SARANATHAN COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25)

Venkateswara Nagar, Panjappur, Tiruchirappalli - 620 012, Tamil Nadu.

INDEX

CRITERION: 1.1.2

The institution adheres to the academic calendar including for the conduct of CIE

2022 - 2023

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Saranathan College of Engineering
Tiruchirapalli – 12

Dt.16.09.2022

Circular

Internal Assessment Test – I for II Year B.E./B.Tech., Classes will commence from 19.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
19.09.2022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
20.09.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
21.09.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
22.09.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.09.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
24.09.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

Principal

Saranathan College of Engineering

Department of Artificial Intelligence and Data Science

2022-2023 Odd Semester-Internal Assessment Test – II Schedule

II Year

Date	Subject Code – Subject Name
15.10.2022	MA3354 – Discrete Mathematics
17.10.2022	CS3351 – Digital Principles and Computer Organization
18.10.2022	AD3351 – Design and Analysis of Algorithms
19.10.2022	AD3391 – Database Design and Management
20.10.2022	AD3301 – Data Exploration and Visualization
21.10.2022	AL3391 – Artificial Intelligence

10/10/22

HOD / AI & DS

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli – 620 012

Dt.9th December 2022

MODEL EXAMINATION _ FOR Second Year B.E./B.Tech., Classes will be from 12.12.2022 (Monday) as per the academic planner.

Test Duration

10.00 AM to 1.00 PM

As per the instruction from the Anna University, Chennai Model Exam Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal Marks will be awarded by the Anna University based on your performance in Model Exam students are advised to take the exam seriously and to score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING 3138 EXAM CELL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

MODEL EXAM for Second Year _ December 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
12.12.022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
14.12.022	CS3353 - Foundations of Data Science	EC3351 - Control Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
16.12.022	CS3391 - Object Oriented Programming	EC3354 - Signals and Systems	EE3301 - Electromagnetic Fields	CD3291 - Data Structures and Algorithms	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
19.12.022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CS3391 - Object Oriented Programming	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
21.12.022	CS3352 - Digital Principles and Computer Organization	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3351 - Digital Principles and Computer Organization	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.12.022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.7.3.2023

Circular

Internal Assessment Test – I for II & III & IV Year B.E./B.Tech., Classes will commence from 9.03.2023 (Thursday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester									
DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
9th March 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th March 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
13th March 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	EI3451 - Industrial Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
14th March 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3491 - Theory of Machines	CE3403 - Concrete Technology	AD3491 - Fundamentals of Data Science and Analysis	AL3452 - Operating Systems
15th March 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3401 - Modern Electronic Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
16th March 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	IC3452 - Electrical Machines and Drives	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CW3401 - Introduction to Business System

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
9th March 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8092 - Thermal Power Plant Instrumentation	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th March 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EE8072 - MEMS and Nano Science	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
13th March 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	EI8651 - Logic and Distributed Control System	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
14th March 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	IC8651 - Advanced Control System	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
15th March 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	CS8391 - Data Structures	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
16th March 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	MG8591 - Principles of Management	ME8694 - Hydralics and Pneumatics	

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
13th March 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
14th March 2023			EE8017 - High Voltage Direct Current Transmission			IE8693 - Production Planing and Control	
15th March 2023			GE8076 -Professional Ethics in Engineering				

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.5.4.2023

Circular (R)

Internal Assessment Test – 2 _for II & III Year B.E./B.Tech., Classes will commence from 10th April 2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – First Hour

11.50 a.m. – 12.45 p.m. – Second Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023 (R)

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester

DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
10th April 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	IT3401 - Web Essentials	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AD3491 - Fundamentals of Data Science and Analysis	AL3451 - Machine Learning
11th April 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	IC3401 - Modern Electronic Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	AL3451 - Machine Learning	CW3401 - Introduction to Business System
12th April 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3491 - Artificial Intelligence and Mechine Learning	IC3452 - Electrical Machines and Drives	ME3491 - Theory of Machines	CE3403 - Concrete Technology	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
13th April 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3451 - Introduction to Operating System	EI3451 - Industrial Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3452 - Operating Systems
17th April 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CS3492 - Database Management System
20th April 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023 (R)

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th April 2023	CS8651 - Internet Programming	MG8591 - Principles of Management		IT8602 - Mobile Communication		ME8693 - Heat and Mass Transfer	
11th April 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EI8092 - Thermal Power Plant Instrumentation	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
12th April 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	MG8591 - Principles of Management	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
13th April 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	EE8072 - MEMS and Nano Science	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
17th April 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	IC8651 - Advanced Control System	ME8692 - Finite Element Analysis	
20th April 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering	EE8691 - Embedded Systems	GE8076 - Professional Ethics in Engineering	CS8391 - Data Structures	ME8694 - Hydralics and Pneumatics	CE8601 - Design of Steel Structural Elements
21st April 2023					EI8651 - Logic and Distributed Control System		EN8592 - Wastewater Engineering

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.11.05.2023

Circular

Internal Assessment Test – 3 _for II & III Year B.E./B.Tech., Classes will commence from 15th May 2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – Third (3rd) Hour

11.50 a.m. – 12.45 p.m. – Fourth (4th) Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 3 _ May 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester									
DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
15th May 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	IT3401 - Web Essentials	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE3401 - Applied Hydraulics Engineering	AD3491 - Fundamentals of Data Science and Analysis	CS3492 - Database Management System
16th May 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	IC3401 - Modern Electronic Instrumentation	CE3491 - Strength of Materials	CE3403 - Concrete Technology	AL3451 - Machine Learning	AL3451 - Machine Learning
17th May 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3451 - Introduction to Operating System	IC3452 - Electrical Machines and Drives	ME3491 - Theory of Machines	CE3404 - Soil Mechanics	AL3452 - Operating Systems	CW3401 - Introduction to Business System
18th May 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	EI3451 - Industrial Instrumentation	ME3493 - Manufacturing Technology	CE3405 - Highway and Railway Engineering	CS3591 - Computer Networks	AL3452 - Operating Systems
22nd May 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3451 - Thermal Engineering	CE3402 - Strength of Materials	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
23rd May 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 3 _ May 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
15th May 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EI8092 - Thermal Power Plant Instrumentation	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
16th May 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8005 - Special Electrical Machines	CS8092 - Computer Graphics and Multimedia	MG8591 - Principles of Management	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
17th May 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8601 - Solid State Drives	CS8091 - Big Data Analytics	EE8072 - MEMS and Nano Science	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
18th May 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	GE8076 - Professional Ethics in Engineering	IT8601 - Computational Intelligence	IC8651 - Advanced Control System	ME8651 - Design of Transmission Systems	EN8592 - Wastewater Engineering
22nd May 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	EE8691 - Embedded Systems	IT8602 - Mobile Communication	CS8391 - Data Structures	ME8692 - Finite Element Analysis	CE8604 - Highway Engineering
23rd May 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	EI8651 - Logic and Distributed Control System	ME8694 - Hydralics and Pneumatics	

Saranathan College of Engineering, Tiruchirappalli

Department of Computer Science and Engineering

Internal Assessment Test - I			Date/ Session	24-09-2022 / FN	Marks	50
Course Code	AD3301	Course Title	DATA EXPLORATION AND VISUALIZATION			
Batch No.	A	Duration	90 mins	Academic Year	2022-2023 (ODD SEM)	
Year	II	Semester	III	Department	AI & DS	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is Exploratory Data Analysis? List the key components of EDA.	C205.1	R
2	Differentiate nominal and ordinal measurement scales.	C205.1	AZ
3	Define data cleaning.	C205.1	R
4	List the benefits of data transformation.	C205.1	R
5	Determine the missing values in the following series by interpolation. Series: [100, NaN, NaN, NaN, 292]	C205.1	A
6	Summarize the software tools available for EDA.	C205.1	U
7	Define outlier. Give example.	C205.1	R
8	Define pivot table.	C205.1	R
9	Differentiate bar chart and histogram	C205.2	AZ
10	What is a scatter plot? For what type of data is scatter plot usually used?	C205.2	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain the types of data with examples. **(10)**	C205.1	U
	(OR)		
12	i. Describe the steps involved in EDA **(4)** ii. Compare EDA with classical and Bayesian analysis. **(6)**	C205.1	U U
13	Explain with suitable examples the various ways of merging database-style dataframes **(10)**	C205.1	U
	(OR)		
14	Illustrate the following data transformation techniques. i. Data deduplication ii. Handling missing values **(5+5)**	C205.1	A

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	List the visual aids for EDA. Discuss in detail any four visual aids with example. **(10)**	C205.1	U
	(OR)		
16	i. Write the python code to generate a simple line plot using matplotlib. **(6)** ii. Specify the guidelines to choose the best chart. **(4)**	C205.2	C U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty In-Charge Dr. P. D. Sheba Kezia Malarchelvi/Professor – CSE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	20.09.2022	Marks	50
Course code	AD3351	Course Title	Design and Analysis of Algorithms			
Batch No.		Duration	90 mins	Academic Year	2021 - 2022	
Year	II	Semester	III	Department	AI & DS	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is Algorithm Design Technique?	CO1	R
2	Write an algorithm to count the binary digits in the binary representation of a given number.	CO1	U
3	Write the recursive Fibonacci algorithm and its recurrence relation	CO1	U
4	What do you mean by empirical analysis?	CO1	R
5	Define brute force method?	CO2	R
6	Write an algorithm to search an element in an array usisg brute force method..	CO2	A
7	Why exhaustive search method is inefficient?	CO2	U
8	Define Divide and Conquer method.	CO3	R
9	Write the formula for Strassen's Matrix multiplication	CO3	R
10	$T(n) = 3T(n/2) + 1$. Solve this using Master's theorem	CO3	A

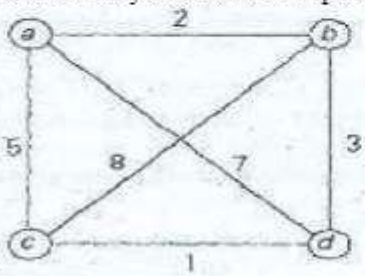
Part – B

(Answer all the questions 2 x 10 = 20marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11a	Write an algorithm to check whether all the elements in an array are distinct and analyze its time complexity. (6)	CO1	AZ
11b	Write an algorithm to find the maximum element in an array and find its time complexity(4)	CO1	AZ
	OR		
12 a	Explain asymptotic notations in detail. (6)	CO1	U
12 b	Prove $n(n+1)/2 \in \Theta(n^2)$ (4)	CO1	A
13	Analyze the algorithm to solve Towers of Hanoi problem and find its time efficiency	CO1	AZ
	OR		
14a	Solve the recurrence equation: $x(n) = x(n-1)+n$ for $n>0$, $x(0)=0$ (6)	CO1	A
14 b.	Design and analyze the recursive algorithm to find the factorial of a number. (4)	CO1	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15 a.	Find all the solution to the Travelling Salesman Problem (cities and distances given in graph by exhaustive search. Find the optimal solution by Exhaustive search. Analyze its time complexity (6) 	CO3	A & AZ
15 b	Find the optimal solution to the following instance of knapsack problem using exhaustive search method. (4)	CO3	A

		Item 1 2 3 4	Weight 3 2 1 4	value 25 20 15 40	Knapsack Capacity W = 5		
16.a	Design and analyze the algorithm for string matching using brute force method.					CO3	AZ
16b	Find the number of character comparisons that will be made by straight forward string matching algorithm for the pattern ABABC in the text BAABABABCCA					CO3	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Staff : Ms.N.Bhavani

Internal Assessment Test – I			Date/ Session	21-09-2022 (Wed)	Marks	50
Course code	AD3391	Course Title	DATABASE DESIGN AND MANAGEMENT			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	II	Semester/ Section	III A	Department	AI&DS	

Part – A (Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Database. List any four government offices where databases are used for their day-today operations.	C203.1	R
2	What are the different types of attributes?	C203.1	U
3	State the levels of abstraction in a DBMS.	C203.1	R
4	Define database instance and schema.	C203.1	U
5	What does relationship types represent in an ER model and provide examples of unary, binary, ternary relationships?	C203.1	U
6	What are the key differences between the ER and EER models?	C203.1	R
7	What is a Weak Entity? Give an Example	C203.1	U
8	List the various types of Integrity Constraints.	C203.1	R
9	Draw the UML notation used to represent superclass / subclass relationships.	C203.1	U
10	Draw an UML diagram to represent Composition.	C203.1	U

Part – B (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	State and explain the advantages of using database over file processing system(5) Discuss the roles of the following personnel in the database environment: i. database administrator ii. application developer iii) end-users(5)	C203.1	A
	OR		
12	Explain the Database System Development Life cycle with a neat diagram.	C203.1	R
13	Explain the various DDL and DML Commands in SQL with suitable examples. What is datamodel? Explain the various types of data models?	C203.2	U
	OR		
14	i.Create the following tables using SQL. Emp_company(Empid integer ename text jdate date salary double,cname text) Company(cname text city text) Employees(ename, city) ii. Increment the salary of those employees working for 'TCS' by 10 percent. iii. Change the datatype of ename from text to varchar(20) iv. add a colum contact in the employees table with varchar datatype.	C203.2	A

Part – C (Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Create an ER model for each of the following descriptions: (a) A large organization has several parking lots, which are used by staff. (b) Each parking lot has a unique name, location, capacity, and number of floors (where appropriate). (c) Each parking lot has parking spaces, which are uniquely identified using a space number. (d) Members of staff can request the sole use of a single parking space. Each member of staff has a unique number, name, telephone extension number, and vehicle license number. (e) Represent all the ER models described in parts (a), (b), (c), and (d) as a single ER model. Provide any assumptions necessary to support your model	C203.1	C
	OR		
16	A university registrar's office maintains data about the following entities: (a) courses, including number, title, credits, syllabus, and prerequisites; (b) course offerings, including course number, year, semester, section number, instructor(s), timings, and classroom; (c) students, including student-id, name, and program; and (d) instructors, including identification number,	C203.1	C

	name, department, and title. Further, the enrollment of students in courses and grades awarded to students in each course they are enrolled for must be appropriately modeled. Construct an E-R diagram forthe registrar's office. Document all assumptions that you make about the mapping constraints		

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question



Saranathan College of Engineering,Tiruchirapalli

Department of Artificial Intelligence and Data Science

Internal Assessment Test - I			Date/ Session	22.09.2022	Marks	50
Course code	AL3391	Course Title	Artificial Intelligence			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	III	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is Artificial Intelligence?	C206.1	R
2	Name the elements of an agent with suitable diagram.	C206.1	R
3	Give an example of PEAS description for an automated taxi.	C206.1	U
4	What is agent function and agent program?	C206.1	R
5	List the properties of task environment	C206.1	R
6	Define Abstraction	C206.1	R
7	What are the components for the well defined problem? Define them.	C206.1	R
8	What is frontier and explored set?	C206.1	R
9	List the criteria to measure the performance of different search strategies.	C206.1	R
10	Differentiate Uninformed search (Blind search) and Informed Search(Heuristic Search) Strategies.	C206.1	U

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about the four categories under which AI is defined.	C206.1	R
	Or		
12	Describe the various types of agent programs with their respective architecture.	C206.1	R
13	Explain problem solving agents and the components necessary to define a problem with examples.	C206.1	R
	Or		
14	Discuss the environment types with suitable examples for each category.	C206.1	U

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Analyze BFSand DFSsearch strategies with examples.	C206.1	AZ
	Or		
16	Analyze Uniform Cost Search and Depth limited search with example.	C206.1	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C311.1:36 marks, C311.2:14 marks

Faculty Members:Mr.P.DineshKumar,AP/AI & DS

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test – I			Date/ Session	23.09.2022	Marks	50
Course code	CS3351	Course Title	Digital Principles and Computer Organization			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Sem/ Section	III	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define a Combinational circuit.	C202.1	R
2	Differentiate Half Adder and Full Adder circuit.	C202.1	U
3	Write down the truth table for Full Subtractor.	C202.1	A
4	What will be the maximum number of output for the decoder with a 6 bit data input.	C202.1	C
5	What is a data selector?	C202.1	R
6	Differentiate decoder and encoder.	C202.1	U
7	Show the K-map for the function of F(A,B,C,D)= □ m(1,4,8,12,15)	C202.1	A
8	Implement EX-OR gate using only NAND gate only.	C202.1	C
9	Define Sequential circuit.	C202.2	R
10	What is Clock? State its uses.	C202.2	R

Part – B (Answer all the questions 2 x 10 = 20marks) Maximum 2 splits/Question

Q.No	Questions	CO	Skills
11	Explain the following logic gates (1)NOR (2)NAND (3)EX-OR (4)EX-NOR (5) AND	C202.1	R
	Or		
12	Explain Full Adder circuit and implement using half adder circuit.	C202.1	R
13	a. Differentiate combinational and sequential circuit. b. Explain the concept of Decimal adder.	C202.2 C202.1	U R
	Or		
14	Explain the concept of SR Flip Flop	C202.2	R

Part – C (Answer all the questions 1 x 10 = 10marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	a. Implement the Full Adder with 3*8 decoder (5) b. Implement the boolean function using 8:1 Multiplexor. F(A,B,C,D)= m(1,3,5,6,7,13,15)	C202.1	AZ
	Or		
16	Simplify the following Boolean function using K-map (1) F(A,B,C,D)= m(0,1,2,5,8)+d(9,10) (2) F(A,B,C,D)=∏M(0,2,8,10,14,15)+d(5,6,9)	C202.1	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the faculty::Ms. A.SRIDEVI

Saranathan College of Engineering, Tiruchirappalli

Department of Computer Science and Engineering

Internal Assessment Test - II			Date/ Session	20-10-2022 / FN	Marks	50
Course Code	AD3301	Course Title	DATA EXPLORATION AND VISUALIZATION			
Batch No.		Duration	90 mins	Academic Year	2022-2023 (ODD SEM)	
Year	II	Semester	III	Department	AI & DS	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is the use of an error bar?	C205.2	U
2	Define contour plots.	C205.2	R
3	Bring out the difference between plt.plot and plt.scatter. Which of these is preferable for large datasets?	C205.2	AZ
4	List the three categories of colormaps.	C205.2	R
5	Differentiate wireframes and surface triangulations.	C205.2	U
6	What is plot legend? Give example.	C205.2	U
7	Illustrate cases and variables.	C205.3	A
8	List the techniques for reducing the number of digits.	C205.3	R
9	Outline the uses of standardization.	C205.3	AZ
10	Define the summaries of level and spread.	C205.3	R

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	List the types of error bars. Describe the methods available for visualizing errors. **(10)**	C205.2	U
	(OR)		
12	i. Write the python code to visualize three dimensional functions. **(4)** ii. Describe plot annotations with suitable example **(6)**	C205.2	C U
13	Write detail note on (i) customizing plot legends (ii) Choosing elements for plot legends (iii) multiple legends. **(4+3+3)**	C205.2	R
	(OR)		
14	Explain the methods of creating subplots with suitable examples. **(10)**	C205.2	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	The scores obtained by nine children on three different tests are given below. Convert these scores into one general IQ score. Draw-a-man test : 18, 25, 27, 26, 19, 26,24,16 Verbal Ability : 25,16,38,8,30,19,16,24,11 Non Verbal Ability : 23,12,31,15,20,12,15,24,17 Identify 3 top performers and 3 slow learners. **(10)**	C205.3	A,AZ
	(OR)		
16	The dataset below shows the gross earnings in pounds of full-time adult workers. Men : 150,55,82,107,102,78,154,85,123,66 Women: 90,76,87,58,50,46,63,68,116,60 Calculate the median and midspread (dQ) of both male and female earnings. Compare the two distributions and present your inferences.	C205.3	A,AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty In-Charge Dr. P. D. Sheba Kezia Malarchelvi/Professor – CSE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - 2			Date/ Session	18.10.2022	Marks	50
Course code	AD3351	Course Title	Design and Analysis of Algorithms			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester	III	Department	AI & DS	

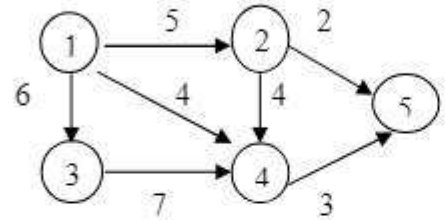
Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is a convex hull?	CO3	R
2	Define Decrease and Conquer method.	CO3	R
3	Mention the 3 variations in Transform and Conquer strategy.	CO3	R
4	Why is presorting used? Give any 2 examples of usage of presorting.	CO3	U
5	Differentiate dynamic programming and divide and conquer methods.	CO4	U
6	State the principle of optimality.	CO4	R
7	What do you mean by coin changing problem?	CO4	U
8	How should the choices be made for Greedy Technique?	CO4	U
9	What is variable length encoding?	CO4	R
10	Write the algorithm for 0/1 knapsack problem using Greedy Technique.	CO4	A

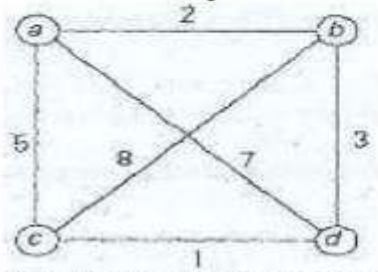
Part – B

(Answer all the questions 2 x 10 = 20marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Design and analyze the algorithm to find a closest pair in a list of n points using divide and conquer method.	CO3	AZ
	OR		
12 a	Multiply 2332 and 4224 using divide and conquer method. (6)	CO3	E
12 b	Explain how this method is better than the classical method. (4)	CO3	AZ
13	Sort the given numbers using heap sort: 5 6 1 7 4 3 2 8 Analyze the time complexity of heap sort.	CO3	A, AZ
	OR		
14	Write the algorithm for topological sorting and find the same for the given graph.  Analyze its time complexity.	CO3	A, AZ

Part – C

(Answer all the questions 1 x 10 = 10marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	Find the shortest path from source a to all vertices using Dijikstra's algorithm.  Write the algorithm and analyze its time complexity.	CO4	A,AZ

	or		
16.a	Construct a Huffman Code for the following data: Character if for int float char ; Probability 0.5 0.35 0.5 0.1 0.4 0.2 Write the algorithm for Huffman code generation.	CO3	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Staff : Ms.N.Bhavani

Internal Assessment Test – II			Date/ Session	19-10-2022 WED	Marks	50
Course code	AD3391	Course Title	DATABASE DESIGN AND MANAGEMENT			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	II	Semester/ Section	III A	Department	AI&DS	

Part – A (Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is Relational Model?	C203.2	R
2	Elucidate the relationship between mathematical relations and relations in the relational data mode	C203.2	U
3	State the six clauses in the syntax of an SQL Query and show what type of constructs should be specified. Which of these are optional?	C203.2	R
4	What are the various aggregate functions in SQL?	C203.2	R
5	How will you create a view in a DB? What is it purpose?	C203.2	U
6	Define Functional Dependency.	C203.3	R
7	State Armstrong's Axiom.	C203.3	U
8	State First Normal Form. What are the anomalies of 1NF?	C203.3	R
9	Find the candidate key of the relational schema R1(A,B,C,D) and check if R1 is in 3NF.FDs for R1: { AB->C, C -> D }	C203.3	U
10	Given a relation R(P, Q, R, S, T) and Functional Dependency set FD = { PQ → R, S → T }, determine whether the given R is in 2NF? If not convert it into 2 NF	C203.3	U

Part – B (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about the various integrity constraints in detail with suitable examples.	C203.2	R
	OR		
12	Highlight the various DDL,DML,TCL and DCL commands in SQL with proper syntax and examples.	C203.2	R
13	The following tables form part of a database held in a relational DBMS: Hotel (hotelNo, hotelName, city) Room (roomNo, hotelNo, type, price) Booking (hotelNo, guestNo, dateFrom, dateTo, roomNo) Guest (guestNo, guestName, guestAddress) where Hotel contains hotel details and hotelNo is the primary key; Room contains room details for each hotel and (roomNo, hotelNo) forms the primary key; Booking contains details of bookings and (hotelNo, guestNo, dateFrom) forms the primary key; Guest contains guest details and guestNo is the primary key. Write the DDL and Sample insert statements for the above database.	C203.2	U
	OR		
14	For the Database specified in Qno.13 write the following SQL Queries. 1. List all double or family rooms with a price below £40.00 per night, in ascending order of price. 2. What is the average price of a room? 3. List all guests currently staying at the Grosvenor Hotel 4. List the number of rooms in each hotel in London 5. List the rooms that are currently unoccupied at the Grosvenor Hotel.	C203.2	A

Part – C (Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Given the Relation R OID | O_Date | CID | C_Name | C_State | PID | P_D Where OID = Order ID, O_Date= Order Date, CID = Customer ID, C_Name = CustomerName, C_State = Customer's State, PID = project id, P_Desc =Project Name, P_Price = Product Price, Qty = Quantity Purchased . Functional Dependencies are: OID -> O_Date CID -> C_Name PID -> P_Desc PID -> P_Price OID -> CID CID -> C_State PID and OID -> Qty OID O_Date CID C_Name C_State PID P_Desc P_Price Qty Normalize the above Relation upto 3NF.	C203.3	AZ
	OR		
16	Consider the following relation. CAR-SALE(car#,date_sold,salesman#,commission%,discount) Assume that a car can be sold by multiple sales man and hence (car#,salesman#) is the primary key. Additional Dependencies are date-Sold → discount salesman# → commission%. Normalize the above relation upto BCNF.	C203.3	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - II			Date/ Session	21.10.2022	Marks	50
Course code	AL3391	Course Title	Artificial Intelligence			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	III	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define Admissible heuristic h(n).	C206.2	R
2	What is a local search algorithm?	C206.2	R
3	What are the components of a genetic algorithm?	C206.2	R
4	What is online search algorithm and offline search algorithm?	C206.2	R
5	Explain the problems associated with hill climbing algorithm.	C206.2	U
6	Define Simulated annealing.	C206.2	R
7	What is Adversarial Search?	C206.3	R
8	List the various types of games in AI.	C206.3	R
9	Define Minimax.	C206.3	R
10	Define Alpha-beta pruning.	C206.3	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about IDA* and SMA*.	C206.2	U
	Or		
12	Explain in detail about Greedy Best First Search and A* Search.	C206.2	U
13	Explain in detail about Genetic Algorithm.	C206.2	U
	Or		
14	Explain in detail about Simulated Annealing.	C206.2	U

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain Minimax algorithm with its procedure with example.	C206.3	U
	Or		
16	Explain alpha beta pruning with its procedure with example.	C206.3	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

Faculty Members:Mr.P.DineshKumar,AP/AI & DS

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test – II			Date/ Session	17.10.2022	Marks	50
Course code	CS3351	Course Title	Digital Principles and Computer Organization			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Sem/ Section	III	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Write down the excitation table for JK Flip flop.	C202.2	A
2	Differentiate Clocked and Asynchronous Sequential circuit	C202.2	U
3	Define race condition.	C202.2	R
4	Differentiate Moore and Mealy Model	C202.2	U
5	Define Register and List out its type.	C202.2	R
6	Define Synchronous counter	C202.2	R
7	List out the step to design a clocked Sequential circuit.	C202.2	A
8	What is mean by Von Neumann Architecture?	C202.3	R
9	Define System software.	C202.3	R
10	Specify factors which decide instruction length.	C202.3	A

Part – B (Answer all the questions 2 x 10 = 20marks) Maximum 2 splits/Question

Q.No	Questions	CO	Skills
11	Explain Shift Register and its Type.	C202.2	R
	Or		
12	Explain the working principle of Master/Slave JK FF	C202.2	R
13	Explain the components of a computer with the block diagram in detail.	C202.3	R
	Or		
14	Explain the different types of instructions.	C202.3	R

Part – C (Answer all the questions 1 x 10 = 10marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	Design a 2 bit synchronous counter which counts in the sequence 00, 01, 010,11 (repeat) 00, …using D flip flop.	C202.2	AZ
	Or		
16	Implement JK Flip flop using D flip flop.	C202.2	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the faculty:Ms. A.SRIDEVI

Saranathan College of Engineering, Tiruchirappalli

Department of Computer Science and Engineering

Model Exam			Date/ Session	23-12-2022 / FN	Marks	100
Course Code	AD3301	Course Title	DATA EXPLORATION AND VISUALIZATION			
Batch No.	A	Duration	3 hrs	Academic Year	2022-2023 (ODD SEM)	
Year	II	Semester	III	Department	AI & DS	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Bring out the difference between population and sample.	C205.3	AZ
2	List the characteristics of normal distribution.	C205.3	R
3	What is Gini coefficient?	C205.3	U
4	What is meant by bi-variate relationship?	C205.4	U
5	List the rules for drawing causal path models.	C205.4	A
6	What is a contingency table? Give the anatomy of contingency table.	C205.4	U
7	Write down the ways of determining the best transformation on data.	C205.4	R
8	Differentiate causality and correlation.	C205.5	AZ
9	Give any two examples of longitudinal studies.	C205.5	R
10	Define univariate time series.	C205.6	R

Part – B

(Answer all the questions 5 x 13 = 65 marks)

Q. No.	Questions	CO	Skills
11 a	Describe Gaussian distribution. Discuss the desirable properties in a summary measure of inequality.	C205.3	U
	(OR)		
11 b	i) Define smoothing and the aim of smoothing. (5) ii) Explain the techniques for smoothing Time Series with examples. (8)	C205.3	U
12	i) List the advantages and disadvantages of box plots. (3) ii) The datasets given below shows the test scores of boys and girls in a class. Construct comparative double box plots and interpret the results. (10) Boys' scores : 50 90 85 20 45 90 98 88 23 68 Girls' score : 85 78 65 43 68 72 95 55 62 45	C205.4	E
	(OR)		
12 b	i) Write down the rules to fit a line. (3) ii) Explain the steps involved in fitting a resistant line. (10)	C205.4	R
13 a	i) List the goals of transformations of data. (3) ii) Discuss the ways of transforming data with suitable examples (10)	C205.4	R
	(OR)		
13 b	i) How would you analyze a contingency table? Explain with an example. (10) ii) List the essentials of interpreting contingency tables using chi-square test. (3)	C205.4	AZ
14 a	Write notes on (i) Simpson's paradox (ii) Positive and negative relationships	C205.5	U
	(OR)		

14 b	What are the assumptions required to infer causes? Explain the process of controlling prior variables.	C205.5	U
15 a	Describe the characteristics of time series data. Explain re-sampling of time series data with an example.	C205.6	A
	(OR)		
15b	With suitable python code discuss in detail time series analysis and visualization.	C205.6	AZ

Part – C

(Answer all the questions 15 x 1 = 15 marks)

<table>
<tr><th>Q. No.</th><th>Questions</th><th>CO</th><th>Skills</th></tr>
<tr><td>16a</td><td>i) What is the use of analysis of variance? Write the steps to perform one-way ANOVA test.
ii) Three different techniques namely medication, exercises, and special diet are randomly assigned to individuals with high blood pressure to lower the blood pressure. After four weeks, the reduction in each person's blood pressure is recorded. Perform one-way ANOVA to test at 5% significance level, whether there is significant difference in mean reduction of blood pressure among the three techniques.
(Hint: F(2,12),0.05 =3.8853)
<table>
<tr><td>Medication</td><td>10</td><td>12</td><td>9</td><td>15</td><td>13</td></tr>
<tr><td>Exercise</td><td>6</td><td>8</td><td>3</td><td>0</td><td>2</td></tr>
<tr><td>Diet</td><td>5</td><td>9</td><td>12</td><td>8</td><td>4</td></tr>
</table></td><td>C205.4</td><td>E</td></tr>
<tr><td colspan="4">(OR)</td></tr>
<tr><td>16b</td><td>The following table shows the association between age group and feelings of safety focusing just on the men in the British Crime Survey.
<table>
<tr><th rowspan="2">Age Groups</th><th rowspan="2"></th><th colspan="2">How safe do you feel walking alone after dark</th><th rowspan="2">Total</th></tr>
<tr><th>Not very worried</th><th>Very worried</th></tr>
<tr><td rowspan="2">16 to 39</td><td>Count</td><td>6317</td><td>117</td><td>6434</td></tr>
<tr><td>% within age groups</td><td>98.2%</td><td>1.8%</td><td>100.0%</td></tr>
<tr><td rowspan="2">40 to 59</td><td>Count</td><td>6808</td><td>157</td><td>6965</td></tr>
<tr><td>% within age groups</td><td>97.7%</td><td>2.3%</td><td>100.0%</td></tr>
<tr><td rowspan="2">60 to 99</td><td>Count</td><td>6251</td><td>422</td><td>6673</td></tr>
<tr><td>% within age groups</td><td>93.7%</td><td>6.3%</td><td>100.0%</td></tr>
<tr><td rowspan="2">Total</td><td>Count</td><td>19376</td><td>696</td><td>20072</td></tr>
<tr><td>% within age groups</td><td>96.5%</td><td>3.5%</td><td>100.0%</td></tr>
</table>
i) Have row percentages or column percentages been provided in this table and why?
ii) Which age group appears to show the highest levels of fear of walking alone after dark?
iii) How many degrees of freedom are there in this table?
iv) Calculate the chi-square statistic and find if it is significant.
(Hint: p=0.0001)
v) Is this sample large enough to enable us to calculate chi-square reliably?</td><td>C205.4</td><td>AZ</td></tr>
</table>

And Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty In-Charge Dr. P. D. Sheba Kezia Malarchelvi/Professor – CSE

Saranathan College of Engineering

Tiruchirapalli

Model Exam			Date/ Session	14.12.2022 FN	Marks	100
Course code	AD3351	Course Title	Design and Analysis of Algorithms			
Batch No.		Duration	180 mins	Academic Year	2022– 2023	
Year	II	Semester	III	Department	AIDS	

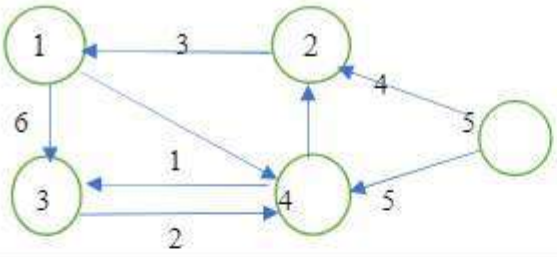
Part – A

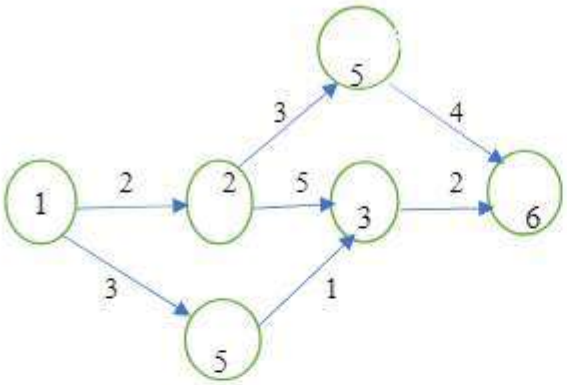
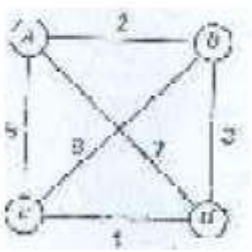
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	State the general principle of Greedy technique.	C2O4.4	R
2	What do you mean by Dynamic programming?	C2O4.4	R
3	Define Multistage Graphs.	C2O4.4	R
4	Define Iterative Improvement Technique.	C2O4.5	U
5	When a linear programming is said to be unbounded?	C2O4.5	U
6	What are the essential properties of flow graph?	C2O4.5	R
7	What is LC search and how is it better tha other search techniques in branch and bound	C2O4.6	U
8	Differentiate feasible and optimal solution.	C2O4.6	U
9	How is lower bound is found by problem reduction?	C2O4.6	U
10	What is promising and non- promising node in a state space tree?	C2O4.6	U

Part – B

(Answer all the questions 13x 5 = 65 marks)

Q. No.	Questions	CO	Skills
11a)	Using Floyd's algorithm, calculate the cost matrix for the given digraph. What is its time complexity 	C2O4.4	A,AZ
	OR		
11b)	Write the algorithm for optimal binary search tree and solve the following problem instance to construct aa optimal binary search tree. Keys are p,q,r,s and the probabilities are 0.1,0.2,0.4,0.3.	C2O4.4	A
12a)	Apply Warshall's algorithm to find the transitive closure of the digraph defined by the following adjacency matrix. Analyze its time complexity $\begin{bmatrix} 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \\ 0 & 0 & 0 & 0 \end{bmatrix}$	C2O4.4	A,AZ
	OR		
12b)	Solve the instance of the Knapsack problem using Memory functions. Capacity W=5 Item Weight Value 1 2 12 2 1 10 3 3 20 4 5 15	C2O4.4	A

13 a)	i.Find the maximum flow in the network using Ford-Fulkerson method. (10)  ii. Define minimum cut and find the minimum cut for the above problem. (3)	C2O4.5	A
	OR		
13 b)	Find the stable marriage matching based on the men's and women's preferences represented by the ranking matrix. Write the algorithm for the above and define blocking pair Tom Jim Bob Ken Ann 1,3 2,3 3,2 4,3 Lea 1,4 4,1 3,4 2,2 Sue 2,2 1,4 3,3 4,1 Mia 4,1 2,2 3,1 1,4	C2O4.5	A
14 a)	Solve the linear programming problem using Simplex method. Maximize Z=3x+5y Subject to x+y<=8 x+3y<=12 x>=0, y>=0	C2O4.5	A
	OR		
14 b	Explain the maximum matching algorithm for Bipartite Graph with an example.	C2O4.5	U
15a)	Explain the class P,NP and NP-complete problems and derive the relationship between them.	C2O4.5	U,AZ
	OR		
15b)	Explain any two approximation algorithms for solving the instance of Travelling SalesPerson problem.(TSP)	C2O4.5	U
	Part – C **(Answer all the questions 15x 1 = 15 marks)**		
16 a)	i. Draw the state space tree for the given set={1,5,8,9} whose sum is 14. (5) ii.Apply branch and bound algorithm technique to solve TSP for 	C2O4.6	A

	OR		
16 a)	i.Solve the 4 queen's problem using backtracking. Write the algorithm. Give the estimated cost for all possible solutions of $ Queen's problem. (7) ii. Find the optimal solution using branch and bound for the following assignment problem. (8) Person Job1 Job2 Job3 Job4 A 9 2 7 8 B 6 4 3 7 C 5 8 1 8 D 7 6 9 4	C2O4.6	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Staff : Ms.N.Bhavani, Dept of IT

SARANATHAN COLLEGE OF E NGINEERING

TIRUCHIRAPPALLI – 12

II YEAR – III SEMESTER – B.TECH(AI & DS)

AD3391 – DATABASE DESIGN AND MANAGEMENT – MODEL EXAMINATION – DEC 2022

TIME: 3 HOURS MAX.MARKS 100 Date of Exam:19-12-202(MONDAY)

PART – A ANSWER ALL THE QUESTIONS. (10 x 2 = 20)

Q. No.	Questions	CO	Skills
1	What are the essential properties of Normalization?	C203.3	R
2	What is functional dependency? Give an example .	C203.3	R
3	BCNF is found to be stricter than 3NF,justify?	C203.3	AZ
4	List out the problems with Concurrent transactions in a Database.	C203.4	R
5	List out the timestamp based deadlock prevention Schemes.	C203.4	AZ
6	What is save point?How it is used in recovery?	C203.4	U
7	What are ACID properties?	C203.4	AZ
8	With a simple example explain types and row types in odbms.	C203.5	U
9	State CAP theorem.	C203.5	R
10	Compare Row oriented and Column Oriented Databases.	C203.6	R

Part – B ANSWER ALL THE QUESTIONS (5 X 13 = 65)

Q.No.	Questions	CO	Skills
11a	i. Discuss insertion, deletion, and modification anomalies.Why are they considered bad? Illustrate with examples.	C203.3	
11B	ii. Consider the universal relation $R = \{A, B, C, D, E, F, G, H, I, J\}$ and the set of functional dependencies $F = \{ \{A, B\}\rightarrow\{C\}, \{A\}\rightarrow\{D, E\}, \{B\}\rightarrow\{F\}, \{F\}\rightarrow\{G,H\}, \{D\}\rightarrow\{I, J\} \}$. What is the key for R? Decompose R into 2NF and then 3NF relations. **(or)** Consider the following relation for published books: BOOK (Book_title, Author_name, Book_type, List_price, Author_affil, Publisher) Author_affil refers to the affiliation of author. Suppose the following dependencies exist: Book_title –> Publisher, Book_type Book_type –>List_price Author_name –> Author_affil a. What normal form is the relation in? Explain your answer. b. Apply normalization until you cannot decompose the relations further. State the reasons behind each decomposition.		

<table>
<tr><td>12a

12b</td><td>What are Schedules? Distinguish between serial and non serial schedules. Discuss the need for Serializabilty with suitable examples.
Or
i.Explain the states of the transaction with a neat diagram.
ii. Discuss in detail the two phase locking protocol that ensures Serializabilty.</td><td>C203.4</td><td>R,C</td></tr>
<tr><td>13a

13b</td><td>i.State Thomas Read/Write rule.
ii. Explain in detail about timestamp based concurrency control techniques. (or)
Narrate the actions that are considered for deadlock detection ,deadlock prevention and deadlock recovery.</td><td>C203.4</td><td>R,C</td></tr>
<tr><td>14a

14b</td><td>Explain in detail the steps for Mapping EER to ODB schema with an example.
or
Write briefly about object identitier, reference types, row types, and UDTs.</td><td>C203.5</td><td>R,C</td></tr>
<tr><td>15a

15b</td><td>What are document oriented databases? Explain. Perform CRUD operations in mongo db for the following data.
<table>
<tr><td>Empid</td><td>Name</td><td>Salary</td><td>Designation</td></tr>
<tr><td>101</td><td>Abc</td><td>30000</td><td>Manager</td></tr>
<tr><td>102</td><td>Def</td><td>40000</td><td>Manager</td></tr>
<tr><td>103</td><td>Ghi</td><td>40000</td><td>President</td></tr>
</table>
Write mongo db queries to fetch name of employees earning less than 40000.
(or)
. What are document oriented databases? Explain. Perform CRUD operations in HBase with data given in 15a.</td><td>C203.6</td><td>C</td></tr>
<tr><td>16</td><td><u>PART – C (1 X 15 = 15)</u>
Consider the following relation:
CAR_SALE (Car_id, Option_type, Option_listprice, Sale_date,Option_discountedprice)

This relation refers to options installed in cars (e.g., cruise control) that were sold at a dealership, and the list and discounted prices of the options.
Fds are CarID –> Sale_date
Option_type –>Option_listprice
CarID,Option_type –> Option_discountedprice
Normalize upto 3NF.</td><td>C203.3</td><td>C</td></tr>
</table>

Saranathan College of Engineering

Tiruchirappalli

Model Exam			Date/Session	21/12/22/FN	Marks	100
Course code	AL3391	Course Title	Artificial Intelligence (C206)			
Batch No.	2021-25	Duration	3Hr	Academic Year	2022-23 ODD	
Year	II	Semester/Section	III	Department	AI & DS	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What are the types of constraints?	C206.4	R
2	What are the steps involved in Monte Carlo Tree Search?	C206.4	R
3	Define First Order Logic.	C206.5	R
4	Define Quantifiers and its types.	C206.5	R
5	Difference between forward chaining and backward chaining.	C206.5	U
6	Define Skolemization.	C206.5	R
7	Define Uncertainty.	C206.6	R
8	Define Atomic Events.	C206.6	R
9	Define Unconditional or Prior Probability.	C206.6	R
10	Define Bayes Theorem.	C206.6	R

Part – B

(Answer all the questions 5 x 13 = 65 Marks)

Q. No.	Questions	CO	Skills
11. a	Explain in detail about Constraint Satisfaction Problem	C206.4	U
	OR		
11. b	Explain in detail about Monte Carlo Tree Search	C206.4	U
12. a	Explain in detail about Forward Chaining and Backward Chaining.	C206.5	U
	OR		
12. b	Discuss Inference rules and Unification in detail.	C206.5	U
13. a	Discuss in detail about Propositional Theorem Proving.	C206.5	U
	OR		
13. b	Write a short note on the following Propositional Model Checking. i. DPLL Algorithm ii. WalkSAT Algorithm	C206.5	U
14. a	Explain in detail about Bayes Theorem.	C206.6	U
	OR		
14. b	Explain in detail about Bayesian Belief Network.	C206.6	U
15.a	Explain in detail about Exact Inference in Bayesian Network.	C206.6	U
	OR		
15.b	Explain in detail about Approximate Inference in Bayesian Network	C206.6	U

Q.No.	PART – C (1 x 15 = 15 Marks)	CO	Skills
16.a	Convert the following sentences to Predicate logic (FOL) and CNF and a discuss resolution by proving "Marcus hated Ceasar". i) Marcus was a man. ii) Marcus was a Roman. iii) All men are people. iv) Caesar was a ruler. iv) All Romans were either loyal to Caesar or hated him. v) Everyone is loyal to someone. vi) People try to assassinate rulers they are not loyal to. vii) Marcus tried to assassinate Caesar.	C206.5	C
	OR		
16.b	Convert the following sentence to FOL and CNF a. John likes all kind of food. b. Apple and vegetable are food c. Anything anyone eats and not killed is food. d. Anil eats peanuts and still alive e. Harry eats everything that Anil eats. Prove by resolution that: f. John likes peanuts.	C206.5	C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C).

Name of the Staff: Mr. P. Dineshkumar / CSE

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test – III			Date/ Session	16.12.2022	Marks	100
Course code	CS3351	Course Title	Digital Principles and Computer Organization			
Batch No.		Duration	03Hrs	Academic Year	2022 - 2023	
Year/	II	Sem/ Section	III	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is an instruction register?	C202.3	R
2	Define MIPS.	C202.3	U
3	List various instruction formats with example.	C202.3	A
4	Define Data path.	C202.4	R
5	What is branch folding?	C202.4	R
6	Define pipelining. Mention the various types of pipelining.	C202.4	U
7	Differentiate SRAM and DRAM.	C202.5	AZ
8	What is program locality?	C202.5	R
9	Differentiate Memory mapped I/O and I/O mapped I/O.	C202.5	AZ
10	What is Programmed I/O?	C202.5	R

Part – B (Answer all the questions 5 x 13 = 65marks) Maximum 2 splits/Question

Q.No	Questions	CO	Skills
11	Explain the concept of Addressing modes with an example.	C202.3	U
	Or		
12	Explain instruction set Architecture? Give examples.	C202.3	R
13	Explain the concept of memory location and addresses.	C202.3	U
	Or		
14	Explain in detail about different instruction types and instruction sequencing.	C202.3	R
15	a) Explain the basic organization of a micro programmed control unit and the generation of control signals using micro program. (6) b) Describe the control unit organization with a separate Encoder and Decoder functions in a hardwired control. (7)	C202.4	U
	Or		
16	What do you mean by hazards and what are the pipelining hazards occurs in a computer architecture? Describe each of them with suitable example.	C202.4	R

17	Build a suitable Data path for branch instruction. Explain all the blocks with suitable example.	C202.4	C
	Or		
18	Explain various approaches used to deal with conditional branching.	C202.4	U

19	Explain the concept of DMA.	C202.5	R
	Or		
20	Write a note on common frame works of memory hierarchy.	C202.5	R

Part – C (Answer all the questions 1 x 15 = 15marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
21	Discuss the different mapping techniques used in the cache memories and their relative merits and demerits.	C202.5	AZ
	Or		
22	What is virtual memory? Explain in detail about the virtual memory with suitable diagram.	C202.5	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the faculty:Ms. A.SRIDEVI



Saranathan College of Engineering,Tiruchirapalli

Department of Artificial Intelligence and Data Science

Internal Assessment Test - I			Date/ Session	16.03.2023	Marks	50
Course code	CS3591	Course Title	Computer Networks			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define Network.	C214.1	R
2	What is the difference between IMAP and POP?	C214.1	U
3	Write down the requirements to build a Computer Network.	C214.1	U
4	List the metrics that influence the performance of computer Networks.	C214.1	U
5	Write the uses of HTTP	C214.1	R
6	What is URL?	C214.1	R
7	What is the use of SNMP Protocol in a network?	C214.1	R
8	What is Transmission Media? Give Examples.	C214.1	R
9	Draw the state Transition Diagram of IMAP.	C214.1	R
10	What is the function of SMTP	C214.1	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	With a neat Sketch, explain the function of OSI network architectures.	C214.1	R
	Or		
12	Write Short Notes on a) Network Types (5) b) Network Topology (5)	C214.1	R
13	Explain in detail how electronic mail application is carried out in a network. Also explain the protocols used in this applications.	C214.1	R
	Or		
14	List the Elements of Network Management and explain the operations of SNMP protocol in detail.	C214.1	R

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Discuss the function performed by of DNS. Give Example.	C214.2	U
	Or		
16	i. What is the difference between TCP and UDP highlight the pros and cons? (7) ii. List out the functions of Transport Layer? (3)	C214.2	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C311.1:36 marks, C311.2:14 marks

Faculty Member: Dr.S.Ravimaran/Prof.&Head/AI & DS

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test – I			Date/ Session	14.03.2023	Marks	50
Course code	AD3491	Course Title	FUNDAMENTALS OF DATA SCIENCE AND ANALYTICS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Sem/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What are the characteristic of quality data?	C213.1	R
2	What is Data Science?	C213.1	R
3	List out four benefits of data science.	C213.1	R
4	Define cleansing.	C213.1	R
5	What are the contents should be included in a project charter?	C213.1	U
6	What is the need for data science?	C213.1	R
7	Represent the following data in stem-and-leaf display.62,71,88,54,103,98,79,82,112,57,69,75.	C213.2	C
8	How the skewness of a data distribution can be identified?	C213.2	U
9	Write the guidelines for frequency distribution.	C213.2	U
10	What is the use of Regression?	C213.3	R

Part – B (Answer all the questions 2 x 10 = 20marks) Maximum 2 splits/Question

Q.No	Questions	CO	Skills
11	Discuss in detail about step-by-step process in data science with neat diagram.	C213.1	R
	Or		
12	Discuss briefly about: (i)Life cycle of Data Science. (5) (ii)Facet of data. (5)	C213.1	R
13	The IQ scores for a group of 35 high school dropouts are as follows: **91 85 84 79 80** **87 96 75 86 104** **95 71 105 90 77** **123 80 100 93 108** **98 69 99 95 90** **110 109 94 100 103** **112 90 90 98 89** (a) Construct a frequency distribution for grouped data. (4) (b) Specify the *real* limits for the lowest class interval in this frequency distribution. (3) (c) Calculate cumulative frequency. (3)	C213.2	A
	Or		
14	i. Discuss in detail about "Measure of central Tendency" and calculate each measure for the following retirement ages data: (6) 60,63,45,63,65,70,55,63,60,65,63 ii.Is it possible to calculate mean for qualitative data? Justify your answer.(2) iii Is the above data following "bimodal"? Justify your answer. (2)	C213.2	A

Part – C (Answer all the questions 1 x 10 = 10marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	Discuss about following measures and calculate them with given residence changes data. **1,3,4,1,0,2,5,8,0,2,3,4,7,11,0,2,3,4** i. Range (2) ii. Varience (2) iii. Standrad Deviation (2) iv. InterQuartileRange (2) v. Z-Score (2)	C213.3	A
	Or		
16	Each of the following pairs represents the number of licensed drivers (X) and the number of cars (Y) for seven houses in my neighborhood: **DRIVERS (X) CARS (Y)** **5 4** **5 3** **2 2** **2 2** **3 2** **1 1** **2 2** **(a)** Construct a scatter plot to verify a lack of pronounced curvilinearity. (1) **(b)** Determine the least squares equation for these data (5) **(c)** Determine the standard error of estimate, $s_{y\|x}$, given that $n = 7$. (2) **(d)** Predict the number of cars for each of two new families with two and five drivers. (2)	C213.3	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the faculty:Ms. A.SRIDEVI

Internal Assessment Test - I			Date/ Session	11.03.2023	Marks	50
Course code	AL3451	Course Title	Machine Learning			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define Machine Learning.	C212.1	R
2	List the various components of Learning Process.	C212.1	R
3	Define the terms hypothesis space and version space.	C212.1	R
4	Compare overfitting and underfitting with a neat diagram.	C212.1	U
5	Define VC dimensions.	C212.1	R
6	List out any four applications of machine learning.	C212.1	R
7	What are the two main objectives of simple linear regressions.	C212.2	R
8	What is Gradient Descent or Steepest Descent?	C212.2	R
9	What is Cost Function?	C212.2	R
10	List out the basic components of Perceptron.	C212.2	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Discuss in detail about VC dimensions.	C212.1	R
	Or		
12	Explain in detail about the concept of Probably Approximately Correct learning.	C212.1	R
13	Write a short notes on i. Learning Associations ii. Classifications	C212.1	R
	Or		
14	Write a short notes on i. Regressions ii. Types of learning	C212.1	R

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15		C212.2	A

Online Store	Monthly E-Commerce Sales	Online Advertising Costs
1	368	1.7
2	340	1.5
3	665	2.8
4	954	5
5	331	1.3
6	556	2.2
7	376	1.3

You have to study the relationship between the monthly e-commerce sales and the online advertising costs. You have the survey results for 7 online stores for the last year.
Your task is to find the equation of the straight line that fits the data best.

<table>
<tr><td colspan="4">Or</td></tr>
<tr><td>16</td><td>Apply Perceptron training rule for OR Gate using the following data,
<table><tr><th>A</th><th>B</th><th>Y=A+B</th></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>1</td></tr></table>w1=0.6 w2=0.6 Threshold = 1 and Learning rate (n) = 0.5</td><td>C212.2</td><td>A</td></tr>
</table>

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C311.1:36 marks, C311.2:14 marks

Faculty Members:Mr.P.DineshKumar,AP/AI & DS

Internal Assessment Test - I			Date/ Session	15.03.2023	Marks	50
Course code	AL3452	Course Title	Operating Systems			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define operating system and its functions.	C211.1	R
2	What are the main purpose of an operating system?	C211.1	AZ
3	What do you mean by multi-programming?	C211.1	R
4	Compare System calls and system programs.	C211.1	U
5	Define context switching.	C211.1	R
6	What are the advantages of co-operative processes?	C211.1	R
7	What is PCB? Specify the information maintained in it.	C211.2	R
8	Differentiate thread from a process.	C211.2	U
9	What is starvation?	C211.2	R
10	What is meant by critical section problem?	C211.2	U

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about any two operating system structures.	C211.1	R
	Or		
12	What are system calls? Discuss briefly the types of system calls provided by the operating systems.	C211.1	U
13	Discuss briefly about inter process communication.	C211.1	R
	Or		
14	Write in detail about thread and Multi threading models.	C211.1	R

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Consider the following set of processes,with the length of CPU-burst time given in milliseconds: P1: Burst Time 10, Priority 3 P2: Burst Time 1, Priority 1 P3: Burst Time 2, Priority 3 P4: Burst Time 1, Priority 4 P5: Burst Time 5, Priority 2 The process has arrived in the order P1,P2,P3,P4,P5,all at time 0. (i) Draw four gantt charts illustrating the execution of these process using FCFS,SJF,a Non pre-emptive priority and RR(quantum=1)scheduling. (ii)What is the turn around time of each process of the scheduling algorithm?	C211.2	A
	Or		
16	Explain briefly about CPU scheduling Algorithms with example.	C211.2	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C311.1:36 marks, C311.2:14 marks

Faculty Members:Ms.A.kayal.,AP/AI & DS

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test – II			Date/ Session	10.04.2023	Marks	50
Course code	AD3491	Course Title	FUNDAMENTALS OF DATA SCIENCE AND ANALYTICS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Sem/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is the standard error of estimation?	C213.3	R
2	The correlation coefficient of -0.84 between total mileage and automobile resale value what does it signify?	C213.3	A
3	What is a Regression line?	C213.3	R
4	Assuming that people are equally likely to be born during any one of the months what is the probability of jack being born during (a)June (b)any month other than June?	C213.4	A
5	Differentiate population and sample.	C213.4	R
6	What is Hypothetical population? Give Example.	C213.4	U
7	What is Confidence Interval? Give formula for CI	C213.4	R
8	What is level of Confidence and margin of Error?	C213.4	R
9	Define Degree of freedom.	C213.5	U
10	Justify which test t-test or z-test needs to be selected when population mean and standard variance are not known.	C213.5	A

Part – B (Answer all the questions 2 x 10 = 20marks) Maximum 2 splits/Question

Q.No	Questions	CO	Skills
11	A production line at a candy plant is designed to yield 2-pound boxes of assorted candies whose weights in fact follow a normal distribution with a mean of 33 ounces and a standard deviation of .30 ounce. A random sample of 36 boxes from the production of the most recent shift reveals a mean weight of 33.09 ounces. (Incidentally, if you think about it, this is an exception to the usual situation where the investigator hopes to reject the null hypothesis.) **(a)** Describe the population being tested. **(b)** Using the customary procedure, test the null hypothesis at the .05 level of significance. **(c)** Someone uses a one-tailed test, upper tail critical, because the sample mean of 33.09 exceeds the hypothesized population mean of 33. Any comment?	C213.4	A
	Or		
12	For the population at large, the Wechsler Adult Intelligence Scale is designed to yield a normal distribution of test scores with a mean of 100 and a standard deviation of 15. School district officials wonder whether, on the average, an IQ score different from 100 describes the intellectual aptitudes of all students in their district. Wechsler IQ scores are obtained for a random sample of 25 of their students, and the mean IQ is found to equal 105. Using the step-by-step procedure described in this chapter, test the null hypothesis at the .05 level of significance.	C213.4	A

13	According to the American Psychological Association, members with a doctorate and a full-time teaching appointment earn, on the average, $82,500 per year, with a standard deviation of $6,000. An investigator wishes to determine whether $82,500 is also the mean salary for all female members with a doctorate and a full-time teaching appointment. Salaries are obtained for a random sample of 100 women from this population, and the mean salary equals $80,100. **(a)** The investigator wishes to conduct a hypothesis test for what population? **(b)** What is the null hypothesis, *H*0? **(c)** What is the alternative hypothesis, *H*1? **(d)** Specify the decision rule, using the .05 level of significance. **(e)** Calculate the value of *z*. **(f)** What is your decision about *H*0? **(g)** Using words, interpret this decision in terms of the original problem.	C213.4	A
	Or		
14	We wish to know the probability that a suspect coin will land heads. We flip the coin 400 times and 190 times it lands heads. (a) Find the 80% confidence interval for the probability that the coin will land heads. State the margin. (b) We can be 95% confident that the probability of the coin landing heads is between what two numbers? State the margin. (c) Either our sample of 400 flips was among the 1% most unusual, or that the probability of the coin landing heads is between what two numbers?	C213.4	A

Part – C (Answer all the questions 1 x 10 = 10marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	Is the temperature of the earth getting warmer because heat is trapped by greenhouse gas emissions, such as carbon dioxide, in the earth's atmosphere? The National Climatic Data Center reports on its website at http://www.ncdc.noaa.gov/ pub/data/anomalies.html that the average global temperatures for recent years have deviated above the long-term mean temperature for the entire twentieth century. Expressed in Fahrenheit degrees, the annual *deviations above* the long term mean temperature for each of ten recent years, listed in chronological order up to 2015, were 1.15, 1.15, 1.01, 1.03 1.15, 1.22, 1.03, 1.13, 1.21, and 1.35. **(a)** Given that $X = 1.14$ and $s = 0.10$ for these ten years, use *t* at the .01 level of significance to test the null hypothesis that the temperature of earth is not getting warmer. In other words, could the sample mean deviation for these ten years have originated from a population of annual deviations for the entire twentieth century having a mean deviation *equal to zero*? **(b)** If appropriate (because the null hypothesis has been rejected), construct a 99 percent confidence interval and interpret this interval.	C213.5	A
	Or		
16	A library system lends books for periods of 21 days. This policy is being reevaluated in view of a possible new loan period that could be either longer or shorter than 21 days. To aid in making this decision, book-lending records were consulted to determine the loan periods actually used by the patrons. A random sample of eight records revealed the following loan periods in days: 21, 15, 12, 24, 20, 21, 13, and 16. Test the null hypothesis with *t*, using the .05 level of significance. Construct a 99 percent confidence interval and interpret this interval.	C213.5	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the faculty:Ms. A.SRIDEVI

Saranathan College of Engineering,Tiruchirapalli

Department of Artificial Intelligence and Data Science

Internal Assessment Test – II			Date/ Session	11.04.2023	Marks	50
Course code	AL3451	Course Title	Machine Learning			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Difference between probabilistic discriminative model and probabilistic generative model.	C212.2	U
2	Define Maximum Marginal Classifier.	C212.2	R
3	Define Information Gain.	C212.2	R
4	List out the reasons why we combine models in machine learning	C212.3	U
5	What is ensemble learning?	C212.3	R
6	List the types of ensemble methods that differentiate the performance and accuracy of the models.	C212.3	R
7	Define Bootstrapping and Aggregation.	C212.3	R
8	Define Unsupervised learning.	C212.3	R
9	Define Stacking.	C212.3	R
10	Write the steps to perform bagging.	C212.3	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about Support Vector Machine.	C212.2	R
	Or		
12	Explain in detail about Random Forest.	C212.2	R
13	Explain in detail about Bagging, Boosting and Stacking	C212.3	R
	Or		
14	Discuss in detail about K-Means Clustering.	C212.3	R

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Use K-Means Clustering algorithm to divide the following data into two clusters. Choose any two data points as centroids (cluster center)	C212.3	A
	Or		
16	Explain in detail about K-Nearest Neighbor algorithm and identify the class for the given Height and Weight.	C212.3	A

X1	1	2	2	3	4	5
X2	1	1	3	2	3	5

Height (CM)	Weight (KG)	Class
167	51	Underweight
182	62	Normal
176	69	Normal
173	64	Normal
172	65	Normal
174	56	Underweight
169	58	Normal
173	57	Normal
170	55	Normal
170	57	?

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C311.1:36 marks, C311.2:14 marks

Internal Assessment Test - II			Date/ Session	13.04.2023	Marks	50
Course code	AL3452	Course Title	Operating Systems			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is semaphore?	C211.2	R
2	Write the three ways to deal the deadlock program.	C211.2	AZ
3	What is segmentation?	C211.3	R
4	Distinguish between internal and external fragmentation.	C211.3	U
5	What is an overlay?what is the use of it?	C211.3	R
6	What are the advantages and dis-advantage of contiguous and non contiguous allocation?	C211.3	R
7	Differentiate between segmentation and paging.	C211.3	R
8	What is demand paging?	C211.3	U
9	What is virtual memory?mention its advantages.	C211.3	R
10	Define TLB.	C211.3	U

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about classic problem of synchronization.	C211.2	R
	Or		
12	How does deadlock avoidance differ from deadlock prevention?write about deadlock avoidance algorithm in detail.	C211.2	U
13	Explain about contiguous memory allocation with neat diagram.	C211.3	A
	Or		
14	What do you mean by paging?Discuss in detail about structure of page tables with appropriate examples.	C211.3	R

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Consider the following snapshot of a system: PROCESS | ALLOCATION | REQUEST | AVAILABLE R1 R2 R3 R4 | R1 R2 R3 R4 | R1 R2 R3 R4 P1 0 0 1 2 | 0 0 1 2 | 1 5 2 0 P2 1 0 0 0 | 1 7 5 0 | P3 1 3 5 4 | 2 3 5 6 | P4 0 6 3 2 | 0 6 5 2 | P5 0 0 1 4 | 0 6 5 6 | Answer the following questions using Banker's algorithm: i) what is the content of need matrix? ii) Is the system is in a safe state? iii) If a request from P2 arrives for (0,4,2,0),can the request be granted immediately?	C211.2	A
	Or		
16	Discuss about any three page replacement algorithm in detail.	C211.3	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C311.1:36 marks, C311.2:14 marks

Internal Assessment Test - II			Date/ Session	17.04.2023	Marks	50
Course code	CS3591	Course Title	Computer Networks			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What do you mean by slow start in TCP connection?	C214.2	R
2	How do fast retransmit mechanism of TCP works ?	C214.2	U
3	Define Congestion Control.	C214.2	R
4	What do you mean by switching ?	C214.3	R
5	Change the following IPV4 addresses from binary notation to dotted decimal notation 10000001 00001011 00001011 11101111	C214.3	A
6	Compare IPV4 and IPV6	C214.3	U
7	Differentiate Packet Switching and Circuit Switching.	C214.3	U
8	What are the different types of IP addressing?	C214.3	R
9	Define Subnetting.	C214.3	R
10	List the pros and cons of using DHCP in network management.	C214.3	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail the various congestion control mechanisms	C214.2	R
	Or		
12	Explain Congestion Avoidance using DECbit and RED in Transport Layer with an Example.	C214.2	R
13	Write a short note on a) DHCP b) ICMP	C214.3	R
	Or		
14	Consider a network scenario and explain the function of ARP and RARP protocols with frame formats.	C214.3	R

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain the short notes on Packet Switching with relevant examples	C214.3	U
	Or		
16	Explain in detail about Internet Protocol with relevant Packet Format.	C214.3	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C311.1:36 marks, C311.2:14 marks

Faculty Member: Dr.S.Ravimaran/Prof.&Head/AI & DS

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test – III			Date/ Session	15.05.2023	Marks	50
Course code	AD3491	Course Title	FUNDAMENTALS OF DATA SCIENCE AND ANALYTICS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Sem/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is sampling distribution of t?	C213.5	R
2	Differentiate independent sample and related sample.	C213.5	A
3	Define p-value.	C213.5	A
4	What is the use of chi-square test?	C213.5	U
5	Differentiate z test , t test and F test	C213.5	A
6	What is goodness of fir test?	C213.6	R
7	Define resampling and weighted resampling.	C213.6	R
8	Define autocorrelation.	C213.6	U
9	How to handle the missing values in data set?	C213.6	U
10	Define regression using statmodel.	C213.6	A

Part – B (Answer all the questions 2 x 10 = 20marks) Maximum 2 splits/Question

Q.No	Questions	CO	Skills
11	Explain the concept of non linear regression.	C213.6	U
	Or		
12	Explain the concept of survival analysis.	C213.6	U
13	Given the aggression scores below for Outcome A of the sleep deprivation experiment, verify that, as suggested earlier, these mean differences shouldn't be taken seriously by testing the null hypothesis at the .05 level of significance. Use the computation formulas for the various sums of squares and summarize results with an ANOVA table. **HOURS OF SLEEP DEPRIVATION** **ZERO** **TWENTY-FOUR** **FORTY-EIGHT** 3 4 2 5 8 4 7 6 6	C213.5	A
	Or		
14	A school psychologist tests the effects of environmental noises on the reading comprehension scores of high school students who rotate, with the customary controls, through three different conditions: silence, white noise, and rock music. The reading comprehension scores for six subjects are as follows: **SUBJECT** **SILENCE** **WHITE NOISE** **ROCK** A 6 4 2 B 11 3 0 C 5 4 1 D 7 6 2 E 4 6 4 F 10 7 5 Summarize the results in an ANOVA table.	C213.5	A

Part – C (Answer all the questions 1 x 10 = 10marks) Case study or Analytical type

<table>
<tr><th>Q. No.</th><th>Questions</th><th>CO</th><th>Skills</th></tr>
<tr><td>15</td><td>Randomly selected records of 140 convicted criminals reveal that their crimes were committed on the following days of the week:

DAYS WHEN CRIMES WERE COMMITTED
<table><tr><th>FREQUENCY</th><th>MON.</th><th>TUE.</th><th>WED.</th><th>THU.</th><th>FRI.</th><th>SAT.</th><th>SUN.</th><th>TOTAL</th></tr><tr><td>Observed (f_o)</td><td>17</td><td>21</td><td>22</td><td>18</td><td>23</td><td>24</td><td>15</td><td>140</td></tr></table>
(a) Using the .01 level of significance, test the null hypothesis that in the underlying population, crimes are equally likely to be committed on any day of the week.
(b) Specify the approximate p-value for this test result.</td><td>C213.5</td><td>A</td></tr>
<tr><td colspan="4">Or</td></tr>
<tr><td>16</td><td>An investigator suspects that there might be a relationship, possibly based on genetic factors, between hair color and susceptibility to poison oak. Three hundred volunteer subjects are exposed to a small amount of poison oak and then classified according to their susceptibility (rash or no rash) and their hair color (red, blond, brown, or black), yielding the following frequencies:

HAIR COLOR AND SUSCEPTIBILITY TO POISON OAK
HAIR COLOR
<table><tr><th>SUSCEPTIBILITY</th><th>RED</th><th>BLOND</th><th>BROWN</th><th>BLACK</th><th>TOTAL</th></tr><tr><td>Rash</td><td>10</td><td>30</td><td>60</td><td>80</td><td>180</td></tr><tr><td>No rash</td><td>20</td><td>30</td><td>30</td><td>40</td><td>120</td></tr><tr><td>Total</td><td>30</td><td>60</td><td>90</td><td>120</td><td>300</td></tr></table>
(a) Test the null hypothesis at the .01 level of significance.
(b) Specify the approximate p-value for this test result.</td><td>C213.5</td><td>A</td></tr>
</table>

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the faculty:Ms. A.SRIDEVI



Saranathan College of Engineering,Tiruchirapalli

Department of Artificial Intelligence and Data Science

Internal Assessment Test – III			Date/ Session	16.05.2023	Marks	50
Course code	AL3451	Course Title	Machine Learning			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is an activation function and why use them?	C212.5	U
2	What is the difference shallow neural network and deep neural network?	C212.5	U
3	List the various types of activation function.	C212.5	R
4	Define Stochastic gradient descent.	C212.5	R
5	Define ReLU and what is the problem associated with it?	C212.5	U
6	Define Cross Validation.	C212.6	R
7	Define accuracy.	C212.6	R
8	Define Precision.	C212.6	R
9	Enumerate Recall or Sensitivity.	C212.6	R
10	Define F1 Score.	C212.6	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about Feed Forward and Error Back Propagation in neural network.	C212.5	R
	Or		
12	Explain the techniques of regularization in detail.	C212.5	R
13	Write a short note on i. Vanishing Gradient Problem (5) ii. ReLU (5)	C212.5	R
	Or		
14	Write a short note on i. Batch Normalization ii. Hyper parameter tuning	C212.5	R

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain in detail about various cross validation techniques.	C212.6	R
	Or		
16	Discuss in detail about K Fold CV paired t-test with an example.	C212.6	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C311.1:36 marks, C311.2:14 marks

Faculty Members:Mr.P.DineshKumar,AP/AI & DS



Saranathan College of Engineering,Tiruchirapalli

Department of Artificial Intelligence and Data Science

Internal Assessment Test - III			Date/ Session	17.05.2023	Marks	50
Course code	AL3452	Course Title	Operating Systems			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	List the various File Attributes.	C211.4	R
2	What are the various File Operations?	C211.4	AZ
3	What are the various Disk-Scheduling Algorithms?	C211.4	R
4	What type of file accessing method can be used for batch and payroll applications?	C211.4	U
5	Write short notes on file system mounting.	C211.4	R
6	What is virtual machine?	C211.5	R
7	How free-space is managed using bit vector Implementation? List its advantages.	C211.5	R
8	Define latency transfer seek time with respect to disk I/O.	C211.5	U
9	List the features of Linux OS.	C211.5	R
10	Write the purpose of using virtualization.	C211.5	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain about single-level, two-level directory structure?	C211.4	R
	Or		
12	Explain about file system mounting, file sharing? .Discuss the functions of files and file implementation.	C211.4	U
13	Suppose the head of a moving- head disk with 200 tracks, numbered 0 to 199, is Currently serving a request at track 143 and has just finished a request at track 125. If the queue of requests is kept in FIFO order: 86, 147, 91, 177, 94, 150, 102, 175, 130. What is the total head movement to satisfy these requests for the following Disk scheduling algorithms. (a)FCFS (b) Random (d) SCAN (e) SSTF (f) C- SCAN.	C211.5	AZ
	Or		
14	Discuss briefly about virtual machine types and their implementation.	C211.5	R

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain the architecture of Android OS.	C211.6	R
	Or		
16	Explain the architecture of IOS.	C211.6	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C211.4:20 marks, C211.5:10 marks, C211.6:10.

Faculty Members:Ms.A.kayal.,AP/AI & DS



Saranathan College of Engineering,Tiruchirapalli

Department of Artificial Intelligence and Data Science

Internal Assessment Test - III			Date/ Session	18.05.2023	Marks	50
Course code	CS3591	Course Title	Computer Networks			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV	Department	AI & DS	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is Transmission Media ? Give Examples.	C214.2	R
2	What do you mean by Circuit Switching ?	C214.2	R
3	Define the Terms Bandwidth and Latency.	C214.2	R
4	Draw the classification chart of Transmission Media.	C214.3	R
5	List the THREE parameters used to represent a periodic sine wave signal.	C214.3	A
6	How do Routers differentiate the incoming unicast, multicast and broadcast IP Packets?.	C214.3	U
7	What is Multicast Routing?.,	C214.3	R
8	List the characteristics of RIP.	C214.3	R
9	Differentiate RIP & OSPF.	C214.3	R
10	Point out two protocols that support multicasting.	C214.3	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	With a neat diagram explain Distance Vector Routing protocol.	C214.2	R
	Or		
12	Explain the working of protocol Independent Multicast (PIM) in detail.	C214.2	R
13	Explain in detail the operation of Link State routing with OSPF protocol by considering a suitable network.	C214.3	R
	Or		
14	Justify the need for Path Vector Routing with the support of Boarder Gateway Protocol (BGP)	C214.3	U

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Outline the need of Distance Multicast Routing Protocol(DVMRP)	C214.3	U
	Or		
16	a. Compare and Contrast guided and unguided media for Transmission (6) b. Describe Circuit Switching with an Example. (4).	C214.3	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.C311.1:36 marks, C311.2:14 marks

Faculty Member: Dr.S.Ravimaran/Prof.&Head/AI & DS

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012 Verified D. Janani

ANSWER BOOK

Name	D. Janani			Year / Semester / Section	II / III / A
Batch No.	248023	Date / Session	22/09/22 / FN	Department	AI & DS
Course Code	AI3391	Course Title	Artificial Intelligence		
Internal Assessment Test	I ☑ · II ☐	III ☐	Model ☐	No. of pages used : 18	
Name and Signature of the Invigilator with date	G. Jeevanya 22/9/22				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	2	12	✓	8	✓		8
3	✓	2	13					
4	✓	1	14	✓	8	✓		8
5	✓	2	15	✓	9	✓		9
6	✓	2	16					
7	✓	2					Total	25
8	✓	2						
9	✓	2						
10	✓	2						
Total		19	Grand Total		44			

P. DINESH KUMAR 22/9/22
Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	50						50
Marks Obtained	44						44

QAC Audit - Remarks

—

P. Anand AP(SG)
Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	R. Viji			Year / Semester / Section	IV / VII / A
Batch No.	248060	Date / Session	21.10.22 / FN	Department	AI & DS
Course Code	AL3391	Course Title	ARTIFICIAL INTELLIGENCE		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	F. Flamkuthi 21.10.22				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	1	11					
2	✓	1	12	✓	9			9
3	✓	2	13	✓	3			3
4	✓	2	14					
5	✓	0	15					
6	✓	1	16	✓	4			4
7	✓	2					Total	16
8	✓	2						
9	✓	1						
10	✓	2						
Total		14						

30
Grand Total

P DINESH KUMAR 21.10.22
Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		32	18				50
Marks Obtained		19	11				30

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPALLI.

ANSWER BOOK

Name : A. Aashifa parveen
Batch Number : 248001

Subject : Artificial Intelligence
Date : 21/12/22

Part - A

IQAC

1. Types of constraints :
   * unary constraint
   * Binary constraint
   * higher order constraint
   * Absolute constraint
   * Preference constraint

2. Steps in Monte Carlo Tree search :
   * Selection
   * Expansion
   * simulation
   * Backpropagation

3. First order logic :
   * First order logic is used to represent the knowledge in a mathematical form. They are more powerful when compared to proportional logic.
   They are.

4. Quantifiers :
   * Quantifiers are used to express the property of collection of object rather than naming the object individually.
   Types :
   * Universal Quantifier * Existential Quantifier * Nested Quantifier

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	A. Aashifa Parveen.			Year / Semester / Section	III / IV / A.
Batch No.	248001	Date / Session	11/3/23 / FN	Department	AI&DS
Course Code	AI3451.	Course Title	Machine learning		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date		P. Sivagamasundhari			

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	2	11	✓	9			9
2	✓	2	12					
3	✓	2	13	✓	9	✓		9
4	✓	2	14					
5	✓	2	15					
6	✓	2	16	✓	10			10
7	✓	2					Total	28
8	✓	2						
9	✓	2						
10	✓	2						
Total		20	48 Grand Total				P. DINESHKUMAR 06/14/3/23 Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	32	18					50
Marks Obtained	30	18					48

QAC Audit - Remarks

Aashifa.

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	Abirayaa.M.K			Year / Semester / Section	II / IV / A
Batch No.	248002	Date / Session	11.04.2023/FN	Department	AI & DS
Course Code	AL3451	Course Title	Machine learning		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used : 12
Name and Signature of the Invigilator with date	11/04/23 (A SRIDEVI)				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	1	11	✓	9			9
2	✓	2	12					
3	✓	1	13					
4	✓	2	14	✓	7			7
5	✓	2	15	✓	7			7
6	✓	0	16					
7	✓	2					Total	23
8	✓	2						
9	✓	2						
10		0	37					
Total		14	Grand Total				P DINESHkumar 18/4/23 Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		16	34				50
Marks Obtained		13	24				37

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	N. Afra Shiveen			Year / Semester / Section	2/4/A
Batch No.	248003	Date / Session	16.05.2023/FN	Department	AI&DS
Course Code	AL 3451	Course Title	Machine learning		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	B. Divya				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✔	2	11	✔	5			5
2		-	12					
3	✔	2	13			✔	4	4
4	✔	2	14					
5	✔	2	15					
6	✔	2	16	✔	7			7
7	✔	2					Total	16
8	✔	2						
9	✔	2						
10	✔	2						
Total		18	Grand Total		34		Name and Signature of the Examiner with date	18/5/23

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted					30	20	50
Marks Obtained					17	17	34

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE
INTERNAL ASSESSMENT 1 2022 -2023 ODD

S.no	Regno	Batchno	Name	AD3301	AD3351	AD3391	AL3391	CS3351	MA3354
1	813821243001	248001	AASHIFA PARVEEN. A	90	86	88	90	94	100
2	813821243002	248002	ABINAYAA . M K	62	A	50	60	14	A
3	813821243003	248003	AFRA SHIREEN. N	84	52	64	80	78	84
4	813821243004	248004	AJAY ABISHEK. M	64	36	50	68	56	44
5	813821243005	248005	AKSHIYA VAIBHAVI. S	60	52	62	58	62	62
6	813821243006	248006	AMARNATH. S	80	68	52	70	92	86
7	813821243007	248007	AMBIKA. K	80	56	78	86	90	96
8	813821243008	248008	ANTO JERUSHA. J	62	54	52	62	52	68
9	813821243010	248010	AYSHA SUMIYA	62	66	68	70	80	64
10	813821243011	248011	BHAVADHARANI. A	64	54	52	60	72	76
11	813821243012	248012	DEVAPRASATH. K	38	22	68	62	60	42
12	813821243014	248014	DHARSENI. A	50	30	58	40	52	70
13	813821243015	248015	DHARSHAN. A	50	44	A	A	A	66
14	813821243017	248017	DHIVYA. R	50	50	50	42	58	58
15	813821243019	248018	HAMILTON INFANT. A	72	44	60	56	58	22
16	813821243020	248019	HARINEE. S G	74	62	72	82	80	88
17	813821243021	248020	HILDA DEVAPRIYAM .X	80	84	88	86	100	94
18	813821243022	248021	ILLAKYA VARNAA. N	50	34	44	64	36	32
19	813821243023	248022	INDHUMATHI. R	50	50	58	64	50	78
20	813821243024	248023	JANANI. D	90	88	78	88	90	88
21	813821243025	248024	JAYANDRAKUMAR. S	12	42	54	8	22	4
22	813821243026	248025	JEEVITHA. B	70	36	66	50	54	24
23	813821243027	248026	JOEL GIFTSON. J	52	40	44	54	66	36
24	813821243028	248027	KARTHIK SRIRAM. B A	66	68	70	62	82	64
25	813821243029	248028	KARUNIYA. P	34	50	40	50	54	62
26	813821243030	248029	KEERTHANA. D	50	44	44	44	76	50
27	813821243031	248030	KEERTHANA. T	76	60	82	62	62	72
28	813821243032	248031	LAVANYA. R	96	A	A	A	100	90
29	813821243033	248032	MADULIKA. P S	54	50	52	70	72	68
30	813821243034	248033	MALINI. S	60	A	A	70	92	A
31	813821243035	248034	MOUNIKA. R	A	38	50	A	A	28
32	813821243036	248035	MUZIFA MUBARAK ALI. M	66	64	76	64	76	74
33	813821243037	248036	NAFEES AHAMED. A	50	34	44	32	58	22
34	813821243038	248037	PERARULALAN. V	58	50	50	54	70	68
35	813821243039	248038	PRAVIN. R F	58	72	68	72	96	82
36	813821243040	248039	RABINSON. G	80	50	70	40	96	86
37	813821243041	248040	RAGHAVENDRA. M	22	30	36	44	50	52
38	813821243042	248041	RAJA CHOLAN	16	26	50	32	72	32
39	813821243043	248042	RISHIKAANDH DEVADOSS	54	50	70	54	82	84
40	813821243044	248043	ROSHAN KUMAR. B	82	76	64	84	96	92
41	813821243045	248044	RUPA SRI VARSINI. R	88	66	70	82	72	92
42	813821243046	248045	SAI ACHALAA. S A	68	52	64	78	50	84
43	813821243047	248046	SEENIVASA PERUMAL. N	60	54	66	60	90	82
44	813821243048	248047	SHANMUGAPANDIYAN. A	70	44	58	66	88	60
45	813821243049	248048	SOORIYA PRABHU. M	14	64	46	30	60	72
46	813821243050	248049	SOWMIYA. T	74	58	68	68	80	94
47	813821243051	248050	SRI SABARI. I.T	4	8	16	12	12	8
48	813821243052	248051	SUBHALAKSHMI. A	68	82	78	78	80	70

49	813821243053	248052	SUDHANTHIRAN. N	72	68	58	76	84	80
50	813821243054	248053	SUDHARSAN. K	50	A	A	50	56	A
51	813821243055	248054	SUJI. S	52	50	58	64	64	80
52	813821243056	248055	SURESH. S	58	58	56	56	86	52
53	813821243057	248056	TEJASRAM. B	74	72	68	84	78	74
54	813821243058	248057	THEO SAVIO. M J	74	80	66	86	100	96
55	813821243059	248058	VETRIVELAN M	54	46	50	64	58	52
56	813821243060	248059	VIGNESHWARAN. S	28	18	44	52	80	70
57	813821243061	248060	VIJI. R	84	72	70	78	82	82
58	813821243062	248061	VIMALA. J	70	36	50	60	42	24
59	813821243063	248062	VISHAL. E	56	54	50	70	52	74
60	813821243018	248063	EDISON. S	50	44	50	50	62	82
61	813821243305	248064	SHANE STEVE. A	A	A	A	A	A	A
62	813821243302	248065	HEMA. S	A	A	A	A	A	A
63	813821243301	248068	AKILAN. S	A	A	A	A	A	A

SARANATHAN COLLEGE OF ENGINEERING
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE
INTERNAL ASSESSMENT 2 2022 -2023 ODD

S.no	Regno	Batchno	Name	AD3301	AD3351	AD3391	AL3391	CS3351	MA3354
1	813821243001	248001	AASHIFA PARVEEN. A	96	76	82	94	70	88
2	813821243002	248002	ABINAYAA . M K	52	36	42	42	52	50
3	813821243003	248003	AFRA SHIREEN. N	74	80	70	94	54	76
4	813821243004	248004	AJAY ABISHEK. M	58	40	50	24	54	50
5	813821243005	248005	AKSHIYA VAIBHAVI. S	84	60	52	80	58	A
6	813821243006	248006	AMARNATH. S	74	72	56	52	58	68
7	813821243007	248007	AMBIKA. K	80	74	80	78	90	78
8	813821243008	248008	ANTO JERUSHA. J	36	50	A	24	66	38
9	813821243010	248010	AYSHA SUMIYA	50	60	74	80	80	80
10	813821243011	248011	BHAVADHARANI. A	80	56	66	74	50	58
11	813821243012	248012	DEVAPRASATH. K	62	56	50	50	58	62
12	813821243014	248014	DHARSENI. A	64	58	42	54	54	78
13	813821243015	248015	DHARSHAN. A	62	54	52	24	54	50
14	813821243017	248017	DHIVYA. R	50	52	52	68	64	66
15	813821243019	248018	HAMILTON INFANT. A	62	50	52	32	70	42
16	813821243020	248019	HARINEE. S G	A	A	A	A	A	A
17	813821243021	248020	HILDA DEVAPRIYAM .X	86	90	84	86	72	90
18	813821243022	248021	ILLAKYA VARNAA. N	50	28	34	42	52	26
19	813821243023	248022	INDHUMATHI. R	62	50	54	52	58	42
20	813821243024	248023	JANANI. D	82	78	76	92	80	86
21	813821243025	248024	JAYANDRAKUMAR. S	58	38	26	4	12	30
22	813821243026	248025	JEEVITHA. B	52	34	18	46	54	56
23	813821243027	248026	JOEL GIFTSON. J	50	50	50	50	54	34
24	813821243028	248027	KARTHIK SRIRAM. B A	92	78	58	58	56	58
25	813821243029	248028	KARUNIYA. P	40	28	20	A	16	50
26	813821243030	248029	KEERTHANA. D	50	50	56	58	18	52
27	813821243031	248030	KEERTHANA. T	68	64	50	28	64	60
28	813821243032	248031	LAVANYA. R	76	86	78	84	72	72
29	813821243033	248032	MADULIKA. P S	38	78	52	54	50	56
30	813821243034	248033	MALINI. S	66	66	60	66	88	66
31	813821243035	248034	MOUNIKA. R	34	20	34	18	50	24
32	813821243036	248035	MUZIFA MUBARAK ALI. M	72	62	60	52	60	52
33	813821243037	248036	NAFEES AHAMED. A	34	12	20	22	20	A
34	813821243038	248037	PERARULALAN. V	60	40	54	58	64	70
35	813821243039	248038	PRAVIN. R F	66	72	66	44	72	80
36	813821243040	248039	RABINSON. G	80	58	52	76	70	76
37	813821243041	248040	RAGHAVENDRA. M	28	30	26	38	32	20
38	813821243042	248041	RAJA CHOLAN	38	24	32	30	40	30
39	813821243043	248042	RISHIKAANDH DEVADOSS	64	42	52	44	70	50
40	813821243044	248043	ROSHAN KUMAR. B	94	74	64	60	84	76
41	813821243045	248044	RUPA SRI VARSINI. R	88	74	52	88	62	74
42	813821243046	248045	SAI ACHALAA. S A	74	54	50	50	54	40

43	813821243047	248046	SEENIVASA PERUMAL. N	72	66	52	72	72	44
44	813821243048	248047	SHANMUGAPANDIYAN. A	74	66	60	82	70	60
45	813821243049	248048	SOORIYA PRABHU. M	52	32	50	44	10	14
46	813821243050	248049	SOWMIYA. T	80	72	54	70	66	78
47	813821243051	248050	SRI SABARI. I.T	14	6	14	6	0	0
48	813821243052	248051	SUBHALAKSHMI. A	66	66	A	84	56	62
49	813821243053	248052	SUDHANTHIRAN. N	58	60	30	56	52	20
50	813821243054	248053	SUDHARSAN. K	50	42	50	44	54	22
51	813821243055	248054	SUJI. S	66	38	60	62	60	58
52	813821243056	248055	SURESH. S	56	30	40	58	60	28
53	813821243057	248056	TEJASRAM. B	82	74	66	54	66	58
54	813821243058	248057	THEO SAVIO. M J	96	76	74	68	64	78
55	813821243059	248058	VETRIVELAN M	82	60	50	26	50	60
56	813821243060	248059	VIGNESHWARAN. S	50	60	38	50	50	56
57	813821243061	248060	VIJI. R	84	70	68	60	58	66
58	813821243062	248061	VIMALA. J	64	54	38	32	56	40
59	813821243063	248062	VISHAL. E	80	42	30	34	28	50
60	813821243018	248063	EDISON. S	74	52	54	50	34	52
61	813821243305	248064	SHANE STEVE. A	2	10	30	6	0	0
62	813821243302	248065	HEMA. S	10	32	32	44	30	26
63	813821243301	248068	AKILAN. S	68	28	24	26	40	24

SARANATHAN COLLEGE OF ENGINEERING
DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE
INTERNAL ASSESSMENT 3 2022 -2023 ODD

S.no	Regno	Batchno	Name	AD3301	AD3351	AD3391	AL3391	CS3351	MA3354
1	813821243001	248001	AASHIFA PARVEEN. A	91	87	71	90	86	94
2	813821243002	248002	ABINAYAA . M K	38	32	26	50	52	24
3	813821243003	248003	AFRA SHIREEN. N	89	64	80	77	45	44
4	813821243004	248004	AJAY ABISHEK. M	28	45	68	66	48	39
5	813821243005	248005	AKSHIYA VAIBHAVI. S	34	46	70	66	58	68
6	813821243006	248006	AMARNATH. S	75	58	85	66	76	59
7	813821243007	248007	AMBIKA. K	80	62	79	79	52	50
8	813821243008	248008	ANTO JERUSHA. J	28	50	65	37	19	18
9	813821243010	248010	AYSHA SUMIYA	91	73	82	88	78	54
10	813821243011	248011	BHAVADHARANI. A	57	59	50	83	53	60
11	813821243012	248012	DEVAPRASATH. K	66	24	39	39	27	0
12	813821243014	248014	DHARSENI. A	50	50	73	60	18	32
13	813821243015	248015	DHARSHAN. A	38	26	13	44	12	17
14	813821243017	248017	DHIVYA. R	82	52	65	53	30	38
15	813821243019	248018	HAMILTON INFANT. A	71	28	52	30	23	16
16	813821243020	248019	HARINEE. S G	63	63	82	65	51	74
17	813821243021	248020	HILDA DEVAPRIYAM .X	A	59	61	A	33	70
18	813821243022	248021	ILLAKYA VARNAA. N	50	31	43	30	29	13
19	813821243023	248022	INDHUMATHI. R	66	39	60	50	26	20
20	813821243024	248023	JANANI. D	85	69	81	88	84	A
21	813821243025	248024	JAYANDRAKUMAR. S	19	19	29	27	24	A
22	813821243026	248025	JEEVITHA. B	30	24	31	50	38	11
23	813821243027	248026	JOEL GIFTSON. J	63	38	50	63	44	32
24	813821243028	248027	KARTHIK SRIRAM. B A	66	60	66	73	59	44
25	813821243029	248028	KARUNIYA. P	51	54	17	37	33	7
26	813821243030	248029	KEERTHANA. D	19	26	-1	31	A	24
27	813821243031	248030	KEERTHANA. T	70	44	59	71	63	14
28	813821243032	248031	LAVANYA. R	95	68	86	91	61	77
29	813821243033	248032	MADULIKA. P S	50	64	57	65	50	16
30	813821243034	248033	MALINI. S	90	82	54	90	71	90
31	813821243035	248034	MOUNIKA. R	35	51	53	68	A	30
32	813821243036	248035	MUZIFA MUBARAK ALI. M	32	38	24	53	16	A
33	813821243037	248036	NAFEES AHAMED. A	55	35	50	50	31	21
34	813821243038	248037	PERARULALAN. V	41	39	41	58	33	50
35	813821243039	248038	PRAVIN. R F	59	61	68	57	25	14
36	813821243040	248039	RABINSON. G	54	62	53	73	63	55
37	813821243041	248040	RAGHAVENDRA. M	44	25	19	41	16	7
38	813821243042	248041	RAJA CHOLAN	32	35	56	51	19	16
39	813821243043	248042	RISHIKAANDH DEVADOSS	43	52	42	51	21	22
40	813821243044	248043	ROSHAN KUMAR. B	71	78	67	78	57	82
41	813821243045	248044	RUPA SRI VARSINI. R	97	75	62	91	72	A
42	813821243046	248045	SAI ACHALAA. S A	A	55	39	52	27	40

43	813821243047	248046	SEENIVASA PERUMAL. N	75	53	41	67	40	62
44	813821243048	248047	SHANMUGAPANDIYAN. A	33	62	57	70	36	45
45	813821243049	248048	SOORIYA PRABHU. M	22	20	16	37	13	28
46	813821243050	248049	SOWMIYA. T	36	62	57	82	58	56
47	813821243051	248050	SRI SABARI. I.T	67	24	44	34	30	0
48	813821243052	248051	SUBHALAKSHMI. A	85	61	51	90	63	49
49	813821243053	248052	SUDHANTHIRAN. N	19	36	24	41	36	30
50	813821243054	248053	SUDHARSAN. K	75	37	45	51	20	28
51	813821243055	248054	SUJI. S	88	56	50	73	52	46
52	813821243056	248055	SURESH. S	50	50	40	75	37	46
53	813821243057	248056	TEJASRAM. B	42	50	36	56	21	54
54	813821243058	248057	THEO SAVIO. M J	89	69	77	85	66	73
55	813821243059	248058	VETRIVELAN M	11	27	23	23	7	9
56	813821243060	248059	VIGNESHWARAN. S	45	56	23	61	20	35
57	813821243061	248060	VIJI. R	27	31	54	64	43	36
58	813821243062	248061	VIMALA. J	8	36	40	53	28	4
59	813821243063	248062	VISHAL. E	50	27	31	54	23	10
60	813821243018	248063	EDISON. S	29	47	41	39	24	42
61	813821243305	248064	SHANE STEVE. A	33	24	46	31	20	8
62	813821243302	248065	HEMA. S	20	41	12	42	35	17
63	813821243301	248068	AKILAN. S	78	26	50	35	25	12

Classwise ALL Cycletest Mark Summary Report

Class:AID Semester:4 Section:A

Semester Period:22-23EVEN

S.no	Regno	Batchno	Name	AD3491	AL3451	AL3452	CS3591	GE3451	MA3391
				A1	A1	A1	A1	A1	A1
1	813821243001	248001	AASHIFA PARVEEN. A	86	96	94	88	90	90
2	813821243002	248002	ABINAYAA . M K	62	60	70	38	78	54
3	813821243003	248003	AFRA SHIREEN. N	94	66	84	59	64	56
4	813821243004	248004	AJAY ABISHEK. M	32	30	74	44	55	34
5	813821243005	248005	AKSHIYA VAIBHAVI. S	46	68	52	50	70	50
6	813821243006	248006	AMARNATH. S	82	74	78	33	74	64
7	813821243007	248007	AMBIKA. K	54	74	86	62	55	80
8	813821243008	248008	ANTO JERUSHA. J	32	80	76	16	55	36
9	813821243010	248010	AYSHA SUMIYA	74	82	88	61	56	56
10	813821243011	248011	BHAVADHARANI. A	74	76	50	40	50	84
11	813821243012	248012	DEVAPRASATH. K	30	62	52	41	31	32
12	813821243014	248014	DHARSENI. A	64	68	82	18	34	40
13	813821243015	248015	DHARSHAN. A	44	60	64	58	21	38
14	813821243017	248017	DHIVYA. R	46	50	68	50	43	36
15	813821243018	248063	EDISON. S	0	62	52	34	39	54
16	813821243019	248018	HAMILTON INFANT. A	34	22	50	58	26	10
17	813821243020	248019	HARINEE. S G	62	76	80	50	64	74
18	813821243021	248020	HILDA DEVAPRIYAM .X	58	70	82	60	80	62
19	813821243022	248021	ILLAKYA VARNAA. N	38	50	72	24	27	34
20	813821243023	248022	INDHUMATHI. R	60	60	78	52	41	50
21	813821243024	248023	JANANI. D	72	92	86	72	74	86
22	813821243025	248024	JAYANDRAKUMAR. S	8	22	14	34	24	2
23	813821243026	248025	JEEVITHA. B	28	50	50	32	51	38
24	813821243027	248026	JOEL GIFTSON. J	60	42	62	38	38	56
25	813821243028	248027	KARTHIK SRIRAM. B A	72	62	76	72	51	52
26	813821243029	248028	KARUNIYA. P	42	A	50	38	32	24
27	813821243030	248029	KEERTHANA. D	52	52	52	28	35	56
28	813821243031	248030	KEERTHANA. T	76	70	72	42	59	50
29	813821243032	248031	LAVANYA. R	92	86	88	64	64	78
30	813821243033	248032	MADULIKA. P S	78	60	60	58	65	56
31	813821243034	248033	MALINI. S	74	70	82	44	63	74
32	813821243035	248034	MOUNIKA. R	58	50	88	40	50	36
33	813821243036	248035	MUZIFA MUBARAK ALI.	44	50	80	62	56	44
34	813821243037	248036	NAFEES AHAMED. A	40	40	36	22	22	22
35	813821243038	248037	PERARULALAN. V	66	52	60	50	44	56
36	813821243039	248038	PRAVIN. R F	82	76	76	44	59	82
37	813821243040	248039	RABINSON. G	68	68	72	56	51	78
38	813821243041	248040	RAGHAVENDRA. M	0	18	18	14	23	28
39	813821243042	248041	RAJA CHOLAN	24	20	42	14	24	34
40	813821243043	248042	RISHIKAANDH	74	A	52	58	41	26
41	813821243044	248043	ROSHAN KUMAR. B	90	56	62	60	59	60
42	813821243045	248044	RUPA SRI VARSINI. R	98	72	94	58	56	74
43	813821243046	248045	SAI ACHALAA. S A	54	64	52	34	66	44
44	813821243047	248046	SEENIVASA PERUMAL. N	68	60	72	50	46	42
45	813821243048	248047	SHANMUGAPANDIYAN. A	50	56	62	50	43	40
46	813821243049	248048	SOORIYA PRABHU. M	28	30	46	12	34	26
47	813821243050	248049	SOWMIYA. T	80	78	80	50	57	62
48	813821243051	248050	SRI SABARI. I.T	36	32	38	44	35	18
49	813821243052	248051	SUBHALAKSHMI. A	88	64	88	52	60	68
50	813821243053	248052	SUDHANTHIRAN. N	42	40	50	16	49	40
51	813821243054	248053	SUDHARSAN. K	60	50	68	28	44	46
52	813821243055	248054	SUJI. S	56	50	62	42	62	58
53	813821243056	248055	SURESH. S	42	36	38	18	56	24

54	813821243057	248056	TEJASRAM. B	74	52	68	66	54	76
55	813821243058	248057	THEO SAVIO. M J	76	84	80	70	72	54
56	813821243059	248058	VETRIVELAN M	16	28	50	40	26	28
57	813821243060	248059	VIGNESHWARAN. S	44	60	52	36	34	52
58	813821243061	248060	VIJI. R	96	68	88	52	46	42
59	813821243062	248061	VIMALA. J	36	56	58	50	43	16
60	813821243063	248062	VISHAL. E	44	56	62	16	22	36
61	813821243301	248068	AKILAN. S	2	34	58	30	35	40
62	813821243302	248065	HEMA. S	22	A	74	36	38	A
63	813821243305	248064	SHANE STEVE. A	6	12	30	22	8	16

Classwise ALL Cycletest Mark Summary Report

Class:AID Semester:4 Section:A

Semester Period:22-23EVEN

S.no	Regno	Batchno	Name	AD3491	AL3451	AL3452	CS3591	GE3451	MA3391
				A2	A2	A2	A2	A2	A2
1	813821243001	248001	AASHIFA PARVEEN. A	94	90	90	80	94	88
2	813821243002	248002	ABINAYAA . M K	A	74	58	43	78	32
3	813821243003	248003	AFRA SHIREEN. N	52	84	82	72	66	70
4	813821243004	248004	AJAY ABISHEK. M	60	52	60	58	50	30
5	813821243005	248005	AKSHIYA VAIBHAVI. S	96	62	84	54	63	52
6	813821243006	248006	AMARNATH. S	76	92	84	A	0	86
7	813821243007	248007	AMBIKA. K	56	72	76	82	63	68
8	813821243008	248008	ANTO JERUSHA. J	50	56	60	50	44	18
9	813821243010	248010	AYSHA SUMIYA	92	56	80	72	69	60
10	813821243011	248011	BHAVADHARANI. A	96	60	72	50	61	86
11	813821243012	248012	DEVAPRASATH. K	32	28	42	32	22	16
12	813821243014	248014	DHARSENI. A	A	A	68	56	53	40
13	813821243015	248015	DHARSHAN. A	20	60	68	30	50	26
14	813821243017	248017	DHIVYA. R	50	54	68	66	64	48
15	813821243018	248063	EDISON. S	82	50	50	40	42	38
16	813821243019	248018	HAMILTON INFANT. A	24	44	64	50	70	42
17	813821243020	248019	HARINEE. S G	96	74	72	72	69	86
18	813821243021	248020	HILDA DEVAPRIYAM .X	92	80	56	60	63	82
19	813821243022	248021	ILLAKYA VARNAA. N	12	50	52	23	41	32
20	813821243023	248022	INDHUMATHI. R	40	40	62	42	41	60
21	813821243024	248023	JANANI. D	92	92	82	78	72	96
22	813821243025	248024	JAYANDRAKUMAR. S	12	16	32	10	39	16
23	813821243026	248025	JEEVITHA. B	24	50	70	66	68	46
24	813821243027	248026	JOEL GIFTSON. J	50	56	64	50	61	50
25	813821243028	248027	KARTHIK SRIRAM. B A	86	80	80	52	72	72
26	813821243029	248028	KARUNIYA. P	52	52	62	52	39	56
27	813821243030	248029	KEERTHANA. D	24	52	60	22	34	52
28	813821243031	248030	KEERTHANA. T	84	54	62	58	77	70
29	813821243032	248031	LAVANYA. R	50	72	86	78	71	84
30	813821243033	248032	MADULIKA. P S	86	70	54	50	45	74
31	813821243034	248033	MALINI. S	96	84	94	64	66	76
32	813821243035	248034	MOUNIKA. R	28	34	44	52	50	50
33	813821243036	248035	MUZIFA MUBARAK ALI.	88	64	66	70	54	50
34	813821243037	248036	NAFEES AHAMED. A	22	26	54	24	28	14
35	813821243038	248037	PERARULALAN. V	66	64	72	60	49	76
36	813821243039	248038	PRAVIN. R F	A	78	46	52	51	88
37	813821243040	248039	RABINSON. G	100	78	86	68	58	82
38	813821243041	248040	RAGHAVENDRA. M	22	22	38	8	42	22
39	813821243042	248041	RAJA CHOLAN	8	34	22	16	33	24
40	813821243043	248042	RISHIKAANDH	26	64	44	52	50	28
41	813821243044	248043	ROSHAN KUMAR. B	92	72	63	54	62	84
42	813821243045	248044	RUPA SRI VARSINI. R	66	90	96	80	71	76
43	813821243046	248045	SAI ACHALAA. S A	38	56	68	58	54	20
44	813821243047	248046	SEENIVASA PERUMAL. N	40	60	56	50	69	60
45	813821243048	248047	SHANMUGAPANDIYAN. A	38	50	70	50	44	52
46	813821243049	248048	SOORIYA PRABHU. M	4	58	44	18	31	20
47	813821243050	248049	SOWMIYA. T	94	86	54	62	68	86
48	813821243051	248050	SRI SABARI. I.T	20	38	58	52	51	30
49	813821243052	248051	SUBHALAKSHMI. A	30	62	76	76	75	50
50	813821243053	248052	SUDHANTHIRAN. N	18	60	36	34	35	26
51	813821243054	248053	SUDHARSAN. K	36	50	72	36	40	30
52	813821243055	248054	SUJI. S	64	50	76	58	69	78
53	813821243056	248055	SURESH. S	38	28	64	18	41	38

54	813821243057	248056	TEJASRAM. B	66	62	62	52	71	62
55	813821243058	248057	THEO SAVIO. M J	98	88	84	76	74	72
56	813821243059	248058	VETRIVELAN M	42	50	74	50	54	56
57	813821243060	248059	VIGNESHWARAN. S	16	32	52	20	44	42
58	813821243061	248060	VIJI. R	88	66	84	60	73	56
59	813821243062	248061	VIMALA. J	34	50	58	36	50	16
60	813821243063	248062	VISHAL. E	68	50	52	22	37	30
61	813821243301	248068	AKILAN. S	52	50	50	32	36	32
62	813821243302	248065	HEMA. S	18	26	56	20	39	18
63	813821243305	248064	SHANE STEVE. A	4	18	46	8	38	10

Classwise ALL Cycletest Mark Summary Report

Class:AID Semester:4 Section:A

Semester Period:22-23EVEN

S.no	Regno	Batchno	Name	AD3491	AL3451	AL3452	CS3591	GE3451	MA3391
				A3	A3	A3	A3	A3	A3
1	813821243001	248001	AASHIFA PARVEEN. A	82	92	80	80	94	84
2	813821243002	248002	ABINAYAA . M K	A	A	30	34	30	46
3	813821243003	248003	AFRA SHIREEN. N	74	68	70	50	43	86
4	813821243004	248004	AJAY ABISHEK. M	34	30	52	50	20	58
5	813821243005	248005	AKSHIYA VAIBHAVI. S	72	38	74	36	46	64
6	813821243006	248006	AMARNATH. S	84	72	80	56	81	80
7	813821243007	248007	AMBIKA. K	70	74	76	60	43	84
8	813821243008	248008	ANTO JERUSHA. J	60	38	50	50	50	62
9	813821243010	248010	AYSHA SUMIYA	78	64	76	74	78	80
10	813821243011	248011	BHAVADHARANI. A	60	40	60	54	57	86
11	813821243012	248012	DEVAPRASATH. K	24	8	28	30	32	24
12	813821243014	248014	DHARSENI. A	52	26	58	50	39	74
13	813821243015	248015	DHARSHAN. A	0	16	22	20	14	56
14	813821243017	248017	DHIVYA. R	60	50	80	44	44	70
15	813821243018	248063	EDISON. S	36	22	40	30	18	56
16	813821243019	248018	HAMILTON INFANT. A	8	50	52	30	27	34
17	813821243020	248019	HARINEE. S G	84	54	66	50	63	84
18	813821243021	248020	HILDA DEVAPRIYAM .X	56	56	A	70	65	58
19	813821243022	248021	ILLAKYA VARNAA. N	36	8	54	30	20	A
20	813821243023	248022	INDHUMATHI. R	64	24	56	42	33	64
21	813821243024	248023	JANANI. D	80	80	72	78	61	78
22	813821243025	248024	JAYANDRAKUMAR. S	0	4	18	16	29	14
23	813821243026	248025	JEEVITHA. B	36	14	18	34	57	20
24	813821243027	248026	JOEL GIFTSON. J	52	28	66	26	50	50
25	813821243028	248027	KARTHIK SRIRAM. B A	70	62	60	52	36	76
26	813821243029	248028	KARUNIYA. P	28	20	42	30	30	24
27	813821243030	248029	KEERTHANA. D	50	12	38	28	22	48
28	813821243031	248030	KEERTHANA. T	86	78	72	54	62	66
29	813821243032	248031	LAVANYA. R	90	80	80	86	46	96
30	813821243033	248032	MADULIKA. P S	58	A	A	A	37	72
31	813821243034	248033	MALINI. S	76	50	74	A	50	100
32	813821243035	248034	MOUNIKA. R	A	A	A	A	A	A
33	813821243036	248035	MUZIFA MUBARAK ALI. M	64	50	A	54	46	56
34	813821243037	248036	NAFEES AHAMED. A	A	A	28	14	45	30
35	813821243038	248037	PERARULALAN. V	62	42	32	46	33	50
36	813821243039	248038	PRAVIN. R F	40	52	50	60	62	60
37	813821243040	248039	RABINSON. G	76	74	70	62	63	74
38	813821243041	248040	RAGHAVENDRA. M	0	16	34	10	25	26
39	813821243042	248041	RAJA CHOLAN	14	8	54	10	9	26
40	813821243043	248042	RISHIKAANDH	50	40	54	44	23	50
41	813821243044	248043	ROSHAN KUMAR. B	50	40	60	58	35	48
42	813821243045	248044	RUPA SRI VARSINI. R	86	54	92	78	81	92
43	813821243046	248045	SAI ACHALAA. S A	26	12	30	28	50	50
44	813821243047	248046	SEENIVASA PERUMAL. N	60	36	62	50	29	78
45	813821243048	248047	SHANMUGAPANDIYAN. A	56	32	68	50	45	40
46	813821243049	248048	SOORIYA PRABHU. M	20	32	4	24	27	54
47	813821243050	248049	SOWMIYA. T	68	52	50	50	50	70
48	813821243051	248050	SRI SABARI. I.T	32	24	60	54	63	A
49	813821243052	248051	SUBHALAKSHMI. A	80	70	96	54	56	A
50	813821243053	248052	SUDHANTHIRAN. N	30	36	40	12	32	44
51	813821243054	248053	SUDHARSAN. K	50	16	50	22	45	30
52	813821243055	248054	SUJI. S	60	56	66	42	53	86
53	813821243056	248055	SURESH. S	40	16	50	22	31	54
54	813821243057	248056	TEJASRAM. B	A	46	38	34	54	58

55	813821243058	248057	THEO SAVIO. M J	84	68	80	58	69	86
56	813821243059	248058	VETRIVELAN M	34	2	54	26	31	32
57	813821243060	248059	VIGNESHWARAN. S	32	30	34	30	21	54
58	813821243061	248060	VIJI. R	68	22	50	32	54	70
59	813821243062	248061	VIMALA. J	16	14	40	50	24	22
60	813821243063	248062	VISHAL. E	20	12	32	14	23	70
61	813821243301	248068	AKILAN. S	20	2	40	30	30	60
62	813821243302	248065	HEMA. S	4	26	62	50	30	32
63	813821243305	248064	SHANE STEVE. A	0	2	46	28	24	8
No.of Failures(<50)				24	36	19	31	38	18

SARANATHAN COLLEGE OF ENGINEERING

19.09.2022

CIRCULAR

Remedial and slip test for Internal Assessment Test- I for III / IV Year B.E / B.Tech classes will commence from 20-09-2022 (Tuesday) as per the timetable mentioned.

S.No.	DATE	SUBJECT
1.	20-09-2022	SUBJECT 1
2.	21-09-2022	SUBJECT 2
3.	22-09-2022	SUBJECT 3
4.	23-09-2022	SUBJECT 4
5.	24-09-2022	SUBJECT 5
6.	26-09-2022	SUBJECT 6

Remedial class duration: 5.00 p.m. to 5.45 p.m. (45 Minutes)

Slip test duration: 5.45 p.m. to 6.30 p.m. (45 Minutes)

Note : The halls will be allotted individually for every subject to conduct Remedial and Slip test.

PRINCIPAL

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.07.10.2022

Circular

Internal Assessment Test – II for III & IV Year B.E./B.Tech., Classes will commence from 10.10.2022 (Monday) as per the academic planner.

Test Duration
9.15 am to 10.45 am (1 ½ Hours)

Class Timings after the I.A. Test
10.45 a.m. – 11.05 a.m. Break
11.05 a.m. – 11.55 a.m. – 1st Hour
11.55 a.m. – 12.45 p.m. – 2nd Hour

Afternoon classes will be held as per regular timetable.

Question paper pattern will be informed by the respective subject handling staff member's

As per the instruction from the Anna University , Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal marks will be awarded by the Anna University based on your performance in I.A. Tests. Students are advised to take the Tests seriously and to score more marks.

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.21.12.2022

Circular

Internal Assessment Test – I for FIRST Year B.E./B.Tech., for section F to L will commence from 26.12.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.55 a.m. – 3rd Hour

11.55 a.m. – 12.45 p.m. –4th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.16.09.2022

Circular

Internal Assessment Test – I for II Year B.E./B.Tech., Classes will commence from 19.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.7.3.2023

Circular

Internal Assessment Test – I for II & III & IV Year B.E./B.Tech., Classes will commence from 9.03.2023 (Thursday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.5.4.2023

Circular

Internal Assessment Test – 2 _for II & III & IV Year B.E./B.Tech., Classes will commence from 10th April 2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.24.7.2023

Circular

Internal Assessment Test – 3 _for FIRST YEAR (II Semester) B.E./B.Tech., Classes will commence from 31.07.2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 am (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 am Break

11.00 a.m. – 11.50 a.m. – First (3rd) Hour

11.50 a.m. – 12.45 p.m. – Second (4th) Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2020 - 2024 _ (III) _Third Year - 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th October 2022	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
11th October 2022	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
12th October 2022	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
13th October 2022	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
14th October 2022	OCE552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
15th October 2022	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control		OA1551 - Environment and Agriculture

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2019 - 2023 _ (IV) _ Final Year - 7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10th October 2022	MG8591 – Principles of Management	EC8701 - Antennas and Microwave Engineering	EE8701- High Voltage Engineering	MG8591 - Principles of Management	EI8751 - INDUSTRIAL DATA NETWORKS	ME 8792 - Power Plant Engineering	CE8701 - Estimation, Costing and Valuation Engineering
11th October 2022	CS8791 – Cloud Computing	EC8751 - Optical Communication	EE8702- Power System Operation and Control	CS8792 - Cryptography and Network Security	EI8091 - INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	ME 8793 - Process Planning and Cost Estimation	CE8702 - Railways, Airports, Docks and Harbour Engineering
12th October 2022	CS8792 – Cryptography and Network Security	EC8791 - Embedded and Real Time Systems	EE8703- Renewable Energy Systems	OBM752 – Hospital Management	EC8093 - DIGITAL IMAGE PROCESSING	ME 8791 - Mechatronics	CE8703 - Structural Design and Drawing
13th October 2022	OBM752 – Hospital Management	EC8702 - Adhoc and Wireless Sensor Networks	EI8075- Fiber Optics and Laser Instrumentation	CS8791 - Cloud Computing	EI8075 - FIBRE OPTICS AND LASER INSTRUMENTATION	OMF 751 - Lean Six Sigma	EN8591 - Municipal Solid Waste Management
14th October 2022	IT8075 – Software Project Management	OIC751 - Transducer Engineering	EE8010- Power System Transients	IT8075 - Software Project Management	EI8692 - ELECTRONICS INSTRUMENTATION	ME 8072 - Renewable Sources of Energy / GE 8077 - Total Quality Management	OME754 - Industrial Safety
15th October 2022	GE8076 – Professional Ethics in Engineering	GE8076 - Professional Ethics in Engineering	OCS752- Introduction to C Programming	IT8005 - Electronic Commerce	OCS752 - INTRODUCTION TO C PROGRAMMING	ME 8099 - Robotics	
17th October 2022			EE8017-High Voltage Direct Current Transmission		GE8076 - PROFESSIONAL ETHICS IN ENGINEERING	IE8693 - Production Planning and Control	

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1_(Slot II) _ December 2022

Batch - 2022 - 2026 _ First Year_ Section F - L

S.No.	DATES	Sub.Code.	Name of the Subject
1	26.12.2022	PH3151	Engineering Physics
2	27.12.2022	CY3151	Engineering Chemistry
3	28.12.2022	GE3151	Problem Solving and Python Programming
4	30.12.2022	MA 3151	Matrice sand Calculus
5	03.01.2023	HS3151	Professional English - I

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SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
19.09.2022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
20.09.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
21.09.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
22.09.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.09.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
24.09.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester									
DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
9th March 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th March 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
13th March 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	EI3451 - Industrial Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	AD3491 - Fundamentals of Data Science and Analysis	MA3391 - Prabability and Statistics
14th March 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3491 - Theory of Machines	CE3403 - Concrete Technology	MA3391 - Probability and Statistics	AL3452 - Operating Systems
15th March 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3401 - Modern Electronic Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
16th March 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	IC3452 - Electrical Machines and Drives	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering		CW3401 - Introduction to Business System

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
9th March 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8092 - Thermal Power Plant Instrumentation	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th March 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EE8072 - MEMS and Nano Science	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
13th March 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	EI8651 - Logic and Distributed Control System	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
14th March 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	IC8651 - Advanced Control System	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
15th March 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	CS8391 - Data Structures	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
16th March 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	MG8591 - Principles of Management	ME8694 - Hydralics and Pneumatics	

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SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
13th March 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
14th March 2023						IE8693 - Production Planing and Control	

Principal

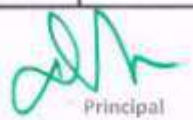
SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester									
DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
10th April 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	IC3451 - Automatic Control Systems	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th April 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3401 - Modern Electronic Instrumentation	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
12th April 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	IC3452 - Electrical Machines and Drives	CE3491 - Strength of Materials	CE3402 - Strength of Materials	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
13th April 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	EI3451 - Industrial Instrumentation	ME3491 - Theory of Machines	CE3403 - Concrete Technology	AD3491 - Fundamentals of Data Science and Analysis	AL3452 - Operating Systems
17th April 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3402 - Embedded Systems and IOT	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
20th April 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	GE3451 - Environmental Sciences and Sustainability	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CW3401 - Introduction to Business System



Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th April 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8651 - Logic and Distributed Control System	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th April 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EI8092 - Thermal Power Plant Instrumentation	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
12th April 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	MG8591 - Principles of Management	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
13th April 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	EE8072 - MEMS and Nano Science	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
17th April 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	IC8651 - Advanced Control System	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
20th April 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	CS8391 - Data Structures	ME8694 - Hydralics and Pneumatics	

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10th April 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
11th April 2023			EE8017 - High Voltage Direct Current Transmission			IE8693 - Production Planing and Control	
12th April 2023			GE8076 -Professional Ethics in Engineering				

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SARANATHAN COLLEGE OF ENGINEERING

2022-2023- SECOND SEMESTER IA TEST-II SUBJECT ORDER

Date	EEE	ICE	Common to AI & DS & CSBS	Common to CSE / IT / CSE(AIML)	ECE	MECH	CIVIL
31.07.2023	MA3251-Statistics and Numerical Methods	MA3251-Statistics and Numerical Methods	MA3251-Statistics and Numerical Methods	MA3251-Statistics and Numerical Methods	MA3251-Statistics and Numerical Methods	MA3251-Statistics and Numerical Methods	MA3251-Statistics and Numerical Methods
01.8.2023	EE3251-Electric Circuit Analysis	EE3251-Electric Circuit Analysis	AD3251 - Data structures and Design	CS3251 - Programming in C	EC3251- Circuit Analysis	—	—
02.8.2023	PH3202-Physics for Electrical Engineering	PH3255 Physics for Instrumentation Engineering	PH3256 Physics for Information Science	PH3256 Physics for Information Science	PH3254-Physics for Electronics Engineering	PH3251 Material Science	PH3251 Physics for Civil Engineering
03.8.2023	BE3255-Basic Civil and Mechanical Engineering	BE3255-Basic Civil and Mechanical Engineering	BE3251-Basic Electrical and Electronics Engineering	BE3251-Basic Electrical and Electronics Engineering	BE3254- Electrical and Instumentation Engineering	BE3251-Basic Electrical and Electronics Engineering	BE3252-Basic Electrical and Electronics and Instumentation Engineering
04.8.2023	GE3251-Engineering Graphics	GE3251-Engineering Graphics	GE3251-Engineering Graphics	GE3251-Engineering Graphics	GE3251-Engineering Graphics	GE3251-Engineering Graphics	GE3251-Engineering Graphics
05.8.2023	HS3252-Professinonal English-II	HS3252-Professinonal English-II	HS3252-Professinonal English-II	HS3252-Professinonal English-II	HS3252-Professinonal English-II	HS3252-Professinonal English-II	HS3252-Professinonal English-II

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Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date	14.03.2023	Marks	50
Course code	CE8604	Course Title	Highway Engineering			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	III	Semester/ Section	VI / A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Write the functions of Indian Road Congress.	C313.1	R
2	How are roads classified in Nagpur plan?	C313.1	R
3	What are the recommendations of Jayakar Committee?	C313.1	R
4	Give some reasons for the poor state of road development in India.	C313.1	R
5	Define Central Road Fund.	C313.1	R
6	Differentiate right of way from carriage way.	C313.2	R
7	Define Super Elevation.	C313.2	R
8	What are the types of sight distances?	C313.2	R
9	What are the elements involved in Highway geometric design?	C313.2	R
10	What is the maximum and minimum super elevation?	C313.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	List out and explain various types of Highways as classified in the Indian Context.	C313.1	R
	OR		
12	Explain in detail about the history of road development in India after independence.	C313.1	R
13	Illustrate with neat sketches and explain how obligatory points control a highway alignment.	C313.1	R
	OR		
14	Explain in detail about cross section elements of urban roads.	C313.1	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	The speeds of overtaking and over taken vehicles are 90 and 60 Kmph respectively. The acceleration of overtaking vehicle is 0.95 m/s^2. Calculate i) Safe overtaking sight distance ii) Mention the minimum length of overtaking zone Draw a neat sketch of overtaking zone and show the position of signposts.	C313.2	R
	OR		
16	Derive an expression for super elevation with a neat sketch.	C313.2	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli -12.

Internal Assessment Test - I			Date/ Session	13.03.2023/ FN	Marks	50
Course code	CE8603	Course Title	Irrigation Engineering			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	III	Semester/ Section	VI / A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define Irrigation Engineering.	C312.1	R
2	What is Base Period and Crop Period?	C312.1	R
3	What is mean by Duty and Delta?	C312.1	R
4	Write any four purposes of Irrigation.	C312.1	R
5	Define consumptive use of water.	C312.1	R
6	Distinguish between Kharif and Rabi crop .	C312.1	R
7	Define crop rotation and mention its advantages.	C312.1	R
8	Distinguish between Controlled and Uncontrolled flooding .	C312.2	U
9	Mention the types of Irrigation Efficiencies.	C312.2	R
10	Define Well Irrigation.	C312.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Discuss briefly about classification of crop based on various criteria.	C312.1	R
	Or		
12	Briefly explain about the term duty , delta , base period and crop period and derive their relationships.	C312.1	R
13	Discuss how Independence has set an era of Irrigation Development.	C312.1	U
	Or		
14	Explain in detail about estimation of Consumptive use of water by Experimental methods.	C312.1	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Discuss about Sprinkler Irrigation with a neat sketch.	C312.2	U
	Or		
16	Explain about Surface Irrigation and its types with a neat sketch.	C312.2	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - 1			Date/ Session	09.03.23/ FN	Marks	50
Course code	CE8601	Course Title	Design of Steel Structural Elements			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	III	Semester/ Section	VI / A	Department	Civil Engineering	

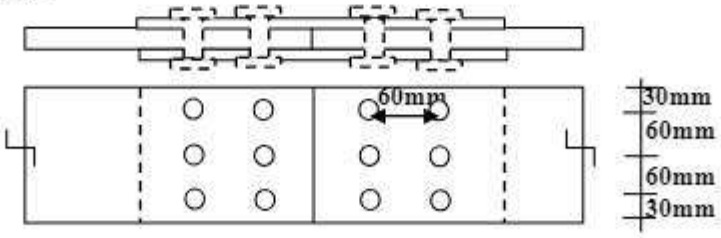
Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	State the advantages of using steel on a structural material.	C310.1	U
2	What is meant by Characteristic strength?	C310.1	R
3	What are the three classification of loads as per *IS 800-2007*?	C310.1	R
4	Discuss the Stress-Strain curve for structural steel and indicate the salient points	C310.1	U
5	Mention the disadvantages of steel structures.	C310.1	U
6	What are the classifications under which imposed loads are grouped as per *IS 800-2007 Part II*?	C310.1	R
7	What are the normal bolts sizes used in structural applications?	C310.2	R
8	What are the advantages of bolted connections?	C310.2	U
9	List the factors affecting the behaviour of joints or connections?	C310.2	U
10	Under what circumstances black bolts are recommended?	C310.2	AZ

Part – B

(Answer all the questions 3 x 10 = 30marks)

Q. No.	Questions	CO	Skills
11	Design a hot rolled steel beam of span 4m, 5m and 4m carrying a UDL of 30kN/m and the beam is laterally supported.	C310.1	E
	Or		
12	Design a 4m long tension member using angle section for the member of a truss to support an axial tension of 380kN due to imposed load and self weight. The member is connected to the gusset plate with 20mm dia bolts. The slenderness ratio will not be exceeding 300. The structural steel is of grade Fe410.	C310.1	E
13	Find the efficiency of butt joint shown in fig.1. The main plates size 180mm x 20mm using two cover plates each of size 12 mm connected by 6 numbers of M20 bolts on each side. Grade 4.6 grade bolt and Fe410 grade plates are used. 	C310.2	E
	Or		
14	Design a double bolted double cover butt joint to connect the plates of thickness 12mm. the joint has to transfer a design load of 750 kN. Use M16 bolts of grad 4.6 and Fe410 grade steel plates used. Assume E= $2x10^5$ N/mm^2.	C310.2	E

15	(i)Explain in detail about the various types of structural steel and mention its properties. (6Marks) (ii) Explain in detail about the loads to be considered for the design of steel structural elements. . (4Marks)	C310.1	U
	Or		
16	Design a rolled steel strut made up of angle section support an axial compressive load of 30kN, the length of strut 4m between the intersections at the ends and connected through 20mm dia bolts. Steel grade Fe410.	C310.1	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date	11-03-2023	Marks	50
Course code	CE8602	Course Title	Structural Analysis II			
Batch No.		Duration	90 mins	Academic Year	2022-2023(Even)	
Year	III	Semester/ Section	06 /A	Department	CIVIL	

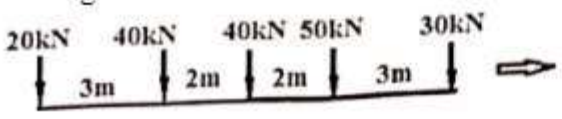
Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Mention some of the applications of Influence line diagram?	C311.1	U
2	Draw the influence line for shear to the right of B for a overhanging beam.	C311.1	R
3	What are influence lines?	C311.1	U
4	Draw the ILD for R_A and R_B for a simply supported beam.	C311.1	R
5	State the conditions to get Absolute maximum bending moment in a simply supported beam when number of point loads act on it?	C311.1	U
6	Draw the ILD for bending moment at any section X of a simply supported beam and mark the ordinates.	C311.1	U
7	Name any four model making materials	C311.2	U
8	State Muller Breslau principle.	C311.2	R
9	State the procedure to find out M_A for a propped cantilever beam using Muller Breslau principle.	C311.2	R
10	What are the uses of Influence lines?	C311.2	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	A Live load of 30 KN/m, 7 m long moves on a simply supported girder of span 12 m. Find the maximum bending moment that can occur at a section 5 m from the left end.	C311.1	E
	OR		
12	A simply supported beam of span 15 m is subjected to a udl of 5 KN/m (self-weight) and an udl of 12 KN/m (Live load) acting for 6 m travelling from right to left. Draw the ILD for SF and BM at a section 10 m from the right end. Use these diagrams to find the Max SF and Max BM at that section.	C311.1	E
13	A train of loads on a simply supported beam of span 24 m moves from left to right. Using Influence line determine the maximum bending moment at left one third span point and also the absolute maximum bending moment in the beam. 	C311.1	E
	OR		

14	A Continuous beam ABC is simply resting on supports A and C, continuous over the support B and has an internal hinge (D) at 3m from A. The span AB is 7 m and the span BC is 10 m. Draw the Influence lines for reactions at A and B.	C311.1	E

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Draw the influence lines for R_A for the continuous beam ABC. AB = 6 m and BC = 6m. Compute the Ordinates at 1.5m intervals.	C311.2	E
	OR		
16	Draw influence line for shearing force at 4 m from the propped end of a propped cantilever of span 7 m, Calculate the ordinates at every 1m intervals.	C311.2	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/Session	15.03.2023 / FN	Marks	50
Course code	EN8592	Course Title	Wastewater Engineering			
Batch No.		Duration	1Hr. 30 Min.	Academic Year	2022-2023/EVEN	
Year	III	Semester/ Section	VI / A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define Time of Concentration.	C314.1	R
2	What are the sources of wastewater generation?	C314.1	R
3	What do you understand by sewer appurtenances? Enumerate various appurtenances commonly used.	C314.2	U
4	Identify the purpose of providing anti-siphonage pipes in house plumbing	C314.2	R
5	Define Self-Cleansing Velocity.	C314.2	R
6	What is meant by population equivalent?	C314.3	R
7	Define BOD & COD.	C314.3	U
8	Define Relative stability of sewage.	C314.3	U
9	State the objectives of preliminary treatment of sewage.	C314.4	R
10	What are the advantages and limitations of septic tank in sewage treatment?	C314.4	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Briefly describe the various physical & chemical characteristics of sewage and state their environmental significance.	C314.3	R
	OR		
12	With the help of a neat sketch, discuss various system of plumbing used for drainage.	C314.3	R
13	A city with a population of 60,000 have a Rate of Water Supply of 200 liters per capita per day. Assume 80 % of water-supplied turns into sewer. The area of city is 30 hectares with runoff coefficient is 0.4 and Time of Concentration is 30 minutes. The rate of peak to average sewage flow is 2. Find the design discharge for combined flow. Also determine the diameter of the sewer pipe when it runs half full at maximum flow condition for a maximum permissible slope is 1 in 600. Use Manning's equation and take Manning's constant as N = 0.013 for all flow conditions.	C314.1	E
14	Design a sewer running 0.7 times full at maximum discharge for a town provided with the separate system serving a population of 1 lakh. Water is supplied from the water works at a rate of 200 litres per capita per day. Take a constant value of N = 0.013 at all depths of flow. The permissible slope is 1 in 600. Take peak factor of 2.25. Assume 80 % of water turns as sewage.	C314.1	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Design a septic tank for a hostel of 150 persons. Let the desludging period be taken as one year and length to breadth ratio as 2.5:1. 205 LPM of peak flow rate. Also design a soil absorption system dispersion trench for the disposal of the septic tank effluent, assuming the percolation rate as 100 min/cm. Assume data wherever necessary.	C314.2	R
	OR		
16	With the help of a neat sketch, discuss the steps involved in the laying and testing of sewers.	C314.2	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date	11.03.2023	Marks	50
Course code	CE3401	Course Title	Applied Hydraulic Engineering			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	II	Semester/ Section	IV / A	Department	Civil Engineering	

Part – A
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is a prismatic Channel?	C210.1	R
2	Define channel of most economical sections.	C210.1	R
3	What are the conditions for maximum velocity in circular channel?	C210.1	R
4	Define Specific Energy.	C210.1	R
5	List the factors affecting Manning's roughness coefficient.	C210.1	R
6	Write short notes on gradually varied flow.	C210.2	R
7	Classify surface profiles in a channel.	C210.2	R
8	Write the expression to determine the length of backwater curve.	C210.2	R
9	Define spatially varied flow.	C210.2	R
10	Distinguish draw down from back water curve.	C210.2	R

Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Derive the most economical section with respect to width and hydraulic mean depth of a trapezoidal channel.	C210.1	R
	OR		
12	Find the diameter of a circular pipe which is laid at a slope of 1 in 8000 and carries a discharge of 800 litres/s when it is flowing half full. Take Manning's N = 0.020	C210.1	E
13	A trapezoidal channel has side slopes 1 to 1. It is required to discharge 13.75 m^3/s of water with a bed gradient of 1 in 1000. If unlined the value of Chezy's C = 44. If lined with concrete, is value 60. The cost per m^3 of excavation is four times the cost per m^2 of lining. The channel is to be the most efficient one, find whether the lined canal or the unlined canal will be cheaper. What will be the dimensions of that economical channel?	C210.1	AZ
	OR		
14	The discharge of water through a rectangular channel of width 8m is $15m^3/s$, when depth of flow of water is 1.2 m Calculate i) Specific Energy ii) Critical depth iii) Critical velocity iv) Value of minimum specific energy v) Value of maximum possible discharge.	C210.1	AZ

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Derive GVF equation with assumptions and end conditions.	C210.2	AZ
	OR		
16	Determine the length of backwater curve caused by an afflux of 2m in a rectangular channel of width 40 m and depth 2.5m with a discharge of $50m^3/s$. The slope of bed is given as 1 in 11,000. Take manning's N = 0.03.	C210.2	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - 1			Date/ Session	15.03.2023/ FN	Marks	50
Course code	CE3404	Course Title	Soil Mechanics			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	II	Semester/ Section	IV / A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is mean by Air content and Percentage air content in soil?	C214.1	R
2	What is the relation between void ratio and porosity?	C214.1	R
3	Draw the phase diagram for dry and fully saturated soil mass.	C214.1	R
4	What is mean by Liquidity index and Plasticity Index ?	C214.1	R
5	What are the Atterberg's limits for the soil and why it is necessary?	C214.1	R
6	Differentiate Darcy's velocity and Seepage velocity.	C214.2	R
7	List the various types of methods of Permeability tests.	C214.2	R
8	Define Permeability and State Darcy's law.	C214.2	R
9	What are the factors affecting hydraulic Conductivity?	C214.2	R
10	Write the range of permeability values for various types of soil.	C214.2	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	In its natural condition, a soil sample has a mass of 22.9 N and a volume of 1.15×10^{-3} m^3. After being completely dried in the oven, the sample weighs 20.35 N. Find bulk density, water content, void ratio, porosity, degree of saturation, air content, dry density and percentage air voids.	C214.1	AZ
	Or		
12	List the factors that affect compaction behavior of soil.	C214.1	R
13	Explain in detail the engineering significance of the consistency limits of soil.	C214.1	R
	Or		
14	A partially saturated soil samples collected from a pit has a natural moisture content of 18% and bulk unit weight of $20kN/m^3$. The specific gravity of soil is 2.68. Estimate the void ratio and degree of saturation. What will be the unit weight of the soil sample on saturation?	C214.1	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain the factors affecting permeability behaviour of soil particles.	C214.2	R
	Or		
16	List the various methods of laboratory determination of permeability with the soil type in which they are best suited and explain falling head method in detail with a neat sketch.	C214.2	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - 1			Date/ Session	14.03.23/ FN	Marks	50
Course code	CE3403	Course Title	Concrete Technology			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year/	II	Semester/ Section	IV / A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is meant by 53 grade cement?	C212.1	R
2	What do you understand by grading of aggregate?	C212.1	R
3	Write any two advantages of sulphate resistance cement.	C212.1	R
4	What are the different types of tests conducted on coarse aggregates?	C212.1	U
5	What are called Bogue compounds?	C212.1	R
6	Differentiate accelerators from retarders.	C212.1	U
7	What are the tests to be conducted to ensure the cement supplied at the site is good?	C212.1	U
8	Define setting of cement.	C212.1	R
9	What are the various purposes for which admixtures are used in concrete?	C212.2	U
10	What is the purpose of adding admixture in concrete?	C212.2	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Enumerate briefly the procedure to conduct the aggregate crushing value and impact value test? What are the acceptance criteria?	C212.1	U
	Or		
12	What is unsoundness in cement? What causes it and what is its effect? How is it determined in the laboratory? Give the BIS specification for the same.	C212.1	U
13	State and explain the various characteristics of aggregates that influence the quality of concrete.	C212.1	U
	Or		
14	What are the requirements of water as per Indian standard for concreting?	C212.1	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain the effects of super plasticizers on fresh and hardened concrete.	C212.2	U
	Or		
16	Define air entrained concrete. Explain the factors affecting of air entrainment	C212.2	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - 1			Date/ Session	16.03.23/ FN	Marks	50
Course code	CE3405	Course Title	Highway And Railway Engineering			
Batch No.		Duration	90 mins.	Academic Year	2022 – 2023 (EVEN)	
Year	II	Semester/ Section	IV / A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	List out the various factors influencing highway alignment.	C214.1	R
2	What are the various road developments in India?	C214.1	U
3	List out various ideal requirements of highway alignment.	C214.1	R
4	List the equipments used in conventional and modern methods of survey.	C214.1	R
5	List out various road patterns in India.	C214.1	R
6	Define curve. List their types.	C214.2	R
7	What is PIEV theory?	C214.2	R
8	Define gradient. List out their types.	C214.2	R
9	What is meant by Super elevation?	C214.2	R
10	List the factors affecting SSD.	C214.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	List out various institutions of highway planning, design and also Explain any few in detail.	C214.1	R
	Or		
12	List out various classifications of roads based on their function and also explain about different types of highways in detail.	C214.1	U
13	Draw and Explain briefly about various cross sectional elements of urban roads also explain briefly.	C214.1	U
	Or		
14	Explain briefly about various types of survey to be taken for planning a new highway project.	C214.1	U
	Part – C (1 x 10 =10)		
15	List out various types of horizontal and cross sectional elements of highway and also explain shortly.	C214.2	R
	Or		
16	The design speed of overtaking and overtaken vehicles are 96 kmph and 80 kmph respectively. The acceleration of overtaking vehicle is 0.95m/s^2.Calculate the following OSD for both one way and two way traffic. (i) Calculate safe OSD (ii) Calculate and locate the minimum and maximum OSD. (iii) Draw a neat sketch of overtaking zone and show the position of signal posts. The reaction time of driver as 2 seconds.	C214.2	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/Session	13.03.2023 / FN	Marks	50
Course code	CE3402	Course Title	Strength of Materials			
Batch No.		Duration	1Hr. 30 Min.	Academic Year	2022-2023/EVEN	
Year	II	Semester/ Section	IV / A	Department	Civil Engineering	

Part – A (20 Marks)

Answer all the Questions **(10x2=20Marks)**

Q. No.	Questios	CO	Skills
1	Define stress.	C211.1	R
2	Define hooks law.	C211.1	U
3	Define shear stress and shear strain.	C211.1	R
4	State the relationship between young's modulus and modulus of rigidity.	C211.1	U
5	Define principal stress and principal plane.	C211.1	R
6	State Poisson's ratio.	C211.1	U
7	Define factor of safety	C211.1	R
8	What are the different types of beams	C211.2	U
9	Differentiate statically determinate & Indeterminate beams	C211.2	R
10	State the relationship between intensity of loading, shear force & Bending moment	C211.2	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	A cylindrical vessels whose ends are closed by means of rigid flange plates is made of steel plate 3mm thick. The internal length and diameter of vessel are 50cm and 25 cm respectively. Determine the longitudinal and circumferential stresses in the cylindrical shell due to an internal pressure of 3 MN/m^2. Also calculate increase in length, diameter and volume of vessel. Take E= 200 GN/m^2, and 1/m = 0.3	C211.1	E
	Or		
12	A steel rod 15 m long is at a temperature of 15°C. Find the free expansion of the length when the temperature is raised to 65°C. Find the temperature stress produced when. i. The expansion of rod is prevented ii. The rod is permitted to expand by 6mm. Take $\alpha = 12x10^{-6}$ per°C, E = 200 GN/m^2	C211.1	E
13	The principal stresses at a point in a bar are 100MN/m^2 (Tensile) and 60MN/m^2 (Compressive).Determine the normal stress and shear stress on a plane inclined at 50° to the axis of the major principal stress. Also determine the maximum intensity of shear stress in the material at the point.	C211.1	E
	Or		
14	A hollow shaft is to transmit 300KW at 80 r.p.m. If the shear stress is not to exceed 60 MN/m^2 and internal diameter is 0.6 of the external diameter. Find the external and internal diameters assuming that the maximum torque is 1.4 times the mean.	C211.1	E

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	A cantilever beam of length 5 m carries a uniformly distributed load of 2 kN/m runs over the length of 2m act between 1m from free end and 2m from left end, and the point load of 1kN, 3KN, 2KN, 2KN at a distance of 4m, 2m, 1m, 0m from the free end, . Draw the S.F. and B.M. diagrams for the cantilever.	C211.2	E
	Or		
16	A simply supported beam of length 6m carries point load of 3kN and 6kN at distances of 2m and 4m from the left end. Draw the shear force and B.M diagrams for the beam.	C211.2	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

Name of the Faculty In-charge: S.Kannan-AP/Civil

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - I			Date	13-03-2023	Marks	50
Course code	CE8020	Course Title	Maintenance, Repair and Rehabilitation of Structures			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	IV	Semester/ Section	08 /A	Department	CIVIL	

Part – A
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define maintenance. Mention the importance of maintenance.	C409.1	R
2	What is the effect of selecting poor quality material in construction?	C409.1	U
3	Discuss about the design and construction errors leading to deterioration of a structure.	C409.1	U
4	Define rehabilitation.	C409.1	R
5	Compare preventive maintenance and routine maintenance with an example.	C409.1	U
6	Mention the causes of deterioration in reinforced concrete structures.	C409.1	R
7	List out the main objectives of maintenance of a building.	C409.1	R
8	What are the effects of concrete due to temperature rise?	C409.2	U
9	List the need for quality assurance.	C409.2	R
10	Define durability and name two tests to assess the durability of concrete.	C409.2	R

Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Discuss the facets of maintenance and list out the scope of maintenance.	C409.1	R
	OR		
12	Explain various categories of inspection based on method and interval.	C409.1	U
13	Explain in detail about quality assurance in concrete structures.	C409.2	U
	OR		
14	Discuss in detail the factors influencing strength of the concrete.	C409.2	U

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	With a flowchart, explain the damage assessment procedure for evaluating a damaged RC structure.	C409.1	R
	OR		
16	Explain in detail the causes of deterioration in reinforced concrete structures.	C409.1	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

Saranathan College of Engineering

Tiruchirapalli-12.

Internal Assessment Test - III			Date/ Session	10.11.22/FN	Marks	50
Course code	CE8501	Course Title	Design of Reinforced Cement Concrete Elements			
Batch No.		Duration	90 mins	Academic Year	2022-2023 (Odd)	
Year/	III	Semester/ Section	V/A	Department	Civil	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Slendeness ratio.	C301.5	R
2	Differentiate between long and short column.	C301.5	R
3	Compare between uniaxial and biaxial bending in Columns.	C301.5	R
4	Write the formula for calculating minimum eccentricity as per IS 456.	C301.5	R
5	Mention the pitch details of lateral ties in columns as per IS 456.	C301.5	U
6	Write any four functions of foundations.	C301.6	R
7	Mention the types of shallow foundations.	C301.6	R
8	Draw the neat sketch of Isolated and Combined Rectangular footing.	C301.6	R
9	What is mean by SBC of Soil ?	C301.6	U
10	Explain check for one way shear or vertical shear in footing .	C301.6	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

IS456-2000 & SP-16 Code books are permitted

Assume Data wherever necessary

Q. No.	Questions	CO	Skills
11	Design a square column subjected to an ultimate axial load of 1000 kN. Consider M20 grade of concrete and HYSD steel bars of grade Fe415.	C301.5	AZ
	OR		
12	Design a Circular column subjected to a characteristic axial load of 800 kN. Assume f_{ck}=25 N/mm^2 and f_y = 415 N/mm^2.	C301.5	AZ
13	Design an uniaxial eccentrically loaded braced rectangular column for the following data: Factored axial load = 1500 kN Factored axial moment M_{ux} = 250 kNm Unsupported length = 3.5m Effective length L_{ex} & L_{ey} = 3m & 2.75m Column size 300 mm x 500 mm M25 & Fe415 combinations used.	C301.5	AZ
	OR		
14	Design an biaxial eccentrically loaded braced circular column for the following data: Factored axial load = 1600 kN	C301.5	AZ

	Factored axial moment M_{ux} & M_{uy} = 175 kNm &100 kNm Unsupported length = 3 m Effective length L_{ex} & L_{ey} = 2.75m & 2.5m Column size 500 mm M25 & Fe415 combinations used.		

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.		CO	Skills
15	Design a reinforced concrete footing for a 345mm thick masonry wall which supports a characteristic load of 250 kN/m including self weight. Assume SBC of soil = 150 kN/m^2 and a depth of 1.2m below ground level. Consider M20 grade of concrete and HYSD steel bars of grade Fe415.	C301.6	A
	OR		
16	A solid footing has to transfer a dead load load of 900 kN and an imposed load of 500 kN for a square column of size 400 mm. Assume the safe bearing capacity of soil may be taken as 200 kN/m^2. Use M20 concrete and Fe415 steel. Design a square footing to support the above column.	C301.6	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - 3			Date/ Session	10.11.2022 / FN	Marks	50
Course code	CE8701	Course Title	Estimation, Costing and Valuation Engineering			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	IV	Semester/ Section	VII /A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is Earnest Money Deposit?	C401.4	R
2	When a contract to be terminated?	C401.4	R
3	Brief note on Lump-sum Contract.	C401.4	AZ
4	Define: Arbitrator.	C401.4	R
5	What are the advantages of arbitration?	C401.4	U
6	How market value is arrived for a property?	C401.5	R
7	What is book value of the property?	C401.5	R
8	Write the purpose of Valuation.	C401.5	R
9	What is called depreciation?	C401.5	U
10	Define Mortgage.	C401.5	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the various types of Contract systems.	C401.4	U
	Or		
12	Explain in detail each and every steps of drafting and preparation of contract documents.	C401.4	U
13	The three storied building is standing on a plot of land measuring 1500sq.m The plinth area of each storey is 560sq.m. The building is of RCC framed structure and the future life may be taken as 80 years. The building fetches a gross rent of Rs. 3500 per month. Work out the capitalized value of the property on the basis of 6% net yield. For sinking fund 3% rate of interest. Cost of land may be taken Rs. 100 per sq.m. Other data required may be assumed suitably.	C401.5	E
	Or		
14	Calculate the standard rent of a newly constructed government residential building from the following data. i) Cost of land =Rs. 10,00,000.00 ii) Cost of Construction of Building = Rs. 70,000.00 iii) Cost of Roads within the compound and fencing = Rs. 40,000.00 iv) Cost of electrical installations = 10% of the cost of building v) Cost of water supply and sanitary= 15% of cost of building vi) Municipal house Tax = Rs. 1300.00 per annum vii) Property Tax = Rs. 660.00 per annum	C401.5	E
	Part – C (1 x 10 =10)		
15	What is mortgage? Explain its types.	C401.6	U
	Or		
16	Explain the various methods of valuation.	C401.6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each questio

Saranathan College of Engineering

Tiruchirappalli – 620012

Internal Assessment Test - III			Date/Session	11-11-2022 / FN	Marks	50
Course code	CE8502	Course Title	STRUCTURAL ANALYSIS II			
Batch No.		Duration	1 Hours 30 Minutes	Academic Year	2022-2023/ODD	
Year	III	Semester	V	Department	CIVIL	

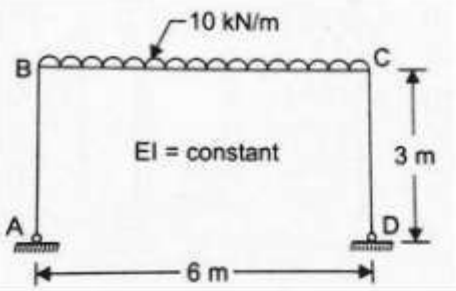
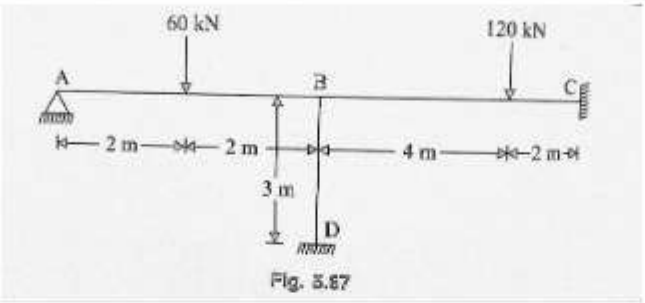
Part – A (10 x 2 = 20 Marks)

Q. No.	Questions	CO	Skills
1.	Statically indeterminate structure requires _____ a) Equilibrium Conditions Only b) Compatibility Conditions Only c) Equilibrium and Compatibility Condition together d) Cannot be solved analytically	C302.5	U
2.	To convert indeterminate structure to a determinate structure, number of force release to be provided equals to _____ a) Number of equilibriums equations for the respective structures available b) External Static Indeterminacy only c) Internal Static Indeterminacy only d) Static Indeterminacy	C302.5	U
3.	What is kinematic indeterminacy for the given figure considering axial deformation? 	C302.6	U
4.	What is kinematic indeterminacy for the given figure? 	C302.6	U
5.	What are compatibility conditions?	C302.5	R
6.	What are the properties which characterize the structure response by means of force displacement relationship?	C302.5	R
7.	What is a transformation matrix?	C302.6	U
8.	Define degree of freedom of the structure with an example.	C302.6	R
9.	Compare the flexibility and stiffness method.	C302.6	U
10.	Define Flexibility of a Structure.	C302.5	R

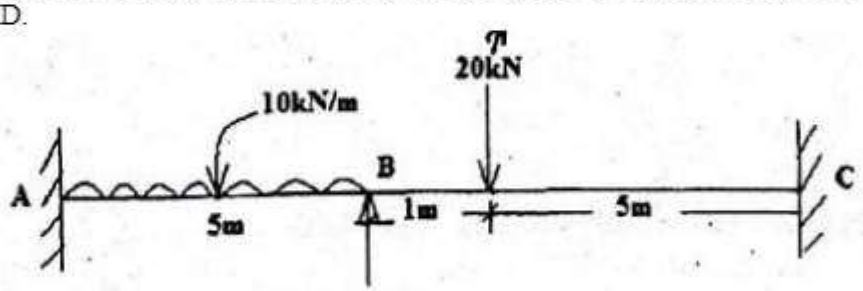
Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11.	Analyze the continuous beam ABC simply supported at A, B and C. Thespan AB is 6 m long and is loaded by a point load of 30 kN at a distance2m from end A. The span BC is 4m and it carries a udl of 10 kN/m throughout. Solve by Flexibility method and draw the Bending Moment Diagram.	C302.5	AZ & E
	OR		
12.	Analyze the continuous beam ABC simply supported at A, B and C. Thespan AB is 6 m long and is loaded by a point load of 30 KN at a distance 2m from end A. The span BC is 4m and it carries an udl of 10 KN/m throughout. Solve by Flexibility method and draw the Bending Moment Diagram.	C302.5	AZ & E

13	Analyze the portal frame as shown in figure by Flexibility method and sketch the BMD. 	C302.5	AZ & E
	OR		
14	Analyze the structure shown in figure by flexibility method and sketch the BMD.  Fig. 5.67	C302.6	AZ & E

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Analyze the continuous beam ABC simply supported at A, B and C. The span AB is 6 m long and is loaded by a point load of 30 KN at a distance 2m from end A. The span BC is 4m and it carries an udl of 10 KN/m throughout. Solve by Stiffness method and draw the Bending Moment Diagram.	C302.6	AZ & E
	OR		
16	Analyze the continuous beam as shown in figure by Stiffness method and sketch the BMD. 	C302.6	AZ & E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/ Session	23.11.2021/ FN	Marks	50
Course code	CE8702	Course Title	Railways, Airports, Docks And Harbour Engineering			
Batch No.		Duration	90 mins.	Academic Year	2021 - 2022	
Year	IV	Semester/ Section	VII / A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	How do you select the site for terminal building?	C402.4	R
2	What is a hangar?	C402.4	R
3	Define calm period.	C402.4	R
4	What are the types of windrose diagram?	C402.4	R
5	What are the corrections should be made for arriving runway length?	C402.4	R
6	Distinguish between quay and pier.	C402.5	R
7	What do you understand about 'littoral drift'?	C402.5	R
8	What is a breakwater? Name its types.	C402.5	R
9	What is meant by sounding?	C402.5	R
10	Why is dredging, so essential in port operations?	C402.5	R

Part – B

(Answer the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Briefly explain about the markings provided at airports.	C402.4	R
	Or		
12	It is proposed to have an airport at an elevation of 380m above MSL. The mean of maximum and mean of average daily temperature of the hottest month are 43.2°C and 25.3°C respectively. The difference in elevation along the proposed profile of runway is 5.8m. If the basic runway length is 1320m, find the actual length of runway to be provided.	C402.4	E
13	Classify harbours and explain them in detail.	C402.5	R
	Or		
14	Explain any six factors for which a harbour engineer must have in consideration, while planning and designing a harbour.	C402.5	U

Part – C

(Answer the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Illustrate with neat sketches any four types of coastal protection works.	C402.6	R
	Or		
16	Explain the different types of break water with neat sketches.	C402.6	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering
Tiruchirappalli - 620012

Internal Assessment Test - III			Date/Session	12-11-2022 / FN	Marks	50
Course code	CE8703	Course Title	STRUCTURAL DESIGN & DRAWING			
Batch No.		Duration	1 Hours 30 Minutes	Academic Year	2022-23/ODD	
Year	IV	Semester	VII	Department	CIVIL	

Part – A
(Answer any 2 questions 2 x 15 = 30 marks)

Q. No.	Questions	CO	Skills
1	Design a steel roof truss and draw the detailing to suit the following data: Span of the truss = 10 m Type of truss = Fan type Roof Cover = G.C. Sheeting Materials: Rolled Steel Angles Spacing of the roof truss = 4.3 m Wind Pressure = 1.0 KN/m^2	C403.5	E
2	Design the roof truss and draw the detailing and check for safety limits for an industrial building located in Guwahati with a span of 18 m and a length of 50 m. The roofing is G.I. sheeting. Basic wind speed is 50 m/s and the terrain is an open industrial area. Building is Class B Building with a clear height of 8 m at the eaves.	C403.5	E
3	Design a welded plate girder of 20 m span to support a dead load including self weight of 20 kN/m and live load of 10 kN/m over the span using the following data. Two moving loads 150 kN each spaced at 2m apart. Yield stress of steel = 250 N/mm^2. Top flange restrained laterally Design the cross section of the plate girder with thinner web plates.	C403.6	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test – III			Date/ Session	14.11.22/ FN	Marks	50
Course code	EN8491	Course Title	Water Supply Engineering			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023 (ODD)	
Year/	III	Semester/ Section	V / A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	State the purpose of aeration in water treatment.	C303.4	R
2	List the different techniques for defluoridation.	C303.4	U
3	Write the principle of desalination process.	C303.4	U
4	Differentiate unit operation and unit process.	C303.4	R
5	List the advantages of nalgonda technique	C303.4	R
6	List the methods of identification of leakage in pipelines.	C303.5	U
7	What are the requirements of water distribution system?	C303.5	R
8	Name the various pipe appurtenances used in water distribution system.	C303.5	R
9	Differentiate gravity and pumping system.	C303.5	U
10	Write the methods of solving complex pipe networks.	C303.5	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain briefly about RO process with neat sketch.	C303.4	R
	Or		
12.	Explain briefly about iron and manganese removal methods with sketch.	C303.4	R
13	Explain briefly about various types of service reservoir with neat sketch.	C303.5	R
	Or		
14	Explain briefly about various types of layout of distribution system with sketch.	C303.5	R
	Part – C (1 x 10 =10)		
15	Explain the different types of plumbing system available in buildings.	C303.6	R
	Or		
16	Explain domestic water supply system fitted with gravity and pressurized tanks along with required line diagrams.	C303.6	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - III			Date/Session	15.11.2022 / FN	Marks	50
Course code	C304	Course Title	CE 8591 - FOUNDATION ENGINEERING			
Batch No.		Duration	1Hr. 30 Min.	Academic Year	2022-2023/ODD	
Year	III	Semester	V	Department	Civil Engineering	

Part – A (20 Marks)
Answer all the Questions (10x2=20 Marks)

Q. No.	Questions	CO	Skills
1	What are under reamed pile? Specify its uses.	C304.4	R
2	What are the conditions where a pile foundation is more suitable than a shallow foundation?	C304.4	A
3	List the piles based on method of installation.	C304.4	R
4	How is the selection of pile carried out?	C304.4	U
5	What is the limitation of dynamic pile load test?	C304.4	R
6	Define anchor pile.	C304.4	R
7	Write down the assumptions of Rankine"s theory	C304.5	A
8	State the direction and magnitude of wall movement required for the mobilization of active and passive earth pressure respectively.	C304.5	R
9	Define coefficient of lateral earth pressure.	C304.6	U
10	If the ratio between co-efficient of passive earth pressure and that of active earth pressure is 9. Find the angle of internal friction of the soil.	C304.6	E

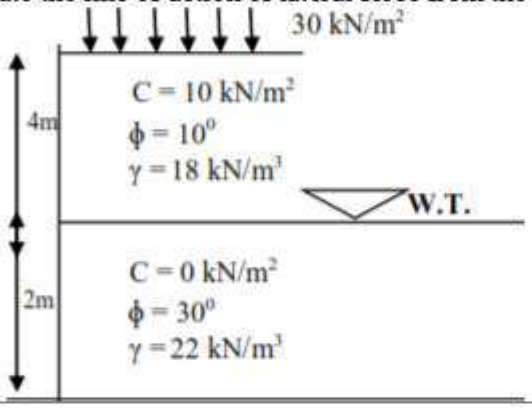
Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Determine the group efficiency of a pile group consists of 16 piles of each 20m long and 50 cm diameter with c/c distance on both directions equal to 1.0m which are embedded on a clay deposit having cohesive strength of 35kN/m^2 by static method, Feld's rule and converse labara formula. Take adhesion factor as 0.6.	C304.4	E
	Or		
12	A precast concrete pile (35cm x 35 cm) is driven by a single-acting steam hammer .Estimate the allowable load using (a)Engineering news record formula(F.S =6) (b)Hiley's formula (F.S=4) (c) Danish formula(F.S= 4) Use the following data. ➢ Maximum rated energy = 3500kN-cm ➢ Weight of hammer = 35 kN ➢ Length of pile = 15 m ➢ Efficiency of pile hammer =0.8 ➢ Co efficient of restitution =0.5 ➢ Weight of pile cap =3 kN ➢ No. of blows for last 25.4 mm = 6 ➢ Modulus of elasticity of concrete=2x 10^7 kN/m^2 Take the weight of pile as 73.5 kN	C304.4	E

13	Explain with neat sketch about pile load test method of determination of load carrying capacity of piles.	C304.4	R
	Or		
14	Enumerate the various types of pile in detail.	C304.4	U

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	Explain Rankine"s theory for active and passive earth pressures on rigid wall cohesive soil. Consider both presence and absence of tension crack for active case.	C304.6	AZ
	Or		
16	Calculate the total active earth pressure on the retaining wall 6m high shows in Fig. of Also calculate the line of action of lateral force from the base of the wall. 	C304.6	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test – III			Date/ Session	15.11.22/ FN	Marks	50
Course code	EN8591	Course Title	Municipal solid waste management			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023 (ODD)	
Year/	IV	Semester/ Section	VII/ A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	List the purpose of offsite waste processing.	C406.4	R
2	Define composting and pyrolysis.	C406.4	R
3	List the objectives of incineration	C406.4	U
4	Define vermin composting.	C406.4	R
5	Define Biomethanation.	C406.4	R
6	What is Leachate	C406.5	R
7	List the methods of solid waste disposal.	C406.5	R
8	State the health effects of dumping of MSW on land.	C406.5	R
9	State different phases in the lifecycle of landfill.	C406.5	U
10	What is dump site rehabilitation?	C406.5	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain briefly about various types of composting with neat sketch	C406.4	R
	Or		
12.	Explain about the working of an incinerator with neat sketch.	C406.4	R
13	Write short notes on gases in landfill.	C406.5	R
	Or		
14	Explain the various techniques involved in leachate treatment.	C406.5	R
	Part – C (1 x 10 =10)		
15	Explain about design and construction of an sanitary land fill.	C406.6	R
	Or		
16	Explain the principle methods used for the land filling of MSW.	C406.6	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirappalli – 620012.

Internal Assessment Test - III			Date/Session	15-11-2022 / FN	Marks	50
Course code	GE8071	Course Title	DISASTER MANAGEMENT			
Batch No.		Duration	90 Minutes	Academic Year	2022-2023/ODD	
Year	III	Semester	V	Department	CIVIL	

Part – A

Answer all the Questions (10x2=20Marks)

Q. No.	Questions	CO	Skills
1	What is mean by Hazard and Vulnerability profile of India?	C305.4	R
2	What is mean by Disaster Relief ?	C305.4	R
3	Mention the role of Central Government during Disaster.	C305.4	R
4	Mention the role of State Government during Disaster.	C305.4	U
5	List out the General types of Emergencies.	C305.4	U
6	What is mean by Coastal Flooding ?	C305.5	R
7	What is Storm and storm surges ?	C305.5	R
8	What do you know about Explosion ?	C305.6	R
9	What is mean by Imported components of Relief & Rescue?	C305.6	R
10	What is mean by Rehabilitation and Mitigation ?	C305.6	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about various Components of Disaster Relief.	C305.4	R
	Or		
12	Explain in detail about Disaster Management Act and Policy in India.	C305.4	R
13	Explain in detail about Recovery Phases of Disaster in terms of Emergency relief.	C305.4	R
	Or		
14	List some of the impact of Disaster Damage Assessment.	C305.4	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	Explain in detail about how Tsunami 2004 which inflicted heavy loss to life and property along the coast of tamilnadu.	C305.5	R
	Or		
16	Explain in detail about Case study of Nepal Earthquake Vulnerability assessment of buildings and Infrastructure in detail.	C305.5	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Faculty In-charge: VENKATESAN. G / ASSISTANT PROFESSOR

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/ Session	16.11.22/ FN	Marks	50
Course code	OME 754	Course Title	Industrial Safety			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	IV	Semester/ Section	VII / A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is meant by system safety analysis?	C405.4	R
2	How to reduce hazards?	C405.4	R
3	How do you prepare a safety analysis?	C405.4	R
4	Give the advantages of fault tree analysis.	C405.4	R
5	Name several of the prominent system analysis techniques.	C405.4	R
6	What are the 4 phases of disaster management?	C405.5	R
7	What are the factors that are the bases for an explosion?	C405.5	R
8	List out various methods of training for safety.	C405.5	R
9	Summarize the benefits of safety induction program.	C405.6	R
10	How do you measure the effectiveness of a safety program?	C405.6	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	What is Fault Tree Analysis? Explain in detail.	C405.4	R
	Or		
12	Give an overview of HAZOP analysis and highlight its advantages.	C405.4	R
13	Identify the points useful in designing and developing any safety training programme in detail	C405.5	R
	Or		
14	Summarize the important guidelines of Factories Act, 1948.	C405.5	R
	Part – C (1 x 10 =10)		
15	Explain in detail about Disaster Management.	C405.6	R
	Or		
16	Explain in detail about explosives and precautions while dealing with it.	C405.6	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - 3			Date/ Session	17.11.22/ FN	Marks	50
Course code	OAI551	Course Title	Environment and Agriculture			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	III	Semester/ Section	V/ A	Department	Civil Engineering	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define fragmentation.	C306.4	R
2	What are the benefits of ecological farming?	C306.4	R
3	What are the roles of pollinators in agriculture?	C306.4	U
4	What are disadvantages of GM crops?	C306.4	U
5	Define Agricultural Biodiversity	C306.4	U
6	Define Global environmental governance	C306.5	U
7	Enlist the goals of Global environmental governance (GEG).	C306.5	U
8	Mention any two Benefits of alternative agriculture.	C306.5	U
9	What is Mega farming?	C306.5	R
10	What is vertical farming?	C306.5	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail the challenges of GEG.	C306.5	R
	Or		
12	What are the goals of GEG?	C306.5	U
13	Explain in detail the use of Agricultural Biotechnology.	C306.4	U
	Or		
14	What are the seven principles in Ecological problem?	C306.4	U
	Part – C (1 x 10 =10)		
15	What are the direct and indirect effects of GM crops?	C306.4	R
	Or		
16	What are the benefits of Alternative Agriculture?	C306.5	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	T. Manimozhi			Year / Semester / Section	II / IV / A
Batch No.	247012	Date / Session	16.5.23/FN	Department	Civil
Course Code	CE3403	Course Title	Concrete Technology		
Internal Assessment Test	I ☐	II ☐	III ☒	Model ☐	No. of pages used : 12
Name and Signature of the Invigilator with date	P. Kaviya 16/5/23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✔	2	11	✔	7			7
2	✔	2	12					
3	✔	2	13					
4	✔	2	14					
5	✔	2	15					
6	✔	2	16	✔	10			10
7		—					Total	17
8	✔	2						
9	✔	2						
10		—						
Total		16						

33/50

Grand Total

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted			40			60	100
Marks Obtained			34			32	66

QAC Audit - Remarks

NIL

R. SURESH BABU

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	S. SRIVARSAN			Year / Semester / Section	3/ VI /A
Batch No.	237022	Date / Session	11-03-23 / FN	Department	CIVIL
Course Code	CE8602	Course Title	STRUCTURAL ANALYSIS - II		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 10
Name and Signature of the Invigilator with date	11/3/23 R.Sathiaraman				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part - A must be written in pages 2-6. Answers for Part - B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11	✓	10			10
2	✓	0	12					
3	✓	0	13					
4	✓	0	14					
5	✓	0	15					
6	✓	1	16	✓	1			1
7	✓	2					Total	11
8	✓	1						
9	✓	0						
10	✓	02						
Total		08	Grand Total		19 → 50		Name and Signature of the Examiner with date	12/3/23 K.Sathya Prabha

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	60 → 26	36 → 12					100 → 38
Marks Obtained							

QAC Audit - Remarks

NIL

R.SURESH BABU

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	R. GOKUL.			Year / Semester / Section	III / 06 / A.
Batch No.	237008.	Date / Session	11/03/23 /FN.	Department	Civil.
Course Code	CE8602	Course Title	Structural Analysis - II.		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 16
Name and Signature of the Invigilator with date	S. Angel			S.A 11.03.23.	

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part - A must be written in pages 2-6. Answers for Part - B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✔	2	11	✔	5			5
2	✔	2	12		—			—
3	✔	2	13		—			—
4	✔	1	14					
5	✔	2	15	✔	7			7
6	✔	2	16					
7	✔	2					Total	12
8	✔	2						
9	✔	2						
10	✔	2						
Total		19.						

31/50 Grand Total

12/3/23 K. Jathya Priya

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	64	36					100
Marks Obtained	32.	30					62

QAC Audit - Remarks

NIL

R. SURESH BABU

Name and Signature of the QAC member

select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '2' and b.sec = 'A' and b.semperiod = '22-23EVEN' and b.branch = 'CIVIL' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:CIVIL Semester:2 Section:A

Semester Period:22-23EVEN

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	BE3252-rameshbabu-eee			GE3251-mahesh-mech			GE3252-venkatesan-ce			HS3252-bhuvaneswari-eng			MA3251-buvaneswari-mat			PH3201-senthilkumar-phy			TP-sandra-eng		
							A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3	A1	A2	A3
1	813822103001	257001	AKSHAYA DEEPTHI. A	GQ	1	*	38	84	64	84	96	66				57	53	52	72	74	52	80	68	64			
2	813822103003	257003	ASWIN. B	MQ	1	*	58	78	72	64	50	54				46	24	27	52	56	50	54	64	60			
3	813822103004	257004	JAYAVARTHAN. V	MQ	6	*	36	44	46	64	68	72				23	7	17	38	36	26	52	30	34			
4	813822103005	257005	LAVANYA. A	MQ	NIL	8.75	98	88	90	64	90	96				83	80	68	88	72	52	100	94	82			
5	813822103006	257006	MANEESHWARI. G N	GQ	1	*	60	80	62	68	54	90				64	60	61	68	68	38	94	70	62			
6	813822103007	257007	MANOJ PRASHANAA. V	MQ	NIL	7.7083	50	74	66	68	56	76				57	70	54	56	50	50	76	76	74			
7	813822103008	257008	MARIS. R	GQ	1	*	76	90	82	74	100	94				41	38	35	50	72	54	76	52	62			
8	813822103009	257009	NHIVAETHIHA. S	MQ	NIL	8.5833	96	98	74	68	96	92				77	79	64	82	92	54	98	96	96			
9	813822103010	257010	NITHESHWARAN. S G	GQ	NIL	7.8333	50	58	42	100	98	74				40	64	39	50	54	16	78	52	50			
10	813822103011	257011	PAVITHRA. K	GQ	NIL	7.6667	68	74	70	76	74	72				43	51	61	82	66	52	80	60	84			
11	813822103012	257012	PAVITHRAN. K	GQ	NIL	7.9583	52	94	60	78	54	72				57	51	50	58	66	38	66	80	64			
12	813822103014	257014	PRAVEEN KUMAR. P	GQ	2	*	16	74	50	50	64	66				39	42	35	40	30	30	50	52	40			
13	813822103015	257015	SANTHOSINI. V	GQ	NIL	8.5	88	92	88	62	26	60				65	76	59	74	68	54	94	84	82			
14	813822103016	257016	SHAMCHARAN. R	GQ	NIL	7.7917	54	78	58	62	76	86				47	50	42	64	64	50	90	66	60			

15	813822103017	257017	SRI MAADHAVAN. B V	MQ	5	*	10	54	44	50	28	36				50	55	36	A	18	12	54	50	40			
16	813822103018	257018	SUBHASH MADHAVAN. S	GQ	NIL	7.7917	94	74	80	70	50	56				36	53	51	50	40	46	A	74	82			
17	813822103019	257019	THILAGARAJ. A	GQ	NIL	7.5417	32	72	56	66	50	50				38	50	33	28	34	22	66	50	40			
18	813822103020	257020	VISHVANTH. S	MQ	2	*	50	72	54	50	56	72				71	61	55	36	18	18	70	50	64			
No.of Failures(<50)							5	1	3	0	2	1	0	0	0	9	4	7	3	5	8	0	1	4	0	0	0

select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '3' and b.sec = 'A' and b.semperiod = '22-23ODD' and b.branch = 'CIVIL' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:CIVIL Semester:3 Section:A

Semester Period:22-23ODD

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	CE3301-anandraj-ce									CE3302-venkatesan-ce									CE3303-kesavaraja-ce									CE3351-kannan-ce						
							A1	M1	A2	M2	A3	AS1	RO1	AS2	LA1	A1	M1	A2	M2	A3	AS1	RO1	AS2	LA1	A1	M1	A2	M2	A3	AS1	RO1	AS2	LA1	A1	M1	A2	M2	A3	AS1	R
1	813821103001	247001	AMARNATH PRAVEEN. M	GQ	NIL	7.5568	40	64	44	84	64	100		100		52		70		43	100		100		78		70		59	100		100		60		54		50	100	
2	813821103002	247002	AMEERUDEEN. K	GQ	1	*	4	48	68		52	100		100		42	68	70		23	100		100		52		56		20	100		100		64		8	16	22	100	
3	813821103003	247003	ARUN KUMAR. P	MQ	1	*	32	56	74		75	100		100		80		88		50	100		100		A	56	50		69	100		100		34	40	78		61	100	
4	813821103004	247004	DHEENADHAYALAN. V	GQ	3	*	4	24	64		10	100		100		12	A	78		14	100		100		50		54		7	100		100		34	A	4	0	6	100	
5	813821103005	247005	GIRIDHARAN. A	GQ	6	*	38	40	52		8	100		100		14	48	42	72	19	100		100		58		30	68	9	100		100		28	68	6	32	0	100	
6	813821103006	247006	GOKULA KRISHNAN. K S	MQ	4	*	14	52	52		30	100		100		66		68		31	100		100		50		52		13	100		100		32	A	6	16	3	100	
7	813821103007	247007	GOKULESH. S	GQ	1	*	28	44	68		35	100		100		84		74		34	100		100		70		60		21	100		100		88		56		33	100	
8	813821103008	247008	HARINI. E L	MQ	1	*	34	20	60		48	100		100		74		68		57	100		100		62		70		43	100		100		58		50		51	100	
9	813821103009	247009	JAFFREY SAMUEL. F	GQ	1	*	A	56	54		54	100		100		A	68	52		46	100		100		A	68	56		37	100		100		50		50		50	100	
10	813821103010	247010	LIJO SOOSAI. S	GQ	NIL	8.375	78		90		82	100		100		80		82		51	100		100		90		72		66	100		100		94		80		68	100	
11	813821103011	247011	LYDIA MARY VINCENT AROCKIARAJ	GQ	NIL	8.4659	80		100		100	100		100		80		82		52	100		100		82		78		91	100		100		90		88		92	100	
12	813821103012	247012	MANIMOZHI. T	GQ	1	*	52		72		68	100		100		64		62		44	100		100		72		50		56	100		100		72		58		59	100	
13	813821103013	247013	MOHAMED ASHFAK. U	MQ	NIL	7.4773	42	76	A	A	64	85		100		86		A	68	35	100		100		66		A	52	22	100		100		62		A	28	10	100	
14	813821103014	247014	MOHAMMED FARIZ. M	MQ	NIL	7.5057	52		52		58	100		100		40	88	70		53	100		100		56		46	56	42	100		100		44	92	50		50	100	
15	813821103015	247015	MUGESH. M	MQ	NIL	7.608	26	68	62		50	98		100		72		68		12	100		100		54		50		13	100		100		60		28	36	2	100	
16	813821103016	247016	NAVEEN KUMAR. P	GQ	4	*	12	76	40	56	54	85		100		A	68	38	56	30	100		100		40	A	30	36	20	100		100		42	60	50		26	100	
17	813821103017	247017	SANJAY. R	MQ	3	*	14	44	34	52	22	100		100		70		60		60	100		100		68		54		45	100		100		70		4	60	35	100	
18	813821103018	247018	SANTHOSH. M	MQ	5	*	18	48	36	32	12	100		100		54		60		52	100		100		52		64		28	100		100		50		22	32	23	100	
19	813821103019	247019	SATHISH KUMAR. D	MQ	NIL	7.8011	34	88	70		78	94		100		78		64		62	100		100		64		68		64	100		100		70		62		51	100	
20	813821103020	247020	SATHYA. M E	MQ	NIL	7.7955	84		42	A	48	100		100		78		82		65	100		100		52		62		41	100		100		56		40	64	58	100	
21	813821103021	247021	SRINITHI. E	MQ	NIL	8.375	80		74		82	100		100		76		82		70	100		100		84		82		67	100		100		72		70		64	100	
22	813821103022	247022	SRINIVASAN. S	MQ	1	*	64		68		94	100		100		66		52		59	100		100		50		50		34	100		100		70		64		69	100	
23	813821103023	247023	THANGAPRABAKARAN. T	MQ	10	*	10	24	34	16	36	100		100		32	48	40	48	26	100		100		38	52	26	36	10	100		100		54		14	24	11	100	
24	813821103024	247024	VENGATESH. V	GQ	NIL	7.7841	42	72	62		64	100		100		66		80		40	100		100		68		66		46	100		100		62		50		38	100	
25	813821103025	247025	VIJAYAPRABHA. K	GQ	NIL	8.8864	86		96		100	100		100		92		90		87	100		100		80		84		70	100		100		100		90		91	100	
26	813821103026	247026	VIKAS. S	GQ	2	*	12	36	34	44	20	100		100		62		78		54	100		100		58		52		16	100		100		50		34	4	11	100	
27	813821103027	247027	VIMAL. S	GQ	NIL	8.25	76		76		100	100		100		82		86		71	100		100		80		26	68	58	100		100		96		34	36	84	100	
28	813821103301	247029	ARUN HAREESH. K	GQ	2	*	A	20	46	64	32	100		100		A	68	52		50	100		100		A	52	30	40	11	100		100		A	60	38	52	39	100	
29	813821103302	247028	VIJAY RAGHAV. S	MQ	3	*	12	60	74		18	100		100		62		68		52	100		100		70		62		42	100		100		70		52		27	100	
No.of Failures(<50)							17	9	7	3	11	0	0	0	0	5	2	3	0	13	0	0	0	0	2	0	5	3	19	0	0	0	0	6	1	11	10	14	0	

select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '5' and b.sec = 'A' and b.semperiod = '22-23ODD' and b.branch = 'CIVIL' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:CIVIL Semester:5 Section:A

Semester Period:22-23ODD

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	CE8501-venkatesan-ce					CE8502-sathyaprabha-ce					CE8591-kannan-ce					EN8491-kesavaraja-ce					GE8071-venkatesan-ce					OAI551-sathyaprabha-ce				
							A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3
1	813820103001	237001	AISHWARYA. R	GQ	NIL	8.4514	78		78		68	76		78		92	74		68		A	70		78		A	82		80		A	A	72	94		90
2	813820103002	237003	ANTONY. C J	MQ	4	*	A	A	A	A	A	32	A	A	52	A	4	A	A	A	A	52		A	64	A	20	A	A	52	A	A	A	A	56	A
3	813820103003	237002	ANTONY ALDRIN	MQ	NIL	7.5486	10	68	A	64	A	36	92	A	56	A	50		A	A	0	70		A	80	32	A	A	66		A	84		78		A
4	813820103004	237004	ARANERI. K.V	MQ	NIL	8.4588	22					4															68					A				
5	813820103005	237005	ARANGARAJAN. R	GQ	NIL	8.1111	68		64		54	52		66		52	56		36	68	26	60		68		56	72		66		52	78		76		64
6	813820103006	237006	DHANUSH. K	GQ	11	*	A	24	8	A	A	18	A	0	52	A	12	A	22	90	A	38	A	0	60	A	22	A	0	52	A	4	A	A	60	A
7	813820103007	237007	ELAKKIYA. E	GQ	NIL	8.375	66		50		70	52		72		70	64		74		70	80		64		66	82		84		82	76		94		84
8	813820103008	237008	GOKUL. R	MQ	NIL	7.9861	60		54		56	60		62		54	66		62		62	72		76		56	80		74		78	80		64		72
9	813820103009	237009	GOWTHAM. R	MQ	NIL	7.8611	60		70		60	50		A	84	64	80		A	84	68	88		A	88	74	88		90		92	72		82		80
10	813820103010	237010	KAMALESHWARAN. M	GQ	1	*	34	68	24	84	60	40	84	50		A	50		26	80	14	68		50		54	A	66	50		58	A	64	74		A
11	813820103011	237011	KANIHA. R	GQ	NIL	8.2361	68		80		82	64		80		90	68		72		92	80		62		76	70		80		80	82		90		88
12	813820103012	237012	KISHOR. A R	MQ	2	*	50		58		42	38	68	72		58	60		50		40	70		50		68	78		74		70	32	64	76		80
13	813820103013	237013	MAGESH. S	MQ	NIL	8.125	86		92		78	80		76		92	98		84		90	88		76		74	80		80		68	94		90		76
14	813820103014	237014	NANTHESWARAN. A	GQ	2	*	36	52	18	A	34	14	80	44	72	24	14	60	44	60	16	54		16	68	34	A	A	50		18	50		60		50
15	813820103015	237015	PREETHI. J	GQ	NIL	8.0694	36	24	32	72	64	30	88	50		50	20	A	26	32	A	72		40	64	20	68		58		A	82		88		78
16	813820103016	237016	RAGHUL. A	GQ	NIL	8.3542	50		74		70	68		70		68	64		58		74	88		72		76	84		72		90	82		66		74
17	813820103017	237017	RAJA. A	MQ	NIL	7.9861	52		68		80	66		54		60	70		60		52	72		60		62	80		70		70	64		70		68
18	813820103018	237018	SANCHAYAN. S	MQ	NIL	8.0764	90		98		90	86		96		84	82		98		100	90		86		88	86		94		94	94		94		92
19	813820103020	237020	SARUPRABHA. E	GQ	NIL	8.3542	68		84		92	70		88		76	80		88		80	90		62		80	86		94		88	90		88		94
20	813820103021	237021	SILAMBARSAN. V	GQ	NIL	7.3864	A	36	20	A	A	40	A	16	52	A	A	A	18	90	A	54		0	36	A	22	A	2	44	A	4	A	A	52	A
21	813820103022	237022	SRIVARSAN. S	GQ	1	*	30	60	26	84	50	38	80	46	92	56	60		44	60	50	60		32	84	52	70		62		66	64		68		88
22	813820103023	237023	SUMESH. S	GQ	3	*	46	40	40	A	48	20	84	52		A	18	0	52		42	72		36	80	54	68		68		70	68		82		70
23	813820103024	237024	SUPER SUKUMARAN. N	GQ	NIL	8.0347	24	80	56		A	44	72	84		A	52		68		50	72		56		50	A	A	78		60	68		80		A
24	813820103025	237025	THAVANESHAN. V S	GQ	NIL	7.9097	50		76		70	44	92	74		40	60		50		64	78		50		60	76		70		50	58		78		66

25	813820103301	237026	NARENDRAN. M	MQ	3	*	36	40	36	64	50	62		50		52	50		50		50	54		50		26	58		62		48	54		54		66
26	813820103302	237027	YUVARAJAN. R	GQ	1	*	24	56	50		40	28	72	36	60	32	10	52	38	40	26	52		6	60	0	44	64	42	44	16	0	52	62		16
27	813820103701	237028	PAVITHRA. J	MQ	NIL	8.3043	90		84		80	76		80		A	80		80		74	80		68		60	92		92		82	94		94		88
No.of Failures(<50)							10	5	8	0	4	14	0	5	0	2	6	1	8	1	7	1	0	7	1	5	4	0	3	2	3	4	0	0	0	1		

select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '7' and b.sec = 'A' and b.semperiod = '22-23ODD' and b.branch = 'CIVIL' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:CIVIL Semester:7 Section:A

Semester Period:22-23ODD

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	CE8701-belin-ce					CE8702-anandraj-ce					CE8703-sathyaprabha-ce					CE8711-sathyaprabha-ce					CE8712-belin-ce					EN8591-kesavaraja-ce					OME754-anandraj-ce				
							A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3
1	813819103001	227001	ABISHEK. V	GQ	NIL	8.544	92		62		76	74		88		82	50		96		92											72		88		68	72		80		72
2	813819103002	227002	AJAY PRABHU. R	GQ	NIL	8.2527	82		80		90	78		86		A	86		96		A											88		90		A	86		92		A
3	813819103003	227003	ANTONY CLINTON. S	GQ	NIL	7.5659	A	85	8	64	40	12	A	A	75	A	4	76	A	64	8											52		50		54	A	A	26	65	34
4	813819103004	227004	ATCHAYA. K	GQ	NIL	8.8846	94		86		94	88		80		92	98		92		96											86		72		82	86		88		88
5	813819103005	227005	DEEPAK. A	GQ	NIL	7.8516	94		76		74	62		82		76	8	76	50		40											86		64		76	82		80		80
6	813819103006	227006	DEEPAK. T	GQ	NIL	7.8077	86		30	72	56	72		60		58	6	84	4	32	20											64		55		30	72		A	88	62
7	813819103007	227007	DEEPIKA. M	MQ	NIL	8.5549	78		88		74	76		72		74	74		92		78											86		86		80	80		78		76
8	813819103008	227008	DINESHRAM. R	GQ	6	*	38	100	48	60	36	52		56		36	A	76	62		40											36	84	42	60	32	A	88	72		36
9	813819103009	227009	GANESH PATHI . R	GQ	2	*	54		40	A	40	48	A	38	70	0	0	A	30	12	28											44	76	22	A	10	12	72	28	72	20
10	813819103010	227010	GOKUL NATH. P	MQ	2	*	60		40	40	60	52		50		0	0	A	36	A	12											54		50		4	A	64	56		34
11	813819103011	227011	HARISH. B	GQ	NIL	7.6978	A	95	A	88	68	A	65	20	A	8	A	80	A	72	20											A	88	38	76	68	A	80	62		A
12	813819103012	227012	HEMANTH. S	MQ	NIL	7.5604	62		34	56	62	56		46	80	42	4	A	20	40	28											80		58		34	50		70		56
13	813819103013	227013	JAYASHREE. S	GQ	NIL	8.4011	74		60		64	60		76		76	60		94		92											88		88		88	82		78		76
14	813819103014	227014	JEGAN SHIVA . K	MQ	NIL	8.3187	88		74		96	74		80		70	40	A	88		66											86		80		74	84		90		82
15	813819103016	227016	KARTHIK. S	MQ	NIL	7.8077	70		66		78	64		74		54	2	84	A	76	0											78		52		56	76		76		66
16	813819103017	227017	KARTHIKEYAN. M	GQ	NIL	7.6758	A	100	66		62	24	A	52		10	4	80	30	68	0											40	76	18	84	18	12	64	26	69	14
17	813819103018	227018	KAUSICA. V	GQ	NIL	8.9725	88		52		92	78		74		82	98		92		92											84		76		86	76		86		80
18	813819103019	227019	LOGESHVARAN. C B	MQ	1	*	66		46	60	68	80		64		70	50		50		44											64		58		38	66		68		58
19	813819103020	227020	MADHAVAN. M N	GQ	NIL	8.3242	66		44	92	90	82		64		A	50		56		60											84		A	84	60	74		62		72
20	813819103021	227021	MADHESH. S	MQ	NIL	7.9615	86		60		68	68		74		60	62		92		80											88		80		64	76		70		70
21	813819103022	227022	MOHAMED AMEEN. S	GQ	NIL	8.2363	94		62		96	88		64		72	74		80		70											88		82		64	88		64		80
22	813819103023	227023	MOHAMMED SULAIMON. A K	GQ	NIL	8	94		58		78	74		76		64	20	88	96		80											70		70		66	72		72		70
23	813819103024	227024	NAGARJUNA. N.R	MQ	NIL	7.9396	72		34	68	64	78		58		42	74		30	88	50											74		54		50	70		60		60
24	813819103025	227025	PARKAVI. P	GQ	NIL	8.467	60		68		94	72		66		68	50		72		86											92		82		92	72		82		72

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select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '4' and b.sec = 'A' and b.semperiod = '22-23EVEN' and b.branch = 'CIVIL' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:CIVIL Semester:4 Section:A

Semester Period:22-23EVEN

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	CE3401-anandraj-ce					CE3402-kannan-ce					CE3403-sathyaprabha-ce					CE3404-venkatesan-ce					CE3405-kesavaraja-ce					GE3451-balamurugan-che					TP-lakshmi-eng				
							A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3
1	813821103001	247001	AMARNATH PRAVEEN. M	GQ	NIL	7.5568	62		60		64	40	72	88		62	64		96		94	52		64		64	90		90		84	32	52	64		44	38		38		
2	813821103002	247002	AMEERUDEEN. K	GQ	1	*	36	84	34	70	14	30	56	30	62	14	62		92		80	50		50		46	84		62		60	38	40	40	76	28	42		76		
3	813821103003	247003	ARUN KUMAR. P	MQ	1	*	84		70		50	86		50		12	86		52		44	80		10	72	14	82		70		8	52		56		10	32		26		
4	813821103004	247004	DHEENADHAYALAN. V	GQ	3	*	0	A	68		10	28	64	20	52	4	20	56	80		32	8	60	60		8	28	76	64		64	20	24	40	14	6	A		40		
5	813821103005	247005	GIRIDHARAN. A	GQ	6	*	4	56	20	12	26	4	52	30	34	0	40	72	30	64	60	2	32	30	24	0	50		24	40	16	50		30	18	4	28		40		
6	813821103006	247006	GOKULA KRISHNAN. K S	MQ	4	*	32	A	30	20	62	8	48	18	50	32	44	A	62		68	10	A	42	34	12	36	72	56		64	14	50	38	54	12	36		A		
7	813821103007	247007	GOKULESH. S	GQ	1	*	32	56	50		62	24	40	22	40	34	86		66		72	42	64	50		34	36	76	58		52	50		56		50	40		A		
8	813821103008	247008	HARINI. E L	MQ	1	*	62		52		28	34	84	50		50	92		98		90	56		42	44	50	56		68		56	42	36	50		30	A		A		
9	813821103009	247009	JAFFREY SAMUEL. F	GQ	1	*	44	52	36	40	44	32	48	44	40	80	50		74		70	30	A	34	40	36	62		44	50	26	22	52	28	50	34	56		44		
10	813821103010	247010	LIJO SOOSAI. S	GQ	NIL	8.375	92		82		78	80		80		78	80		96		100	84		90		74	96		88		82	72		70		32	48		34		
11	813821103011	247011	LYDIA MARY VINCENT AROCKIARAJ	GQ	NIL	8.4659	96		88		76	86		90		88	94		84		100	84		96		96	100		96		88	64		82		78	A		52		
12	813821103012	247012	MANIMOZHI. T	GQ	1	*	72		56		50	60		72		54	72		78		66	42	72	74		78	68		84		52	36	40	58		60	42		56		
13	813821103013	247013	MOHAMED ASHFAK. U	MQ	NIL	7.4773	68		70		34	60		50		54	76		78		52	56		58		22	74		66		50	50		60		22	30		52		
14	813821103014	247014	MOHAMMED FARIZ. M	MQ	NIL	7.5057	26	76	50		62	24	48	50		54	42	A	86		68	34	76	66		46	76		58		22	20	32	50		18	50		50		
15	813821103015	247015	MUGESH. M	MQ	NIL	7.608	32	96	74		26	38	92	58		16	46	64	78		34	10	60	76		20	68		56		24	54		62		32	42		66		
16	813821103016	247016	NAVEEN KUMAR. P	GQ	4	*	12	40	28	46	22	42	64	38	58	50	52		44	58	50	16	60	34	56	30	50		20	60	26	20	A	34	34	10	34		72		
17	813821103017	247017	SANJAY. R	MQ	3	*	6	40	16	50	22	28	44	28	44	24	56		54		70	38	64	58		34	56		24	56	20	20	60	62		60	28		A		
18	813821103018	247018	SANTHOSH. M	MQ	5	*	0	68	34	34	22	8	32	20	24	26	40	72	64		66	10	A	44	74	26	28	88	22	52	34	6	52	40	56	28	22		42		
19	813821103019	247019	SATHISH KUMAR. D	MQ	NIL	7.8011	50		68		70	66		62		A	82		78		86	60		84		68	90		72		42	60		56		32	42		54		
20	813821103020	247020	SATHYA. M E	MQ	NIL	7.7955	86		70		42	66		60		52	72		82		82	58		42	64	46	46	88	52		50	36	56	50		20	A		64		
21	813821103021	247021	SRINITHI. E	MQ	NIL	8.375	74		96		64	72		56		54	94		98		88	74		78		68	92		86		66	70		56		34	A		A		
22	813821103022	247022	SRINIVASAN. S	MQ	1	*	90		56		88	50		44	62	58	40	68	76		60	58		54		2	74		76		56	20	44	50		28	40		50		
23	813821103023	247023	THANGAPRABAKARAN. T	MQ	10	*	18	36	22	26	14	6	40	14	22	14	A	60	36	54	54	12	44	28	18	8	34	64	26	24	18	8	24	26	38	12	34		48		
24	813821103024	247024	VENGATESH. V	GQ	NIL	7.7841	62		74		74	54		76		70	44	60	74		66	60		68		56	78		66		56	38	28	72		34	A		70		
25	813821103025	247025	VIJAYAPRABHA. K	GQ	NIL	8.8864	98		100		84	94		80		90	90		98		100	84		98		96	90		96		76	72		82		42	50		40		
26	813821103026	247026	VIKAS. S	GQ	2	*	22	76	30	10	22	8	24	10	12	28	42	64	72		68	14	40	28	16	26	28	92	56		26	44	68	50		6	32		52		
27	813821103027	247027	VIMAL. S	GQ	NIL	8.25	80		90		20	92		92		30	78		88		20	72		88		28	58		84		8	66		72		4	54		78		
28	813821103301	247029	ARUN HAREESH. K	GQ	2	*	30	64	62		50	58		42	50	60	52		50		68	38	64	70		66	68		60		62	14	20	32	64	8	28		A		

| | | |

select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '6' and b.sec = 'A' and b.semperiod = '22-23EVEN' and b.branch = 'CIVIL' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:CIVIL Semester:6 Section:A

Semester Period:22-23EVEN

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	CE8601-belin-ce					CE8602-sathyaprabha-ce					CE8603-venkatesan-ce					CE8604-anandraj-ce					EN8592-kannan-ce					TP-vaishali-ce				
							A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3
1	813820103001	237001	AISHWARYA. R	GQ	NIL	8.4514	90		80		74	86		90		96	60		68		60	72		88		70	80		90		82					
2	813820103002	237003	ANTONY. C J	MQ	4	*	42	64	A	A	A	28	64	A	50	16	22	84	A	36	0	24	64	A	84	10	26	84	A	A	6					
3	813820103003	237002	ANTONY ALDRIN	MQ	NIL	7.5486	80		A	56	38	A	32	A	52	68	A	72	50		A	50		A	86	56	A	76	A	A	72					
4	813820103005	237005	ARANGARAJAN. R	GQ	NIL	8.1111	90		70		56	84		88		80	90		68		10	66		58		58	26	88	60		74					
5	813820103006	237006	DHANUSH. K	GQ	11	*	12	36	10	A	A	4	A	26	50	A	8	A	4	30	A	0	A	18	82	A	A	A	2	A	A					
6	813820103007	237007	ELAKKIYA. E	GQ	NIL	8.375	A	72	84		64	A	60	80		68	A	92	86		60	A	100	72		62	A	80	52		76					
7	813820103008	237008	GOKUL. R	MQ	NIL	7.9861	58		62		58	62		90		64	60		62		52	54		78		66	40	80	68		74					
8	813820103009	237009	GOWTHAM. R	MQ	NIL	7.8611	80		56		68	78		66		60	82		84		44	90		72		60	70		52		A					
9	813820103010	237010	KAMALESHWARAN. M	GQ	1	*	A	76	60		52	60		70		58	50		52		30	56		60		A	24	A	38	78	70					
10	813820103011	237011	KANIHA. R	GQ	NIL	8.2361	92		86		74	86		96		92	72		80		62	68		94		74	50		72		94					
11	813820103012	237012	KISHOR. A R	MQ	2	*	68		66		52	56		78		60	58		64		44	22	76	70		40	28	68	50		40					
12	813820103013	237013	MAGESH. S	MQ	NIL	8.125	84		78		76	100		96		96	84		96		50	90		86		74	92		98		74					
13	813820103014	237014	NANTHESWARAN. A	GQ	2	*	76		30	A	A	70		56		A	66		62		A	40	84	60		A	30	48	14	A	A					
14	813820103015	237015	PREETHI. J	GQ	NIL	8.0694	84		34	52	40	20	52	66		68	72		72		36	66		72		A	14	52	22	62	16					
15	813820103016	237016	RAGHUL. A	GQ	NIL	8.3542	94		78		84	82		76		96	72		86		66	80		84		70	70		78		88					
16	813820103017	237017	RAJA. A	MQ	NIL	7.9861	82		64		52	80		80		72	68		68		26	68		62		72	56		74		68					
17	813820103018	237018	SANCHAYAN. S	MQ	NIL	8.0764	96		88		84	A	100	100		100	A	100	90		76	88		88		72	72		90		94					
18	813820103020	237020	SARUPRABHA. E	GQ	NIL	8.3542	96		84		68	82		90		96	80		84		88	82		90		78	52		66		82					
19	813820103021	237021	SILAMBARSAN. V	GQ	NIL	7.3864	0	20	14	A	A	0	A	A	50		2	A	6	A		12	12	28	A		A	A	0	A						
20	813820103022	237022	SRIVARSAN. S	GQ	1	*	72		32	A	40	38	60	50		60	54		42	48	16	46	A	50		46	20	A	50		50					
21	813820103023	237023	SUMESH. S	GQ	3	*	58		28	52	24	A	40	32	58	56	58		76		12	44	84	42	80	22	42	68	50		A					
22	813820103024	237024	SUPER SUKUMARAN. N	GQ	NIL	8.0347	82		42	78	50	A	68	62		80	A	92	74		72	68		76		36	44	96	50		80					
23	813820103025	237025	THAVANESHAN. V S	GQ	NIL	7.9097	86		50		50	50		64		68	72		56		58	72		64		44	40	44	56		76					

select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '8' and b.sec = 'A' and b.semperiod = '22-23EVEN' and b.branch = 'CIVIL' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:CIVIL Semester:8 Section:A

Semester Period:22-23EVEN

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	CE8020-vaishali-ce		
							A1	M1	A2
1	813819103001	227001	ABISHEK. V	GQ	NIL	8.544	76		24
2	813819103002	227002	AJAY PRABHU. R	GQ	NIL	8.2527	96		0
3	813819103003	227003	ANTONY CLINTON. S	GQ	NIL	7.5659	0	A	0
4	813819103004	227004	ATCHAYA. K	GQ	NIL	8.8846	96		94
5	813819103005	227005	DEEPAK. A	GQ	NIL	7.8516	50		0
6	813819103006	227006	DEEPAK. T	GQ	NIL	7.8077	58		62
7	813819103007	227007	DEEPIKA. M	MQ	NIL	8.5549	86		86
8	813819103008	227008	DINESHRAM. R	GQ	6	*	52		30
9	813819103009	227009	GANESH PATHI . R	GQ	2	*	4	A	0
10	813819103010	227010	GOKUL NATH. P	MQ	2	*	12	A	0
11	813819103011	227011	HARISH. B	GQ	NIL	7.6978	40	A	60
12	813819103012	227012	HEMANTH. S	MQ	NIL	7.5604	24	52	72
13	813819103013	227013	JAYASHREE. S	GQ	NIL	8.4011	90		82
14	813819103014	227014	JEGAN SHIVA . K	MQ	NIL	8.3187	82		0
15	813819103016	227016	KARTHIK. S	MQ	NIL	7.8077	76		66
16	813819103017	227017	KARTHIKEYAN. M	GQ	NIL	7.6758	4	A	60
17	813819103018	227018	KAUSICA. V	GQ	NIL	8.9725	80		86
18	813819103019	227019	LOGESHVARAN. C B	MQ	1	*	40	52	66

19	813819103020	227020	MADHAVAN. M N	GQ	NIL	8.3242	58		62
20	813819103021	227021	MADHESH. S	MQ	NIL	7.9615	60		28
21	813819103022	227022	MOHAMED AMEEN. S	GQ	NIL	8.2363	78		52
22	813819103023	227023	MOHAMMED SULAIMON. A K	GQ	NIL	8	64		44
23	813819103024	227024	NAGARJUNA. N.R	MQ	NIL	7.9396	66		2
24	813819103025	227025	PARKAVI. P	GQ	NIL	8.467	74		68
25	813819103026	227026	PAVITHIRA. M	GQ	NIL	8.7637	76		82
26	813819103027	227027	PRABHURAJ. T	GQ	2	*	2	A	0
27	813819103028	227028	RAJA. N	GQ	NIL	7.489	12	A	0
28	813819103030	227030	SAKTHI MAHESWARAN. B	MQ	NIL	8.3736	A	84	0
29	813819103031	227031	SANGILI MUTHU. R	MQ	NIL	7.6099	14	A	0
30	813819103032	227032	SOLAIARAVIND. C T	GQ	NIL	7.3626	16	A	0
31	813819103033	227034	SRIRAGHUL. R	MQ	NIL	7.5165	10	A	0
32	813819103034	227035	SRIRAM. B	GQ	2	*	8	28	0
33	813819103035	227033	SRIRAAM. PA	MQ	NIL	8.0769	66		0
34	813819103036	227036	SUGUNESAHAN. B A	MQ	2	*	16	52	0
35	813819103037	227038	TAMILARASAN. N	MQ	2	*	6	52	70
36	813819103038	227039	VEDA. V	GQ	NIL	8.7527	92		94
37	813819103302	227042	SARAVANAN. P	GQ	NIL	7.9242	50		66
38	813819103303	227040	TATROUES	MQ	NIL	8.053	32	32	20
			No.of Failures(<50)				16	1	21

SARANATHAN COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS

Internal Assessment Test – 3 Schedule

2022-23 EVEN Semester

15-05-2023 MON	CS3492	Database Management Systems
16-05-2023 TUE	AL3451	Machine Learning
17-05-2023 WED	CW3401	Introduction to Business Systems
18-05-2023 THU	AL3452	Operating Systems
22-05-2023 MON	MA3391	Probability and Statistics
23-05-2023 TUE	GE3451	Environmental Sciences and Sustainability

Head/CSBS

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.5.4.2023

Circular

Internal Assessment Test – 2 _for II & III & IV Year B.E./B.Tech., Classes will commence from 10th April 2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

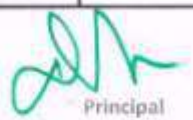
SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester									
DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
10th April 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	IC3451 - Automatic Control Systems	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th April 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3401 - Modern Electronic Instrumentation	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
12th April 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	IC3452 - Electrical Machines and Drives	CE3491 - Strength of Materials	CE3402 - Strength of Materials	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
13th April 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	EI3451 - Industrial Instrumentation	ME3491 - Theory of Machines	CE3403 - Concrete Technology	AD3491 - Fundamentals of Data Science and Analysis	AL3452 - Operating Systems
17th April 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3402 - Embedded Systems and IOT	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
20th April 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	GE3451 - Environmental Sciences and Sustainability	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CW3401 - Introduction to Business System



Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th April 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8651 - Logic and Distributed Control System	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th April 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EI8092 - Thermal Power Plant Instrumentation	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
12th April 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	MG8591 - Principles of Management	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
13th April 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	EE8072 - MEMS and Nano Science	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
17th April 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	IC8651 - Advanced Control System	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
20th April 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	CS8391 - Data Structures	ME8694 - Hydralics and Pneumatics	

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10th April 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
11th April 2023			EE8017 - High Voltage Direct Current Transmission			IE8693 - Production Planing and Control	
12th April 2023			GE8076 -Professional Ethics in Engineering				

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.7.3.2023

Circular

Internal Assessment Test – I for II & III & IV Year B.E./B.Tech., Classes will commence from 9.03.2023 (Thursday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester									
DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
9th March 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th March 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
13th March 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	EI3451 - Industrial Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	AD3491 - Fundamentals of Data Science and Analysis	MA3391 - Prabability and Statistics
14th March 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3491 - Theory of Machines	CE3403 - Concrete Technology	MA3391 - Probability and Statistics	AL3452 - Operating Systems
15th March 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3401 - Modern Electronic Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
16th March 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	IC3452 - Electrical Machines and Drives	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering		CW3401 - Introduction to Business System

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
9th March 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8092 - Thermal Power Plant Instrumentation	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th March 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EE8072 - MEMS and Nano Science	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
13th March 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	EI8651 - Logic and Distributed Control System	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
14th March 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	IC8651 - Advanced Control System	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
15th March 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	CS8391 - Data Structures	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
16th March 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	MG8591 - Principles of Management	ME8694 - Hydralics and Pneumatics	

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
13th March 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
14th March 2023						IE8693 - Production Planing and Control	

Principal

SARANATHAN COLLEGE OF ENGINEERING

19.09.2022

CIRCULAR

Remedial and slip test for Internal Assessment Test- I for III / IV Year B.E / B.Tech classes will commence from 20-09-2022 (Tuesday) as per the timetable mentioned.

S.No.	DATE	SUBJECT
1.	20-09-2022	SUBJECT 1
2.	21-09-2022	SUBJECT 2
3.	22-09-2022	SUBJECT 3
4.	23-09-2022	SUBJECT 4
5.	24-09-2022	SUBJECT 5
6.	26-09-2022	SUBJECT 6

Remedial class duration: 5.00 p.m. to 5.45 p.m. (45 Minutes)

Slip test duration: 5.45 p.m. to 6.30 p.m. (45 Minutes)

Note : The halls will be allotted individually for every subject to conduct Remedial and Slip test.

PRINCIPAL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli – 620 012

Dt.9th December 2022

MODEL EXAMINATION _ FOR Second Year B.E./B.Tech., Classes will be from 12.12.2022 (Monday) as per the academic planner.

Test Duration

10.00 AM to 1.00 PM

As per the instruction from the Anna University, Chennai Model Exam Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal Marks will be awarded by the Anna University based on your performance in Model Exam students are advised to take the exam seriously and to score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

MODEL EXAM for Second Year _ December 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
12.12.022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
14.12.022	CS3353 - Foundations of Data Science	EC3351 - Control Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
16.12.022	CS3391 - Object Oriented Programming	EC3354 - Signals and Systems	EE3301 - Electromagnetic Fields	CD3291 - Data Structures and Algorithms	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
19.12.022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CS3391 - Object Oriented Programming	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
21.12.022	CS3352 - Digital Principles and Computer Organization	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3351 - Digital Principles and Computer Organization	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.12.022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.16.09.2022

Circular

Internal Assessment Test – I for II Year B.E./B.Tech., Classes will commence from 19.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
19.09.2022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
20.09.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
21.09.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
22.09.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.09.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
24.09.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

Principal

Internal Assessment– I		Date/ Session	15/03/2023 F.N	Marks	50
Course code	AL3451	Course Title	Machine Learning (C212)		
Batch No.		Duration	90 mins	Academic Year	2022-2023
Year	II	Semester/ Section	IV	Department	CSBS

Part – A(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is machine learning? Why machine learning needed for business organization?	C212.1	R
2	What is a model?	C212.1	R
3	List out the differences between labelled and unlabeled data?	C212.1	Az
4	Why VC dimension is used?	C212.1	U
5	Differentiate bias and variance?	C212.1	AZ
6	Let us assume a regression algorithm generates a model Y=0.54 + 0.66 * X for the data pertaining to week week sales of a product. X is the week and Y is the product sales. Find the prediction for 5^{th} and 8^{th} week.	C212.2	A
7	What is a Hypothesis in machine learning? What is a Hypothesis space?	C212.2	R
8	Is a regression being different from classification? If yes, how?	C212.2	U
9	What is generalization and specialization?	C212.2	R
10	State Byes theorm?	C212.2	R

Part – B(Answer all the questions 2 x 10 = 20marks)

11	Explain the machine learning process model	C212.1	R
	Or		
12	Write a note on a) supervised b) unsupervised c) semi supervised ML algorithms	C212.1	R
13	Explain the perceptron learning model.	C212.2	C
	Or		
14	Explain the concept of PAC	C212.2	U

Part – C(Answer all the questions 1 x 10 = 10marks)

15	Using Candidate Elimination Algorithm is used to find the set of consistent hypothesis for the following data:	C204.4	C

Citations	Size	InLibrary	Price	Editions	Buy
Some	Small	No	Affordable	One	No
Many	Big	No	Expensive	Many	Yes
Many	Medium	No	Expensive	Few	Yes
Many	Small	No	Affordable	Many	Yes

	Or		
16	The week and number of hours spent by a researcher in a library are tabulated as below. Predict hours spent in the 7^{th} and 9^{th} week using linear regression. Week (xi) : 1 2 3 4 5 Hours spent(yi) : 12 18 22 28 35.	C204.4	C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C).

Name of the faculty S.Venkatasubramanian/C.S.B.S

HOD/CSBS

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	20.09.2022 FN	Marks	50
Course code	AD3351	Course Title	Design and Analysis of Algorithms			
Batch No.	2021-25	Duration	90 mins	Academic Year	2021 - 2022	
Year	II	Semester	III	Department	CSBS	

Part – A

(Answer all the questions 10 x 2 = 20marks)

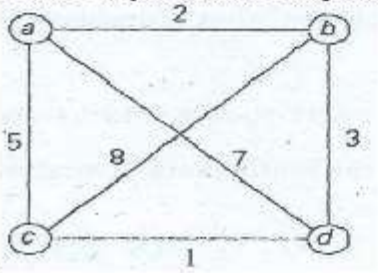
Q. No.	Questions	CO	Skills
1	What is Algorithm Design Technique?	CO1	R
2	Write an algorithm to count the binary digits in the binary representation of a given number.	CO1	U
3	Write the recursive Fibonacci algorithm and its recurrence relation.	CO1	U
4	What do you mean by empirical analysis?	CO1	R
5	Define brute force method.	CO2	R
6	Write an algorithm to search an element in an array using brute force method.	CO2	A
7	Why exhaustive search method is inefficient?	CO2	U
8	Define Divide and Conquer method.	CO3	R
9	Write the formula for Strassen's Matrix multiplication.	CO3	R
10	$T(n) = 3T(n/2) + 1$. Solve this using Master's theorem.	CO3	A

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11a	Write an algorithm to check whether all the elements in an array are distinct and analyze its time complexity. (6)	CO1	AZ
11b	Write an algorithm to find the maximum element in an array and find its time complexity(4)	CO1	AZ
	OR		
12 a	Explain Asymptotic notations in detail. (6)	CO1	U
12 b	Prove $n(n+1)/2 \in \Theta(n^2)$ (4)	CO1	A
13	Analyze the algorithm to solve Towers of Hanoi problem and find its time efficiency	CO1	AZ
	OR		
14a	Solve the recurrence equation: $x(n) = x(n-1)+n$ for $n>0$, $x(0)=0$ (6)	CO1	A
14 b.	Design and analyze the recursive algorithm to find the factorial of a number. (4)	CO1	AZ

Part – C(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15 a.	Find all the solution to the Travelling Salesman Problem (cities and distances given in graph by exhaustive search. Find the optimal solution by Exhaustive search. Analyze its time complexity (6) 	CO3	A & AZ

15 b	Find the optimal solution to the following instance of knapsack problem using exhaustive search method. (4) Item Weight value 1 3 25 2 2 20 Knapsack Capacity W = 5 3 1 15 4 4 40	CO3	A
	OR		
16.a	Design and analyze the algorithm for string matching using brute force method.6	CO3	AZ
16b	Find the number of character comparisons that will be made by straight forward string matching algorithm for the pattern ABABC in the text BAABABABCCA	CO3	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Staff : Ms.V.R.Sridevi /CSBS

HOD/CSBS

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Appropriate answer are not enabled to question and more description is needed.

Name	M. CHRISHA MAGDALIN			Year / Semester / Section	2nd / IV / 'A'
Batch No.	249016	Date / Session	14-3-2023 / FN	Department	CSBS
Course Code	- 7 -	Course Title	Operating System		
Internal Assessment Test	I [✓]	II [ ]	III [ ]	Model [ ]	No. of pages used :
Name and Signature of the Invigilator with date	G.Ve/CA/B 14/3 G.VENKATES				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
CO1 1	✓	2	CO1 11	✓	8			8
CO1 2	✓	0	CO1 12					
3	✓	1	CO2 13	✓	5			5
4	✓	1	CO1 14					
5	✓	1	CO2 15	✓	8			8
6	✓	1	CO2 16					
CO3 7	✓	2					Total	21
8	✓	1						
9	✓	0						
CO1 10	✓	2						
Total		11						

32/50 64%

Grand Total

A. MOHAMMADEN 14/3/23

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	~~50~~ 27	23					50
Marks Obtained	~~32~~ 15	17					32

QAC Audit - Remarks

NIL

D. Boobalan 11/5/2023

D. BOOBALA MURALITHARAN

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPALLI.

ANSWER BOOK

20/25 80.1

Name : L. SUDARVIZHI

Subject : AL 3452 - Operating syste

Batch Number : 249058

Date : 23/03/2023

J. Boobalamurali 11/5/2023

J. BOOBALA MURALITHARAN

PART-A

1. Dual mode operation:

* There are two modes of operation in operating system. They are
  * User mode
  * Kernel mode.
* These modes are used to protect the operating system from illegal activities by designating complex amp instructions.

2

2. Need of API:

* System call is the interface between process and the operating system
* System calls are more detailed and difficult when compared to Application Program Interface (API).
* System calls cannot be accessed by the application developers but they can access API.

2

3. System Boot:

* Booting of the system is starting of the computer system.
* The computer hardware boots by loading the operating system with the help of bootstrap program or bootstrap loader.

2

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	PERRS .T.K			Year / Semester / Section	II / IV / A
Batch No.	249044	Date / Session	13-4-2021 / FN	Department	CSBS
Course Code	AL3452	Course Title	OPERATING SYSTEMS		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date					

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part - A must be written in pages 2-6. Answers for Part - B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	2	12	✓	8			8
3	✓	2	13	✓	3	✓	3	6
4	✓	2	14					
5	✓	1	15	✓	8			8
6	✓	2	16				Total	22
7	✓	2						
8	✓	2	41/50		82%	A. MOHAMMADALI		A+A
9	✓	2	Grand Total			Name and Signature of the Examiner with date		
10	✓	2						
Total		19						

To be filled by the examiner

	1	2	3	4	5	6	Total
Course Outcomes							50
Marks allotted		30	20				41
Marks Obtained		25	16				

QAC Audit - Remarks

NIL

J. Bhuvaneswari 11/5/2021

J. BOOBALA MURALITHARAN

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	A. Nooreja			Year / Semester / Section	II-3-C
Batch No.	249056	Date / Session	5/5/23	Department	CSBS
Course Code	AL 3452	Course Title	Operating systems		
Internal Assessment Test	I ☐	II ☑ Retest	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	A. MOHANADEVI	A 5/5/23			

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1		2	11					
2		2	12		2			2
3		1	13		3			3
4		2	14					
5		1	15		9			9
6		1	16					
7		2					Total	14
8		2						
9		2	31/50		62%		A. MOHANADEVI A	
10		2						
Total		17	Grand Total				Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		30	20				50
Marks Obtained		19	12				31

QAC Audit - Remarks

QAC

D. Boobala Murugan 11/5/2023

D. BOOBALA MURUGAN

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	L. SUDHEV12 41			Year / Semester / Section	II / IV / A
Batch No.	249058	Date / Session	18/05/2023 / FN	Department	CSBS
Course Code	AL 5452	Course Title	OPERATING SYSTEMS		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used : 17
Name and Signature of the Invigilator with date			18/5/23		

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11	✓	8			8
2	✓	2	12					
3	✓	2	13					
4	✓	2	14	✓	4	✓	3	7
5	✓	2.	15					
6	✓	2	16	✓	9			9.
7	✓	2					Total	24
8	✓	2	44/50		88%		A. MOHANADEVI	A/M
9	✓	2	Grand Total				Name and Signature of the Examiner with date	
10	✓	2						
Total		20						

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted					30	20	50
Marks Obtained					27	17	44

QAC Audit - Remarks

NIL

J. Boobala Murugesan 26/5/2023

D. BOOBALA MURUGESTHARAN

Name and Signature of the QAC member

Internal Assessment Tests Mark Report

Class:CSBS Semester:4 Section:A **Subject Code:AL3452 Title : OPERATING SYSTEMS**

S.no	Regno	Batchno	Name	IATEST-A1	IATEST-M1	IATEST-A2	IATEST-M2	IATEST-A3
				14-03-2023	23-03-2023	13-04-2023	05-05-2023	18-05-2023
1	813821244001	249001	AAKASH. A	24	40	38	28	36
2	813821244002	249002	AARTHY. T	50		72		76
3	813821244003	249003	ABDUR RAHMAN ASHIK. A	14	-1	A	6	14
4	813821244004	249004	ABINAYA. M	34	56	68		50
5	813821244005	249005	ADHESH. J	26	52	26	56	42
6	813821244006	249006	AMIRTA LAKSHMI. M E	66		52		A
7	813821244007	249007	ANIRUTH RAGAVENDRA. S	18	52	42	52	60
8	813821244008	249008	ARIKARAN. K	46	44	16	44	32
9	813821244009	249009	ARULNITHI. A	12	52	30	50	12
10	813821244010	249010	ARUN. J	62		56		64
11	813821244011	249011	ATHISH VARSHEN. N	52		52		56
12	813821244012	249012	AYSHWARYA. S	A	64	74		46
13	813821244013	249013	BHARATH KANNAN. R	10	60	56		44
14	813821244014	249014	BOWTHIRIYA. S	50		32	64	66
15	813821244015	249015	BRINDHA. M	46	72	60		42
16	813821244016	249016	CHRISHA MAGDALIN. M	64		76		72
17	813821244017	249017	DEEPIKA. S	44	72	56		54
18	813821244018	249018	DHARANI. S	10	60	50		50
19	813821244019	249019	FARGANA BEGUM. A	18	24	52		56
20	813821244020	249020	GIRIVASAN. A B	6	32	10	A	26
21	813821244021	249021	GOKUL RAJ. V	12	24	32	A	A
22	813821244022	249022	GOWSALYA. P	34	80	64		70
23	813821244023	249023	GURU RATCHITHA. S	16	72	54		52
24	813821244026	249024	HARI PRASATH. M	20	60	8	50	46
25	813821244024	249025	HARICHARAN. T	12	-1	3	18	30
26	813821244025	249026	HARINI. R S	28	64	52		46
27	813821244027	249027	HARSHINI. S	34	76	68		70
28	813821244028	249028	ISHANIKA. V	40	60	34	52	40
29	813821244029	249029	JAIAKASH. K	4	36	40	22	30
30	813821244030	249030	JANANI. K M	20	60	56		52
31	813821244031	249031	KIRUTHIKA SHREE. B	58		58		60
32	813821244032	249032	MADHINI. K	62		34	68	52
33	813821244033	249033	MANIKANDAN. S	30	64	24	42	40
34	813821244034	249034	MOHAMED ASAR. N	26	52	14	A	18
35	813821244035	249035	MOHAMED SAMEER. S	2	40	2	32	10
36	813821244036	249036	MOHAMED SHAFIK. N	34	64	54		62
37	813821244037	249037	MOHAMMED YASEEN. S	16	44	34	32	42
38	813821244038	249038	MONISHA. N	52		78		76
39	813821244039	249039	MUKILAN. K B	6	-1	10	22	4
40	813821244040	249040	MURUGANANDAM. P	10	56	26	52	42
41	813821244041	249041	NARENDRAN. S P	64		76		74
42	813821244042	249042	NAVEEN RAJ. K	6	24	12	18	A
43	813821244043	249043	NEVIN RICHARD AUSTIN. S	4	52	36	26	30
44	813821244044	249044	PIERRS. I K	50		82		36
45	813821244045	249045	PRATHIKSHAA. S S	40	76	68		78
46	813821244046	249046	PRINCE GAUTHAM. V	4	24	32	38	8
47	813821244047	249047	RAHUL. R	A	24	6	30	14
48	813821244048	249048	RAJESHWARAN. M	50		44	42	18
49	813821244049	249049	RAMCHIDAMBAR. BA	12	32	38	60	74
50	813821244050	249050	REETHIKA. S	60		74		54

S.no	Regno	Batchno	Name	IATEST-A1	IATEST-M1	IATEST-A2	IATEST-M2	IATEST-A3
				14-03-2023	23-03-2023	13-04-2023	05-05-2023	18-05-2023
51	813821244051	249051	REVAN JOSH. J	32	64	32	58	36
52	813821244052	249052	SAKTHIKEERTHIKA. T	72		58		64
53	813821244053	249053	SHAM. S	A	52	38	56	38
54	813821244054	249054	SHOBANA DEVI. S	34	72	60		58
55	813821244055	249055	SINDUJA. T	52		68		52
56	813821244056	249056	SOORYA. S	20	32	24	62	50
57	813821244057	249057	SRIRAM. G K	44	60	46	A	36
58	813821244058	249058	SUDARVIZHI. L	A	80	78		88
59	813821244059	249059	SURIYANARAYANAN. G	44	56	24	50	42
60	813821244060	249060	THESIGAN. S	22	40	52		34
61	813821244061	249061	VISHWA. M	2	28	14	54	4
62	813821244062	249062	YUVADHARSHINI. V	4	68	20	24	10
63	813821244302	249063	KARTHICK. K	32	52	24	50	42
64	813821244301	249064	AARON. J	A	32	32	50	56

A. MOHANADEVI, AP/CSBS

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS

Internal Assessment II (Report Period 16.10.2022 to 08.12.2022) (Entry Period 22.12.2022 to 26.12.2022)

Subject Code & Name : **AD3492 - Fundamentals of Data Science and Analytics**

Year / Sem / Branch / Sec : **II / III / CSBS / "A" Sec - 2022-23 ODD SEM (2021-2025 BATCH)**

Name of the Faculty : **R.MOHANKUMAR / ASSISTANT PROFESSOR / CSBS**

S.No	Reg. No	Student Name	Assignment / Seminar (40)	IA 2 Mark (50)	IA 2 Mark converted (100)	IA 2 Mark converted (60)	Total Marks (A+D) (100)	Portal Entry 2 Mark (100)
			A	B	C	D	E	F
1	813821244001	AAKASH. A	39	39	78	47	86	86
2	813821244002	AARTHY. T	40	50	100	60	100	100
3	813821244003	ABDUR RAHMAN ASHIK. A	40	41	82	49	89	89
4	813821244004	ABINAYA. M	40	40	80	48	88	88
5	813821244005	ADHESH. J	40	42	84	50	90	90
6	813821244006	AMIRTA LAKSHMI. M E	40	49	98	59	99	98
7	813821244007	ANIRUTH RAGAVENDRA. S	40	41	82	49	89	89
8	813821244008	ARIKARAN. K	39	38	76	46	85	85
9	813821244009	ARULNITHI. A	39	40	80	48	87	87
10	813821244010	ARUN. J	40	41	82	49	89	89
11	813821244011	ATHISH VARSHEN. N	40	46	92	55	95	95
12	813821244012	AYSHWARYA. S	39	44	88	53	92	92
13	813821244013	BHARATH KANNAN. R	39	39	78	47	86	86
14	813821244014	BOWTHRIYA. S	40	46	92	55	95	95
15	813821244015	BRINDHA. M	40	47	94	56	96	96
16	813821244016	CHRISHA MAGDALIN. M	40	50	100	60	100	100
17	813821244017	DEEPIKA. S	39	39	78	47	86	86
18	813821244018	DHARANI. S	40	41	82	49	89	89
19	813821244019	FARGANA BEGUM. A	40	50	100	60	100	100
20	813821244020	GIRIVASAN. A B	39	29	58	35	74	74
21	813821244021	GOKUL RAJ. V	39	44	88	53	92	92
22	813821244022	GOWSALYA. P	40	41	82	49	89	89
23	813821244023	GURU RATCHITHA. S	40	45	90	54	94	94
24	813821244024	HARICHARAN. T	40	40	80	48	88	88
25	813821244025	HARINI. R S	40	50	100	60	100	100
26	813821244026	HARI PRASATH. M	40	40	80	48	88	88
27	813821244027	HARSHINI. S	40	40	80	48	88	88
28	813821244028	ISHANIKA. V	40	41	82	49	89	89
29	813821244029	JAIAKASH. K	40	41	82	49	89	89
30	813821244030	JANANI. K M	39	45	90	54	93	93
31	813821244031	KIRUTHIKA SHREE. B	40	41	82	49	89	89
32	813821244032	MADHINI. K	40	45	90	54	94	94
33	813821244033	MANIKANDAN. S	40	41	82	49	89	89
34	813821244034	MOHAMED ASAR. N	40	41	82	49	89	89
35	813821244035	MOHAMED SAMEER. S	39	28	56	34	73	73
36	813821244036	MOHAMED SHAFIK. N	40	45	90	54	94	94
37	813821244037	MOHAMMED YASEEN. S	40	42	84	50	90	90
38	813821244038	MONISHA. N	40	41	82	49	89	89

Subject Code & Name : **AD3492 - Fundamentals of Data Science and Analytics**

Year / Sem / Branch / Sec : **II / III / CSBS / "A" Sec - 2022-23 ODD SEM (2021-2025 BATCH)**

Name of the Faculty : **R.MOHANKUMAR / ASSISTANT PROFESSOR / CSBS**

S.No	Reg. No	Student Name	Assignment / Seminar (40)	IA 2 Mark (50)	IA 2 Mark converted (100)	IA 2 Mark converted (60)	Total Marks (A+D) (100)	Portal Entry 2 Mark (100)
			A	B	C	D	E	F
39	813821244039	MUKILAN. K B	39	28	56	34	73	73
40	813821244040	MURUGANANDAM. P	40	42	84	50	90	90
41	813821244041	NARENDRAN. S P	40	50	100	60	100	100
42	813821244042	NAVEEN RAJ. K	40	41	82	49	89	89
43	813821244043	NEVIN RICHARD AUSTIN. S	40	41	82	49	89	89
44	813821244044	PIERRS. I K	40	50	100	60	100	100
45	813821244045	PRATHIKSHAA. S S	40	46	92	55	95	95
46	813821244046	PRINCE GAUTHAM. V	40	41	82	49	89	89
47	813821244047	RAHUL. R	39	28	56	34	73	73
48	813821244048	RAJESHWARAN. M	39	40	80	48	87	87
49	813821244049	RAMCHIDAMBAR. BA	40	50	100	60	100	100
5	813821244050	REETHIKA. S	40	50	100	60	100	100
51	813821244051	REVAN JOSH. J	40	41	82	49	89	89
52	813821244052	SAKTHIKEERTHIKA. T	39	39	78	47	86	86
53	813821244053	SHAM. S	40	40	80	48	88	88
54	813821244054	SHOBANA DEVI. S	39	44	88	53	92	92
55	813821244055	SINDUJA. T	39	43	86	52	91	91
56	813821244056	SOORYA. S	40	41	82	49	89	89
57	813821244057	SRIRAM. G K	40	41	82	49	89	89
58	813821244058	SUDARVIZHI. L	40	50	100	60	100	100
59	813821244059	SURIYANARAYANAN. G	40	42	84	50	90	90
60	813821244060	THESIGAN. S	40	41	82	49	89	89
61	813821244061	VISHWA. M	39	29	58	35	74	74
62	813821244062	YUVADHARSHINI. V	39	35	70	42	81	81
63	813821244301	AARON. J	39	38	76	46	85	85
64	813821244302	KARTHICK. K	39	34	68	41	80	80

Signature of the Faculty Member

R. Mohankumar

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS

Internal Assessment I (Report Period 22.08.2022 to 15.10.2022) (Entry Period 15.10.2022 to 21.10.2022)

Subject Code & Name : **AD3492 - Fundamentals of Data Science and Analytics**

Year / Sem / Branch / Sec : **II / III / CSBS / "A" Sec - 2022-23 ODD SEM (2021-2025 BATCH)**

Name of the Faculty : **R.MOHANKUMAR / ASSISTANT PROFESSOR / CSBS**

S.No	Reg. No	Student Name	Assignment / Seminar (40)	IA 1 Mark (50)	IA 1 Mark converted (100)	IA 1 Mark converted (60)	Total Marks (A+D) (100)	Portal Entry 1 Mark
			A	B	D	D	E	F
1	813821244001	AAKASH. A	39	38	76	46	85	85
2	813821244002	AARTHY. T	39	43	86	52	91	91
3	813821244003	ABDUR RAHMAN ASHIK. A	40	42	84	50	90	90
4	813821244004	ABINAYA. M	40	47	94	56	96	96
5	813821244005	ADHESH. J	40	42	84	50	90	90
6	813821244006	AMIRTA LAKSHMI. M E	40	50	100	60	100	100
7	813821244007	ANIRUTH RAGAVENDRA. S	40	50	100	60	100	100
8	813821244008	ARIKARAN. K	39	38	76	46	85	85
9	813821244009	ARULNITHI. A	40	31	62	37	77	77
10	813821244010	ARUN. J	40	42	84	50	90	90
11	813821244011	ATHISH VARSHEN. N	40	50	100	60	100	100
12	813821244012	AYSHWARYA. S	39	44	88	53	92	92
13	813821244013	BHARATH KANNAN. R	39	44	88	53	92	92
14	813821244014	BOWTHRIYA. S	40	41	82	49	89	89
15	813821244015	BRINDHA. M	40	41	82	49	89	89
16	813821244016	CHRISHA MAGDALIN. M	40	50	100	60	100	100
17	813821244017	DEEPIKA. S	39	44	88	53	92	92
18	813821244018	DHARANI. S	39	50	100	60	99	99
19	813821244019	FARGANA BEGUM. A	40	47	94	56	96	96
20	813821244020	GIRIVASAN. A B	40	31	62	37	77	77
21	813821244021	GOKUL RAJ. V	39	34	68	41	80	80
22	813821244022	GOWSALYA. P	39	40	80	48	87	87
23	813821244023	GURU RATCHITHA. S	40	50	100	60	100	100
24	813821244024	HARICHARAN. T	40	31	62	37	77	77
25	813821244025	HARINI. R S	40	50	100	60	100	100
26	813821244026	HARI PRASATH. M	39	34	68	41	80	80
27	813821244027	HARSHINI. S	40	50	100	60	100	100
28	813821244028	ISHANIKA. V	40	41	82	49	89	89
29	813821244029	JAIAKASH. K	40	36	72	43	83	83
30	813821244030	JANANI. K M	40	50	100	60	100	100
31	813821244031	KIRUTHIKA SHREE. B	40	50	100	60	100	100
32	813821244032	MADHINI. K	40	41	82	49	89	89
33	813821244033	MANIKANDAN. S	40	35	70	42	82	82
34	813821244034	MOHAMED ASAR. N	39	34	68	41	80	80
35	813821244035	MOHAMED SAMEER. S	40	31	62	37	77	77
36	813821244036	MOHAMED SHAFIK. N	40	35	70	42	82	82

Code & Name : AD3492 - Fundamentals of Data Science and Analytics

ear / Sem / Branch / Sec : II / III / CSBS / "A" Sec - 2022-23 ODD SEM (2021-2025 BATCH)

Name of the Faculty : R.MOHANKUMAR / ASSISTANT PROFESSOR / CSBS

S.No	Reg. No	Student Name	Assignment / Seminar (40)	IA 1 Mark (50)	IA 1 Mark converted (100)	IA 1 Mark converted (60)	Total Marks (A+D) (100)	Portal Entry 1 Mark
			A	B	D	D	E	F
37	813821244037	MOHAMMED YASEEN. S	40	41	82	49	89	89
38	813821244038	MONISHA. N	39	39	78	47	86	86
39	813821244039	MUKILAN. K B	40	31	62	37	77	77
40	813821244040	MURUGANANDAM. P	40	36	72	43	83	83
41	813821244041	NARENDRAN. S P	40	50	100	60	100	99
42	813821244042	NAVEEN RAJ. K	40	31	62	37	77	77
43	813821244043	NEVIN RICHARD AUSTIN. S	39	34	68	41	80	80
44	813821244044	PIERRS. I K	40	50	100	60	100	100
45	813821244045	PRATHIKSHAA. S S	40	50	100	60	100	100
46	813821244046	PRINCE GAUTHAM. V	40	50	100	60	100	100
47	813821244047	RAHUL. R	40	35	70	42	82	82
[illegible]	813821244048	RAJESHWARAN. M	39	40	80	48	87	87
49	813821244049	RAMCHIDAMBAR. BA	40	50	100	60	100	100
50	813821244050	REETHIKA. S	40	50	100	60	100	100
51	813821244051	REVAN JOSH. J	40	47	94	56	96	96
52	813821244052	SAKTHIKEERTHIKA. T	39	48	96	58	97	97
53	813821244053	SHAM. S	40	50	100	60	100	100
54	813821244054	SHOBANA DEVI. S	40	50	100	60	100	100
55	813821244055	SINDUJA. T	40	47	94	56	96	96
56	813821244056	SOORYA. S	39	50	100	60	99	99
57	813821244057	SRIRAM. G K	39	50	100	60	99	99
58	813821244058	SUDARVIZHI. L	40	50	100	60	100	100
59	813821244059	SURIYANARAYANAN. G	40	36	72	43	83	83
60	813821244060	THESIGAN. S	40	46	92	55	95	95
61	813821244061	VISHWA. M	40	37	74	44	84	84
[illegible]	813821244062	YUVADHARSHINI. V	40	35	70	42	82	82
[illegible]	813821244301	AARON. J	39	38	76	46	85	85
64	813821244302	KARTHICK. K	39	38	76	46	85	85

[R. Mohan Kumar]

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	M.E. Amrita lakshmi	Year / Semester / Section	II / III / C
Batch No.	249006	Date / Session	21/09/2022 FN
Department	CSBS		
Course Code	AD3491	Course Title	Fundamentals of data science and Analytics
Internal Assessment Test	I ☑ II ☐ III ☐	Model ☐	No. of pages used : 18
Name and Signature of the Invigilator with date	HEMA R.		9/21/2022

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C				Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	(b) Marks	
1	✓	2	11				
2	✓	2	12	✓	5	4+1	10
3	✓	2	13				
4	✓	2	14	✓	6	2+2	10
5	✓	2	15		(6) extra		
6	✓	2	16	✓	4+4	3+2	10
7	✓	2				Total	30
8	✓	2					
9	✓	2					
10	✓	2					
Total		17+3	Grand Total		50/50 (100%)		Name and Signature of the Examiner with date

R. Mohan kumar 21/9/22

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	22	28					50
Marks Obtained	22	28					50

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

T. Aarthy

ANSWER BOOK

Name	T. AARTHY	Year / Semester / Section	II / III / A
Batch No.	249002	Date / Session	19-10-22 / F.N
Department	CSBS		
Course Code	AD3491	Course Title	FUNDAMENTALS OF DATA SCIENCE AND ANALYTICS.

Internal Assessment Test: I ☐ II ☑ III ☐ Model ☐ No. of pages used :

Name and Signature of the Invigilator with date: Dr. R. Rekha R. Rekha 19/10/22

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C				Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks
1		2	11				
2		2	12		7+2		9
3		2	13		8		8
4		2	14				
5		2	15		7+2		9
6		2	16				
7		2				Total	26
8		—					
9		1					
10		2					
Total		17	Grand Total		439/500 (86%)	Name and Signature of the Examiner with date	R. Mohan Kumar 19/10/22

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		18	32				50
Marks Obtained		15+2	26				439

QAC Audit - Remarks

—

P. Anand, AP/IT

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPALLI.

Attd 19/12/22

ANSWER BOOK

Name : T. Aarthy
Batch Number : 249002

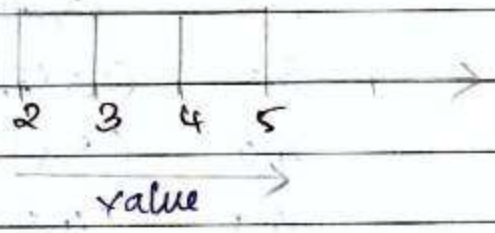
Subject : Fundamentals of Data science and Analytics
Date : 19.12.2022

PART-B.

11.

a. Relative frequency table:

Value	Frequency
2	1
3	1
4	1
5	1



12/100

P-A Book

b. population = {2, 3, 4, 5}.
Sample size = 2.

Sample set	Frequency	Mean ($\bar{x}$)	Probability.
(2,2)	1	2.0	1/16
(2,3)	1	2.5	1/16
(2,4)	1	3.0	1/16
(2,5)	1	3.5	1/16
(3,2)	1	2.5	1/16
(3,3)	1	3.0	1/16
(3,4)	1	3.5	1/16
(3,5)	1	4.0	1/16
(4,2)	1	3.0	1/16
(4,3)	1	3.5	1/16

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.08.09.2022

Circular

Internal Assessment Test – I for III & IV Year B.E./B.Tech., Classes will commence from 12.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2020 - 2024 _ Third Year - 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
12.09.2022	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
13.09.2022	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
14.09.2022	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
15.09.2022	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
16.09.2022	OEC552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
17.09.2022	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control		OA1551 - Environment and Agriculture

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2019 - 2023 _ Final Year - 7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
12.09.2022	MG8591 – Principles of Management	EC8701 - Antennas and Microwave Engineering	EE8701- High Voltage Engineering	MG8591 - Principles of Management	EI8751 - INDUSTRIAL DATA NETWORKS	ME 8792 - Power Plant Engineering	CE8701 - Estimation, Costing and Valuation Engineering
13.09.2022	CS8791 – Cloud Computing	EC8751 - Optical Communication	EE8702- Power System Operation and Control	CS8792 - Cryptography and Network Security	EI8091 - INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	ME 8793 - Process Planning and Cost Estimation	CE8702 - Railways, Airports, Docks and Harbour Engineering
14.09.2022	CS8792 – Cryptography and Network Security	EC8791 - Embedded and Real Time Systems	EE8703- Renewable Energy Systems	OBM752 – Hospital Management	EC8093 - DIGITAL IMAGE PROCESSING	ME 8791 - Mechatronics	CE8703 - Structural Design and Drawing
15.09.2022	OBM752 – Hospital Management	EC8702 - Adhoc and Wireless Sensor Networks	EI8075- Fiber Optics and Laser Instrumentation	CS8791 - Cloud Computing	EI8075 - FIBRE OPTICS AND LASER INSTRUMENTATION	OMF 751 - Lean Six Sigma	EN8591 - Municipal Solid Waste Management
16.09.2022	IT8075 – Software Project Management	OIC751 - Transducer Engineering	EE8010- Power System Transients	IT8075 - Software Project Management	EI8692 - ELECTRONICS INSTRUMENTATION	ME 8072 - Renewable Sources of Energy / GE 8077 - Total Quality Management	OME754 - Industrial Safety
17.09.2022	GE8076 – Professional Ethics in Engineering	GE8076 - Professional Ethics in Engineering	OCS752- Introduction to C Programming	IT8005 - Electronic Commerce	OCS752 - INTRODUCTION TO C PROGRAMMING	ME 8099 - Robotics	
19.09.2022			EE8017-High Voltage Direct Current Transmission		GE8076 - PROFESSIONAL ETHICS IN ENGINEERING		

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.16.09.2022

Circular

Internal Assessment Test – I for II Year B.E./B.Tech., Classes will commence from 19.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
19.09.2022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
20.09.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
21.09.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
22.09.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.09.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
24.09.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.07.10.2022

Circular

Internal Assessment Test – II for III & IV Year B.E./B.Tech., Classes will commence from 10.10.2022 (Monday) as per the academic planner.

Test Duration
9.15 am to 10.45 am (1 ½ Hours)

Class Timings after the I.A. Test
10.45 a.m. – 11.05 a.m. Break
11.05 a.m. – 11.55 a.m. – 1st Hour
11.55 a.m. – 12.45 p.m. – 2nd Hour

Afternoon classes will be held as per regular timetable.

Question paper pattern will be informed by the respective subject handling staff member's

As per the instruction from the Anna University , Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal marks will be awarded by the Anna University based on your performance in I.A. Tests. Students are advised to take the Tests seriously and to score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2020 - 2024 _ (III) _Third Year - 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th October 2022	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
11th October 2022	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
12th October 2022	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
13th October 2022	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
14th October 2022	OCE552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
15th October 2022	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control		OA1551 - Environment and Agriculture

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2019 - 2023 _ (IV) _ Final Year - 7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10th October 2022	MG8591 – Principles of Management	EC8701 - Antennas and Microwave Engineering	EE8701- High Voltage Engineering	MG8591 - Principles of Management	EI8751 - INDUSTRIAL DATA NETWORKS	ME 8792 - Power Plant Engineering	CE8701 - Estimation, Costing and Valuation Engineering
11th October 2022	CS8791 – Cloud Computing	EC8751 - Optical Communication	EE8702- Power System Operation and Control	CS8792 - Cryptography and Network Security	EI8091 - INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	ME 8793 - Process Planning and Cost Estimation	CE8702 - Railways, Airports, Docks and Harbour Engineering
12th October 2022	CS8792 – Cryptography and Network Security	EC8791 - Embedded and Real Time Systems	EE8703- Renewable Energy Systems	OBM752 – Hospital Management	EC8093 - DIGITAL IMAGE PROCESSING	ME 8791 - Mechatronics	CE8703 - Structural Design and Drawing
13th October 2022	OBM752 – Hospital Management	EC8702 - Adhoc and Wireless Sensor Networks	EI8075- Fiber Optics and Laser Instrumentation	CS8791 - Cloud Computing	EI8075 - FIBRE OPTICS AND LASER INSTRUMENTATION	OMF 751 - Lean Six Sigma	EN8591 - Municipal Solid Waste Management
14th October 2022	IT8075 – Software Project Management	OIC751 - Transducer Engineering	EE8010- Power System Transients	IT8075 - Software Project Management	EI8692 - ELECTRONICS INSTRUMENTATION	ME 8072 - Renewable Sources of Energy / GE 8077 - Total Quality Management	OME754 - Industrial Safety
15th October 2022	GE8076 – Professional Ethics in Engineering	GE8076 - Professional Ethics in Engineering	OCS752- Introduction to C Programming	IT8005 - Electronic Commerce	OCS752 - INTRODUCTION TO C PROGRAMMING	ME 8099 - Robotics	
17th October 2022			EE8017-High Voltage Direct Current Transmission		GE8076 - PROFESSIONAL ETHICS IN ENGINEERING	IE8693 - Production Planning and Control	

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

14.10.2022

CIRCULAR

Internal Assessment Test- II for II Year B.E / B.Tech classes will commence from 15.10.2022 (Saturday) as per the Academic schedule.

Test duration:

09.15 a.m. to 10.45 a.m. (1 ½ Hour)

Class timings after the I.A.Test

10.45 a.m. – 11.05 a.m. : Break

11.05 a.m -11.55a.m – 1st hour

11.55 a.m – 12.45 p.m – 2nd hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

As per the instructions from Anna University Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal "as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

PRINCIPAL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Second_Internal Assessment Test for II Year_ October 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
15.10.2022	MA3354 - Discrete Mathematics	MA3355 - Prabability and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
17.10.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
18.10.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
19.10.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
20.10.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming
21.10.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

08.11.2022

CIRCULAR

Internal Assessment Test- III for III and IV Year B.E / B.Tech classes will commence from 10.11.2022 (Thursday) as per the Academic schedule.

Test duration:

09.15 a.m. to 10.45 a.m. (1 ½ Hour)

Class timings after the I.A.Test

10.45 a.m. – 11.05 a.m. : Break

11.05 a.m -11.55a.m – 3rd hour

11.55 a.m – 12.45 p.m – 4th hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

As per the instructions from Anna University Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal "as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

PRINCIPAL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 3 _ November 2022

Batch - 2020 - 2024 _ Third Year_ III Year_ 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10-Nov-22	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
11-Nov-22	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
14-Nov-22	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
15-Nov-22	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
16-Nov-22	OEC552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
17-Nov-22	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control		OA1551 - Environment and Agriculture

Exam Cell

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 3 _ November 2022

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10-Nov-22	MG8591 – Principles of Management	EC8701 - Antennas and Microwave Engineering	EE8701- High Voltage Engineering	MG8591 - Principles of Management	EI8751 - INDUSTRIAL DATA NETWORKS	ME 8792 - Power Plant Engineering	CE8701 - Estimation, Costing and Valuation Engineering
11-Nov-22	CS8791 – Cloud Computing	EC8751 - Optical Communication	EE8702- Power System Operation and Control	CS8792 - Cryptography and Network Security	EI8091 - INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	ME 8791 - Mechatronics	CE8702 - Railways, Airports, Docks and Harbour Engineering
14-Nov-22	CS8792 – Cryptography and Network Security	EC8791 - Embedded and Real Time Systems	EE8703- Renewable Energy Systems	OBM752 – Hospital Management	EC8093 - DIGITAL IMAGE PROCESSING	OMF 751 - Lean Six Sigma	CE8703 - Structural Design and Drawing
15-Nov-22	OBM752 – Hospital Management	EC8702 - Adhoc and Wireless Sensor Networks	EI8075- Fiber Optics and Laser Instrumentation	CS8791 - Cloud Computing	EI8075 - FIBRE OPTICS AND LASER INSTRUMENTATION	ME 8072 - Renewable Sources of Energy / GE 8077 - Total Quality Management	EN8591 - Municipal Solid Waste Management
16-Nov-22	IT8075 – Software Project Management	OIC751 - Transducer Engineering	EE8010- Power System Transients	IT8075 - Software Project Management	EI8692 - ELECTRONICS INSTRUMENTATION	ME 8099 -Robotics	OME754 - Industrial Safety
17-Nov-22	GE8076 – Professional Ethics in Engineering	GE8076 - Professional Ethics in Engineering	OCS752- Introduction to C Programming	IT8005 - Electronic Commerce	OCS752 - INTRODUCTION TO C PROGRAMMING	ME 8793 - Process Planning and Cost Estimation	
18-Nov-22			EE8017-High Voltage Direct Current Transmission		GE8076 - PROFESSIONAL ETHICS IN ENGINEERING	IE8693 - Production Planning and Control	

Exam Cell

C1.2.1

IA TEST QUESTION PAPERS

Academic Year 2022 – 2023 Odd Semester

SaranathanCollegeofEngineering

Tiruchirappalli

InternalAssessmentTest - I			Date/Session	10 /10/2022	Marks	50
Coursecode	CS8591	CourseTitle	COMPUTERNETWORKS(C302)			
Batch No.		Duration	90 Mins	AcademicYear	2022-2023ODD	
Year	III	Semester/Section	V/A &B	Department	C.S.E	

Part– A

(Answerallthe questions10 x2=20marks)

Q.No.	Questions	CO	Skills
1	What are the functions of bridges?	C302.2	R
2	Define Automatic Repeat Request.	C302.2	R
3	What is CSMA/CD?	C302.2	R
4	List the types of frames in HDLC.	C302.2	R
5	What is piggy backing?	C302.2	U
6	Why IPv6 is preferred over IPv4?	C302.3	R
7	Find the class of each address. (a) 11000001. 10000011.00011011.11111111 (b) 252.5.15.111	C302.3	A
8	Check whether following IPV6 address notation are correct? (a)::Of53:6382:AB00:67DB:BB27:7332 (b)7803:42F2:::88EC:D4BA:B75D:11CD	C302.3	A
9	What is a router? (Or) What is the function or role of a router?	C302.3	R
10	Define – Masking and Subnetting.	C302.3	R

Part –B(Answerall thequestions2 x10=20marks)

Q.No.	Questions	CO	Skills
11	Explain about the error and flow control mechanisms employed at data link layer.	C302.2	R
	OR		
12	Outline the MAC working principle of IEEE802.11 ,wireless LAN`	C302.2	U
13	Draw the IPV6 packet header format and explain its address format.	C302.3	R
	OR		
14	Draw the IPV4 packet header format and explain its different class address format.	C302.3	R

Part– C(1 x 10 = 10marks)

15	A message that is to be transmitted is represented by the polynomial M(x)= x5+x4+x with a generating prime polynomial G(x)=x3+x2+1. Generate a 3 bit CRC code, C(x) which is to be appended to M(x) and find out whether it is error free.	C302.2	A
	OR		
16	Encode the data or message bits 0011 into the 7bit even parity Hamming code.	C302.2	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentionedagainst each question.

NameoftheStaff:

III year CSE "A" sec- Dr.S.Mohana.
III year CSE "B" sec-Mr.PB.Arun Prasad.

Saranathan College of Engineering, Trichy

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

C1.2.1

ANSWER PAPERS

Academic Year 2022 – 2023 Odd Semester

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	I. Kiaz Fathima			Year / Semester / Section	II / III / B
Batch No.	241078	Date / Session	20/9/22 FN	Department	CSE
Course Code	CS3351	Course Title	DIGITAL PRINCIPLES AND COMPUTER ORGANIZATION		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 13
Name and Signature of the Invigilator with date	S. Hannah			20/9/22	

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11	✓	9+1			9+1 = 10
2	✓	2	12					
3	✓	2	13	✓	8+2			10
4	✓	2	14					
5	✓	2	15	✓	6+4			6+4 = 10
6	✓	2	16					
7	✓	2					Total	30
8	✓	2						
9	✓	2						
10	✓	2						
Total		20	Grand Total		40+10 = 50			

Very Good

K. MOHANAPPRIYA

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	20	30					50
Marks Obtained	16+4 = 20	30					50

QAC Audit - Remarks

Name and Signature of the QAC member

C1.2.1

IA TEST MARK STATEMENT

Academic Year 2022 – 2023 Odd Semester

Subject Wise Internal Assessment Tests Mark Report

Academic Year 2022 -2023 - Odd Semester

Subject Code:CS8592

Title : OBJECT ORIENTED ANALYSIS AND DESIGN

Subject Handled by: parkavi-cse

Date of Exam:17.9.2022

S.no	Regno	Batchno	Name	IATEST-A1 (100)
1	813820104001	231001	AADHITHYAN. S P	50
2	813820104002	231002	ABBHINOV. B R	62
3	813820104003	231003	ABDUL HAFEEZ AHMED. N	24
4	813820104004	231004	ABDUL VAJITH. M	66
5	813820104005	231005	AFREEN. A	58
6	813820104006	231006	AJAY. S	64
7	813820104007	231007	ALAN JAMEY. M	54
8	813820104008	231008	ALMASDIVAN. K	84
9	813820104009	231009	ANANDA DHARSHINEE. M S	90
10	813820104010	231010	ANUSUYA. T	72
11	813820104011	231011	APARNA GAYATHRI. N	88
12	813820104012	231012	APARNA. D R	60
13	813820104014	231013	ARUN PRASAD. S	60
14	813820104013	231014	ARUNKUMAR. M	52
15	813820104015	231015	ASHIQ MOHAMMED. R	52
16	813820104016	231016	BHARATH. S	60
17	813820104017	231017	BHARATHIRAJA. C	80
18	813820104018	231018	BHAVYA SRII. A	84
19	813820104019	231019	BOOMESWAR. A	88
20	813820104020	231020	CYRIL LIVIYAN. L	70
21	813820104021	231021	DEVARANI.S	72
22	813820104022	231022	DEVASANA. K	82
23	813820104023	231023	DHANUSH. M	72

S.no	Regno	Batchno	Name	IATEST-A1 (100)
24	813820104024	231024	DHARANI. M	74
25	813820104025	231025	DHEEPIKA. R	86
26	813820104026	231026	DHINESH KUMAR. S	70
27	813820104027	231027	DHIVYA DHARSHINI. P	76
28	813820104028	231028	FELICIA. A	84
29	813820104029	231029	GIRIDHAR B	72
30	813820104030	231030	GLADSON RENNIS. S	78
31	813820104031	231031	GOKULA VADHANA. S	84
32	813820104032	231032	GUHAN. M	62
33	813820104033	231033	GUNANANDHINI S	68
34	813820104034	231034	GURUPRAMODH. R	50
35	813820104036	231035	HARI PRIYA. N	66
36	813820104035	231036	HARINI. K	72
37	813820104037	231037	HARISH. R	58
38	813820104038	231038	HEMA MALINI. R	84
39	813820104039	231039	INDUMATHI. S	78
40	813820104040	231040	JASWANTH. R	52
41	813820104041	231041	JAYAJANANI. S	66
42	813820104042	231042	JEEVA SURIYA. S	64
43	813820104043	231043	KALAI SELVAN. K	68
44	813820104044	231044	KALAIYARASAN. M	72
45	813820104045	231045	KAVERY. S	62
46	813820104046	231046	KAVIN. P	60
47	813820104047	231047	KAVIYAPRIYA. M	70
48	813820104048	231048	KAVYA. S	86
49	813820104049	231049	KAVYA. S	78
50	813820104050	231050	KEERTHANA. S	74
51	813820104051	231051	KIRUTHIKA. K	72
52	813820104053	231052	LAVANYA. M	80

S.no	Regno	Batchno	Name	IATEST-A1 (100)
53	813820104054	231053	LEKSHMI PPRABHA. B S	72
54	813820104055	231054	LOGESH. R	60
55	813820104056	231055	MADHUVANTHI. K	70
56	813820104057	231056	MAGIMA. V M	68
57	813820104058	231057	MAHESH KUMAR. R	64
58	813820104059	231058	MALATHY. M	70
59	813820104060	231059	MANO. S	50
60	813820104061	231060	MANOJ BHAVVAN. B	74
61	813820104306	231122	SIVAGAMI. S	66
62	813820104305	231124	SANDEEP. M	56
63	813820104307	231126	THRIKSHA. V	36

[FACULTY] [HOD/CSE]

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Computer Science Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester			
COURSE CODE/TITLE	OBJECT ORIENTED ANALYSIS AND DESIGN	Batch	2020 - 2024
CLASS / SECTION	Sem 5 / CSE A & B		
COURSE COORDINATOR	Mr.D.Boobala Muralitharan / Ms.J.Sathia Parkavi		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**						**40**	**60**								**80**	**20**	**60**	**80**	**60**	**0**	**80**	**20**
1	813820104001	AADHITHYAN. S P	32	18						36	16								30	14	32	54	16		30	14
2	813820104002	ABBHINOV. B R	34	28						30	44								52	14	34	58	44		52	14
3	813820104003	ABDUL HAFEEZ AHMED. N	24	0						16	14								18	0	24	16	14		18	0
4	813820104004	ABDUL VAJITH. M	42	24						20	30								24	16	42	44	30		24	16
5	813820104005	AFREEN. A	42	16						24	30								24	16	42	40	30		24	16
6	813820104006	AJAY. S	38	26						20	30								28	6	38	46	30		28	6
7	813820104007	ALAN JAMEY. M	26	28						20	18								14	14	26	48	18		14	14
8	813820104008	ALMASDIVAN. K	48	36						32	40								52	16	48	68	40		52	16
9	813820104009	ANANDA DHARSHINEE. M S	52	38						38	50								66	14	52	76	50		66	14
10	813820104010	ANUSUYA. T	44	28						32	34								38	14	44	60	34		38	14
11	813820104011	APARNA GAYATHRI. N	50	38						38	50								76	0	50	76	50		76	0
12	813820104012	APARNA. D R	36	24						26	34								34	16	36	50	34		34	16
13	813820104013	ARUNKUMAR. M	32	20						24	20								10	8	32	44	20		10	8
14	813820104014	ARUN PRASAD. S	40	20						24	26								22	12	40	44	26		22	12
15	813820104015	ASHIQ MOHAMMED. R	34	18						14	24								24	8	34	32	24		24	8
16	813820104016	BHARATH. S	34	26						12	18								52	14	34	38	18		52	14
17	813820104017	BHARATHIRAJA. C	46	34						28	22								50	10	46	62	22		50	10
18	813820104018	BHAVYA SRII. A	48	36						38	52								60	16	48	74	52		60	16

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**						**40**	**60**								**80**	**20**	**60**	**80**	**60**	**0**	**80**	**20**
19	813820104019	BOOMESWAR. A	52	36						38	22								46	14	52	74	22		46	14
20	813820104020	CYRIL LIVIYAN. L	46	24						12	24								40	14	46	36	24		40	14
21	813820104021	DEVARANI.S	44	28						14	36								26	12	44	42	36		26	12
22	813820104022	DEVASANA. K	48	34						0	0								60	0	48	34	0		60	0
23	813820104023	DHANUSH. M	46	26						28	12								54	0	46	54	12		54	0
24	813820104024	DHARANI. M	44	30						28	40								56	0	44	58	40		56	0
25	813820104025	DHEEPIKA. R	48	38						28	52								56	14	48	66	52		56	14
26	813820104026	DHINESH KUMAR. S	36	34						26	34								40	0	36	60	34		40	0
27	813820104027	DHIVYA DHARSHINI. P	42	34						22	48								56	14	42	56	48		56	14
28	813820104028	FELICIA. A	48	36						30	44								52	14	48	66	44		52	14
29	813820104029	GIRIDHAR B	44	28						28	42								38	14	44	56	42		38	14
30	813820104030	GLADSON RENNIS. S	46	32						36	24								18	8	46	68	24		18	8
31	813820104031	GOKULA VADHANA. S	48	36						24	40								40	14	48	60	40		40	14
32	813820104032	GUHAN. M	36	26						34	22								32	14	36	60	22		32	14
33	813820104033	GUNANANDHINI S	32	36						24	46								40	16	32	60	46		40	16
34	813820104034	GURUPRAMODH. R	36	14						20	20								2	14	36	34	20		2	14
35	813820104035	HARINI. K	44	28						30	34								0	0	44	58	34		0	0
36	813820104036	HARI PRIYA. N	38	28						30	40								36	16	38	58	40		36	16
37	813820104037	HARISH. R	28	30						20	16								10	14	28	50	16		10	14
38	813820104038	HEMA MALINI. R	46	38						30	50								50	16	46	68	50		50	16
39	813820104039	INDUMATHI. S	48	30						34	38								44	16	48	64	38		44	16
40	813820104040	JASWANTH. R	36	16						22	10								16	8	36	38	10		16	8
41	813820104041	JAYAJANANI. S	34	32						26	16								42	10	34	58	16		42	10
42	813820104042	JEEVA SURIYA. S	34	30						18	32								26	16	34	48	32		26	16
43	813820104043	KALAI SELVAN. K	38	30						34	26								0	0	38	64	26		0	0
44	813820104044	KALAIYARASAN. M	38	34						32	18								46	14	38	66	18		46	14
45	813820104045	KAVERY. S	32	30						14	22								36	16	32	44	22		36	16

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**						**40**	**60**								**80**	**20**	**60**	**80**	**60**	**0**	**80**	**20**
46	813820104046	KAVIN. P	32	28						20	42								42	14	32	48	42		42	14
47	813820104047	KAVIYAPRIYA. M	38	32						30	44								66	16	38	62	44		66	16
48	813820104048	KAVYA. S	48	38						28	52								56	16	48	66	52		56	16
49	813820104049	KAVYA. S	42	36						34	46								52	16	42	70	46		52	16
50	813820104050	KEERTHANA. S	46	28						22	46								52	16	46	50	46		52	16
51	813820104051	KIRUTHIKA. K	44	28						32	36								46	16	44	60	36		46	16
52	813820104052	KISHORE KUMAR. H	34	12						28	24								40	8	34	40	24		40	8
53	813820104053	LAVANYA. M	48	32						26	40								58	14	48	58	40		58	14
54	813820104054	LEKSHMI PPRABHA. B S	40	32						32	30								36	8	40	64	30		36	8
55	813820104055	LOGESH. R	40	20						26	12								32	14	40	46	12		32	14
56	813820104056	MADHUVANTHI. K	38	32						36	42								52	10	38	68	42		52	10
57	813820104057	MAGIMA. V M	36	32						32	30								36	14	36	64	30		36	14
58	813820104058	MAHESH KUMAR. R	34	30						20	34								28	10	34	50	34		28	10
59	813820104059	MALATHY. M	38	32						26	34								40	16	38	58	34		40	16
60	813820104060	MANO. S	30	20						14	26								22	14	30	34	26		22	14
61	813820104061	MANOJ BHAVVAN. B	42	32						26	16								34	12	42	58	16		34	12
62	813820104062	MARTHINI. S V	48	38						36	48								72	18	48	74	48		72	18
63	813820104063	MOHAMED ASHIK. A	42	32						22	28								62	10	42	54	28		62	10
64	813820104064	MOHAMED IBRAHIM. R	22	18						14	28								42	14	22	32	28		42	14
65	813820104065	MOHAMED NABEEL. M	38	20						20	12								60	14	38	40	12		60	14
66	813820104066	MOHANA. S	50	34						32	48								60	18	50	66	48		60	18
67	813820104067	MONIKA. S	50	36						36	52								68	16	50	72	52		68	16
68	813820104068	NANDHANA. S V	48	22						30	50								64	14	48	52	50		64	14
69	813820104069	NATHAMUNI. S R	34	20						24	28								50	6	34	44	28		50	6
70	813820104070	NAVAB SHERIFF. J	50	32						30	48								68	16	50	62	48		68	16
71	813820104071	NEHA. R K	40	26						24	28								66	18	40	50	28		66	18
72	813820104072	NIRMAL. P	48	20						0	0								70	12	48	20	0		70	12

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**						**40**	**60**								**80**	**20**	**60**	**80**	**60**	**0**	**80**	**20**
73	813820104073	NITHIS KUMAR. P	34	12						20	36								36	8	34	32	36		36	8
74	813820104074	NITHYA. C S	36	14						30	56								64	18	36	44	56		64	18
75	813820104075	NITHYA. K	42	20						32	48								62	12	42	52	48		62	12
76	813820104076	NIVAS. T S	46	34						26	52								50	16	46	60	52		50	16
77	813820104077	NIVATHAA. G	42	30						28	46								52	16	42	58	46		52	16
78	813820104078	NOWSHIN FATHIMA. M	44	34						24	48								68	18	44	58	48		68	18
79	813820104079	PALLAVI. M	40	20						32	38								58	10	40	52	38		58	10
80	813820104080	PARTHIGA. R	46	12						26	26								50	14	46	38	26		50	14
81	813820104081	POOJA. G	46	34						22	14								56	16	46	56	14		56	16
82	813820104082	POOJA TANAJI MALI	48	18						20	48								46	18	48	38	48		46	18
83	813820104083	POORVASHA V	46	22						32	52								56	16	46	54	52		56	16
84	813820104084	PRASANNA PRIYAN. R M	36	24						36	52								24	0	36	60	52		24	0
85	813820104085	PRASHANTIKA. S	54	34						38	50								48	14	54	72	50		48	14
86	813820104086	PREETHI. G	50	24						38	56								74	18	50	62	56		74	18
87	813820104087	PRIYA DHARSHINI. P	50	36						34	52								62	18	50	70	52		62	18
88	813820104088	RAAJESH. I	26	16						34	44								24	6	26	50	44		24	6
89	813820104090	RAJESH KUMAR. K	40	16						26	24								32	4	40	42	24		32	4
90	813820104091	RITHIKA. S	50	32						36	50								66	14	50	68	50		66	14
91	813820104092	SANJAI. P	42	14						30	34								48	4	42	44	34		48	4
92	813820104093	SANJAYKUMAR. S V	30	18						10	30								34	16	30	28	30		34	16
93	813820104094	SHABARISH. M	42	36						34	50								48	8	42	70	50		48	8
94	813820104095	SHALIK AHMED	44	26						22	52								50	4	44	48	52		50	4
95	813820104096	SHALINI. A	40	28						32	46								58	14	40	60	46		58	14
96	813820104097	SHANMUGAPRIYAN. P	38	32						28	48								56	6	38	60	48		56	6
97	813820104098	SHINY ALOYSIA. A	46	34						38	52								50	18	46	72	52		50	18
98	813820104099	SHRUTHI NANDITHA. P	56	36						38	56								74	18	56	74	56		74	18
99	813820104100	SHYAM SUNDER. S	32	30						30	44								42	16	32	60	44		42	16

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**						**40**	**60**								**80**	**20**	**60**	**80**	**60**	**0**	**80**	**20**
100	813820104101	SIVA KUMAR. A	36	30						32	42								56	14	36	62	42		56	14
101	813820104102	SNEHA. M	42	8						0	0								0	0	42	8	0		0	0
102	813820104103	SONALAKSHME. S	38	26						38	52								46	14	38	64	52		46	14
103	813820104104	SORNAPPRIYA R	38	22						32	54								62	18	38	54	54		62	18
104	813820104105	SOWMEYA. V	36	22						30	48								50	18	36	52	48		50	18
105	813820104106	SRIVATHSAN. S	44	8						34	50								24	14	44	42	50		24	14
106	813820104107	SUBARAJAN A	44	26						30	36								44	14	44	56	36		44	14
107	813820104108	SUBIN RAJ. P	36	16						22	38								24	12	36	38	38		24	12
108	813820104109	SURYA N	42	24						28	42								60	18	42	52	42		60	18
109	813820104110	SUSMITHA. T	50	26						38	54								76	18	50	64	54		76	18
110	813820104111	SYEDA SHERIN. S	46	26						36	52								46	18	46	62	52		46	18
111	813820104112	THIRISHA HELEN. J	50	38						38	50								66	16	50	76	50		66	16
112	813820104113	THIRUVENKADAM. S	46	22						30	52								52	10	46	52	52		52	10
113	813820104114	VARSHA. G	42	32						22	50								40	12	42	54	50		40	12
114	813820104115	VARSHA SREE. K	50	36						36	52								68	16	50	72	52		68	16
115	813820104116	VARSHINI. N	40	16						26	54								52	16	40	42	54		52	16
116	813820104117	VIGNESHWARAN. N	44	32						34	54								60	14	44	66	54		60	14
117	813820104118	VISHNURAM. K	34	20						16	28								58	14	34	36	28		58	14
118	813820104119	VIVIAN JOSEPH. A	46	22						28	30								52	14	46	50	30		52	14
119	813820104301	ABDUL WASIV. H	46	26						38	42								64	14	46	64	42		64	14
120	813820104302	HARINI. S	30	20						22	34								60	14	30	42	34		60	14
121	813820104303	LOGESH. R	48	26						26	38								56	14	48	52	38		56	14
122	813820104304	MOHAMMED AAGIL	0	0						0	0								0	0	0	0	0		0	0
123	813820104305	SANDEEP. M	40	16						24	26								24	16	40	40	26		24	16
124	813820104306	SIVAGAMI. S	36	30						24	26								40	16	36	54	26		40	16
125	813820104307	THRIKSHA. V	28	8						12	14								30	2	28	20	14		30	2
																				CO's Target Value	39.00	52.00	39.00	0.00	52.00	13.00
																				No. of Student Secured above CO's Target value	76	70	61	0	43	84
																				Percentage of Student Secured above Target	60.80	56.00	48.80	0.00	34.40	67.20

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Computer Science Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

Academic Period 2022 - 2023 / ODD Semester			
COURSE CODE/TITLE	OBJECT ORIENTED ANALYSIS AND DESIGN	Batch	2020 - 2024
CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813820104001	AADHITHYAN. S P	A
2	813820104002	ABBHINOV. B R	A
3	813820104003	ABDUL HAFEEZ AHMED. N	B
4	813820104004	ABDUL VAJITH. M	A
5	813820104005	AFREEN. A	B+
6	813820104006	AJAY. S	B+
7	813820104007	ALAN JAMEY. M	B+
8	813820104008	ALMASDIVAN. K	A
9	813820104009	ANANDA DHARSHINEE. M S	A
10	813820104010	ANUSUYA. T	B+
11	813820104011	APARNA GAYATHRI. N	A
12	813820104012	APARNA. D R	B+
13	813820104013	ARUNKUMAR. M	B+
14	813820104014	ARUN PRASAD. S	B+
15	813820104015	ASHIQ MOHAMMED. R	A
16	813820104016	BHARATH. S	B+
17	813820104017	BHARATHIRAJA. C	A
18	813820104018	BHAVYA SRII. A	A
19	813820104019	BOOMESWAR. A	B+
20	813820104020	CYRIL LIVIYAN. L	B+
21	813820104021	DEVARANI.S	A
22	813820104022	DEVASANA. K	A
23	813820104023	DHANUSH. M	A
24	813820104024	DHARANI. M	A
25	813820104025	DHEEPIKA. R	A
26	813820104026	DHINESH KUMAR. S	B+

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
27	813820104027	DHIVYA DHARSHINI. P	A
28	813820104028	FELICIA. A	B+
29	813820104029	GIRIDHAR B	A
30	813820104030	GLADSON RENNIS. S	A
31	813820104031	GOKULA VADHANA. S	A
32	813820104032	GUHAN. M	B+
33	813820104033	GUNANANDHINI S	B+
34	813820104034	GURUPRAMODH. R	B
35	813820104035	HARINI. K	B+
36	813820104036	HARI PRIYA. N	B+
37	813820104037	HARISH. R	B+
38	813820104038	HEMA MALINI. R	A
39	813820104039	INDUMATHI. S	A
40	813820104040	JASWANTH. R	B
41	813820104041	JAYAJANANI. S	B
42	813820104042	JEEVA SURIYA. S	B
43	813820104043	KALAI SELVAN. K	B
44	813820104044	KALAIYARASAN. M	A
45	813820104045	KAVERY. S	B+
46	813820104046	KAVIN. P	B+
47	813820104047	KAVIYAPRIYA. M	A+
48	813820104048	KAVYA. S	A
49	813820104049	KAVYA. S	A+
50	813820104050	KEERTHANA. S	A+
51	813820104051	KIRUTHIKA. K	B+
52	813820104052	KISHORE KUMAR. H	B
53	813820104053	LAVANYA. M	A

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
54	813820104054	LEKSHMI PPRABHA. B S	A
55	813820104055	LOGESH. R	B+
56	813820104056	MADHUVANTHI. K	A+
57	813820104057	MAGIMA. V M	A
58	813820104058	MAHESH KUMAR. R	B+
59	813820104059	MALATHY. M	B+
60	813820104060	MANO. S	B+
61	813820104061	MANOJ BHAVVAN. B	B+
62	813820104062	MARTHINI. S V	A
63	813820104063	MOHAMED ASHIK. A	A
64	813820104064	MOHAMED IBRAHIM. R	U
65	813820104065	MOHAMED NABEEL. M	B+
66	813820104066	MOHANA. S	B+
67	813820104067	MONIKA. S	A
68	813820104068	NANDHANA. S V	B+
69	813820104069	NATHAMUNI. S R	B+
70	813820104070	NAVAB SHERIFF. J	A
71	813820104071	NEHA. R K	A
72	813820104072	NIRMAL. P	A
73	813820104073	NITHIS KUMAR. P	B+
74	813820104074	NITHYA. C S	A+
75	813820104075	NITHYA. K	A
76	813820104076	NIVAS. T S	B
77	813820104077	NIVATHAA. G	A
78	813820104078	NOWSHIN FATHIMA. M	B+
79	813820104079	PALLAVI. M	B+
80	813820104080	PARTHIGA. R	A

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
81	813820104081	POOJA. G	B+
82	813820104082	POOJA TANAJI MALI	A
83	813820104083	POORVASHA V	A
84	813820104084	PRASANNA PRIYAN. R M	A
85	813820104085	PRASHANTIKA. S	A
86	813820104086	PREETHI. G	A+
87	813820104087	PRIYA DHARSHINI. P	A+
88	813820104088	RAAJESH. I	B
89	813820104090	RAJESH KUMAR. K	B
90	813820104091	RITHIKA. S	A
91	813820104092	SANJAI. P	B
92	813820104093	SANJAYKUMAR. S V	B
93	813820104094	SHABARISH. M	B
94	813820104095	SHALIK AHMED	B+
95	813820104096	SHALINI. A	A
96	813820104097	SHANMUGAPRIYAN. P	B
97	813820104098	SHINY ALOYSIA. A	B+
98	813820104099	SHRUTHI NANDITHA. P	A
99	813820104100	SHYAM SUNDER. S	B
100	813820104101	SIVA KUMAR. A	B
101	813820104102	SNEHA. M	B+
102	813820104103	SONALAKSHME. S	B+
103	813820104104	SORNAPPRIYA R	A
104	813820104105	SOWMEYA. V	B+
105	813820104106	SRIVATHSAN. S	A
106	813820104107	SUBARAJAN A	B+
107	813820104108	SUBIN RAJ. P	B+

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
108	813820104109	SURYA N	B
109	813820104110	SUSMITHA. T	A
110	813820104111	SYEDA SHERIN. S	A+
111	813820104112	THIRISHA HELEN. J	A+
112	813820104113	THIRUVENKADAM. S	A
113	813820104114	VARSHA. G	A+
114	813820104115	VARSHA SREE. K	B+
115	813820104116	VARSHINI. N	B+
116	813820104117	VIGNESHWARAN. N	A
117	813820104118	VISHNURAM. K	B
118	813820104119	VIVIAN JOSEPH. A	B
119	813820104301	ABDUL WASIV. H	B
120	813820104302	HARINI. S	B+
121	813820104303	LOGESH. R	B+
122	813820104304	MOHAMMED AAGIL	
123	813820104305	SANDEEP. M	B
124	813820104306	SIVAGAMI. S	B+
125	813820104307	THRIKSHA. V	B+
No. of S/O Grade			0
No. of A/A+ Grade			10
No. of B/A Grade			46
No. of C/B+ Grade			46
No. of D/B Grade			21
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			102
CO-Attainment University			81.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012
Programme: **B.E. Computer Science Engineering**
Overall Attainment Sheet – POs & PSOs attainment calculation
AcademicYear : 2022-23ODD

COURSE CODE/TITLE:**CS8592 OBJECT ORIENTED ANALYSIS AND DESIGN**:COURSE COORDINATOR:**Mr.D.Boobala Muralitharan / Ms.J.Sathia Parkavi** Batch:2020 - 2024 **Sem:5 CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)**

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C305.1	60.80	81.00	72.92	100.00	78.34	2
C305.2	56.00	81.00	71.00	100.00	76.80	2
C305.3	48.80	81.00	68.12	80.53	70.60	2
C305.4	0.00	81.00	48.60	84.80	55.84	1
C305.5	34.40	81.00	62.36	81.60	66.21	2
C305.6	67.20	81.00	75.48	100.00	80.38	2

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C305.1	3	3	3			3							3	3	3
C305.2	3	3	3			3							3	3	3
C305.3	3	3	3			3							3	3	3
C305.4	3	3	3			3							3	3	3
C305.5	3	3	3			3							3	3	3
C305.6	3	3	3			3							3	3	3
C305	3.00	3.00	3.00			3.00							3.00	3.00	3.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C305.1	2.00	2.00	2.00			2.00							2.00	2.00	2.00
C305.2	2.00	2.00	2.00			2.00							2.00	2.00	2.00
C305.3	2.00	2.00	2.00			2.00							2.00	2.00	2.00
C305.4	1.00	1.00	1.00			1.00							1.00	1.00	1.00
C305.5	2.00	2.00	2.00			2.00							2.00	2.00	2.00
C305.6	2.00	2.00	2.00			2.00							2.00	2.00	2.00
C305	1.83	1.83	1.83			1.83							1.83	1.83	1.83

[FACULTY] [HOD/CSE]

Saranathan College of Engineering, Trichy

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

C1.2.1

IA TEST CIRCULAR AND SCHEDULE

Academic Year 2022 – 2023 Even Semester

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.7.3.2023

Circular

Internal Assessment Test – I for II & III & IV Year B.E./B.Tech., Classes will commence from 9.03.2023 (Thursday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester

DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
9th March 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th March 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
13th March 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	EI3451 - Industrial Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
14th March 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3491 - Theory of Machines	CE3403 - Concrete Technology	AD3491 - Fundamentals of Data Science and Analysis	AL3452 - Operating Systems
15th March 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3401 - Modern Electronic Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
16th March 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	IC3452 - Electrical Machines and Drives	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CW3401 - Introduction to Business System

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
9th March 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8092 - Thermal Power Plant Instrumentation	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th March 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EE8072 - MEMS and Nano Science	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
13th March 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	EI8651 - Logic and Distributed Control System	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
14th March 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	IC8651 - Advanced Control System	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
15th March 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	CS8391 - Data Structures	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
16th March 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	MG8591 - Principles of Management	ME8694 - Hydralics and Pneumatics	

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
13th March 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
14th March 2023			EE8017 - High Voltage Direct Current Transmission			IE8693 - Production Planing and Control	
15th March 2023			GE8076 -Professional Ethics in Engineering				

Principal

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.5.4.2023

Circular (R)

Internal Assessment Test – 2 _for II & III Year B.E./B.Tech., Classes will commence from 10th April 2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – First Hour

11.50 a.m. – 12.45 p.m. – Second Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023 (R)

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester

DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
10th April 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	IT3401 - Web Essentials	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AD3491 - Fundamentals of Data Science and Analysis	AL3451 - Machine Learning
11th April 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	IC3401 - Modern Electronic Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	AL3451 - Machine Learning	CW3401 - Introduction to Business System
12th April 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3491 - Artificial Intelligence and Mechine Learning	IC3452 - Electrical Machines and Drives	ME3491 - Theory of Machines	CE3403 - Concrete Technology	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
13th April 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3451 - Introduction to Operating System	EI3451 - Industrial Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3452 - Operating Systems
17th April 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CS3492 - Database Management System
20th April 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023 (R)

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th April 2023	CS8651 - Internet Programming	MG8591 - Principles of Management		IT8602 - Mobile Communication		ME8693 - Heat and Mass Transfer	
11th April 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EI8092 - Thermal Power Plant Instrumentation	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
12th April 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	MG8591 - Principles of Management	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
13th April 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	EE8072 - MEMS and Nano Science	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
17th April 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	IC8651 - Advanced Control System	ME8692 - Finite Element Analysis	
20th April 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering	EE8691 - Embedded Systems	GE8076 - Professional Ethics in Engineering	CS8391 - Data Structures	ME8694 - Hydralics and Pneumatics	CE8601 - Design of Steel Structural Elements
21st April 2023					EI8651 - Logic and Distributed Control System		EN8592 - Wastewater Engineering

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.11.05.2023

Circular

Internal Assessment Test – 3 _for II & III Year B.E./B.Tech., Classes will commence from 15th May 2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – Third (3rd) Hour

11.50 a.m. – 12.45 p.m. – Fourth (4th) Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 3 _ May 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester									
DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
15th May 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	IT3401 - Web Essentials	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE3401 - Applied Hydraulics Engineering	AD3491 - Fundamentals of Data Science and Analysis	CS3492 - Database Management System
16th May 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	IC3401 - Modern Electronic Instrumentation	CE3491 - Strength of Materials	CE3403 - Concrete Technology	AL3451 - Machine Learning	AL3451 - Machine Learning
17th May 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3451 - Introduction to Operating System	IC3452 - Electrical Machines and Drives	ME3491 - Theory of Machines	CE3404 - Soil Mechanics	AL3452 - Operating Systems	CW3401 - Introduction to Business System
18th May 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	EI3451 - Industrial Instrumentation	ME3493 - Manufacturing Technology	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	AL3452 - Operating Systems
22nd May 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3451 - Thermal Engineering	CE3402 - Strength of Materials	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
23rd May 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 3 _ May 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
15th May 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EI8092 - Thermal Power Plant Instrumentation	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
16th May 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8005 - Special Electrical Machines	CS8092 - Computer Graphics and Multimedia	MG8591 - Principles of Management	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
17th May 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8601 - Solid State Drives	CS8091 - Big Data Analytics	EE8072 - MEMS and Nano Science	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
18th May 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	GE8076 - Professional Ethics in Engineering	IT8601 - Computational Intelligence	IC8651 - Advanced Control System	ME8651 - Design of Transmission Systems	EN8592 - Wastewater Engineering
22nd May 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	EE8691 - Embedded Systems	IT8602 - Mobile Communication	CS8391 - Data Structures	ME8692 - Finite Element Analysis	CE8604 - Highway Engineering
23rd May 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	EI8651 - Logic and Distributed Control System	ME8694 - Hydralics and Pneumatics	

Principal

C1.2.1

IA TEST QUESTION PAPERS

Academic Year 2022 – 2023 Even Semester

Saranathan College of Engineering, Tiruchirappalli

Internal Assessment Test – I			Date/ Session	09-03-2023	Marks	50
Course Code	CS8651	Course Title	INTERNET PROGRAMMING			
Batch No.		Duration	90 mins	Academic Year	2022-2023(EVEN SEM)	
Year	III	Semester/ Section	VI / "A, B"	Department	CSE	

Part – A (Answer all the questions 10 x 2 = 20 marks)

Q.No.	Questions	CO	Skills
1	What is Web2.0? Give Example.	C310.1	R
2	Define Cascading style sheet.	C310.1	R
3	Give an example for inline style sheet.	C310.1	U&A
4	Differentiate between standalone and container tag.	C310.1	R
5	What is the difference between website and web server?	C310.1	R
6	List any two Rich Internet Applications.	C310.1	R
7	How will implement inheritance in CSS? Give an Example	C310.1	U
8	Design a simple login form using HTML and CSS. Also Validate it using java script Regular Expressions.	C310.2	U&A
9	Write the javascript methods to print the date and time based on computers locale	C310.2	R
10	Highlight the benefits of "**strict**" keyword in javascript	C310.2	R

Part – B (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	What are the newly added features of HTML5.0 when compared with basic HTML? Explain its Features.	C310.1	U&A
	(OR)		
12	Discuss the structure of the HTTP request/response message.	C310.1	R
13	i. Design a simple arithmetic calculator using javascript. ii.Write a javascript program to change the color of an Element(Eg.<p> tag) when the user clicks a button.	C310.2	U&A
	(OR)		
14	Write a javascript program to print the age of the person using DOM methods given his date of birth.	C310.2	U&A

Part – C(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Create a form in HTML 5.0 to provide the list of grocery for the month from the list in the website. Create using forms, labels, text boxes, lists. Allow the user to enter his details to get the grocery delivered to his house.	CO 310.1	U
	(OR)		
16	Illustrate in detail about the different type of CSS selectors used in Internet Programming.Also discuss about CSS transitions and animations	C310.1	U&A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty In charge: "B" Sec- Ms. S. Ranjani / Assistant Professor/ CSE

Faculty n charge: "A" Sec-Mr. K.S Chandrasekaran. / Associate Professor/CSE

Saranathan College of Engineering, Trichy

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

C1.2.1

ANSWER PAPERS

Academic Year 2022 – 2023 Even Semester

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	S. Alaagammai			Year / Semester / Section	II / IV / B
Batch No.	241010	Date / Session	11/4/23 - FN	Department	C.S.E
Course Code	CS3451	Course Title	Introduction to Operating System.		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date					

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper. S. Alaagi
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✔	2	11	✔	10			
2	✔	2	12					
3	✔	2	13	✔	9			
4	✔	2	14					
5	✔	2	15					
6	✔	2	16	✔	10			
7	✔	2					Total	
8	✔	2						
9	✔	1						
10	✔	2						
Total			Grand Total				Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		20	20	10			50
Marks Obtained		20	19	9			48

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	S. KAVYA			Year / Semester / Section	III / VI / A
Batch No.	231049	Date / Session	15/3/23 /FN	Department	CSE
Course Code	CS8603	Course Title	DISTRIBUTED SYSTEMS		
Internal Assessment Test	I ✓	II ☐	III ☐	Model ☐	No. of pages used : 18
Name and Signature of the Invigilator with date	S. RANJANI				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	2	11	✓	8			8
2	✓	2	12					
3	✓	2	13					
4	✓	2	14	✓	8			8
5	✓	2	15	✓	10			10
6	✓	2	16					
7	✓	2					Total	26
8	✓	2						
9	✓	0						
10	✓	0						
Total		16	Grand Total		42/50 Good		Name and Signature of the Examiner with date	18/3/23

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	34	16					50
Marks Obtained	30	12					42

QAC Audit - Remarks

Nil

12/5/23

Dr. R. Senthami

Name and Signature of the QAC member

C1.2.1

IA TEST MARK STATEMENT

Academic Year 2022 – 2023 Even Semester

Subject Wise Internal Assessment Tests Mark Report

Academic Year 2022 -2023 - Odd Semester

Subject Code:CS8603

Title : DISTRIBUTED SYSTEMS

Subject Handled by: pdsheba-cse

Date of Exam:15.3.2023

S.no	Regno	Batchno	Name	IATEST-A1 (100)
1	813820104001	231001	AADHITHYAN. S P	18
2	813820104002	231002	ABBHINOV. B R	68
3	813820104003	231003	ABDUL HAFEEZ AHMED. N	36
4	813820104004	231004	ABDUL VAJITH. M	64
5	813820104005	231005	AFREEN. A	56
6	813820104006	231006	AJAY. S	70
7	813820104007	231007	ALAN JAMEY. M	6
8	813820104008	231008	ALMASDIVAN. K	96
9	813820104009	231009	ANANDA DHARSHINEE. M S	98
10	813820104010	231010	ANUSUYA. T	62
11	813820104011	231011	APARNA GAYATHRI. N	96
12	813820104012	231012	APARNA. D R	50
13	813820104014	231013	ARUN PRASAD. S	14
14	813820104013	231014	ARUNKUMAR. M	8
15	813820104015	231015	ASHIQ MOHAMMED. R	8
16	813820104016	231016	BHARATH. S	32
17	813820104017	231017	BHARATHIRAJA. C	68
18	813820104018	231018	BHAVYA SRII. A	94
19	813820104019	231019	BOOMESWAR. A	60
20	813820104020	231020	CYRIL LIVIYAN. L	56
21	813820104021	231021	DEVARANI.S	A
22	813820104022	231022	DEVASANA. K	72
23	813820104023	231023	DHANUSH. M	30

S.no	Regno	Batchno	Name	IATEST-A1 (100)
24	813820104024	231024	DHARANI. M	54
25	813820104025	231025	DHEEPIKA. R	96
26	813820104026	231026	DHINESH KUMAR. S	50
27	813820104027	231027	DHIVYA DHARSHINI. P	92
28	813820104028	231028	FELICIA. A	82
29	813820104029	231029	GIRIDHAR B	50
30	813820104030	231030	GLADSON RENNIS. S	30
31	813820104031	231031	GOKULA VADHANA. S	70
32	813820104032	231032	GUHAN. M	66
33	813820104033	231033	GUNANANDHINI S	60
34	813820104034	231034	GURUPRAMODH. R	50
35	813820104036	231035	HARI PRIYA. N	58
36	813820104035	231036	HARINI. K	76
37	813820104037	231037	HARISH. R	68
38	813820104038	231038	HEMA MALINI. R	98
39	813820104039	231039	INDUMATHI. S	34
40	813820104040	231040	JASWANTH. R	34
41	813820104041	231041	JAYAJANANI. S	62
42	813820104042	231042	JEEVA SURIYA. S	24
43	813820104043	231043	KALAI SELVAN. K	24
44	813820104044	231044	KALAIYARASAN. M	70
45	813820104045	231045	KAVERY. S	50
46	813820104046	231046	KAVIN. P	40
47	813820104047	231047	KAVIYAPRIYA. M	94
48	813820104048	231048	KAVYA. S	92
49	813820104049	231049	KAVYA. S	84
50	813820104050	231050	KEERTHANA. S	86
51	813820104051	231051	KIRUTHIKA. K	60
52	813820104053	231052	LAVANYA. M	56

S.no	Regno	Batchno	Name	IATEST-A1 (100)
53	813820104054	231053	LEKSHMI PPRABHA. B S	80
54	813820104055	231054	LOGESH. R	54
55	813820104056	231055	MADHUVANTHI. K	98
56	813820104057	231056	MAGIMA. V M	34
57	813820104058	231057	MAHESH KUMAR. R	70
58	813820104059	231058	MALATHY. M	A
59	813820104060	231059	MANO. S	60
60	813820104061	231060	MANOJ BHAVVAN. B	80
61	813820104306	231122	SIVAGAMI. S	56
62	813820104305	231124	SANDEEP. M	56
63	813820104307	231126	THRIKSHA. V	8

[FACULTY] [HOD/CSE]

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.08.09.2022

Circular

Internal Assessment Test – I for III & IV Year B.E./B.Tech., Classes will commence from 12.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

BCE

Principal

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test -I September 2022

Batch - 2020 - 2024 _ (III) _Third Year - 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
12.09.2022	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
13.09.2022	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
14.09.2022	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number . Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
15.09.2022	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
16.09.2022	OCE552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
17.09.2022	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control		OA1551 - Environment and Agriculture

Exam Cell

Principal

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test -I September 2022

Batch - 2019 - 2023 _ (IV) _ Final Year - 7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
12.09.2022	MG8591 – Principles of Management	EC8701 - Antennas and Microwave Engineering	EE8701- High Voltage Engineering	MG8591 - Principles of Management	EI8751 - INDUSTRIAL DATA NETWORKS	ME 8792 - Power Plant Engineering	CE8701 - Estimation, Costing and Valuation Engineering
13.09.2022	CS8791 – Cloud Computing	EC8751 - Optical Communication	EE8702- Power System Operation and Control	CS8792 - Cryptography and Network Security	EI8091 - INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	ME 8793 - Process Planning and Cost Estimation	CE8702 - Railways, Airports, Docks and Harbour Engineering
14.09.2022	CS8792 – Cryptography and Network Security	EC8791 - Embedded and Real Time Systems	EE8703- Renewable Energy Systems	OBM752 – Hospital Management	EC8093 - DIGITAL IMAGE PROCESSING	ME 8791 - Mechatronics	CE8703 - Structural Design and Drawing
15.09.2022	OBM752 – Hospital Management	EC8702 - Adhoc and Wireless Sensor Networks	EI8075- Fiber Optics and Laser Instrumentation	CS8791 - Cloud Computing	EI8075 - FIBRE OPTICS AND LASER INSTRUMENTATION	OMF 751 - Lean Six Sigma	EN8591 - Municipal Solid Waste Management
16.09.2022	IT8075 – Software Project Management	OIC751 - Transducer Engineering	EE8010- Power System Transients	IT8075 - Software Project Management	EI8692 - ELECTRONICS INSTRUMENTATION	ME 8072 - Renewable Sources of Energy / GE 8077 - Total Quality Management	OME754 - Industrial Safety
17.09.2022	GE8076 – Professional Ethics in Engineering	GE8076 - Professional Ethics in Engineering	OCS752- Introduction to C Programming	IT8005 - Electronic Commerce	OCS752 - INTRODUCTION TO C PROGRAMMING	ME 8099 - Robotics	
19.09.2022			EE8017-High Voltage Direct Current Transmission		GE8076 - PROFESSIONAL ETHICS IN ENGINEERING	IE8693 - Production Planning and Control	

Exam Cell

Principal

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test - I			Date/ Session	17-09-2022 FN	Marks	50
Course code	EC 8553	Course Title	DISCRETE TIME SIGNAL PROCESSING			
Batch No.		Duration	90 Mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	V / A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What are the various methods to represent the DT signal ?	302.1	E
2	Let **x(n)** be **{1, 2, 3, 2, 1}**. Sketch the **x(n)** & **x(n + 2)**.	302.1	E
3	How many multiplications and additions are required to compute N point DFT using radix 2 FFT?	302.1	R
4	Write down the difference between Linear and Circular Convolution.	302.1	E
5	Estimate the 4 point DFT of **x(n) = {1, 1, 0, 0}**.	302.1	R
6	What are the differences between DIF and DIT algorithms?	302.1	U
7	Write down the relationship between DTFT and DFT?	302.1	E
8	Why the computations in FFT algorithm are said to be in place?	302.1	R
9	Mention advantages and disadvantages of IIR filters.	302.2	R
10	List the types of the structures used for realizations of IIR filter?	302.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	State and prove the following properties of DFT. i. Periodicity ii. Symmetry iii. Circular convolution **(03 + 03 + 04)**	302.1	U
	Or		
12	Perform convolution of the data sequences, impulse response **h(n) = {2, 1, -1}** and input sequence **x(n) = {1, 2, 3, -1, -2, -3, 4, 5, 6}** using overlap add and overlap save method.	302.1	AZ, E
13	Find the 8 point DFT of the sequence **x(n) = {1, 2, 3, 4, 4, 3, 2, 1}** using DIF – FFT Algorithm.	302.1	A, AZ
	Or		
14	Compute the 8 point DFT of the sequence **$x(n) = 2^n$; $0 \le n \le 7$** using DIT – FFT Algorithm.	302.1	A, AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Deduce and Draw the Direct form – I and Direct Form – II form realizations for the given system. **y(n) = -0.1y(n-1) + 0.2y(n-2) + 3x(n) + 3.6x(n-1) + 0.6x(n-2)**	302.2	AZ
	Or		
16	Realize the given IIR filter using cascade and parallel form realization method. **y(n) = -0.1y(n-1) + 0.2y(n-2) + 3x(n) + 3.6x(n-1) + 0.6x(n-2)**	302.2	A

*Bloom's Skills: **Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question***

Staff In-Charge: Mr. G.Sivakannu, AP /ECE and Dr. M.Padmaa Prof /ECE

Saranathan College of Engineering

Tiruchirapalli-12

Internal Assessment Test - I			Date/ Session	16-09-2022	Marks	50
Course code	EC8501	Course Title	Digital Communication			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	V/ A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. NO	Questions	CO	Skills
1	What is the channel capacity of a Gaussian channel with 1 MHz bandwidth and signal power to noise power spectral density ratio is 10^4 Hz ?	C301.1	A, AZ, E
2	Define Mutual Information and Channel capacity.	C301.1	R,U
3	Comment the tradeoff between bandwidth and signal to noise ratio.	C301.1	R, U, A
4	A source produces 4 symbols with probability 1/2,1/4,1/8 *and* 1/8 . For this source, a practical coding scheme has an average codeword length of 2 bits/symbols. Find the efficiency the code.	C301.1	A, AZ, E
5	Define entropy.	C301.1	
6	State Shannon's Channel Capacity theorem.	C301.1	R, U, A
7	Write down the expression for output SNR of a DPCM receiver mentioning both predictive gain and prediction error to quantization noise ratio.	C301.2	A, AZ, E
8	What is linear predictor? On what basis are predictor coefficients determined?	C301.2	R, U
9	Define the processing gain of DPCM.	C301.2	R, U
10	What is the need for adaptive DPCM?	C301.2	U, C

Part – B

(Answer all the questions 2 x 10 = 20marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Derive the channel capacity of band limited and power limited Gaussian channel.	C301.1	A, AZ, E
	OR		
12	Construct Huffman code for the following message set x=[x1,x2,x3,x4,x5,x6,x7,x8] with probabilities P(x)=[0.07, 0.08, 0.04, 0.26, 0.14, 0.4, 0.005, 0.005].Compute the coding efficiency and redundancy.	C301.1	A, AZ, E
13	Explain the operation of a prediction filter with neat diagram and derive the Wiener Hopf equation.	C301.2	R,U
14	With a neat block diagram, explain the operation of DPCM system.	C301.2	R,U

Part – C

(Answer all the questions 1 x 10 = 10marks) Case study or Analytical type

Q.No.	Questions	CO	Skills
15	Consider that two sources X and Y emit symbols {x1, x2, x3} and {y1, y2, y3} with the joint probability p(X, Y) as given below in matrix form :	C301.1	R,U, AZ

	$$p(X,Y) = \begin{array}{c} \\ x_1 \\ x_2 \\ x_3 \end{array} \begin{array}{c} \begin{array}{ccc} y_1 & y_2 & y_3 \end{array} \\ \begin{bmatrix} \frac{3}{40} & \frac{1}{40} & \frac{1}{40} \\ \frac{1}{20} & \frac{3}{20} & \frac{1}{20} \\ \frac{1}{8} & \frac{1}{8} & \frac{3}{8} \end{bmatrix} \end{array}$$ Calculate the entropy H(X), H(Y), H(Y/X) and H(X, Y).		
16	Consider a discrete source that emits the symbols {x1, x2, x3, x4, x5, x6, x7, x8} with probabilities {0.48, 0.15, 0.1, 0.1, 0.07, 0.05, 0.03, 0.02}. Construct a binary code using Shannon-Fano technique. Compute the efficiency of the code ?	C301.1	R,U,A, AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	15.09.2022FN	Marks	50
Course code	EC8552	Course Title	COMPUTER ARCHITECTURE AND ORGANISATION			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	III	Semester/ Section	V / A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	If computer A runs a program in 10 seconds, and computer B runs the same program in 15 seconds, how much faster is A over B?	C503.1	E
2	Compile given C Assignment Statement into MIPS: g = h + A[8]	C503.1	C
3	What is the role of MAR and MDR?	C503.1	U
4	Difference between Computer Architecture and Computer Organization.	C505.1	U
5	Compile given C Statement into MIPS if (i == j) f = g + h; else f = g – h;	C503.1	C
6	What is instruction register?	C503.1	R
7	Add 10001 + 11101	C503.2	E
8.	List out the Eight ideas in computer Architecture	C503.1	R
9	What are the various types of operations required for instructions?	C503.1	R
10	Write R- type Instruction format.	C503.1	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Define Addressing mode.Explain the following with an example. i. Immediate Addressing Mode ii. Indirect Addressing Mode. iii. Index Register Addressing Mode. iv. AutoIncrement Addressing mode. v. Relative Addressing Mode.	C503.1	R
	(OR)		
12	i) Discuss about the performance measurements and its metrics of a Computer. ii)Consider three different processors P1, P2, and P3 executing the same instruction set. P1 has a 3 GHz clock rate and a CPI of 1.5. P2 has a 2.5 GHz clock rate and a CPI of 1.0. P3 has a 4.0 GHz clock rate and has a CPI of 2.2. a).Which processor has the highest performance expressed in instructions per second? b).If the processors each execute a program in 10 seconds, find the number of cycles and the number of instructions?	C503.1	E
13	Solve 20*4 using unsigned Hardware multiplication method	C503.2	E
	(OR)		
14	Solve -36*5.	C503.2	E

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Illustrate a Program that evaluate the expression :A*B+C*D in a single accumulator processor. assume that the processor has load, store, multiply and add instructions and that all values fit in the accumulator.	C503.1	AZ
	(OR)		
16	Classify assembly language instruction operations and operands in ARM computer hardware in detail.	C503.1	AZ

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Internal Assessment Test - I			Date/ Session	14.09.2022/FN	Marks	50
Course code	EC8551	Course Title	Communication Networks			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	III	Semester/ Section	V/A&B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What are the features provided by layering?	C305.1	U
2	Why are the protocols needed?	C305.1	U
3	What are the interfaces provided by protocols?	C305.1	R
4	Define: Connection Control.	C305.1	R
5	What are the parameters used to analyze the network performance?	C305.1	U
6	A bit string, 0111101111101111110, needs to be transmitted at the data link layer. What is the string actually transmitted after bit stuffing?	C305.1	A
7	Distinguish between connectionless and connection oriented service.	C305.1	R
8	List out the protocols in TCP/IP application layer.	C305.1	R
9	What is the significance of stop and wait protocol.	C305.2	U
10	What is meant by media access control?	C305.2	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Draw the OSI network architecture & Explain the functionalities of every layer in detail.	C305.1	U
	or		
12	Explain about the types of connection, topology and direction of data flow.	C305.1	U
13	Explain about the types, Frame format and Access mechanism of Ethernet.	C305.2	AZ
	or		
14	Explain about the architecture, Frame format and Problems in IEEE 802.11(WLAN)	C305.2	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	What is the need for error detection? Explain Two Dimensional Parity with suitable examples.	C305.1	U,R
	or		
16	We want to transmit the message 11001001 and protect it from errors using the CRC polynomial x3+1. i) Use polynomial long division to determine the message that should be transmitted. ii) Suppose the leftmost bit of the message is inverted due to noise on the transmission link. What is the result of the receiver's CRC calculation? How does the receiver know that an error has occurred?	C305.1	A

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Internal Assessment Test – I			Date/Session	13.09.22/FN	Marks	50
Course code	OMD551	Course Title	Basics of Biomedical Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2022- 2023	
Year/	III	Semester/Section	V / A & B	Department	ECE A & B	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define action potential and resting potential	C306OE1.1	AZ
2	Draw Eithovens triangle	C306OE1.2	R
3	What is the function of sodium pump	C306OE1.1	U
4	Name different types of electrodes used for biomedical instrumentation system	C306OE1.2	A
5	Define Half-cell potential.	C306OE1.1	R
6	Define the repolarization and depolarization	C306OE1.1	R
7	What are the advantages of Silver-Silver chloride electrode	C306OE1.1	R
8	State the uses of electrode paste	C306OE1.1	A
9	List the brainwaves and their frequency	C306OE1.2	A
10	What is unipolar and Bipolar mode of EMG	C306OE1.1	A

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the EEG 10-20 electrode system.	C306OE1.1	R
	Or		
12	Draw the recording set-up for ECG measurement and explain the blocks	C306OE1.1	U
13	Explain the different types of skin surface electrodes	C306OE1.1	R
	Or		
14	Draw the components of man-instrument system and explain the blocks.	C306OE1.1	U

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Draw the recording set-up for EEG measurement and explain the blocks	C306OE1.2	U
	Or		
16	Draw and explain the different lead configurations and its significance in ECG.	C306OE1.2	AZ

Name of the Staff: Dr. N. Preethi Elizabeth AP/ECE

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Dt: 12.09.2022

III - ECE A&B - 128

Internal Assessment Test - I			Date/ Session	12.09.2022 FN	Marks	50
Course code	EC8073	Course Title	MEDICAL ELECTRONICS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	V –A&B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	State all or none law in respect of cell bio potential.	C	R
2	Define a) Resting Potential b) Action Potential	C305PE2.1	R
3	Define – Conduction Velocity.	C305PE2.1	R
4	Mention the cause of first and second heart sounds.	C305PE2.1	U
5	State the importance of PCG signals.	C305PE2.1	A
6	Define absolute and relative refractory period.	C305PE2.1	R
7	Write down the Nernst equation of action potential.	C305PE2.1	Az,C
8	State Beer's law.	C305PE2.2	R
9	What is an auto-analyzer? What are the essential units in it?	C305PE2.2	R
10	What is Colorimeter? State its uses.	C305PE2.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Draw and explain the 10-20 lead system used for EEG measurement.	C305PE2.1	R
	or		
12	Explain the international standard 12 lead configuration in ECG and gives its significances with a neat diagram	C305PE2.1	AZ,R
13	Define blood pressure. With diagram illustrate how it can be measured using Sphygmomanometer.	C305PE2.2	U
	or		
14	Explain measurement of PH, PO2, PCO2 electrodes with neat diagram.	C305PE2.2	A

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain the measurements and recording setup of EMG	C305PE2.1	A
	or		
16	List and discuss the important characteristics of bio-amplifier.	C305PE2.1	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

SARANATHAN COLLEGE OF ENGINEERING, TRICHY

DEPARTMENT OF ECE

TRAINING AND PLACEMENT

IATEST I

APTITUDE QUESTIONS (15*2=30MARKS)

1. **In a certain room, there are 28 women and 21 men. What is the ratio of men to women? What is the ratio of women to the total number of people?**

A. 5:4 B. 4:7 C. 6:3 D. 8:7

2. **If a:b=1:2 and b:c=3:4 find a:b:c?**

A. 3:8:6 B. 3:12:6 C. 3:6:8 D. 1:2:4

3. **A, B, C, D, E and F, not necessarily in that order, are sitting at a round table. A is between D and F, C is opposite to D and D and E are not on neighboring chairs. Which one of the following pairs must be sitting on neighboring chairs?**

a. A and B b. C and E c. B and F d. A and C

4. **P, Q, R, S, T and U are standing in a circle talking, facing inward. T is next to R who is standing 3 places away from S. P is standing 2 seats away from U. Which of the following has to be true?**

a. P is standing opposite to R b. P is standing next to T c. P is standing next to S

d. P is standing next to Q

5. **One year ago, the ratio of Honey and Piyush ages was 2: 3 respectively. After five years from now, this ratio becomes 4: 5. How old is Piyush now?**

A. 5 years B. 25 years C. 10 years D. 15 years

6. **Saransh is 50 years old and Nazma is 40 years old. How long ago was the ratio of their ages 3:2?**

A. 20 years B. 30 years C. 40 years D. 25 years

7. **Ten years ago, the age of mother was three times the age of her son. After ten years, mother's age will be twice that of his son. Find the ratio of their** present ages.

A. 11 : 7 B. 9 : 5 C. 7 : 4 D. 7 : 3

8. **The sum of ages of 5 children born at the intervals of 3 years each is 50 years. What is the age of the youngest child?**

A. 4 years B. 8 years C. 10 years D. None of these

9. **5, 17, 37, 65,..... , 145.** a) 95 b) 99 c) 97 d) 101 e) None

10. **11, 16, 26, ..., 86?** a) 46 b) 56 c) 76 d) 86 e) None

11. **10, 11, 13, 21, 69,.....?** a) 384 b) 490 c) 453 d) 390 e) None

12. How many minutes Raman will take to cover a distance of 400 meters if he runs at a speed of 20 km/hr?

a. 2 mins b. 1.5 mins c. 1⅘ mins d. 2.5 mins e. None

13. John travelled from his town to city. John went to city by bicycle at the speed of 25 km/h and came back at the speed of 4 km/h. If John took 5 hours and 48 min to complete his journey, what is the distance between town and city ?

a. 15 km b. 22 km c. 20 km d. 25 km

14. For a candidate to clear an examination, he/she must score 55% marks. If he/she gets 120 and fails by 78 marks, the total marks for the examination is:

A. 300 B. 320 C. 360 D. 400

15. How much is 80% of 40 is greater than 4/5 of 25?

A. 4 B. 6 C. 9 D. 12

VERBAL (20*1=20 MARKS)

1. Although he was late (1)/ but he stopped on the way(2)/ to have coffee with his friends. (3) / No error. (4)

a. 1 b. 2 c. 3 d. 4

2. She was taking care of her baby for two hours (1)/ before she (2)/ was called by her mother. (3)/ No error. (4)

a. 1 b. 2 c. 3 d. 4

3. He met me two days ago (1)/ but he never told me (2)/ about his grandmother's death. (3)/ No error (4).

a. 1 b. 2 c. 3 d. 4

4. _____ Horse runs fast.
5. I saw _____ boy running in _____ Street.
6. He can pay upon _____ flute very well.
7. I saw _____ old man in _____ Street.
8. All _____ boys were present.
9. He is _____ M. Phil.
10. _____ Moon is shining in _____ sky.
11. Man is _____ rational being.
12. I have read _____ Arabian Nights.
13. Dawn is _____ English paper.
14. The gas prices continue to (raise/rise).

In the following the questions choose the word which best expresses the meaning of the given word.

15. BRIEF A.Limited B.Small C.Little D.Short

16. VENT A.Opening B.Stodge C.End D.Past tense of go

17. AUGUST A.Common B.Ridiculous C.Dignified D.Petty

In the following questions choose the word which is the exact OPPOSITE of the given words.

18. ENORMOUS A. Soft B. Average C. Tiny D. Weak

19. EXPAND A. Convert B. Condense C. Congest D. Conclude

20. SHRINK A. Contract B. Spoil C. Expand D. Stretch

Saranathan College of Engineering

Tiruchirappalli – 620012

IV-ECE-A&B-130

Dt: 12/9/22

Internal Assessment Test - 1		Date/ Session	12.9.2022/ FN	Marks	50
Course code	EC8701	Course Title	Antenna and Microwave Engineering		
Batch No.		Duration	90 mins	Academic Year	2022 – 2023/ODD
Year/	IV	Semester/ Section	VII/A&B	Department	ECE

Part – A (20 Marks)

Part - A

Answer all the Questions **(10x1=10 Marks)**

Q. No.	Questions	CO	Skills
1	List out the microwave frequency bands in Electromagnetic spectrum	C401.1	R
2	Give the basic antenna radiation equation	C401.1	R
3	Give the equation for antenna noise temperature with its definition	C401.1	R
4	What is the need for impedance matching in antennas	C401.1	U
5	Determine the efficiency of the antenna having radiation resistance of 50 ohms and loss resistance of 20 ohms.	C401.1	U
6	Define directivity.	C401.1	U
7	Compare link budget and link margin in the field of antenna design	C401.1	U
8	Determine the gain of the antenna having the gain of 30 dB and efficiency 70%.	C401.1	R
9	List out the types of aperture antenna.	C401.2	U
10	What are the applications of loop antenna	C401.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the physical concept of radiation with necessary diagram.	C401.1	U,R
	or		
12	Explain the concept of (a) Beam solid angle (b) Beam efficiency (c) Antenna Temperature	C401.1	U,R
13	Discuss the radiation of a linear wire antenna	C401.2	U,R
	or		
14	Explain the radiated fields of a loop antenna	C401.2	U,R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	(i) Determine the radiation resistance of antenna of length $\lambda/8$ m. (ii) An antenna has a field pattern given by $E(\theta)=\cos^2\theta$ for $0^\circ \le \theta \le 90^\circ$. Find HPBW	C401.1	U,R
	or		
16	Summarize the Friis equation of an antenna with diagram. Also explain the individual parameters in the equation in detail.	C401.1	U,R

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	13.9.2022/FN	Marks	50
Course code	EC8751	Course Title	Optical Communication			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	IV	Semester/ Section	VII/A&B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	State Snell's Law.	C402.1	U
2	Define Numerical Aperture	C402.1	R
3	Calculate NA of silica fiber with its core refractive index (n1) of 1.48 and cladding refractive index of 1.46. What should be the new value of 'n' in order to change the NA to 0.23?	C402.1	E
4.	What are the types of material absorption losses in silica glass fibers?	C402.1	U
5.	Write the refractive index expression for graded index fiber.	C402.1	R
6.	List out the materials user for fiber manufacturing.	C402.1	R
7.	Define – Birefringence	C402.1	U
8.	What is meant by mode coupling? What causes it?	C402.2	R
9	What are Skew rays and Meridional rays?	C402.2	U
10	A 30 km long optical fiber has an attenuation of 0.8 dB/km. If 7 dBm of optical power is launched into the fiber, determine the output optical power in dBm.	C402.2	E

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain with neat diagram the elements of an optical fiber transmission link	C402.1	AZ
	Or		
12	Discuss briefly about linearly polarized modes and discuss the mode theory of circular waveguides	C402.1	AZ
13	With aid of diagrams discuss the bending and core-cladding losses occurring in optical fibers.	C402.2	AZ
	Or		
14	What is Attenuation? Discuss the three different attenuation mechanisms in optical fiber with necessary mathematical expressions.	C402.2	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	(i) Briefly explain optical fiber modes and configurations.(6) (ii)Consider a multimode fiber that has a core refractive index of n1=1.48 and a cladding index of n2=1.460. Find the critical angle and acceptance angle. (4)	C402.1	AZ
	Or		
16	(i)Discuss in detail about the modes in step index fibers. (6) (ii)A step index fiber has a normalized frequency V=26.6 at a. If the core radius is 25μm, find the numerical aperture and the number of modes entering the fiber.(4)	C402.1	AZ

STAFF MEMBERS:Dr.C.VENNILA& Mr.M.MAHENDRAN

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - I			Date/Session	14-09-2022 / FN	Marks	50
Course code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	IV	Semester/Section	07 / A & B	Department	ECE	

Part – A
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is an embedded computer system?	C403.1	R
2	Why microprocessor is used in embedded system?	C403.1	U
3	Mention the challenges in embedded computing system design.	C403.1	R
4	Mention the observations of quality management of ISO 9000?	C403.1	R
5	Illustrate the need of flash file systems in consumer electronics	C403.1	R
6	Differentiate von Neumann and Harvard architecture.	C403.2	R
7	Compare ARM 10 and ARM 11	C403.2	AZ
8	Give the registers organization used in embedded system	C403.2	U
9	List the different profiles of ARM cortex Processor.	C403.2	R
10	Give the significance of SWI instruction.	C403.2	U

Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	(i) What are the factors to be considered while designing an Embedded System Process? (4) (ii) State the importance of Structural and Behavioral description in detail. (6)	C403.1	AZ,U
	(OR)		
12	Compare the hierarchical and successive refinement model design for an embedded system with suitable diagrams.	C403.1	AZ
13	Summarize the different factors involved in embedded system design process of GPS moving map with necessary illustrations	C403.1	U
	(OR)		
14	Develop the conceptual specifications and detailed specifications written in UML language to design the Model Train Controller	C403.1	AZ

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	With necessary illustrations explain the features of the ARM 9 processor Core.	C403.2	R
	(OR)		
16	Write a program to find the sum of 4X + 9Y + 4Z, where X = 2, Y = 3 and Z = 4 using ARM Processor instruction set	C403.2	AZ,A

Saranathan College of Engineering
Tiruchirappalli – 620012

Internal Assessment Test - I			Date/ Session	15.09.2022/FN	Marks	50
Course code	EC8702	Course Title	Adhoc and Wireless Sensor Networks			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023/ODD	
Year/	IV	Semester/ Section	VII/A&B	Department	ECE	

Part – A (20 Marks)

Answer all the Questions (10x2=20 Marks)

Q. No.	Questions	CO	Skills
1	List the applications of ad hoc networks	C404.1	R
2	Write the issues in ad hoc networks.	C404.1	U
3	Outline the challenging issues in ad hoc network.	C404.1	A
4	Differentiate proactive and reactive routing protocols. Write examples for each	C404.1	R
5	When does Route Error message initiated in AODV routing protocol?	C404.1	U
6	Generalize the concept of hidden terminal problem.	C404.1	U
7	State any two applications of wireless sensor networks.	C404.2	R
8	Define wireless sensor network.	C404.2	U
9	Name the hardware components of a Wireless sensor network	C404.2	R
10	Illustrate the enabling technologies of a wireless sensor network.	C404.2	U

Part – B
(Answer all the questions 2 x 10= 20marks)

Q. No.	Questions	CO	Skills
11	(i) Differentiate between cellular Network and Ad Hoc Network. (ii) Examine the major advantages of ad hoc wireless Internet.	C404.1	U
	OR		
12	Analyze the destination sequenced distance-vector routing protocol with an example	C404.1	A
13	Illustrate the challenges and the required mechanisms of a Wireless Sensor network.	C404.2	R,U
	OR		
14	Briefly explain the single node Architecture of WSN with neat sketch.	C404.2	R,U

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	Design an ad hoc wireless network with nodes and demonstrate the process of route establishment and route maintenance using the on demand routing protocol.	C404.1	R,U,A
	OR		
16	Explore the issues related to routing protocol for ad hoc wireless networks.	C404.1	U,A

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(Approved by AICTE, Newdelhi, Accredited by NAAC with "A+" Grade and Affiliated to Anna University, Chennai)

Tiruchirappalli – 12

Internal Assessment Test – I			Date/ Session	16 – 09 – 2022 FN	Marks	50
Course code	OIC 751	Course Title	Transducer Engineering			
Batch No.		Duration	90 Mins	Academic Year	2022 – 2023	
Year	IV	Semester/Section	VII / A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20 Marks)

Q. No.	Questions	COs	Skills
1	What do you mean by static calibration?	406OE2.1	R
2	What is the need for calibration of measuring instruments?	406OE2.1	R
3	What is mean by error analysis?	406OE2.1	R
4	Compare active and passive transducers.	406OE2.1	U
5	Define odds and uncertainty.	406OE2.1	R
6	What are systematic and random errors? Give an example for each.	406OE2.1	R
7	Define accuracy and precision.	406OE2.2	R
8	Define sensitivity and linearity of an instrument.	406OE2.2	R
9	List the basic requirements of transducer.	406OE2.2	R
10	To which of the characteristic type of a transducer, the characteristic "Speed of response" belongs to? Why?	406OE2.2	R

Part – B

(Answer all the questions 2 x 10 = 20 Marks)

Q. No.	Questions	COs	Skills
11	Describe the selection criteria of a transducer for a particular application.	406OE2.1	U
	OR		
12	Explain the different types of standards used for calibration briefly.	406OE2.1	R
13	Describe the different static characteristics of a transducer with suitable examples.	406OE2.2	U
	OR		
14	Describe the different dynamic characteristics of a transducer with suitable examples.	406OE2.2	U

Part – C

(Answer all the questions 1 x 10 = 10 Marks)

Q. No.	Questions	CO	Skills
15	One hundred temperature readings were taken at small intervals of time and recorded to the nearest **0.5°C** temperature. The frequency of occurrences of the readings is given below: **Temp °C**: 100, 100.5, 101, 101.5, 98.5, 99, 99.5 **Frequency**: 31, 17, 10, 6, 4, 13, 19 Calculate **1.** Arithmetic mean **2.** Average deviation **3.** Standard deviation **4.** Variance **5.** Probable error	406OE2.1	AZ, A, E
	OR		
16	For the following readings, find the mean, average deviation, standard deviation, variance and probable error. 24.4, 23.3, 23.7, 24.6, 24.3	406OE2.1	AZ, A, E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty In-charge: Dr. M. Padmaa, Prof. / ECE& Dr.M.Barithabegum Prof. / ECE

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Tiruchirappalli – 620012

Internal Assessment Test - I			Date/ Session	17.9.2022/FN	Marks	50
Course code	GE8076	Course Title	PROFESSIONAL ETHICS IN ENGINEERING			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023/ODD	
Year/	IV	Semester/ Section	VII/A&B	Department	ECE	

Part – A (20 Marks)
Answer all the Questions (10x1=10 Marks)

Q. No.	Questions	CO	Skills
1	Define moral values.	C409PE4.1	A
2	List out some civic virtues	C409PE4.1	R
3	Give the importance of integrity	C409PE4.1	R
4	What is work ethics?	C409PE4.1	U
5	Discuss briefly on caring and sharing	C409PE4.1	U
6	Why self-respect is important?	C409PE4.1	U
7	Describe the meaning of cooperation	C409PE4.1	U
8	What is stress management?	C409PE4.1	R
9	Distinguish between empathy and sympathy	C409PE4.1	U
10	what is spirituality?	C409PE4.1	R

Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the scope and importance of professional ethics in engineering	C409PE4.1	U,R
	or		
12	Identify in detail the importance of service learning	C409PE4.1	U,R
13	Discuss about how respect for others play important role in ethics and explain the importance of courage in detail	C409PE4.1	U,R
	or		
14	Examine the importance of valuing time and examine the importance of co-operation	C409PE4.1	U,R

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	Discuss the role of yoga for professional excellence and stress management	C409PE4.1	U,R
	or		
16	Explain how one can manage time properly and examine the importance of commitments	C409PE4.1	U,R

Name of the Faculty In-charge: Dr.S.Rajeswari & Dr.S.A.Arunmozhi

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.16.09.2022

Circular

Internal Assessment Test – I for II Year B.E./B.Tech., Classes will commence from 19.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
19.09.2022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
20.09.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
21.09.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
22.09.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.09.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
24.09.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

Principal

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - 1			Date / Session	24.09.2022 / FN	Marks	50
Course code	CS3353	Course Title	C Programming and Data Structures			
Batch No.		Duration	09.15 am to 10.45 am	Academic Year	2022-2023	
Year	Second Year	Semester/Section	III/A/B	Department	ECE / ICE/EEE	

Part – A - (Answer all the questions 10 x 2 = 20marks)

Q.No.	Questions	CO	Skills
1	Define Identifiers. List the rules to apply identifiers in C.	C202.1	R
2	What are Data Types in C? Give its types.	C202.1	R
3	Distinguish between while and do-while.	C202.1	E
4	Write a C program to print Sum of n numbers using While loop.	C202.1	C
5	Differentiate Recursion and Iteration.	C202.1	E
6	How Call-by-value is differed from Call-by-reference?	C202.1	E
7	Define an Array. How to initialize array in C?	C202.1	U
8	What is Self-referential structure?	C202.2	R
9	Compare Structure with Union.	C202.2	AZ
10	Write a C program to display Name of the colours using an enumerated type.	C202.2	C

Part – B - (Answer all the questions 2 x 10 = 20marks)

Q.No.	Questions	CO	Skills
11	i) List all the Operators in C. Explain the types of Operators with syntax and example. (6) ii) Write a C program to get a 4 digit number and display the reverse of the same number. (4)	C202.1	R,U A
	Or		
12	i) Explain Decision Making Statements in detail. (5) ii) Create a C program to find GCD of 2 numbers using Functions. (5)	C202.1	U C
13	i) Define Function. Explain types of Function with respect to its arguments and return values. (5) ii) Write a C program to get 2 numbers and exchange those numbers using Pass by value and Pass by reference. (5)	C202.1	R C, A
	Or		
14	i) Explain 2-dimensional array with an example program. (5) ii) Develop a Matrix in C to print the output: (5) {{1,2} , {3,4} {5,6} , {7,8} {9,10},{11,12}}	C202.1	R A

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	i) Define Structure. How to initialize Structure in C? (4) ii) Write a C program to represent a Complex number using Structure and add two complex numbers. (6)	C202.2	U A
	Or		
16	i) Discuss on array of union variable with illustrative example. (5) ii) Create a C program to identify Smallest of 3 numbers using Union. (5)	C202.2	A C

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - I			Date/ Session	23.9.2022/FN	Marks	50
Course code	EC 3353	Course Title	Electronic Devices and Circuits			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023	
Year	II	Semester/ Section	III / A & B	Department	ECE	

Part – A
(Answer all the questions (10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is barrier potential in pn junction diode? Give the value of barrier potential for Si and Ge pn junction diodes	C204.1	R
2	List out the differences between avalanche break down and zener break down.	C204.1	R
3	Write the diode current equation. Calculate the diode current in a Silicon pn diode when it is subjected to a voltage of 4 V. assume room temperature is 27^0 C. The reverse saturation current of the diode is 40 μA.	C204.1	E
4	A step-down transformer having turns ratio 10: 1 and input 230 V, 50 Hz is used in a half-wave rectifier. The diode forward resistance is 15 ohms and resistance of secondary winding is 10 ohms. For a load resistance of 4 kilo ohms, calculate average and r.m.s. values of load current.	C204.1	E
5	In a pn junction diode, the reverse current is always very small. Why?	C204.1	AZ
6	Draw the V-I characteristics of UJT and mark the different regions.	C204.1	R
7	Mention the applications of Zener Diode	C204.1	R
8	What is the need for biasing? Define operating point	C204.2	R
9	List out the types of biasing methods of BJT	C204.2	R
10	Why common emitter amplifiers are more popular?	C204.2	U

Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the structure, operation and V-I characteristics of pn junction diode with relevant diagrams. List out the applications of pn junction diode	C204.1	AZ
	Or		
12	a) Explain the operation of zener diode as voltage regulator [5] b) Explain zener break down mechanism. [2] c) A 24 V, 600 mW zener diode is used for providing a 24 V stabilized supply to a variable load (voltage shunt regulator). If the input voltage is 32 V, calculate value of series resistance required. [3]	C204.1	AZ, E
13	Define Diffusion capacitance. Derive the expression for diffusion capacitance.	C204.1	U, AZ
	Or		
14	Explain the operation of full wave rectifier with two diodes. Derive the expression for efficiency, transformer utilization factor, ripple factor	C204.1	U, AZ

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Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	a) Explain the input and output characteristics of Common emitter configuration [6] b) In a npn transistor collector current is 20 mA. The base current is 40 μA. Find out α, β. If β increases by 10% find out new value of α. [4]	C204.2	R
	Or		
16	Explain the operation of n-p-n transistor with relevant diagrams. Explain its VI characteristics.	C204.2	E

Bloom's Skills: *Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question*

Faculty In-Charge: *Mr. S.Hariprasath, Asst.Prof/ ECE & Dr.P.Shanmugapriya, Associate. Prof., / ECE*

Saranathan College of Engineering

Tiruchirapalli

	Internal Assessment Test - I			Date/Session	22.09.2022/FN	Marks	50
Course code	EC3352	Course Title	Digital System Design				
Batch No.		Duration	90 mins	Academic Year	2022 - 2023		
Year/	II	Semester/Section	III A& B	Department	ECE		

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Find decimal equivalent of $(231.23)_8$. Convert $(101101.1101)_2$ to decimal and hexadecimal.	C206.1	A
2	Apply De Morgan's theorem for the Boolean expression ((A+B+C)D)'	C206.1	U, A
3	Define Duality property. Find the dual of F = A'B+ABC'+(A+B')C	C206.1	U,A
4	Simplify AB + (AC)'+ AB'C(AB+C).	C206.1	A
5	State and prove Associative law.	C206.1	R,U
6	Convert the following functions into canonical forms. i) F1 = W'XY + XZ' ii) F2 = (A+B')(B+C)(A+C')	C206.1	A
7	Perform subtraction A-B using 2s Complement where A = 11001 and B = 10011	C206.1	U,E
8	Write short notes on Gray Code and Excess-3 code.	C206.1	R
9	Why NAND and NOR gates are called as universal gates?	C206.1	R
10	Define half adder and draw its truth table.	C206.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Minimize the following expressions using K-Map. Also find the prime implicants and essential prime implicants. i)Y= A'BC'D' + A'BC'D + ABC'D' + AB'C'D +A'B'CD'. ii)G=Π_M (0,1,3,7,9,11) + d(4,8)	C206.1	A, AZ
	OR		
12	Simplify the following Boolean expressions to the indicated number of literals and draw the logic diagram of the simplified expressions. i)A'B(D'+C'D)+B(A+A'CD) to one literal ii)ABC'D+A'BD+ABCD to two literals	C206.1	R,U,A
13	Minimize the following 5 variable expressions using K-Map. Also find the Prime Implicants and Essential Prime Implicants. F(A, B,C,D,E) = $\sum$m(0,2,4,6,9, 10,13,18,21,23,25,26,29,31, +d(10, 14,22, 30)	C206.2	A, AZ
	OR		
14	Simplify the following 5 variable Boolean expression using McCluskey method. Also find the Prime Implicants and Essential Prime Implicants. F= $\sum$ m(0,1,9,15,24,29,30) + d(8,11,31).	C206.2	A,U

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Design a BCD to Excess-3 code converter using truth table & K-Map simplification.	C206.2	A,AZ
	OR		
16	Design full adder using K map and implement the full adder using two half adder.	C206.2	A, AZ

Saranathan College of Engineering
Tiruchirappalli - 620012

Internal Assessment Test - I			Date/Session	21.09.2022/FN	Marks	50
Course code	EC3354	Course Title	SIGNALS AND SYSTEMS			
Batch No.		Duration	90 mins	Academic Year	2022-2023/ODD	
Year	II	Semester	III/ A & B	Department	ECE	

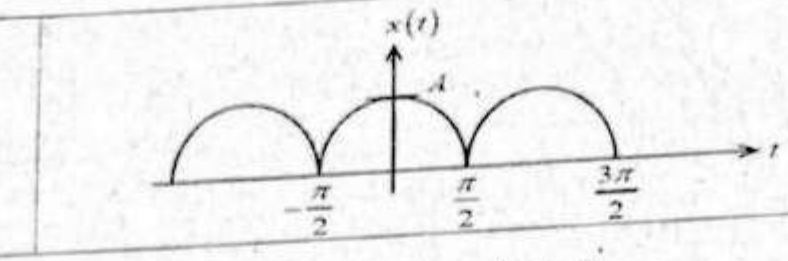
Part – A (20 Marks) **(10x2=20 Marks)**

Answer all the Questions

Q. No.	Question	CO	Skills
1	What are the various types to represent discrete time sequences?	C204.1	U R
2	Check whether the given system $y[n] = x[-n]$ is causal or not.	C204.1	A,E,AZ
3	What are called deterministic and random signals.	C204.1	U R
4	Evaluate the given integral. $\int_{-\infty}^{\infty} \delta(t)e^{-j\Omega t}dt$	C204.1	A,E,AZ
5	Find the fundamental period of $x(t) = cos\left(\frac{\pi}{3}t\right) + \sin(\frac{\pi}{4}t)$.	C204.1	A,E,AZ
6	Determine the even and odd components of the signal $x[n] = e^{jn}$.	C204.1	A,E,AZ
7	State Superposition theorem	C204.1	U R
8	Sketch the given signal neatly, $x(t) = r(t) - r(t-1)$.	C204.1	R, A
9	State Dirichlet conditions?	C204.2	U , R
10	List the conditions for half-wave symmetry.	C204.2	U , R

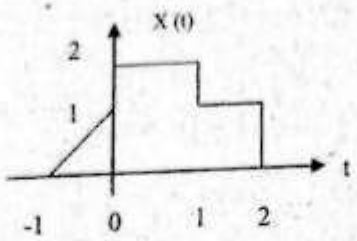
Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	(a). Determine the fundamental time period for the given signals $x[n] = 2\cos\left(\frac{\pi}{4}n\right) + 2sin(\frac{\pi}{2}n + \frac{\pi}{6})$ **(b).** Check whether the given signal is energy (or) power (or) neither energy nor power signals. $x(t) = \left(1 + e^{-5t}\right)u(t)$. **(c). Calculate Even and Odd components of the given signal.** $x[n] = \{1, 1, 2, 3\}$.	C204.1	A,E,AZ
	Or		
12	Determine whether the following systems are Causal, Static, Linear, and Time-invariant, Stable or not (a) $y(n) = \cos[x(n)]$ (b) $y(t) = x(t)\cos(\Omega_c t)$	C204.1	A,E,AZ
13	Sketch the signal $x(t) = t^2$ ***for all values of*** $'t'$, and find the trigonometric Fourier series coefficients over an interval $(-1,1)$	C204.2	A,E,AZ
	Or		
14	Find the Fourier series Coefficients for the given signal $x(t)$ as shown in fig.	C204.2	A,E,AZ



Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	For the signal $x(t)$ shown in fig. sketch the following signals  (i) $x(t-2)$. (ii) $x(-t+2)$ (iii) $x(2t+3)$ (iv) $x(\frac{3}{2}t)$	C204.1	U,A,AZ
	Or		
16	(a). Let $x[n] = (\frac{1}{4})^n$, where $-2 \leq n \leq 2$ be the given signal, carefully sketch the following signals (i) $x[2n]$. (ii) $x[3n-1]$. (iii) $x[2-2n]$.	C204.1	U,A,AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

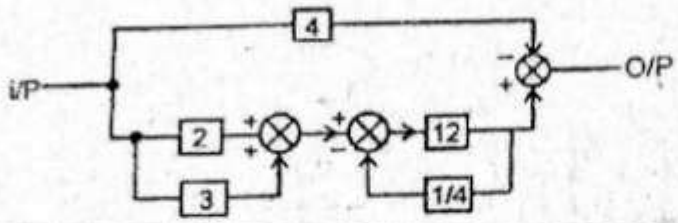
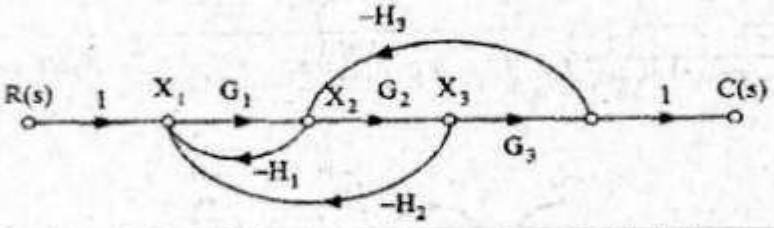
Name of the Faculty In-charge: Dr.V.MOHAN Associate Prof/ ECE & Mr.G.SIVAKANNU AP/ECE

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - I			Date/Session	20-09-22 / FN	Marks	50
Course code	EC3351	Course Title	CONTROL SYSTEMS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/Section	03 / A & B	Department	ECE	

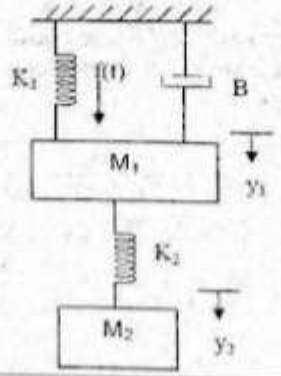
Part – A

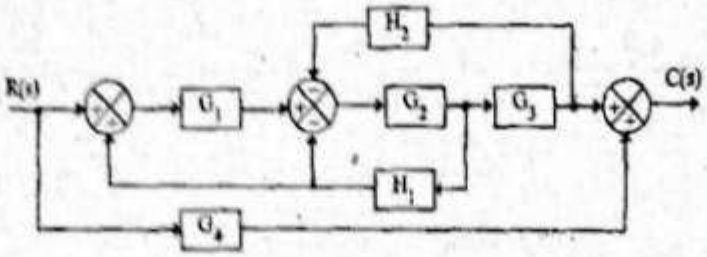
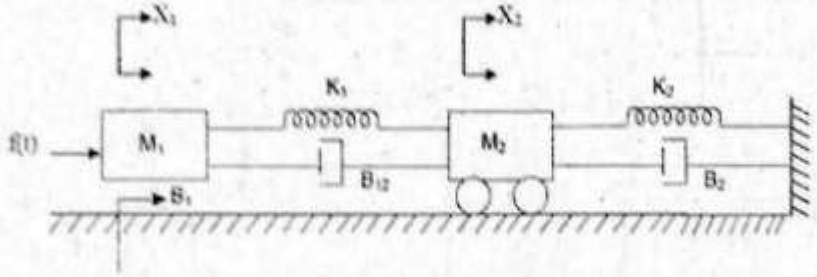
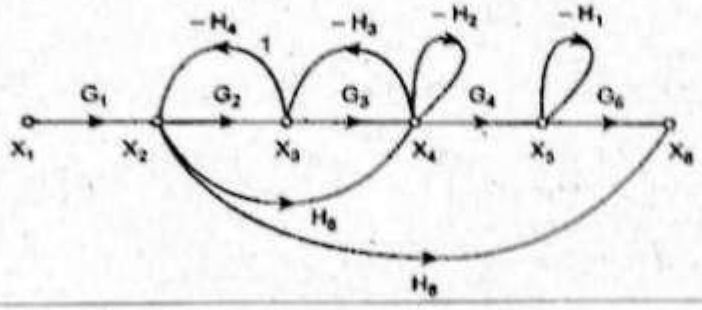
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define transfer function of a system.	C205.1	R
2	Differentiate closed loop & open loop control system	C205.1	R
3	Determine the gain of the following system 	C205.1	AZ
4	Find Δ for the following SFG 	C205.1	A
5	What is block diagram? What are the basic components of a block diagrams?	C205.1	A
6	Distinguish between type and order of a system	C205.2	R
7	Give the steady state error to a various standard input for type - 2 systems.	C205.2	R
8	List the advantages of generalized error coefficients.	C205.2	R
9	Give the units of Kp, Kv and Ka?	C205.2	R
10	What is meant by transient and steady state response?	C205.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Determine the transfer function $Y_2(S)/F(S)$ of the system shown in fig. 	C205.1	E
	(OR)		

12	Consider the block diagram shown in fig. Using reduction technique, obtain C(s)/R(s) 	C205.1	E
13	Write the differential equations governing the mechanical systems shown below. Draw the force-voltage and force-current electrical analogous circuits and verify by writing mesh and node equations. 	C205.1	C
	(OR)		
14	Find the Transfer Function for the signal flow graph shown in fig. 	C205.1	E

Part – C
(Answer all the questions 1 x 10 = 10marks)

15	A unity feedback control system has an open loop transfer function G(s) = 1/(0.5s+1)(0.2s+1). Determine the steady state error for unit step, unit ramp, and unit acceleration inputs.	C205.2	A,E
	(OR)		
16	For a system G(s) H(s) = $K_1(2s+1)/s(5s+2)(1+s)^2$. Find the minimum value of K_1, to limit steady state error to 0.2 when input to system is 1+6t.	C205.2	A,E

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli

Internal Assessment Test - I			Date/Session	19/09/2022	Marks	50
Course code	MA3355	Course Title	Random Processes and Linear Algebra			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/Section	III/A &B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skill
1	Find the value of k and also find P[X<1] the following probability distribution of X x: -2, -1, 0, 1, 2, 3 P[X=x): 0.1, K, 0.2, 2k, 0.3, 3k	CO1	E
2	Given the probability density function $f(x) = \frac{k}{1+x^2}, -\infty < x < \infty$, Find k and CDF .	CO1	E
3	If the pdf of a random variable X is f(x)= x /2 in 0<x<2. Find P(X>1.5/X>1)	CO1	E
4	Obtain the binomial distribution whose mean is 6 and variance is 4.	CO1	U
5	The number of monthly breakdowns of a computer is a random variable having a Poisson distribution with mean equal to 1.8. Find the probability that this computer will function for a month (a) without a break down (b) with only one breakdown.	CO1	A
6	If X is uniformly distributed in (-b, b) determine b if $P(x > 2) = \frac{3}{4}$.	CO1	E
7	The time (in hours) required to repair a machine is exponentially distributed with parameter λ=1/2. What is the probability that the repair time exceeds 2h?	CO1	A
8	Define normal distribution.	CO1	R
9	Given RV X with density function f(x) = 2x 0 < x < 1 find the pdf of $y=8x^3$.	CO1	A
10	If a random variable X has the MGF $M_x(t) = \frac{3}{3-t}$ obtain SD	CO1	E

Part – B

(Answer all the questions 3 x 10 = 30marks)

Q. No.	Questions	CO	Skill
11	(i) Three factories produce light bulbs to supply the market. Factory A produces 20%, 50% of the tools are produced in factories B and 30% in factory C. 2% of the bulbs produced in factory A, 1% of the bulbs produced in factory B and 3% of the bulbs produced in factory C are defective. A bulb is selected at random in the market and found to be defective. what is the probability that this bulb was produced by factory B?	CO1	E
	(ii) Out of 800 families with four children each , How many families would be expected to have (a) Two Boys and two girls (b) Atleast one boy (c) Atmost 2 girls. Assume equal probability for boys and girls		E
	(OR)		
12	(i) Derive the MGF of Poisson distribution and hence find the mean and variance.	CO1	E
	(ii) A random variable x has the following probability distribution X: 0, 1, 2, 3, 4, 5, 6, 7 P[X=x]: 0, K, 2k, 2k, 3k, k^2, $2k^2$, $7k^2+k$ Find (i) the values of k (ii) cumulative distribution of X (iii) the smallest value of λ for which P[X ≤ λ] >1/2.		E

13	(i) Derive the r^{th} order moment of Exponential distribution. Hence find mean & variance also find its MGF. (ii) X is a normal distribution with mean 16 and standard deviation 3. Find (a) P[X<25] (b) P[X>19] (c) P[12.5< X < 19]	CO1	E E
	(OR)		
14	(i) A random variable X has a uniform distribution over the interval (-3,3). Compute (1) P[X=2] (2)$P[\|X-2\|<2]$ (3) Find k such that P (X>k) = 1/3. (ii) In a normal distribution 31% of the items are under 45 and 8% are over 64.Find the mean and variance of the distribution.	CO1	E E
15	Three balls are drawn at random without replacement from a box containing 2 white, 3 red, and 4 black balls. If X denote the number of white balls drawn and Y denotes the number of red balls drawn Find (i) Joint probability distribution (ii) Marginal distribution of X and Y (iii) $P(^{X\leq 1}/_{Y\leq 2})$ (iv) P(X+Y≤2)	CO2	E
	(OR)		
16.	The joint probability mass function of (X,Y) is given by P(X,Y)= k(2x+3y); x = 0, 1, 2 ; y =1, 2, 3 Find (i) value of k (ii) Marginal distribution of X and Y (iii) P(X>Y) (iv) P(max(x,y)=2)	CO2	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

SARANATHAN COLLEGE OF ENGINEERING - TRICHY-12

INTERNAL ASSESSMENT TEST I - II YEAR BE/B.TECH - ODD SEM 2022-23

SEATING ARRANGEMENT

ROOM N	BRANCH	SECTIO	YEAR	Batch No - (From - To)	TOTAL
RV 413	ECE	A	II	242001-242017	17
RV 414	ECE	A	II	242018-242033	15
RV 415	ECE	A	II	242038-242048	15
RV 301	ECE	A	II	242049-242063,242127	13
RV 402	ECE	B	II	242064-242078	15
RV 403	ECE	B	II	242079-242094	16
RV 404	ECE	B	II	242095-242111	16
RV 405	ECE	B	II	242112-242132	16

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HOD/ECE

SARANATHAN COLLEGE OF ENGINEERING - TRICHY-12

INTERNAL ASSESSMENT TEST I - III/ IV YEAR BE/B.TECH - ODD SEM 2022-23

SEATING ARRANGEMENT

ROOM N	BRANCH	SECTION	YEAR	Batch No - (From - To)	COUNT
JS CH-A	ECE	A	IV	222001-222020	20
JS CH-B	ECE	A	IV	222021-222040	20
JS CH-C	ECE	A	IV	222041-222061	20
KS 109	ECE	A/B	IV	222062-222081	20
KS 110	ECE	A/B	IV	222082-222101	20
KS 111	ECE	A/B	IV	222102-222121	20
KS 307	ECE	A	III	232001-232012	11
KS 311	ECE	A	III	232014-232032	20
KS 312	ECE	A	III	232033-222053	20
KS 313	ECE	A/B	III	232054,110,111,112	20
KS 315	ECE	B	III	232055-232072	20
KS 316	ECE	B	III	232073-232092	17
				236093-236109	

HOD/ECE

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF ECE

IAT 1 DUTY LIST 2022-2023 ODD SEMESTER (III & IV)

S.no	STAFF NAME	9/12/2022	9/13/2022	9/14/2022	9/15/2022	9/16/2022
1	Dr. S.A Arunmozhi	@				
2	Dr. S Rajeswari		@			
3	Dr. V Mohan,				@	
4	Dr. P Shanmugapriya					@
5	Dr. M Baritha Begum		@			
6	Mr. S Hariprasath,			@		
7	Mr. K Malaisamy				@	@
8	Ms. P Sivagamasundhari		@			
9	Ms. A Shamim Banu			@		
10	Mr. M Mahendran	@				
11	Mr. G Sivakannu		@			
12	Ms. S Kiruthiga	@			@	
13	Ms. M Anthuvan Lydia			@		
14	Ms. B.Divya	@				
15	Ms. Dr.N.Preethi Elizabeth					@
		4	4	3	3	3

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SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF ECE

IAT 1 DUTY LIST 2022-2023 ODD SEMESTER

17.09.2022

S.no	STAFF NAME	9/19/2022	9/20/2022	9/21/2022	9/22/2022	9/23/2022	9/24/2022	
1	Dr. S.A Arunmozhi							0
2	Dr. S Rajeswari							0
3	Dr. V Mohan,							0
4	Dr. P Shanmugapriya							0
5	Dr. M Baritha Begum							1
6	Dr.K.Malaisamy			@				2
7	Mr.S.Hariprasath	@	@					2
8	Ms. P Sivagamasundhari	@			@			2
9	Ms. A Shamim Banu			@	@			2
10	Mr. M Mahendran					@		1
11	Mr. G Sivakannu	@				@		2
12	Ms. S Kiruthiga	@						1
13	Ms. M Anthuvan Lydia						@	1
14	Ms. B.Divya				@		@	2
15	Ms. Dr.N.Preethi Elizabeth		@	@				2
16	Dr.Geetha		@					1
17	Dr.Subhashini		@					1
		4	4	3	3	2	2	18

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Saranathan College of Engineering
Tiruchirapalli – 12

Dt.07.10.2022

Circular

nternal Assessment Test – II for III & IV Year B.E./B.Tech., Classes will commence from 10.10.2022 (Monday) as per the academic planner.

Test Duration
9.15 am to 10.45 am (1 ½ Hours)

Class Timings after the I.A. Test
10.45 a.m. – 11.05 a.m. Break
11.05 a.m. – 11.55 a.m. – 1st Hour
11.55 a.m. – 12.45 p.m. - 2nd Hour

Afternoon classes will be held as per regular timetable.

Question paper pattern will be informed by the respective subject handling staff member's

As per the instruction from the Anna University , Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal marks will be awarded by the Anna University based on your performance in I.A. Tests. Students are advised to take the Tests seriously and to score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2020 - 2024 _ (III) _Third Year - 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th October 2022	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
11th October 2022	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
12th October 2022	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
13th October 2022	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
14th October 2022	OCE552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
15th October 2022	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control		OA1551 - Environment and Agriculture

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2019 - 2023 _ (IV) _ Final Year - 7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10th October 2022	MG8591 – Principles of Management	EC8701 - Antennas and Microwave Engineering	EE8701- High Voltage Engineering	MG8591 - Principles of Management	EI8751 - INDUSTRIAL DATA NETWORKS	ME 8792 - Power Plant Engineering	CE8701 - Estimation, Costing and Valuation Engineering
11th October 2022	CS8791 – Cloud Computing	EC8751 - Optical Communication	EE8702- Power System Operation and Control	CS8792 - Cryptography and Network Security	EI8091 - INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	ME 8793 - Process Planning and Cost Estimation	CE8702 - Railways, Airports, Docks and Harbour Engineering
12th October 2022	CS8792 – Cryptography and Network Security	EC8791 - Embedded and Real Time Systems	EE8703- Renewable Energy Systems	OBM752 – Hospital Management	EC8093 - DIGITAL IMAGE PROCESSING	ME 8791 - Mechatronics	CE8703 - Structural Design and Drawing
13th October 2022	OBM752 – Hospital Management	EC8702 - Adhoc and Wireless Sensor Networks	EI8075- Fiber Optics and Laser Instrumentation	CS8791 - Cloud Computing	EI8075 - FIBRE OPTICS AND LASER INSTRUMENTATION	OMF 751 - Lean Six Sigma	EN8591 - Municipal Solid Waste Management
14th October 2022	IT8075 – Software Project Management	OIC751 - Transducer Engineering	EE8010- Power System Transients	IT8075 - Software Project Management	EI8692 - ELECTRONICS INSTRUMENTATION	ME 8072 - Renewable Sources of Energy / GE 8077 - Total Quality Management	OME754 - Industrial Safety
15th October 2022	GE8076 – Professional Ethics in Engineering	GE8076 - Professional Ethics in Engineering	OCS752- Introduction to C Programming	IT8005 - Electronic Commerce	OCS752 - INTRODUCTION TO C PROGRAMMING	ME 8099 - Robotics	
17th October 2022			EE8017-High Voltage Direct Current Transmission		GE8076 - PROFESSIONAL ETHICS IN ENGINEERING	IE8693 - Production Planning and Control	

Exam Cell

Principal

Saranathan College of Engineering
Tiruchirappalli – 620012

Internal Assessment Test - II			Date/ Session	13.10.2022/ FN	Marks	50
Course code	EC8702	Course Title	Adhoc and Wireless Sensor Networks			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023/ODD	
Year/	IV	Semester/ Section	VII/A&B	Department	ECE	

Part – A (20 Marks)

Answer allthe Questions **(10x2=20Marks)**

Q. No.	Questions	CO	Skills
1	Write the operational states of transceiver in the sensor node.	C404.2	R
2	Mention about the term energy scavenging in WSN.	C404.2	U
3	Classify the modes of operation of a sensor node	C404.2	A
4	Compare single hop and multiple hop.	C404.2	R
5	Write the concept of wake up radio.	C404.3	U
6	Name the scheduled based protocols.	C404.3	U
7	Analyze the pros and cons of scheduled based protocols.	C404.3	R
8	List the objective of PAMAS.	C404.3	U
9	Exhibit how LEACH protocol differs from other routing protocols used in WSN.	C404.3	A
10	What are the performance requirements for a MAC protocol?	C404.2	U

Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the concept of contention based protocols also explain about the principle of PAMAS.	C404.3	U
	OR		
12	Describe about the low duty cycle protocols and explain any two protocols.	C404.3	A
13	(i) Analyze how energy scavenging is realized in wireless sensor network. (ii) Distinguish sensor networks from the mobile ad hoc network.	C404.2	R,U
	OR		
14	Derive the expression for energy consumption in a sensor node with an appropriate diagram.	C404.2	R,U

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	Elaborate the challenges and issues in Transpórt layer protocol and find the suitable solutions for it.	C404.3	R,U,A
	OR		
16	Explain the LEACH routing with the help of neat diagram. Give its advantages and disadvantages.	C404.3	U,A

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Tiruchirappalli – 620012

Internal Assessment Test - II			Date/ Session	15.10.2022/ FN	Marks	50
Course code	GE8076	Course Title	PROFESSIONAL ETHICS IN ENGINEERING			
Batch No.		Duration	90 mins	Academic Year		2022 – 2023/ODD
Year/	IV	Semester/ Section	VII/A&B	Department		ECE

Part – A (20 Marks)

Part - A (10x2=20 Marks)

Answer all the Questions

Q. No.	Questions	CO	Skills
1	Mention various types of Inquiries available.	C409PE4.2	A
2	State Kohlberg's theory.	C409PE4.2	R
3	What is meant by ethical egoism?	C409PE4.2	R
4	Summarize the implications of consensus & controversy.	C409PE4.2	U
5	What is moral dilemma?	C409PE4.2	A
6	Differentiate scientific experiments and engineering projects?	C409PE4.3	C
7	Generalize about Code of Ethics.	C409PE4.3	U
8	Explain the term accountability?	C409PE4.3	R
9	Summarize the problems with the law in engineering.	C409PE4.3	A
10	List the features of morally responsible engineers.	C409PE4.3	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain briefly about the theories of moral autonomy by Kohlberg and Gilligan.	C409PE4.2	U,R
	or		
12	Illustrate the motives for professionalism and the models for professional engineers.	C409PE4.2	U,R
13	What do you understand by (i) experimental control, and (ii) informed consent, in the context of engineering as experimentation?	C409PE4.3	U,R
	or		
14	In what ways, the engineering societies can promote ethics.	C409PE4.3	U,R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	(i) Analyze in detail the uses and limitations of ethical theories. (ii) Analyze the pros and cons of Customs.	C409PE4.2	U,R
	Or		
16	Explain moral dilemma with a suitable case study.	C409PE4.2	U,R

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Saranathan College of Engineering

(Approved by AICTE, New delhi, Accredited by NAAC with "A+" Grade and Affiliated to Anna University, Chennai)

Tiruchirappalli – 12

Internal Assessment Test – II		Date/ Session	14 – 10 – 2022FN	Marks	50
Course code	OIC 751	Course Title	Transducer Engineering		
Batch No.		Duration	90 Mins	Academic Year	2022 – 2023
Year	IV	Semester/Section	VII / A & B	Department	ECE

Part – A

(Answer all the questions 10 x 2 = 20 Marks)

Q. No.	Questions	COs	Skills
1	Draw the time response of a first order instrument to a unit impulse signal	406OE2.2	R
2	Obtain the response of zero and first order system.	406OE2.2	U
3	A thermometer has a time constant of **3.5 sec**. If it is taken quickly from a bath having temperature **0C** and immersed in a water bath having temperature **100C**. What temperature will be indicated after **1.5 sec**?	406OE2.2	E
4	Compare the characteristics of RTD and Thermistor.	406OE2.3	U
5	What is the principle of strain gauge?	406OE2.3	R
6	State the working principle of piezo-resistive sensor.	406OE2.3	R
7	Write the principle of operation of hotwire anemometer.	406OE2.3	R
8	Enumerate different types of strain gauge.	406OE2.3	U
9	What are the advantages and disadvantages of potentiometer?	406OE2.3	U
10	What is self heating error of thermometer?	406OE2.3	R

Part – B

(Answer all the questions 2 x 10 = 20 Marks)

Q. No.	Questions	COs	Skills
11	Derive the time response of a second order under damped measuring system for a unit step input. Draw the response.	406OE2.2	U
	OR		
12	Explain the response of a zero-order transducer and first-order transducer when applied with step input signal.	406OE2.2	R
13	Describe the construction and operation of resistance temperature detector.	406OE2.3	R
	OR		
14	Give the basic principle of potentiometer. Discuss the characteristics of potentiometer and derive an expression for sensitivity.	406OE2.3	U

Part – C

(Answer all the questions 1 x 10 = 10 Marks)

Q. No.	Questions	CO	Skills
15	Explain the principle, construction and working operation of constant current and constant temperature Anemometer.	406OE2.3	R, U
	OR		
16	Describe the principle of operation, construction detail and hygrometer and strain gauge.	406OE2.3	R, U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty In-charge: **Dr. M. Padmaa, Prof. / ECE& Dr.M.Barithabegum Assoc.prof/ECE**

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/Session	12-10-2022 / FN	Marks	50
Course code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	IV	Semester/Section	07 / A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Distinguish between PCLK and CCLK	C403.2	AZ
2	For a GPIO pin to be made to act as an ON/OFF switch, what are the registers to be used?	C403.2	AZ
3	Write the difference between single and double edged PWM.	C403.2	R
4	How does the prescalar in a timer unit function?.	C403.2	U
5	Specify the different control word registers used in UART	C403.2	E
6	Mention the different components for embedded programs.	C403.3	R
7	State the basic principle of compilation technique.	C403.3	AZ
8	Name any two techniques used to optimize execution time of program	C403.3	AZ
9	Sketch a Data Flow Graph for the block shown below: r = a+b-c; s = a*r ; t = b-d; r = d+e;	C403.3	C
10	Interpret the differences between loop fusion and loop tiling	C403.3	U,A

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Outline the working of a UART in LPC214x in detail.	C403.2	AZ,U
	(OR)		
12	(i) Calculate the value of the clock to be given in PWMMR0 and PWMMR3 to get a pulse train of period 5 ms and duty cycle of 25%. (5) (ii) List the features of LPC 214x processor (5)	C403.2	E,AZ
13	Explain the various methods for Program optimization with necessary examples.	C403.3	U
	(OR)		
14	Write about i) Black box Testing (5) ii) White box Testing (5)	C403.3	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills

15	Determine the code generated for the given conditional code snippet, explain with necessary CDFG.
	if (a + b > 0)
	x = 5;
	else
	x = 7;
		C403.3	AZ

	(OR)		
16	Explain about the software performance optimization.	C403.3	AZ,A

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Internal Assessment Test – II			Date/Session	11.10.2022/ FN	Marks	50
Course code	EC8751	Course Title	Optical Communication			
Batch No.		Duration	90 mins	Academic Year	2022- 2023	
Year	IV	Semester/Section	VII/A&B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define internal quantum efficiency of a LED	C402.2	U
2	Write two differences between a Laser and a LED	C402.2	R
3	What are the merits of index guided lasers?	C402.2	R
4	A continuous 12Kms long optical fiber link has a loss of 1.5dB/Km. What is the minimum optical fiber that must be launched into the fiber to maintain on optical power level of 0.3μW at the receiver end?	C402.2	E,AZ
5	What is the significance of intrinsic layer in PIN diode.	C402.3	U
6	Define internal quantum efficiency of a LED	C402.3	U
7	Write two differences between a Laser and a LED	C402.3	R
8	What are the merits of index guided lasers?	C402.3	R
9	What are direct band gap and indirect band semiconductors?	C402.3	R
10	Define population inversion	C402.3	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Derive an expression for internal quantum efficiency and external quantum efficiency and optical power emitted from LED.	C402.3	AZ
	Or		
12	Explain surface emitting LED (SLED) and an edge emitting LED (ELED) in detail	C402.3	U,R
13	Explain about inter and intra modal dispersion in detail.	C402.2	A,U
	Or		
14	Explain and derive the expression for cut off wave length and mode field diameter.	C402.2	U,R
	PART –C (1*10=10 Marks)		
15	Draw and explain the structure of Fabry Perot resonator cavity for Laser Diode. Derive laser diode rate equation.	C402.3	U
	Or		
16	Explain the structure and principle operation of a PIN diode.	C402.3	U

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Tiruchirappalli – 620012

Internal Assessment Test - II			Date/ Session	10.10.2022 /FN	Marks	50
Course code	EC8701	Course Title	Antenna and Microwave Engineering			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023/ODD	
Year/	IV	Semester/ Section	VII/A&B	Department	ECE	

Part – A (20 Marks) -Part – A **Answer all the Questions (10x1=10 Marks)**

Q. No.	Questions	CO	Skills
1	State Babinet's principle and how does it give rise to the concept of complementary antenna	C401.2	R
2	State Huygens principle for Aperture antennas	C401.2	R
3	Point out the limitations of a microstrip patch antenna.	C401.2	A
4	Define FNBW and HPBW of aperture antenna	C401.2	R
5	At 2.7GHz, the increase in antenna temperature from Cygnus A with a 20m dish antenna is 51k. Solve the aperture efficiency of the antenna?	C401.2	E
6	Define phased array	C401.3	U
7	Illustrate the meaning and need for the binomial array	C401.3	A
8	Find the directivity of broadside forms of arrays when a uniform linear array contains 50 isotropic radiations with aninter element spacing of $\lambda/2$.	C401.3	A
9	Enumerate the basic principle of reconfigurable antennas	C401.3	U
10	Draw the radiation pattern for broad side and end fire array	C401.3	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	With necessary illustrations, assess the radiationcharacteristics of multi element log periodic antenna and mention its possible applications.	C401.2	U,E
	or		
12	Describe the radiation pattern and fields on the axis of an E-plane and H-plane sectoral horns.	C401.2	U,R
13	Find the expression for the field and the radiation pattern produced by a N element array of infinitesimal with distance of separation $\lambda/2$ and currents of unequal magnitude and phase shift 180^0.	C401.3	U,R
	or		
14	(i) Demonstrate the radiation mechanisms of broad sideantenna array and end fire antenna array with neat sketches. (5) (ii) What is binomial array? Draw the pattern of 10 elements binomial array with spacing between the elementsof $3\lambda/4$ and $\lambda/2$.(5)	C401.3	U

Part – C (Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	A uniform linear array consists of 16 isotropic point sources with a spacing of $\lambda/4$. If the phase difference is -90^0, Determine the directivity, HPBW, beam solid angle and effective apertures	C401.3	U,R
	or		
16	Elaborate in detail about the principle and operation of frequency independent antennas.	C401.3	U,R

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Tiruchirappalli – 12

INTERNAL ASSESSMENT TEST - II			Date/ Session	10.10.2022/FN	Marks	50
Course code	EC8073	Course Title	Medical Electronics			
Batch No.		Duration	90 mins		Academic Year	2022 - 2023
Year	III	Semester/ Section	V –A&B		Department	ECE

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is the function of Hemodialysis System?	C305PE2.3	R
2	What is dialysate? Mention it Composition.	C305PE2.3	R
3	Differentiate Internal and External defibrillator.	C305PE2.3	R
4	What are Ultrasonic imaging systems?	C305PE2.3	R
5	State the principle of MRI	C305PE2.3	AZ
6	List out the type of Ventilators	C305PE2.3	R
7	Define – Cardiac Output. Find the cardiac output of a person if his heart rate is 70BPM and stroke volume is 70 ml	C305PE2.2	R
8	Write the advantages of coulter method of blood cell counting	C305PE2.2	U
9	What is total lung capacity?	C305PE2.2	AZ
10	Give the use of monochromator in spectrophotometer	C305PE2.2	A

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain magnetic resonance imaging systems	C305PE2.3	R
	or		
12	(i) Explain the principle and operations of dc defibrillators. (ii)Briefly describe ventilators and its functioning.	C305PE2.3	R
13	Explain the Blood flow measurement using following techniques: a)Electromagnetic Principle b)Thermo Dilution.	C305PE2.2	U
	or		
14	Write a note on coulter method and dark field method of blood cell counting	C305PE2.2	A

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain in detail cardiac pacemaker and different modes.	C305PE2.3	AZ
	or		
16	What is dialysis? Explain in detail the principle block diagram and working of haemodialysis.	C305PE2.3	U

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Tiruchirapalli

Internal Assessment Test - 2		Date/Session	11.10.22/FN	Marks	50
Course code	OMD551	Course Title	Basics of Biomedical Instrumentation		
Batch No.		Duration	90 mins	Academic Year	2022- 2023
Year/	III	Semester/Section	V / A & B	Department	ECE A & B

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is the need of bio amplifier	C306EE1.1	AZ
2	Define CMRR	C306EE1.1	R
3	What is the advantages of isolation amplifier	C306EE1.1	U
4	Name different types of bio amplifiers used for biomedical instrumentation system	C306OE1.1	A
5	What is mean by systolic and diastolic pressure	C306EE1.1	R
6	What is mean by korotkoff sound	C306EE1.1	R
7	What are the basic requirements for biological amplifiers	C306EE1.1	R
8	What is the purpose of input buffer stage in instrumentation amplifier	C306EE1.2	A
9	Give the different types of filter used in bio instrumentation	C306EE1.2	A
10	What are the different method to estimate the cardiac output	C306EE1.2	A

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the operation of isolation amplifier with neat diagram.	C306OE1.1	R
	Or		
12	Illustrate the concept of power line interference in bio-signals.	C306OE1.1	U
13	Explain about differential bio amplifier with neat circuit diagram	C306OE1.1	R
	Or		
14	Explain about right leg driven ECG amplifier	C306OE1.1	U

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain about cardiac output measurement.	C306OE1.2	U
	Or		
16	Explain the operation of band pass filter with neat circuit diagram	C306OE1.2	AZ

Name of the Staff: Dr. N. Preethi Elizabeth AP/ECE

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Internal Assessment Test - II			Date/ Session	12.10.2022/ FN	Marks	50
Course code	EC8551	Course Title	Communication Networks			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023/ODD	
Year/	III	Semester/ Section	V/A&B	Department	ECE	

Part – A (20 Marks)

(Answer All the Questions **10x2=20 Marks)**

Q. No.	Questions	CO	Skills
1	Given a host address 192.168.180.94/27. Calculate the network address and host ranges.	C305.2	A
2	Define: Mask Address.	C305.2	R
3	Write the types of classes of IPv4 and its ranges.	C305.2	R
4	Define: ICMP.	C305.2	U
5	Compare Zigbee with bluetooth	C305.2	U
6	What is meant by IP spoofing?	C305.2	A
7	What is meant by collocated Care of Address?	C305.2	R
8	Write Short notes on OSPF?	C305.3	R
9	Give classification of Routing.	C305.3	U
10	What is Unicast Routing?	C305.3	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Describe about the types of ICMP messages in detail.	C305.2	U,R
	or		
12	Explain about the Working mechanism of Mobile IP and also describe about three phases in data transfer of Mobile IP.	C305.2	U,R
13	Explain about Link State Routing Protocol with suitable diagrams.	C305.3	U,R
	or		
14	Explain about Distance Victor Routing Protocol with suitable diagrams.	C305.3	U,R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	A classless address is given as 167.199.170.82/27. Find First and Last Address of a block and also find No. of addresses in this block.	C305.2	E,A
	or		
16	How do solve the address depletion problem in IPv4 and explain the techniques with suitable example to solve address depletion problem.	C305.2	U,A

Name of the Faculty In-charge: **M. Mahendran. And S.Kiruthiga**

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Tiruchirappalli - 620012

Internal Assessment Test - II			Date/Session	13.10.22 / FN	Marks	50
Course code	EC8552	Course Title	COMPUTER ARCHITECTURE AND ORGANISATION			
Batch No.		Duration	90 mins	Academic Year	2022-2023/ODD	
Year	III	Semester	V	Department	ECE – A & B	

Part – A (20 Marks)

I. Choose the correct Answer for the following Questions **(10x1=10 Marks)**

Q. No.	Questions	CO	Skills
1.	Add 10001 + 11101	C503.2	R
2.	Write the rule to find recoding values of multiplier in Booth Algorithm.	C503.2	C
3.	Perform subtraction of 2 numbers 15+(-3)using 2's complement method	C503.2	U
4.	Draw the table to find recoded value of the multiplier in modified booth algorithm.	C503.2	C
5.	Write the rule to find recoding values of multiplier in modified Booth Algorithm.	C503.2	R
6.	Define Pipelining	C503.3	R
7.	What is a stall?	C503.3	U
8.	What is Data hazard?	C503.3	R
9.	Draw the hardware organization of pipelining with 4 stages.	C503.3	C
10.	What is Instruction hazard?	C503.3	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Multiply **15*2** using Booth Algorithm.	C503.2	E
	Or		
12	Solve **16/4** using non restoring division algorithm.	C503.2	E
13	Explain Carry slave addition with your own example.	C503.2	E
	Or		
14	Solve **13*-10** using modified booth algorithm	C503.2	E

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills

15	Check and analyze the data dependency for the following two Instructions.
	MUL R2,R3,R4
	ADD R5,R4,R6
	And explain the type of Hazard occurred during the execution of pipeline Stage
		C503.3	AZ

	Or		
16	Explain the basics of pipelining in detail.	C503.3	R

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Tiruchirapalli-12

Internal Assessment Test - II			Date/ Session	14-10-2022/FN	Marks	50
Course code	EC8501	Course Title	Digital Communication			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023 ODD	
Year	III	Semester/ Section	V/ A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. NO	Questions	CO	Skills
1	A Delta Modulation system is tested with a 10kHz. Sinusoidal signal with 1V peak to peak at the input is sampled at 10 times the Nyquist rate, Determine the step size of the quantizer.	C301.2	E
2	Summarize the need of Line Codes.	C301.2	U
3	Illustrate the difference between DM and ADM.	C301.2	U, A
4	State Nyquist criteria to realize zero ISI.	C301.3	R
5	List four applications of eye pattern.	C301.3	R
6	What is meant by ISI in communication system? How it can be minimized?	C301.3	R
7	Illustrate Eye pattern with diagram.	C301.3	R
8	What is duo binary system? What are the drawbacks of it?	C301.3	R
9	Define roll off factor.	C301.3	R
10	Write the necessity of Equalization.	C301.3	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain DM system transmitter and receiver. Derive the expression for signal to noise ratio of the system.	C301.2	R, AZ, E
	OR		
12	For the sequence 11001001 sketch the waveforms for bipolar NRZ, Split phase Manchester, Polar RZ and Unipolar RZ. Sketch also their power spectral densities for the same.	C301.2	U, AZ, E
13	Draw the block diagram of Duo-binary coding technique for controlled ISI. Explain the scheme with and without pre-coder.	C301.3	R,U
	OR		
14	Explain the concept of Matched filter receiver.	C301.3	R,U

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	Obtain an expression for Nyquist criterion for distortion less baseband transmission for zero Inter Symbol Interference.	C301.3	R,U
	OR		
16	The binary data 011100101 are applied to the input of a modified duo-binary system. (i) Construct the modified duo-binary coder output and corresponding receiver output without a pre-coder. (ii) Suppose that due to error in transmission, the level produced by the third digit is reduced to zero. Construct a new receiver output.	C301.3	R,U, AZ

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Tiruchirapalli

Internal Assessment Test - II			Date/ Session	15.10.2022 /FN	Marks	50
Course code	EC 8553	Course Title	Discrete-Time Signal Processing			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	III	Semester/ Section	V/A&B	Department	ECE	

Part – A
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	SSkills
1	Compare Butterworth and Chebyshev filter.	C302.2	R
2	What is meant by frequency warping?	C 302.2	R
3	What are the requirements for an analog filter to be Stable and Causal?	C302.2	R
4	Why IIT method is not suitable for designing filters at high frequency?	C302.2	R
5	Write down the expression for converting LPF into BPF.	C302.2	U
6	What are the properties to design digital filter from analog filter ?	C302.3	R
7	Write down mathematical expression for converting analog filter into digital filter by using a derivative method.	C302.3	U
8	What is the reason that FIR filter is always stable?	C302.3	R
9	Write down the advantages of FIR filter	C302.3	R
10	What is meant by Group delay and Phase delay ?	C302.3	U

Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11. a	Convert the analog filter with system function $H_a(S)$ into digital filter using IIT, $H_a(S) = \frac{S+0.3}{(S+0.3)^2+16}$. Assume T = 1 sec.	C 302.2	A,E
11 b	Obtain the digital transfer function for the given analog filter, $H_a(S) = \frac{S+1}{(S+3)(S+5)}$. Use BLT method. Assume T = 1 sec.	C 302.2	A,E
	OR		
12	Design a digital Butterworth filter to meet the following constraints $0.707 \leq \lvert H(e^{j\omega})\rvert \leq 1; for\ 0 \leq \omega \leq 0.5\pi$ $\lvert H(e^{j\omega})\rvert \leq 0.2; \quad for\ 0.75\pi \leq \omega \leq \pi$ By using Bilinear Transformation Method. Assume T=1 sec.	C 302.2	A,E
13	Using Bilinear Transformation, design a digital highpass filter , monotonic in passband with cutoff frequency of $1000Hz$ and down $10dB$ at $350Hz$. The sampling frequency is $5000Hz$.	C 302.3	AZ,E
	OR		
14	Design a Chebyshev lowpass filter using Impulse Invariance method for the following specification.	C 302.3	AZ, E

	$0.8 \le \lvert H(e^{jw}) \rvert \le 1 \; for \; 0 \le \omega \le 0.2\pi$ $\lvert H(e^{jw}) \rvert \le 0.2 \; for \; 0.6\pi \le \omega \le \pi$		

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Design a digital ideal Lowpass FIR Filter for the following specifications, $H_d(e^{jw}) = \begin{cases} 1 \; ; for -\frac{\pi}{2} \le \omega \le \frac{\pi}{2} \\ 0; \quad \frac{\pi}{2} \le \omega \le \pi \end{cases}$ With N=11. Using Discrete Fourier Series Method.	C 302.3	R,U
	OR		
16	Design a digital ideal Band Stop FIR Filter for the following specifications, $H_d(e^{jw}) = \begin{cases} e^{-j5\omega} \; ; for \; \lvert\omega\rvert \le \frac{\pi}{3} \; and \; \lvert\omega\rvert \ge \frac{2\pi}{3} \\ 0; \quad other \; wise \end{cases}$ With N=7. Using Discrete Fourier Series Method	C 302.3	A,E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

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Tiruchirapalli

Internal Assessment Test - II			Date/Session	15/10/2022	Marks	50
Course code	MA 3355	Course Title	Random Processes and Linear Algebra			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/Section	III/A &B	Department	ECE	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1.	If the random variables X and Y are independent, then Prove that COV(X,Y) = 0	CO2	E
2.	The joint probability density function of a bivariate random variable (X,Y) is f(x,y) = k (x + y), 0 < x < 2, 0 < y < 2, Find k.	CO2	E
3.	The regression lines between the random variables X and Y is given by 3X+Y = 10, 3X+4Y = 12.Find the coefficient of correlation between X and Y.	CO2	E
4..	State central limit theorem.	CO2	U
5.	Write any two properties of correlation.	CO2	A
6.	State the four types of random Processes	CO3	E
7.	Define a stationary process.	CO3	
8.	A random process x(t) is characterized by four sample functions $X(t,s_1)$= -1, $X(t,s_2)$ = -2 $x(t,s_3)$= 3, $X(t,s_4)$=t . Prove that X(t) is not WSS.	CO3	R
9.	Prove that the difference of two independent Poisson processes is not a Poisson process	CO3	A
10.	A radioactive source emits particles at a rate of 5 per minute in accordance with Poisson process. Each particle emitted has a probability 0.6 of being recorded. Find the probability that 10 particles are recorded in 4-min period.	CO3	E

Part – B (Answer all the questions 3 x 10 = 30marks)

Q. No.	Questions	CO	Skills
11	If the joint pdf of the random variable (X,Y) is $f(x,y) = \begin{cases} Kxy, & 0 < x < 1, 0 < y < x \\ 0 & otherwise \end{cases}$ Find (i)the value of K (ii) Marginal density function of X and Y (iii) $P\left(Y < \frac{1}{8} \middle| X < \frac{1}{2}\right)$	CO2	E
	(OR)		
12	From the following data, find (i)the coefficient of correlation between the marks in Economics and Statistics (ii) the two regression lines (iii) the most likely marks in Statistics when marks in Economics are 30	CO2	E

Marks in Economics	25	28	35	32	31	36	29	38	34	32
Marks in Statistics	43	46	49	41	36	32	31	30	33	39

13	(i) Show that the random process with pdf $P[X(t)=n] = \begin{cases} \frac{at}{1+at}, n=0 \\ \frac{(at)^{n-1}}{(1+at)^{n+1}}, n=1,2,3,\ldots \end{cases}$ is not stationary.	CO3	E
	(ii) A fair coin is tossed 250 times . Find the probability that heads will appear between 120 and 140 times using central limit theorem.	CO2	
	(OR)		
14	(i) In the random process X(t) = A sin t +B cos t, A and B are independent random variables, each assuming the values -1 and 2 with probabilities 2/3 and 1/3. Prove that X(t) is WSS.	CO3 CO2	E

	(ii) The joint pdf of the random variable (X,Y) is given by $f(x,y)=k\,xy\,e^{-(x^2+y^2)}$ $x>0,y>0$ .Find(i) the value of k (ii) Are X and Y independent.		
15.	State the postulates of the Poisson Process and obtain the probability distribution for that. Is the Poisson process Stationary? Justify your answer.	CO3	E
	(OR)		
16.	(i) Show that random processes $X(t)=A\cos(\lambda t+\theta)$ is WSS if A and λ are constants and θ is uniformly distributed random variable in $(0,2\pi)$ (ii) If customers arrive at a counter in accordance with Poisson process with a mean rate of 2 per minute. Find the probability that the interval between 2 consecutive arrivals more than 1 minute.	CO3	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

SARANATHAN COLLEGE OF ENGINEERING

14.10.2022

CIRCULAR

Internal Assessment Test- II for II Year B.E / B.Tech classes will commence from 15.10.2022 (Saturday) as per the Academic schedule.

Test duration:

09.15 a.m. to 10.45 a.m. (1 ½ Hour)

Class timings after the I.A.Test

10.45 a.m. – 11.05 a.m. : Break

11.05 a.m -11.55a.m – 1st hour

11.55 a.m – 12.45 p.m – 2nd hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

As per the instructions from Anna University Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal "as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

PRINCIPAL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Second_Internal Assessment Test for II Year_ October 2022

Batch - 2021 - 2025 (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
15.10.2022	MA3354 - Discrete Mathematics	MA3355 - Prabability and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
17.10.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
18.10.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
19.10.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
20.10.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming
21.10.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics

Exam Cell

Principal

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SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPALLI - 620012

Internal Assessment Test - II			Date/ Session	18.10.2022/FN	Marks	50
Course code	EC3354	Course Title	SIGNALS AND SYSTEMS			
Batch No.		Duration	90 mins	Academic Year	2022- 2023	
Year	II	Semester/ Section	III/A&B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Write the conditions for existence of Fourier Transform.	C205.2	R,U
2	Find the FT of $\delta(t)$	C205.2	A
3	If $X(s)=\frac{1}{s+0.9}$ .Find Laplace transform of $tx(t)$.	C205.2	R,U
4	State any two properties of ROC.	C205.2	R,U
5	State the final value theorem of Laplace Transform.	C205.3	R,U
6	Write down the relationship between CT Fourier transform and Laplace transform for absolutely integral signal	C205.3	R,U
7	Determine the transfer function of ideal Differentiator.	C205.3	AZ
8	Give the relation between x(t) and $X(j\Omega)$ are Fourier transform pairs.	C205.3	E
9	Define System function.	C205.3	E
10	What is the condition for stability of a system ?	C205.3	C

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	a) Determine the Fourier transform of a double sided exponential signal $x(t)=e^{-2\|t\|}$. (b) Determine the FT of $x(t)=e^{(t-3)}u(t-3)$	C205.2	R,U,AZ,E
	Or		
12	a) Determine the FT of $x(t)=\cos(\Omega_0 t)u(t)$ b) Determine the Fourier transform. $x(t)=sgn(t)$	C205.2	AZ,E
13	Obtain the inverse Laplace transform of $X(S)=\frac{1}{s^2+3s+2}$ *with ROC* $(a)-2<\mathrm{Re}(s)<-1$ $(b)\mathrm{Re}(s)>-1$ $(c)\mathrm{Re}(s)<-2$	C205.3	AZ,E
	Or		
14	a) Determine the Laplace transform of the following signal $x(t)=e^{-at}\sin\Omega_0 t\,u(t)$ b) Let x(t) and X(s) be Laplace transform pairs. Given that $x(t)=e^{-t}u(t)$. (i) Determine X (2s) and $X(4s)$	C205.3	AZ,E

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Using Laplace Transform, determine the following, $\frac{d^2y(t)}{dt^2}+5\frac{dy(t)}{dt}+6y(t)=\frac{dx(t)}{dt}+5x(t)$ (a) System Function (b) Step response of the system (c) Frequency response of the system	C205.3	AZ,E,C
	Or		
16	Using Laplace transform, determine the response of the system described by the equation, $\frac{d^2y(t)}{dt^2}+3\frac{dy(t)}{dt}+2y(t)=\frac{dx(t)}{dt}$; if $y(0)=2, \frac{dy(0)}{dt}=1$ for input $x(t)=e^{-t}u(t)$	C205.3	A,AZ,E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

64+63

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/Session	17-10-22 / FN	Marks	50
Course code	EC3351	Course Title	CONTROL SYSTEMS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/Section	03 / A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	With reference to time response of a control system, define peak time.	C205.2	R
2	What will be the nature of response of a second order system with different types of damping?	C205.2	AZ
3	What is first order and second order systems?	C205.2	U
4	Why derivative controller is not used in control system?	C205.2	AZ
5	The closed-loop transfer function of second order system is given below. Determine it's damping ratio and natural frequency of oscillation. $C(S)/R(S) = 400/ S^2 +6S +400$	C205.2	A
6	What is minimum phase system?	C205.3	R
7	Draw the polar plot of $G(s)=1/(1+sT)$	C205.3	E
8	What is gain and phase cross over frequency?	C205.3	R
9	The damping ratio and natural frequency of oscillation of a second order system is 0.5 and 8 rad/sec respectively. Calculate resonant peak and resonant frequency?	C205.3	A,E
10	Construct the bode plot for $G(S)=1/S^2$	C205.3	E

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	A unity feedback system is characterized by an open loop transfer function $G(s)=K/s(s+10)$. Determine the gain K, so that the system will have damping ratio of 0.5 for this value K. Determine the peak overshoot and time at peak overshoot for a unit step input.	C205.2	E
	(OR)		
12	Derive the expressions and draw the response of second order under damped system for unit Step input.	C205.2	E
13	With a neat diagram, explain the function of PID Controllers in detail.	C205.2	U,R
	(OR)		
14	Enumerate the function of PD Controllers with example.	C205.2	E

Part – C

(Answer all the questions 1 x 10 = 10marks)

15	The open loop transfer function of a unity feedback system is given by $G(s)=10 / S(1+0.4S)(1+0.1S)$. Using Bode plot, Determine gain and phase margin.	C205.3	A,E
	(OR)		
16	The open loop transfer function of a unity feedback system is given by $G(s)= 1/S(1+S)^2$. Sketch the polar plot and determine gain and phase margin.	C205.3	AZ,E

64+63

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/Session	17-10-22 / FN	Marks	50
Course code	EC3351	Course Title	CONTROL SYSTEMS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/Section	03 / A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	With reference to time response of a control system, define peak time.	C205.2	R
2	What will be the nature of response of a second order system with different types of damping?	C205.2	AZ
3	What is first order and second order systems?	C205.2	U
4	Why derivative controller is not used in control system?	C205.2	AZ
5	The closed-loop transfer function of second order system is given below. Determine it's damping ratio and natural frequency of oscillation. $C(S)/R(S) = 400/ S^2 +6S +400$	C205.2	A
6	What is minimum phase system?	C205.3	R
7	Draw the polar plot of $G(s)=1/(1+sT)$	C205.3	E
8	What is gain and phase cross over frequency?	C205.3	R
9	The damping ratio and natural frequency of oscillation of a second order system is 0.5 and 8 rad/sec respectively. Calculate resonant peak and resonant frequency?	C205.3	A,E
10	Construct the bode plot for $G(S)=1/S^2$	C205.3	E

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	A unity feedback system is characterized by an open loop transfer function $G(s)=K/s(s+10)$. Determine the gain K, so that the system will have damping ratio of 0.5 for this value K. Determine the peak overshoot and time at peak overshoot for a unit step input.	C205.2	E
	(OR)		
12	Derive the expressions and draw the response of second order under damped system for unit Step input.	C205.2	E
13	With a neat diagram, explain the function of PID Controllers in detail.	C205.2	U,R
	(OR)		
14	Enumerate the function of PD Controllers with example.	C205.2	E

Part – C

(Answer all the questions 1 x 10 = 10marks)

15	The open loop transfer function of a unity feedback system is given by $G(s)=10 / S(1+0.4S)(1+0.1S)$. Using Bode plot, Determine gain and phase margin.	C205.3	A,E
	(OR)		
16	The open loop transfer function of a unity feedback system is given by $G(s)= 1/S(1+S)^2$. Sketch the polar plot and determine gain and phase margin.	C205.3	AZ,E

64 + 63 = 127

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II		Date/ Session	19.10.2022 FN	Marks	50
Course code	EC3352	Course Title	Digital System Design		
Batch No.		Duration	90 mins	Academic Year	2022-2023
Year/	II	Semester/ Section	III /A & B	Department	ECE

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Draw the circuit diagram for 1:2 De multiplexer	C206.2	R
2	What is meant by priority encoder?	C206.2	R
3	Write short notes on the decoder.	C206.2	R
4	Define propagation delay.	C206.2	R
5	Write the Generate (Gi) and Propagate (Pi) equations for the carry look-ahead adder?	C206.2	U
6	How the logic circuit is classified in digital?	C206.3	R
7	State the type of a sequential circuit.	C206.3	R
8	Define race around condition.	C206.3	U
9	Write function table for RS flip flop.	C206.3	R
10	Differentiate between Latch and Flip Flop.	C206.3	R

Part – B

(Answer all the questions 2x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Design a 4:2 priority encoder and explain with neat circuit diagrm.	C206.2	R
	or		
12	Draw the circuit of the 4:1 Multiplexer. Implement the following function using 8:1 MUX F(A,B,C,D)= ∑(0,2,5,6,7,11,13,14,15)	C206.2	AZ
13	Design a BCD adder circuit and explain it a with neat sketch	C206.2	AZ
	Or		
14	Design a 4-bit magnitude comparator circuit and explain it with a neat diagram.	C206.2	U

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Draw the circuit diagram, function table, characteristic table with characteristic equation and excitation table of a JK flip-flop.	C206.3	A
	Or		
16	Design 3 bit synchronous up counter using JK flip flop.	C206.3	A

63+64=

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	20.10.2022/FN	Marks	50
Course code	EC 3353	Course Title	Electronic Devices and Circuits			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023	
Year	II	Semester/ Section	III / A & B	Department	ECE	

Part – A

(Answer all the questions (10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is stability factor? Write the expressions for S, S' and S" of self-bias BJT amplifier.	C204.2	R
2	Draw the ' re' equivalent circuit of CE amplifier in fixed bias.	C204.2	R
3	If the mid-band gain is 100 and half-power frequencies are f_L = 40Hz and f_H =16kHz. Calculate the amplifier gain at 20Hz and 20kHz frequencies.	C204.2	E
4	What is the effect of miller's capacitance on the frequency response of an amplifier?	C204.2	E
5	Draw the h parameter model of common emitter amplifier and write the expression for input impedance and current gain.	C204.2	AZ
6	Express the equation for the overall lower and upper cut-off frequency of the multistage amplifier.	C204.3	R
7	Define CMRR	C204.3	R
8	What is meant by neutralization?	C204.3	R
9	In a differential amplifier if the common mode gain is 240 and differential mode gain is 125, calculate CMRR in dB	C204.3	R
10	A tuned circuit has resonant frequency of 1600 kHz and a bandwidth of 10 kHz. What is the value of its Q factor?	C204.3	E

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the operation of the basic common base amplifier circuit and derive the expressions for its small-signal voltage gain, current gain, input impedance and output impedance.	C204.2	AZ, E
	Or		
12	Explain the operation of the common emitter un-bypassed amplifier circuit and derive the expressions for its small-signal voltage gain, current gain, input impedance and output impedance.	C204.2	AZ, E
13	a) Discuss the effect of coupling and bypass capacitors on the low-frequency response of the BJT amplifier. [5] b) Discuss the effect of inter electrode capacitance on the high frequency response of the BJT amplifier. [5]	C204.2	U, AZ
	Or		
14	Explain the operation of following biasing circuits. Also derive the expression for stability factor a) self - bias b) collector to base bias	C204.2	U, AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain the working principle of capacitance coupled single tuned amplifier and derive the expressions for its important parameters	C204.3	R, U
	Or		
16	Explain the operation of cascode amplifier with neat diagram	C204.3	R, U

Bloom's Skills: *Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question*

Faculty In-Charge: *Mr. S.Hariprasath,"Asst.Prof/ ECE & Dr.P.Shanmugapriya, Associate. Prof., / ECE*

Q4+65+19

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - II			Date / Session	21.10.2022 / FN	Marks	50
Course code	CS3353	Course Title	C Programming and Data Structures			
Batch No.		Duration	09.15 am to 10.45 am	Academic Year	2022-2023	
Year	Second Year	Semester/Section	III/A/B	Department	ECE / ICE	

Part – A - (Answer all the questions 10 x 2 = 20marks)

Q.No.	Questions	CO	Skills
1	When do you use Null Pointer?	C202.2	AZ
2	List the File operations in C paradigm.	C202.2	R
3	How does a Preprocessor works?	C202.2	AZ
4	List the advantages of Linked List over arrays.	C202.3	AZ
5	Define an Abstract Data Type.	C202.3	R
6	Write the routine for creation of Circular Doubly Linked List.	C202.3	C
7	Give the Prefix and Postfix for the below Infix expression. p*q+(r-s/t)	C202.3	A
8	List the application of Stack ADT.	C202.3	R
9	Define Queue. What are various operations on the Queue?	C202.3	R
10	What is Priority Queue? What are the ways to implement Priority Queues?	C202.3	U

Part – B - (Answer all the questions 2 x 10 = 20marks)

Q.No.	Questions	CO	Skills
11	i) Write a C program for accessing Structure variables through pointer. (6) ii) Write a short note on 1) fseek() 2) ftell (4)	C202.2	U,C
	Or		

12	i) Explain Preprocessor directive in detail. Write a program to explain all the types of directives in C. (7)
	ii) What is the output of the following code fragment? (3)
	int x=456, *p1, **p2;
	p1=&x;
	p2=&p1;
	printf("Value of x is: %d\n", x);
	printf("Value of *p1 is: %d\n", *p1);
	printf("Value of *p2 is: %d\n", *p2);
		C202.2	U,C,E

13	i) What are the ways to insert nodes in a Linked List? Write the routine to insert an element as head and last node. (6) ii) In stack, evaluate ((a-(b+c)*d)+(e+f)) if a=6, b=5, c=4, d=3, e=2 and f=1. (4)	C202.3	R,E
	Or		
14	i) What is Doubly Linked List? Write the C program for Insertion operation of DLL. (5) ii) Write an algorithm to insert and delete an item on Circular Queue. (5)	C202.3	R,U

Part – C - (Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	i) Write a C program for Polynomial representation of 6x3+5x2+7x+1 using linked list. (10)	C202.3	C
	Or		
16	i) Write a C program to implement Dequeue operation in C. (10)	C202.3	C

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF ECE

IAT 2 DUTY LIST 2022-2023 ODD SEMESTER (III & IV YEAR)

07.10.2022

S.no	STAFF NAME	10/10/2022	10/11/2022	10/12/2022	10/13/2022	10/14/2022	10/15/2022	
1	Dr. S.A Arunmozhi				@			1
2	Dr. S Rajeswari		@					1
3	Dr. V Mohan,	@						1
4	Dr. P Shanmugapriya					@		1
5	Dr. M Baritha Begum		@					1
6	Mr. S Hariprasath,					@		1
7	Mr. K Malaisamy				@	@		2
8	Ms. P Sivagamasundhari		@					1
9	Mr. M Mahendran			@	@			2
10	Mr. G Sivakannu		@					1
11	Ms. S Kiruthiga	@					@	2
12	Ms. M Anthuvan Lydia	@			@			2
13	Ms. B.Divya			@			@	2
14	Ms. Dr.N.Preethi Elizabeth	@					@	2
15	Mr.Kesavan			@			@	2
		4	4	3	4	3	4	22

HOD/ECE

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF ECE

IAT 2 DUTY LIST 2022-2023 ODD SEMESTER (II YEAR)

14.10.2022

S.no	STAFF NAME	10/15/2022	10/17/2022	10/18/2022	10/19/2022	10/20/2022	10/21/2022	
1	Dr. S.A Arunmozhi							0
2	Dr. S Rajeswari							0
3	Dr. V Mohan,							0
4	Dr. P Shanmugapriya							0
5	Dr. M Baritha Begum							0
6	Mr. S Hariprasath			@	@			2
7	Dr. K Malaisamy				@			1
8	Ms. P Sivagamasundhari	@	@					2
9	Mr. M Mahendran	@						1
10	Mr. G Sivakannu	@					@	2
11	Ms. S Kiruthiga		@					1
12	Ms. M Anthuvan Lydia						@	1
13	Ms. B.Divya					@		1
14	Dr.N.Preethi Elizabeth			@				1
15	Mr.Kesavan				@	@		2
16	Dr.Geetha (MAT)		@					1
17	Dr.Subashini (MAT)		@					1
		3	4	2	3	2	2	16

HOD/ECE

SARANATHAN COLLEGE OF ENGINEERING - TRICHY-12

INTERNAL ASSESSMENT TEST II - II YEAR BE/B.TECH - ODD SEM 2022-23

SEATING ARRANGEMENT 17.10.2022

ROOM NO	BRANCH	SECTION	YEAR	REG NO - FROM - TO	TOTAL
JS-CONFERENCE HALL-A	ECE	A	II	242001-242020	20
JS-CONFERENCE HALL-B	ECE	A	II	242021-242041	20
JS-CONFERENCE HALL-C	ECE	A	II	242042-242063,242127	20
KS 109	ECE	A	II	242128,129,130 AND 131	4
KS 109	ECE	B	II	242064-242078	15
KS 110	ECE	B	II	242079-242097	19
KS 111	ECE	B	II	242098-242116	20
KS 113	ECE	B	II	242119-242132	9

HOD/ECE

A	B	C	D	E	F	G
	ROOM NO	BRANCH	SECTION	YEAR	Batch No - (From - To)	COUNT
	ME 301	ECE	A	IV	222001-222020	20
	ME 302	ECE	A	IV	222021-222040	20
	ME 303	ECE	A	IV	222041-222061	20
	KS 109	ECE	A/B	IV	222062-222081	20
	KS 110	ECE	A/B	IV	222082-222101	20
	KS 111	ECE	A/B	IV	222102-222121	20
	KS 307	ECE	A	III	232001-232012	11
	KS 311	ECE	A	III	232013-232032	20
	KS 312	ECE	A	III	232033-232053	20
	KS 313	ECE	A/B	III	232054,110,111,112 232055-232072	20
	KS 315	ECE	B	III	232073-232092	20
	KS 316	ECE	B	III	232093-232109	17

H. Singh
HOD/ECE

SARANATHAN COLLEGE OF ENGINEERING

08.11.2022

CIRCULAR

Internal Assessment Test- III for III and IV Year B.E / B.Tech classes will commence from 10.11.2022 (Thursday) as per the Academic schedule.

Test duration:

09.15 a.m. to 10.45 a.m. (1 ½ Hour)

Class timings after the I.A.Test

10.45 a.m. – 11.05 a.m. : Break

11.05 a.m -11.55a.m – 3rd hour

11.55 a.m – 12.45 p.m – 4th hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

As per the instructions from Anna University Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal "as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

PRINCIPAL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli – 620 012

Dt.9th December 2022

MODEL EXAMINATION _ FOR Second Year B.E./B.Tech., Classes will be from 12.12.2022 (Monday) as per the academic planner.

Test Duration

10.00 AM to 1.00 PM

As per the instruction from the Anna University, Chennai Model Exam Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal Marks will be awarded by the Anna University based on your performance in Model Exam students are advised to take the exam seriously and to score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

MODEL EXAM for Second Year _ December 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
12.12.022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
14.12.022	CS3353 - Foundations of Data Science	EC3351 - Control Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
16.12.022	CS3391 - Object Oriented Programming	EC3354 - Signals and Systems	EE3301 - Electromagnetic Fields	CD3291 - Data Structures and Algorithms	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
19.12.022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CS3391 - Object Oriented Programming	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
21.12.022	CS3352 - Digital Principles and Computer Organization	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3351 - Digital Principles and Computer Organization	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.12.022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Principal

Saranathan College of Engineering
Tiruchirapalli

MODEL EXAMINATION			Date	12/12/2022	Marks	100
Course code	MA3355	Course Title	Random Process and Linear Algebra			
Batch No.		Duration	3 Hrs	Academic Year	2022 - 2023	
Year	II	Semester/Section	III/A &B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define Random Processess.	CO_3	U
2	A radioactive source emits particles at a rate of 5 per minute in accordance with Poisson process. Each particle emitted has a probability 0.6 of being recorded. Find the probability that 10 particles are recorded in 4-min period.	CO_3	R
3	A random process x(t) is characterized by four sample functions $X(t,s_1)= -1$, $X(t,s_2) = -2$ $x(t,s_3)= 3$, $X(t,s_4)=t$ .Prove that X(t) is not WSS.	CO_3	R
4	Define vector space.	CO_4	R
5	Determine x so that the vectors $u=(1,-1,x-1), v=(2,x,-4), w=(0,x+2,-8)$ in R^3 are linearly dependent over R .	CO_4	U
6	Find the dimension of W where W is given by $W= \{(a_1,a_2,a_3,a_4,a_5) \in F^5 / a_2=a_3=a_4$ and $a_1+a_5 = 0\}$	CO_4	A
7	Let $T : R^2 \rightarrow R^3$ be defined by T(x,y) = (x+3y, o, 2x-4y). Compute the matrix of the transformation with respect to the standard bases of R^2	CO_5	E
8	Define inner product space.	CO_6	R
9	State orthogonal decomposition theorem.	CO_6	U
10	Let R^2 have the weighted Euclidean inner product defined as $\langle u,v\rangle = 2u_1v_1 + 3u_2v_2$ and let $u=(1,1), v=(3,2), w=(0,-1)$ Compute the value of $\langle u+v, 3w\rangle$.	CO_6	A

Part – B

(Answer all the questions 5 x 16 = 80marks)

Q. No.	Questions	CO	Skills
11A.	(i) In the random process X(t) = A sin t +B cos t, A and B are independent random variables, each assuming the values -1 and 2 with probabilities 2/3 and 1/3. Prove that X(t) is WSS . (ii) Three boys A,B,C are throwing a ball to each other. A always throws the ball to B and B always throws to C but C is just as likely to throw the ball to B as to A. Show that the process is Markovian, Find the TPM and classify the states.	CO_3	U
	(OR)		
11B.	State the postulates of the Poisson Process and obtain the probability distribution for that. Is the Poisson process Stationary? Justify your answer.	CO_3	R
12A.	i) Let R^+ be the set of all positive real numbers. Define the vector addition and scalar multiplication as follows. $u+v=uv$ for all $u,v \in R^+$ and $\alpha u = u^{\alpha}$ for all $u \in R^+$ and $\alpha \in R^+$ .Determine whether or not R^+ is a real vector space. ii) State ad prove Replacement theorem.	CO_4	U
	(OR)		

12B.	i)Test whether following vector is in the linear span of S $\begin{pmatrix}1 & 0\\1 & 1\end{pmatrix}, S=\left\{\begin{pmatrix}1 & 0\\0 & -1\end{pmatrix},\begin{pmatrix}0 & 1\\0 & 1\end{pmatrix},\begin{pmatrix}1 & 1\\0 & 0\end{pmatrix}\right\}$ *in* $M_2(R)$ ii) Let S be a linearly independent subset of a vector space V, and let v be a vector in V that is not in S. Then $S\bigcup\{v\}$ is linearly dependent if and only if Vε L(s)	CO_4	U
13A.	(i) Any intersection of subspace of a vector space is a subspace of V (ii) Let V = R^3 Prove that W = { (a,b,c) / $a^2+b^2+c^2=1$ } is not subspace of V.	CO_4	R
	(OR)		
13B.	(i)Verify whether the first polynomial can be expressed as a linear combination of the other two in $P_3(R)$ for the given x^3-8x^2+4x, x^3-2x^2+3x-1 and x^3-2x+3 (ii) If a vector space V is generated by a finite set S, then some subset of S is a basis for V. Hence v has a finite basis.	CO_4	E,U
14A.	i)Let $T:R^2\to P_2(R)$ be a Linear transformation such that $T(1,1)=2-3x+x^2, T(2,3)=1-x^2$. Determine T and Find a) T (-1, 2) b) T(-5, 2) c) rank and nullity of T d) Is T one to one or onto? ii) Let V and W be vector spaces, and let $T:V\to W$ be linear. If V is finite dimensional, then $nullity(T)+rank(T)=\dim(V)$.	CO_5	E
	(OR)		
14B.	Let T: $T:P_2(R)\to P_2(R)$ Define $T(f(x))=\int_0^x f(t)dt$ Prove that T is linear, one to one but not onto , for the above operation.	CO_5	E
15A.	i) State and prove Cauchy-schwartz inequality. ii) In R^3 have the Euclidean inner product. Use Gram-Schmidt process to transform the basis $\{u_1,u_2,u_3\}$ into an orthonormal basis, where $u_1=(1,1,1)u_2=(0,1,1)$ *and* $u_3=(0,0,1)$	CO_6	E
	(OR)		
15B.	i) Let V = C^3 with standard inner product , where x =(2, 1+i , i), y = (2-i , 2, 1+2i) Verify cauchy's and Triangle inequality ii) Use the least square approximation to find the best fit with linear function and compute the error E for the set {(-3,9), (-2,6), (0,2), (1,1) }.	CO_6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

Saranathan College of Engineering
Tiruchirapalli

MODEL EXAM			Date/Session	14-12-22 / FN	Marks	100
Course code	EC3351	Course Title	CONTROL SYSTEMS			
Batch No.		Duration	3 HOURS	Academic Year	2022 - 2023	
Year	II	Semester/Section	03 / A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	State the method to determine phase margin from bode's plot.	C205.3	AZ
2	Mention the need for lead compensation and lag compensation.	C205.3	AZ
3	What will be the Stability of the system when the roots of characteristic equation are on imaginary axis?	C205.4	U
4	Write the necessary and sufficient condition for the stability according to Routh Stability criterion.	C205.4	U
5	What is meant by relative stability?	C205.4	R
6	The addition of a pole will make a system more stable. Justify your answer.	C205.4	E
7	State the properties of State Transition Matrix.	C205.5	E
8	What is meant by sampled data controlled system?	C205.5	R
9	What are the advantages of state space representation?	C205.5	U
10	What is the use of ZoH?	C205.5	R

Part – B

(Answer all the questions 5 x 13 = 65marks)

Q. No.	Questions	CO	Skills
11 A	The open loop transfer function of a unity feedback system is $G(s) = K/S(S+1)$ It is desired to have the velocity error constant K_V=20 sec^{-1} and phase margin as 40°. Design a lead compensator to meet the above specification	C205.3	E
	(OR)		
11 B	Sketch the polar plot for the open loop transfer function of a unity feedback system is given by $G(s) = 1/ S(1 + S) (1+ 2S)$. Also, determine Gain Margin & Phase Margin.	C205.3	E
12 A	A system is given by $G(s) H(s) = (4S+1) /S^2(S+1) (2S+1)$ Sketch the Nyquist plot and determine the stability of the system.	C205.4	AZ,E
	(OR)		
12 B	With the help of Routh's stability criterion, determine the stability of the following systems represented by the characteristic equations: **(a) $S^4 + 8S^3 + 18S^2 + 16s + 5 = 0$. (b) $S^6 + 2s^5 + 8s^4 + 12s^3 + 20s^2 + 16s + 16 = 0$.**	C205.4	AZ
13 A	Sketch the root locus of the system whose open loop transfer function is G(s) $H(s) = K (S+9)/ S(S^2+4S+11)$	C205.4	E
	(OR)		
13 B	Sketch the root locus of the system whose open loop transfer function is G(s) $H(s) = K/ S (S^2+4S+13)$	C205.4	E

14 A	For the state equation: $\dot{X} = \begin{pmatrix} 0 & 1 \\ -2 & -3 \end{pmatrix} X + \begin{pmatrix} 0 \\ 1 \end{pmatrix} U$ with the unit step input and the initial conditions are $X(0) = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$ Solve the following (a) State transition matrix (b) Solution of the state equation.	C205.5	AZ,E
	(OR)		
14 B	A state model of a system is given as: $\dot{X} = \begin{pmatrix} 0 & 1 & 0 \\ 0 & 0 & 1 \\ -6 & -11 & -6 \end{pmatrix} X + \begin{pmatrix} 0 \\ 0 \\ 1 \end{pmatrix} U$ and $Y = (1 \ 0 \ 0)X$ Determine: (i) The Eigen Values. (ii) The State Transition Matrix.	C205.5	AZ,E
15 A	Obtain a state model for the system whose Transfer function is given by G(s) $H(s) = (7S^2+12S+8) / (S^3+6S^2+11S+9)$	C205.5	AZ
	(OR)		
15 B	The state space representation of a system is given below $\begin{bmatrix} \dot{x}_1 \\ \dot{x}_2 \\ \dot{x}_3 \end{bmatrix} = \begin{bmatrix} 0 & 0 & 1 \\ -2 & -3 & 0 \\ 0 & 2 & -3 \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} + \begin{bmatrix} 0 \\ 2 \\ 0 \end{bmatrix} u$ and $y = \begin{bmatrix} 0 & 1 & 0 \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix}$ Check for controllability and observability.	C205.5	E

Part – C

(Answer all the questions 1 x 15 = 15marks)

16 A	for a system represented by the state equation $\dot{X}(t)=AX(t)$ the response is $X(t)=\begin{bmatrix} e^{-2t} \\ -2e^{-2t} \end{bmatrix}$ when $X(0)=\begin{bmatrix} 1 \\ -2 \end{bmatrix}$ and $X(t)=\begin{bmatrix} e^{-t} \\ -e^{-t} \end{bmatrix}$ When $X(0)=\begin{bmatrix} 1 \\ -1 \end{bmatrix}$ Determine the system matrix A and state transition matrix.	C205.5	AZ,E
	(OR)		
16 B	Find the state model of the differential equation is $\dddot{y} + 2\ddot{y} + 3\dot{y} + 4y = u$ Diagonalize the following system matrix $A = \begin{pmatrix} 0 & 1 & 0 \\ 3 & 0 & 2 \\ -12 & -7 & -6 \end{pmatrix}$	C205.5	AZ,E

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TIRUCHIRAPALLI - 620012

MODEL EXAM			Date/ Session	16.12.2022/FN	Marks	100
Course code	EC3354	Course Title	SIGNALS AND SYSTEMS			
Batch No.		Duration	180 mins	Academic Year	2022– 2023	
Year	II	Semester/ Section	III/A&B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is the condition for stability of a System?	C205.3	A
2	Find the Fourier transform of $e^{at}u(-t)$.	C205.3	A
3	Define transfer function of CT-LTI system.	C205.3	AZ
4	Find the Z-Transform of $\delta[n-2]$.	C205.4	R,U
5	Compute the DTFT of the signal $x(n)=u(n-2)-u(n-6)$.	C205.4	AZ
6	Consider an analog signal x(t) = 2sin350πt-5cos700πt . Determine the minimum sampling frequency.	C205.4	R,U
7	Determine the final value of the signal whose $X(z)=\frac{2-4z^{-1}}{1+2z^{-1}-3z^{-2}}$	C205.4	AZ
8	Write down the relationship between DTFT and Z-Transform.	C205.5	AZ
9	What are the properties of convolution Sum?	C205.5	R
10	Find the Linear convolution between two sequence $x[n]=[2,2,2]$ and $h[n]=[1,2,3]$	C205.5	AZ

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	A CT-LTI system is defined by $\frac{d^2y}{dt^2}+3\frac{dy}{dt}+2y(t)=x(t)$, Determine its (i) Transfer function (ii) Impulse response (iii) Unit step response	C205.3	AZ,E
	OR		
12	(a). Find the convolution of two signals $x(t)=e^{-at}u(t)$ and $h(t)=e^{-bt}u(t)$ (b). A CT-LTI System defined as $h(t)=(2e^{-5t}+e^{-2t})u(t)$. Determine its Frequency response.	C205.3	AZ,E
13	Determine the Z-Transforms and ROC for the following signals, $(i)x(n)=2^nu(-n)$ $(ii)x(n)=n(\frac{1}{4})^n[(u(n)-u(n-5)]$	C205.4	AZ,E
	OR		
14	State and Prove sampling theorem for low pass band limited signal and explain the process of reconstruction of the signal from its samples.	C205.4	AZ,E
15	(a) State and prove Convolution Theorem of Z-Transform (b) Find the Fourier transform of the signal $x[n]=(a)^{\lvert n\rvert}$	C205.4	AZ,E
	OR		
16	Find the inverse Z-transform of $X(z)=\frac{5z^{-1}}{(1-2z^{-1})(1-3z^{-1})}$ when the ROC is $(i)ROC:\lvert z\rvert>3$ $(ii)ROC:\lvert z\rvert<2$ $(iii)ROC:2<\lvert z\rvert<3$	C205.4	AZ,E

17	Determine convolution $x(n) = \{1,4,3,2\}$; $h(n) = \{1,3,2,1\}$ ↑ (b) Find the convolution between two given signals $x_1(n) = \left(\frac{1}{2}\right)^n u(n)$; $x_2(n) = \left(\frac{1}{3}\right)^n u(n)$	C205.5	AZ,E
	OR		
18	A causal system represented by the following difference equation $y(n) + \frac{1}{4}y(n-1) = x(n) + \frac{1}{2}x(n-1)$ (a) Find the system function and give the corresponding ROC. (b) Find the Unit step response of the system. (c) Find the Frequency response $H(e^{j\omega})$.	C205.5	AZ,E
19.	(a). Determine the impulse response h(n) and transfer function of the system described by $y(n) = \frac{1}{3}y(n-1) + 3x(n)$. (b). A system has impulse response $h(n) = -0.25\delta(n+1) + 0.5\delta(n) - 0.75\delta(n-1)$. Is this system stable?	C205.5	AZ,E
	OR		
20	Determine the Overall impulse response for the cascade of two LTI systems having Impulse responses as, $h_1[n] = \left(\frac{2}{5}\right)^n u[n]$ and $h_1[n] = \left(\frac{1}{5}\right)^n u[n]$	C205.5	AZ,E

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
21	Using Laplace Transform, determine the following, $\frac{d^2y(t)}{dt^2} + 5\frac{dy(t)}{dt} + 6y(t) = \frac{dx(t)}{dt} + 5x(t)$ (a) System Function (b) Step response of the system (c) Frequency response of the system	C205.3	AZ,E,C
	Or		
22	Using Laplace transform, determine the response of the system described by the equation, $\frac{d^2y(t)}{dt^2} + 3\frac{dy(t)}{dt} + 2y(t) = \frac{dx(t)}{dt}$; *if* $y(0) = 2, \frac{dy(0)}{dt} = 1$ *for input* $x(t) = e^{-t}u(t)$	C205.3	A,AZ,E

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Saranathan College of Engineering
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Model Exam			Date/Session	19-12-2022 / FN	Marks	100
Course code	EC3352	Course Title	DIGITAL SYSTEM DESIGN			
Batch No.		Duration	3 hrs	Academic Year	2022 - 2023	
Year	II	Semester/Section	03 / A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	How does JK flip flop differ from SR flip flop in its basic operation?	C206.3	U
2	Mention any four application of shift register.	C206.3	U
3	What is primary disadvantage of Asynchronous counter?	C206.3	U
4	Draw excitation table for JK Flip Flop and T Flip Flop.	C206.3	A
5	A binary ripple counter needs to count 0 to 255_{10}. How many flip flops required?	C206.3	A
6	What is the significance of state Assignment?	C206.4	R
7	What is meant by fundamental mode of sequential circuit?	C206.4	R
8	Compare mealy and Moore machine	C206.4	U
9	If I_{OH} = 400 µA , I_{IH}=40µA, I_{OL}=16 mA, I_{IL} =1.6mA Determine Fan out of 2 input NAND Gate	C206.5	R
10	Define Fan out and noise margin.	C206.5	R

Part – B

(Answer all the questions 5 x 13 = 65 marks)

Q. No.	Questions	CO	Skills
11	Design a Synchronous counter that follows the sequence 1,3,5,7 using T flip flops	C206.3	A,Az
	(OR)		
12	Design 3 bit Up/Down synchronous counter using JK flip flops	C206.3	A,Az
13	Design Mod 12 Asynchronous counter and 3 bit Ring counter	C206.4	Az
	(OR)		
14	Design Universal shift register and explain its function.	C206.4	A
15	Implement BCD to gray code convertor using PAL	C206.5	U,A
	(OR)		
16	Implement following function using PLA Z_1 = AB'D'E + A'B'C'E' + BC + DE , Z_2 = A'C'E , Z_3 = BC + DE + C'D'E'+ BD ,Z_4 = A'C'E + CE	C206.5	E
17	Implement the functions A(X,Y,Z) = $\sum_m$ (1,2,4,6) and B(X,Y,Z) = $\sum_m$ (0,1,6,7) using PLA and function F (A,B,C,D)=AB' + BD +B'CD' using ROM	C206.5	E
	(OR)		
18	Illustrate the operation and characteristics of TTL NAND gate in detail	C206.5	U ,R
19	Explain in detail about Races and it types. Explain the method used for race free state assignment with illustration	C206.4	U,R
	(OR)		
20	Explain in detail hazard and its types. Design hazard free circuit for the function F(A,B,C,D) = Π_M(0,2,6,7,8,10,12)	C206.4	U,Az

Part – C

(Answer all the questions 1 x 15 = 15 marks)

Q. No.	Questions	CO	Skills
21	Design a sequence detector that produce output 1 whenever the input sequence with 1101 occurs without overlapping.	C206.3	Az,E
	(OR)		
22	Design a real time clock using counter and & 7 segment display, BCD to 7 segment decoder and logic gate.	C206.3	A,U

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Model Examination			Date/ Session	21.12.2022/FN	Marks	100
Course code	EC 3353	Course Title	Electronic Devices and Circuits			
Batch No.		Duration	3 hours	Academic Year	2022 – 2023	
Year	II	Semester/ Section	III / A & B	Department	ECE	

Part – A
(Answer all the questions (10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Draw the cascade amplifier and its small signal ac equivalent circuit	C204.3	R
2	Define CMRR. In a differential amplifier if the common mode gain is 240 and differential mode gain is 125 then calculate CMRR in dB	C204.3	E
3	Define sensitivity and de-sensitivity of gain in feedback amplifiers.	C204.4	R
4	Write the expression for input and output resistance of i) voltage series feedback amplifier b) current series feedback amplifier	C204.4	R
5	If L_1=2 mH, L_2=4 mH and C=0.1 nF, determine the frequency of oscillation for Hartley oscillator.	C204.4	E
6	Compare Class A, Class B and Class C amplifiers.	C204.5	R
7	How the efficiency is high for class A transformed coupled amplifier compared to class A amplifier?	C204.5	AZ
8	Draw the characteristics of power MOSFET.	C204.5	R
9	Give the principle of operation of step-down DC-DC converter.	C204.6	R
10	Compare Buck and Boost converter.	C204.6	AZ

Part – B
(Answer all the questions 5 x 13 = 65 marks)

Q. No.	Questions	CO	Skills
11.a)	Explain the working principle of capacitance coupled single tuned amplifier and derive the expressions for its important parameters	C204.3	R, AZ
	Or		
11.b)	What is neutralization technique? Why it is necessary? Explain the following neutralization techniques with neat circuit diagram: (i) Hazeltine neutralization (ii) Neutrodyne neutralization	C204.3	AZ, E
12.a)	Draw the block diagram of Voltage series feedback amplifier and derive the expressions of input impedance Zin, output impedance Zo and gain.	C204.4	U, AZ
	Or		
12.b)	Draw the block diagram of Current series feedback amplifier and derive the expressions of input impedance Zin, output impedance Zo and gain.	C204.4	U, AZ
13.a)	Estimate the frequency of oscillation and the condition for sustained oscillation of Colpitts oscillator with neat circuit diagram.	C204.4	U, AZ
	Or		
13.b)	Estimate the frequency of oscillation and the condition for sustained oscillation of Hartley oscillator with neat circuit diagram.	C204.4	U, AZ
14.a)	Summarize the transfer characteristics, signal waveforms, power dissipation and power conversion efficiency of Class A transformer coupled amplifier.	C204.5	U, AZ
	Or		
14.b)	Summarize the transfer characteristics, signal waveforms, power dissipation and power conversion efficiency of Class B amplifier.	C204.5	U, AZ

15.a)	Illustrate the Buck converter with necessary diagrams and derive the expressions for voltage and current.	C204.6	U, AZ
	Or		
15.b)	Illustrate the Boost converter with necessary diagrams and derive the expressions for voltage and current	C204.6	U, AZ

Part – C
(Answer all the questions 1 x 15 = 15marks)

Q. No.	Questions	CO	Skills
16.a)	Explain the operation of Wein-bridge oscillator using BJT amplifier with necessary equations and diagrams and derive the expression for gain.	C204.4	R, AZ
	Or		
16.b)	In a Colpitts oscillator, the values of the inductors and capacitors in the tank circuit are L = 40mH, C1 = 100pF and C2 = 500pF. Evaluate the following a) Frequency of oscillations. [3] b) If the output voltage is 10v, find the feedback voltage. [4] c) Find the minimum gain if the frequency is changed by changing L alone. [4] d) Find the value of C_1 for a gain of 10 v. Also find the new frequency. [4]	C204.4	AZ, E

Bloom's Skills: *Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question*

Faculty In-Charge: *Mr.S.Hariprasath, Assistant Professor/ ECE & Dr.P.Shanmugapriya, Associate Professor / ECE*

SARANATHAN COLLEGE OF ENGINEERING

TIRUCHIRAPPALLI - 620012

MODEL EXAMINATION			Date/Session	23.12.2022 / FN	Marks	100
Course code	CS3353	Course Title	CPROGRAMMING AND DATA STRUCTURE			
Batch No.		Duration	3 Hours	Academic Year	2021-2022 / ODD	
Year	II	Semester	III	Department	ECE-A&B,ICE	

Part – A

(Answer all the questions 10 x 2 = 20Marks)

Q. No.	Questions	CO	Skills
1.	Define ADT (Abstract Data Type) and its Feature?	C105.3	R,A
2.	How Singly and Doubly linked lists can be represented?	C105.3	K,A
3.	Distinguish between Stack and Queue.	C105.3	U
4.	Convert the infix (a+b)*(c+d)/f into postfix &prefix expression.	C105.3	A
5.	Define Binary tree and its Application?	C105.4	K,R
6.	Define hash function,hashing.	C105.4	R,A
7.	What is the difference between Linear and Quadratic Probing.	C105.4	U
8.	What is divide-and-conquer strategy?	C105.5	AZ
9.	Compare quick sort and merge sort.	C105.5	U
10.	What is linear search and Binary search?	C105.5	K,R

Part – B

(Answer all the questions 5 x 13 = 65Marks)

Q. No.	Questions	CO	Skills
11a.	(i)Explain array based implementation of list.(5m) (ii)Explain Singly Linked List in detail with example?(8m)	C105.3	R,K
	or		

11b.	(i) Explain Doubly Linked List in detail with example?(8m) (ii)Explain Circular Linked List in detail with example? (5m)	C105.3	U,K
12a.	(i) Explain Linked List Implementation of Stack ADT. (9m) (ii) What are the postfix and prefix forms of the expression? A+B*(C-D)/(P-R)(4m)	C105.3	R,AZ
	or		
12b.	(i) Explain Linked List Implementation of Queue ADT(9m) (ii) Explain circular queue and its implementation.(4m)	C105.3	U,K
13a.	(i)How to insert and delete an element into a binary search tree and write down the code for the insertion routine with an example.(5m) (ii)Construct an expression tree for the expression (a+b*c) + ((d*e+f)*g). Give the outputs when you apply inorder, preorder and postorder traversals.(8m)	C105.4	AZ,U
	or		
13b.	(i) Define tree,sibling,binary search tree,expression tree.(3m) (ii)Create a binary search tree for the following numbers start from an empty binary search tree. 45,26,10,60,70,30,40 Delete keys 10, 60 and 45 one after the other and show the trees at each stage.(10m)	C105.4	K,E
14a.	(i)What are the advantages and disadvantages of various collision resolution strategies? (6m) (ii) Given the input { 4371, 1323, 6173, 4199, 4344, 9679, 1989 } and a hash function of h(X)=X(mod 10) show the resulting: Separate Chaining hash table. (7m)	C105.4	R,C
	or		
14b.	(i) Define open addressing and its type?Briefly explain about linear probing and quadratic probing with an example? (8m) (ii) Explain Re-hashing and double hashing.(5m)	C105.4	K,U
15a.	(i)Write down the algorithm for insertion sort and quick sort with an example?(8m) (ii)Explain merge sort and use it to sort the sequence number 42,23,74,11,65,57,94,36,99,81,61.(5m)	C105.5	R,AZ
	or		
15b.	(i)Write down the algorithm for heap sort with an example?(5m) (ii)Briefly explain about searching techniques with examples. (8m)	C105.5	U,R

Part – C

(Answer all the questions 1 x 15 = 15Marks)

Q.No.	Questions	CO	Skills
16a.	Write a C Program that takes an Array of Pointers to store Two Dimensional Array and perform Matrix Multiplication using it.(15m)	C105.6	C
	or		

16b.	Briefly explain about Priority Queue with Example?(15m)	C105.6	K

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E),Knowledge(K) and Create (C). Skill need to be mentioned against each question.

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	M. HARRISH			Year / Semester / Section	IV / VII / A
Batch No.	222035	Date / Session	14.09.22 / FN	Department	ECE
Course Code	EC8791	Course Title	Embedded and Real time System.		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	E. ELANGATHIR			E. Elan 14/9/22	

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	☑	2	11					
2	☑	2	12	☑	8			8
3	☑	2	13					
4		—	14					—
5		—	15	☑	0			
6	☑	2	16		5			5
7	☑	2					Total	13
8	☑	1						
9	☑	1						
10		—						
Total		12						

25/50 50%

Grand Total

D. Endhumathy D. Endhu 14/9

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	30	20					50
Marks Obtained	14	11					25

QAC Audit - Remarks

P. Thenmozhiyal

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	R. HEMAVATHI			Year / Semester / Section	IV / VII / A
Batch No.	222039	Date / Session	14.09.2022 / F.N	Department	ECE
Course Code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 17
Name and Signature of the Invigilator with date	F. ELANKATHIR				14/9/22

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	2	12	✓	8			8
3	✓	2	13	✓	8			8
4	✓	2	14					
5	✓	2	15	✓	7			7
6	✓	2	16					
7	✓	2					Total	23
8	✓	1						
9	✓	2						
10	✓	2						
Total		19						

42 / 50 — 84%

R. Hemavathi

Grand Total

D. Sindhuvathy 14/9

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	30	20					50
Marks Obtained	26	16					42

QAC Audit - Remarks

P. Shanmugapriya

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	D. Hariprasath			Year / Semester / Section	IV / VII / A
Batch No.	222031	Date / Session	14.09.2022 / FN	Department	ECE
Course Code	EC 8791	Course Title	Embedded and Real time systems		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 12
Name and Signature of the Invigilator with date	E-ELANKATHIR			14/9/22	

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	1	12	✓	8			8
3	✓	2	13					
4	✓	1	14	✓	1			1
5		—	15					
6	✓	2	16	✓	8			8
7	✓	2					Total	17
8		—						
9	✓	2						
10		—						
Total		12						

29/50 58%

Grand Total

D. Eindhumathy

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	30	20					50
Marks Obtained	15	14					29

QAC Audit - Remarks

—

P. Shanmugapriya

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	SIDDIQ.A			ear / Semester / Section	IV/7/B
Batch No.	222096	Date / Session		Department	ECE
Course Code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 12
Name and Signature of the Invigilator with date	P.RAM PRASAD				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11	✓	2	✓	1	3
2	✓	2	12					
3	✓	2	13	✓	8			
4	—		14					8
5	✓	0	15					
6	✓	2	16	✓	9			9
7	—						Total	20
8	—							
9	✓	2						
10	—							
Total		10			30 Grand Total			

Name and Signature of the Examiner with date: B.W.-7619 B.DIVYA

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	30	20					50
Marks Obtained	17	13					30

QAC Audit - Remarks: 34 26

S.Prasanna Perumal

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	N. RAMKUMAR			Year / Semester / Section	IV / VII / B
Batch No.	222083	Date / Session	14-09-22 / FN	Department	ECE
Course Code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 7
Name and Signature of the Invigilator with date	P. RAM PRAKASH				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1		1	11					
2		2	12					
3			13					
4		1	14					
5		1	15					
6			16					
7							Total	-0-
8		1						
9								
10								
Total		4	Grand Total		4		B. DIVYA	Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	30	20					50.
Marks Obtained	04	00					04

QAC Audit - Remarks

68 00

S. Prasanna Kumar

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	Nandhini S.J			Year / Semester / Section	IV / VII / B
Batch No.	222070	Date / Session	14/9/22 / FN	Department	ECE
Course Code	EC8791	Course Title	Embedded and Real time Systems		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	A. SHEELAVATHI	A.	14/9/22		

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓		12	✓	7			7
3	✓	2	13	✓	8			8
4	✓		14					
5	✓		15					
6	✓	2	16	✓	9			9
7							Total	24
8	✓							
9	✓	2						
10	✓	1						
Total		9	Grand Total		33		Name and Signature of the Examiner with date	B. DIVYA 16/9

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	30	20					50
Marks Obtained	19	14					33

QAC Audit - Remarks

38 28

S. Prasanna Perumal

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING
DEPARTMENT OF ECE

EC8791 EMBEDDED AND REAL TIME SYSTEMS REMEDIAL AND SLIPTEST ATTENDANCE

22.09.22

S.NO	BATCH NO	NAME	SEC	SIGN
1	222002	AARTHI. M	A	
2	222014	BAUMARANJITH	A	

22/9/22

FACULTY

(J. EINDHUMATHY)

Saranathan College of Engineering
Tiruchirapalli

ATTENDANCE

SLIP Test - I			Date	22-09-2022	
Course code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS		
Year	IV	Semester/Section	07 / B	Department	ECE

S.No	Batch No	Name	Sign
1.	222065	MANOJKUMAR. M	AB
2.	222072	NISAGAR. S	S. Nisagar
3.	222075	PALANIYAPPAN. R	OD
4.	222083	RAMKUMAR. N	N. Ramkumar
5.	222085	RENGANATHAN. A	OD
6.	222088	SAIRA BANU. B	AB
7.	222121	YOGESH. S	S. Yogesh

22/9/22

SARANATHAN COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

ROOT CAUSE ANALYSIS

Academic Year:2022-23ODD Date:27/09/2022

Name of the Faculty: **Ms.J.Eindhumathy**	Course Code & Name:**EC8791 & EMBEDDED AND REAL TIME SYSTEMS**
Degree & Program:B.E/B.TECH**(ECE)**	Semester & Section: **7-A**
IA Test: Internal Assessment Test -1	University Exam Month & Year:**22-23ODD**
Target:90%	Achieved:98%

S.NO	BATCH NO	NAME OF THE STUDENT	CAUSES FOR FAILURE	CORRECTIVE ACTION TAKEN	PREVENTIVE ACTION TAKEN	FOLLOWUP STATUS	REMARKS OF THE HOD
1	222014	BAUMA RANJITH. S	Didn't prepare well forgot	focus & concentrate remedial & Slip test conducted	materials were given & asked to do writing practice	assignment collected	study regularly

Signature of the Staff

Head of the Department

SARANATHAN COLLEGE OF ENGINEERING

(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

ROOT CAUSE ANALYSIS

Academic Year:2022-23ODD Date:20/10/2022

Name of the Faculty: **Ms.J.Eindhumathy**	Course Code & Name:**EC8791 & EMBEDDED AND REAL TIME SYSTEMS**
Degree & Program:B.E/B.TECH(**ECE**)	Semester & Section: **7-A**
IA Test: Internal Assessment Test -2	University Exam Month & Year:**22-23ODD**
Target:90%	Achieved:95%

S.NO	BATCH NO	NAME OF THE STUDENT	CAUSES FOR FAILURE	CORRECTIVE ACTION TAKEN	PREVENTIVE ACTION TAKEN	FOLLOWUP STATUS	REMARKS OF THE HOD
1	222013	BALASUBRAMANIAN. S	Didn't Study well	Blip test conducted & motivated to study daily	Notes, question bank with answers were given	Assignment collected & asked to doubting practise	Study regularly. Work hard & Do study regularly. Study well & take care of your health.
2	222014	BAUMA RANJITH. S	forgot can't able to remember				
3	222049	KAVIYA. K	Not well				

Signature of the Staff

Head of the Department

Saranathan College of Engineering

Tiruchirapalli

Slip Test – II Attendance			Date/Session	19-10-2022 / AN	Marks	25
Course code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS			
		Duration	45 mins	Academic Year	2022 - 2023	
Year	IV	Semester/Section	07 / A	Department	ECE	

ATTENDANCE SHEET

S.no	Batchno	Name	Assessment-2	SIGNATURE
1	222006	AGALYA. R	A	R. Agalya
2	222013	BALASUBRAMANIAN. S	32	
3	222014	BAUMA RANJITH. S	4	
4	222024	DHARSHINI. S	A	AB
5	222049	KAVIYA. K	42	K. K

19/10/22

FACULTY

J. EINDHUMATHY

Saranathan College of Engineering
Tiruchirapalli

Slip Test – II Attendance			Date/Session	19-10-2022 / AN	Marks	25
Course code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS			
		Duration	45mins	Academic Year	2022 - 2023	
Year	IV	Semester/Section	07 / B	Department	ECE	

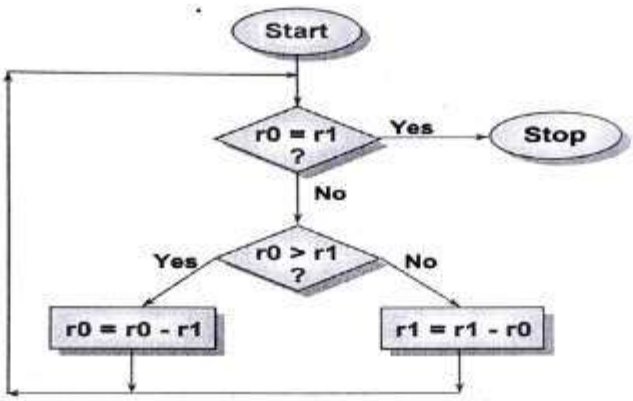
ATTENDANCE SHEET

S.no	Batchno	Name	Assessment-2	SIGNATURE
1.	222062	MADUMITHA. S	A	A
2.	222063	MALAVIKA. M	30	A
3.	222065	MANOJKUMAR. M	14	M. mj
4.	222072	NISAGAR. S	8	S. Nisaga
5.	222073	NITHIN RAJ. S	10	S. Nithin RJ
6.	222083	RAMKUMAR. N	2	N. Ramkumar
7.	222085	RENGANATHAN. A	24	A. Rthan
8.	222088	SAIRA BANU. B	A	A
9.	222095	SHYAM SUNDAR. B	42	B. Shyam Sundar
10	222097	SIVABALA. K	A	ksiva
11	222107	SRISUDHARSSAN. R	30	R.
12	222110	SUDHAKAR. S	A	S.

19/10

FACULTY

Assignment – 03			Dateof Issue:	15.09.2022	Marks	10
Course code	EC 8791	Course Title	Embedded and Real Time Systems			
Year	IV	Semester/Section	VII /A& B	Dateof Submission:	23.09.2022	

Q.No	Questions	CO
1	Convert the GCD algorithm given in this flowchart into A) "Normal" assembler, where only branches can be conditional. B) ARM assembler, where all instructions are conditional, thus improving code density. 	CO403.2
2	Specify instructions which will implement the following: a) r0 = 16 b) r1 = r0 * 4 c) r1 = r2 * 7	CO403.2
3	What will the following instructions do? a) ADDS r0, r1, r1, LSL #2 b) RSB r2, r1, #0 3.	CO403.2
4	What does the following instruction sequence do? a) ADD r0, r1, r1, LSL #1 b) SUB r0, r0, r1, LSL #4 c) ADD r0, r0, r1, LSL #7	CO403.2
5	Write a segment of code that add together elements x to x+(n-1) of an array, where the element x=0 is the first element of the array.	CO403.2

Name and Signature of the Faculty

HoD/ECE

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	B. Shyam Sundar			Year / Semester / Section	IV / VII B
Batch No.	222095	Date / Session	12/10/22/FN	Department	ECE
Course Code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used : 11
Name and Signature of the Invigilator with date	HEMA R.				10/12/2022

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
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Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11	✓	2			2
2	✓	2	12					
3	✓		13					
4	✓		14	✓	2			2
5	✓	2	15	✓	5			5
6	✓	2	16					
7	✓	1					Total	9
8	✓	1						
9	✓							
10	✓	2						
Total		12	Grand Total		21		Name and Signature of the Examiner with date	12/10 B. DIVYA

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	20	30					50
Marks Obtained	8	13					21

QAC Audit - Remarks

S. Professional Personal

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	S. Saravanan			Year / Semester / Section	IV / VII / B
Batch No.	222105	Date / Session	12/10/22 / FN	Department	ECE
Course Code	EC8791	Course Title	Embedded and Real Time Systems.		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date					

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
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6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1			11		5			5
2			12					
3		2	13					
4			14		4		3	7
5		2	15					
6		2	16		8			8
7		2					Total	20
8		2						
9								
10		2						
Total		12						

32.

Grand Total

12/10 B. Divya.

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	20	30					50
Marks Obtained	09	23					64

QAC Audit - Remarks

S. Prasanna
Principal

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	S. RAGAVI			Year / Semester / Section	IV / VII / B
Batch No.	222080	Date / Session	14.11.22/FN	Department	ECE
Course Code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	G.Venkatesan 14/11 G.VENKATESAN				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1		2	11	✓	5		3	8
2		2	12					
3		1	13	✓	9			9
4			14					
5			15	✓	8			8
6		2	16					
7		2					Total	25
8								
9								
10		2						
Total		11	Grand Total		36	72%	Name and Signature of the Examiner with date	B. Divya 14/11

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted				40	40	20	100
Marks Obtained				26	30	16	72

QAC Audit - Remarks

S. Prasanna Perumal

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

60

ANSWER BOOK

Name	M. NANDHINI			Year / Semester / Section	IV / VII / B
Batch No.	222069	Date / Session	14.11.2022/FN	Department	ECE
Course Code	EC8791	Course Title	EMBEDDED AND REAL TIME SYSTEMS		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used 18
Name and Signature of the Invigilator with date	G.Venkatesan 14/11 G.VENKATESAN				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
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6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1		2	11		5			5
2		2	12					
3		2	13					6
4		2	14		6			
5		01	15					
6		2	16		9			9
7		2					Total	20
8		2						
9		2						
10		2						
Total		19	Grand Total		39 → 78		Name and Signature of the Examiner with date	B.Divya

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted				40	40	20	100
Marks Obtained				28	32	18	78

QAC Audit - Remarks

S. Praveena

S. Praveena Parimal

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	P. MEENATCHI			Year / Semester / Section	IV / VII / B
Batch No.	222066	Date / Session	14.11.2022 / FN	Department	ECE
Course Code	EC8791	Course Title	Embedded and Real time Systems.		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used : 18
Name and Signature of the Invigilator with date	G. Vel Fat 14/11		G. VENKATESAN		

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	1	11					
2	✓	1	12	✓	9			9
3	✓	2	13	✓	9			9
4	✓	2	14					
5			15					
6	✓	2	16	✓	9			9
7	✓	2					Total	27
8	✓	2						
9	✓	2						
10	✓	2						
Total		16	Grand Total		43 86/-		Name and Signature of the Examiner with date	B. Divya. B. 16/11

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted				40	40	20	100
Marks Obtained				30	38	18	86

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	Dharsini Devi Muralidharan M			Year / Semester / Section	IV/VII/A
Batch No.	22021	Date / Session	14/11/22/FN	Department	ECE
Course Code	EC8791	Course Title	Embedded and real time systems		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used 10
Name and Signature of the Invigilator with date	K. Karthikeyan				14/11/22

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part - A must be written in pages 2-6. Answers for Part - B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	2	12		8			
3	✓	2	13		9			8/9
4	✓	2	14					
5	✓	1	15					
6	✓	2	16		2+1			2+1
7	✓	2					Total	20
8	✓	2						
9	✓	2						
10		2						
Total		19	Grand Total		39/50		Name and Signature of the Examiner with date	7.81. S. Sandhumathy 14/11/22

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted				20	20	10	50
Marks Obtained				17	19	8	39

QAC Audit - Remarks

P. Shanmugapriya

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	R.KEERTHIGA			Year / Semester / Section	IV / VII / A
Batch No.	222057	Date / Session	14.11.22/FN	Department	EC
Course Code	EC8791	Course Title	EMBEDDED REAL TIME SYSTEM		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used : 20
Name and Signature of the Invigilator with date	A. Kenny Varan		14/11/22		

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	2	12	✓	8			8
3	✓	2	13	✓	9			9
4	✓	2	14					
5	✓	0	15			/		
6	✓	2	16	✓	7			7
7	✓	2					Total	24
8	✓	2						
9	✓	2						
10	✓	2						
Total		18						

42/50 — 84% — R.Keerthiga Received — Grand Total

D. Sindhumathy, Exr — 15/11/22 — Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted				20	20	10	50
Marks Obtained				16	19	7	42

QAC Audit - Remarks

P. Shanmugapriya

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	M. HARRISH			Year / Semester / Section	IV / VII / A
Batch No.	222035	Date / Session	14.11.22 / FN	Department	ECE
Course Code	EC8791	Course Title	Embedded and real time system		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	K. Muthukumaresan 14/11/22				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1		2	11					
2		2	12					
3		—	13		8			8
4		2	14					
5		—	15					
6		2	16		6			6
7		—					Total	14
8		—						
9		2						
10		2						
Total		12	Grand Total		26/50		52	

Name and Signature of the Examiner with date: S. Sundhumathy 14/11/22

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted				20	20	10	50
Marks Obtained				6	14	6	26

QAC Audit - Remarks

P. Shanmugapriya
Name and Signature of the QAC member

Due Date: 14/4/23

Name of the Staff:/Dept: J. Endhumathy / ECE

Saranathan College of Engineering

Tiruchirapalli - 12

AB - NIL

Exam Cell

Attendance & Mark Entry Sheet for First Year / Second IA Test on April 2023

S.No.	Year	Semester	Branch	Section	B.NO.	Name of the Student	02 (40) Status	03 (60)	100 Remarks if Any.
1	Socond	4	ECE	A	242001	ABICA JENUS. A	38	54	92
2	Socond	4	ECE	A	242002	ABINAYA. S	32	52	84
3	Socond	4	ECE	A	242003	AGALYAA. S	28	52	80
4	Socond	4	ECE	A	242004	AHARINI. G	25	47	72
5	Socond	4	ECE	A	242005	AKASH. R left	40	58	98
6	Socond	4	ECE	A	242006	AKSHAYA SARAVANAN	30	48	78
7	Socond	4	ECE	A	242007	ANANDHA VADHANI. M	~~38~~	~~48~~	~~78~~
8	Socond	4	ECE	A	242008	ANIESH LURA. S	36	60	96
9	Socond	4	ECE	A	242009	ANIT ADITHYA. A	24	54	78
10	Socond	4	ECE	A	242010	ARCHANA. S	38	50	88
11	Socond	4	ECE	A	242011	ASWATHI. A S	40	38	78
12	Socond	4	ECE	A	242012	ATHISH PRANAV. M	26	40	66
13	Socond	4	ECE	A	242013	BALAJI. S D	36	46	82
14	Socond	4	ECE	A	242014	BALAMURUGAN. S	40	54	94
15	Socond	4	ECE	A	242015	BHARANI DHARAN. K	19	54	73
16	Socond	4	ECE	A	242016	BIOSHINI ELIZABETH. V	32	54	86
17	Socond	4	ECE	A	242017	CHANDRASEKAR. C	27	23	50
18	Socond	4	ECE	A	242018	CLARANCE NIRMAL. I	28	42	70
19	Socond	4	ECE	A	242019	DEVISRI. K	26	56	82
20	Socond	4	ECE	A	242020	DHANYA. S G	34	56	90
21	Socond	4	ECE	A	242021	DHEVASENA. K	34	48	82
22	Socond	4	ECE	A	242022	DIVAKARAN. J	26	38	64
23	Socond	4	ECE	A	242023	DOMINIC FERDINAND. A	23	29	52
24	Socond	4	ECE	A	242024	EDRIK ARUL RAJ. A	16	48	64
25	Socond	4	ECE	A	242025	GANESAN. R	24	26	50
26	Socond	4	ECE	A	242026	GANESH. S	25	29	54
27	Socond	4	ECE	A	242027	GANGA GAYATHRI. R	36	52	88
28	Socond	4	ECE	A	242028	GAYATHIRI. P	28	40	68
29	Socond	4	ECE	A	242029	GLADY FAUSTINA. A	34	48	82
30	Socond	4	ECE	A	242030	GNANASAMBANDAN. S R	29	56	85
31	Socond	4	ECE	A	242032	GRUBAKAR. R	22	30	52
32	Socond	4	ECE	A	242033	GRUZ ANDREWS. R	20	46	66
33	Socond	4	ECE	A	242034	GUNALAN. A	29	41	70
34	Socond	4	ECE	A	242035	GUNASEKAR. E	32	52	84
35	Socond	4	ECE	A	242036	GURU VENKATESH. S	32	60	92
36	Socond	4	ECE	A	242037	HAREESH VENKADESH. M	36	58	94
37	Socond	4	ECE	A	242038	HARI PRIYA. S	36	58	94
	Socond	4	ECE	A	242039	HARIKRISHNAN. E	20	36	56

Due Date:

Name of the Staff /Dept:

Saranathan College of Engineering

Tiruchirapalli - 12

Exam Cell

Attendance & Mark Entry Sheet for First Year / Second IA Test on April 2023

S.No.	Year	Semester	Branch	Section	B.NO.	Name of the Student	Status	Remarks if Any.
39	Second	4	ECE	A	242040	HARIKRISHNAN. S	34 56	90
40	Second	4	ECE	A	242041	HARINISHRI. T	34 60	94
41	Second	4	ECE	A	242042	HARISH. D	30 54	84
42	Second	4	ECE	A	242043	HARISH. P	30 36	66
43	Second	4	ECE	A	242044	HARISH. R	36 54	90
44	Second	4	ECE	A	242045	HEMAVARSHINI. S	36 56	92
45	Second	4	ECE	A	242046	ILLAKIYA. S	38 56	94
46	Second	4	ECE	A	242047	ISHAQ. S	16 54	70
47	Second	4	ECE	A	242048	JAYA HARINI. K	36 50	86
48	Second	4	ECE	A	242049	JAYASURIYA. P	36 56	92
49	Second	4	ECE	A	242050	JEFFRIN VALENTINA. R S	37 60	97
50	Second	4	ECE	A	242052	JOTHISWAR. B A	26 52	78
51	Second	4	ECE	A	242053	KANIHAA. R	37 54	91
52	Second	4	ECE	A	242054	KANMANI. K	40 56	96
53	Second	4	ECE	A	242055	KANTHAN MARAN. S	16 56	72
54	Second	4	ECE	A	242056	KARTHIKA. K	38 36	74
55	Second	4	ECE	A	242057	KASTHURI RENGAN. S	36 60	96
56	Second	4	ECE	A	242058	KAVYA. G	32 50	82
57	Second	4	ECE	A	242059	KAVYAH. G	40 56	96
58	Second	4	ECE	A	242062	KIRAN. T	30 54	84
59	Second	4	ECE	A	242063	KRITHIKA. R Left		
60	Second	4	ECE	A	242127	SHARAN SRINIVAS. S S	34 52	86
61	Second	4	ECE	A	242128	AGASTIN BERNANDO. K	24 52	76
62	Second	4	ECE	A	242129	HARI RAM. V	27 51	78
63	Second	4	ECE	A	242130	PREM KUMAR. V	34 54	88
64	Second	4	ECE	A	242131	AKASH. R	32 44	76

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II						
Course code	EC3451	Course Title	Date/Session	11.04.2023/ FN	Marks	50
Batch No.		Duration	Linear Integrated Circuits			
Year	II	Semester/Section	90 mins	Academic Year	2022 - 2023	
			04 / A & B	Department	ECE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Mention two linear and two non- linear operations performed by an operational amplifier?	C212.2	R
2	How will you realize a peak detector using a precision rectifier?	C212.2	E
3	What is the need for converting a first order filter into a second order filter?	C212.2	U
4	How is the current characteristic of a PN junction employed in a Log amplifier?	C212.2	E
5	Design a second order Butterworth active low pass filter for a cut-off frequency of 1KHz, C=0.1μF and R_f=10k ohms. Find R and R_f.	C212.2	C
6	What is a four-quadrant multiplier?	C212.3	U
7	Draw the block diagram of a multiplier using log and antilog amplifiers.	C212.3	AZ
8	Determine the change in dc control voltage Vc during lock, if input signal frequency fs = 20 kHz, the free running frequency fo is 21 kHz and the V/F transfer coefficient of VCO is 4 kHz/V	C212.3	R
9	VCO is called as V-F converter why?	C212.3	E
10	Draw the basic block diagram of PLL?	C212.3	AZ

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	i) Briefly explain the working principle of Schmitt trigger. (5m) ii) Design a wide band pass filter having f_L=400 Hz f_H=2kHz and pass band gain of 4. Find the value of Q of the filter. (5m)	C212.2	A
	(OR)		
12	What is a precision rectifier? Explain the working of Full wave precision rectifier and clipper circuit?	C212.2	U
13	Explain Analog Multiplier using Emitter Coupled Transistor.	C212.3	R
	(OR)		
14	Determine the expressions for lock in range and capture range for PLL.	C212.3	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	With neat simplified internal diagram explain the working principle of Gilbert's multiplier cell.	C212.3	U
	(OR)		
16	Explain the operation of VCO and derive its conversion factor.	C212.3	U

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	CHANDRASEKAR.C			Year / Semester / Section	III / V / 'A'
Batch No.	24 2017	Date / Session	11/04/23 / FN	Department	ECE
Course Code	EC3451	Course Title	Linear Integrated circuits		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used : 07
Name and Signature of the Invigilator with date	M. V. Sivanandam 11/4/23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part - A must be written in pages 2-6. Answers for Part - B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
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Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	2	11	✓	2+8		—	12
2	✓	2	12					
3	✓	2	13					
4	✓	2	14					
5	✓	1½	15	✓	1½			1½
6	✓	2	16					
7	✓	2					Total	4+1=5½
8	✓	2	25/50		50 %		D. Endhumathy 11/4	
9	✓	2						
10	✓	2						
Total		19½	Grand Total				Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		20	30				50
Marks Obtained		13½	11½				25

QAC Audit - Remarks

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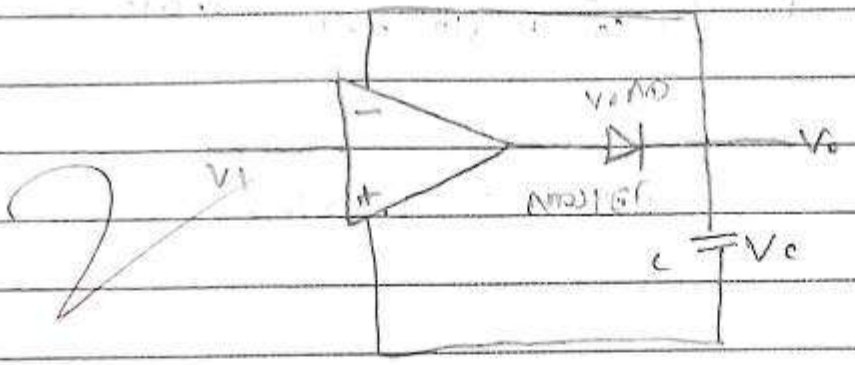
P. Shanmugapriya

Name and Signature of the QAC member

PART-A

1. Linear operations: Adder, subtractor, voltage to current converter current to voltage converter, instrumentation amplifiers, Anti log computation and power amplifier.
Non Linear operations: Rectifier, peak detector, clipper clamper Samples and hole circuits, log and antilog

2.



3. A first order active filter has one pole which is defined by a capacitor resistance pair. A second order filter has two capacitor resistor. This gives the filter frequency response steeper slope as it passband and stop band.

4. The voltage across the diode will be always proportional to the log of the current through when the diode is place frequency the input voltage inverting mode. The output voltage the negative. Log of the antilog.

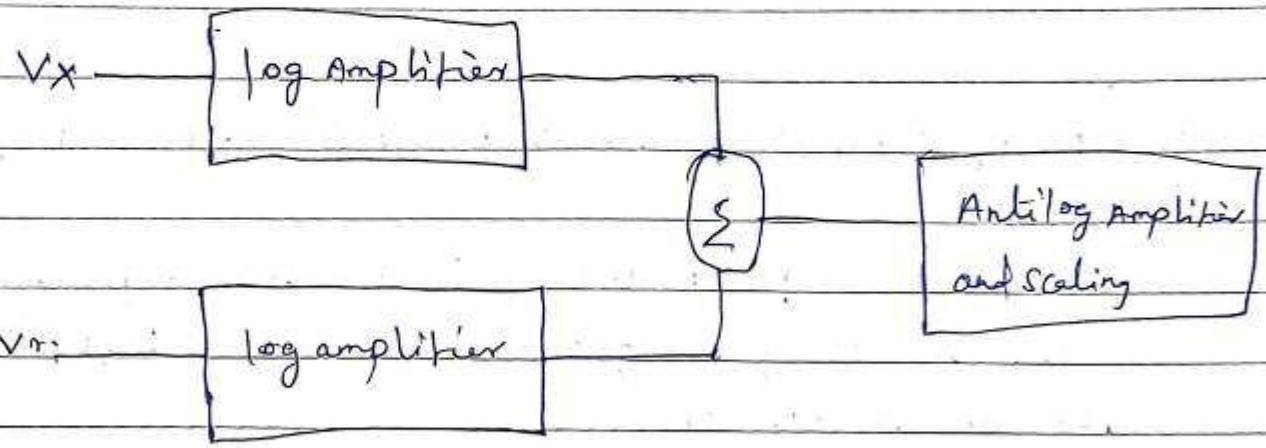
5. $f = 1KHZ$, $C = 0.1 M.F$ $R_1 = 10kohms$

$$f = \frac{1}{2\pi RC} = R = \frac{1}{2\pi (0.1kHz)(10kHz)} = 1.61k\Omega$$

$$A_o = 3 - \alpha = 3 - 1.414 = 1.5860$$

6. It is a multiplier circuit with two inputs being both positive and both negative then multiplier is a called four quadrant multiplier.

7.



8. $\Delta V_c (f_s - f_0) / 1KHz / V$ is dc control voltage V_c during lock of input signal frequency $f_s = 20KHz$, the free running frequency f_0 is 21 KHz and the V/F transfer coefficient of VCO is 1KHz/V $\Delta V_c (20 - 21) = (20KHz - 21KHz)$

$f_s = 20kHz$

$f_0 = 21 KHz$ $\Delta V_c = -1/A$ Vo

9. A voltage controlled oscillator or VCO is an electronic oscillation whose oscillator frequency depends on the input voltage. It is said to be when there is a charge voltage there is a charge in a frequency It is called VCO converter

part-B

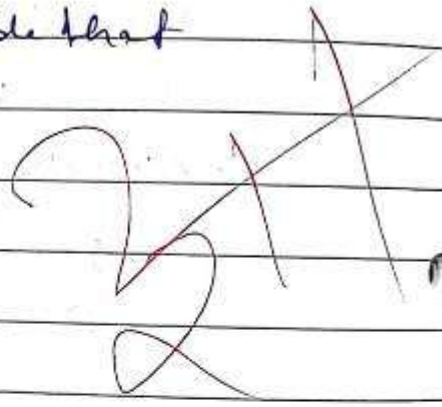
11. i) Briefly explain the working principle of schmitt trigger:

* If positive feedback is applied to the comparator amplifier the gain gets increased and higher than the normal circuit
* But is practical circuit the gain is exactly equal to one for long period.

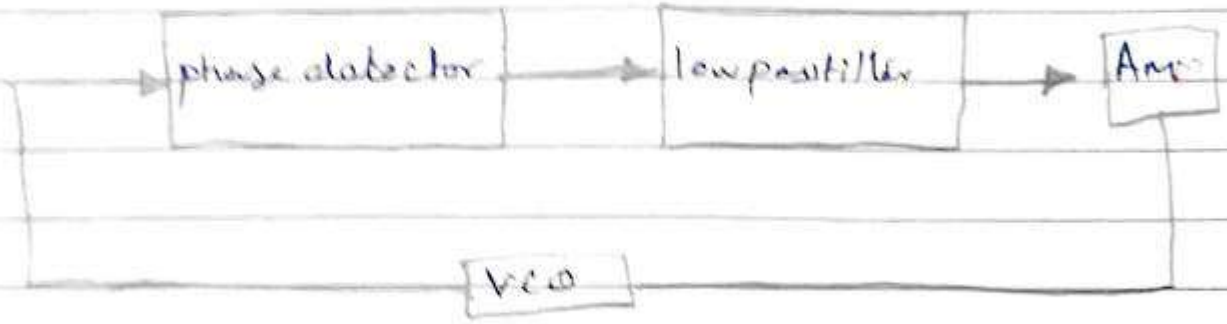
from the above diagram we can conclude that

$$V_o = \frac{V_{ref} R_1}{R_1 + R_3} + \frac{V_{sat} R_f}{R_1 + R_3}$$

V_T when circuit goes



10. basic block diagram of PLL :



15. Analysis:

$I_{C1} + I_{C2} + I_{C3}$ and $I_{C3} + I_{C4}$

$I_{C3} + I_{C4} + I_{C5}$

from:

$\Delta I = I_{C1} + I_{C2}$

$(I_{C1} + I_{C2}) - (I_{C3} + I_{C4})$

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	P GAYATHRI			Year / Semester / Section	II / IV / A
Batch No	242028	Date / Session	11.4.23 / FN	Department	ECE
Course Code	EC 3451	Course Title	Linear Integrated circuits		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used : 8
Name and Signature of the Invigilator with date	M.V. Sofiyalini 11/4/23.				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part - A must be written in pages 2-6 Answers for Part - B must be written from page 7 onwards.
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Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11		-	✓	4	4
2	✓	2	12					
3	✓	2	13	✓	9			9
4	✓	2	14					
5	✓	2	15					
6	✓	2	16	✓	1			1
7	✓	2					Total	14
8	✓	2						
9	✓	2						
10	✓	2						
Total		20	34/50 = 68% P. Gayathri Grand Total				D. Sindhumathy 11/5 Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		20	30				50
Marks Obtained		14	20				34

QAC Audit - Remarks

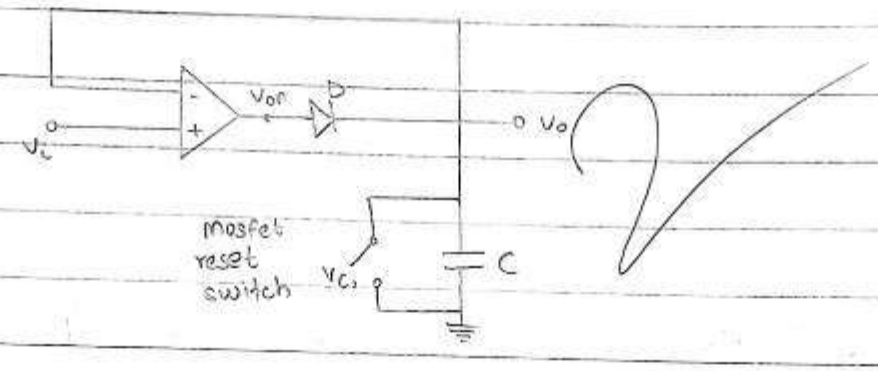
P. Shanmugapriya
Name and Signature of the QAC member

PART - A

(1) Linear operations : Adder, subtractor, instrumentation Amplifier, Power amplifier, V-I converter, I-V converter

Non-Linear operations : Rectifier, Peak detector, clipper, clamper, sample and hold circuits, log and antilog.

(2)



(3) A first order active filter has one pole which is defined by a capacitor / resistor. second order filter has two capacitors and resistors. This gives the filters frequency response a steeper slope as it transits from pass band to stop band.

(4) * The voltage across diode is proportional to log of current passes through it and when diode is placed in the feedback path of op-amp in

output voltage
inverting mode, input current is proportional to negative log of input current.

* Since input current is proportional to input voltage we can say that input current is proportional to negative log of input voltage.

(5) Given: $C = 0.1\,\mu F$ $R_i = 10K\Omega$ $f = 1KHz$

$$f = \frac{1}{2\pi RC}$$

$$10k = \frac{1}{2\pi (0.1\mu)(R)} \Rightarrow \boxed{R = 1.6K\Omega}$$

$$A_o = \beta - \alpha = \beta - 1.414 = 1.5860$$

$$A_o = 1 + \frac{R_f}{R_i} \Rightarrow R_i(A_o - 1) = R_f$$

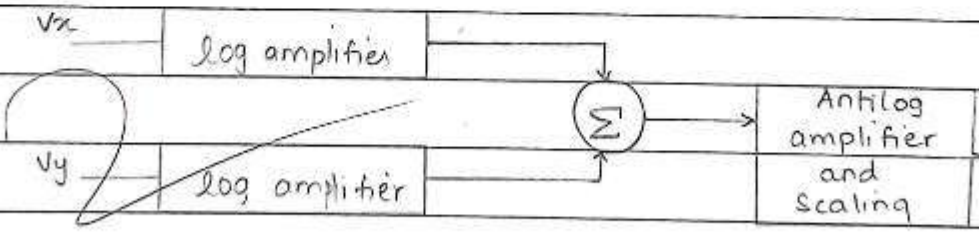
$$R_f = 10K(1.5860 - 1)$$

$$= 10K(0.5860)$$

$$\boxed{R_f = 5.86K\Omega}$$

(6) It is a multiplier with two inputs being both positive and both negative, then the multiplier is called four-quadrant multiplier.

(7)



(8) $$\Delta V_c = \frac{(f_s - f_o)}{K_{VCO}}$$

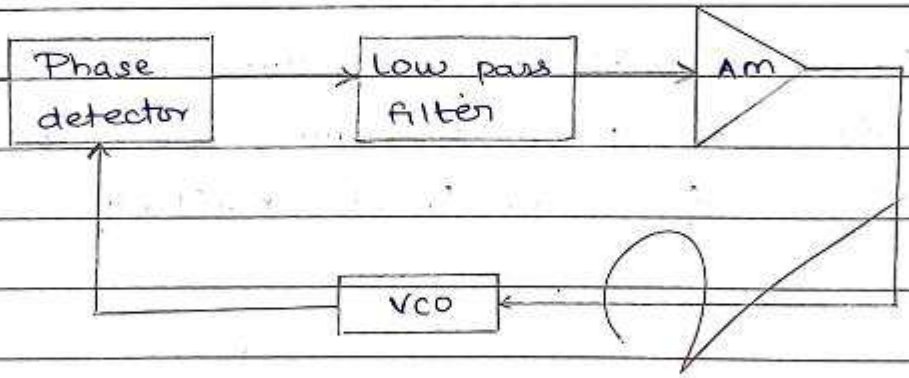
$$\Delta V_c = \frac{(20K - 21K)}{4KHz/V}$$

$$\boxed{\Delta V_c = -1/4\ V}$$

⇒ Note that the negative sign indicates that the control voltage need to be decreased to bring vco frequency into lock with input signal.

(9) "Voltage controlled oscillator" (or) "VCO" is an electronic oscillator in which oscillation frequency is controlled by input voltage i.e Change in input voltage results in change in output frequency Hence it is called **V-F** converter.

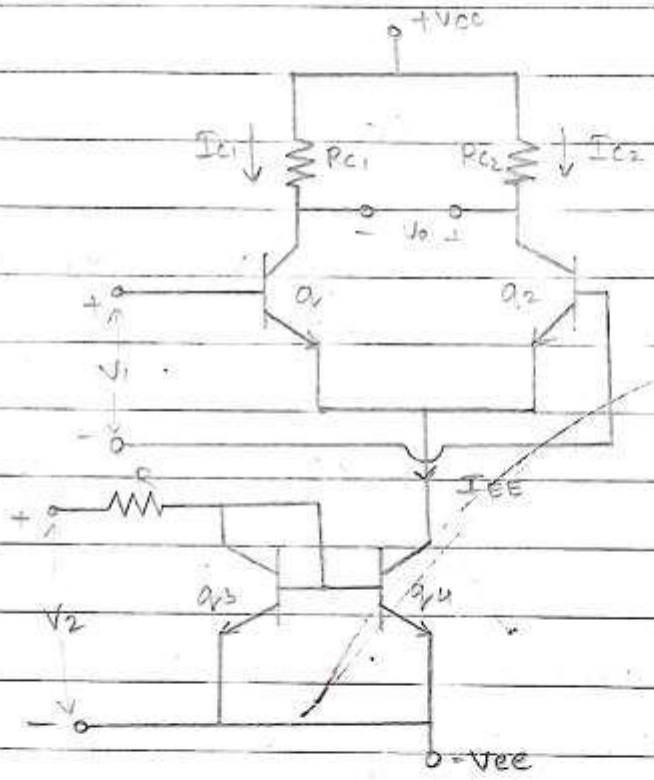
(10)



PART - B

(13) Analog multiplier using Emitter coupled Transistor

* A pair of transistor with emitter connected together forms basic multiplier



$$I_{C1} = \frac{I_{EE}}{1 + e^{-V_1/V_T}} \qquad I_{C2} = \frac{I_{EE}}{1 + e^{+V_1/V_T}}$$

$$\Delta I_C = (I_{C1} - I_{C2})$$

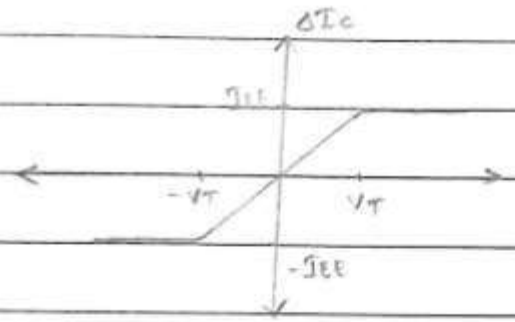
$$= \left[\frac{I_{EE}}{1 + e^{-V_1/V_T}} - \frac{I_{EE}}{1 + e^{+V_1/V_T}} \right]$$

$$\cdot \left(\frac{I_{EE}}{1 + e^{-V_1/V_T}} - \frac{I_{EE}}{1 + e^{+V_1/V_T}} \right)$$

$$\Delta I_c = I_{EE} \left[\frac{1}{1 + e^{-V_1/V_T}} - \frac{1}{1 + e^{+V_1/V_T}} \right]$$

$$\Delta I_c = I_{EE} \tanh \left(\frac{V_1}{2V_T} \right)$$

DC characteristic of emitter pair



Let $V_1 << V_T$ then,

$$\Delta I_c = I_{EE} \tanh \left(\frac{V_1}{2V_T} \right)$$

$$\Delta I_c = I_{EE} \left(\frac{V_1}{2V_T} \right) //$$

* if I_{EE} is proportional to V_2 then,

$$\Delta I_c = V_2 \left(\frac{V_1}{2V_T} \right)$$

* if $I_{EE} \propto K_0 (V_2 - V_{BE(ON)})$

$\Rightarrow K_0 \rightarrow$ scaling factor $(1/R)$

$$\Delta I_c = \frac{K_0 (V_2 - V_{BE(ON)}) V_1}{2 V_T} //$$

second condition

① $V_1 < 50\,mV$

② $V_2 > V_{BE(ON)}$

Drawback

* V_2 must be positive resulting in 2nd quadrant
* $\tanh\left(\frac{V_1}{2V_T}\right) \simeq \left(\frac{V_1}{2V_T}\right)$ with assumption $V_1 << V_T$.

At room temperature $V_T = 26\,mV$, V_1 must be very small inorder to satisfy the approximation

(11) ii) Given : $f_L = 400\,Hz$

$f_H = 2\,KHz$

for LPF, $f_H = 2\,KHz = 1/2\pi R_1 C_1$ where $C_1 = 0.01\,\mu F$ and $R_1 = 7.96\,K\Omega$

for HPF, $f_L = 400\,Hz = 1/2\pi R_2 C_2$ where $C_2 = 0.01\,\mu F$ and $R_2 = 39.78\,K\Omega$

$$Q = \frac{f_o}{BW}$$

WKT, $f_o = \sqrt{f_h f_l}$ and $BW = f_h - f_l$

$$\therefore Q = \frac{f_o}{BW} = \frac{\sqrt{f_h f_l}}{f_h - f_l}$$

$$= \frac{\sqrt{2K * 400}}{2K - 400}$$

$$= \frac{894.4}{1600}$$

$$\boxed{Q = 0.56}$$

for wide band pass filter Q is very small i.e, $Q < 10$.

PART - C

(16) VCO

Voltage controlled oscillator - It is also called as V-F converter because oscillation frequency is controlled by input voltage i.e change in input voltage results in change in output frequency Hence it is called V-F converter

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	T. Harinishri			Year / Semester / Section	II / IV / A
Batch No.	242041	Date / Session	11.4.23 / FN	Department	ECE
Course Code	EC3451	Course Title	linear Integrated circuits.		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used : 14
Name and Signature of the Invigilator with date	Dr.K.Rajkumar 11/4/23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	2	11					
2	✓	2	12	✓	7			7
3	✓	2	13	✓	10			10
4	✓	2	14					
5	✓	2	15	✓	10			10
6	✓	2	16					
7	✓	2					Total	27
8	✓	2	48/50		94%			
9	✓	2	T. Harinishri					
10	✓	2						
Total		20	Grand Total					

J. Eindhumathy 11/4 — Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	9	20	30				57
Marks Obtained		18	30				47

QAC Audit - Remarks

—

P. Shanmugapriya — Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	S. SIVASAKTHI			Year / Semester / Section	II / IV / B
Batch No.	242110	Date / Session	11/3/2023 FN	Department	ECE-B
Course Code	EC3451	Course Title	Linear Integrated Circuits		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used : 12
Name and Signature of the Invigilator with date	Dr. D. Ans Angel. 11/11.4.23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11	✓	4	✓	2	6
2	✓	2	12					
3	✓	2	13	✓	7			7
4	✓	2	14					
5	✓	2	15	✓	8			8
6	✓	2	16					
7	✓	2					Total	21
8	✓	2	41					
9	✓	2						
10	✓	2						
Total		20	Grand Total				Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		40	60				100
Marks Obtained		32	50				82

QAC Audit - Remarks

—

P. Shanmugapriya

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	Sanjay . C			Year / Semester / Section	II / IV / "B"
Batch No.	242098	Date / Session	11/4/23/FN	Department	ECE
Course Code	EC 3451	Course Title	Linear integrated Circuits		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used : 9
Name and Signature of the Invigilator with date	Dr. D. Ans Angel. 11.4.23.				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11	✓	10			
2	✓	2	12					
3	✓	2	13					
4	✓		14					
5	✓	2	15	✓	8			
6	✓	2	16					
7	✓	2					Total	
8	✓	1						
9	✓	2						
10	✓	2						
Total		17	Grand Total				Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		40	60				100
Marks Obtained		16	34				50

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	TC Vignesh.			Year / Semester / Section	II/IV/B.
Batch No.	247/22.	Date / Session	11/4/23 F.N	Department	ECE
Course Code	EC8453	Course Title	LINEAR INTREGRATED CIRCUITS.		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	Dr. D. Ans Angel. 11.4.23.				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part - A must be written in pages 2-6. Answers for Part - B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11	✓	0			0
2	✓	0	12					
3	✓	1	13					
4	✓	0	14	✓	0			0
5	✓	0	15					
6	✓	0	16	✓	0			0
7	✓	0					Total	0
8	✓	0						
9	✓	0						
10	✓	0						
Total		3	Grand Total		3		Name and Signature of the Examiner with date	15/4/23

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		40	60				100
Marks Obtained		0	0	-			00

QAC Audit - Remarks

Name and Signature of the QAC member

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-2023

Sem: ODD/ ~~EVEN~~

Year/ Sem/Sec	III / VI / A															Dept	ECE
			Test I					Test II					Test III				
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
CS3353	Ms. Shopna Rani	IA Test	64	53	11	18	55	64	61	3	24	58	63	61	2	34	43
		Make up Test	29	24	5	9	52	21	21	6	6	56	-	-	-	-	-
		Remarks	Students felt 'C' to learn to study and new concepts are difficult to learn.					Lack of preparation among students. Have to work hard.					Since Subject is program based, students felt difficult to attend all the questions				
EC3351	Ms. A. Shamin & Banu Dr. V. Mohan	IA Test	64	56	8	14	66	64	61	3	20	64	63	61	2	8	84
		Make up Test	22	12	10	2	45	23	14	9	8	47	-	-	-	-	-
		Remarks	—					—									
EC3352	Ms. P. Sivagama Sundari	IA Test	64	57	7	26	48	64	61	3	4	89	63	63	0	21	67
		Make up Test	33	31	2	12	58	7	5	2	2	43	-	-	-	-	-
		Remarks	Since subject is design based. Students feel difficult to understand new concept					—									
Signature of QAC members with name			P. Shanmugapriya, S. Prasanna Devi					P. Shanmugapriya, S. Prasanna Devi					P. Shanmugapriya, Dr S.A. Amsaveni				
Signature of HOD																	
QAC In-Charge			S.A.					S.A.					S.A.				
IQAC Co-ordinator																	
Principal																	

Year/ Sem/Sec: II / III / A

Sem: ODD/ EVEN

Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC3353	Ms S Hariprasath	IA Test	64	57	7	9	75	64	61	3	6	86	63	61	2	8	84
		Make up Test	16	9	7	0	56	9	6	3	0	67	-	-	-	-	-
		Remarks	—					—									
EC3354	Mr G Sivakumar	IA Test	64	56	8	25	48	64	61	3	14	73	63	62	1	20	67
		Make up Test	33	31	2	6	76	17	8	9	3	29	-	-	-	-	-
		Remarks	Few students are analytically poor, no good tough to study the paper					—									
MA3355	Dr. Geetha	IA Test	64	57	7	26	48	64	62	2	23	61	63	62	1	51	17
		Make up Test	33	29	4	0	88	25	20	5	10	40	-	-	-	-	-
		Remarks	Students felt Probability is difficult and not Study well					—					Lack of Preparation Have to work hard.				
Signature of QAC members with name			P Shanmugapriya, T. S. Prasanna Devi					P Shanmugapriya, T. S. Prasanna Devi					P Shanmugapriya, Dr. S. A. Arunmozhi				
Signature of HOD			M. Bhat					M. Bhat					M. Bhat				
QAC In-Charge			S. A. Arunmozhi					S. A. Arunmozhi					S. A. Arunmozhi				
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-2023

Sem: ODD/ ~~EVEN~~

Dept ECE

Year/ Sem/Sec II III B

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
CS3353	Ms Elankathir	IA Test	63	62	1	22	63	63	60	3	16	70	63	62	1	41	33
		Make up Test	23	18	5	2	70	19	18	1	6	63	-	-	-	-	-
		Remarks	—					—					G.Vijithi E.Elankathir All questions given in model are easy but subdivisions are more. So don't learn and answer				
EC3351	Ms.J.Eindhumathy	IA Test	63	63	0	19	70	63	63	0	12	81	63	63	0	14	78
		Make up Test	19	15	4	2	68	12	10	2	2	67	-	-	-	-	-
		Remarks	—					—									
EC3352	Dr.M.Santhi	IA Test	63	63	0	29	54	63	61	2	5	89	63	62	1	33	46
		Make up Test	29	29	0	16	45	7	7	0	3	57	-	-	-	-	-
		Remarks	Students didn't practice ~~well~~ well. -					—					Didn't Prepare well.				
Signature of QAC members with name			P Shanmugapriya S.Prasanna Parimala					P Shanmugapriya S.Prasanna Priyadharshini					P Shanmugapriya Dr.S.A.Anuradha				
Signature of HOD			M. Bhaskar					M. Bhaskar					M. Bhaskar				
QAC In-Charge			S.A.Angl					S.A.Angl					S.A.Angl				
IQAC Co-ordinator			CAA					CAA					CAA				
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-2023

Year/ Sem/Sec	III / B											Sem: ODD/ ~~EVEN~~				
												Dept	ECE			
			Test I					Test II					Test III			
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC3353	Dr.P.Shanmuggapriya	IA Test	63	62	1	21	65	63	60	3	11	78	63	63	0	12	81
		Make up Test	22	17	5	1	73	14	10	4	6	29	-	-	-	-	-
		Remarks	—					—									
EC3354	Dr.V.Mohan	IA Test	63	62	1	19	68	63	62	1	14	76	63	61	2	30	49
		Make up Test	20	19	1	3	80	15	9	6	4	48	-	-	-	-	-
		Remarks	—					—					Some students got confused b/w 3 transformers & their properties.				
MA3355	Dr.M.Subhashini	IA Test	63	61	2	19	67	61	59	4	17	67	63	63	0	45	29
		Make up Test	21	19	2	2	81	21	19	2	14	24	-	-	-	-	-
		Remarks	—					—					They did not study well and didn't write Part B questions.				
Signature of QAC members with name			P.Shanmuggapriya S.Prassanna Kumar					P.Shanmuggapriya S.Prassanna Kumar					P.Shanmuggapriya Dr.S.A.Arunmozhi				
Signature of HOD			M. Brd					M. Brd					M. Brd				
QAC In-Charge			S.A.					S.A.					S.A.				
IQAC Co-ordinator																	
Principal																	

Year/ Sem/Sec: III / V / A | Sem: ODD/ ~~EVEN~~ | Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC8073	Ms M Anthuvan Lydia	IA Test	55	55	0	2	96	55	54	1	11	78	55	51	4	14	67
		Make up Test	2	2	0	0	100	12	12	0	0	100					
		Remarks	—					—					—				
EC8501	Ms P Shanmugapriya	IA Test	55	54	1	11	78	55	52	3	9	78	55	52	3	20	~~58~~
		Make up Test	12	10	2	1	75	12	9	3	5	33					
		Remarks	—					—					Students lack in solving problems in unit-5 They didn't attend part-A theory question.				
EC8551	Ms.S Kiruthiga	IA Test	55	54	1	25	53	~~55~~	~~52~~	3	5	85	55	52	3	8	80
		Make up Test	26	26	0	3	~~88~~	8	8	0	0	100					
		Remarks	Since the paper is theory paper, need more time to write the content					—					—				
Signature of QAC members with name			P Shanmugapriya					P Shanmugapriya					P Shanmugapriya				
Signature of HOD																	
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-2023

Sem: ODD/ ~~EVEN~~

Dept: ECE

Year/ Sem/Sec: III / V / A

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC8552	Ms A. Sheelavathi	IA Test	55	55	0	13	76	55	54	1	5	89	55	50	5	14	65
		Make up Test	13	12	1	0	92	6	3	3	0	50					
		Remarks	—					—					—				
EC8553	Mr. G. Sivakannu	IA Test	55	55	0	17	69	55	54	1	15	71	55	53	2	26	49
		Make up Test	17	15	2	7	47	16	12	4	6	38					
		Remarks	—					—					Students lack in solving problems				
CMD551	Dr. Preethi Elizabeth	IA Test	55	55	0	4	93	55	54	1	1	96	55	53	2	4	89
		Make up Test	4	4	0	0	100	2	2	0	0	100					
		Remarks	—					—					—				
Signature of QAC members with name			P. Shanmugapriya, S. Prasanna, Principal					P. Shanmugapriya, S. Prasanna, Principal					P. Shanmugapriya, S. Prasanna, Principal				
Signature of HOD			M.S.B.					M.S.B.					M.S.B.				
QAC In-Charge			S.A.					S.A.					S.A.				
IQAC Co-ordinator																	
Principal																	

Year/ Sem/Sec: III / V / B

Sem: ODD/ ~~EVEN~~

Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC8073	Dr. M Barithra Begum	IA Test	53	52	1	3	92	53	53	0	3	94	53	49	4	4	85
		Make up Test	4	3	1	0	75	3	2	1	0	67					
		Remarks	—					—					—				
EC8501	Dr. S Rajeswari	IA Test	53	53	0	6	89	53	53	0	15	72	53	51	2	24	51
		Make up Test	6	4	2	3	17	15	13	2	2	73					
		Remarks	—					—					Students didn't prepared well for problem type questions				
EC8551	Mr. M Mahendran	IA Test	53	53	0	6	89	53	53	0	1	98	53	53	0	11	79
		Make up Test	6	5	1	0	83	1	1	0	0	100					
		Remarks	—					—					—				
Signature of QAC members with name			P. Shanmugapriya, S. Prassanna					P. Shanmugapriya, S. Prassanna					P. Shanmugapriya, S. Prassanna				
Signature of HOD			H. Siraj					H. Siraj					H. Siraj				
QAC In-Charge			S. N. A					S. N. A					S. N. A				
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-2023

Sem: ODD/ ~~EVEN~~

Dept ECE

Year/ Sem/Sec III V B

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC8552	Ms. Sathiya	IA Test	53	53	0	15	72	53	53	0	8	85	53	52	1	27	47
		Make up Test	15	15	0	0	100	8	8	0	2	75					
		Remarks	—					—					Simple They need to study more memory lenghts that they have to understand & need more deep learning				
EC8553	Dr.M.Padmaa	IA Test	53	52	1	24	53	53	53	0	21	60	53	52	1	18	64
		Make up Test	25	22	3	9	52	21	20	1	0	95					
		Remarks	Since DTSP is problem related paper, Student need more practice					—					—				
OMD551	Dr Preethi Elizabeth ← Ms. Kesavan	IA Test	53	51	2	1	94	53	52	1	2	94	53	50	3	1	92
		Make up Test	3	2	1	0	67	3	3	0	0	100					
		Remarks	—					—					—				
Signature of QAC members with name			P.Shanmugapriya & Prasanna Kumar					P.Shanmugapriya & Prasanna Kumar					P.Shanmugapriya & Prasanna Kumar				
Signature of HOD			M. Siva					M. Siva					M. Siva				
QAC In-Charge			S.A.R					S.A.R					S.A.R				
IQAC Co-ordinator			CAA					CAA					CAA				
Principal																	

Year/ Semester: IV / VII / A

Sem: ODD/ ~~EVEN~~

Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC8701	Dr. S.A. Annamalai	IA Test	60	55	5	9	77	60	51	3	11	77	60	57	3	4	88
		Make up Test	14	13	1	0	93	14	10	4	0	71					
		Remarks	—					—					—				
EC8702	Dr. C. Vennila	IA Test	60	45	15	2	72	60	56	4	2	90	60	55	5	0	92
		Make up Test	17	16	1	0	94	6	2	4	0	33					
		Remarks	—					—					—				
EC8751	Mr. M. Mahendran	IA Test	60	59	1	5	90	60	58	2	4	90	60	53	7	11	70
		Make up Test	6	5	1	0	83	6	4	2	3	17					
		Remarks	—					—					—				
Signature of QAC members with name			P. Shanmugapriya, S. Prasanna Perumal					P. Shanmugapriya, S. Prasanna Perumal					P. Shanmugapriya, S. Prasanna Perumal				
Signature of HOD			M. Bha					M. Bha					M. Bha				
QAC In-Charge			S.A. Ar					S.A. Ar					S.A. Ar				
IQAC Co-ordinator			CAA					CAA					CAA				
Principal																	

Year/ Sem/Sec: IV / VII / A

Sem: ODD/ ~~EVEN~~

Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC8791	Ms.J.Pandhumathy	IA Test	60	58	2	1	95	60	57	3	3	90	60	59	1	0	98
		Make up Test	3	2	1	0	67	6	4	2	1	50					
		Remarks	—					—					—				
GE8076	Dr.S.Rajeswari	IA Test	60	58	2	2	93	60	56	4	4	87	60	53	7	5	80
		Make up Test	4	3	1	0	75	8	5	3	0	63					
		Remarks	—					—					—				
01C751	Dr.M.Padmaa	IA Test	60	57	3	4	88	60	57	3	2	92	60	56	4	1	92
		Make up Test	7	3	4	0	43	5	3	2	1	40					
		Remarks	—					—					—				

Signature of QAC members with name	P.Shanmugapriya	P.Shanmugapriya	P.Shanmugapriya
Signature of HOD			
QAC In-Charge			
IQAC Co-ordinator			
Principal			

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022 - 2023

Sem: ODD/ EVEN

Year/ Sem/Sec: II / IV / A

Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC3401	Dr.S.Rajeswari	IA Test	63	61	2	29	51	63	62	1	9	84	63	61	2	28	52
		Make up Test	31	27	4	0	87	10	6	4	4	20	-	-	-	-	-
		Remarks	Students didn't prepare well.					-					Students didn't take up this test seriously. They were writing records & observations				
EC3451	Ms.J.Eindhuraj	IA Test	63	62	1	1	97	63	62	1	0	98	63	59	4	12	75
		Make up Test	2	0	2	0	0	-	-	-	-	-	-	-	-	-	-
		Remarks	-					-									
EC3452	Dr.V.Mohan	IA Test	63	62	1	1	97	63	62	1	1	97	63	58	5	15	68
		Make up Test	2	0	2	0	0	2	0	2	0	0	-	-	-	-	-
		Remarks	-					-					-				
Signature of QAC members with name			P.Shanmugapriya, A.Gopikrishnan					P.Shanmugapriya, A.Gopikrishnan					P.Shanmugapriya, A.Gopikrishnan				
Signature of HOD																	
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-2023

Sem: ~~ODD~~/ EVEN

Year/ Sem/Sec: II / IV A

Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC3491	Dr.M.Basiltha Begum	IA Test	63	60	3	0	95	63	61	2	6	87	63	60	3	16	70
		Make up Test	3	2	1	0	67	8	7	01	7	0	-	-	-	-	-
		Remarks	-					-					-				
EC3492	Mr.G.Sivakannu	IA Test	63	62	1	20	67	63	61	2	15	73	63	56	7	21	56
		Make up Test	21	9	12	5	19	17	15	2	12	18	-	-	-	-	-
		Remarks	-					-					Students felt difficult to study 1½ portion at the last moment for exam				
GE3451	Dr.G.Thulasi	IA Test	63	62	1	33	46	63	60	3	22	60	63	49	14	38	17
		Make up Test	34	32	2	13	56	25	24	1	23	4	-	-	-	-	-
		Remarks	Part B answers are not explained in detail					-					Part B questions not prepared well.				
Signature of QAC members with name			P.Shanmugapriya A.Prof	A.Gopikrishnan				P.Shanmugapriya A.Prof	A.Gopikrishnan				P.Shanmugapriya A.Prof	A.Gopikrishnan			
Signature of HOD			M.Shd					M.Shd					M.Shd				
QAC In-Charge			S.A.Azhagu					S.A.Azhagu					S.A.Azhagu				
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-2023

Year/ Sem/Sec: II / IV / B

Sem: ODD/ EVEN

Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC3401	Mr.M.Mahendran	IA Test	63	61	2	21	63	63	60	3	11	48	63	61	2	28	52
		Make up Test	23	22	1	4	78	14	14	0	7	50	-	-	-	-	-
		Remarks	-					-					Portion for this test is very heavy. student didn't take seriously because this marks is not considered.				
EC3451	Dr.M.Padmaa	IA Test	63	63	0	8	87	63	63	0	4	94	63	60	3	16	70
		Make up Test	8	8	0	1	88	4	3	1	3	0	-	-	-	-	-
		Remarks	-					-									
EC3452	Dr.P.Sharmyaapriya	IA Test	63	63	0	5	92	63	62	1	5	90	63	61	2	45	25
		Make up Test	5	5	0	4	20	6	6	0	6	0	-	-	-	-	-
		Remarks	-					-					Students didn't take this test as serious/ Practice one since, this test marks will not be considered for internal				
Signature of QAC members with name			P.Sharmyaapriya A.Prof. A.Supplementary					P.Sharmyaapriya A.Prof. A.Supplementary					P. Sharmyaapriya A.Prof. A.Supplementary				
Signature of HOD																	
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2020-2023

Sem: ODD/ EVEN

Dept ECE

Year/ Sem/Sec II | IV | B

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC3491	Dr.S.Arumugam	IA Test	63	63	0	4	94	63	63	0	9	86	63	60	3	20	63
		Make up Test	4	4	0	1	75	9	9	0	7	22	-	-	-	-	-
		Remarks	-					-					-				
EC3492	Dr.V.Mohan	IA Test	63	63	0	5	92	63	62	1	5	90	63	58	5	21	59
		Make up Test	5	5	0	3	40	6	4	2	1	50	-	-	-	-	-
		Remarks						-					Lack of practice in solving problems.				
GE3451	Mr.A.Lakshmanan	IA Test	63	62	1	33	46	63	63	0	19	70	63	58	5	54	6
		Make up Test	34	30	4	14	47	19	19	0	19	0	-	-	-	-	-
		Remarks	Lack of preparation advised to prepare well.					-					Lack of preparation. Due to Technical lab practical				
Signature of QAC members with name			P.Shanmugapriya A.Prof	A.Sapthagirivasan A.Prof				P.Shanmugapriya A.Prof	A.Sapthagirivasan A.Prof				P.Shanmugapriya A.Prof	A.Sapthagirivasan A.Prof			
Signature of HOD			H.Shaji					H.Shaji					H.Shaji				
QAC In-Charge			S.A.A					S.A.A					S.A.A				
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022 - 2023

Sem: ODD/ EVEN

Dept ECE

Year/ Sem/Sec	III / VI / A																			
Subject Code	Name of faculty		Test I					Test II					Test III							
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %			
EC8691	Ms. M. Anthuvan Lydia	IA Test	55	53	2	14	65	55	51	4	4	80	55	47	8	9	69			
		Make up Test	19	19	0	9	53	2					-	-	-	-	-			
		Remarks	-					-					-							
GE8076	Dr. S. Rajeswari	IA Test	55	53	2	8	82	55	54	1	30	44	55	51	4	30	38			
		Make up Test	10	9	1	0	90	31	29	2	12	55	-	-	-	-	-			
		Remarks	-					Among this 50% of the students are not eligible for writing Unit test-2 exam. So they should prepare well					50% of the students not eligible for CAT exam. So they should prepare well							
MA8591	Mr. K. Arumporul	IA Test	55	53	2	0	96	55	53	2	4	89	55	52	3	7	82			
		Make up Test	2	2	0	1	50	6	5	1	4	17	-	-	-	-	-			
		Remarks	-					-					-							
Signature of QAC members with name			P. Sharmugapriya A-Expert					P. Sharmugapriya A-Expert					P. Sharmugapriya A-Expert							
Signature of HOD			H.O.D					H.O.D					H.O.D							
QAC In-Charge			S.A.A					S.A.A					S.A.A							
IQAC Co-ordinator																				
Principal																				

Saranathan College of Engineering
QAC - Audit Report
Academic Year : 2022 - 2023

Sem: ODD/ EVEN

Dept: ECE

Year/ Sem/Sec: III / VI / A

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC8095	Dr. M. Santhi	IA Test	55	53	2	13	83	55	54	1	18	65	55	50	5	23	49
		Make up Test	15	15	0	2	87	19	18	1	8	53	-	-	-	-	-
		Remarks	-					-					Students didn't prepare well. They were not serious about IA 3.				
EC8651	Dr. M. Basilla Begum	IA Test	55	52	3	0	95	55	55	0	1	98	55	51	4	7	80
		Make up Test	3	2	1	1	33	1	1	0	1	0	-	-	-	-	-
		Remarks	-					-					-				
EC8652	Dr. N. Preethi Elizabeth	IA Test	55	53	2	2	93	55	54	1	2	95	55	50	5	4	84
		Make up Test	4	3	1	0	75	3	3	0	0	100	-	-	-	-	-
		Remarks	-					-					-				
Signature of QAC members with name			P Soundarapandian, A. Gopi Krishnan					P Soundarapandian, A. Gopikrishnan					P Soundarapandian, A. Gopikrishnan				
Signature of HOD																	
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-2023

Year/ Sem/Sec: III | VI | B

Sem: ODD/ EVEN

Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
EC8691	Mr.K.Malairaj	IA Test	53	52	1	6	89	53	51	2	4	89	53	46	5	15	61
		Make up Test	7	7	0	0	100						-	-	-	-	-
		Remarks	—					—					—				
GE8076	Dr.S.A.Alexander	IA Test	53	51	2	3	91	53	53	0	8	85	53	42	11	12	57
		Make up Test	5	5	0	0	100	8	8	0	1	88	-	-	-	-	-
		Remarks	—					—					Students did not perform well for answering part A				
MG8591	Mr.S.Saravanan	IA Test	53	53	0	5	91	53	51	2	1	94	53	50	3	8	79
		Make up Test	5	4	1	0	80	3	3	0	1	67	-	-	-	-	-
		Remarks	—					—					—				
Signature of QAC members with name			P.Shanmugapriya A.Professor					P.Shanmugapriya A.Professor					P.Shanmugapriya A.Professor				
Signature of HOD																	
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-2023

Sem: ODD/ EVEN

Year/ Sem/Sec: III / VI / B

Dept: ECE

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
E8095	Dr.C.Vennila	IA Test	53	49	4	6	81	53	52	1	3	92	53	52	1	15	70
		Make up Test	10	10	0	0	100	4	4	0	2	50	-	-	-	-	-
		Remarks	-					-					-				
EC8651	Dr.P.Shanmugapriya	IA Test	53	51	2	3	91	53	51	2	7	83	53	51	2	6	85
		Make up Test	5	5	0	0	100	9	9	0	7	22	-	-	-	-	-
		Remarks	-					-					-				
E8652	Ms.S.Kiruthiga	IA Test	53	48	5	2	87	53	52	1	1	96	53	52	1	5	89
		Make up Test	7	6	1	1	71	2	2	0	0	100	-	-	-	-	-
		Remarks	-					-					-				
Signature of QAC members with name			P.Shanmugapriya A.Prof & IQAC Member					P.Shanmugapriya A.Prof & IQAC Member					P.Shanmugapriya A.Prof & IQAC Member				
Signature of HOD			H.O.D					H.O.D					H.O.D				
QAC In-Charge			S.A.Angel					S.A.Angel					S.A.Angel				
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8701 ANTENNAS AND MICROWAVE ENGINEERING	NBA Code	C401
SEMESTER / YEAR	VII sem / IV Year	Academic year	2022-2023
COORDINATOR	Dr.S.A.Arunmozhi / Dr.K.Malaisamy		
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C401.1	14.17	78	52.47	100	61.97	2
C401.2	29.17	78	58.47	100	66.77	2
C401.3	35	78	60.8	85.56	65.75	2
C401.4	35.83	78	61.13	84.72	65.85	2
C401.5	55	78	68.8	82.22	71.48	2
C401.6	99.17	78	86.47	100	89.17	2

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C401.1	3	3	3	2	3	2		1	2	2	3	3	3	3
C401.2	3	3	3	2	3	2		1	2	2	3	3	3	3
C401.3	3	3	3	2	3	2		1	2	2	3	3	3	3
C401.4	3	3	3	2	3	2		1	2	2	3	3	3	3
C401.5	3	3	3	2	3	2		1	2	2	3	3	3	3
C401.6	3	3	3	2	3	2		1	2	2	3	3	3	3
LEVEL	3	3	3	2	3	2		1	2	2	3	3	3	3

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C401.1	2.00	2.00	2.00	1.33	2.00	1.33		0.67	1.33	1.33	2.00	2.00	2.00	2.00
C401.2	2.00	2.00	2.00	1.33	2.00	1.33		0.67	1.33	1.33	2.00	2.00	2.00	2.00
C401.3	2.00	2.00	2.00	1.33	2.00	1.33		0.67	1.33	1.33	2.00	2.00	2.00	2.00
C401.4	2.00	2.00	2.00	1.33	2.00	1.33		0.67	1.33	1.33	2.00	2.00	2.00	2.00
C401.5	2.00	2.00	2.00	1.33	2.00	1.33		0.67	1.33	1.33	2.00	2.00	2.00	2.00
C401.6	2.00	2.00	2.00	1.33	2.00	1.33		0.67	1.33	1.33	2.00	2.00	2.00	2.00
Level	2.00	2.00	2.00	1.33	2.00	1.33		0.67	1.33	1.33	2.00	2.00	2.00	2.00

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C401	3	3	3	2	3	2		1	2	2	3	3	3	3
Attainment	2.00	2.00	2.00	1.33	2.00	1.33		0.67	1.33	1.33	2.00	2.00	2.00	2.00

HOD/ECE

Saranathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8751 OPTICAL COMMUNICATION	NBA Code	C402
SEMESTER / YEAR	VII sem / IV Year	Academic year	2022-2023
COORDINATOR	Mr.M.Mahendran / Dr.C.Vennila		
CO Attainment Level: 1 - (0% - 60%), 2- (61% -90%), 3-(91% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C402.1	46.67	83	68.47	100	74.77	2
C402.2	51.67	83	70.47	100	76.37	2
C402.3	70	83	77.8	85.28	79.3	2
C402.4	40.83	83	66.13	85.83	70.07	2
C402.5	60.83	83	74.13	83.61	76.03	2
C402.6	0	83	49.8	100	59.84	1

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C402.1	2	2	1	1	1				1	1	1	1	2	2
C402.2	2	2	1	1	1	1	1		1	1	1	1	2	2
C402.3	2	2	1	1	1	1	1		1	1	1	1	2	2
C402.4	2	2	1	1	1	1	1		1	1	1	1	2	2
C402.5	2	2	1	1	1	1		1	1	1	1	1	2	2
C402.6	2	2	1	1	1	1	1	1	1	1	1	1	2	2
LEVEL	2	2	1	1	1	1	1	1	1	1	1	1	2	2

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C402.1	1.33	1.33	0.67	0.67	0.67				0.67	0.67	0.67	0.67	1.33	1.33
C402.2	1.33	1.33	0.67	0.67	0.67	0.67	0.67		0.67	0.67	0.67	0.67	1.33	1.33
C402.3	1.33	1.33	0.67	0.67	0.67	0.67	0.67		0.67	0.67	0.67	0.67	1.33	1.33
C402.4	1.33	1.33	0.67	0.67	0.67	0.67	0.67		0.67	0.67	0.67	0.67	1.33	1.33
C402.5	1.33	1.33	0.67	0.67	0.67	0.67		0.67	0.67	0.67	0.67	0.67	1.33	1.33
C402.6	0.67	0.67	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.67	0.67
Level	1.22	1.22	0.61	0.61	0.61	0.60	0.58	0.50	0.61	0.61	0.61	0.61	1.22	1.22

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C402	2	2	1	1	1	1	1	1	1	1	1	1	2	2
Attainment	1.22	1.22	0.61	0.61	0.61	0.60	0.58	0.50	0.61	0.61	0.61	0.61	1.22	1.22

HOD/ECE

Saranathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8791 EMBEDDED AND REAL TIME SYSTEMS	NBA Code	C403
SEMESTER / YEAR	VII sem / IV Year	Academic year	2022-2023
COORDINATOR	Ms.J Eindhumathy / Ms.B Divya		
CO Attainment Level: 1 - (0%- 60%), 2- (61%-90%), 3-(91% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C403.1	65.83	90	80.33	100	84.27	2
C403.2	37.5	90	69	100	75.2	2
C403.3	61.67	90	78.67	84.44	79.82	2
C403.4	73.33	90	83.33	81.39	82.94	2
C403.5	74.17	90	83.67	80.83	83.1	2
C403.6	68.33	90	81.33	100	85.07	2

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C403.1	2	2	1	1	1				1	1	1	1	2	2
C403.2	2	2	1	1	1				1	1	1	1	2	2
C403.3	2	2	1	1	1				1	1	1	1	2	2
C403.4	2	2	1	1	1				1	1	1	1	2	2
C403.5	2	2	1	1	1				1	1	1	1	2	2
C403.6	2	2	1	1	1				1	1	1	1	2	2
LEVEL	2	2	1	1	1				1	1	1	1	2	2

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C403.1	1.33	1.33	0.67	0.67	0.67				0.67	0.67	0.67	0.67	1.33	1.33
C403.2	1.33	1.33	0.67	0.67	0.67				0.67	0.67	0.67	0.67	1.33	1.33
C403.3	1.33	1.33	0.67	0.67	0.67				0.67	0.67	0.67	0.67	1.33	1.33
C403.4	1.33	1.33	0.67	0.67	0.67				0.67	0.67	0.67	0.67	1.33	1.33
C403.5	1.33	1.33	0.67	0.67	0.67				0.67	0.67	0.67	0.67	1.33	1.33
C403.6	1.33	1.33	0.67	0.67	0.67				0.67	0.67	0.67	0.67	1.33	1.33
Level	1.33	1.33	0.67	0.67	0.67				0.67	0.67	0.67	0.67	1.33	1.33

Attainmrat of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C403	2	2	1	1	1				1	1	1	1	2	2
Attainment	1.33	1.33	0.67	0.67	0.67				0.67	0.67	0.67	0.67	1.33	1.33

HOD/ECE

Saranathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8702 AD HOC AND WIRELESS SENSOR NETWORKS	NBA Code	C404
SEMESTER / YEAR	VII sem / IV Year	Academic year	2022-2023
COORDINATOR	Dr.C.Vennila / Ms.S.Kiruthiga		
CO Attainment Level: 1 - (0% - 60%), 2- (61%-90%), 3-(91% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C404.1	68.33	78	74.13	100	79.31	2
C404.2	70.83	78	75.13	100	80.11	2
C404.3	69.17	78	74.47	83.06	76.19	2
C404.4	81.67	78	79.47	83.06	80.19	2
C404.5	70.83	78	75.13	81.39	76.38	2
C404.6	0	78	46.8	100	57.44	1

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C404.1	2	2	1	1	1	1	1	1		1	1	1	2	
C404.2	2	2	1	1	1	1	1	1		1	1	1	2	
C404.3	2	2	1	1	1	1	1	1		1	1	1	2	
C404.4	2	2	1	1	1	1	1	1		1	1	1	2	
C404.5	2	2	1	1	1	1	1	1		1	1	1	2	
C404.6	2	2	1	1	1	1	1	1		1	1	1	2	
LEVEL	2	2	1	1	1	1	1	1		1	1	1	2	

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C404.1	1.33	1.33	0.67	0.67	0.67	0.67	0.67	0.67		0.67	0.67	0.67	1.33	
C404.2	1.33	1.33	0.67	0.67	0.67	0.67	0.67	0.67		0.67	0.67	0.67	1.33	
C404.3	1.33	1.33	0.67	0.67	0.67	0.67	0.67	0.67		0.67	0.67	0.67	1.33	
C404.4	1.33	1.33	0.67	0.67	0.67	0.67	0.67	0.67		0.67	0.67	0.67	1.33	
C404.5	1.33	1.33	0.67	0.67	0.67	0.67	0.67	0.67		0.67	0.67	0.67	1.33	
C404.6	0.67	0.67	0.33	0.33	0.33	0.33	0.33	0.33		0.33	0.33	0.33	0.67	
Level	1.22	1.22	0.61	0.61	0.61	0.61	0.61	0.61		0.61	0.61	0.61	1.22	

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C404	2	2	1	1	1	1	1	1		1	1	1	2	
Attainment	1.22	1.22	0.61	0.61	0.61	0.61	0.61	0.61		0.61	0.61	0.61	1.22	

HOD/ECE

Saranathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	OIC751 TRANSDUCER ENGINEERING	NBA Code	C406OE2
SEMESTER / YEAR	VII sem / IV Year	Academic year	2022-2023
COORDINATOR	Dr.M.Padmaa / Dr.M.Baritha Begum		
CO Attainment Level: 1 - (0% - 60%), 2- (61%-90%), 3-(91% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C406OE2.1	77.5	99	90.4	100	92.32	3
C406OE2.2	61.67	99	84.07	100	87.25	2
C406OE2.3	78.33	99	90.73	84.17	89.42	2
C406OE2.4	75	99	89.4	78.89	87.3	2
C406OE2.5	54.17	99	81.07	87.5	82.35	2
C406OE2.6	29.17	99	71.07	100	76.85	2

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C406OE2.1	2	2	2	1	1						3	2	1	1
C406OE2.2	2	2	2	1	1						3	2	1	1
C406OE2.3	2	2	2	1	1						3	2	1	1
C406OE2.4	2	2	2	1	1						3	2	1	1
C406OE2.5	2	2	2	1	1						3	2	1	1
C406OE2.6	2	2	2	1	1						3	2	1	1
LEVEL	2	2	2	1	1						3	2	1	1

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C406OE2.1	2.00	2.00	2.00	1.00	1.00						3.00	2.00	1.00	1.00
C406OE2.2	1.33	1.33	1.33	0.67	0.67						2.00	1.33	0.67	0.67
C406OE2.3	1.33	1.33	1.33	0.67	0.67						2.00	1.33	0.67	0.67
C406OE2.4	1.33	1.33	1.33	0.67	0.67						2.00	1.33	0.67	0.67
C406OE2.5	1.33	1.33	1.33	0.67	0.67						2.00	1.33	0.67	0.67
C406OE2.6	1.33	1.33	1.33	0.67	0.67						2.00	1.33	0.67	0.67
Level	1.44	1.44	1.44	0.72	0.72						2.17	1.44	0.72	0.72

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C406OE2	2	2	2	1	1						3	2	1	1
Attainment	1.44	1.44	1.44	0.72	0.72						2.17	1.44	0.72	0.72

HOD/ECE

Saranathan College of Engineering
Department of Electronics and Communication Engineering

COURSE CODE /	EC8711 EMBEDDED LAB	NBA Code	C407
SEMESTER / YEAR	VII sem/ IV	Academic year	2022-2023
COORDINATOR	B.DIVYA, J.EINDHUMATHY	Credits	2
Level 1 (0-69%), Level 2 (70-79%) and Level 3 (above 80%)			

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT)	CO-Attainment University (CO-UNI)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI)	Target	CO Attainment Level
C407.1	100.00	100.00	100.00	80	3
C407.2	100.00	100.00	100.00	80	3
C407.3	100.00	100.00	100.00	80	3
C407.4	100.00	100.00	100.00	80	3
C407.5	100.00	100.00	100.00	80	3
C407.6	100.00	100.00	100.00	80	3

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C407.1	2	1	1	1	-	-	-	-	-	-	-	-	2	1
C407.2	2	1	1	1	-	-	-	-	-	-	-	-	2	1
C407.3	2	1	1	1	-	-	-	-	-	-	-	-	2	1
C407.4	2	1	1	1	-	-	-	-	-	-	-	-	2	1
C407.5	2	1	1	1	-	-	-	-	-	-	-	-	2	1
C407.6	2	1	1	1	-	-	-	-	-	-	-	-	2	1
LEVEL	2	1	1	1	-	-	-	-	-	-	-	-	2	1

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C407.1	2.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	2.00	1.00
C407.2	2.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	2.00	1.00
C407.3	2.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	2.00	1.00
C407.4	2.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	2.00	1.00
C407.5	2.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	2.00	1.00
C407.6	2.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	2.00	1.00
Level	2.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	2.00	1.00

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C407	2	1	1	1	-	-	-	-	-	-	-	-	2	1
Attainment	2.00	1.00	1.00	1.00	-	-	-	-	-	-	-	-	2.00	1.00

HOD/ECE

Sarunathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8761 ADVANCED COMMUNICATION LAB	NBA Code	C408
SEMESTER / YEAR	VII / IV	Academic year	2022-2023
COORDINATOR	DR.S.A.ARUNMOZHI / G.SIVAKANNU	Credits	2

Level 1 (0-69%), Level 2 (70-79%) and Level 3 (above 80%)

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT)	CO-Attainment University (CO-UNI)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI)	Target	CO Attainment Level
C408.1	100.00	99.16	99.50	80	3
C408.2	100.00	99.16	99.50	80	3
C408.3	100.00	99.16	99.50	80	3
C408.4	100.00	99.16	99.50	80	3
C408.5	100.00	99.16	99.50	80	3
C408.6	100.00	99.16	99.50	80	3

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C408.1	2	2	2	2	2	2	-	-	-	-	1	2	2	2
C408.2	2	2	2	2	2	2	-	-	-	-	1	2	2	2
C408.3	2	2	2	2	2	2	-	-	-	-	1	2	2	2
C408.4	2	2	2	2	2	2	-	-	-	-	1	2	2	2
C408.5	2	2	2	2	2	2	-	-	-	-	1	2	2	2
C408.6	2	2	2	2	2	2	-	-	-	-	1	2	2	2
LEVEL	2	2	2											

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C408.1	2.00	2.00	2.00	2.00	2.00	2.00	-	-	-	-	1.00	2.00	2.00	2.00
C408.2	2.00	2.00	2.00	2.00	2.00	2.00	-	-	-	-	1.00	2.00	2.00	2.00
C408.3	2.00	2.00	2.00	2.00	2.00	2.00	-	-	-	-	1.00	2.00	2.00	2.00
C408.4	2.00	2.00	2.00	2.00	2.00	2.00	-	-	-	-	1.00	2.00	2.00	2.00
C408.5	2.00	2.00	2.00	2.00	2.00	2.00	-	-	-	-	1.00	2.00	2.00	2.00
C408.6	2.00	2.00	2.00	2.00	2.00	2.00	-	-	-	-	1.00	2.00	2.00	2.00
Level	2.00	2.00												

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C408	2	2	2	2	2	2	-	-	-	-	1	2	2	2
Attainment	2.00	2.00	2.00	2.00	2.00	2.00	-	-	-	-	1.00	2.00	2.00	2.00

HOD/ECE

COURSE CODE / TITLE	GE8076 PROFESSIONAL ETHICS IN ENGINEERING	NBA Code	C409PE4
SEMESTER / YEAR	VII sem / IV Year	Academic year	2022-2023
COORDINATOR	Dr.S.Rajeswari / Dr.S.A.Arunmozhi	Credits	3

CO Attainment Level: 1 - (0% - 60%), 2- (61%-90%), 3-(91% and Above)

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.4fxCO-INT + 0.6fxCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C409PE.1	57.5	0	23	100	38.4	1
C409PE.2	67.5	0	27	100	41.6	1
C409PE.3	19.17	0	7.67	83.61	22.86	1
C409PE.4	58.33	0	23.33	83.61	35.39	1
C409PE.5	40.83	0	16.33	83.06	29.68	1
C409PE.6	0	0	0	100	20	1

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C409PE.1	2	2	1	1	1	2	2	2	1	1	1	1	2	2
C409PE.2	2	2	1	1	1	2	2	2	1	1	1	1	2	2
C409PE.3	2	2	1	1	1	2	2	2	1	1	1	1	2	2
C409PE.4	2	2	1	1	1	2	2	2	1	1	1	1	2	2
C409PE.5	2	2	1	1	1	2	2	2	1	1	1	1	2	2
C409PE.6	2	2	2	1	1	2	2	2	1	1	1	1	2	2
LEVEL	2	2	1.166666667	1	1	2	2	2	1	1	1	1	2	2

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C409PE.1	0.67	0.67	0.33	0.33	0.33	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.67	0.67
C409PE.2	0.67	0.67	0.33	0.33	0.33	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.67	0.67
C409PE.3	0.67	0.67	0.33	0.33	0.33	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.67	0.67
C409PE.4	0.67	0.67	0.33	0.33	0.33	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.67	0.67
C409PE.5	0.67	0.67	0.33	0.33	0.33	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.67	0.67
C409PE.6	0.67	0.67	0.67	0.33	0.33	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.67	0.67
Level	0.67	0.67	0.39	0.33	0.33	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.67	0.67

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C409PE4	2	2	1.166666667	1	1	2	2	2	1	1	1	1	2	2
Attainment	0.67	0.67	0.39	0.33	0.33	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.67	0.67

HOD/ECE

Saranathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8501 DIGITAL COMMUNICATION	NBA Code	C301
SEMESTER / YEAR	V Sem / III Year	Academic year	2022-2023
COORDINATOR	Dr.P.Sharmegapriya / Dr.S.Rajeswari		
CO Attainment Level: 1 - (0% - 60%), 2- (61%-80%), 3-(81% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C301.1	57.41	55	55.96	100	64.77	2
C301.2	36.11	55	47.44	100	57.96	1
C301.3	19.44	55	40.78	85.8	49.78	1
C301.4	8.33	55	36.33	84.57	45.98	1
C301.5	39.81	55	48.93	85.19	56.18	1
C301.6	0	55	33	100	46.4	1

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C301.1	2	2	2	2	2	1			1	1	1	2	2	2
C301.2	2	2	2	2	2	1			1	1	1	2	2	2
C301.3	2	2	2	2	2	1			1	1	1	2		2
C301.4	2	2	2	2	2	1			1	1	1	2	2	2
C301.5	2	2	2	1	2	1			1	1	1	2	2	2
C301.6	2	2	2	1	2	1			1	2	1	2	2	2
LEVEL	2	2	2	1.6666667	2	1			1	1.166667	1	2	2	2

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C301.1	1.33	1.33	1.33	1.33	1.33	0.67			0.67	0.67	0.67	1.33	1.33	1.33
C301.2	0.67	0.67	0.67	0.67	0.67	0.33			0.33	0.33	0.33	0.67	0.67	0.67
C301.3	0.67	0.67	0.67	0.67	0.67	0.33			0.33	0.33	0.33	0.67	0.00	0.67
C301.4	0.67	0.67	0.67	0.67	0.67	0.33			0.33	0.33	0.33	0.67	0.67	0.67
C301.5	0.67	0.67	0.67	0.33	0.67	0.33			0.33	0.33	0.33	0.67	0.67	0.67
C301.6	0.67	0.67	0.67	0.33	0.67	0.33			0.33	0.67	0.33	0.67	0.67	0.67
Level	0.78	0.78	0.78	0.67	0.78	0.39			0.39	0.44	0.39	0.78	0.67	0.78

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C301	2	2	2	1.6666667	2	1			1	1.166667	1	2	2	2
Attainment	0.78	0.78	0.78	0.67	0.78	0.39			0.39	0.44	0.39	0.78	0.67	0.78

HOD/ECE

Sarvanathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	ECK553 DISCRETE-TIME SIGNAL PROCESSING	NBA Code	C302
SEMESTER / YEAR	V sem / III Year	Academic year	2022-2023
COORDINATOR	Mr G Sivakannu / Dr M Padma		
CO Attainment Level: 1 - (0% - 60%), 2 - (61%-80%), 3-(81% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course Exit Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C302.1	46.3	87	70.72	100	76.57	2
C302.2	35.19	87	66.27	100	73.02	2
C302.3	37.04	87	67.03	81.48	69.91	2
C302.4	24.07	87	61.83	84.88	66.44	2
C302.5	57.41	83	75.16	82.41	76.61	2
C302.6	0	87	52.2	100	61.76	2

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C302.1	3	3	3	2	3	1	1	1	2	2	2	2	3	3
C302.2	3	3	3	2	3	1	1	1	2	2	2	2	3	3
C302.3	3	3	3	2	3	1	1	1	2	2	2	2	3	3
C302.4	3	3	3	2	3	1	1	1	2	2	2	2	3	3
C302.5	3	3	3	2	3	1	1	1	2	2	2	2	3	3
C302.6	3	3	3	2	3	1	1	1	2	2	2	2	3	3
13 V14	3	3	3	2	3	1	1	1	2	2	2	2	3	3

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C302.1	2.00	2.00	2.00	1.33	2.00	0.67	0.67	0.67	1.33	1.33	1.33	1.33	2.00	2.00
C302.2	2.00	2.00	2.00	1.33	2.00	0.67	0.67	0.67	1.33	1.33	1.33	1.33	2.00	2.00
C302.3	2.00	2.00	2.00	1.33	2.00	0.67	0.67	0.67	1.33	1.33	1.33	1.33	2.00	2.00
C302.4	2.00	2.00	2.00	1.33	2.00	0.67	0.67	0.67	1.33	1.33	1.33	1.33	2.00	2.00
C302.5	2.00	2.00	2.00	1.33	2.00	0.67	0.67	0.67	1.33	1.33	1.33	1.33	2.00	2.00
C302.6	2.00	2.00	2.00	1.33	2.00	0.67	0.67	0.67	1.33	1.33	1.33	1.33	2.00	2.00
Level	2.00	2.00	2.00	1.33	2.00	0.67	0.67	0.67	1.33	1.33	1.33	1.33	2.00	2.00

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C302	3	3	3	2	3	1	1	1	2	2	2	2	3	3
Attainment	2.00	2.00	2.00	1.33	2.00	0.67	0.67	0.67	1.33	1.33	1.33	1.33	2.00	2.00

HOD/ECE

Saranathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8552 COMPUTER ARCHITECTURE AND ORGANIZATION	NBA Code	C303
SEMESTER / YEAR	V sem / III Year	Academic year	2022-2023
COORDINATOR	Ms.A.Sheelavathi / Ms.G.Sathiya		
CO Assessment Level: 1 - (0% - 60%); 2 - (61%-80%); 3-(81% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C303.1	37.96	31	33.79	100	47.03	1
C303.2	65.74	31	46.9	100	55.92	1
C303.3	37.96	31	33.79	83.33	43.69	1
C303.4	50.93	31	38.97	83.44	47.9	1
C303.5	35.19	31	32.67	82.72	42.68	1
C303.6	32.41	31	31.56	100	45.25	1

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C303.1	2	2	2	2		1					1	1	3	3
C303.2	2	2	2	2		1					1	1	3	3
C303.3	2	2	2	2		1					1	1	3	3
C303.4	2	2	2	2		1					1	1	3	3
C303.5	2	2	2	2		1					1	1	3	3
C303.6	2	2	2	2		1					1	1	3	3
LEVEL	2	2	2	2		1					1	1	3	3

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C303.1	0.67	0.67	0.67	0.67		0.33					0.33	0.33	1.00	1.00
C303.2	0.67	0.67	0.67	0.67		0.33					0.33	0.33	1.00	1.00
C303.3	0.67	0.67	0.67	0.67		0.33					0.33	0.33	1.00	1.00
C303.4	0.67	0.67	0.67	0.67		0.33					0.33	0.33	1.00	1.00
C303.5	0.67	0.67	0.67	0.67		0.33					0.33	0.33	1.00	1.00
C303.6	0.67	0.67	0.67	0.67		0.33					0.33	0.33	1.00	1.00
Level	0.67	0.67	0.67	0.67		0.33					0.33	0.33	1.00	1.00

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C303	2	2	2	2		1					1	1	3	3
Attainment	0.67	0.67	0.67	0.67		0.33					0.33	0.33	1.00	1.00

HOD/ECE

Saranathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8551 COMMUNICATION NETWORKS	NBA Code	C304
SEMESTER / YEAR	V sem / III Year	Academic year	2022-2023
COORDINATOR	Ms.S.Kiruthiga / Mr.M.Mahendran		
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C304.1	44.44	87	69.98	100	75.98	2
C304.2	55.56	87	74.42	100	79.54	2
C304.3	75	87	82.2	82.41	82.24	2
C304.4	59.26	87	75.9	81.79	77.08	2
C304.5	72.22	87	81.09	82.41	81.35	2
C304.6	0	87	52.2	100	61.76	2

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C304.1	2	2	1	1	1					1		1	1	2
C304.2	2	2	1	1	1					1		1	1	2
C304.3	2	2	1	1	1					1		1	1	2
C304.4	2	2	1	1	1					1		1	1	2
C304.5	2	2	1	1	1					1		1	1	2
C304.6	2	2	1	1	1					1		1	1	2
LEVEL	2	2	1	1	1					1		1	1	2

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C304.1	1.33	1.33	0.67	0.67	0.67					0.67		0.67	0.67	1.33
C304.2	1.33	1.33	0.67	0.67	0.67					0.67		0.67	0.67	1.33
C304.3	1.33	1.33	0.67	0.67	0.67					0.67		0.67	0.67	1.33
C304.4	1.33	1.33	0.67	0.67	0.67					0.67		0.67	0.67	1.33
C304.5	1.33	1.33	0.67	0.67	0.67					0.67		0.67	0.67	1.33
C304.6	1.33	1.33	0.67	0.67	0.67					0.67		0.67	0.67	1.33
Level	1.33	1.33	0.67	0.67	0.67					0.67		0.67	0.67	1.33

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C304	2	2	1	1	1					1		1	1	2
Attainment	1.33	1.33	0.67	0.67	0.67					0.67		0.67	0.67	1.33

HOD/ECE

Sarvanthan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8073 MEDICAL ELECTRONICS	NBA Code	C305PE
SEMESTER / YEAR	V sem / III Year	Academic year	2022-2023
COORDINATOR	Ms.M.Anthuvan Lydia / Dr.M.Baritha Begum	Credits	3
CO Attainment Level: 1 - (40% - 60%) 2- (61%-80%) 3-(81% and Above)			

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C305PE.1	73.15	52	60.46	100	68.37	2
C305PE.2	51.85	52	51.94	100	61.55	2
C305PE.3	61.11	52	55.64	83.02	61.12	2
C305PE.4	61.11	52	55.64	84.26	61.37	2
C305PE.5	38.89	52	46.76	82.41	53.89	1
C305PE.6	30.56	52	42.42	100	54.74	1

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C305PE.1	2	2	2	1	1	2	2	1		1	1	2	2	1
C305PE.2	2	2	2	1	1	2	2	1		1	1	2	2	1
C305PE.3	2	2	2	1	1	2	2	1		1	1	2	2	1
C305PE.4	2	2	2	1	1	2	2	1		1	1	2	2	1
C305PE.5	2	2	2	1		2	2	1		1	1	2	2	1
C305PE.6	2	2	2	1		2	2	1		1	1	2	2	1
LEVEL	2	2	2	1	1	2	2	1		1	1	2	2	1

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C305PE.1	1.33	1.33	1.33	0.67	0.67	1.33	1.33	0.67		0.67	0.67	1.33	1.33	0.67
C305PE.2	1.33	1.33	1.33	0.67	0.67	1.33	1.33	0.67		0.67	0.67	1.33	1.33	0.67
C305PE.3	1.33	1.33	1.33	0.67	0.67	1.33	1.33	0.67		0.67	0.67	1.33	1.33	0.67
C305PE.4	1.33	1.33	1.33	0.67	0.67	1.33	1.33	0.67		0.67	0.67	1.33	1.33	0.67
C305PE.5	0.67	0.67	0.67	0.33		0.67	0.67	0.33		0.33	0.33	0.67	0.67	0.33
C305PE.6	0.67	0.67	0.67	0.33		0.67	0.67	0.33		0.33	0.33	0.67	0.67	0.33
Level	1.11	1.11	1.11	0.56	0.67	1.11	1.11	0.56		0.56	0.56	1.11	1.11	0.56

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C305PE	2	2	2	1	1	2	2	1		1	1	2	2	1
Attainment	1.11	1.11	1.11	0.56	0.67	1.11	1.11	0.56		0.56	0.56	1.11	1.11	0.56

HOD/ECE

Saranathan College of Engineering

Department of Electronics and Communication Engineering

COURSE CODE / TITLE	OMD551 BASICS OF BIOMEDICAL INSTRUMENTATION	NBA Code	C306OE1
SEMESTER / YEAR	V sem / III Year	Academic year	2023-2025
COORDINATOR	Dr.N.Preethi Elizabeth / Mr.A.Kesavan		
CO Attainment Level: 1 - (0% - 60%) 2- (61%-80%) 3-(81% and Above)		Credits	3

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT) (%)	CO-Attainment University (CO-UNI) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C306OE1.1	51.85	76	66.34	100	73.07	2
C306OE1.2	80.56	76	77.82	100	82.26	2
C306OE1.3	78.7	76	77.08	83.02	78.27	2
C306OE1.4	73.15	76	74.86	82.41	76.37	2
C306OE1.5	71.3	76	74.12	84.26	76.15	2
C306OE1.6	54.63	76	67.45	100	73.96	2

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C306OE1.1	2	2	2	3	3	2	2	1		1	1	2	2	1
C306OE1.2	2	2	2	3	3	2	2	1		1	1	2	2	
C306OE1.3	2	2	2	3	3	2	2	1		1	1	2	2	1
C306OE1.4	2	2	2	3	3	2	2	1		1	1	2	2	
C306OE1.5	2	2	2	3	3	2	2	1		1	1	2	2	
C306OE1.6	2	2	2	3	3	2	2	1		1	1	2	1	
LEVEL	2	2	2	3	3	2	2	1		1	1	2	1.833333	1

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C306OE1.1	1.33	1.33	1.33	2.00	2.00	1.33	1.33	0.67		0.67	0.67	1.33	1.33	0.67
C306OE1.2	1.33	1.33	1.33	2.00	2.00	1.33	1.33	0.67		0.67	0.67	1.33	1.33	
C306OE1.3	1.33	1.33	1.33	2.00	2.00	1.33	1.33	0.67		0.67	0.67	1.33	1.33	0.67
C306OE1.4	1.33	1.33	1.33	2.00	2.00	1.33	1.33	0.67		0.67	0.67	1.33	1.33	
C306OE1.5	1.33	1.33	1.33	2.00	2.00	1.33	1.33	0.67		0.67	0.67	1.33	1.33	
C306OE1.6	1.33	1.33	1.33	2.00	2.00	1.33	1.33	0.67		0.67	0.67	1.33	0.67	
Level	1.33	1.33	1.33	2.00	2.00	1.33	1.33	0.67		0.67	0.67	1.33	1.22	0.67

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C306OE1	2	2	2	3	3	2	2	1		1	1	2	1.833333	1
Attainment	1.33	1.33	1.33	2.00	2.00	1.33	1.33	0.67		0.67	0.67	1.33	1.22	0.67

HOD/ECE

Saranathan College of Engineering
Department of Electronics and Communication Engineering

COURSE CODE /	EC8562 DIGITAL SIGNAL PROCESSING	NBA Code	C307
SEMESTER / YEAR	V sem/ III	Academic year	2022-2023
COORDINATOR	O.SIVAKANNU DR.M.PADMAA	Credits	2
Level 1 (0-69%), Level 2 (70-79%) and Level 3 (above 80%)			

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT)	CO-Attainment University (CO-UNI)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI)	Target	CO Attainment Level
C307.1	100.00	100.00	100.00	80	3
C307.2	100.00	100.00	100.00	80	3
C307.3	100.00	100.00	100.00	80	3
C307.4	100.00	100.00	100.00	80	3
C307.5	100.00	100.00	100.00	80	3
C307.6	100.00	100.00	100.00	80	3

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C307.1	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C307.2	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C307.3	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C307.4	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C307.5	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C307.6	2	2	2	2	2	1	1	-	2	2	2	2	2	2
LEVEL	2	2	2	2	2	1	1	-	2	2	2	2	2	2

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C307.1	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C307.2	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C307.3	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C307.4	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C307.5	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C307.6	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
Level	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C307	2	2	2	2	2	1	1	-	2	2	2	2	2	2
Attainment	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00

HOD

Saranathan College of Engineering
Department of Electronics and Communication Engineering

COURSE CODE / TITLE	EC8561 COMMUNICATION SYSTEM LAB	NBA Code	C308
SEMESTER / YEAR	V sem/ III	Academic year	2022-2023
COORDINATOR	Dr.S.RAJESWARI	Credits	2

Level 1 (0-69%), Level 2 (70-79%) and Level 3 (above 80%)

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT)	CO-Attainment University (CO-UNI)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI)	Target	CO Attainment Level
C308.1	100.00	100.00	100.00	80	3
C308.2	100.00	100.00	100.00	80	3
C308.3	100.00	100.00	100.00	80	3
C308.4	100.00	100.00	100.00	80	3
C308.5	100.00	100.00	100.00	80	3
C308.6	100.00	100.00	100.00	80	3

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C308.1	2	2	2	1	1	-	-	1	1	2	1	1	2	2
C308.2	2	2	2	1	1	-	-	1	1	2	1	1	2	2
C308.3	2	2	2	1	1	-	-	1	1	2	1	1	2	2
C308.4	2	2	2	1	1	-	-	1	1	2	1	1	2	2
C308.5	2	2	2	1	1	-	-	1	1	2	1	1	2	2
C308.6	2	2	2	1	1	-	-	1	1	2	1	1.00	2	2
LEVEL	2	2	2	1	1	-	-	1	1	2	1	1.00	2	2

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C308.1	2.00	2.00	2.00	1.00	1.00	-	-	1.00	1.00	2.00	1.00	1.00	2.00	2.00
C308.2	2.00	2.00	2.00	1.00	1.00	-	-	1.00	1.00	2.00	1.00	1.00	2.00	2.00
C308.3	2.00	2.00	2.00	1.00	1.00	-	-	1.00	1.00	2.00	1.00	1.00	2.00	2.00
C308.4	2.00	2.00	2.00	1.00	1.00	-	-	1.00	1.00	2.00	1.00	1.00	2.00	2.00
C308.5	2.00	2.00	2.00	1.00	1.00	-	-	1.00	1.00	2.00	1.00	1.00	2.00	2.00
C308.6	2.00	2.00	2.00	1.00	1.00	-	-	1.00	1.00	2.00	1.00	1.00	2.00	2.00
Level	2.00	2.00	2.00	1.00	1.00	-	-	1.00	1.00	2.00	1.00	1.00	2.00	2.00

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C308	2	2	2	1	1	-	-	1	1	2	1	1.00	2	2
Attainment	2.00	2.00	2.00	1.00	1.00	-	-	1.00	1.00	2.00	1.00	1.00	2.00	2.00

HOD

Saranathan College of Engineering
Department of Electronics and Communication Engineering

COURSE CODE / TITLE	UC856 COMMUNICATION NETWORKS LAB	NBA Code	C309
SEMESTER / YEAR	V sem/ III	Academic year	2022-2023
COORDINATOR	MR.M.MATHENDRAN	Credits	2
Level 1 (0-69%), Level 2 (70-79%) and Level 3 (above 80%)			

CO ATTAINMENT

CO	CO-Attainment Internal (CO-INT)	CO-Attainment University (CO-UNI)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI)	Target	CO Attainment Level
C309.1	100.00	100.00	100.00	80	3
C309.2	100.00	100.00	100.00	80	3
C309.3	100.00	100.00	100.00	80	3
C309.4	100.00	100.00	100.00	80	3
C309.5	100.00	100.00	100.00	80	3
C309.6	100.00	100.00	100.00	80	3

Expected CO PO level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C309.1	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C309.2	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C309.3	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C309.4	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C309.5	2	2	2	2	2	1	1	-	2	2	2	2	2	2
C309.6	2	2	2	2	2	1	1	-	2	2	2	2	2	2
LEVEL	2	2	2	2	2	1	1	-	2	2	2	2	2	2

PO Attainment level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C309.1	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C309.2	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C309.3	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C309.4	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C309.5	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
C309.6	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00
Level	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00

Attainment of POs & PSOs level

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C309	2	2	2	2	2	1	1	-	2	2	2	2	2	2
Attainment	2.00	2.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	2.00

HOD

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli – 620 012

Dt.9th December 2022

MODEL EXAMINATION _ FOR Second Year B.E./B.Tech., Classes will be from 12.12.2022 (Monday) as per the academic planner.

Test Duration

10.00 AM to 1.00 PM

As per the instruction from the Anna University, Chennai Model Exam Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal Marks will be awarded by the Anna University based on your performance in Model Exam students are advised to take the exam seriously and to score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

MODEL EXAM for Second Year _ December 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
12.12.022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
14.12.022	CS3353 - Foundations of Data Science	EC3351 - Control Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
16.12.022	CS3391 - Object Oriented Programming	EC3354 - Signals and Systems	EE3301 - Electromagnetic Fields	CD3291 - Data Structures and Algorithms	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
19.12.022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CS3391 - Object Oriented Programming	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
21.12.022	CS3352 - Digital Principles and Computer Organization	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3351 - Digital Principles and Computer Organization	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.12.022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell



Principal

SARANATHAN COLLEGE OF ENGINEERING

19.09.2022

CIRCULAR

Remedial and slip test for Internal Assessment Test- I for III / IV Year B.E / B.Tech classes will commence from 20-09-2022 (Tuesday) as per the timetable mentioned.

S.No.	DATE	SUBJECT
1.	20-09-2022	SUBJECT 1
2.	21-09-2022	SUBJECT 2
3.	22-09-2022	SUBJECT 3
4.	23-09-2022	SUBJECT 4
5.	24-09-2022	SUBJECT 5
6.	26-09-2022	SUBJECT 6

Remedial class duration: 5.00 p.m. to 5.45 p.m. (45 Minutes)

Slip test duration: 5.45 p.m. to 6.30 p.m. (45 Minutes)

Note : The halls will be allotted individually for every subject to conduct Remedial and Slip test.

PRINCIPAL

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.16.09.2022

Circular

Internal Assessment Test – I for II Year B.E./B.Tech., Classes will commence from 19.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
19.09.2022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
20.09.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
21.09.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
22.09.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.09.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
24.09.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

Principal

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	16.09.2022/ FN	Marks	50
Course code	EE8591	Course Title	Digital Signal Processing			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	V/A	Department	EEE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Differentiate Power and Energy Signals.	C304.1	U
2	Find the Nyquist rate of the signal x(t) = 2cos150πt and comment on aliasing effect.	C304.1	A
3	Sketch x[n] = {2,1,3,0,2} and find x[n - 2].	C304.1	A
4	What are the different types of representation of discrete time signal?	C304.1	R
5	Find ODD and EVEN signals for x(n) = { 1,2,1,0,1}	C304.1	A
6	Write the properties of Region of Convergence.	C304.2	R
7	Find the system transfer function H(z) if y(n) = x(n)+y(n-1).	C304.2	A
8	Find the Z-transform for the sequence $x(n) = a^n.u(n)$	C304.2	A
9	State initial value theorem & final value theorem of Z Transform	C304.2	R
10	List the methods to find inverse Z-Transform.	C304.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Test whether the following systems are linear, causal, time-invariant and memory-less (i) y(n) = nx(n)+[x(n+1)] (ii) y(n) = x(2n) (5+5)	C304.1	AZ
	or		
12	Determine the energy and power of the following signals. (i) $x(n) = (0.5)^n u(n)$ (ii) x[n]=nu[n] (5+5)	C304.1	AZ
13	(i) Find the convolution of two sequences x(n) = {1,2,-1,1} and h(n) = {1,0,1,1} (7) (ii) Write the linearity property of Z-transform (3)	C304.2	AZ
	or		
14	(i) Determine the Z-transform of the signal $x(n) = \sin(\omega_0 n)\, u(n)$ (7) (ii) Write the differentiation property of Z-transform (3)	C304.2	AZ
	Part – C **(Answer all the questions 1 x 10 = 10marks)**		
15	Obtain the inverse Z-transform of $X(Z) = Z^2 / Z^2+1.5Z+0.5$ for ROC (i) $\|z\| > 1$ (ii) $\|z\| < 0.5$ (iii) $0.5 < \|z\| < 1$ using any two methods. (5+5)	C304.2	AZ
	or		
16	(i) Find the impulse response of the discrete time system described by the difference equation $y(n-2) - 3y(n-1) + 2y(n) = x(n-1)$ (5) (ii) Find the stability of the given system $y(n)-3y(n-1)-4y(n-2) = x(n)+2x(n-1)$ (5)	C304.2	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the faculty: Dr.P.Ram Prakash, AP/EEE

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SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	Aaradhana. A			Year / Semester / Section	3rd / V
Batch No.	233001	Date / Session	16/09/22/FN	Department	EEE
Course Code	EE8591	Course Title	Digital Signal Processing		
Internal Assessment Test	I [✓]	II [ ]	III [ ]	Model [ ]	No. of pages used : 9
Name and Signature of the Invigilator with date	S. Prasanna Perumal - 16/09/2022			S. Prasanna Perumal.	

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour.)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	1	11	✓				
2	✓	0	12	✓	7			7
3			13	✓	4			4
4			14					
5	✓	1	15					
6			16	✓	9			9
7	✓	2					Total	20
8	✓	1						
9								
10	✓	0						
Total		05						

20/50 (50) Grand Total

P. Ram Prakash — Name and Signature of the Examiner with date — 17/9

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	40	60					100
Marks Obtained	38	32					50

QAC Audit - Remarks

NIL

S. Harinarath 21/10/22 — Name and Signature of the QAC member

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	14.10.2022/ FN	Marks	50
Course code	EE8591	Course Title	Digital Signal Processing			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	V/A & B	Department	EEE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is the relationship between Z-transform and DTFT?	C304.2	U
2	List any two properties of DTFT with expression	C304.2	R
3	State Parseval's theorem in the context of DTFT.	C304.2	U
4	Write N point DFT equation for x(n) and IDFT equation for X(K)	C304.3	R
5	State and proof the circular frequency shifting property of DFT	C304.3	A
6	What is zero padding?	C304.3	R
7	Draw the basic butterfly structure of DIT FFT algorithm	C304.3	U
8	What are the applications of FFT algorithms?	C304.3	A
9	Calculate the percentage saving in calculations in a 256 point radix-2 FFT, when compared to direct DFT.	C304.3	A
10	Define twiddle factor and write its magnitude and phase angle.	C304.3	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	(i) Obtain the convolution of $x_1(n)= \{0,1, 4,- 2\}$ and $x_2(n) =\{1, 2, 2,2\}$ (5) (ii) Determine the DTFT of $x(n) = (0.5)^{n-1} u(n-1)$ (5)	C304.2	AZ
	or		
12	(i) Determine the discrete time Fourier transform of $x(n) = a^{\|n\|}$, $\|a\| < 1$ (5) (ii) Obtain the circular convolution of $X_1(n)= \{1,2,2,1\}$ and $X_2(n) =\{1,2,3,1\}$ (5)	C304.2	AZ
13	Determine the 8 point DFT of the signal $x(n) = \{1,1,1,1,1,1,0,0\}$and sketch its magnitude and phase.	C304.3	AZ
	or		
14	Find the IDFT of the sequence $X(k)=\{4, 1-j2.414, 0, 1-j0.414, 0, 1+j0.414, 0, 1+j2.414\}$	C304.3	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

15	An 8-point sequence is given by compute 8 point DFT of $x(n)=\{1,2,3,4,4,3,2,1\}$ is given by Radix-2 DIF-FFT	C304.3	AZ
	or		
16	Find the 8 point DFT of the sequence of $x(n) = \{1/2, 1/2, 1/2, 1/2, 0,0,0,0\}$ using decimation in time radix-2 FFT algorithm	C304.3	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

Name of the faculty: Dr.P.Ram Prakash, AP/EEE

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SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	Abdul Jalil. A			Year / Semester / Section	III / 5th
Batch No.	233008	Date / Session	14/10/22 - FN	Department	EEE
Course Code	EE8591	Course Title	Digital Signal Processing		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used : 11
Name and Signature of the Invigilator with date	M. Ramya				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1		2	11					
2		2	12					
3		—	13		10			10
4		2	14					
5		—	15		4			4
6		2	16					
7		2					Total	14
8		2						
9		2						
10		2						
Total		16						

30/50 60 58

Grand Total

P. Ram Rakesh 15/10

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		32	68				100
Marks Obtained		8	52				60

QAC Audit - Remarks

NIL

S. Hanifa Sathi

S. Hanifa 5/11

Name and Signature of the QAC member

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ALL Cycletest Mark Summary Report

Class:EEE Semester:5 Section:A

Semester Period:22-23ODD

S.no	Batchno	Name	EE8591-ramprakash-eee				
			A1	M1	A2	M2	A3
1	233001	AARADHANA. A	50		54		54
2	233002	ABDULRAHMAN. B	50		50		30
3	233003	ABIRAMI. D	62		36	68	22
4	233004	AJMEER KHAJA. S	40	60	28	52	24
5	233005	ANTONI FELIX. A	56		50		26
6	233006	ANUSH ARAVIND. U P	58		60		50
7	233007	ARUN KUMAR. V	80		76		50
8	233008	ASRAF ALI. A	20	72	60		16
9	233009	BHARATH KUMAR. M	66		A	52	16
10	233010	DANIEL WINFRED. J	10	28	42	40	6
11	233011	DHANUSHA. K	70		52		60
12	233012	DHARANIDHARAN. M	28	50	40	76	6
13	233013	DHARSHANAA. K	32	52	46	60	26
14	233014	DHARUN. A	22	56	24	80	0
15	233015	DHILIP RAJ. M P	54		42	68	26
16	233016	DHIVYA BHARATHI. V	60		50		64
17	233018	DINESH. P K	32	72	50		18
18	233017	DINESH RAJA. S	50		52		10
19	233019	DOYEL THERSITA. J	42	80	38	80	34
20	233020	FRANKLIN PATRICK. P	24	72	36	84	20
21	233021	GAYATHERI. M	62		62		60
22	233022	GOBINATH. P	60		50		40
23	233023	HARE HARA SUDAN. V	18	56	38	60	52
24	233024	HARIHARAN. G	56		42	84	66
25	233025	HARIHARAN. L	64		56		50
26	233026	HARISH. M	A	52	54		26
27	233027	HEMADHARSHINI. A	70		74		72
28	233028	KALAIVANI. S	52		52		52
29	233029	KAVIYA. A R	62		50		42
30	233030	KAVIYA. R	66		70		54
31	233032	KISHORE. R	20	56	52		14
32	233031	KISHORE KUMAR. R	34	64	54		14
33	233033	LOGA VIGNESH. M	24	44	32	72	14
34	233034	LOGESHWARAN. G R	70		72		60
35	233035	LOGESHWARAN. R	62		42	88	32
36	233036	MANIKANDAN. R	16	64	40	92	2

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37	233037	MANSOOR AHAMED. S	28	A	44	52	18
38	233038	MATHESWARAN. P	14	64	60		24
39	233040	MOHANAKANNAN. R	16	56	34	64	14
40	233041	MOSES MANOHARAN. V	56		54		50
41	233042	NANTHAKUMAR. K	40	76	50		32
42	233043	NARMADHA. K	A	76	34	68	58
43	233044	NASREEN BANU. A	82		82		76
44	233045	NAVIN KUMAR. P	A	44	50		10
45	233046	NILOFAR NISHA. A	54		74		88
46	233047	NIRENJANA. G M	24	56	54		50
47	233048	NITHISHWARAN. S	50		30	A	4
48	233049	NIVIN VIJOSS. R	52		50		40
49	233050	PAUL ROJER. R	62		84		66
50	233051	PRASANNA KUMAR. A	28	40	42	76	14
51	233052	PRATHABAN. K	88		80		90
52	233053	PRAVEENKUMAR. S	12	8	32	32	2
53	233054	PRIYADHARSHINI. S	84		72		74
54	233055	RAKKESH. S	64		42	88	42
55	233056	RANGARAJAN. P S	18	72	20	56	10
56	233058	SANJAY. D	56		32	52	16
57	233059	SARAVANAKUMAR. L	34	60	50		50
58	233060	SHEIKHA NASEEMA. N	72		76		66
59	233061	SHRINA MAGGI. J S	32	80	50		16
60	233062	SIVA SANKARI. N	54		60		42
61	233064	SRIDEVI. P	78		76		70
62	233065	SUMEETH. S	28	68	54		12
63	233066	THASLEEMA KAUSER. Z	50		66		38
64	233068	VASANTHAPRIYAN. G C	10	40	6	44	12
65	233069	YOGGIRAJ. J S	4	24	26	50	20
66	233072	JACOBMARTIN. I	50		52		36
67	233070	KARTHIKEYAN. S	24	76	54		14
68	233073	SACHITHANANTHAN. P	10	24	32	28	14
69	233074	SANJAY. M	20	22	50		38
70	233071	SANTHOSHKUMAR. B	14	56	50		6
71	233075	YOGESWARAN. G R	12	50	30	A	18
No.of Failures(<50)			31	9	26	4	46

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Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - I			Date / Session	11.03.2023 / FN	Marks	50
Course code	EE3401	Course Title	TRANSMISSION AND DISTRIBUTION			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV / A	Department	EEE	

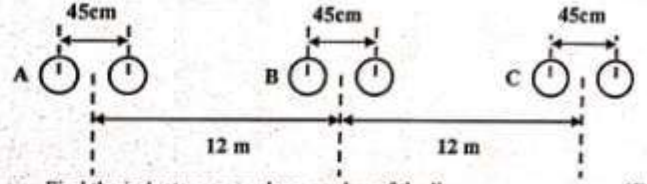
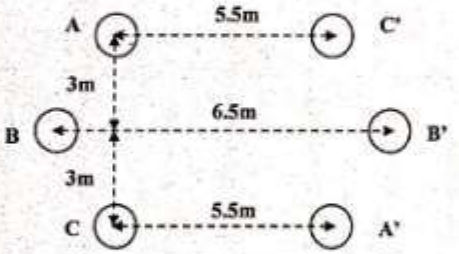
Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	What are the advantages of using bundled conductors?	C212.1	R
2.	Distinguish between stranded and bundled conductors.	C212.1	U
3.	Why transmission lines are transposed? Mention the advantages of transposition of conductors.	C212.1	A
4.	What is meant by Distribution system and what is the purpose of the 4th wire in a 3-Φ, 4 wire secondary distribution system?	C212.1	U
5.	What is skin effect? How skin effect depends upon the frequency of the circuit?	C212.1	R
6.	Calculate the loop inductance per kilometer comprising two parallel conductors 1 m apart and 1 cm diameter	C212.1	R
7.	Compute the capacitance of a 3Φ overhead line where the radius of conductor is 0.5 cm and the spacing between the conductors is 300 cm.	C212.1	A
8.	Define regulation of transmission line.	C212.2	R
9.	What is the effect of leading power factor on voltage regulation of a short transmission line?	C212.2	U
10.	Classify the overhead transmission lines.	C212.2	R

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Draw and explain the structure of typical electrical power system with various voltage levels.	C212.1	R
	OR		
12.	Derive an expression for inductance of a 3 phase asymmetrically spaced transmission line.	C212.1	A
13.	Draw the phasor diagram of a short transmission line and derive an expression for voltage regulation and transmission efficiency.	C212.2	A
	OR		
14.	A 15 km long 3 phase line has a resistance of 5.31 ohms/phase and inductive reactance of 5.54 ohms/phase. The sending end voltage is 11 kV. The receiving end load is 1200 kW at a power factor of 0.8 lagging. Find the receiving end voltage and line current.	C212.2	A

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	A 400 kV 3 phase bundled conductor line with 2 sub-conductors per bundle has a horizontal configuration as shown in figure. The radius of each sub-conductor is 1.6 cm.  a. Find the inductance per phase per km of the line. (5) b. Compute the inductance of the line with only one conductor per phase having same cross sectional area. (3) c. What do you infer from the results? (2)	C212.1	AZ
	OR		
16.	A 100 km long double circuit 3Φ line has its conductor at the vertices of a hexagon as shown in the following figure. The conductor radius is 1.25 cm. Find its capacitance per phase.  	C212.1	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: R.Satheesh, AP-EEE

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SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK R. Amirtash.

Name	R. Amirtash			Year / Semester / Section	II / IV / D'
Batch No.	243006	Date / Session	11/03/23 / FN.	Department	EEE
Course Code	EE3401	Course Title	Transmission And Distribution.		
Internal Assessment Test	I ☒	II ☐	III ☐	Model ☐	No. of pages used : 7
Name and Signature of the Invigilator with date	R.Balasubramanian				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✔	0	11	✔	(2)			(2)
2	✔	2	12	✔	4			4
3	✔	1	13					
4	✔	1	14	✔	4			4
5	✔	1	15	✔	7			
6	✔	2	16					7
7	✔	1					Total	15
8	✔	2						
9	✔	0						
10	✔	0						
Total		10	Grand Total		25			

R. SATHEESH 11/3/23

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	68	32					100
Marks Obtained	38	12					50

QAC Audit - Remarks

NIL

S. Thanuja 11/5/23

Name and Signature of the QAC member

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SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	SUDHAN SANKAR.S			Year / Semester / Section	II/IV EA
Batch No.	243053	Date / Session	11/08/23/F.N	Department	EEE
Course Code	EE3401	Course Title	TRANSMISSION AND DISTRIBUTION		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 10
Name and Signature of the Invigilator with date	P.V. 11/8/23		P.S.		

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1		—	11					
2	✓	1	12		6			6
3			13		6			6
4			14					
5			15		10			10
6	✓	1	16					
7	✓	1					Total	22
8	✓	2						
9	✓	0						
10		—						
Total		05	Grand Total		27	Sudhan Sankar.S	R. SATHEESH 14/3/23	Name and Signature of the Examiner with da

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	68	32					100
Marks Obtained	38	16					54

QAC Audit - Remarks

NIL

S. Hari 11/15/23

Name and Signature of the QAC member

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Staff Code: satheesh-eee,Assessment Test -1 [Date of Exam -11/03/23]

Branch: EEE Semester: 4 Subject Code: EE3401 - Sec A ,ShortTitle: T&D

1. For All tests,Please Enter Marks Secured for 100.
2. Total Marks for Absentees Should be marked only as -1. COs for Absentees should be entered as Zero.
3. Do not Prefix 0 for Single Digit Marks Eg: If the mark to be entered is 8,put the entry as 8.
4. Mark entry in this screen is Applicable only for UG-Assessment Tests.
5. **For Students who are not appearing for the VIII Semster Elective Paper this semester,Total Marks should be marked as -2**

S.no	Batchno	Register Number	Name	C1 out of [68]	C2 out of [32]	Total MarksSecured [out of 100]
1	243001	813821105001	ABINESH. P	12	4	16
2	243002	813821105002	ADNAN SHEIK IBRAHIM	14	8	22
3	243003	813821105003	AJAY. A	50	10	60
4	243004	813821105004	AKASH RAJ. A	30	6	36
5	243005	813821105005	ALAGU SRINIVASAR. S	14	0	14
6	243006	813821105006	AMIRTESH. R	38	12	50
7	243007	813821105007	AMIRTHA LAKSHMI. P	46	8	54
8	243008	813821105008	ANBARASAN. E	2	0	2
9	243009	813821105009	ARIHARAN. S	22	2	24
10	243010	813821105010	ATHIDHYAN. N	44	28	72
11	243012	813821105012	BARATH YOGESH. R K	54	32	86
12	243014	813821105014	DARTHI MARY. S	24	12	36
13	243015	813821105015	DEVA ALFRED. S	0	0	-1
14	243016	813821105016	DHASVANTH. S	32	24	56
15	243017	813821105017	DIVYA. R	6	0	6
16	243018	813821105018	ELAVARASAN. S	4	4	8
17	243019	813821105019	FAIYAZ AHAMED. M	2	8	10
18	243020	813821105020	GOKUL. M	30	16	46
19	243021	813821105024	HARI KARTHIK. K	32	18	50
20	243022	813821105021	HARIHARAN. B	40	26	66
21	243023	813821105022	HARIHARAN. M	50	14	64
22	243024	813821105023	HARIHARASUDHAN. R	20	14	34
23	243025	813821105025	HARISH. H P	54	28	82
24	243026	813821105026	IQJAS FATHIMA. I	40	30	70

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25	243027	813821105027	JAISON. R	0	6	6
26	243028	813821105028	KEAVIN. L	32	24	56
27	243029	813821105029	LOKESH KANNAN. N	22	6	28
28	243030	813821105030	MAFAZ AHAMED. M	2	0	2
29	243031	813821105031	MAHESHWARAN. P L	26	4	30
30	243032	813821105032	MARZOOK AHAMED. M	34	18	52
31	243033	813821105033	MOHAMED FAIZAL. R	0	6	6
32	243034	813821105034	MOHAMED MAZIN. A	44	22	66
33	243035	813821105035	MOHAMMED ARSHAD. M	48	28	76
34	243036	813821105036	MOHAMMED YUSUF. A	8	8	16
35	243037	813821105037	NISHA CATHERINE. V	8	0	8
36	243038	813821105038	NITHISH KUMAR. J	20	2	22
37	243039	813821105039	NITHISHKUMAR. P	10	8	18
38	243040	813821105040	PADMASHARAN. G S	0	0	-1
39	243041	813821105041	POOJA. Y	34	28	62
40	243042	813821105043	PRAVEEN KUMAR. V	16	14	30
41	243043	813821105042	PRAVEEN. S	48	28	76
42	243044	813821105044	ROJAR GIMSON. A	38	20	58
43	243046	813821105045	SHANTHINI. S	12	0	12
44	243047	813821105046	SHARULATHA. N	38	22	60
45	243048	813821105047	SHEAK ABDULLAH. K	12	8	20
46	243049	813821105048	SIVANESAN. B	32	28	60
47	243051	813821105049	SRIMATHI. R	34	2	36
48	243052	813821105050	SUBALAKSHMI. G	16	0	16
49	243053	813821105051	SUDHAN SANKAR. S	38	16	54
50	243054	813821105052	SUDHES MARAN. S	30	14	44
51	243055	813821105053	SURENDHIRAN. R	14	6	20
52	243056	813821105054	TAMILARASAN. P	34	18	52
53	243057	813821105055	VINODHINI. R	44	22	66
54	243058	813821105056	YAZAR MOHIDEEN. S	50	24	74
55	243059	813821105057	YUVHARAAJ. S	14	2	16
56	243060	813821105058	ZUBAIR AHAMED. A	8	4	12
57	243061	813821105302	KIRSHAN MELWIN. J	16	0	16
58	243062	813821105301	JOSHUVA VASANTHAN. K	40	16	56

[illegible] for this subject. Sorry No More Correction Possible.

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Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	10.04.2023 /FN	Marks	50
Course code	EE3401	Course Title	TRANSMISSION AND DISTRIBUTION			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV / A	Department	EEE	

Part – A - (Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Define natural loading or surge impedance loading (SIL) of a line.	C212.2	R
2.	Write the expressions for A, B, C and D constants of medium transmission line using nominal-π method.	C212.2	R
3.	Define visual critical disruptive voltage.	C212.2	R
4.	What is Ferranti effect?	C212.2	R
5.	What are the factors affecting sag?	C212.3	R
6.	Define safety factor for sag in transmission line.	C212.3	R
7.	A 132 kV transmission line has the following data: weight of the conductor = 0.68 kg/m; Length of span = 260 m; Working Tension = 1550 kg. Calculate the sag.	C212.3	A
8.	Define string efficiency.	C212.4	R
9.	How the shunt capacitance affect the string efficiency?	C212.4	U
10.	What are the methods of improving string efficiency of string insulator?	C212.4	R

Part – B - (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	A balanced 3 phase transmission load of 30 MW is supplied at 132 kV and 0.85 pf lagging using 80 km length transmission line. The impedance of a single conductor is (20+j52) ohms and the total phase-neutral admittance is 315×10^{-6} Siemen. Using nominal T method determine A, B, C and D constants of the line, sending end voltage and regulation of the line.	C212.2	A
	OR		
12.	Derive the sending end voltage and current for a long transmission line with necessary diagram.	C212.2	R
13.	The towers of height 30 m and 90 m respectively support a transmission line conductor at water crossing. The horizontal distance between the towers is 500m. If the tension in the conductor is 1600 kg, find the minimum clearance of the conductor and water. Also calculate the clearance mid-way between the supports. Weight of the conductor is 1.5 kg/m. Consider the base of the tower at water level.	C212.3	A
	OR		
14.	What is the expression for sag for a overhead transmission line when the supports are at unequal level? Explain the effect of ice and wind loading.	C212.3	R

Part – C - (Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Each line of the three insulators forming a string has a self-capacitance of C Farad. The shunt capacitance of each insulator is 0.2 C to earth and 0.1 C to line. A guard ring increases the capacitance of line of the metal work of the lowest insulator to 0.3 C. Evaluate the string efficiency.	C212.4	E
	OR		
16.	Classify the different types of insulators used for overhead transmission line and explain with neat diagrams.	C212.4	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question Faculty in-charge: R.Satheesh, AP-EEE

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SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	P. Tamilarasan			Year / Semester / Section	II / IV /
Batch No.	243056	Date / Session	10/4/23 - FN	Department	EEE
Course Code	EE3401	Course Title	Transmission and distribution		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	Dr. N. PREETHI ELIZABETH				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✔	—	11	✔	8			8
2	✔	2	12					
3		2	13	✔	10			10
4	✔	2	14					
5	✔	1	15	✔	6			6
6	✔	0	16					
7	✔	1					Total	24
8	✔	0	34/50				R. SATHEESH 12/04/23	
9	✔	0						
10	✔	1						
Total		10	Grand Total				Name and Signature of the Examiner with d	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		36	32	32			100
Marks Obtained		28	24	16			68

QAC Audit - Remarks

NIL

S. Hariprasath

S. Hariprasath 11/5

Name and Signature of the QAC member

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SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	J. Kishan melwin.			Year / Semester / Section	II / IV / A
Batch No.	243061	Date / Session	10/04/23 / FN	Department	EEE
Course Code	EE 3401	Course Title	Transmission And Distribution.		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used: 7
Name and Signature of the Invigilator with date	Dr. N. PREETHI ELIZABETH 10/4/23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1			11					
2			12					
3			13	✔	7			7
4	✔	1	14					
5	✔	2	15	✔	6			6
6	✔	2	16					
7	✔	1					Total	13
8	✔	1						
9	✔	0						
10	✔	1						
Total		08						

21

Grand Total

R. SATHEESH 12/04/23

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		36	32	32			100
Marks Obtained		02	24	16			42

QAC Audit - Remarks

NIL

S. Hariprasath 11/5/23

Name and Signature of the QAC member

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Staff Code: satheesh-eee,Assessment Test -2 [Date of Exam -10/04/23]

Branch: EEE Semester: 4 Subject Code: EE3401 - Sec A , ShortTitle: T&D

1. For All tests,Please Enter Marks Secured for 100.
2. Total Marks for Absentees Should be marked only as -1. COs for Absentees should be entered as Zero.
3. Do not Prefix 0 for Single Digit Marks Eg: If the mark to be entered is 8,put the entry as 8.
4. Mark entry in this screen is Applicable only for UG-Assessment Tests.
5. **For Students who are not appearing for the VIII Semster Elective Paper this semester,Total Marks should be marked as -2**

S.no	Batchno	Register Number	Name	C2 out of (36)	C3 out of (32)	C4 out of (32)	Total MarksSecured (out of 100)
1	243001	813821105001	ABINESH. P	4	6	4	14
2	243002	813821105002	ADNAN SHEIK IBRARIM	2	6	6	14
3	243003	813821105003	AJAY. A	8	22	6	36
4	243004	813821105004	AKASH RAJ. A	2	14	8	24
5	243005	813821105005	ALAGU SRINIVASAN. S	0	8	8	16
6	243006	813821105006	AMIRTESH. R	22	30	16	68
7	243007	813821105007	AMIRTHA LAKSHMI. P	12	12	28	52
8	243008	813821105008	ANBARASAN. E	2	8	0	10
9	243009	813821105009	ARIHARAN. S	2	14	10	26
10	243010	813821105010	ATHIDHYAN. N	2	18	30	50
11	243012	813821105012	BARATH YOGESH. R K	30	28	22	80
12	243014	813821105014	DARTHI MARY. S	24	10	18	58
13	243015	813821105015	DEVA ALFRED. S	8	10	10	26
14	243016	813821105016	DHASVANTH. S	8	24	26	58
15	243017	813821105017	DIVYA. R	8	10	0	18
16	243018	813821105018	ELAVARASAN. S	6	0	0	6
17	243019	813821105019	FAIYAZ AHAMED. M	0	0	4	4
18	243020	813821105020	GOKUL. M	0	0	0	-1
19	243021	813821105024	HARI KARTHIK. K	8	16	18	42
20	243022	813821105021	HARIHARAN. B	12	32	26	70
21	243023	813821105022	HARIHARAN. M	10	30	16	56
22	243024	813821105023	HARIHARASUDHAN. R	2	14	6	22
23	243025	813821105025	HARISH. H P	14	32	32	78
24	243026	813821105026	IQJAS FATHIMA. I	30	32	32	94

25	243027	813821105027	JAISON. R	4	16	14	34
26	243028	813821105028	KEAVIN. L	0	10	18	28
27	243029	813821105029	LOKESH KANNAN. M	12	14	24	50
28	243030	813821105030	MAFAZ AHAMED. M	0	0	0	0
29	243031	813821105031	MAHESHWARAN. P L	4	14	14	32
30	243032	813821105032	MARZOOK AHAMED. M	28	22	18	68
31	243033	813821105033	MOHAMED FAIZAL. R	4	20	18	42
32	243034	813821105034	MOHAMED NAZIN. A	24	26	10	60
33	243035	813821105035	MOHAMMED ARSHAD. M	26	30	26	82
34	243036	813821105036	MOHAMMED YUSUF. A	0	6	4	10
35	243037	813821105037	NISHA CATHERINE. V	2	6	2	10
36	243038	813821105038	NITHISH KUMAR. J	4	20	0	24
37	243039	813821105039	NITHISHKUMAR. P	6	10	4	20
38	243040	813821105040	PADMASHARAN. G S	6	14	4	26
39	243041	813821105041	POOJA. Y	8	30	18	56
40	243042	813821105043	PRAVEEN KUMAR. V	0	20	14	34
41	243043	813821105042	PRAVEEN. S	22	26	10	58
42	243044	813821105044	ROJAR GIMSON. A	8	14	22	44
43	243046	813821105045	SHANTHINI. S	10	24	4	38
44	243047	813821105046	SHARULATHA. N	8	12	24	44
45	243048	813821105047	SHEAK ABDULLAH. K	0	10	14	24
46	243049	813821105048	SIVANESAN. B	14	16	30	60
47	243051	813821105049	SRIMATHI. P	10	14	4	28
48	243052	813821105050	SUBALAKSHMI. G	0	10	8	18
49	243053	813821105051	SUDHAN SANKAR. S	0	0	0	-1
50	243054	813821105052	SUDHES MARAN. S	4	26	28	58
51	243055	813821105053	SURENDHIRAN. R	2	16	2	20
52	243056	813821105054	TAMILARASAN. P	28	24	16	68
53	243057	813821105055	VINODHINI. R	8	30	28	66
54	243058	813821105056	YAZAR MOHIDEEN. S	16	32	28	76
55	243059	813821105057	YUVHARAAJ. S	2	4	14	20
56	243060	813821105058	ZUBAIR AHAMED. A	0	6	8	14
57	243061	813821105302	KIRSHAN MELWIN. J	2	24	16	42
58	243062	813821105301	JOSHUVA VASANTHAN. K	0	24	26	50

You have already submitted marks for this subject. Sorry No More Correction Possible

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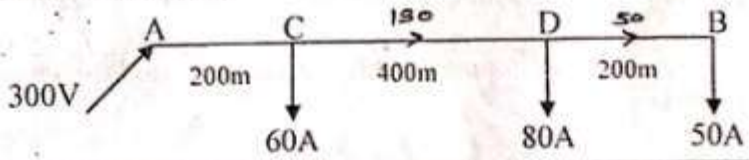
II - EEE

59-15-5-23

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - III		Date / Session	15.05.2023 / FN	Marks	50
Course code	EE3401	Course Title	TRANSMISSION AND DISTRIBUTION		
Batch No.		Duration	90 mins	Academic Year	2022 - 2023
Year	II	Semester/ Section	IV / A	Department	EEE

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Mention the different classification of cables based on the voltage rating.	C212.5	R
2.	State the effects of unequal distribution of stress in a cable.	C212.5	R
3.	What is the difference between capacitance grading and intersheath grading for an underground cable?	C212.5	A
4.	How is leakage resistance different from resistance of core in a cable?	C212.5	R
5.	What are the desirable characteristics of insulating materials used in cables?	C212.5	R
6.	Distinguish between overhead transmission line and underground cable.	C212.5	A
7.	What is a feeder?	C212.6	R
8.	Write the expression for power loss in a DC distributor with uniform loading when it is fed from one end.	C212.6	R
9.	Find the voltage drop in the section CD of the given 2 wire DC distributor 800m long fed at one end as shown in the figure below. The resistance of one conductor is 0.4Ω/km. 	C212.6	A
10.	Write the equation for finding the point of minimum potential when a 2 wire uniformly loaded DC distributor is fed from both ends with unequal voltages.	C212.6	R

Part – B
(Answer all the questions 2 x 10 = 20 marks)

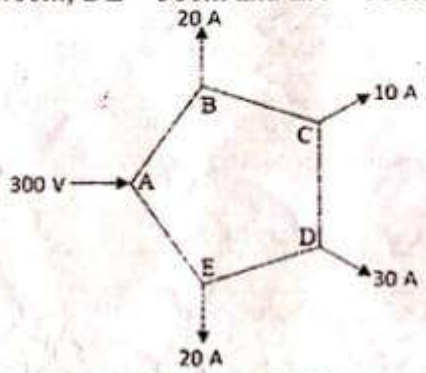
Q. No.	Questions	CO	Skills
11.	A single core cable working on 66 kV, 3 phase system has a conductor diameter of 3cm and a sheath of inside diameter of 9cm. It is desired to reduce the maximum stress by using two intersheaths such that the stress varies between same values in the three layers. Determine the a) location of the intersheaths, b) voltage on the intersheaths	C212.5	A
	OR		
12.	A single core lead covered cable is to be designed for a safe working voltage of 66kV to earth (peak). Its conductor diameter is 2 cm and its three insulating materials have permittivities 3, 4 and 5 respectively with the	C212.5	A

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	corresponding maximum safe working stress of 20kV/cm, 26kV/cm and 38kV/cm respectively. Find the minimum diameter of the lead sheath.		
13.	With neat diagram and equations, explain the methods of grading of cables.	C212.5	R
	OR		
14.	Describe an experiment to determine the capacitance of a 3 core belted cable.	C212.5	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	A ring main ABCDEA is fed from 300 V supply as shown in following figure. The resistance of each section AB, BC, CD, DE and EA is 0.2 Ω per 100 m. The loads are tapped off as shown. Arrange the voltages at the load points B (V_B), C (V_C), D (V_D) and E (V_E) in ascending order. [AB = 300m, BC = 400m, CD = 400m, DE = 500m and EA = 300m]. 	C212.6	E
	OR		
16.	Prove that a DC distributor fed from one end with uniform loading can be considered as a DC distributor fed from one end with concentrated load at its midpoint.	C212.6	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: R.Satheesh, AP-EEE

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SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	S. DHASVANTH			Year / Semester / Section	II / IV / A
Batch No.	243016	Date / Session	15.5.2023 / FN	Department	EEE
Course Code	EE3401	Course Title	TRANSMISSION & DISTRIBUTION		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date					

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11		10			10
2	✓		12	✓	3			
3	✓	2	13	✓				
4	✓	2	14					
5	✓	2	15	✓	3			3
6	✓	2	16					
7	✓						Total	13
8	✓	0						
9	✓	2						
10	✓	0						
Total		12	Grand Total		25		Name and Signature of the Examiner with date	

S. Dhasvanth

R. SATHEESH 15/05/2023

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted					64	36	100
Marks Obtained							

QAC Audit - Remarks

5/6/23

Name and Signature of the QAC member

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Staff Code: satheesh-eee,Assessment Test -3 [Date of Exam -15/05/23]

Branch: EEE Semester: 4 Subject Code: EE3401 - Sec A ,ShortTitle: T&D

1. For All tests,Please Enter Marks Secured for 100.
2. Total Marks for Absentees Should be marked only as -1. COs for Absentees should be entered as Zero.
3. Do not Prefix 0 for Single Digit Marks Eg: If the mark to be entered is 8,put the entry as 8.
4. Mark entry in this screen is Applicable only for UG-Assessment Tests.
5. **For Students who are not appearing for the VIII Semster Elective Paper this semester,Total Marks should be marked as -2**

S.no	Batchno	Register Number	Name	CS out of [64]	CS out of [36]	Total Marksfecured [out of 100]
1	243001	813821105001	ABINESH. P	12	4	16
2	243002	813821105002	ADHAN SHEIK IBRAHIM	34	20	54
3	243003	813821105003	AJAY. A	10	14	24
4	243004	813821105004	AKASH RAJ. A	22	18	40
5	243005	813821105005	ALAGU SRINIVASAN. S	8	2	10
6	243006	813821105006	AMIRTESH. R	28	2	30
7	243007	813821105007	AMIRTHA LAKSHMI. P	64	30	94
8	243008	813821105008	ANNARASAN. E	28	0	28
9	243009	813821105009	ARIHARAN. S	10	8	18
10	243010	813821105010	ATHIDHYAN. N	24	22	46
11	243012	813821105012	BARATH YOGESH. R K	64	28	92
12	243014	813821105014	DARTHI MARY. S	50	16	66
13	243015	813821105015	DEVA ALFRED. S	18	0	18
14	243016	813821105016	DHASVANTH. S	40	10	50
15	243017	813821105017	DIVYA. R	0	4	4
16	243018	813821105018	ELAVARASAN. S	20	6	26
17	243019	813821105019	FAIYAZ AHAMED. M	2	2	4
18	243020	813821105020	GOKUL. M	10	24	34
19	243021	813821105024	HARI KARTHIK. K	24	4	28
20	243022	813821105021	HARIHARAN. B	48	18	66
21	243023	813821105022	HARIHARAN. M	44	24	68
22	243024	813821105023	HARIHARASUDHAN. R	12	10	22
23	243025	813821105025	HARISH. M P	32	24	56
24	243026	813821105026	IQJAS FATHIMA. I	64	34	98

19/05/2023, 10:27 Assessment Tests Mark Entry

25	243027	813821105027	JAISON. R	2	20	22
26	243028	813821105028	KEAVIN. L	14	10	24
27	243029	813821105029	LOKESH KANNAN. M	14	22	36
28	243030	813821105030	MAFAZ AHAMED. M	0	0	0
29	243031	813821105031	MANESHWARAN. P L	26	6	32
30	243032	813821105032	MARZOOK AHAMED. M	46	34	80
31	243033	813821105033	MOHAMED FAIZAL. R	0	0	0
32	243034	813821105034	MOHAMED NAZIN. A	10	22	32
33	243035	813821105035	MOHAMMED ARSHAD. M	62	36	98
34	243036	813821105036	MOHAMMED YUSUF. A	4	0	4
35	243037	813821105037	NISHA CATHERINE. V	4	10	14
36	243038	813821105038	NITHISH KUMAR. J	8	8	16
37	243039	813821105039	NITHISHKUMAR. P	0	2	2
38	243040	813821105040	PADMASHARAN. G S	12	2	14
39	243041	813821105041	POOJA. Y	44	28	72
40	243042	813821105043	PRAVEEN KUMAR. V	10	8	18
41	243043	813821105042	PRAVEEN. S	10	0	10
42	243044	813821105044	POJAR GIMSON. A	30	32	62
43	243046	813821105045	SHANTHINI. S	38	22	60
44	243047	813821105046	SHARULATHA. M	0	0	-1
45	243048	813821105047	SHEAK ABDULLAH. K	0	10	10
46	243049	813821105048	SIVANESAN. B	22	36	58
47	243051	813821105049	SRIMATHI. R	34	24	58
48	243052	813821105050	SUBAIAKSHMI. G	12	4	16
49	243053	813821105051	SUDHAN SANKAR. S	26	8	34
50	243054	813821105052	SUDHES MARAN. S	12	6	18
51	243055	813821105053	SURENDHIRAN. R	0	0	-1
52	243056	813821105054	TAMILARASAN. P	44	22	66
53	243057	813821105055	VINODHINI. R	44	24	68
54	243058	813821105056	YAZAR MOHIDEEN. S	48	22	70
55	243059	813821105057	YUVARAAJ. S	0	0	-1
56	243060	813821105058	ZUBAIR AHAMED. A	4	0	4
57	243061	813821105302	KIRSHAN MELWIN. J	24	16	40
58	243062	813821105301	JOSHUVA VASANTHAN. X	36	14	50

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Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	PROTECTION AND SWITCHGEAR	Batch	2020 - 2024
CLASS / SECTION	Sem 6 / EEE	COURSE OUTCOME / TARGET	1: 65, 2: 65, 3: 65, 4: 65, 5: 65, 6: 65
COURSE COORDINATOR	Dr.M.V.Suganyadevi		

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			72	28							60	40						28	36	36	40						112	28	60	68	36	36
1	813820105001	AARADHANA. A	0	0							32	28						19	17	14	40						40	0	32	47	17	14
2	813820105002	ABDULRAHMAN. B	59	10							19	13						12	25	23	40						99	10	19	25	25	23
3	813820105003	ABIRAMI. D	57	10							18	32						20	18	20	40						97	10	18	52	18	20
4	813820105004	AJMEER KHAJA. S	52	0							7	4						5	16	7	40						92	0	7	9	16	7
5	813820105005	ANTONI FELIX. A	0	0							22	22						16	0	0	39						39	0	22	38	0	0
6	813820105006	ANUSH ARAVIND. U P	46	13							45	7						16	20	8	38						84	13	45	23	20	8
7	813820105007	ARUN KUMAR. V	62	26							30	35						20	26	23	40						102	26	30	55	26	23
8	813820105008	ASRAF ALI. A	43	7							23	10						0	20	14	35						78	7	23	10	20	14
9	813820105009	BHARATH KUMAR. M	61	4							28	27						23	23	20	40						101	4	28	50	23	20
10	813820105010	DANIEL WINFRED. J	31	7							22	21						6	33	23	35						66	7	22	27	33	23
11	813820105011	DHANUSHA. K	56	20							45	33						24	28	26	40						96	20	45	57	28	26
12	813820105012	DHARANIDHARAN. M	20	12							4	6						8	0	0	40						60	12	4	14	0	0
13	813820105013	DHARSHANAA. K	48	2							24	18						23	22	5	40						88	2	24	41	22	5
14	813820105014	DHARUN. A	50	0							36	14						22	20	0	39						89	0	36	36	20	0
15	813820105015	DHILIP RAJ. M P	0	0							36	17						0	14	0	39						39	0	36	17	14	0
16	813820105016	DHIVYA BHARATHI. V	50	20							27	39						10	22	22	40						90	20	27	49	22	22
17	813820105017	DINESH. P K	39	15							0	0						19	20	22	36						75	15	0	19	20	22
18	813820105018	DINESH RAJA. S	53	13							18	6						5	23	17	38						91	13	18	11	23	17
19	813820105019	DOYEL THERSITA. J	43	12							0	0						23	24	24	40						83	12	0	23	24	24
20	813820105020	FRANKLIN PATRICK. P	50	0							16	16						0	0	0	40						90	0	16	16	0	0
21	813820105021	GAYATHERI. M	42	20							46	32						21	25	15	40						82	20	46	53	25	15
22	813820105022	GOBINATH. P	47	17							33	12						0	20	23	40						87	17	33	12	20	23
23	813820105023	HARE HARA SUDAN. V	41	5							8	2						18	0	6	35						76	5	8	20	0	6
24	813820105024	HARIHARAN. G	46	24							31	6						18	14	8	40						86	24	31	24	14	8
25	813820105025	HARIHARAN. L	32	18							45	35						23	20	24	40						72	18	45	58	20	24
26	813820105026	HARISH. M	34	18							26	31						0	28	6	36						70	18	26	31	28	6
27	813820105027	HEMADHARSHINI. A	63	24							45	36						24	27	31	40						103	24	45	60	27	31
28	813820105028	KALAIVANI. S	46	19							39	34						23	21	27	40						86	19	39	57	21	27
29	813820105029	KAVIYA. A R	52	15							31	27						18	25	27	40						92	15	31	45	25	27
30	813820105030	KAVIYA. R	57	24							28	33						20	23	25	40						97	24	28	53	23	25
31	813820105031	KISHORE. R	0	0							10	18						3	7	12	39						39	0	10	21	7	12
32	813820105032	KISHORE KUMAR. R	43	15							15	7						15	18	15	39						82	15	15	22	18	15
33	813820105033	LOGA VIGNESH. M	34	0							29	9						18	17	10	40						74	0	29	27	17	10
34	813820105034	LOGESHWARAN. G R	65	22							46	19						21	24	25	40						105	22	46	40	24	25
35	813820105035	LOGESHWARAN. R	57	23							46	26						20	17	22	40						97	23	46	46	17	22
36	813820105036	MANIKANDAN. R	35	19							28	8						9	20	15	38						73	19	28	17	20	15
37	813820105038	MATHESWARAN. P	60	25							37	18						19	21	23	40						100	25	37	37	21	23
38	813820105039	MOHANAKANNAN. R	39	6							29	13						7	18	25	37						76	6	29	20	18	25
39	813820105040	MOSES MANOHARAN. V	51	15							34	28						18	25	23	37						88	15	34	46	25	23
40	813820105041	NANTHAKUMAR. K	31	22							29	26						19	16	15	35						66	22	29	45	16	15
41	813820105042	NARMADHA. K	51	2							33	12						19	18	18	40						91	2	33	31	18	18
42	813820105043	NASREEN BANU. A	62	24							38	33						18	26	27	40						102	24	38	51	26	27
43	813820105044	NAVIN KUMAR. P	25	18							20	8						0	0	0	40						65	18	20	8	0	0
44	813820105045	NILOFAR NISHA. A	59	23							45	37						27	25	32	40						99	23	45	64	25	32
45	813820105046	NIRENJANA. G M	47	12							38	19						21	24	23	40						87	12	38	40	24	23
46	813820105047	NITHISHWARAN. S	23	17							9	20						14	1	17	38						61	17	9	34	1	17
47	813820105048	NIVIN VIJOSS. R	46	22							44	30						22	24	17	40						86	22	44	52	24	17
48	813820105049	PAUL ROJER. R	64	26							52	38						22	24	30	40						104	26	52	60	24	30
49	813820105050	PRASANNA KUMAR. A	0	0							4	0						5	23	22	40						40	0	4	5	23	22
50	813820105051	PRATHABAN. K	63	23							35	38						25	25	28	40						103	23	35	63	25	28
51	813820105052	PRAVEENKUMAR. S	38	18							22	21						6	8	11	40						78	18	22	27	8	11

52	813820105053	PRIYADHARSHINI. S	65	17							54	34						22	27	26	40						105	17	54	56	27	26
53	813820105054	RAKKEEH. S	48	12							30	21						8	23	27	40						88	12	30	26	23	27
54	813820105055	RANGARAJAN. P S	8	0							14	0						0	12	0	35						43	0	14	0	12	0
55	813820105057	SANJAY. D	23	16							18	6						10	4	8	38						61	16	18	16	4	8
56	813820105058	SARAVANAKUMAR. L	44	19							25	26						0	0	0	38						82	19	25	26	0	0
57	813820105059	SHEIKHA NASEEMA. N	65	26							40	38						24	26	25	40						105	26	40	62	26	25
58	813820105060	SHRINA MAGGI. J S	42	26							32	18						20	20	24	40						82	26	32	38	20	24
59	813820105061	SIVA SANKARI. N	65	26							52	14						22	28	26	40						105	26	52	36	28	26
60	813820105062	SRIDEVI. P	60	24							51	33						23	21	27	40						100	24	51	56	21	27
61	813820105063	SUMEETH. S	7	0							10	12						0	0	0	35						42	0	10	12	0	0
62	813820105064	THASLEEMA KAUSER. Z	56	20							0	0						24	17	21	40						98	20	0	24	17	21
63	813820105066	VASANTHAPRIYAN. G C	23	10							25	10						0	8	17	37						60	10	25	10	8	17
64	813820105067	YOGGIRAJ. J S	33	13							12	0						5	3	3	36						69	13	12	5	3	3
65	813820105301	JACOBMARTIN. I	41	18							13	9						11	19	26	39						80	18	13	20	19	26
66	813820105302	KARTHIKEYAN. S	14	18							31	20						16	16	18	39						53	18	31	36	16	18
67	813820105303	SACHITHANANTHAN. P	58	14							24	14						6	28	20	39						97	14	24	20	28	20
68	813820105304	SANJAY. M	45	13							22	10						21	22	22	39						84	13	22	31	22	22
69	813820105305	SANTHOSHKUMAR. B	45	7							30	15						0	18	6	39						84	7	30	15	18	6
70	813820105501	SOWMIYA MOTHILAL	52	23							39	30						24	23	26	40						92	23	39	54	23	26
71	813820105701	YOGESWARAN. G R	26	24							0	0						18	12	16	39						65	24	0	18	12	16
CO's Target Value																											72.80	18.20	39.00	44.20	23.40	23.4
No. of Student Secured above CO's Target value																											52	26	15	24	21	21
Percentage of Student Secured above Target																											73.24	36.62	21.13	33.80	29.58	29.5

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	EE8602 PROTECTION AND SWITCHGEAR	Batch	2020 - 2024
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813820105001	AARADHANA. A	B+
2	813820105002	ABDULRAHMAN. B	A
3	813820105003	ABIRAMI. D	B+
4	813820105004	AJMEER KHAJA. S	B
5	813820105005	ANTONI FELIX. A	B
6	813820105006	ANUSH ARAVIND. U P	B
7	813820105007	ARUN KUMAR. V	A
8	813820105008	ASRAF ALI. A	B
9	813820105009	BHARATH KUMAR. M	B+
10	813820105010	DANIEL WINFRED. J	B
11	813820105011	DHANUSHA. K	A
12	813820105012	DHARANIDHARAN. M	B
13	813820105013	DHARSHANAA. K	B+
14	813820105014	DHARUN. A	B
15	813820105015	DHILIP RAJ. M P	B
16	813820105016	DHIVYA BHARATHI. V	B+
17	813820105017	DINESH. P K	B
18	813820105018	DINESH RAJA. S	B+
19	813820105019	DOYEL THERSITA. J	B+
20	813820105020	FRANKLIN PATRICK. P	B
21	813820105021	GAYATHERI. M	B+
22	813820105022	GOBINATH. P	B+
23	813820105023	HARE HARA SUDAN. V	U
24	813820105024	HARIHARAN. G	B+
25	813820105025	HARIHARAN. L	A
26	813820105026	HARISH. M	B+
27	813820105027	HEMADHARSHINI. A	A
28	813820105028	KALAIVANI. S	B
29	813820105029	KAVIYA. A R	A
30	813820105030	KAVIYA. R	A
31	813820105031	KISHORE. R	B
32	813820105032	KISHORE KUMAR. R	B
33	813820105033	LOGA VIGNESH. M	B
34	813820105034	LOGESHWARAN. G R	B+
35	813820105035	LOGESHWARAN. R	A
36	813820105036	MANIKANDAN. R	B
37	813820105038	MATHESWARAN. P	A
38	813820105039	MOHANAKANNAN. R	A
39	813820105040	MOSES MANOHARAN. V	A
40	813820105041	NANTHAKUMAR. K	B
41	813820105042	NARMADHA. K	B+
42	813820105043	NASREEN BANU. A	A
43	813820105044	NAVIN KUMAR. P	U
44	813820105045	NILOFAR NISHA. A	A
45	813820105046	NIRENJANA. G M	B+
46	813820105047	NITHISHWARAN. S	B+
47	813820105048	NIVIN VIJOSS. R	B
48	813820105049	PAUL ROJER. R	O
49	813820105050	PRASANNA KUMAR. A	B
50	813820105051	PRATHABAN. K	A
51	813820105052	PRAVEENKUMAR. S	B
52	813820105053	PRIYADHARSHINI. S	A
53	813820105054	RAKKESH. S	A
54	813820105055	RANGARAJAN. P S	U
55	813820105057	SANJAY. D	B
56	813820105058	SARAVANAKUMAR. L	A
57	813820105059	SHEIKHA NASEEMA. N	B+
58	813820105060	SHRINA MAGGI. J S	B+
59	813820105061	SIVA SANKARI. N	A
60	813820105062	SRIDEVI. P	A+
61	813820105063	SUMEETH. S	U
62	813820105064	THASLEEMA KAUSER. Z	B+
63	813820105066	VASANTHAPRIYAN. G C	B
64	813820105067	YOGGIRAJ. J S	B

65	813820105301	JACOBMARTIN. I	B+
66	813820105302	KARTHIKEYAN. S	B
67	813820105303	SACHITHANANTHAN. P	B
68	813820105304	SANJAY. M	B+
69	813820105305	SANTHOSHKUMAR. B	B+
70	813820105501	SOWMIYA MOTHILAL	
71	813820105701	YOGESWARAN. G R	B+
No. of S/O Grade			1
No. of A/A+ Grade			1
No. of B/A Grade			18
No. of C/B+ Grade			22
No. of D/B Grade			24
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			42
CO-Attainment University			59.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C311.1	73.24	59.00	64.70	81.22	68.00	2
C311.2	36.62	59.00	50.05	83.10	56.66	1
C311.3	21.13	59.00	43.85	80.28	51.14	1
C311.4	33.80	59.00	48.92	84.51	56.04	1
C311.5	29.58	59.00	47.23	81.69	54.12	1
C311.6	29.58	59.00	47.23	80.28	53.84	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C311.1	3	2	1			1	1	1		1	1	1	2		
C311.2	3	2	1			1	1	1		1	1	1	2		
C311.3	3	2	1			1	1	1		1	1	1	2		
C311.4	3	2	1			1	1	1		1	1	1	2		
C311.5	3	2	1			1	1	1		1	1	1	2		
C311.6	3	2	1			1	1	1		1	1	1	2		
C311	3.00	2.00	1.00			1.00	1.00	1.00		1.00	1.00	1.00	2.00		

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C311.1	2.00	1.33	0.67			0.67	0.67	0.67		0.67	0.67	0.67	1.33		
C311.2	1.00	0.67	0.33			0.33	0.33	0.33		0.33	0.33	0.33	0.67		
C311.3	1.00	0.67	0.33			0.33	0.33	0.33		0.33	0.33	0.33	0.67		
C311.4	1.00	0.67	0.33			0.33	0.33	0.33		0.33	0.33	0.33	0.67		
C311.5	1.00	0.67	0.33			0.33	0.33	0.33		0.33	0.33	0.33	0.67		
C311.6	1.00	0.67	0.33			0.33	0.33	0.33		0.33	0.33	0.33	0.67		
C311	1.17	0.78	0.39			0.39	0.39	0.39		0.39	0.39	0.39	0.78		

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	TRANSMISSION AND DISTRIBUTION PCC 3 0 0 3	Batch	2021 - 2025
CLASS / SECTION	Sem 4 / EEE	COURSE OUTCOME / TARGET	1: 65, 2: 65, 3: 65, 4: 65, 5: 65, 6: 65
COURSE COORDINATOR	Mr.R.Satheesh		

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			68	32						36	32	32							64	36	40						108	68	32	32	64	36
1	813821105001	ABINESH. P	12	4						4	6	4							12	4	40						52	8	6	4	12	4
2	813821105002	ADNAN SHEIK IBRAHIM	14	8						2	6	6							34	20	40						54	10	6	6	34	20
3	813821105003	AJAY. A	50	10						8	22	6							10	14	40						90	18	22	6	10	14
4	813821105004	AKASH RAJ. A	30	6						2	14	8							22	18	40						70	8	14	8	22	18
5	813821105005	ALAGU SRINIVASAR. S	14	0						0	8	8							8	2	40						54	0	8	8	8	2
6	813821105006	AMIRTESH. R	38	12						22	30	16							28	2	40						78	34	30	16	28	2
7	813821105007	AMIRTHA LAKSHMI. P	46	8						12	12	28							64	30	40						86	20	12	28	64	30
8	813821105008	ANBARASAN. E	2	0						2	8	0							28	0	40						42	2	8	0	28	0
9	813821105009	ARIHARAN. S	22	2						2	14	10							10	8	40						62	4	14	10	10	8
10	813821105010	ATHIDHYAN. N	44	28						2	18	30							24	22	40						84	30	18	30	24	22
11	813821105012	BARATH YOGESH. R K	54	32						30	28	22							64	28	40						94	62	28	22	64	28
12	813821105014	DARTHI MARY. S	24	12						24	16	18							50	16	40						64	36	16	18	50	16
13	813821105015	DEVA ALFRED. S	0	0						0	16	10							18	0	40						40	0	16	10	18	0
14	813821105016	DHASVANTH. S	32	24						6	24	26							40	10	40						72	30	24	26	40	10
15	813821105017	DIVYA. R	6	0						8	10	0							0	4	40						46	8	10	0	0	4
16	813821105018	ELAVARASAN. S	4	4						6	0	0							20	6	40						44	10	0	0	20	6
17	813821105019	FAIYAZ AHAMED. M	2	8						0	0	4							2	2	40						42	8	0	4	2	2
18	813821105020	GOKUL. M	30	16						0	0	0							10	24	40						70	16	0	0	10	24
19	813821105021	HARIHARAN. B	40	26						12	32	26							48	18	40						80	38	32	26	48	18
20	813821105022	HARIHARAN. M	50	14						10	30	16							44	24	40						90	24	30	16	44	24
21	813821105023	HARIHARASUDHAN. R	20	14						2	14	6							12	10	40						60	16	14	6	12	10
22	813821105024	HARI KARTHIK. K	32	18						8	16	18							24	4	40						72	26	16	18	24	4
23	813821105025	HARISH. H P	54	28						14	32	32							32	24	40						94	42	32	32	32	24
24	813821105026	IQJAS FATHIMA. I	40	30						30	32	32							64	34	40						80	60	32	32	64	34
25	813821105027	JAISON. R	0	6						4	16	14							2	20	40						40	10	16	14	2	20
26	813821105028	KEAVIN. L	32	24						0	10	18							14	10	40						72	24	10	18	14	10
27	813821105029	LOKESH KANNAN. N	22	6						12	14	24							14	22	40						62	18	14	24	14	22
28	813821105030	MAFAZ AHAMED. M	2	0						0	0	0							0	0	40						42	0	0	0	0	0
29	813821105031	MAHESHWARAN. P L	26	4						4	14	14							26	6	40						66	8	14	14	26	6
30	813821105032	MARZOOK AHAMED. M	34	18						26	22	18							46	34	40						74	44	22	18	46	34
31	813821105033	MOHAMED FAIZAL. R	0	6						4	20	18							0	0	40						40	10	20	18	0	0
32	813821105034	MOHAMED MAZIN. A	44	22						24	26	10							10	22	40						84	46	26	10	10	22
33	813821105035	MOHAMMED ARSHAD. M	48	28						26	30	26							62	36	40						88	54	30	26	62	36
34	813821105036	MOHAMMED YUSUF. A	8	8						0	6	4							4	0	40						48	8	6	4	4	0
35	813821105037	NISHA CATHERINE. V	8	0						2	6	2							4	10	40						48	2	6	2	4	10
36	813821105038	NITHISH KUMAR. J	20	2						4	20	0							8	8	40						60	6	20	0	8	8
37	813821105039	NITHISHKUMAR. P	10	8						6	10	4							8	2	40						50	14	10	4	6	2
38	813821105040	PADMASHARAN. G S	0	0						8	14	4							12	2	40						40	8	14	4	12	2
39	813821105041	POOJA. Y	34	28						8	30	18							44	28	40						74	36	30	18	44	28
40	813821105042	PRAVEEN. S	48	28						22	26	10							10	0	40						88	50	26	10	10	0
41	813821105043	PRAVEEN KUMAR. V	16	14						0	20	14							10	8	40						56	14	20	14	10	8
42	813821105044	ROJAR GIMSON. A	38	20						8	14	22							30	32	40						78	28	14	22	30	32
43	813821105045	SHANTHINI. S	12	0						10	24	4							38	22	40						52	10	24	4	38	22
44	813821105046	SHARULATHA. N	38	22						8	12	24							0	0	40						78	30	12	24	0	0
45	813821105047	SHEAK ABDULLAH. K	12	8						0	10	14							6	10	40						52	8	10	14	6	10
46	813821105048	SIVANESAN. B	32	28						14	16	30							22	36	40						72	42	16	30	22	36

47	813821105049	SRIMATHI. R	34	2						10	14	4							34	24	40						74	12	14	4	34	24
48	813821105050	SUBALAKSHMI. G	16	0						0	10	8							12	4	40						56	0	10	8	12	4
49	813821105051	SUDHAN SANKAR. S	38	16						0	0	0							26	8	40						78	16	0	0	26	8
50	813821105052	SUDHES MARAN. S	30	14						4	26	26							12	6	40						70	18	26	26	12	6
51	813821105053	SURENDHIRAN. R	14	6						2	16	2							0	0	40						54	8	16	2	0	0
52	813821105054	TAMILARASAN. P	34	18						28	24	16							44	22	40						74	46	24	16	44	22
53	813821105055	VINODHINI. R	44	22						8	30	28							44	24	40						84	30	30	28	44	24
54	813821105056	YAZAR MOHIDEEN. S	50	24						16	32	28							48	22	40						90	40	32	28	48	22
55	813821105057	YUVHARAAJ. S	14	2						2	4	14							0	0	40						54	4	4	14	0	0
56	813821105058	ZUBAIR AHAMED. A	8	4						0	6	8							4	0	40						48	4	6	8	4	0
57	813821105301	JOSHUVA VASANTHAN. K	40	16						0	24	26							36	14	40						80	16	24	26	36	14
58	813821105302	KIRSHAN MELWIN. J	16	0						2	24	16							24	16	40						56	2	24	16	24	16
CO's Target Value																											70.20	44.20	20.80	20.80	41.60	23.40
No. of Student Secured above CO's Target value																											26	6	20	16	12	13
Percentage of Student Secured above Target																											44.83	10.34	34.48	27.59	20.69	22.41

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	EE3401 TRANSMISSION AND DISTRIBUTION PCC 3 0 0 3	Batch	2021 - 2025
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813821105001	ABINESH. P	C
2	813821105002	ADNAN SHEIK IBRAHIM	B+
3	813821105003	AJAY. A	B+
4	813821105004	AKASH RAJ. A	B+
5	813821105005	ALAGU SRINIVASAR. S	C
6	813821105006	AMIRTESH. R	B+
7	813821105007	AMIRTHA LAKSHMI. P	A+
8	813821105008	ANBARASAN. E	B+
9	813821105009	ARIHARAN. S	B+
10	813821105010	ATHIDHYAN. N	A
11	813821105012	BARATH YOGESH. R K	A+
12	813821105014	DARTHI MARY. S	A
13	813821105015	DEVA ALFRED. S	C
14	813821105016	DHASVANTH. S	A+
15	813821105017	DIVYA. R	C
16	813821105018	ELAVARASAN. S	B+
17	813821105019	FAIYAZ AHAMED. M	C
18	813821105020	GOKUL. M	B+
19	813821105021	HARIHARAN. B	A+
20	813821105022	HARIHARAN. M	A+
21	813821105023	HARIHARASUDHAN. R	A
22	813821105024	HARI KARTHIK. K	A+
23	813821105025	HARISH. H P	O
24	813821105026	IQJAS FATHIMA. I	O
25	813821105027	JAISON. R	B+
26	813821105028	KEAVIN. L	A
27	813821105029	LOKESH KANNAN. N	B+
28	813821105030	MAFAZ AHAMED. M	U
29	813821105031	MAHESHWARAN. P L	B+
30	813821105032	MARZOOK AHAMED. M	A
31	813821105033	MOHAMED FAIZAL. R	B+
32	813821105034	MOHAMED MAZIN. A	A
33	813821105035	MOHAMMED ARSHAD. M	A
34	813821105036	MOHAMMED YUSUF. A	C
35	813821105037	NISHA CATHERINE. V	C
36	813821105038	NITHISH KUMAR. J	B+
37	813821105039	NITHISHKUMAR. P	B
38	813821105040	PADMASHARAN. G S	B
39	813821105041	POOJA. Y	A+
40	813821105042	PRAVEEN. S	B+
41	813821105043	PRAVEEN KUMAR. V	B
42	813821105044	ROJAR GIMSON. A	A
43	813821105045	SHANTHINI. S	B+
44	813821105046	SHARULATHA. N	B+
45	813821105047	SHEAK ABDULLAH. K	B
46	813821105048	SIVANESAN. B	B+
47	813821105049	SRIMATHI. R	B+
48	813821105050	SUBALAKSHMI. G	B
49	813821105051	SUDHAN SANKAR. S	B
50	813821105052	SUDHES MARAN. S	B+
51	813821105053	SURENDHIRAN. R	C
52	813821105054	TAMILARASAN. P	A+
53	813821105055	VINODHINI. R	A+
54	813821105056	YAZAR MOHIDEEN. S	A
55	813821105057	YUVHARAAJ. S	C
56	813821105058	ZUBAIR AHAMED. A	C
57	813821105301	JOSHUVA VASANTHAN. K	A
58	813821105302	KIRSHAN MELWIN. J	B
No. of S/O Grade			2
No. of A/A+ Grade			10
No. of B/A Grade			7
No. of C/B+ Grade			10
No. of D/B Grade			0

No. of E/B Grade	0
Target for course outcome Attainment	65
No of students above the target	29
CO-Attainment University	50.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C212.1	44.83	50.00	47.93	81.03	54.55	1
C212.2	10.34	50.00	34.14	82.18	43.75	1
C212.3	34.48	50.00	43.79	82.18	51.47	1
C212.4	27.59	50.00	41.03	82.18	49.26	1
C212.5	20.69	50.00	38.28	81.61	46.94	1
C212.6	22.41	50.00	38.97	82.18	47.61	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C212.1	3	2	2	1		2					1	2	3	2	
C212.2	3	2	2	1		2					1	2	3	2	
C212.3	3	2	2	1		2					1	2	3	2	
C212.4	3	2	2	1		2		1			1	2	3	2	
C212.5	3	2	2	1		2					1	2	3	2	
C212.6	3	2	2	1		2					1	2	3	2	
C212	3.00	2.00	2.00	1.00		2.00		0.17			1.00	2.00	3.00	2.00	

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C212.1	1.00	0.67	0.67	0.33		0.67					0.33	0.67	1.00	0.67	
C212.2	1.00	0.67	0.67	0.33		0.67					0.33	0.67	1.00	0.67	
C212.3	1.00	0.67	0.67	0.33		0.67					0.33	0.67	1.00	0.67	
C212.4	1.00	0.67	0.67	0.33		0.67		0.33			0.33	0.67	1.00	0.67	
C212.5	1.00	0.67	0.67	0.33		0.67					0.33	0.67	1.00	0.67	
C212.6	1.00	0.67	0.67	0.33		0.67					0.33	0.67	1.00	0.67	
C212	1.00	0.67	0.67	0.33		0.67		0.06			0.33	0.67	1.00	0.67	

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	ELECTRICAL CIRCUIT ANALYSIS	Batch	2022 - 2026
CLASS / SECTION	Sem 2 / EEE	COURSE OUTCOME	1 2 3 4 5 6
COURSE COORDINATOR	Dr.M.Marimuthu	TARGET	65 65 65 65 65 65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	40						64			36				40	60			20	20					80	124	40	60	36	0
1	813822105001	ABARNA. S	46	32						30			26				20	42			20	20					66	82	20	42	26	
2	813822105002	AHMED YASEEN. A	40	18						38			16				12	22			20	20					60	76	12	22	16	
3	813822105003	ANU SRI. M	42	26						40			28				22	36			20	20					62	86	22	36	28	
4	813822105004	ARULPRASATH. S	30	28						26			24				20	42			20	19					50	73	20	42	24	
5	813822105005	ASHWIIN SARVESH. S	30	28						36			16				12	28			20	20					50	84	12	28	16	
6	813822105006	ASWIN. S	40	34						24			28				16	46			20	20					60	78	16	46	28	
7	813822105007	AVANTHIKA. M	36	26						46			24				20	42			20	20					56	92	20	42	24	
8	813822105008	BALAJI. R	50	40						46			30				26	42			20	20					70	106	26	42	30	
9	813822105009	BOOBALAN. V	16	10						36			24				22	32			20	19					36	65	22	32	24	
10	813822105010	DHARANI. P	32	18						30			28				8	14			20	20					52	68	8	14	28	
11	813822105011	GNANASEKARAN. A	24	14						38			24				20	30			20	19					44	71	20	30	24	
12	813822105012	HARIHARAN. A	20	12						26			12				4	34			19	20					39	58	4	34	12	
13	813822105013	HARINI. S	48	38						40			30				18	44			20	20					68	98	18	44	30	
14	813822105014	HARINI. S	52	36						38			30				26	58			20	20					72	94	26	58	30	
15	813822105015	IMMANUVEL. K	38	34						22			8				14	40			20	20					58	76	14	40	8	
16	813822105016	ISHWARYA. M D	50	40						48			34				28	60			20	20					70	108	28	60	34	
17	813822105017	IYAN RAJ. S	38	36						36			34				14	52			20	20					58	92	14	52	34	
18	813822105018	JAISING. R	28	22						28			24				8	32			20	20					48	70	8	32	24	
19	813822105019	JEEVANTH. A	40	30						40			32				28	42			20	20					60	90	28	42	32	
20	813822105020	JEROME. W	20	32						34			16				20	30			20	20					40	86	20	30	16	
21	813822105021	JOJINA. J	42	36						50			34				22	50			20	20					62	106	22	50	34	
22	813822105022	KABILAN. S	20	24						20			19				14	36			20	19					40	63	14	36	19	
23	813822105023	KISHORE KUMAR. D	20	32						28			28				8	26			20	20					40	80	8	26	28	
24	813822105024	LAKSHAN AINAN. S	34	20						22			20				16	38			20	20					54	62	16	38	20	
25	813822105025	MOHAMED YUNUS. S	38	40						20			26				20	34			20	20					58	80	20	34	26	
26	813822105026	MOHANAPRASATH. B	34	30						34			22				12	30			20	20					54	84	12	30	22	
27	813822105027	MOHITH SIVARAM. K	24	16						18			22				8	16			20	19					44	53	8	16	22	
28	813822105028	MUTHU CHELVAN. S L	34	32						30			32				18	32			20	20					54	82	18	32	32	
29	813822105029	NANDHINI. R	36	22						26			28				10	16			20	20					56	68	10	16	28	
30	813822105030	NAVIN KUMAAR. V B	48	34						18			20				22	36			20	20					68	72	22	36	20	
31	813822105031	NINDHIYA. R	34	34						42			30				20	46			20	20					54	96	20	46	30	
32	813822105032	NISHITHA JENNIFER. S	30	30						28			22				14	10			20	20					50	78	14	10	22	
33	813822105033	NITHISHWARAN. S	34	20						14			10				20	32			20	20					54	54	20	32	10	
34	813822105034	PERAMUTHU. P	42	40						50			34				28	44			20	20					62	110	28	44	34	
35	813822105035	PRAVEENA SRI. K	58	36						44			32				22	44			20	20					78	100	22	44	32	
36	813822105036	PREETHI. A	30	32						24			26				8	16			20	20					50	76	8	16	26	
37	813822105037	PRIYADHARSHINI. K	34	30						40			32				18	34			20	20					54	90	18	34	32	
38	813822105038	RAGHUL PRAKASH	40	34						42			28				28	46			20	20					60	96	28	46	28	
39	813822105039	SABARIGURU. J R	36	26						24			26				22	38			20	20					56	70	22	38	26	
40	813822105040	SARVESH. V R	42	24						12			8				12	12			20	19					62	55	12	12	8	
41	813822105041	SATHISH. B	38	12						40			34				26	52			20	20					58	72	26	52	34	
42	813822105042	SHAABAAZ AHAMED KHAN. K	52	32						20			22				14	38			20	20					72	72	14	38	22	
43	813822105043	SHAHITH AHAMED. A	32	30						54			26				32	58			20	20					52	104	32	58	26	
44	813822105044	SHRI GAYATHRI. J	50	38						30			30				22	52			20	20					70	88	22	52	30	
45	813822105045	SIDDHARTHAN. K	40	30						34			20				16	46			20	20					60	84	16	46	20	
46	813822105046	SRIRANJANI. A	60	40						38			34				28	40			20	20					80	98	28	40	34	

47	813822105047	SRI SUDHARSAN. G K	26	28						20			18				22	38			20	20					46	68	22	38	18	
48	813822105048	SRI VARSHA. M K	34	28						24			28				16	36			20	20					54	72	16	36	28	
49	813822105049	SUBENDRAN. S	58	38						48			28				18	42			20	20					78	106	18	42	28	
50	813822105050	SUBHASHREE JENA S	24	20						26			24				6	16			20	20					44	66	6	16	24	
51	813822105051	SUDHARSAN. R S	42	38						32			20				26	56			20	20					62	90	26	56	20	
52	813822105052	SUJI. R	38	24						32			18				20	48			20	20					58	76	20	48	18	
53	813822105053	SWETHA. Y	50	38						46			30				24	54			20	20					70	104	24	54	30	
54	813822105054	SYED MUBARAK. U	50	32						38			22				32	56			20	20					70	90	32	56	22	
55	813822105055	UMAR. S	60	36						22			28				24	44			20	20					80	78	24	44	28	
56	813822105056	YUKTHIKA CATHARINE. M B	52	40						56			36				30	54			20	20					72	116	30	54	36	
CO's Target Value																											52.00	80.60	28.00	39.00	23.40	0.00
No. of Student Secured above CO's Target value																											40	28	8	28	37	0
Percentage of Student Secured above Target																											71.43	50.00	14.29	50.00	66.07	0.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	EE3251 ELECTRICAL CIRCUIT ANALYSIS	Batch	2022 - 2026
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813822105001	ABARNA. S	B
2	813822105002	AHMED YASEEN. A	U
3	813822105003	ANU SRI. M	B+
4	813822105004	ARULPRASATH. S	U
5	813822105005	ASHWIIN SARVESH. S	U
6	813822105006	ASWIN. S	U
7	813822105007	AVANTHIKA. M	U
8	813822105008	BALAJI. R	B+
9	813822105009	BOOBALAN. V	A
10	813822105010	DHARANI. P	B+
11	813822105011	GNANASEKARAN. A	B+
12	813822105012	HARIHARAN. A	U
13	813822105013	HARINI. S	B+
14	813822105014	HARINI. S	B+
15	813822105015	IMMANUVEL. K	B+
16	813822105016	ISHWARYA. M D	A
17	813822105017	IYAN RAJ. S	B+
18	813822105018	JAISING. R	C
19	813822105019	JEEVANTH. A	B+
20	813822105020	JEROME. W	U
21	813822105021	JOJINA. J	A
22	813822105022	KABILAN. S	B+
23	813822105023	KISHORE KUMAR. D	B
24	813822105024	LAKSHAN AINAN. S	B+
25	813822105025	MOHAMED YUNUS. S	U
26	813822105026	MOHANAPRASATH. B	B+
27	813822105027	MOHITH SIVARAM. K	U
28	813822105028	MUTHU CHELVAN. S L	B+
29	813822105029	NANDHINI. R	B+
30	813822105030	NAVIN KUMAAR. V B	U
31	813822105031	NINDHIYA. R	B+
32	813822105032	NISHITHA JENNIFER. S	B
33	813822105033	NITHISHWARAN. S	B
34	813822105034	PERAMUTHU. P	B+
35	813822105035	PRAVEENA SRI. K	A
36	813822105036	PREETHI. A	B
37	813822105037	PRIYADHARSHINI. K	B+
38	813822105038	RAGHUL PRAKASH	B+
39	813822105039	SABARIGURU. J R	U
40	813822105040	SARVESH. V R	U
41	813822105041	SATHISH. B	U
42	813822105042	SHAABAAZ AHAMED KHAN. K	B
43	813822105043	SHAHITH AHAMED. A	B+
44	813822105044	SHRI GAYATHRI. J	B+
45	813822105045	SIDDHARTHAN. K	U
46	813822105046	SRIRANJANI. A	B+
47	813822105047	SRI SUDHARSAN. G K	B
48	813822105048	SRI VARSHA. M K	U
49	813822105049	SUBENDRAN. S	B+
50	813822105050	SUBHASHREE JENA S	B+
51	813822105051	SUDHARSAN. R S	B+
52	813822105052	SUJI. R	B+
53	813822105053	SWETHA. Y	B+
54	813822105054	SYED MUBARAK. U	B+
55	813822105055	UMAR. S	B+
56	813822105056	YUKTHIKA CATHARINE. M B	B+
No. of S/O Grade			0
No. of A/A+ Grade			4
No. of B/A Grade			7
No. of C/B+ Grade			1
No. of D/B Grade			0
No. of E/B Grade			0
Target for course outcome Attainment			65

No of students above the target	12
CO-Attainment University	21.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
113.1	71.43	21.00	41.17	85.71	50.08	1
113.2	50.00	21.00	32.60	82.14	42.51	1
113.3	14.29	21.00	18.31	83.93	31.44	1
113.4	50.00	21.00	32.60	82.74	42.63	1
113.5	66.07	21.00	39.03	80.95	47.41	1
113.6	0.00	21.00	12.60	83.93	26.87	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
113.1	2	3	2	2	3	2	3		2		2	1	3	2	
113.2	2	3	2	2	3	2	3		2		2	1	3	2	
113.3	2	3	2	2	3	2	3		2			1	3	2	
113.4	2	3	2	2	3	2	3		2		2	1	3	2	
113.5	2	3	2	2	3	2	3		2		2	1	3	2	
113.6	2	3	2	2	3	2	3		2		3	1	3	2	
113	2.00	3.00	2.00	2.00	3.00	2.00	3.00		2.00		1.83	1.00	3.00	2.00	

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
113.1	0.67	1.00	0.67	0.67	1.00	0.67	1.00		0.67		0.67	0.33	1.00	0.67	
113.2	0.67	1.00	0.67	0.67	1.00	0.67	1.00		0.67		0.67	0.33	1.00	0.67	
113.3	0.67	1.00	0.67	0.67	1.00	0.67	1.00		0.67			0.33	1.00	0.67	
113.4	0.67	1.00	0.67	0.67	1.00	0.67	1.00		0.67		0.67	0.33	1.00	0.67	
113.5	0.67	1.00	0.67	0.67	1.00	0.67	1.00		0.67		0.67	0.33	1.00	0.67	
113.6	0.67	1.00	0.67	0.67	1.00	0.67	1.00		0.67		1.00	0.33	1.00	0.67	
113	0.67	1.00	0.67	0.67	1.00	0.67	1.00		0.67		0.61	0.33	1.00	0.67	

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester			
COURSE CODE/TITLE	POWER SYSTEM OPERATION AND CONTROL	Batch	2019 - 2023
CLASS / SECTION	Sem 7 / EEE A & B	COURSE OUTCOME / TARGET	1: 65, 2: 65, 3: 65, 4: 65, 5: 65, 6: 65
COURSE COORDINATOR	Dr.M.V.Suganyadevi / Mr.R.Satheesh		

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			68	**32**						**32**	**68**							**40**	**32**	**28**	**68**	**64**	**68**	**40**	**32**	**28**
1	813819105001	AADHITHYA P B	50	16						25	25							30	30	14	50	41	25	30	30	14
2	813819105002	AARTHI. L	55	23						25	40							21	15	22	55	48	40	21	15	22
3	813819105004	ABIRAMI. R	59	30						28	34							38	30	20	59	58	34	38	30	20
4	813819105006	AKASH. T	35	27						24	39							10	20	20	35	51	39	10	20	20
5	813819105007	AMIRTHA LAKSHMI. K	63	32						30	62							34	32	28	63	62	62	34	32	28
6	813819105008	ANNAMALAI. M	48	6						21	30							20	11	12	48	27	30	20	11	12
7	813819105009	ARAVIND. K	35	20						25	33							30	20	10	35	45	33	30	20	10
8	813819105010	AVINAS. R M	39	19						28	42							28	17	20	39	47	42	28	17	20
9	813819105011	AZARUDEEN. J	54	21						17	61							25	25	9	54	38	61	25	25	9
10	813819105012	BALA MANI KANDAN. R	48	24						20	37							20	10	11	48	44	37	20	10	11
11	813819105013	BHAVADHARINI. M	59	29						25	61							36	28	25	59	54	61	36	28	25
12	813819105014	CAROLIN MARY. X	68	32						29	63							38	32	27	68	61	63	38	32	27
13	813819105015	CHANDRIKA. S	68	28						26	47							35	32	26	68	54	47	35	32	26
14	813819105016	CHANDRU. A	62	29						26	47							15	20	25	62	55	47	15	20	25
15	813819105017	DANUSH PRIYAN. RA	33	0						15	21							20	3	0	33	15	21	20	3	0
16	813819105018	DEVADHARSHINI. S	52	28						25	63							0	0	0	52	53	63	0	0	0
17	813819105019	EMMANUEL LOUIS. L	60	22						29	60							36	15	07	60	51	60	36	15	7
18	813819105020	GAYATHIRI. M	52	28						23	56							35	30	26	52	51	56	35	30	26
19	813819105021	GAYATHRI. S	56	14						24	40							30	21	25	56	38	40	30	21	25
20	813819105022	GOKULNATH. R	52	27						21	52							30	20	00	52	48	52	30	20	0
21	813819105023	GOWTHAM. R	60	22						26	52							30	20	9	60	48	52	30	20	9
22	813819105024	HARIHARAN. R	58	24						28	54							30	26	20	58	52	54	30	26	20
23	813819105025	HARIHARAN. S	56	26						23	59							30	17	25	56	49	59	30	17	25
24	813819105026	HARIKARAN . M	55	27						30	50							34	25	25	55	57	50	34	25	25
25	813819105027	HARI KRISHNAN. P	44	18						25	60							29	25	25	44	43	60	29	25	25
26	813819105028	HARI NARAYANAN. R	54	23						25	35							36	20	20	54	48	35	36	20	20
27	813819105029	HARINI. K	52	24						18	52							26	18	24	52	42	52	26	18	24
28	813819105030	HARINI. K B	47	27						26	48							24	26	24	47	53	48	24	26	24
29	813819105031	HARISHINI. S	54	13						22	36							30	25	20	54	35	36	30	25	20
30	813819105032	HARITHA. J	46	20						27	47							31	30	20	46	47	47	31	30	20
31	813819105033	HESHAVARDHINI. N	36	16						21	29							26	20	10	36	37	29	26	20	10
32	813819105034	HIRUTHICRAM. C	34	21						27	38							28	15	15	34	48	38	28	15	15
33	813819105035	JANANI. A	32	27						0	0							30	20	19	32	27	0	30	20	19
34	813819105036	KALEESWARAN. B	13	9						20	37							20	21	00	13	29	37	20	21	0
35	813819105037	KARISHMA. R S	44	12						22	43							25	15	17	44	34	43	25	15	17
36	813819105038	KARTHIKEYAN. S	48	25						26	56							26	25	22	48	51	56	26	25	22
37	813819105040	KHAVYA. K J	36	28						27	36							25	9	05	36	55	36	25	9	5
38	813819105041	KIRAUN RAAJ. B	17	14						23	27							20	14	3	17	37	27	20	14	3
39	813819105042	LAKSHMI. S	63	28						28	53							36	22	25	63	56	53	36	22	25
40	813819105043	LOGESH. A	63	29						23	64							20	23	25	63	52	64	20	23	25
41	813819105045	MANIRAJ. V C	60	25						26	44							20	22	20	60	51	44	20	22	20
42	813819105046	MANOGAR. R	50	20						15	40							09	15	10	50	35	40	9	15	10
43	813819105047	MOHAMED IMRAN. J	20	4						12	28							8	5	14	20	16	28	8	5	14
44	813819105048	MOHAMED JAVITH. S	30	10						12	34							30	22	8	30	22	34	30	22	8
45	813819105049	MOHANA. S	44	16						24	42							32	24	16	44	40	42	32	24	16
46	813819105050	MOHANA PRIYAN. R	32	24						12	22							18	10	18	32	36	22	18	10	18
47	813819105051	MOHAN RAJ. R	32	8						18	38							14	22	18	32	26	38	14	22	18
48	813819105052	MUTHU KARUPPAN. A	36	14						26	38							36	28	24	36	40	38	36	28	24
49	813819105053	NAVINKKUMAR. K	64	32						30	58							34	22	16	64	62	58	34	22	16
50	813819105054	NAZEEMA BANU. S	42	26						28	32							18	28	24	42	54	32	18	28	24
51	813819105055	NIJITHA. I	32	8						2	42							8	14	20	32	10	42	8	14	20

52	813819105056	NIVADITHA. M	60	28						28	42							16	20	4	60	56	42	16	20	4
53	813819105057	PRAVEENKUMAR. D	46	30						20	40							28	18	4	46	50	40	28	18	4
54	813819105059	RAHUL. K	50	10						18	32							22	22	18	50	28	32	22	22	18
55	813819105060	RAHUL. R	16	10						8	38							12	8	14	16	18	38	12	8	14
56	813819105061	RAJESH. A	18	12						14	18							12	12	10	18	26	18	12	12	10
57	813819105063	RENGANATHAN. R	29	16						16	18							6	10	8	29	32	18	6	10	8
58	813819105064	RIORDAAN AMALA INFANT. D F S	24	12						20	34							6	16	8	24	32	34	6	16	8
59	813819105065	SAI SHAARAN. T S	31	16						18	24							14	4	18	31	34	24	14	4	18
60	813819105066	SAM DANIEL. W	23	22						20	40							14	6	16	23	42	40	14	6	16
61	813819105067	SANJEEV. B	35	22						20	34							8	6	2	35	42	34	8	6	2
62	813819105068	SANTHOSH KUMAR. S	24	18						16	34							16	20	14	24	34	34	16	20	14
63	813819105069	SHAMITHA. R	56	22						28	22							0	0	0	56	50	22	0	0	0
64	813819105070	SHANMATHI. S	49	28						22	46							36	22	24	49	50	46	36	22	24
65	813819105071	SHARAN. N	42	8						18	32							12	22	4	42	26	32	12	22	4
66	813819105072	SHARMILA. J	47	32						30	60							28	28	18	47	62	60	28	28	18
67	813819105073	SHIVANI. R	46	20						26	36							30	20	16	46	46	36	30	20	16
68	813819105074	SHOBAN NATH. M	9	0						14	22							0	0	0	9	14	22	0	0	0
69	813819105075	SIVA HARI. S	42	20						20	38							18	18	18	42	40	38	18	18	18
70	813819105076	SIVA SOORIYA. M	34	24						22	16							12	14	2	34	46	16	12	14	2
71	813819105077	SNEHAA. A	28	16						14	36							20	16	16	28	30	36	20	16	16
72	813819105078	SNEKA. A	28	22						18	32							40	22	16	28	40	32	40	22	16
73	813819105080	SREEVATHSAN. K	51	26						26	38							34	22	14	51	52	38	34	22	14
74	813819105081	SRINIVASAN. M	37	6						24	18							6	14	22	37	30	18	6	14	22
75	813819105082	SRIRAMAN. E C	44	10						12	38							8	10	18	44	22	38	8	10	18
76	813819105083	SUJEITH. S K	18	20						24	30							24	20	18	18	44	30	24	20	18
77	813819105084	SURESHKUMAR. P	52	22						24	44							24	14	12	52	46	44	24	14	12
78	813819105085	SWATHY. S M	32	14						8	50							14	14	18	32	22	50	14	14	18
79	813819105086	VASANTH. R	17	0						8	42							10	4	12	17	8	42	10	4	12
80	813819105087	VIDHYA. D	50	24						18	52							30	18	26	50	42	52	30	18	26
81	813819105088	VIDHYA DHARANI. V	54	20						20	44							20	20	22	54	40	44	20	20	22
82	813819105089	VIKTHISWARAN. A	28	8						0	0							12	22	20	28	8	0	12	22	20
83	813819105090	VIMALESH. K	49	14						20	24							38	32	14	49	34	24	38	32	14
84	813819105091	YASHIKA. K	47	4						16	48							16	20	20	47	20	48	16	20	20
85	813819105092	YOGESH. N	37	24						4	16							18	26	20	37	28	16	18	26	20
86	813819105093	YOGESHWARAN. M	31	24						4	0							36	14	22	31	28	0	36	14	22
87	813819105301	LAKSHMI NARASIMMAN. V	27	23						19	31							19	0	00	27	42	31	19	0	0
88	813819105302	PANDIESWARI. A	28	23						24	38							14	20	10	28	47	38	14	20	10
89	813819105303	RAHUL. V	30	23						15	38							13	20	10	30	38	38	13	20	10
90	813819105304	SURENDRAN. P	51	18						26	46							38	24	22	51	44	46	38	24	22
91	813819105305	YUKESH KUMAR. T S	57	32						28	50							32	22	24	57	60	50	32	22	24
92	813820105501	SOWMIYA MOTHILAL	0	0						0	0							0	0	0	0	0	0	0	0	0
																					CO's Target Value			44.20	41.60	44.20	26.00	20.80	16.20
																					No. of Student Secured above CO's Target value			46	49	29	38	37	38
																					Percentage of Student Secured above Target			50.00	53.26	31.52	41.30	40.22	41.30

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE EE8702 POWER SYSTEM OPERATION AND CONTROL	Batch 2019 - 2023
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)	

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813819105001	AADHITHYA P B	B
2	813819105002	AARTHI. L	B+
3	813819105004	ABIRAMI. R	B+
4	813819105006	AKASH. T	B
5	813819105007	AMIRTHA LAKSHMI. K	A
6	813819105008	ANNAMALAI. M	B
7	813819105009	ARAVIND. K	B
8	813819105010	AVINAS. R M	B
9	813819105011	AZARUDEEN. J	B
10	813819105012	BALA MANI KANDAN. R	B
11	813819105013	BHAVADHARINI. M	A
12	813819105014	CAROLIN MARY. X	A+
13	813819105015	CHANDRIKA. S	A+
14	813819105016	CHANDRU. A	A+
15	813819105017	DANUSH PRIYAN. RA	
16	813819105018	DEVADHARSHINI. S	B+
17	813819105019	EMMANUEL LOUIS. L	B+
18	813819105020	GAYATHIRI. M	B+
19	813819105021	GAYATHRI. S	B+
20	813819105022	GOKULNATH. R	B
21	813819105023	GOWTHAM. R	B
22	813819105024	HARIHARAN. R	B+
23	813819105025	HARIHARAN. S	B
24	813819105026	HARIKARAN . M	B+
25	813819105027	HARI KRISHNAN. P	B+
26	813819105028	HARI NARAYANAN. R	B+
27	813819105029	HARINI. K	A
28	813819105030	HARINI. K B	B+
29	813819105031	HARISHINI. S	B+
30	813819105032	HARITHA. J	B
31	813819105033	HESHAVARDHINI. N	B
32	813819105034	HIRUTHICRAM. C	B
33	813819105035	JANANI. A	B+
34	813819105036	KALEESWARAN. B	B
35	813819105037	KARISHMA. R S	B
36	813819105038	KARTHIKEYAN. S	B
37	813819105040	KHAVYA. K J	B+
38	813819105041	KIRAUN RAAJ. B	B
39	813819105042	LAKSHMI. S	B+
40	813819105043	LOGESH. A	B+
41	813819105045	MANIRAJ. V C	B+
42	813819105046	MANOGAR. R	B
43	813819105047	MOHAMED IMRAN. J	B
44	813819105048	MOHAMED JAVITH. S	B
45	813819105049	MOHANA. S	B+
46	813819105050	MOHANA PRIYAN. R	B+
47	813819105051	MOHAN RAJ. R	B+
48	813819105052	MUTHU KARUPPAN. A	B+
49	813819105053	NAVINKKUMAR. K	B
50	813819105054	NAZEEMA BANU. S	B
51	813819105055	NIJITHA. I	B+
52	813819105056	NIVADITHA. M	B+
53	813819105057	PRAVEENKUMAR. D	A
54	813819105059	RAHUL. K	A
55	813819105060	RAHUL. R	B+
56	813819105061	RAJESH. A	B
57	813819105063	RENGANATHAN. R	U
58	813819105064	RIORDAAN AMALA INFANT. D F S	B
59	813819105065	SAI SHAARAN. T S	B+

60	813819105066	SAM DANIEL. W	B+
61	813819105067	SANJEEV. B	B
62	813819105068	SANTHOSH KUMAR. S	B+
63	813819105069	SHAMITHA. R	B+
64	813819105070	SHANMATHI. S	A
65	813819105071	SHARAN. N	A
66	813819105072	SHARMILA. J	B+
67	813819105073	SHIVANI. R	A
68	813819105074	SHOBAN NATH. M	B
69	813819105075	SIVA HARI. S	B+
70	813819105076	SIVA SOORIYA. M	B
71	813819105077	SNEHAA. A	B+
72	813819105078	SNEKA. A	A
73	813819105080	SREEVATHSAN. K	B+
74	813819105081	SRINIVASAN. M	B
75	813819105082	SRIRAMAN. E C	B+
76	813819105083	SUJEITH. S K	B+
77	813819105084	SURESHKUMAR. P	B+
78	813819105085	SWATHY. S M	B
79	813819105086	VASANTH. R	B
80	813819105087	VIDHYA. D	A
81	813819105088	VIDHYA DHARANI. V	A
82	813819105089	VIKTHISWARAN. A	B
83	813819105090	VIMALESH. K	B
84	813819105091	YASHIKA. K	B
85	813819105092	YOGESH. N	B+
86	813819105093	YOGESHWARAN. M	B
87	813819105301	LAKSHMI NARASIMMAN. V	B
88	813819105302	PANDIESWARI. A	B+
89	813819105303	RAHUL. V	B
90	813819105304	SURENDRAN. P	B+
91	813819105305	YUKESH KUMAR. T S	A
92	813820105501	SOWMIYA MOTHILAL	
No. of S/O Grade			0
No. of A/A+ Grade			3
No. of B/A Grade			12
No. of C/B+ Grade			38
No. of D/B Grade			36
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			53
CO-Attainment University			57.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C402.1	50.00	57.00	54.20	100.00	63.36	2
C402.2	53.26	57.00	55.50	100.00	64.40	2
C402.3	31.52	57.00	46.81	84.78	54.40	1
C402.4	41.30	57.00	50.72	84.78	57.53	1
C402.5	40.22	57.00	50.29	82.97	56.82	1
C402.6	41.30	57.00	50.72	100.00	60.58	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C402.1	3	2	1	2	1		2						2		
C402.2	3	2	1	2	1		2						2		
C402.3	3	2	1	2	1		2						2		
C402.4	3	2	1	2	1		2						2		
C402.5	3	2	1	2	1		2						2		
C402.6	3	2	1	2	1		2						2		
C402	3.00	2.00	1.00	2.00	1.00		2.00						2.00		

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C402.1	2.00	1.33	0.67	1.33	0.67		1.33						1.33		
C402.2	2.00	1.33	0.67	1.33	0.67		1.33						1.33		
C402.3	1.00	0.67	0.33	0.67	0.33		0.67						0.67		
C402.4	1.00	0.67	0.33	0.67	0.33		0.67						0.67		
C402.5	1.00	0.67	0.33	0.67	0.33		0.67						0.67		
C402.6	1.00	0.67	0.33	0.67	0.33		0.67						0.67		
C402	1.33	0.89	0.44	0.89	0.44		0.89						0.89		

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester			
COURSE CODE/TITLE	POWER SYSTEM ANALYSIS	Batch	2020 - 2024
CLASS / SECTION	Sem 5 / EEE		
COURSE COORDINATOR	Dr.M.V.Suganyadevi		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			64	**36**						**36**	**64**							**60**	**36**	**4**	**64**	**72**	**64**	**60**	**36**	**4**
1	813820105001	AARADHANA. A	54	34						18	42							42	26	4	54	52	42	42	26	4
2	813820105002	ABDULRAHMAN. B	53	15						16	39							58	19	4	53	31	39	58	19	4
3	813820105003	ABIRAMI. D	26	18						15	40							31	15	0	26	33	40	31	15	0
4	813820105004	AJMEER KHAJA. S	17	13						7	16							4	0	0	17	20	16	4	0	0
5	813820105005	ANTONI FELIX. A	24	26						8	34							36	10	4	24	34	34	36	10	4
6	813820105006	ANUSH ARAVIND. U P	42	11						25	47							39	30	2	42	36	47	39	30	2
7	813820105007	ARUN KUMAR. V	51	19						36	40							35	32	3	51	55	40	35	32	3
8	813820105008	ASRAF ALI. A	20	7						20	31							28	23	0	20	27	31	28	23	0
9	813820105009	BHARATH KUMAR. M	52	12						12	48							31	23	3	52	24	48	31	23	3
10	813820105010	DANIEL WINFRED. J	22	6						18	20							22	1	0	22	24	20	22	1	0
11	813820105011	DHANUSHA. K	56	25						16	56							44	31	2	56	41	56	44	31	2
12	813820105012	DHARANIDHARAN. M	26	6						6	28							22	0	0	26	12	28	22	0	0
13	813820105013	DHARSHANAA. K	36	18						28	22							59	9	0	36	46	22	59	9	0
14	813820105014	DHARUN. A	33	17						25	8							42	9	0	33	42	8	42	9	0
15	813820105015	DHILIP RAJ. M P	42	8						35	30							48	6	0	42	43	30	48	6	0
16	813820105016	DHIVYA BHARATHI. V	59	30						35	38							42	33	4	59	65	38	42	33	4
17	813820105017	DINESH. P K	44	10						17	33							40	12	0	44	27	33	40	12	0
18	813820105018	DINESH RAJA. S	28	10						16	35							30	25	0	28	26	35	30	25	0
19	813820105019	DOYEL THERSITA. J	40	10						35	41							48	26	3	40	45	41	48	26	3
20	813820105020	FRANKLIN PATRICK. P	42	20						35	30							28	12	4	42	55	30	28	12	4
21	813820105021	GAYATHERI. M	58	20						36	40							43	32	2	58	56	40	43	32	2
22	813820105022	GOBINATH. P	30	22						24	30							33	9	4	30	46	30	33	9	4
23	813820105023	HARE HARA SUDAN. V	4	0						23	20							40	28	3	4	23	20	40	28	3
24	813820105024	HARIHARAN. G	22	20						26	24							31	25	0	22	46	24	31	25	0
25	813820105025	HARIHARAN. L	50	20						24	36							15	26	4	50	44	36	15	26	4
26	813820105026	HARISH. M	28	10						26	34							11	24	3	28	36	34	11	24	3
27	813820105027	HEMADHARSHINI. A	50	31						31	60							44	29	3	50	62	60	44	29	3
28	813820105028	KALAIVANI. S	50	24						18	47							35	24	2	50	42	47	35	24	2
29	813820105029	KAVIYA. A R	34	20						31	31							33	28	2	34	51	31	33	28	2
30	813820105030	KAVIYA. R	53	30						34	50							45	25	0	53	64	50	45	25	0
31	813820105031	KISHORE. R	18	0						12	21							21	0	0	18	12	21	21	0	0
32	813820105032	KISHORE KUMAR. R	20	8						6	15							30	0	0	20	14	15	30	0	0
33	813820105033	LOGA VIGNESH. M	20	8						4	15							21	0	0	20	12	15	21	0	0
34	813820105034	LOGESHWARAN. G R	58	30						27	53							44	33	3	58	57	53	44	33	3
35	813820105035	LOGESHWARAN. R	38	20						36	44							48	33	0	38	56	44	48	33	0
36	813820105036	MANIKANDAN. R	20	4						23	0							23	0	0	20	27	0	23	0	0
37	813820105038	MATHESWARAN. P	20	2						31	35							29	15	0	20	33	35	29	15	0
38	813820105039	MOHANAKANNAN. R	33	10						19	34							12	14	0	33	29	34	12	14	0
39	813820105040	MOSES MANOHARAN. V	30	20						11	41							40	20	4	30	31	41	40	20	4
40	813820105041	NANTHAKUMAR. K	0	0						12	21							0	22	0	0	12	21	0	22	0
41	813820105042	NARMADHA. K	20	5						32	20							47	16	2	20	37	20	47	16	2
42	813820105043	NASREEN BANU. A	60	31						29	49							58	29	0	60	60	49	58	29	0
43	813820105044	NAVIN KUMAR. P	21	20						8	20							12	0	0	21	28	20	12	0	0
44	813820105045	NILOFAR NISHA. A	50	30						31	60							57	29	4	50	61	60	57	29	4
45	813820105046	NIRENJANA. G M	30	26						36	34							27	27	2	30	62	34	27	27	2
46	813820105047	NITHISHWARAN. S	30	8						32	23							15	15	0	30	40	23	15	15	0
47	813820105048	NIVIN VIJOSS. R	40	18						36	38							38	26	3	40	54	38	38	28	3
48	813820105049	PAUL ROJER. R	50	23						35	53							57	27	3	50	58	53	57	27	3
49	813820105050	PRASANNA KUMAR. A	12	0						10	0							8	0	0	12	10	0	8	0	0
50	813820105051	PRATHABAN. K	59	30						34	61							59	34	3	59	64	61	59	34	3
51	813820105052	PRAVEENKUMAR. S	23	10						20	17							21	0	0	23	30	17	21	0	0

52	813820105053	PRIYADHARSHINI. S	64	30						28	64							47	34	3	64	58	64	47	34	3
53	813820105054	RAKKESH. S	40	25						29	30							57	22	3	40	54	30	57	22	3
54	813820105055	RANGARAJAN. P S	22	0						2	12							18	0	0	22	2	12	18	0	0
55	813820105057	SANJAY. D	18	0						7	26							21	0	0	18	7	26	21	0	0
56	813820105058	SARAVANAKUMAR. L	20	16						21	29							30	0	0	20	37	29	30	0	0
57	813820105059	SHEIKHA NASEEMA. N	60	21						31	42							50	32	3	60	52	42	50	32	3
58	813820105060	SHRINA MAGGI. J S	20	10						16	26							36	6	0	20	26	26	36	6	0
59	813820105061	SIVA SANKARI. N	30	20						36	42							59	20	4	30	56	42	59	20	4
60	813820105062	SRIDEVI. P	64	30						28	36							50	30	4	64	58	36	50	30	4
61	813820105063	SUMEETH. S	25	10						12	17							8	0	0	25	22	17	8	0	0
62	813820105064	THASLEEMA KAUSER. Z	25	25						34	31							21	16	3	25	59	31	21	16	3
63	813820105066	VASANTHAPRIYAN. G C	10	30						4	13							6	0	0	10	34	13	6	0	0
64	813820105067	YOGGIRAJ. J S	20	9						6	17							0	0	0	20	15	17	0	0	0
65	813820105301	JACOBMARTIN. I	23	20						17	19							46	15	3	23	37	19	46	15	3
66	813820105302	KARTHIKEYAN. S	30	20						8	22							13	11	0	30	28	22	13	11	0
67	813820105303	SACHITHANANTHAN. P	30	7						9	8							8	0	0	30	16	8	8	0	0
68	813820105304	SANJAY. M	20	13						21	21							6	0	0	20	34	21	6	0	0
69	813820105305	SANTHOSHKUMAR. B	20	23						30	36							33	15	4	20	53	36	33	15	4
70	813820105701	YOGESWARAN. G R	20	5						6	36							20	23	0	20	11	36	20	23	0
CO's Target Value																					41.60	46.80	41.60	39.00	23.40	2.60
No. of Student Secured above CO's Target value																					23	23	16	27	27	27
Percentage of Student Secured above Target																					32.86	32.86	22.86	38.57	38.57	38.57

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	EE8501 POWER SYSTEM ANALYSIS	Batch	2020 - 2024
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813820105001	AARADHANA. A	B
2	813820105002	ABDULRAHMAN. B	B
3	813820105003	ABIRAMI. D	B
4	813820105004	AJMEER KHAJA. S	B
5	813820105005	ANTONI FELIX. A	B
6	813820105006	ANUSH ARAVIND. U P	B
7	813820105007	ARUN KUMAR. V	B
8	813820105008	ASRAF ALI. A	B
9	813820105009	BHARATH KUMAR. M	B
10	813820105010	DANIEL WINFRED. J	U
11	813820105011	DHANUSHA. K	B+
12	813820105012	DHARANIDHARAN. M	U
13	813820105013	DHARSHANAA. K	B
14	813820105014	DHARUN. A	B
15	813820105015	DHILIP RAJ. M P	B
16	813820105016	DHIVYA BHARATHI. V	B+
17	813820105017	DINESH. P K	B
18	813820105018	DINESH RAJA. S	B+
19	813820105019	DOYEL THERSITA. J	B
20	813820105020	FRANKLIN PATRICK. P	B
21	813820105021	GAYATHERI. M	B+
22	813820105022	GOBINATH. P	B
23	813820105023	HARE HARA SUDAN. V	U
24	813820105024	HARIHARAN. G	B
25	813820105025	HARIHARAN. L	B
26	813820105026	HARISH. M	B
27	813820105027	HEMADHARSHINI. A	B+
28	813820105028	KALAIVANI. S	B
29	813820105029	KAVIYA. A R	B
30	813820105030	KAVIYA. R	B+
31	813820105031	KISHORE. R	B
32	813820105032	KISHORE KUMAR. R	U
33	813820105033	LOGA VIGNESH. M	B
34	813820105034	LOGESHWARAN. G R	B+
35	813820105035	LOGESHWARAN. R	B+
36	813820105036	MANIKANDAN. R	B
37	813820105038	MATHESWARAN. P	B
38	813820105039	MOHANAKANNAN. R	B
39	813820105040	MOSES MANOHARAN. V	A
40	813820105041	NANTHAKUMAR. K	B+
41	813820105042	NARMADHA. K	B
42	813820105043	NASREEN BANU. A	B+
43	813820105044	NAVIN KUMAR. P	B
44	813820105045	NILOFAR NISHA. A	A
45	813820105046	NIRENJANA. G M	B
46	813820105047	NITHISHWARAN. S	B
47	813820105048	NIVIN VIJOSS. R	A
48	813820105049	PAUL ROJER. R	A+
49	813820105050	PRASANNA KUMAR. A	B
50	813820105051	PRATHABAN. K	A
51	813820105052	PRAVEENKUMAR. S	B
52	813820105053	PRIYADHARSHINI. S	A
53	813820105054	RAKKESH. S	B+
54	813820105055	RANGARAJAN. P S	U
55	813820105057	SANJAY. D	B
56	813820105058	SARAVANAKUMAR. L	B+
57	813820105059	SHEIKHA NASEEMA. N	A
58	813820105060	SHRINA MAGGI. J S	B
59	813820105061	SIVA SANKARI. N	B+

60	813820105062	SRIDEVI. P	B+
61	813820105063	SUMEETH. S	B+
62	813820105064	THASLEEMA KAUSER. Z	B
63	813820105066	VASANTHAPRIYAN. G C	U
64	813820105067	YOGGIRAJ. J S	U
65	813820105301	JACOBMARTIN. I	B
66	813820105302	KARTHIKEYAN. S	B
67	813820105303	SACHITHANANTHAN. P	U
68	813820105304	SANJAY. M	B
69	813820105305	SANTHOSHKUMAR. B	B
70	813820105701	YOGESWARAN. G R	B
No. of S/O Grade			0
No. of A/A+ Grade			1
No. of B/A Grade			6
No. of C/B+ Grade			15
No. of D/B Grade			40
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			22
CO-Attainment University			31.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C301.1	32.86	31.00	31.74	100.00	45.39	1
C301.2	32.86	31.00	31.74	100.00	45.39	1
C301.3	22.86	31.00	27.74	84.51	39.10	1
C301.4	38.57	31.00	34.03	86.38	44.50	1
C301.5	38.57	31.00	34.03	84.51	44.12	1
C301.6	38.57	31.00	34.03	100.00	47.22	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C301.1	2	3		2	1	1	1						1		
C301.2	2	3		2	1	1	1						1		
C301.3	2	3		2	1	1	1						1		
C301.4	2	3		2	1	1	1						1		
C301.5	2	3		2	1	1	1						1		
C301.6	2	3		2	1	1	1						1		
C301	2.00	3.00		2.00	1.00	1.00	1.00						1.00		

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C301.1	0.67	1.00		0.67	0.33	0.33	0.33						0.33		
C301.2	0.67	1.00		0.67	0.33	0.33	0.33						0.33		
C301.3	0.67	1.00		0.67	0.33	0.33	0.33						0.33		
C301.4	0.67	1.00		0.67	0.33	0.33	0.33						0.33		
C301.5	0.67	1.00		0.67	0.33	0.33	0.33						0.33		
C301.6	0.67	1.00		0.67	0.33	0.33	0.33						0.33		
C301	0.67	1.00		0.67	0.33	0.33	0.33						0.33		

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester			
COURSE CODE/TITLE	ELECTROMAGNETIC FIELDS	Batch	2021 - 2025
CLASS / SECTION	Sem 3 / EEE		
COURSE COORDINATOR	Mr.B.Paranthagan		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			100							**60**	**40**							**32**	**36**	**32**	**100**	**60**	**40**	**32**	**36**	**32**
1	813821105001	ABINESH. P	30							30	22							4	12	4	30	30	22	4	12	4
2	813821105002	ADNAN SHEIK IBRAHIM	50							30	32							4	10	4	50	30	32	4	10	4
3	813821105003	AJAY. A	38							26	24							0	0	0	38	26	24	0	0	0
4	813821105004	AKASH RAJ. A	58							14	18							2	7	4	58	14	18	2	7	4
5	813821105005	ALAGU SRINIVASAR. S	22							30	22							0	0	18	22	30	22	0	0	18
6	813821105006	AMIRTESH. R	56							38	24							7	15	9	56	38	24	7	15	9
7	813821105007	AMIRTHA LAKSHMI. P	60							40	34							18	22	22	60	40	34	18	22	22
8	813821105008	ANBARASAN. E	10							20	16							8	4	0	10	20	16	8	4	0
9	813821105009	ARIHARAN. S	34							38	12							8	10	6	34	38	12	8	10	6
10	813821105010	ATHIDHYAN. N	50							20	16							3	6	2	50	20	16	3	6	2
11	813821105012	BARATH YOGESH. R K	80							30	34							16	20	6	80	30	34	16	20	6
12	813821105014	DARTHI MARY. S	50							42	22							16	22	20	50	42	22	16	22	20
13	813821105015	DEVA ALFRED. S	26							40	34							0	5	0	26	40	34	0	5	0
14	813821105016	DHASVANTH. S	86							40	36							10	18	10	86	40	36	10	18	10
15	813821105017	DIVYA. R	24							20	12							2	8	6	24	20	12	2	8	6
16	813821105018	ELAVARASAN. S	12							22	30							12	20	7	12	22	30	12	20	7
17	813821105019	FAIYAZ AHAMED. M	28							20	18							4	10	5	28	20	18	4	10	5
18	813821105020	GOKUL. M	50							28	22							14	22	12	50	28	22	14	22	12
19	813821105021	HARIHARAN. B	64							32	34							13	22	10	64	32	34	13	22	10
20	813821105022	HARIHARAN. M	52							56	35							11	22	9	52	56	35	11	22	9
21	813821105023	HARIHARASUDHAN. R	38							32	18							7	9	3	38	32	18	7	9	3
22	813821105024	HARI KARTHIK. K	32							28	26							15	25	10	32	28	26	15	25	10
23	813821105025	HARISH. H P	68							56	38							10	20	16	68	56	38	10	20	16
24	813821105026	IQJAS FATHIMA. I	76							54	32							8	24	22	76	54	32	8	24	22
25	813821105027	JAISON. R	12							20	12							9	13	3	12	20	12	9	13	3
26	813821105028	KEAVIN. L	50							30	22							3	12	8	50	30	22	3	12	8
27	813821105029	LOKESH KANNAN. N	12							30	20							2	8	8	12	30	20	2	8	8
28	813821105030	MAFAZ AHAMED. M	0							2	6							2	9	5	0	2	6	2	9	5
29	813821105031	MAHESHWARAN. P L	50							36	22							5	20	4	50	36	22	5	20	4
30	813821105032	MARZOOK AHAMED. M	56							36	26							10	21	11	56	36	26	10	21	11
31	813821105033	MOHAMED FAIZAL. R	16							30	20							6	14	6	16	30	20	6	14	6
32	813821105034	MOHAMED MAZIN. A	52							36	28							6	12	12	52	36	28	6	12	12
33	813821105035	MOHAMMED ARSHAD. M	80							40	36							18	26	23	80	40	36	18	26	23
34	813821105036	MOHAMMED YUSUF. A	10							30	14							2	5	2	10	30	14	2	5	2
35	813821105037	NISHA CATHERINE. V	10							22	12							0	5	2	10	22	12	0	5	2
36	813821105038	NITHISH KUMAR. J	32							6	30							0	5	0	32	6	30	0	5	0
37	813821105039	NITHISHKUMAR. P	28							30	14							4	9	5	28	30	14	4	9	5
38	813821105040	PADMASHARAN. G S	34							30	20							2	8	4	34	30	20	2	8	4
39	813821105041	POOJA. Y	82							44	32							22	28	22	82	44	32	22	28	22
40	813821105042	PRAVEEN. S	80							24	26							2	8	6	80	24	26	2	8	6
41	813821105043	PRAVEEN KUMAR. V	18							36	22							3	12	4	18	36	22	3	12	4
42	813821105044	ROJAR GIMSON. A	38							26	24							5	17	11	38	26	24	5	17	11
43	813821105045	SHANTHINI. S	18							38	18							3	17	9	18	38	18	3	17	9
44	813821105046	SHARULATHA. N	54							14	4							4	16	4	54	14	4	4	16	4
45	813821105047	SHEAK ABDULLAH. K	30							32	18							2	9	7	30	32	18	2	9	7
46	813821105048	SIVANESAN. B	52							28	28							9	21	9	52	28	28	9	21	9
47	813821105049	SRIMATHI. R	58							40	22							7	15	10	58	40	22	7	15	10
48	813821105050	SUBALAKSHMI. G	34							30	14							4	14	4	34	30	14	4	14	4
49	813821105051	SUDHAN SANKAR. S	6							22	20							3	8	2	6	22	20	3	8	2
50	813821105052	SUDHES MARAN. S	56							36	18							4	18	8	56	36	18	4	18	8
51	813821105053	SURENDHIRAN. R	8							10	12							2	10	6	8	10	12	2	10	6

52	813821105054	TAMILARASAN. P	72							48	34							19	27	21	72	48	34	19	27	21
53	813821105055	VINODHINI. R	80							54	32							18	28	25	80	54	32	18	28	25
54	813821105056	YAZAR MOHIDEEN. S	78							38	34							7	15	9	78	38	34	7	15	9
55	813821105057	YUVHARAAJ. S	20							20	18							5	11	7	20	20	18	5	11	7
56	813821105058	ZUBAIR AHAMED. A	20							24	16							3	10	11	20	24	16	3	10	11
57	813821105301	JOSHUVA VASANTHAN. K	0							30	20							11	18	14	0	30	20	11	18	14
58	813821105302	KIRSHAN MELWIN. J	34							32	20							12	21	20	34	32	20	12	21	20
CO's Target Value																					65.00	39.00	26.00	20.80	23.40	20.80
No. of Student Secured above CO's Target value																					10	12	18	1	6	6
Percentage of Student Secured above Target																					17.24	20.69	31.03	1.72	10.34	10.34

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Electrical and Electronics Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	EE3301 ELECTROMAGNETIC FIELDS	Batch	2021 - 2025
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813821105001	ABINESH. P	A
2	813821105002	ADNAN SHEIK IBRAHIM	B+
3	813821105003	AJAY. A	A
4	813821105004	AKASH RAJ. A	B+
5	813821105005	ALAGU SRINIVASAR. S	B
6	813821105006	AMIRTESH. R	B+
7	813821105007	AMIRTHA LAKSHMI. P	A
8	813821105008	ANBARASAN. E	B
9	813821105009	ARIHARAN. S	B
10	813821105010	ATHIDHYAN. N	B
11	813821105012	BARATH YOGESH. R K	A
12	813821105014	DARTHI MARY. S	B+
13	813821105015	DEVA ALFRED. S	B+
14	813821105016	DHASVANTH. S	B+
15	813821105017	DIVYA. R	B
16	813821105018	ELAVARASAN. S	U
17	813821105019	FAIYAZ AHAMED. M	U
18	813821105020	GOKUL. M	B
19	813821105021	HARIHARAN. B	B+
20	813821105022	HARIHARAN. M	B+
21	813821105023	HARIHARASUDHAN. R	A
22	813821105024	HARI KARTHIK. K	B
23	813821105025	HARISH. H P	A
24	813821105026	IQJAS FATHIMA. I	A
25	813821105027	JAISON. R	B+
26	813821105028	KEAVIN. L	B+
27	813821105029	LOKESH KANNAN. N	B
28	813821105030	MAFAZ AHAMED. M	B
29	813821105031	MAHESHWARAN. P L	B+
30	813821105032	MARZOOK AHAMED. M	B+
31	813821105033	MOHAMED FAIZAL. R	B+
32	813821105034	MOHAMED MAZIN. A	B+
33	813821105035	MOHAMMED ARSHAD. M	A
34	813821105036	MOHAMMED YUSUF. A	B+
35	813821105037	NISHA CATHERINE. V	B
36	813821105038	NITHISH KUMAR. J	B
37	813821105039	NITHISHKUMAR. P	B+
38	813821105040	PADMASHARAN. G S	B
39	813821105041	POOJA. Y	B+
40	813821105042	PRAVEEN. S	B+
41	813821105043	PRAVEEN KUMAR. V	B
42	813821105044	ROJAR GIMSON. A	B
43	813821105045	SHANTHINI. S	B
44	813821105046	SHARULATHA. N	B+
45	813821105047	SHEAK ABDULLAH. K	B
46	813821105048	SIVANESAN. B	B+
47	813821105049	SRIMATHI. R	B+
48	813821105050	SUBALAKSHMI. G	B
49	813821105051	SUDHAN SANKAR. S	B
50	813821105052	SUDHES MARAN. S	A
51	813821105053	SURENDHIRAN. R	B+
52	813821105054	TAMILARASAN. P	A
53	813821105055	VINODHINI. R	B+
54	813821105056	YAZAR MOHIDEEN. S	A
55	813821105057	YUVHARAAJ. S	B
56	813821105058	ZUBAIR AHAMED. A	B
57	813821105301	JOSHUVA VASANTHAN. K	B+
58	813821105302	KIRSHAN MELWIN. J	B
No. of S/O Grade			0

No. of A/A+ Grade	11
No. of B/A Grade	21
No. of C/B+ Grade	0
No. of D/B Grade	0
No. of E/B Grade	0
Target for course outcome Attainment	65
No of students above the target	32
CO-Attainment University	55.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C201.1	17.24	55.00	39.90	100.00	51.92	1
C201.2	20.69	55.00	41.28	100.00	53.02	1
C201.3	31.03	55.00	45.41	86.21	53.57	1
C201.4	1.72	55.00	33.69	82.18	43.39	1
C201.5	10.34	55.00	37.14	83.91	46.49	1
C201.6	10.34	55.00	37.14	100.00	49.71	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C201.1	3	3	2	2					1	1		1	2	3	
C201.2	3	3	2	2					1				2		
C201.3	3	3	2	2					1				2		
C201.4	3	3	2	2					1				2		
C201.5	3	3	2	2					1				2		
C201.6	3	3	2	2					1				2		
C201	3.00	3.00	2.00	2.00					1.00	0.17		0.17	2.00	0.50	

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C201.1	1.00	1.00	0.67	0.67					0.33	0.33		0.33	0.67	1.00	
C201.2	1.00	1.00	0.67	0.67					0.33				0.67		
C201.3	1.00	1.00	0.67	0.67					0.33				0.67		
C201.4	1.00	1.00	0.67	0.67					0.33				0.67		
C201.5	1.00	1.00	0.67	0.67					0.33				0.67		
C201.6	1.00	1.00	0.67	0.67					0.33				0.67		
C201	1.00	1.00	0.67	0.67					0.33	0.06		0.06	0.67	0.17	

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF INSTRUMENTATION AND CONTROL ENGINEERING

TIME TABLE FOR IA TEST - 2 FOR III, IV YEAR ICE ODD SEM 2022-2023

TIME : (9.15 am to 10.45 am)

S.NO	DATES	III YEARS		IV YEARS	
		SUB CODE	SUBJECT TITLE	SUB CODE	SUBJECT TITLE
1	10.10.2022	EI8551	Analytical Instruments	EI8751	Industrial Data Networks
2	11.10.2022	EI8552	Industrial Instrumentation - II	EI8075	Fibre Optics and Laser Instruments
3	12.10.2022	OCE551	Air Pollution and Control Engineering	EC8093	Digital Image Processing
4	13.10.2022	EI8093	Unit Operation and Control	EI8091	Instrumentation in Petrochemical Industries
5	14.10.2022	EE8551	Microprocessors and Microcontrollers	EI8692	Electronic Instrumentation
6	15.10.2022	EI8553	Process Control	OCS752	Introduction to C Programming
7	17.10.2022			GE8076	Professional Ethics in Engineering

Staff In charge

HOD/ICE

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF INSTRUMENTATION AND CONTROL ENGINEERING

TIME TABLE FOR IA TEST - 2 FOR II YEAR ICE ODD SEM 2022-2023

TIME : (9.15 am to 10.45 am)

S.NO	DATES	II YEARS	
		SUB CODE	SUBJECT TITLE
1	15.10.2022	MA3353	Transforms Differential Equations
2	17.10.2022	EI3351	Analog Electronics
3	18.10.2022	EI3352	Digital System Design and Applications
4	19.10.2022	EI3353	Transducer Engineering
5	20.10.2022	EI3354	Linear Integrated Circuits and Applications
6	21.10.2022	CS3353	C programming and Data Structure

Staff In charge

HOD/ICE

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.7.3.2023

Circular

Internal Assessment Test – I for II & III & IV Year B.E./B.Tech., Classes will commence from 9.03.2023 (Thursday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester

DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
9th March 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th March 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
13th March 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	EI3451 - Industrial Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
14th March 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3491 - Theory of Machines	CE3403 - Concrete Technology	AD3491 - Fundamentals of Data Science and Analysis	AL3452 - Operating Systems
15th March 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3401 - Modern Electronic Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
16th March 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	IC3452 - Electrical Machines and Drives	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CW3401 - Introduction to Business System

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
9th March 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8092 - Thermal Power Plant Instrumentation	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th March 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EE8072 - MEMS and Nano Science	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
13th March 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	EI8651 - Logic and Distributed Control System	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
14th March 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	IC8651 - Advanced Control System	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
15th March 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	CS8391 - Data Structures	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
16th March 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	MG8591 - Principles of Management	ME8694 - Hydralics and Pneumatics	

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
13th March 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
14th March 2023			EE8017 - High Voltage Direct Current Transmission			IE8693 - Production Planing and Control	
15th March 2023			GE8076 -Professional Ethics in Engineering				

Principal

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.5.4.2023

Circular (R)

Internal Assessment Test – 2 _for II & III Year B.E./B.Tech., Classes will commence from 10th April 2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – First Hour

11.50 a.m. – 12.45 p.m. – Second Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023 (R)

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester

DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
10th April 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	IT3401 - Web Essentials	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AD3491 - Fundamentals of Data Science and Analysis	AL3451 - Machine Learning
11th April 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	IC3401 - Modern Electronic Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	AL3451 - Machine Learning	CW3401 - Introduction to Business System
12th April 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3491 - Artificial Intelligence and Mechine Learning	IC3452 - Electrical Machines and Drives	ME3491 - Theory of Machines	CE3403 - Concrete Technology	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
13th April 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3451 - Introduction to Operating System	EI3451 - Industrial Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3452 - Operating Systems
17th April 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CS3492 - Database Management System
20th April 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023 (R)

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th April 2023	CS8651 - Internet Programming	MG8591 - Principles of Management		IT8602 - Mobile Communication		ME8693 - Heat and Mass Transfer	
11th April 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EI8092 - Thermal Power Plant Instrumentation	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
12th April 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	MG8591 - Principles of Management	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
13th April 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	EE8072 - MEMS and Nano Science	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
17th April 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	IC8651 - Advanced Control System	ME8692 - Finite Element Analysis	
20th April 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering	EE8691 - Embedded Systems	GE8076 - Professional Ethics in Engineering	CS8391 - Data Structures	ME8694 - Hydralics and Pneumatics	CE8601 - Design of Steel Structural Elements
21st April 2023					EI8651 - Logic and Distributed Control System		EN8592 - Wastewater Engineering

Principal

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	10.09.2022	Marks	50
Course code	EI8551	Course Title	Analytical Instruments			
Batch No.		Duration	90 mins	Academic Year	2022–2023/ ODD	
Year	III	Semester/ Section	V/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What are the selection Criteria for carrier gas?	301.3	R
2	Define Chromotography.	301.3	R
3	What is the use of pulse damper in pumping system?	301.3	R
4	Write the features of thermal conductivity detectors.	301.3	R
5	What are the advantages of HPLC?	301.3	U
6	List the types of H2S analysers.	301.4	R
7	How does the paramagnetic oxygen analyser works.	301.4	U
8	Why thermistor used in thermal conductivity of a gas?	301.4	R
9	Name the types of dust monitoring instruments.	301.4	R
10	How air pollutants are classified based on chemical composition.	301.4	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	With a neat diagram, explain the separation principal in Liquid column chromatography.	301.3	R
	Or		
12	Explain any two types of detectors used in HPLC.	301.3	U
13	Explain briefly about dust monitoring instruments and smoke measurement.	301.4	R
	Or		
14	With a suitable diagram explain thermal conductivity analyser.	301.4	U

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Discuss with few examples, how gas/liquid chromatography used for qualitative analysis.	301.4	U
	Or		
16	Draw the schematic of Chemiluminescent Analyzer and explain how it is used in analysis of NO and NO_2 emission, and mention its applications	301.4	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Faculty In-charge: **P.ARAVIND/AP/ICE**

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/Session	11.10.2022/FN	Marks	50
Course code	EI8552	Course Title	Industrial Instrumentation II			
Batch No.		Duration	90 mins	Academic Year	2022-2023/ODD	
Year	III	Semester/Section	V	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define mass flow rate.	C302.3	U
2	List the advantages of angular momentum flowmeter.	C302.3	R
3	Brief about the principle of thermal flowmeter.	C302.3	U
4	Write the formulae used for the flow using heat transfer flowmeter.	C302.4	R
5	Calculate the induced emf in an electromagnetic flow meter due to the flow of a conductive fluid in a pipe with inner diameter of 2.75 cm. The flux density B = $6mV.\sec/cm^2$ and volume flow rate Q = $2500cm^3/\min$.	C302.4	AZ
6	What is meant by vortex shedding?	C302.4	R
7	What are the applications of laser Doppler anemometer?	C302.4	R
8	List the types of weir.	C302.4	R
9	What are the steps followed to select the flowmeter?	C302.4	U
10	Write the different methods of solid flow measurement	C302.4	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	a) Write note on calibration of flowmeter. b) Explain angular momentum mass flowmeter	C302.3	U
	OR		
12	Write a short note on a) LDA b) Hot wire anemometer	C302.3	U
13	Explain about ultrasonic flowmeter.	C302.4	U
	OR		
14	Explain construction and working of electromagnetic flowmeter.	C302.4	R

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain the types of weir in open channel flow measurement.	C302.4	R
	OR4		
16	Explain the principle of Target Flow Meters.	C302.4	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Faculty In-charge: **Dr. M Shanmugavalli /Prof/ICE**

Saranathan College of Engineering

Tiruchirapalli - 620012

Internal Assessment Test - II			Date/Session	15/10/2022 /FN	Marks	50
Course code	EI8553	Course Title	PROCESS CONTROL			
Batch No.		Duration	90 mins	Academic Year	2022-2023/ODD	
Year	III	Semester	V	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Give the equation involving control valve sizing.	C303.2	R
2	What is the role of valve positioned in a control valve	C303.2	R
3	What leads to cavitation in flow systems	C303.2	U & R
4	What is the end effect of flashing	C303.2	R
5	List few factors for control valve selection	C303.2	U & R
6	Define single speed floating point	C303.3	R
7	Mention the relation between Proportional band and proportional gain	C303.3	R
8	Write the transfer function for a P+I+D controller	C303.3	U & R
9	Define anti reset winding	C303.3	R
10	Why bumpless transfer is essential for controller output variations	C303.3	U & R

Part-B

(Answer all the questions 2 x 10 = 20marks)

11	Write short notes on i. Control Valve sizing ii. Valve positioned	C303.2	R
	Or		
12	a. Briefly explain on control valve selection b. What is the influence of Cavitation and Flashing in Process Systems.	C303.2	R
13	With a aid , of sutiable example and model graph , explain in detail about the ON/OFF control , and single speed floating point	C303.3	A
	Or		
14	Explain in detail, the conceptual aspects of the various composite modes of P+I+D control.	C303.3	A

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	A liquid level control system, linearly converts a displacement of 5 to 10 meters into 4 – 20 mA signal. A relay serves as a two position control to open or close an inlet valve. The relay closes at 12mA and opens at 10 mA Find a).relation between displacement level and current .b) the neutral zone and displacement gap in meters.	C303.3	E & C
	Or		
16	An integral control is used for speed control witht a set point of 12 rpm within a range of 10 to 15 rpm. The controller output is 22% initially. The constant Ki is 0.15%.. If the speed jumps to 13.5 rpm, calculate output after two seconds for a constant error.	C303.3	E & C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Faculty In-charge: **S.M.GiriRajkumar /Prof and Head/ICE**

Saranathan College of Engineering

Tiruchirapalli - 620012

Internal Assessment Test - II			Date/ Session	12-10-2022/FN	Marks	50
Course code	OCE551	Course Title	Air Pollution and Control Engineering			
Batch No.		Duration	90 mins	Academic Year	2022-2023/ODD	
Year	III	Semester/ Section	V/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is turbulence and how it is formed?	C306.2	R
2	Define atmospheric stability.	C306.2	R
3	Write the plume rise computing formula suggested by IS: 8829.	C306.2	U
4	What are wind roses? State uses.	C306.2	U
5	List 4 applications of Dispersion Models.	C306.2	C
6	Differentiate Adsorption and Absorption.	C306.3	R
7	List the principles by which particulates removal is carried out.	C306.3	U
8	Write short notes on Pollution control by fugitive emission containment.	C306.3	U
9	State the objectives of using air pollution control.	C306.3	U
10	Write the fundamental approaches of controlling air pollution.	C306.3	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain about the preparation of windrose diagram for a location.	C306.2	R
	Or		
12	What do you understand by Dispersion Models? Explain about Gaussian Dispersion Model in detail.	C306.2	U
13	What are filter bags? Explain their working and operating problems.	C306.3	U
	Or		
14	Explain the process of selection of Air pollution control equipment.	C306.3	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain in detail about the principle of operation and working of Gravitational settling chambers with neat sketch.	C306.3	U
	Or		
16	What are the scrubbing devices in pollution control? Explain in detail with a neat sketch.	C306.3	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Faculty In-charge: **Dr.K.GAAYATHRY/AP/ICE**

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	17.10.2022/FN	Marks	50
Course code	GE8076	Course Title	Professional Ethics In Engineering			
Batch No.		Duration	90 mins	Academic Year	2022-2023/ODD	
Year	IV	Semester/ Section	VII	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Engineering ethics.	C411.E51.2	R
2	Engineers as Social enablers and Catalyst – Discuss.	C411.E51.2	Az
3	Differentiate between Act-Utilitarianism and Rule- Utilitarianism	C411.E51.2	U
4	What are the uses of Ethical theories?	C411.E51.2	U
5	What is moral dilemma?	C411.E51.2	R
6	What is meant by Engineering as Experimentation?	C411.E51.3	U
7	Give the limitations of codes.	C411.E51.3	R
8	Define Conscientiousness.	C411.E51.3	U
9	Give two examples in field of Engineering for learning from the past.	C411.E51.3	C
10	Differentiate between Scientific experiments and Engineering projects.	C411.E51.3	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q.No.	Questions	CO	Skills
11	Discuss the models of professional roles and also discuss about theories about virtues.	C411.E51.2	Az
	OR		
12	Explain in detail about the types of Inquiries in Engineering.	C411.E51.2	U
13	Discuss on 'Engineers as responsible experimenters'.	C411.E51.3	R
	OR		
14	What are the codes of ethics? State and Explain the function of codes of ethics and the objective to codes.	C411.E51.3	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain the theories pertaining to Moral Autonomy with special reference to consensus and controversy.	C411.E51.2	U
	OR		
16	Discuss in detail about the various Ethical theories and their uses.	C411.E51.2	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.K.GAAYATHRY AP/ICE

Saranathan College of Engineering

Tiruchirappalli - 620012

Internal Assessment Test - II			Date/Session	11.10.2022/FN	Marks	50
Course code	EI8075	Course Title	Fibre Optics And Laser Instruments			
Batch No.		Duration	90 Min	Academic Year	2022-2023/ODD	
Year	IV	Semester	VII	Department	ICE	

Part – A (20 Marks)

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Mention application of fibre optic sensors.	C404-E31.3	R
2	Differentiate Intrinsic and extrinsic fibre optic sensor.	C404-E31.3	R
3	What is pocket effects?	C404-E31.3	R
4	Define Micro fringes	C404-E31.3	U & R
5	What are the special features of fibre optic sensors?	C404-E31.3	U & R
6	Generalize the properties of LASER.	C404-E31.4	R
7	What is cavity damping?	C404-E31.4	R
8	Why population inversion is significant in lasers?	C404-E31.4	R
9	List out the reasons for various losses in Fibre optics.	C404-E31.4	U & R
10	What are the factors that effect the light source linearity?	C404-E31.4	U & R

Part-B

(Answer all the questions 2 x 10 = 20 marks)

11	Explain the principle of interferometric method of measurement of length.	C404-E31.3	R
	Or		
12	Analyze the features of fiber optic sensors and point out the uses in the measurement of current and voltage	C404-E31.3	R
13	With neat diagram, explain the working of liquid and semiconductor laser.	C404-E31.4	A
	Or		
14	Explain in detail about various properties of laser with neat diagram.	C404-E31.4	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q.No.	Questions	CO	Skills
15	Discuss about Q switching and mode blocking.	C404-E31.4	E & C
	Or		
16	With the help of an energy diagram, analyze how four level laser system is advantageous to three level laser system.	C404-E31.4	R&A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Faculty In-charge: **P.Aravind/AP/ICE**

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test – II			Date/ Session	15.10.2022/FN	Marks	50
Course code	EI8091	Course Title	Instrumentation in Petrochemical Industries			
Batch No.		Duration	90 mins	Academic Year	2021-2022/ODD	
Year	IV	Semester/ Section	VII/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Dew Point and Bubble Point in a distillation column	C402.2	R
2	What is octane number and which process is used to increase the octane number of a compound	C402.2	R, U
3	Differentiate Feedback, Feed forward.	C402.2	R
4	What are isomers? Give some examples of isomers.	C402.2	R
5	What is meant by catalyst poisoning?	C402.2	R
6	What are derivatives of crude streams?	C402.3	R
7	Write down the chemical reaction of Acetylene production using Chemical Reaction Process and Thermal Cracking Process.	C402.3	U
8	Why do we derive Vinyl Chloride from Acetylene when it can be derived from Ethylene?	C402.3	R
9	What is Dowtherm?	C402.3	R
10	Give the reaction that yields Formaldehyde from the process of oxidation and dehydrogenation.	C402.3	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain the feed forward, Feedback, cascade control, inferential and adaptive control of distillation column.	C402.2	R
	OR		
12	Explain the Multi variable control of distillation column	C402.2	R
13	i. Derive the Mathematical model of batch distillation column. ii. Write short notes on Isomerisation.	C402.2	R
	OR		
14	i. Explain about Methane and its derivatives ii. Explain Methane production scheme	C402.3	AZ, E

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain in detail the process of Ethanolamines with neat diagram	C402.3	R
	OR		
16	a. Explain in detail the production of Acetylene by chemical reaction process with a neat diagram. b. What are the applications of MTBE and HFC's	C402.3	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Faculty In-charge: **Dr.M.Banu Sundareswari/AP/ICE**

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test – II			Date/ Session	14-10-2022/FN	Marks	50
Course code	EI8692	Course Title	Electronics Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2022-2023/ODD	
Year/	IV	Semester/ Section	VII/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Explain the purpose of Flood Gun and Writing Gun in Analog Storage Oscilloscope	C310.2	R
2	State the difference between Variable Persistence Storage and Bi-stable Storage Oscilloscope	C310.2	R
3	Draw the block diagram of Frequency Selective Wave Analyzer	C310.2	R
4	Compute the Total Harmonic Distortion of a signal that contains a fundamental signal with an RMS value of 10 V, a 2^{nd} harmonic with a RMS value of 5 V, a 3^{rd} harmonic with an RMS value of 3 V, and a 4^{th} harmonic with an RMS value of 1.5 V	C310.2	AZ, E
5	What is the purpose of using a Spectrum Analyzer and how is it different from other waveform display devices	C310.2	R, U
6	Draw the circuit diagram of RC Phase Shift Oscillator	C310.3	R
7	What is the resonant frequency formula of a Wein's Bridge oscillator when $R1 \neq R2$ and $C1 \neq C2$	C310.3	R
8	Explain the working of Hartley Oscillator	C310.3	R
9	Define Piezoelectric Effect	C310.3	R
10	State Barkhausen Criterion	C310.3	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail the working of Wein's Bridge Oscillator with neat diagram and appropriate derivation	C310.3	R, AZ
	OR		
12	Explain the working of Hartley Oscillator with neat diagram	C310.3	R
13	a. Give the derivation of Barkhausen Criterion using a simple feedback circuit b. Explain the working of Crystal Oscillator with neat diagram	C310.3	R, U
	OR		
14	Explain in detail the working of Square Wave generator with a neat diagram	C310.3	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain in detail the working of Digital Storage Oscilloscope with a neat diagram	C310.2	R
	OR		
16	a. Explain with neat diagram the detailed working of Sampling Oscilloscope which uses Real Time Sampling method b. Explain the working of Heterodyne Wave Analyzer with neat diagram	C310.2	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill needs to be mentioned against each question

Faulty in-charge: R.Seetharaman/AP-ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment - II			Date	10/10/2022 / FN	Marks	50
Course code	EI8751	Course Title	Industrial Data Networks			
Batch No.		Duration	90 mins	Academic Year	2022 – 2023 / ODD	
Year/	IV	Semester	VII	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define baud rate.	C401.2	U
2	Differentiate RS232 and RS485.	C401.2	AZ
3	Write the features of device net.	C401.2	U
4	What are the benefits of AS-interface?	C401.2	A
5	What is HART command and mention the types	C401.3	U
6	Write the applications of HART	C401.3	U
7	List the components of field bus	C401.3	U
8	What are the different field bus topologies?	C401.3	R
9	What is Interoperability?	C401.3	U
10	Write the advantages of OPC	C401.3	U

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	With a neat sketch explain the components of actuator sensor interface	C401.2	U
	Or		
12	Describe about RS 485 configuration with neat diagram	C401.2	AZ
13	Discuss about the HART protocol implementation of OSI model	C401.3	U
	Or		
14	Explain HART message structure and HART communication mode	C401.3	U

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain the general Field bus architecture in detail?	C401.3	AZ
	or		
16	Describe the working of OLE for process control?	C401.3	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Faculty In-charge: **Dr. M Shanmugavalli /Prof/ICE**

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	13.05.2022 / FN	Marks	50
Course code	EI8452	Course Title	Industrial Instrumentation - 1			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year	II	Semester/ Section	IV/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define density	C211.2	R
2	Define Specific gravity	C211.2	R
3	Define viscosity and consistency.	C211.3	U
4	Differentiate Newtonian and non- Newtonian fluids	C211.3	U
5	Define kinematic, specific, and relative viscosity	C211.3	R
6	What is Newton law of viscosity	C211.3	R
7	Define humidity	C211.3	R
8	Define Moisture.	C211.3	U
9	What is Fluidity?	C211.3	R
10	Explain the principle of dew point meter	C211.3	AZ

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	With neat diagram explain, the construction and working of i) capillary and ii). Efflux cup viscometer	C211.3	A
	or		
12	Explain any three types of density measurement.	C211.2	A
13	Explain about the consistency measurement in industries.	C211.3	U
	or		
14	How humidity measurement is important in industry explain any three types	C211.3	A

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Explain any three Moisture measurement methods with neat diagram	C211.3	A
	Or		
16	Explain about the Dew Point measurements methods with neat diagram	C211.3	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.M.Banu Sundareswari AP/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	19.05.2022/FN	Marks	50
Course code	IC8451	Course Title	CONTROL SYSTEM			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year/	II	Semester/ Section	IV/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define steady state error.	213.2	R
2	Give mathematical expressions for static error constants.	213.2	R
3	State the expression of errors, if found using generalized error co-efficient.	213.2	U
4	What is the need for break away point?	213.3	U
5	What is the significance of asymptotes?	213.3	U
6	Mention two methods to study closed loop response from open-loop response.	213.4	R,U
7	Define gain margin calculation for bode plot	213.4	R, U
8	How phase margin is calculated from polar plot?	213.4	R,U
9	Draw the polar model graph for $G(s) = \frac{1}{s^2(1+s)}$	213.4	AZ
10	Define phase crossover and gain crossover frequency.	213.4	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Calculate the steady state error of a unity feedback system with $G(s) = \frac{10(s+2)}{s^2(s+1)}$, an input of $R(s) = \frac{3}{s} - \frac{2}{s^2} + \frac{1}{3s^3}$	213.2	AZ, E
	OR		
12	Sketch the rootlocus for $G(s) = \frac{k(s+6)}{s(s+2(s+5)}$	213.3	AZ, E
13	Sketch the bode plot and find GM and PM for $G(s) = \frac{50(1+0.2s)}{s(s^2+16s+100)}$	213.4	AZ, E
	OR		
14	Sketch the bode plot and find GM and PM for $G(s) = \frac{e^{-0.3s}}{s(s+3)(s+10)}$	213.4	AZ, E

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Sketch the polar plot and find GM and PM for $G(s) = \frac{1}{s(1+s)(1+2s)}$	213.4	AZ,E
	OR		
16	Sketch the polar plot and find GM and PM for $G(s) = \frac{1}{(s(1+s)^2}$	213.4	AZ, E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.S.M.Giriraj Kumar Prof/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/Session	19.05.2022/FN	Marks	50
Course code	EE8451	Course Title	Linear Integrated Circuits and application			
Batch No.		Duration	90 mins	Academic Year	2021- 2022/EVEN	
Year/	II	Semester/ Sec	IV	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	A 100 pF capacitor has maximum charging current of 100 micro ampere. Calculate in slewrate.	C213.2	R
2	What is an ideal op-amp characteristics of IC 741	C213.2	R
3	Write two applications of Clipper and clamper	C213.3	R
4	What is need of instrumentation amplifier	C213.3	R
5	What is sampling and hold circuit where it's used	C213.3	R
6	Define comparator using op-amp	C213.3	R
7	What are the different types of filter	C213.3	R
8	What is V/I and I/V converter	C213.2	R
9	What are the different Types of DAC	C213.3	R
10	What is signal conditioning	C213.3	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in operation of Differentiator and integrator by using op-amp	C213.2	R
	Or		
12	Explain in detail about V/I and I/V converter	C213.2	R
13	Explain in detail about inverting and non inverting summing amplifier	C213.2	R,U
	Or		
14	Explain in detail about AC characteristics of op-amp	C213.2	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Design and explain in detail about instrumentation amplifier using op-amp and derive its output voltage equation	C213.3	R,U
	Or		
16	Explain in detail about square wave and triangle wave generator	C213.3	R,U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.P.THIRUMURUGAN AP/ICE

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - II			Date/ Session	14.05.2022/ FN	Marks	50
Course code	EE8072	Course Title	MEMS and Nano Science			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year/	III	Semester	VI	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is micromachining?	C313-E11.3	R
2	List the types of etching.	C313-E11.3	R
3	Differentiate CVD and PVD.	C313-E11.3	U
4	Compare and contrast surface micromachining and bulk micromachining	C313-E11.3	U
5	List the types of etching.	C313-E11.3	A
6	Write the major classes of polymers.	C313-E11.4	R
7	Write the major classes of polymers.	C313-E11.4	U
8	Define viscoelastic creep.	C313-E11.4	R
9	How do polymers differ from those of metals and semiconductors?	C313-E11.4	A
10	Explain the terms PDMS and PMMA.	C313-E11.4	A

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Describe about physical vapour deposition with relevant diagrams.	C313-E11.3	U
	OR		
12	Summarize the processing steps of photolithography with neat sketch.	C313-E11.3	U
13	Writ a note on micromachining.	C313-E11.3	U
	OR		
14	Design a typical micromachining process involving one structural and one sacrificial layer.	C313-E11.3	U

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain the following: i. SU-8 ii. Parylene	C313-E11.4	R
	OR		
16	Design a Parylene surface micro machined pressure sensor with fabrication steps.	C313-E11.4	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.M.Shanmugavalli Prof/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test –II			Date/ Session	18.05.2022/FN	Marks	50
Course code	EI8651	Course Title	Logic and Distributed Control System			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year/	III	Semester	VI	Department	ICE	

Part – A

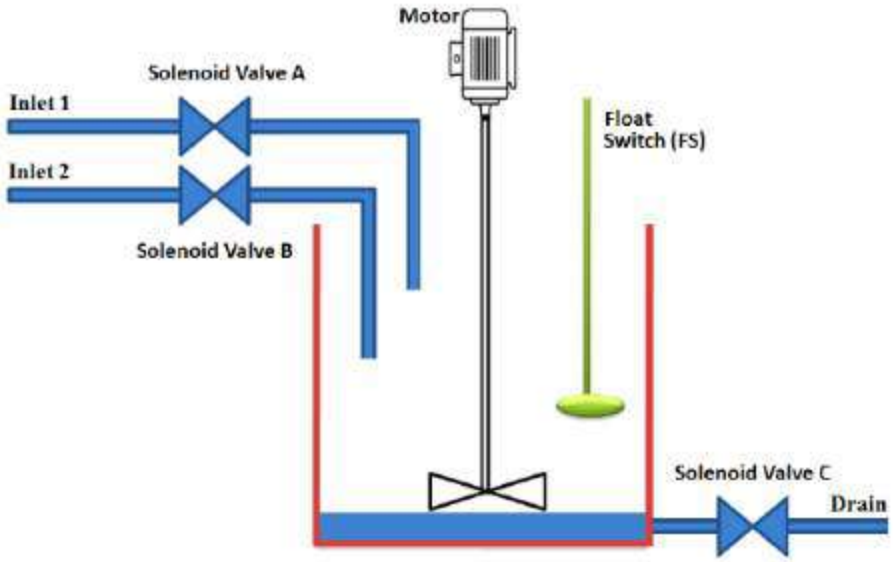
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What are the 3 different types of timers available in PLC's	C310.2	R
2	Draw the PLC Diagram for OR gate	C310.2	A
3	Design a PLC diagram where a motor turns on after 50 seconds	C310.2	A
4	Draw the PLC representation and Relay logic symbol for each of the following: NO contact, NC contact, and coil.	C310.2	U
5	Draw the general representation of Coil Type On Delay Timer	C310.2	U
6	Define the purpose of Masked Move in data manipulation instructions	C310.2	U
7	State the difference between Ladder Diagram and Functional Block Diagram	C310.3	U
8	What are the basic elements of a Functional Block Diagram	C310.3	R
9	Draw the functional block diagram for AND gate	C310.3	U
10	Define Sequential Function Chart Programming	C310.3	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain the function of Up Counter and Down Counter with appropriate diagram	C310.2	R, U
	OR		
12	Draw a ladder program to convert Celsius temperature to Fahrenheit and explain the working of the program	C310.2	C
13	Explain the working of JMP, LBL, JSR, SBR, RET with a ladder logic of your choice	C310.2	E, AZ
	OR		
14	Develop the ladder logic diagram for the following process	C310.2	C



1. When ON button is pressed Valve A and valve B must be OPENED
2. When Float Switch is energized valve A and valve B must be CLOSED and Motor must turn ON for 1 minute
3. After 1 minute motor must turn OFF and valve C must be OPENED
4. When Float Switch is de-energized valve C must by CLOSED and process should repeat
5. Emergency switch must be provided to STOP the process a any time

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Compare the difference between Ladder Diagram and Functional Block Diagram for an ON-Delay Timer with neat diagram	C310.3	R
	OR		
16	a. Draw the Functional Block Diagram for a ON-OFF control of a motor with latched output (5 marks) b. Draw the Sequential Flow Chart for a Heater Control Process (5 marks)	C310.3	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: R. Seetharaman/AP/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	19.05.2022/FN	Marks	50
Course code	IC8651	Course Title	ADVANCED CONTROL SYSTEM			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year/	III	Semester/ Section	VI/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Write the general expression for K and G matrix	309.2	R
2	Draw the block diagram of a full order state observer and write down its state model	309.2	R
3	Comment on the role of G matrix in state observer	309.2	U
4	What is need of observable phase variable form of state model?	309.2	U
5	Define minimum-order state observer	309.2	R
6	Comment on the need for state feedback?	309.2	R
7	What are the different types of representation of discrete time signal?	309.3	R, U
8	Mention the advantages of digital controllers	309.3	R
9	Draw the block diagram of sampled data control system	309.3	R
10	Find the transform of the given sequence f(k) = {9,5,2,8,6,-6,-12}	309.3	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Derive the state equation for a system with feedback and explain about any 2 methods to find out the state feedback gain matrix, K	309.2	R, U
	OR		
12	Find out the state feedback gain matrix K for the following system such that the closed loop poles are located at 0.5, 0.6 and 0.7 $\begin{bmatrix} 0 & 1 & 0 \\ 0 & 0 & 1 \\ -1 & -2 & -3 \end{bmatrix} \mathbf{x}(k) + \begin{bmatrix} 0 \\ 0 \\ 1 \end{bmatrix} u(k)$	309.2	AZ, E
13	Derive the expression for Observable Phase Variable form of state model and also determine the transformation matrix P_o	309.2	R, U
	OR		
14	Consider the linear system given by $\dot{x} = Ax + Bu$, $Y = Cx + Du$ Where $A = \begin{bmatrix} -7 & 1 & 15 \\ -2 & 0 & 5 \\ -2 & 0 & 4 \end{bmatrix}$, $B = \begin{bmatrix} 65 \\ -5 \\ 30 \end{bmatrix}$, $C = \begin{bmatrix} 1 & 0 & -2 \end{bmatrix}$, $D = 0$ Design a full-order observer with desired eigenvalues as $\mu_1 = -5, \mu_2 = -6$ and $\mu_3 = -7$	309.2	AZ, E

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	a. Derive the Z-transform f(k)=u(k) and plot the ROC's of the infinite duration signals b. Determine the Z-transform of $e^{at}cos\omega t$	309.3	R, U
	OR		
16	a. F(k)=$\alpha^k u(-k-1)$ find the Z transform of the given signal b. Determine the inverse Z-transform of the following function $F(z) = 1 / (1 - 1.5\ z^{-1} + 0.5\ z^{-2})$	309.3	AZ, E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.M.Banu Sundareswari AP/ICE

QUESTION PAPER FORMAT
Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - II			Date/ Session	16.5.2022/FN	Marks	50
Course code	EE8071	Course Title	Applied Soft Computing			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year/	III	Semester/ Section	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is Hopfield Network?	C314. E23.2	R
2	Outline the applications of ANN.	C314. E23.2	A
3	Discuss about discrete tie Hopfield networks.	C314. E23.2	C
4	What is the goal of inverted pendulum?	C314. E23.2	U
5	List out the difference between Neural network and fuzzy logic.	C314. E23.2	R
6	Define a fuzzy set. Give example.	C314. E23.3	AZ
7	Define Fuzzification.	C314. E23.3	R
8	Write about cardinality of crisp relations.	C314. E23.3	U
9	Explain Demorgan's laws for classical sets.	C314. E23.3	C
10	Mention the key role of Knowledge based system.	C314. E23.3	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain in detail on the applicability of a multi-layer feed forward neural network controller for an inverted pendulum model.	C314. E23.2	R
	OR		
12	Elaborate the importance of feedback networks and explain energy function of Hopfield network.	C314. E23.2	U
13	List out and discuss the various properties of fuzzy set with suitable examples.	C314. E23.3	R
	OR		
14	With suitable diagram, briefly discuss about knowledge based system.	C314. E23.3	Az

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Given $X=\{(0.1/x_1),(0.5/x_2),(1/x_3),(0.3/x_4),(0.1/x_5)\}$, $Y=\{(0.3/y_1),(1/y_2),(0.9/y_3),(0.2/y_4),(0.1/y_5)\}$ and $Z=\{(0.5/z_1),(1/z_2),(0.9/z_3),(0.4/z_4),(0/z_5)\}$. Compute R = X x Y, P = Y x Z and S = P o R using max-min composition.	C314. E23.3	A
	OR		
16	Fuzzy sets A and B are defined with the membership function as $U_A(X)=[(0.1/x_1),(0.5/x_2),(1/x_3),(0.3/x_4),(0.1/x_5)]$, $U_B=[(0.3/y_1),(1/y_2),(0.9/y_3),(0.2/y_4),(0.1/y_5)]$, Determine (1) AUB, (2) $A \cap B$, (3) $\bar{A}$, (4) $\bar{B}$, (5) $\overline{A \cap B}$	C314. E23.3	C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.P.ARAVIND AP/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	13.05.2022/FN	Marks	50
Course code	EI8092	Course Title	Thermal Power Plant Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year/	III	Semester/ Section	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is mean by pulverizer	C312.3	U
2	What are power frequency and power factor?	C312.2	R
3	How to find percentage smoke density from Ringlemann chart.	C312.2	U
4	What is an evergreen window?	C312.3	R
5	Write the deflection torque equation of electro dynamo meter voltmeter.	C312.2	U
6	What are the 4 major principles involved in pulverization?	C312.3	R
7	List out 4 inspection parameters in bowl mill performance	C312.3	U
8	Define Draught system.	C312.2	U
9	What is the use of wobbler in a air pollution equipment?	C312.3	R
10	In combustion control, what is meant turbulence? Why it is the key factor?	C312.3	AZ

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Briefly discuss on Flue gas oxygen analyzer and smoke density measurement	C312.2	U
	OR		
12	Explain in details about Steam flow measurement and Hot wire anemometer.	C312.2	R
13	Explain the operation of natural draught and forced draught with suitable diagrams	C312.3	U
	OR		
14	Explain with neat diagram, process of pulverizer in coal handling?	C312.3	AZ

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Briefly discuss on electrodynamometer type voltage and current measurement	C312.3	AZ
	OR		
16	Explain in details about measurement of power and power factor using electrodynamometer	C312.2	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.P.THIRUMURUGAN AP/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	17.05.2022	Marks	50
Course code	GE8073	Course Title	Fundamentals of Nano Science			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year/	III	Semester	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	How are carbon nano tubes classified?	C410.E64.2	R
2	What do you meant by colloidal routes?	C410.E64.2	R
3	Discuss the methods used to synthesis nano particles.	C410.E64.2	U
4	Define sputtering and list its types.	C410.E64.2	U
5	Differentiate carbon nano tubes from bucky balls.	C410.E64.2	A
6	List the application of self-assembly materials.	C410.E64.2	R
7	Explain the use of ball milling in nanotechnology.	C410.E64.2	U
8	What are carbon nano tubes?	C410.E64.3	R
9	Define buckminsterfullerene.	C410.E64.3	AU
10	Define nano forms of carbon.	C410.E64.3	AZ

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Give short notes about: a) Co-precipitation b) Ultrasonification.	C410.E64.2	U
	OR		
12	Write in detail about the sputtering and its types.	C410.E64.2	U
13	Write note on molecular beam epitaxy and atomic layer epitaxy.	C410.E64.2	U
	OR		
14	Explain about MOMBE.	C410.E64.2	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain Single Wall Carbon Nanotubes (SWCNT) and Multi Wall Carbon Nanotubes (MWCNT).	C410.E64.3	R
	OR		
16	Explain about the synthesis of CNT.	C410.E64.3	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.M.Shanmugavalli Prof/ICE

QUESTION PAPER FORMAT
Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - II			Date/ Session	16.05.2022	Marks	50
Course code	GE8076	Course Title	Professional Ethics In Engineering			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year/	IV	Semester/ Section	VIII	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is meant by engineering ethics?	C411.E51.2	R
2	What is the basic concept of right action?	C411.E51.2	A
3	What is mean by Moral Autonomy?	C411.E51.2	C
4	Give classification of ethical theories?	C411.E51.2	U
5	What is moral dilemma?	C411.E51.2	R
6	What reasons lead to many repetitions of past mistakes?	C411.E51.3	AZ
7	Give limitations of code.	C411.E51.3	R
8	What are the elements of informed consent?	C411.E51.3	U
9	What are the general features of morally responsible engineers?	C411.E51.3	C
10	Differentiate between scientific experiments and engineering projects.	C411.E51.3	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Discuss the models of professional roles and also discuss about theories about virtues.	C411.E51.2	Az
	OR		
12	What is Duty Ethics? Explain in detail.	C411.E51.2	U
13	Discuss on 'Engineers as responsible experimenters'.	C411.E51.3	R
	OR		
14	What are the function of codes of ethics?	C411.E51.3	Az

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	What does a balance outlook emphasis in governing engineering practices and discuss about industrial standards with example.	C411.E51.2	A
	OR		
16	Write a brief theory about a) sense of honor, b) self-control, c) courage, and d) Good judgment.	C411.E51.2	C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.P.ARAVIND AP/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/ Session	08.06.2022	Marks	50
Course code	EI8452	Course Title	Industrial Instrumentation-I			
Batch No.		Duration	90 mins	Academic Year	2021-2022 EVEN	
Year/	II	Semester/ Section	IV	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is the principle of bimetallic thermometer	C211.4	R
2	Give few types of thermocouple with composition and temperature range.	C211.4	R
3	What are the types of bimetallic thermometer? explain with neat diagram	C211.4	U
4	What is the difference between positive temperature and negative temperature coefficients? Explain with type of thermometer	C211.4	U
5	Why signal conditioner is necessary in temperature measurement?	C211.4	R
6	What is seeback effect in thermocouple.	C211.4	C
7	Explain different thermocouple junction with diagram.	C211.4	U
8	List the criteria for selecting temperature sensor.	C211.4	C
9	Differentiate absolute pressure and gauge pressure.	C211.5	U
10	State the principle of U-Tube manometer.	C211.5	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Discuss the construction, operation, advantages and disadvantages of liquid fill in thermometer.(10)	C211.4	R
	OR		
12	With suitable diagram, outline the various sources of static error in filled system and summarize the characteristics of thermistor. (5+5)	C211.4	U
13	Explain in detail about the various laws of thermocouple and briefly discuss the working principle of thermocouple. (5+5)	C211.4	R
	OR		
14	Explain in detail, total radiation type pyrometer and optical pyrometer.(5+5)	C211.4	R

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain the principle of manometer in pressure measurements.	C211.5	A
	OR		
16	Explain the principle of bourdon tube and diaphragm in pressure measurements. Compare their merits. (10)	C211.5	C

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/ Session	14.06.2022/FN	Marks	50
Course code	IC8451	Course Title	CONTROL SYSTEM			
Batch No.		Duration	90 mins	Academic Year	2021-2022 EVEN	
Year/	II	Semester/ Section	IV/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	How to get characteristic equation	213.5	R
2	How to get auxiliary equation for Routh Hurwitz criterion	213.5	R
3	Comment on stability aspects for a Routh Hurwitz table	213.5	U
4	Define Nyquist stability criterion	213.5	U
5	What will be substitution to be made for 's' in getting C2 for Nyquist plot	213.5	U
6	What is the need for compensator	213.5	R,U
7	What is the expression for beta in a lag compendator	213.5	R, U
8	Define the need for a state space system	213.6	R,U
9	Define controllability	213.6	AZ
10	How to check observability	213.6	R

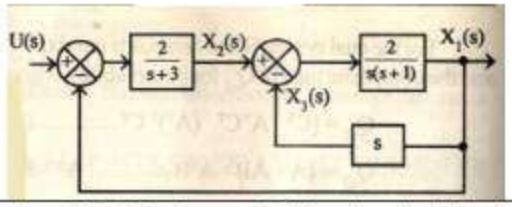
Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Obtain the stability analysis for system of a unity feedback system with $G(s) =$, for $s^8 + s^7 + 8s^6 + 4s^5 + 3s^4 + 5s^3 + 7s^2 + 6s + K = 0$ and comment on stability	213.5	AZ, E
	OR		
12	Sketch the Nyquist plot for $G(s) = \frac{K}{s(s+2(s+4)}$	213.5	AZ, E
13	Design a lag compensator for unity feedback system and having ramp input $G(s) = \frac{K}{s(1+2s)}$ for PM=40, ess=0.2	213.5	AZ, E
	OR		
14	Design a lead compensator for unity feedback system and having $K_v + 50$ and Pm = 20	213.5	AZ, E

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Design a lag –lead compensator for system $G(s) = \frac{K}{s(s+3)(s+6)}$ for PM=35, Kv = 80	213.5	AZ,E
	OR		
16	For the given block diagram, determine the controllability and observability , 	213.6	AZ, E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill needs to be mentioned against each question.

Staff : **Dr.S.M. Giriraj Kumar**

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/Session	15.06.22/FN	Marks	50
Course code	EE8451	Course Title	Linear Integrated Circuits and application			
Batch No.		Duration	90 mins	Academic Year		2021- 2022
Year/	II	Semester/ Sec	IV	Department		ICE

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is Schmitt trigger	C213.3	R
2	List the various ADC techniques	C213.3	R
3	Write the important specifications of DAC and ADC	C213.3	R
4	Mention the applications of a 555 timer	C213.4	R
5	How do we vary the duty cycle of an astable multi vibrator	C213.4	R
6	Give the schematic symbol of Multiplier	C213.4	R
7	Define Scale factor of multiplier	C213.4	R
8	What is mean by lock in range and Capture in range in PLL operation	C213.4	R
9	Differentiate between linear and switching regulator	C213.5	R
10	List the important characteristics of a voltage regulator	C213.5	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in Detail about log and antilog amplifier	C213.3	R
	Or		
12	Explain in detail about ADC and its types	C213.3	R
13	Explain in detail about functional block diagram and operation of astable multi vibrator using an IC 555.	C213.4	R,U
	Or		
14	Explain the working of PLL using appropriate block diagram and explain any one application of the same.	C213.4	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	(i)Explain the analog voltage multiplier circuit (ii) Explain in detail about fixed voltage regulator.	C213.4, C213.5	R,U
	Or		
16	(i)Explain in detail about PLL as frequency synthesizer (ii) Explain in detail about adjustable voltage regulator	C213.4, C213.5	R,U

***Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned** against each question*

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - III			Date/Session	09/06/2022/FN	Marks	50
Course code	MA8491	Course Title	NUMERICAL METHODS			
Batch No.		Duration	90 mins	Academic Year	2021 – 2022 EVEN	
Year/	II	Semester/ Section	IV	Department	EEE,CIVIL,ICE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1.	Which is better Taylor's method or Runge - Kutta Method. Why?	CO4	U
2.	Write the Runge- Kutta algorithm of fourth order.	CO4	R
3.	Using Modified Euler's method, compute $y(0.1)$ from $y' = y - \frac{2x}{y}$, given $y(0) = 1$	CO4	E
4.	Using Euler method find y(0.3) if $\frac{dy}{dx} = \frac{1}{2}(x^2 + 1)y^2$ and y (0.2) = 1.1114	CO4	E
5.	Write the error in Milne's predictor and corrector formula	CO5	R
6.	What are the multi-step methods? Give reason.	CO5	U
7.	Write down Adam's Bashforth predictor and corrector formula	CO5	R
8.	Classify the partial differential equation $u_{xx} + 2u_{xy} + u_{yy} = 0$.	CO6	R
9.	What is the order of error arriving when deriving y' and y''.	CO6	U
10.	Write down the explicit formula to solve one dimensional wave equation.	CO6	R

Part – B

(Answer all the questions 3 x 10 = 30marks)

Q. No.	Questions	CO	Skills
11.	Given $\frac{dy}{dx} = x^2y - 1$ and y(0) = 1. Find the value of y(0.1), y(0.2), y(0.3) by using Taylor's series method.	CO4	U
	(or)		
12.	Use Runge –Kutta method of fourth order, when x = 0.1, 0.2, 0.3, h= 0.1 given x = 0 when y = 1 and $\frac{dy}{dx} = x + y$.	CO4	U
13.	Determine the value of $y(0.8)$ using Milne's predictor and corrector method, given $y' = y - x^2, y(0) = 1, y(0.2) = 1.12186$, using Taylor series method to get the values of $y(0.4)$ and $y(0.6)$.	CO5	U
	(or)		

14.	Using Adam's Bashforth method, find $y(4.4)$ given $5xy' + y^2 = 2$; $y(4) = 1, y(4.1) = 1.0049$, using Euler's method to get the values of y(4.2) and y(4.3).	CO5	U
15.	Using finite difference method, solve $y'' - 64y + 10 = 0$, $x \in (0,1)$ given $y(0) = y(1) = 0$, subdividing the interval into 4 equal parts.	CO6	U
	(or)		
16.	Evaluate the pivotal values of the following equation taking h = 1 and upto one half of the period of oscillation $16u_{xx} = u_{tt}$ given $u(0,t) = u(5,t) = 0$, $u(x,0) = x^2(5-x)$ and $u_t(x,0) = 0$.	CO6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test – III			Date/ Session	13.06.2022/FN	Marks	50
Course code	EI8651	Course Title	Logic and Distributed Control System			
Batch No.		Duration	90 mins	Academic Year	2021-2022/EVEN	
Year/	III	Semester	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	List some structured text operators	C310.3	R
2	Give the instruction list of a latched motor control	C310.3	C
3	Distinguish between structured text programming and Ladder programming	C310.3	U
4	Differentiate selective branching and parallel branching in Sequential Function Chart	C310.3	U
5	What are the differences between SCADA and DCS	C310.4	U
6	Why is Foundation Fieldbus (FF) protocol more preferred than HART protocol	C310.4	AZ
7	Define star topology	C310.4	R
8	List out the hardware architecture of DCS	C310.4	R
9	What do you mean by Local Control Unit?	C310.4	R
10	Compare hybrid, Central Computer and Distributed Control System architecture	C310.4	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Describe the evolution of DCS with neat diagram	C310.4	U
	OR		
12	Describe in detail about smart field devices used in DCS controller with neat diagram	C310.4	U
13	Explain about the processing methods of Field Control Station with neat diagram	C310.4	R, U
	OR		
14	Explain the working of Bus Topology and Mesh Topology with neat diagram	C310.4	R

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Write the sequencer program in ladder logic for two-way traffic signal and explain how the program is executed	C310.3	C
	OR		
16	a. List the basic statement types for Structured Text program (5 marks) b. Explain conditional statements and iteration/looping statements in Structured Text programming (5 marks)	C310.3	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C).

Faculty Member: R. Seetharaman/AP/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/ Session	10.6.2022	Marks	50
Course code	EE8071	Course Title	Applied Soft Computing			
Batch No.		Duration	90 mins	Academic Year	2021-2022	
Year/	III	Semester/ Section	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Name any two fuzzy membership functions.	C314. E23.3	R
2	Define neuro fuzzy system learn.	C314. E23.3	A
3	List out the applications of fuzzy logic system.	C314. E23.3	C
4	Define core and boundaries of a membership function.	C314. E23.3	U
5	Mention the key role of knowledge based system	C314. E23.3	R
6	In what way fuzzy PID Control operation is better than the traditional PID control operation?	C314. E23.4	AZ
7	Why is the error value used as an input signal for fuzzy based inverted pendulum model?	C314. E23.4	R
8	What are the basic elements of a fuzzy logic control system?	C314. E23.4	U
9	Recall the assumptions in a fuzzy control system Design.	C314. E23.4	C
10	What is FAM table?	C314. E23.4	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Define defuzzification. Outline the various methods of defuzzification with an example.	C314. E23.3	R
	OR		
12	Elaborate how fuzzy inference rules are formulated with relevant examples.	C314. E23.3	U
13	Demonstrate briefly about the fuzzy rule base for the home heating system with a fuzzy rule function condition.	C314. E23.4	R
	OR		
14	With a neat flowchart describe the algorithm of fuzzy based motor speed control.	C314. E23.4	Az

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Consider and aircraft landing problem, define the input and output parameters. Obtain membership values for the considered parameters and formulate fuzzy inference rules. Derive the defuzzified output values from the fuzzy associative memory table formulated.	C314. E23.5	A
	OR		
16	Draw the block diagram of fuzzy logic based liquid level control system. Carry out Fuzzification, inference mechanism and defuzzification process over the system and depict the control action taken employing fuzzy techniques.	C314. E23.5	C

Name of the staff: Dr. P. Aravind.

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/ Session	08.06.2022 /FN	Marks	50
Course code	EI8092	Course Title	Thermal Power Plant Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2021-2022	
Year/	III	Semester/ Section	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	List the elements used in flow measurement.	C312.4	U
2	What is the basic feedwater supply system in boiler?	C312.4	R
3	What are basic factors to be considered for feed water flow?	C312.4	U
4	What are two scales used in power plant for temperature measurement?	C312.4	R
5	Write the relationship between ^{0}C and ^{0}F.	C312.4	U
6	What is the necessity for cooling the condenser water?	C312.5	R
7	List the popular methods of governing.	C312.5	U
8	List the factors considered for choosing vibration sensors.	C312.5	U
9	What is the need for vibration monitoring in turbine?	C312.5	R
10	Classify instrumentation systems for vibration monitoring.	C312.5	AZ

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain boiler feed water processing and control.	C312.4	U
	OR		
12	Explain any two types of pressure measuring devices.	C312.4	R
13	Explain the operation and construction of rotor and casing in speed measurement application.	C312.5	U
	OR		
14	Explain with neat diagram, vibration measurement.	C312.5	AZ

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	With suitable diagram, discuss shell temperature monitoring and control	C312.5	AZ
	OR		
16	Briefly discuss on 1) steam pressure control 2) lubricant oil temperature.	C312.5	U

Saranathan College of Engineering

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Internal Assessment Test - III			Date/ Session	09.06.2022/ FN	Marks	50
Course code	EE8072	Course Title	MEMS and Nano Science			
Batch No.		Duration	90 mins	Academic Year	2021-22 EVEN	
Year/	III	Semester	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is MOEMS?	C313-E11.4	R
2	List down the actuators used in optical MEMS.	C313-E11.4	R
3	Distinguish between Quantum wires and Quantum dots.	C313-E11.5	U
4	What is Knudsen number?	C313-E11.5	U
5	List the applications of Nano products.	C313-E11.5	A
6	Classify the different types of milling.	C313-E11.6	R
7	What is Nano fabrication?	C313-E11.6	U
8	Nano particle of gold is purple in colour. Justify.	C313-E11.6	R
9	Differentiate bottom-up and Top-down approach.	C313-E11.6	A
10	Generalize the application of self-assembly materials.	C313-E11.6	A

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Describe the nanofabrication and its principles involved in nanotechnology.	C313-E11.5	U
	OR		
12	Explain the role of Engineering Fluids at the Nanoscale.	C313-E11.5	U
13	State the Principle and explain the operation of a typical micro mirror.	C313-E11.4	U
	OR		
14	Discuss in detail about the Assembly of 3D MEMS with any one Application.	C313-E11.4	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Discuss about the various applications involved in Nano products and explain any four about it.	C313-E11.5	R
	OR		
16	State the modelling of nanoscale heat conduction by Boltzmann transport equation.	C313-E11.5	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering
Tiruchirapalli

INTERNAL ASSESSMENT - III			Date/ Session	14.06.2022	Marks	50
Course code	GE8073	Course Title	Fundamentals of Nano Science			
Batch No.		Duration	90 mins	Academic Year	2021-22 EVEN	
Year/	IV	Semester	VIII	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define nanometal oxides.	C410.E64.4	R
2	Define properties of the nanoscale fibers of aluminium oxide.	C410.E64.4	R
3	What are nanoclays?	C410.E64.4	U
4	What is surface analysis?	C410.E64.5	U
5	What is meant by XRD?	C410.E64.5	A
6	What are the disadvantages of ESEM?	C410.E64.5	R
7	What are the applications of SEM?	C410.E64.5	U
8	Why is a higher resolution better?	C410.E64.5	R
9	Define quantum tunneling.	C410.E64.5	UU
10	Define near-field scanning optical microscopy	C410.E64.5	U

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Discuss on the preparation, properties and applications of Quantum wires and Quantum dots.	C410.E64.4	U
	OR		
12	Describe Structure-property relationships applications.	C410.E64.4	U
13	Write short notes on SPM, STM.	C410.E64.5	U
	OR		
14	Ellaborate about high-resolution transmission electron microscopy	C410.E64.5	U

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	What is meant by Atomic Force Microscope (AFM)? Explain the working principle of AFM.	C410.E64.5	R
	OR		
16	Expand SEM and write its working principle in detail.	C410.E64.5	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

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Internal Assessment Test - III			Date/ Session	13.6.2022	Marks	50
Course code	GE8076	Course Title	Professional Ethics In Engineering			
Batch No.		Duration	90 mins	Academic Year	2021-2022 EVEN	
Year/	IV	Semester/ Section	VIII	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is safe Exists?	C411.E51.4	R
2	State the reasons that may cause risk.	C411.E51.4	A
3	What is meant by risk?	C411.E51.4	C
4	Define confidentiality.	C411.E51.4	U
5	Define the term safety and relate it to risk.	C411.E51.4	R
6	What is meant by global issues?	C411.E51.5	AZ
7	When a corporation to be called as a MNC?	C411.E51.5	R
8	What are the advantages of MNCs to host country?	C411.E51.5	U
9	What are the moral responsibilities of engineers working in foreign countries?	C411.E51.5	C
10	What meant by international rights?	C411.E51.5	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain the risk benefit analysis and conceptual problems associated with it.	C411.E51.4	Az
	OR		
12	What are the elements of intellectual property rights? Explain.	C411.E51.4	U
13	Discuss about 4 important dimensions of global issues in details.	C411.E51.5	R
	OR		
14	Explain in detail about international human rights.	C411.E51.5	Az

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Discuss the testing strategies for safety with suitable examples. Mention the difficulties in assessing the personal risk.	C411.E51.6	A
	OR		
16	Explain the process of collective bargaining in Indian context in the industries.	C411.E51.6	C

Name of the Faculty: P. Aravind

Saranathan College of Engineering

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Internal Assessment Test - I			Date/ Session	11.03.2023	Marks	50
Course code	EI3451	Course Title	Industrial Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2022-23	
Year	II	Semester	IV	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define viscosity.	C210.1	R
2	Write down the principle of Dry and wet bulb psychrometers.	C210.1	R
3	What is dew point?	C210.1	R
4	What is meant by conductivity?	C210.1	R
5	Explain about the microwave sensor	C210.1	R
6	Differentiate the IR and NMR sensor	C210.1	U
7	List few applications of moisture measurement	C210.2	R
8	What is signal conditioning?	C210.2	R
9	List the different temperature measuring devices.	C210.2	R
10	What is meant by cold junction compensation?	C210.2	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11a	What are the different methods of moisture measurements	C210.1	R
	OR		
11b	Discuss about resistive and capacitive hygrometer.	C210.1	R
12 a	Write note on bimetallic thermometer	C210.2	U
	OR		
12b	Write note on thermocouple.	C210.2	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
13 a	Write note on Saybolt viscometer.	C210.1	A
	OR		
13b	How will you measure moisture measurement in solids	C210.1	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - I			Date / Session	14.03.2023	Marks	50
Course code	IC3401	Course Title	Modern Electronic Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Draw the block diagram of a measurement system.	C202.1	U
2.	What are the different principles and operating torques used in instruments?	C202.1	U
3.	Explain the operating principle of moving iron and moving coil	C202.1	U
4.	Define the sensitivity and give the expression.	C202.1	A
5.	What is the function pivot and jewel bearing?	C202.1	A
6.	A moving coil instrument has the following data: number of turns=100, width of the coil=20mm, depth of the coil=30mm, flux density in the gap=0.1Wb/m^2. Calculate the deflection torque when carrying a current of 10mA, also calculate the deflection, if the control spring constant is 2×10^{-6}Nm/deg.	C202.1	AZ
7.	Calculate the value of multiplier resistance on the 50v range of a DC voltmeter that uses 500μA meter movement with an internal resistance of 1KΩ	C202.1	AZ
8.	Different types of ADC and DAC used in signal processing.	C202.2	U
9.	What is ratio meter conversion	C202.2	A
10.	What is the function of sample and hold circuit	C202.2	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	With a schematic diagram explain the any two DC voltage measurement method.	C202.1	U
	OR		
12.	With a schematic diagram explain the functioning of attraction and repulsion type of moving iron instruments.	C202.1	U
13.	Explain Western type and ratio type frequency meter with neat diagram	C202.1	A
	OR		
14.	Explain any one phase measurement and time measurement methods.	C202.1	A

Part – C

(Answer all the questions 1 x 10 = 10 marks)

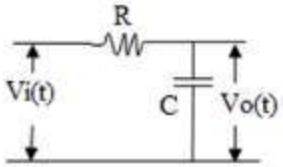
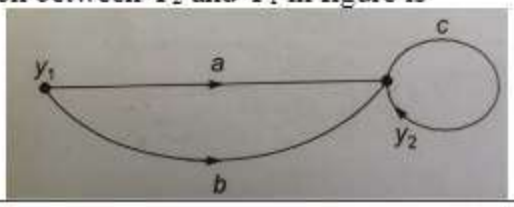
Q. No.	Questions	CO	Skills
15.	i) Draw and explain the elements of a digital data acquisition system. (5) ii) Draw the basic structure of IEEE 488 bus showing interfacing between interactive instruments. (5)	2	U
	OR		
16.	Write short notes about Successive approximation type ADC. (5) Explain about the R-2R ladder type DAC. (5)	2	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

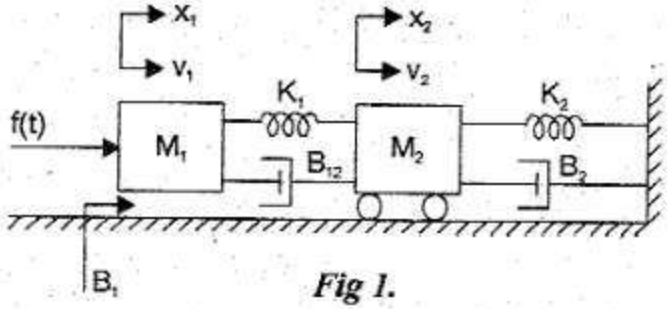
Faculty in-charge: Dr.M.Banu Sundareswari

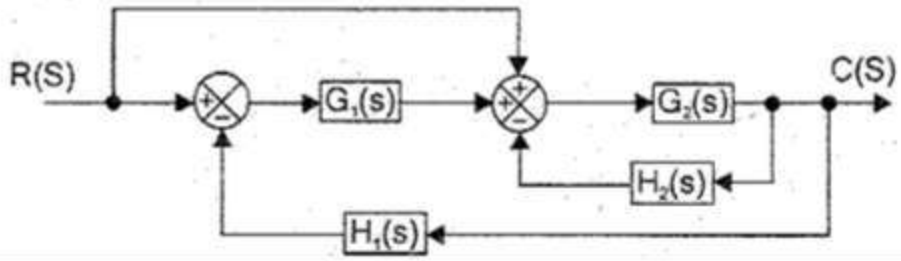
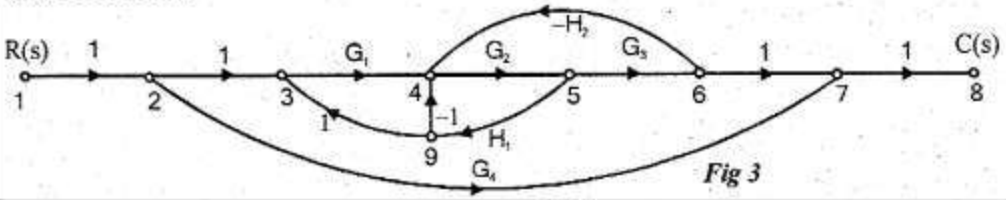
Internal Assessment Test - I			Date / Session	10.03.2023/FN	Marks	50
Course code	IC3451	Course Title	Automatic Control Systems			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Define transfer function.	C211.1	U
2.	Write the analogous electrical elements in torque current analogy for the elements of mechanical rotational system.	C211.1	R
3.	Obtain the transfer function for the electrical network shown in figure. 	C211.1	A
4.	What are the basic components of a block diagram?	C211.1	C
5.	The transfer function between Y_2 and Y_1 in figure is 	C211.1	AZ
6.	Write the block diagram reduction rule of eliminating a positive feedback loop.	C211.1	E
7.	Tabulate the different types of damping ratio and their names of the system.	C211.2	A
8.	Obtain the impulse response of first order system.	C211.2	R
9.	List the time domain specifications.	C211.2	U
10.	Derive the expression for rise time.	C211.2	AZ

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Write the differential equation governing the mechanical translational system shown in fig. Draw the force-voltage and force-current electrical analogous circuits and verify by writing mesh and node equations.  *Fig 1.*	C211.1	A
	OR		

12.	Using block diagram reduction technique find the transfer function of the system is shown in figure.  	C211.1	R
13.	Find the transfer function for the following signal flow graph using Mason's gain formulae.  *Fig 3*	C211.1	U
	OR		
14.	Derive the transfer function of field controlled DC servomotor.	C211.1	C

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Obtain the expression for second order underdamped system and when the input is unit step.	C211.2	U
	OR		
16.	The unity feedback system is characterized by an open loop transfer function G(s)=K/s(s+10). Determine the gain K, so that system will have a damping ratio of 0.5 for this value K. Determine time domain specifications.	C211.2	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: Dr.A.Gopikrishnan, AP/ICE

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - I			Date / Session	15/03/2023 - FN	Marks	50
Course code	MG8591	Course Title	Principles of Management			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI / A	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	List out the top 5 companies in India according to their market capitalization.	C409.E55.1	Az
2.	Brief in about the Importance of Business Environment.	C409.E55.1	U
3.	Write short notes on Micro Environmental factors.	C409.E55.1	R
4.	List out any 2 differences between Administration and Management.	C409.E55.1	U
5.	Discuss about the Characteristics of Organizational Culture.	C409.E55.1	U
6.	What are the five steps for managing culture change?	C409.E55.1	R
7.	Distinguish between the American and Japanese Cultural Differences in a Typical Organization (any 2).	C409.E55.1	Az
8.	Comment on the trends and challenges of management in global scenario	C409.E55.1	Az
9.	Define Planning.	C409.E55.2	R
10.	What is Decision making?	C409.E55.2	R

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	a. List out the 14 Principles of Henri Fayol. b. Explain the principal contribution of F.W.Taylor to the development of Management though and practice.	C409.E55.1	R,U
	OR		
12.	Discuss the roles of Manager and Managerial skills in a typical organization.	C409.E55.1	U
13.	Explain in Detail about the Functions of Management for effective and efficient accomplishment of organizational goals.	C409.E55.1	U
	OR		
14.	Explain in Detail about the various steps involved in planning process.	C409.E55.2	U

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Explain management is an art or science both science and art system based on contingency approach to management in form of Case study	C409.E55.1	Az
	OR		
16.	Analyze the challenges faced during the process of setting up a business partnership through a case study for Microsoft Company.	C409.E55.1	Az

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: Dr.S.M.Girirajkumar / Professor & Head / ICE

Internal Assessment Test - I			Date/ Session	14/03/2023-FN	Marks	50
Course code	EE8071	Course Title	Applied Soft Computing			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define soft Computing technique	C314. E23.1	R
2	What are the different activation functions used in ANN?	C314. E23.1	A
3	What is Axon and Synapse?	C314. E23.1	R
4	What is activation function?	C314. E23.1	U
5	Define bias and list out some learning factors in algorithm.	C314. E23.1	R
6	What is Artificial Intelligence?	C314. E23.1	U
7	Write the weight updated equation of a back propagation algorithm	C314. E23.1	R
8	Which model is used to perform basic logic operations?	C314. E23.1	R
9	Highlight on the suitability of ANNs for control applications.	C314. E23.2	U
10	Write the energy function for discrete Hopfield network.	C314. E23.2	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Discuss about various learning methods in Neural Networks.	C314. E23.1	R
	OR		
12.	Explain in detail the types of activation functions used in artificial neuron.	C314. E23.1	R
13.	Draw the architecture of Single and multi-layer feed forward network and explain.	C314. E23.1	U
	OR		
14.	Discuss about architecture, flow chart and training algorithm of back propagation algorithm neural network.	C314. E23.1	Az

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Discuss about architecture, flow chart and training algorithm of Hopfield network.	C314. E23.2	Az
	OR		
16.	Four steps of Hebbian learning of a single neuron network have been implemented starting with $W^1 = [1 \quad -1]^T$ for learning constant C & $\lambda = 1$ using input as follows, using bipolar continuous activation function and bipolar binary activation function . $X_1 = \begin{bmatrix} 1 \\ -2 \end{bmatrix}, X_2 = \begin{bmatrix} 0 \\ 1 \end{bmatrix}, X_3 = \begin{bmatrix} 2 \\ 3 \end{bmatrix}, X_4 = \begin{bmatrix} 1 \\ -1 \end{bmatrix}$	C314. E23.1	Az

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge : Dr.K.Gaayathry/AP/ICE

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Internal Assessment Test - I			Date/ Session	10.03.2023	Marks	50
Course code	EE8072	Course Title	MEMS and Nano Science			
Batch No.		Duration	90 mins	Academic Year	2022-23	
Year/	III	Semester	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is MEMS?	C313-E11.1	R
2	What are the advantages of MEMS?	C313-E11.1	R
3	What is the need for miniaturization?	C313-E11.1	U
4	Explain about air bag deployment system.	C313-E11.1	U
5	How will you integrate mechanical and electrical components in MEMS?	C313-E11.1	A
6	A parallel plate capacitor is made of two square plates with the dimensions L = W = 1mm. Determine the normal electrostatic force if the gap between these two plates is 0.002mm. The plates are separated by static air.	C313-E11.1	AZ
7	Explain the operation of SMA with an example.	C313-E11.1	U
8	What are the basic micro fabrication processes available?	C313-E11.1	R
9	What is CVD?	C313-E11.1	R
10	What do you mean by deposition by epitaxy?	C313-E11.1	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain the difference between microelectronics and microsystem.	C313-E11.1	U
	OR		
12	Describe about the multidisciplinary nature of MEMS.	C313-E11.1	U
13	Explain about the ion implantation and diffusion used in MEMS.	C313-E11.1	U
	OR		
14	Write a note on photolithography.	C313-E11.1	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain about the different actuation techniques used in MEMS.	C313-E11.1	R
	OR		
16	Write note on micro gears, micro turbines, micro motors and micro optical devices	C313-E11.	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - I			Date / Session	09.03.2023/FN	Marks	50
Course code	EI8092	Course Title	Thermal Power Plant Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	What are the factors to be considered for power plant performance.	C312.1	U
2.	Differentiate sub-critical boiler and super-critical boiler	C312.1	R
3.	Explain the term nuclear fission.	C312.1	A
4.	Define the principle used in solar power plant?	C312.1	C
5.	Calculate the speed of generator having 2 poles configuration and grid frequency is 50Hz.	C312.1	AZ
6.	Mention the importance of instrumentation system in power plant.	C312.1	E
7.	Write a short note on P&I diagram.	C312.1	A
8.	What is meant by cogeneration?	C312.1	U
9.	List the methods and elements used for air flow measurement.	C312.2	A
10.	What is meant by bulk compression effect?	C312.2	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Explain the operation of hydro-electric power plant with a neat diagram and describe about the each component.	C312.1	U
	OR		
12.	With a neat sketch explain the boiler processes in detail.	C312.1	C
13.	Explain the operation of solar power plant with a neat diagram and describe about the each component.	C312.1	AZ
	OR		
14.	Draw the overall layout of thermal power plant and present the four major circuits of operation.	C312.1	E

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Explain any two measurement method of air flow in power plant.	C312.2	A
	OR		
16.	Describe in detail about steam pressure measurement with a neat diagram.	C312.2	C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: Dr.A.Gopikrishnan, AP/ICE

Internal Assessment Test - I			Date / Session	11-03-2023/FN	Marks	50
Course code	EI8651	Course Title	LOGIC AND DISTRIBUTED CONTROL SYSTEM			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	VI/A	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Draw the block diagram of SCADA architecture	C310.1	R
2.	List the Advantages of PLC over Relay Logic	C310.1	U
3.	What are the Features of SCADA systems	C310.1	R
4.	State the difference between RTU and MTU	C310.1	R
5.	Compare Fixed and Modular type PLC module	C310.1	R
6.	Draw the Ladder Logic Diagram for the following expression y = AB + BC+CA	C310.2	AZ
7.	Design a ladder logic diagram for implementing OR function	C310.2	U
8.	Design a ladder logic diagram for a process which uses an On-Delay timer	C310.2	U
9.	List the graphical languages used in PLC programming	C310.2	R
10.	Highlight the uniqueness of Retentive Timer	C310.2	U

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Explain the architecture of PLC with a neat diagram	C310.1	R
	OR		
12.	With a neat sketch explain the block diagram of SCADA	C310.1	R
13.	a) With a neat sketch explain about the communication architecture of SCADA (5 marks) b) Explain in detail about the programming device and the languages used in PLC programming (5 marks)	C310.1	R
	OR		
14.	With a neat sketch explain the software architecture of SCADA	C310.1	R

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Explain the working of On-Delay Timer and Retentive Off-Delay Timer with a sample application using ladder logic	C310.2	AZ, C
	OR		
16.	a) Draw the ladder logic for the following expressions (5 marks) $Y = (A+B).C$ $Y = (\bar{A}.B)+(C.\bar{D})$ $Y = (A+B+\bar{C}).\bar{D}$	C310.2	AZ, C

	b) Draw the ladder diagram for the following process using On-Delay and Off-Delay Timers (5 Marks) **Step 1:** When switch A is turned ON, an indicator must be **energized** **Step 2:** Once the switch A is turned OFF, the indicator must be **de-energized** AFTER 60 seconds **Step 3:** When switch B is turned ON, a motor must be **energized** AFTER 120 seconds **Step 4:** Motor must be turned OFF when switch C is pressed		

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill needs to be mentioned against each question

Faculty in-charge: R. Seetharaman/AP-ICE

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test - I			Date/ Session	13.03.2023/FN	Marks	50
Course code	IC8651	Course Title	Advanced Control System			
Batch No.		Duration	90 mins	Academic Year	2022-2023/ Even	
Year/	III	Semester/ Section	VI/A	Department	ICE	

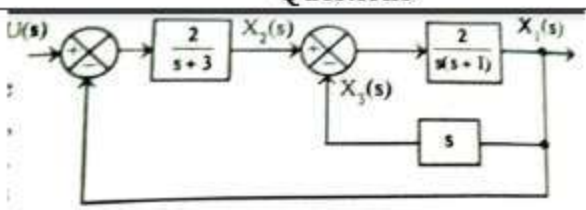
Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Write the advantages of state space representation	309.1	U
2	Write down the expression for state equation and output equation of linear time invariant (LTI), SISO and MIMO system	309.1	R
3	Draw a state diagram of MIMO system	309.1	R, U
4	$\frac{d^2y}{dt^2}+10\frac{dy}{dt}+7y-u=0.$ Obtain the state model of the given system	309.1	AZ, E
5	What is free and forced response and deduce the expression.		
6	What is modal matrix? Write the expression for modal matrix	309.1	U
7	Mention the properties of state transition matrix	309.1	R
8	What is the advantage of diagonalization?	309.1	R
9	What is resolvent matrix? Derive a relation between state equation and transfer function for LTI system.	309.1	AZ, E
10	List out the physical variables for electrical and mechanical translational system	309.1	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	 Write the state equations for the system in figure. And check the controllability and observability.	309.1	AZ, E
	OR		
12	Assign state variables and obtain the state models of the system. $\frac{y(s)}{u(s)}=\frac{(s+3)}{s^3+9s^2+24s+20}$	309.1	AZ, E
13	A system is described by $\dot{X}(t)=\begin{bmatrix}0 & 1\\ -6 & -5\end{bmatrix}x(t)+\begin{bmatrix}0\\1\end{bmatrix}U(t)$ $y(t)=[6 \quad 1]x(t)$; $x(0)=\begin{bmatrix}1\\0\end{bmatrix}$; $u(t)=1 \quad t\geq 0$ Determine output response of the given system.	309.1	AZ, E

	OR		
14	Find the state transition matrix and free and forced response of the given system $\dot{x}(t)=\begin{bmatrix}-1 & 0.5\\ 1 & 0\end{bmatrix}x(t)+\begin{bmatrix}0.5\\ 0\end{bmatrix}u(t)\ x(0)=\begin{bmatrix}0\\ 0\end{bmatrix}$ $y(t)=[1\ \ 0]\,x(t)$ where u(t) is the unit-step input.	309.1	AZ, E

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Design a state-feedback controller which will place the closed-loop poles at -2±3.464j,-5 $\dot{x}=\begin{bmatrix}0 & 1 & 0\\ 0 & 0 & 1\\ -6 & -11 & -6\end{bmatrix}x+\begin{bmatrix}0\\ 0\\ 1\end{bmatrix}u;\ y=\begin{bmatrix}1 & 0 & 0\end{bmatrix}x.$	309.1	AZ, E
	OR		
16	Design the state observer gain matrix G for the following system by converting the system in to, observable canonical form such that the closed loop poles are located at +5,-5' $\dot{X}=\begin{bmatrix}-1 & -1\\ 1 & -2\end{bmatrix}x(t)+\begin{bmatrix}0\\ 1\end{bmatrix}u(t);\ y=[1\ \ 0]x(t)$	309.1	AZ, E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr.M.Banu Sundareswari AP/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	13.02.2023	Marks	50
Course code	GE8073	Course Title	Fundamentals of Nano Science			
Batch No.		Duration	90 mins	Academic Year	2022-23	
Year/	IV	Semester	VIII	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What do you mean by nano particles?	C410.E64.1	R
2	Name any four types of nano structured materials.	C410.E64.1	R
3	What are the applications of quantum dots?	C410.E64.1	U
4	Mention the applications of nano wires.	C410.E64.1	U
5	Analyze self-assembly of nano structures.	C410.E64.1	A
6	Generalize the application of self-assembly materials.	C410.E64.1	R
7	Define sputtering and list its types.	C410.E64.1	U
8	Discuss the methods used to synthesis nanoparticles	C410.E64.1	R
9	Differentiate carbon nanotubes from bucky balls.	C410.E64.1	AU
10	List any four day to day live commercial applications of nanotechnology.	C410.E64.1	A

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Describe about the implications of nano science in the field of a. Physics and b. Chemistry.	C410.E64.1	U
	OR		
12	Discuss the importance of quantum dots in imaging process	C410.E64.1	U
13	Describe about the implications of Nano science and technology for Biology and Engineering.		U
	OR		
14	Distinguish the properties and synthesis methods of Nanoparticles and Quantum dot.	C410.E64.1	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Discuss various application of quantum wires in nanotechnology	C410.E64.1	R
	OR		
16	Discuss on the effect on properties in nano: Mechanical, Electrical, optical, magnetic and thermal.	C410.E64.1	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	13.04.2023	Marks	50
Course code	EI3451	Course Title	Industrial Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2022-23	
Year	II	Semester	IV	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is thermograph?	C210.2	R
2	What is manometer? List down the types of it.	C210.2	R
3	How will you calibrate pressure?	C210.2	R
4	What is the need for flow measurement?	C210.3	R
5	Define discharge co-efficient	C210.3	R
6	Differentiate volumetric and mass flow rate.	C210.3	U
7	What is the use of positive displacement flowmeter?	C210.3	R
8	What is the use of positive displacement flowmeter?	C210.3	R
9	Write the advantages of rotameter?	C210.3	R
10	How will you calibrate flowmeter?	C210.3	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	With a neat diagram, explain the working of orifice plate and its types	C210.3	R
	OR		
12	Write short notes on i) Dall tube ii) Pitot tube	C210.3	R
13	Write note on radiation and optical pyrometer.	C210.2	U
	OR		
14	Write note on bourdon tube and diaphragms.	C210.2	R

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Formulate an expression for how rotameter is used to measure the flow rate of fluids	C210.3	A
	OR		
16	Explain the principle, construction and working of positive displacement flow meters	C210.3	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test – II			Date / Session	11/04/2023/FN	Marks	50
Course code	IC 3401	Course Title	MODERN ELECTRONIC INSTRUMENTATION			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Explain the function of GPIB	C202.2	R
2.	Is Sigma-Delta ADC more efficient than other ADC's? justify your answer	C202.2	U
3.	Explain the function of DAV & NRFD in Data Byte Transfer Bus	C202.2	R
4.	Draw the block diagram of Sigma-Delta DAC	C202.2	R
5.	What are Piezoelectric Crystals? mentions its applications	C202.3	R
6.	Differentiate Rotational and Reactive Torque	C202.3	R
7.	Mention any 2 transducers used for measuring Linear Displacement	C202.3	R
8.	Draw the diagram of Capacitive Transducers with Differential Arrangement	C202.3	R
9.	Explain the principle of Hall Effect Transducer	C202.3	R
10.	How does a Photoelectric Type Tachometer work	C202.3	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Explain how a Capacitive Transducer is used to measure linear displacement (both horizontal and vertical displacement) with neat diagram	C202.3	R, U
	OR		
12.	How does a RVDT measure Angular Displacement? Explain with neat diagram	C202.3	R, U
13.	Explain the working of Moving Magnet Type Velocity Transducer and list out its advantages	C202.3	R
	OR		
14.	a. Explain how load cell is used to measure force with neat diagram (5 marks) b. How does a precision disk measure angular displacement (5 marks)	C202.3	R, U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

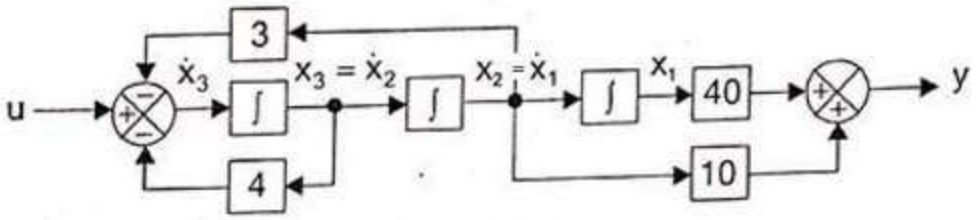
Q. No.	Questions	CO	Skills
15.	Explain in detail the working of Digital Filters with appropriate diagram and derivation	C202.2	R
	OR		
16.	Give a detailed explanation of IEEE 488 with a neat block diagram	C202.2	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: R. Seetharaman

Internal Assessment Test - II			Date / Session	10.04.2023/FN	Marks	50
Course code	IC3451	Course Title	Automatic Control Systems			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Find order and type of the system. $G(s) = \frac{10}{s^2(s+1)(s+2)}$	C211.2	R
2.	What is steady state error?	C211.2	U
3.	A unity feedback system has a open loop transfer function of $G(s) = \frac{25(s+4)}{s(s+0.5)(s+2)}$. Determine e_{ss} for unit ramp input.	C211.2	AZ
4.	Why derivative control is not used in control systems?	C211.2	C
5.	What is PID controller? write its transfer function	C211.2	A
6.	Draw the block diagram representation of a state model	C211.6	R
7.	Differentiate transfer function and state space model.	C211.6	A
8.	Determine the state model of the system represented by the block diagram. 	C211.6	E
9.	Write the properties of state transition matrix	C211.6	AZ
10.	Define observability.	C211.6	U

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	For a unity feedback control system, the open loop transfer function $G(s)=10(s+2)/s^2(s+1)$. Find K_p, K_v, K_a and steady state error when input is $R(s) = \frac{3}{s} - \frac{2}{s^2} + \frac{1}{3s^3}$	C211.2	A
	OR		
12.	A unity feedback system has the forward transfer function $G(s) = \frac{K_1(2s+1)}{s(5s+1)(1+s)^2}$. The input r(t)=1+6t is applied to the systems. Determine the value of K_1 if the steady state error is to be less than 0.1.	C211.2	AZ

13.	Sketch the root locus of the system whose open loop transfer function is $G(s)=\frac{K}{s(s+2)(s+4)}$. Find the value of K, so that damping ratio is 0.5.	C211.5	C
	OR		
14.	The open loop transfer function of a unity feedback system is given by $G(s)=\frac{k(s+9)}{s(s^2+4s+11)}$. Sketch the root locus of the system.	C211.5	AZ

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	a) Find the transfer function for the state model given as $\begin{bmatrix}\dot{x}_1\\ \dot{x}_2\end{bmatrix}=\begin{bmatrix}-5 & -1\\ 3 & -1\end{bmatrix}\begin{bmatrix}x_1\\ x_2\end{bmatrix}+\begin{bmatrix}2\\ 5\end{bmatrix}[U] \quad Y=\begin{bmatrix}1 & 2\end{bmatrix}\begin{bmatrix}x_1\\ x_2\end{bmatrix}$ b) Obtain the state model of the system whose transfer function is $\frac{Y(s)}{U(s)}=\frac{10}{s^3+4s^2+2s+1}$	C211.6	E
	OR		
16.	Determine the state controllability and observability of the system $\begin{bmatrix}\dot{x}_1\\ \dot{x}_2\\ \dot{x}_3\end{bmatrix}=\begin{bmatrix}0 & 0 & 1\\ -2 & -3 & 0\\ 0 & 2 & -3\end{bmatrix}\begin{bmatrix}x_1\\ x_2\\ x_3\end{bmatrix}+\begin{bmatrix}0\\ 2\\ 0\end{bmatrix}u$ and $y=\begin{bmatrix}1 & 0 & 0\end{bmatrix}\begin{bmatrix}x_1\\ x_2\\ x_3\end{bmatrix}$	C211.6	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: A.Gopikrishnan, AP/ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date	12-04-2023	Marks	50
Course code	IC3452	Course Title	Electrical Machines and Drives			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/Section	IV / A	Department	ICE	

Part – A (50 Marks)
(Answer all the questions)

Q. No.	Questions	CO	Skills
1	Draw the Circuit diagram, Tabulation, Model Graph for conducting "Load test on DC shunt motor". Also write all the relevant formula. (15 marks) For the readings given below find Torque, Power input, Power output and Efficiency. Line voltage V_L = 220V, Line current I_L = 12A, Spring balance readings S_1 = 12kg & S_2 = 3kg, Radius of the brake drum (R) = 0.113m, thickness of the belt (t) = 0.005m, Speed(N) = 1420rpm.	C215.1	R, U, A, E
2	Draw the Circuit diagram, Tabulation, Model Graph for the experiment "Load characteristics of DC shunt generator". (10 marks)	C215.1	R, U, A
3	Draw the Circuit diagram, Tabulation & Model Graph(for both types of speed control) for conducting "Speed Control of DC shunt motor". (10 marks)	C215.1	R, U, A
4	Draw the Circuit diagram, Tabulation, Model Graph for conducting "Load test on single phase induction motor". Also write all the relevant formula. (15 marks) For the readings given below find Torque, Power input, Power output, % slip and Efficiency. Line voltage V_L = 240V, Line current I_L = 6A, Power input(P_i) = 1320W, Spring balance readings S_1 = 9kg & S_2 = 2.6kg, Radius of the brake drum (R) = 0.097m, thickness of the belt (t) = 0.005m, Speed(N) = 1449rpm and Synchronous speed(Ns) = 1500rpm.	C215.3	R, U, A, E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the faculty in charge : R.Balasubramanian, Assoc. Prof / EEE

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - II			Date/ Session	13.04.2023/ FN	Marks	50
Course code	EE8072	Course Title	MEMS and Nano Science			
Batch No.		Duration	90 mins	Academic Year	2022-23	
Year/	III	Semester	VI	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is micromachining?	C313-E11.3	R
2	List the types of etching.	C313-E11.3	R
3	Compare and contrast surface micromachining and bulk micromachining	C313-E11.3	U
4	What are the types of etching followed in bulk micromachining?	C313-E11.3	U
5	List down the actuators used in optical MEMS.	C313-E11.4	A
6	Write the major classes of polymers.	C313-E11.4	R
7	Define MOEMS.	C313-E11.4	U
8	Define viscoelastic creep.	C313-E11.4	R
9	How do polymers differ from those of metals and semiconductors?	C313-E11.4	A
10	Explain the terms PDMS and PMMA.	C313-E11.4	A

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	With suitable diagram, brief the fabrication of optical lenses.	C313-E11.3	U
	OR		
12	i) Give the details of polyamide material property and discuss on its feature. ii) Explain the construction of flow sensor using LCP (Liquid Crystal Polymer).	C313-E11.3	U
13	Write a note on micromachining.	C313-E11.3	U
	OR		
14	Design a typical micromachining process steps for the cantilever beam.	C313-E11.3	U

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain the following: i. SU-8 ii. Parylene	C313-E11.4	R
	OR		
16	Design a Parylene surface micro machined pressure sensor with fabrication steps.	C313-E11.4	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - II			Date / Session	11.04.2023/FN	Marks	50
Course code	EI8092	Course Title	Thermal Power Plant Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	What do you mean by shrinking in a boiler drum?	C312.2	U
2.	How power and power factor is measured?	C312.2	A
3.	Why flue gas analysis is used in power plants?	C312.2	C
4.	How to find the percentage of smoke density from Ringlemann chart?	C312.2	AZ
5.	What is the use of pulverizer?	C312.3	R
6.	List the types of grinding and explain?	C312.3	C
7.	Write the functions of draught systems.	C312.3	E
8.	What is combustion efficiency?	C312.3	U
9.	What is excess air?	C312.3	A
10.	Describe about soot blowing operation.	C312.3	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Explain with neat diagram how oxygen concentration is measured using flue gas oxygen analyzer.	C312.2	U
	OR		
12.	Write a short note on a) steam temperature measurement with a neat diagram b) smoke density measurement with a neat diagram	C312.2	R
13.	Explain the operation of natural draught and forced draught with suitable diagrams	C312.3	A
	OR		
14.	Explain with neat diagram, process of pulverizer in coal handling?	C312.3	AZ

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Describe about single point and parallel positioning combustion control with a neat diagram.	C312.3	U
	OR		
16.	With relevant diagram explain how cross limited combustion control system can be implemented in power plant?	C312.3	C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C).
Skill need to be mentioned against each question

Faculty in-charge: A.Gopikrishnan, AP/ICE

Internal Assessment Test - II			Date / Session	21/04/2023/FN	Marks	50
Course code	EI 8651	Course Title	LOGIC AND DISTRIBUTED CNOTROL SYSTEM			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	VI/A	Department	ICE	

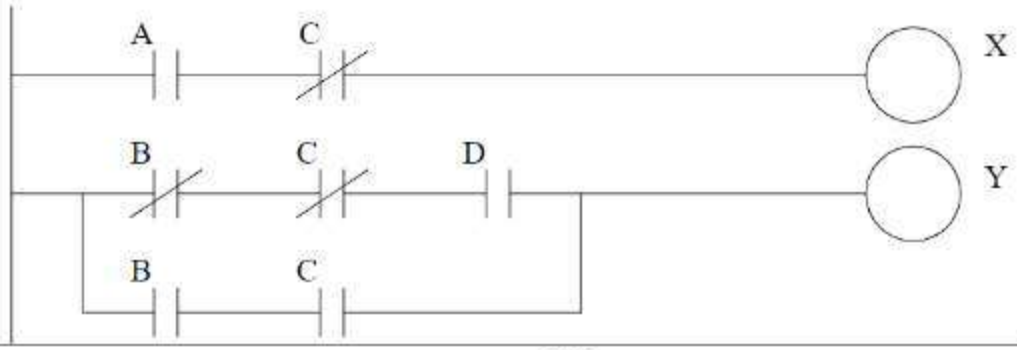
Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Motors M1, M2, M3 are to be switched on sequentially. A delay of 30 seconds is to be maintained between the start of one motor to another motor. Write a suitable PLC logic for the same	C310.2	AZ, C
2.	Explain in brief the Master Control Reset instruction in PLC	C310.2	R
3.	Give an example for program control instruction and explain its working	C310.2	C, R
4.	Write the types of comparison functions	C310.2	R
5.	State the advantages of functional block diagram in PLC programming	C310.3	R
6.	Explain the function of transition in SFC	C310.3	R
7.	Draw the functional block diagram of OR Gate	C310.3	R
8.	Write a program in Sequential Function Block to control a process with a delay of 10 seconds	C310.3	AZ, C
9.	Mention any 4 Mnemonics used in Instruction List and explain its functionalities	C310.3	R
10.	Design Instruction list PLC program for y = AB + BC+ CA	C310.3	AZ, C

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	**Develop a Functional Block Diagram for the case given:** A switch will increment the counter when triggered. This counter can be reset by a second switch. The value in the counter should be multiplied by five and then displayed	C310.3	AZ, C
	OR		
12.	Develop a **Sequential Function Chart** PLC program for Bottle Filling System	C310.3	AZ, C
13.	Convert the following ladder logic to **Instruction List** program 	C310.3	AZ, C
	OR		

14.	Draw a **Sequential Function Chart** PLC program to perform the following sequence of operations to control the working of dishwasher. (i) Soap release solenoid (ii) Input valve hot water (iii) Wash impeller operation (iv) Drain water valve (v) Drain pump motor (vi) Heat element for drying	C310.3	AZ, C

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	A conveyor is supposed to have exactly 45 parts on it. You have three indicating lights to indicate the conveyor count status: **less than 45**, yellow; **exactly 45**, green: and **more than 45**, red. The count of parts on the conveyor is set at 45 each morning. There are two sensors on the conveyor. One is actuated by parts entering the conveyor, and the other is actuated by parts leaving. **Develop a PLC ladder logic program** using compare functions.	C310.2	AZ, C
	OR		
16.	Draw PLC Ladder program for sequentially energizing solenoids A, B, C and D after every 5-second increment. **Use Data Manipulation Instructions**.	C310.2	AZ, C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: R. Seetharaman

Internal Assessment Test - II			Date/ Session	17/04/2023/FN	Marks	50
Course code	IC8651	Course Title	Advanced Control System			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	VI	Department	ICE	

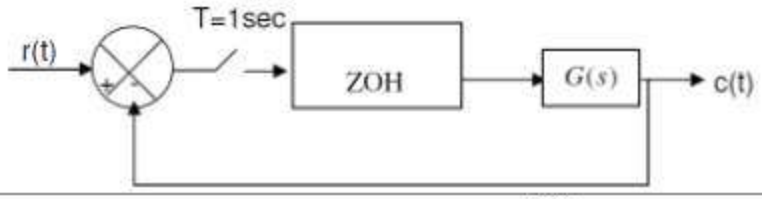
Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Define Z-transform		R
2.	What are the different methods of evaluating inverse z-transform?		R
3.	State sampling theorem.		U
4.	What is pulse transfer function?		R
5.	What are the methods available for the stability analysis of sampled data control systems?		R
6.	$5z^2 - 2z + 2 = 0$, State whether the system is stable or not using bilinear transformation.		A
7.	Find the Z transform of $\sin \omega t$ and $\cos \omega t$.		U
8.	What are linear systems and nonlinear systems? Give examples.		U
9.	How the nonlinearities are classified? Give examples.		U
10.	What is Saturation? Give examples.		U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Obtain the z-transform of $\frac{1}{s(s+1)}$ Determine the Z-domain transfer function for the following s-domain transfer function H(s) = $\frac{a}{s^2 - a^2}$		A
	OR		
12.	Determine the Inverse z-transform of the following function (i) F(z) = $\frac{1}{1-1.5z^{-1}+0.5z^{-2}}$ (ii) F(z) = $\frac{1+z^{-1}}{1-z^{-1}+0.5z^{-2}}$		A
13.	For the samples data control system shown in fig. find the response to unit step Input, where G(s)= $\frac{1}{s+1}$ 		A
	OR		

14.	Check for stability of the samples data control systems represented by the following characteristic equation (a) $5z^2+-2z+2$ (b) $z^3-0.2z^2-0.25z+0.05=0$ (c) $z^4-1.7z^3+1.04z^2-0.268z+0.024=0$		A

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Derive the describing function of dead zone and saturation of non-linearity.		U
	OR		
16.	Derive the describing function of backlash of non-linearity.		U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: Dr. M. Shanmugavalli, Prof/ICE

Internal Assessment Test - II			Date/ Session	12/04/2023 - FN	Marks	50
Course code	MG8591	Course Title	Principles of Management			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI / A	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Define Objectives and its significance	C406.2	Az
2.	What do you mean by MBO	C406.2	U
3.	Mention about the characteristics of STRATEGIES	C406.2	R
4.	Name few factors that are involved in Strategic Processing/formulation	C406.2	U
5.	Define about Differentiation Strategy	C406.2	U
6.	Mention about Policy formulation	C406.2	R
7.	Organization is a Machine or Management – brief with justification	C406.3	AZ
8.	Define , Line and Staff organization	C406.3	Az
9.	Categorize Function based Departmentation	C406.3	R
10.	What is the importance of Delegation – mention its key step	C406.3	R

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Write short notes on the a. Features of objectives b. SMART objectives	C406.2	R,U
	OR		
12.	.Discuss in detail about the MBO, with reference to a reference	C406.2	U
13.	Discuss in detail about the various aspects of Organization Process in a corporate Management	C406.3	U
	OR		
14.	Write short notes on the a. Span of Control b. Differentiating Centralization and De-centralization	C406.3	U

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	With suitable aids of reference(specific mention to cases) describe in detail about the various strategies	C406.2	AZ
	OR		
16.	Explain about the role of Staffing and Training with reference to typical case study	C406.1	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: Dr.S.M.Girirajkumar / Prof & Head / ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	10.04.2023	Marks	50
Course code	GE8073	Course Title	Fundamentals of Nano Science			
Batch No.		Duration	90 mins	Academic Year	2022-23	
Year/	IV	Semester	VIII	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define sputtering and list its types.	C410.E64.2	R
2	What do you meant by colloidal routes?	C410.E64.2	R
3	Discuss the methods used to synthesis nano particles.	C410.E64.2	U
4	How are CNT classified?	C410.E64.2	U
5	Differentiate carbon nano tubes from bucky balls.	C410.E64.2	A
6	List the application of self-assembly materials.	C410.E64.2	R
7	Explain the use of ball milling in nanotechnology.	C410.E64.2	U
8	What are carbon nano tubes?	C410.E64.3	R
9	Define Buckminster fullerene.	C410.E64.3	AU
10	Define nano forms of carbon.	C410.E64.3	AZ

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Give short notes about: a) Mechanical milling b) Colloidal routes.	C410.E64.2	U
	OR		
12	Write in detail about the sputtering and its types.	C410.E64.2	U
13	Write note on molecular beam epitaxy and atomic layer epitaxy.	C410.E64.2	U
	OR		
14	Explain about MOMBE.	C410.E64.2	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain Single Wall Carbon Nanotubes (SWCNT) and Multi Wall Carbon Nanotubes (MWCNT).	C410.E64.3	R
	OR		
16	Explain about the synthesis of CNT.	C410.E64.3	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - III			Date/ Session	18.05.2023/FN	Marks	50
Course code	EI3451	Course Title	Industrial Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	What is electrical flow meter? Give examples.	C210.4	R
2.	What are the advantages of ultrasonic flow meter?	C210.4	U
3.	What are the applications of laser Doppler anemometer?	C210.4	R
4.	List the types of weir.	C210.4	R
5.	Calculate the induced emf in an electromagnetic flow meter due to the flow of a conductive fluid in a pipe with inner diameter of 2.75 cm. The flux density B = $6mV.\sec/cm^2$ and volume flow rate Q = $2500cm^3$ / min .	C210.4	AZ
6.	What is meant by vortex shedding?	C210.4	U
7.	What are the steps followed to select the flow meter?	C210.4	A
8.	List the types of displacer type level methods.	C210.5	R
9.	Write the limitations of float type indicator.	C210.5	U
10.	Write the applications of ultrasonic gauge.	C210.5	A

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Explain about electromagnetic flow meter and target flow meter.	C210.4	U
	C210.5		
12.	What is LDA? Explain. How it is different from Vortex flow meter?	C210.4	A
13.	Write note on boiler drum level measurement.	C210.5	U
	OR		
14.	Explain about ultrasonic gauge and displacer type of level measurement.	C210.5	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	How will you measure flow rate in open channels?	C210.4	U
	OR		
16.	Discuss about solid flow rate measurement.	C210.4	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: Dr. M. Shanmugavalli/Prof/ICE

Internal Assessment Test - III			Date / Session	16.05.2023/FN	Marks	50
Course code	IC 3401	Course Title	MODERN ELECTRONIC INSTRUMENTATION			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	How does MEMS sensors differ from traditional sensors	C202.4	U
2.	Draw the diagram of Cantilever based Accelerometer	C202.4	R
3.	Explain the principle of Coriolis Effect	C202.4	R
4.	Name few applications of Cantilever based MEMS sensors	C202.4	R
5.	Mention the advantages of Wireless Instrumentation	C202.4	R
6.	Define Dextrorotatory and Levorotatory in Glucose measurement system	C202.5	U
7.	What are the limitations of wireless patient monitoring system	C202.5	R
8.	Draw the diagram of Metal Piezoresistive Flow-Rate Sensor	C202.5	R
9.	What is the principle involved behind bulk-micromachined single crystal silicon accelerometers	C202.5	U
10.	Highlight the uniqueness of Chiral molecules	C202.5	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Explain in detail how double tuning fork Gyroscope work with neat diagram	C202.4	R
	OR		
12.	Discuss on the working and concept behind cantilever-based bimetallic strip sensor for micro tweezers-based applications	C202.4	R, U
13.	Explain in detail the working of piezoelectric type MEMS pressure sensors, and highlight on how it differs from Capacitance type MEMS pressure sensors	C202.4	R, U
	OR		
14.	How are MEMS accelerometers used in shock and blast applications? explain with neat diagram	C202.4	R

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Explain in detail the working of Polarimeter in Glucose measurement	C202.5	R
	OR		
16.	Explain the measurement system used in detection of hidden objects	C202.5	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: R. Seetharaman/AP-ICE

Internal Assessment Test - III			Date/ Session	15.05.2023/FN	Marks	50
Course code	IC3451	Course Title	Automatic Control Systems			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/Section	IV	Department	ICE	

Part – A (Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	What are frequency domain specifications?	C211.3	U
2.	What is gain crossover frequency	C211.3	R
3.	List the advantages of bode plot.	C211.3	AZ
4.	What is polar plot?	C211.3	A
5.	Define gain margin. Write the formulae.	C211.3	C
6.	What is compensator? List the types	C211.3	A
7.	Why compensation is necessary in feedback control system?	C211.4	U
8.	State Routh Hurwitz criterion.	C211.4	C
9.	What is the necessary condition for stability?	C211.4	R
10.	Determine the range of K for stability of unity feedback system whose open loop transfer function is G(s) = K / s (s+1)(s+2)	C211.4	E

Part – B (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Plot the bode diagram for the following transfer function $G(s)=\frac{10}{s(1+0.4s)(1+0.1s)}$ and obtain the gain and phase cross over frequencies.	C211.3	C
	OR		
12.	Sketch the Bode plot for the following transfer function and determine the system gain K for the gain cross over frequency to be 5 rad/sec. $G(s)=\frac{Ks^2}{(1+0.2s)(1+0.02s)}$	C211.3	A
13.	The open loop transfer function of a unity feedback system is given by $G(s)=\frac{1}{s(1+s)(1+2s)}$. Sketch the polar plot and determine the gain margin and phase margin.	C211.3	U
	OR		
14.	Consider a unity feedback system having an open loop transfer function. $G(s)=\frac{K}{s(1+0.5s)(1+4s)}$. Sketch the polar plot and determine the value of K so that i) gain margin is 20 db and ii) phase margin is 30 degree.	C211.3	AZ

Part – C (Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Using Routh stability criterion, determine the stability of a system and number of roots in the right half of s-plane in the following characteristic equations: $s^5+4s^4+8s^3+8s^2+7s+4 = 0$.	C211.4	R
	OR		
16.	The characteristic polynomial of a system is $s^7+9s^6+24s^5+24s^4+24s^3+24s^2+23s+15=0$. Determine the location of roots on s-plane and hence the stability of the system.	C211.4	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question. Faculty in-charge: A.Gopikrishnan, AP/ICE

Internal Assessment Test III			Date/ Session	16/05/2023	Marks	50
Course code	MG8591	Course Title	Principles of Management			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI / A	Department	ICE	

Part – A
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	What are the significant characteristics of Motivation	C406.4	AZ
2.	State VictorVroom's Expectancy theory	C406.4	U
3.	Why a Management needs good Leadership	C406.4	R
4.	Differentiate Leaders and Managers	C406.4	U
5.	What are Factors for concern for production	C406.4	U
6.	Define Controlling in a Management by Harold Koontz	C406.5	R
7.	What is the use of Statistical data in control	C406.5	AZ
8.	Define Productivity in a Management	C406.5	U
9.	Define Purchase Control	C406.5	R
10.	Brief on any one barrier of control	C406.5	R

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Describe in detail on Motivation Theory by two experts	C406.4	R,U
	OR		
12.	.Explain about the various aspects of Communication and also about the barriers of effective communication	C406.4	U
13.	Explain about the Budgetary and Non-budgetary types of control	C406.5	U
	OR		
14.	Write in detail about the Process of Control as a sequence, and mention the effects of barriers	C406.5	U

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Discuss about the various styles of Leadership with reference to a Petrochemical Industry or any other Process Industry	C406.4	AZ
	OR		
16.	Write short notes with suitable case study on the a. Productivity Calculations b. Cost control	C406.5	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: Dr.S.M.Girirajkumar / Prof & Head / ICE

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/ Session	17.05.2023/ FN	Marks	50
Course code	EE8072	Course Title	MEMS and Nano Science			
Batch No.		Duration	90 mins	Academic Year	2022-23 EVEN	
Year/	III	Semester	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Differentiate MEMS and NEMS.	C313-E11.5	R
2	What are the negative impact of nano technology?	C313-E11.5	R
3	Distinguish between Quantum wires and Quantum dots.	C313-E11.5	U
4	What is Knudsen and mach number?	C313-E11.5	U
5	List the applications of Nano products.	C313-E11.5	A
6	Classify the different types of milling.	C313-E11.6	R
7	What is Nano fabrication?	C313-E11.6	U
8	Nano particle of gold is purple in colour. Justify.	C313-E11.6	R
9	Differentiate bottom-up and Top-down approach.	C313-E11.6	A
10	Generalize the application of self-assembly materials.	C313-E11.6	A

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Describe the nanofabrication and its principles involved in nanotechnology.	C313-E11.5	U
	OR		
12	Explain the role of Engineering Fluids at the Nanoscale.	C313-E11.5	U
13	Write note on molecular beam and atomic layer epitaxy.	C313-E11.6	U
	OR		
14	Write note on: Precipitation, mechanical milling and colloidal routes.	C313-E11.6	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Discuss about the various applications involved in Nano products and explain any four about it.	C313-E11.5	R
	OR		
16	State the modelling of nanoscale heat conduction by Boltzmann transport equation.	C313-E11.5	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - III			Date/ Session	15.05.2023/FN	Marks	50
Course code	EI8092	Course Title	Thermal Power Plant Instrumentation			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	VI	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	List the objectives of drum level control.	C312.4	R
2.	What are the types of feedwater control?	C312.4	AZ
3.	State the role of attemperators.	C312.4	C
4.	What are the mechanisms for control of super heat temperature?	C312.4	A
5.	Mention the important parameters to be monitored in turbine.	C312.5	R
6.	List the popular methods of governing.	C312.5	C
7.	What is the need for vibration monitoring in turbine?	C312.5	E
8.	An iron-constant (Fe-K) thermocouple is used to measure the superheated steam temperature. The thermocouple head is placed near the furnace wall whose temperature is around 100°C. What will be the percentage error if the temperature meter is located in the control room and only copper cable runs from thermocouple head to control room. Assume the range as 0-600°C.	C312.5	U
9.	Why lubricant is used in turbine?	C312.5	AZ
10.	Why it is necessary to install cooling system in power plant?	C312.5	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Explain about the steam temperature control in boiler with suitable diagram.	C312.4	U
	OR		
12.	Discuss any two types of feedwater control in boiler with a neat diagram.	C312.4	R
13.	How speed monitored in power plants? Explain with a neat diagram?	C312.5	A
	OR		
14.	Explain with neat diagram, steam pressure control in turbine.	C312.5	AZ

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	With suitable diagram, discuss about shell temperature monitoring and control in detail.	C312.5	U
	OR		
16.	Explain in detail about the lubricant oil temperature control with a neat diagram.	C312.5	C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: A.Gopikrishnan, AP/ICE

Internal Assessment Test - III			Date / Session	23.05.2023/FN	Marks	50
Course code	EI 8651	Course Title	LOGIC AND DISTRIBUTED CONTROL SYSTEM			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/ Section	VI/A	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	What are the differences between SCADA and DCS	C310.4	R
2.	Why is Foundation Fieldbus (FF) protocol more preferred than HART protocol	C310.4	U
3.	Draw the structure of star topology	C310.4	R
4.	List out the hardware architecture of DCS	C310.4	R
5.	Compare hybrid, Central Computer and Distributed Control System architecture	C310.4	R, U
6.	How does a Networked Control System work?	C310.5	R
7.	Define OEM.	C310.5	R
8.	What is OPC, and what are its uses?	C310.5	R, U
9.	What is the role played by "Watchdog" in Safety PLCs	C310.5	U
10.	List out the benefits of implementing IIoT in industries	C310.5	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Describe the evolution of DCS with neat diagram	C310.4	R
	OR		
12.	Explain about any two processing methods of Field Control Station with neat diagram	C310.4	R
13.	Explain the working of Ring Topology and Mesh Topology with neat diagram, and highlight its differences	C310.4	R, U
	OR		
14.	Discuss on the Overlapping and Modular architectural models of High-Level Operator Interface Station with neat diagram	C310.4	R

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Discuss in detail about the Safety PLC's used in the industries	C310.5	R
	OR		
16.	a. list out the advantages of using Plant Wide Control in manufacturing industries (5 marks) b. What are the challenges faced in implementing IIoT in industries (5 marks)	C310.5	R, U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty in-charge: R. Seetharaman/AP-ICE

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test - III			Date/ Session	18.05.2023/FN	Marks	50
Course code	IC8651	Course Title	Advanced Control System			
Batch No.		Duration	90 mins	Academic Year	2022-2023/ Even	
Year/	III	Semester/ Section	VI	Department	ICE	

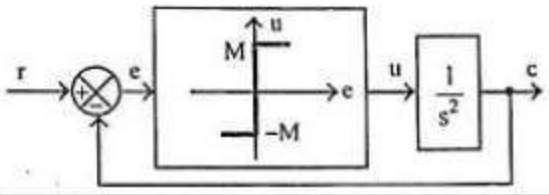
Part – A

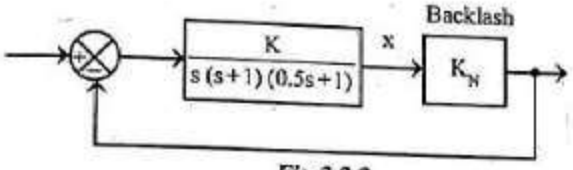
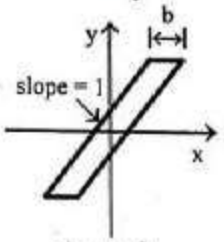
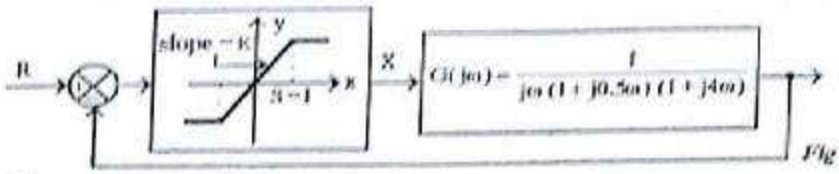
(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is phase plane analysis?	C309.5	U
2	What is jump resonance?	C309.5	R
3	Define limit cycle?	C309.5	U
4	How will you analyse the stability of non linear system?	C309.5	A
5	What do you mean by singular point?	C309.5	A
6	What is the condition for asymptotic stable for discrete time linear system?	C309.6	U
7	State the design steps of LQR steady state control.	C309.6	R
8	State the reduced Riccatti equation and its application.	C309.6	R
9	When a system is said to be asymptotically stable?	C309.6	A
10	State the condition of stability for first method of Lyapunov linear system.	C309.6	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	A linear second order servo is described by the equation $\ddot{e} + 2\zeta\omega_n\dot{e} + \omega_n^2 e = 0$ where $\zeta = 0.15$, $\omega_n = 1$ rad/sec, $e(0) = 1.5$ and $\dot{e}(0) = 0$. Determine the singular point. Construct the phase trajectory, using the method of isoclines	C309.5	AZ, E
	OR		
12	Consider a system with an ideal relay as shown in fig 2.4.1. Determine the singular point. Construct phase trajectories, corresponding to initial conditions, (i) $c(0) = 2$, $\dot{c}(0) = 1$ and (ii) $c(0) = 2$, $\dot{c}(0) = 1.5$. Take r = 2 volts and M = 1.2 volts  *Fig 2.4.1.*	C309.5	AZ, E

13	A servo system used for positioning a load has backlash characteristics as shown in fig 2.2.1. The block diagram of the system is shown in fig 2.2.2. The magnitude and phase of the describing function of backlash nonlinearity for various values of b/X are listed in table-2.2.1, where X = Maximum value of input sinusoidal signal to the nonlinearity.  *Fig 2.2.2.*  *Fig 2.2.1.* **TABLE-2.2.1** | b/X | 0 | 0.2 | 0.4 | 1.0 | 1.4 | 1.6 | 1.8 | 1.9 | 2.0 | | $\lvert K_N \rvert$ | 1 | 0.954 | 0.882 | 0.592 | 0.367 | 0.248 | 0.125 | 0.064 | 0 | | $\angle K_N$ | 0 | −6.7° | −13.4° | −32.5° | −46.6° | −55.2° | −66° | −69.8° | −90° | Show that the system is stable if K = 1. Also show that limit cycle exists when K = 2. Investigate the stability of these limit cycles and determine their frequency and b/X.	C309.6	AZ, E
	OR		
14	Consider a unity feedback system shown in fig 2.A.1 having a saturating amplifier with gain K. Determine the maximum value of K for the system to stay stable. What would be the frequency and nature of limit cycle for a gain of K = 2.5?  *Fig 2.A.1.* SOLUTION The stability of the system can be analysed using polar plot. The gain, K of the saturating amplifier can be attached to G(jω) and amplifier is considered to be an unity gain amplifier.	C309.6	AZ, E

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	*Determine the stability of the system* $\dot{X} = Ax$ *where* $A = \begin{bmatrix} 0 & 1 \\ -2 & -3 \end{bmatrix}$ *and determine Lyapunov's function with* $Q = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$	C309.5	AZ, E
	OR		
16	*Determine the parameter 'a' such that it will minimize the optimal performance index* $J = \int_0^{\alpha} x^T 2x dt$ *with unit step input for the closed loop transfer function* $\frac{Y(s)}{U(s)} = \frac{10}{s^2 + as + 10}$. *Assume* $Q = \begin{bmatrix} 1 & 0 \\ 0 & \mu \end{bmatrix}$, $\begin{bmatrix} x_1(0) \\ x_2(0) \end{bmatrix} = \begin{bmatrix} 1/10 \\ 0 \end{bmatrix}$	C309.5	AZ, E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Faculty Member: Dr. M. Shanmugavalli, Prof/ICE

Saranathan College of Engineering

Tiruchirapalli

INTERNAL ASSESSMENT - III			Date/ Session	22.05.2023	Marks	50
Course code	GE8073	Course Title	Fundamentals of Nano Science			
Batch No.		Duration	90 mins	Academic Year	2022-23 EVEN	
Year/	IV	Semester	VIII	Department	ICE	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define nano metal oxides.	C410.E64.4	R
2	Define properties of the nanoscale fibers of aluminium oxide.	C410.E64.4	R
3	What are nanoclays?	C410.E64.4	U
4	What is surface analysis?	C410.E64.5	U
5	What is meant by XRD?	C410.E64.5	A
6	What are the disadvantages of ESEM?	C410.E64.5	R
7	What are the applications of SEM?	C410.E64.5	U
8	Why is a higher resolution better?	C410.E64.5	R
9	Define quantum tunneling.	C410.E64.5	U
10	Define near-field scanning optical microscopy	C410.E64.5	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Discuss on the preparation, properties and applications of Quantum wires and Quantum dots.	C410.E64.4	U
	OR		
12	Describe Structure-property relationships applications.	C410.E64.4	U
13	Write short notes on SPM, STM.	C410.E64.5	U
	OR		
14	Ellaborate about high-resolution transmission electron microscopy	C410.E64.5	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	What is meant by Atomic Force Microscope (AFM)? Explain the working principle of AFM.	C410.E64.5	R
	OR		
16	Expand SEM and write its working principle in detail.	C410.E64.5	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	SHERENE ANALIA. G			Year / Semester / Section	III / 06 / A
Batch No.	235018	Date / Session	14.3.23 / FN	Department	ICE
Course Code	IC8651	Course Title	ADVANCED CONTROL SYSTEMS.		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	P.V. 14/3/23	P.T.R.			

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	2	12	✓	9			9
3	✓	2	13	✓	10			10
4	✓	2	14					
5	✓	2	15	✓	4			4
6	✓	2	16					
7	✓	0					Total	23
8	✓	01	36/50				Dr. M. Ramajeyam 14/3/23	
9	✓	0						
10	✓	2						
Total		13	Grand Total				Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	40 / 80	10 / 20					50 / 100
Marks Obtained	32 / 64	4 / 8					36 / 72

QAC Audit - Remarks

M. MARIMUTHU

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK 28

Name	A. Siva Subramanian			Year / Semester / Section	III / VI
Batch No.	235019	Date / Session	17/4/23/FN	Department	ICE
Course Code	IC8651	Course Title	Advanced Control System		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	G. Sivakumar / 17/4/23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓		11	✓				7
2	✓	2	12					
3	✓	2	13	✓				6
4		0	14					
5		1	15	✓				9
6			16					
7							Total	22
8		1						
9								
10								
Total		6	Grand Total				Name and Signature of the Examiner with date	MSV 17/4/23

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted			34/68	16/32			50/100
Marks Obtained			18/36	10/20			28/56

QAC Audit - Remarks

M. Mahalingam

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

25

ANSWER BOOK

Name	CHANDRU V			Year / Semester / Section	III / VI / A
Batch No.	235004	Date / Session	18.05.23/FN	Department	ICE
Course Code	IC8651	Course Title	Advanced control system -		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	P. ANAND B. N 18/5/23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part - A must be written in pages 2-6. Answers for Part - B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	1	11					
2	✓	1	12					
3	✓	1	13	✓	8			8
4	✓	1	14					
5	✓	1	15	✓	10			10
6	✓	1	16					
7	✓						Total	18
8								
9								
10	✓	1						
Total		7	Grand Total				Name and Signature of the Examiner with date	

18/5/23

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted					30/60	20/40	50/100
Marks Obtained					13/26	12/24	25/50

QAC Audit - Remarks

M. M. MARUDHAVANAN

Name and Signature of the QAC member

Date of Exam: 20.03.2023

Name of the Staff /Dept: Dr.A.Gopikrishnan

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	N. Anjali			Year / Semester / Section	II/IV/A
Batch No.	245001	Date / Session	11/3/23-FN	Department	ICE
Course Code	IC3451	Course Title	Automatic control system.		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	V.R. Srideri 11/3/23				

INSTRUCTIONS TO THE CANDIDATES :

Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
Write your Batch Number in the Question Paper.
Use both sides of the paper for answering questions.
The answer book contains sufficient pages and no additional sheets will be given.
Possession of any incriminating material and malpractice of any nature shall be punishable as per rules.
Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C						Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks		
1	/	2	11	/					6
2	/	2	12						
3	/	1	13						
4	/	0	14	/					5
5	/	0	15	/					3
6	/	1½	16						
7	/	1½						Total	14
8	/	2							
9	/	2							
10	/	0							
Total		12							

26/50

Grand Total

A. Shu 11/3/23 Gopi. A

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	32/64	18/36					50/100
Marks Obtained	17½/35	8½/17					26/52

QAC Audit - Remarks

M.M. Dr.M.MARI DEPUTY

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	M. Deepthi Swarnaa.			Year / Semester / Section	2nd/4th.
Register No.	245002.	Date / Session	10.4.23/F.N	Department	ICE
Course Code	IC3451	Course Title	Automatic control System		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used : 15
Name and Signature of the Invigilator with date			10/4/23 (S. VIJAYALAKSHMI)		

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. See that answer book contains sufficient pages and no additional sheets will be given.
5. Possession of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1		0	11		8			8
2		0	12					
3		2	13					
4		0	14		6½			6½
5		—	15					
6		—	16		6½			6½
7		½					Total	21
8		1						
9		0						
10		½						
Total		4						

25/50

Grand Total

A. S. 10/4

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted		20 | 40			10 | 20	20 | 40	50 | 100
Marks Obtained		10 | 20			6.5 | 13	8½ | 17	25 | 50

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	Mathangini. M			Year / Semester / Section	II / IV
Batch No.	245010	Date / Session	15/05/23 - FN	Department	ICE
Course Code	IC3451	Course Title	Automatic Control Systems		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	R. SURESH BABU 15/05/23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possession of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	1	12	✓	10			10
3	✓	1	13	✓	10			10
4	✓	0	14					
5	✓	1½	15	✓				
6	✓	2	16	✓	7			7
7	✓	1½					Total	27
8	—	—						
9	—	—						
10	✓	2						
Total		11						

38/50 Grand Total

Name and Signature of the Examiner with date: A. 16/5/23 A. Gopi

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted			32 | 64	18 | 36			50 | 100
Marks Obtained			27½ | 55	10½ | 21			38 | 76

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

40

ANSWER BOOK

R. HARI PRAKASH			Year / Semester / Section	III / VI
235005	Date / Session	11.03.2023	Department	ICE
EE8072	Course Title	MEMS AND NANO SCIENCE		
Assessment Test	I ☑	II ☐	III ☐	Model ☐
Signature of the Invigilator with date	11/3 R. Balasubramanian			No. of pages used : 15

TO THE CANDIDATES :

Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.

Batch Number in the Question Paper.

sides of the paper for answering questions.

Answer book contains sufficient pages and no additional sheets will be given.

Possession of any incriminating material and malpractice of any nature shall be punishable as per rules.

Answers must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A	Part B / C					Total Marks
Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
2	11	✓				8
2	12					
2	13					
	14	✓				7
1	15					
1	16	✓				9
2					Total	24
2						
2						
2						
16	Grand Total				Name and Signature of the Examiner with date	

MSV 11/3/23

To be filled by the examiner

1	2	3	4	5	6	Total
34/68	16/32					50/100
27/54	13/26					40/80

QAC Audit - Remarks

M.P. Dr. M.P. [illegible]

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINE

Tiruchirapalli - 620 012

ANSWER BOOK

M.S. Irshath Ahmed			Year / Semester / Sect
235007	Date / Session	13.4.23/FN	Department
EE8072	Course Title	MEMS AND NANO SCIEN	
Test	I ☐	II ☑	III ☐ Model ☐ No. o
Signature of the Invigilator with date	P.KAVIYA 13/4/23		

INSTRUCTIONS TO THE CANDIDATES :

1. Answer for Part-A must be written in pages 2-6. Answers for Part-B must be written fro
2. Write your Batch Number in the Question Paper.
3. Both sides of the paper for answering questions.
4. Answer book contains sufficient pages and no additional sheets will be given.
5. Possession of any incriminating material and malpractice of any nature shall be punishabl
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column again

Part A			Part B / C					
Q.NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	1	11					
2	✓	2	12	✓				
3	✓	1	13					
4	✓	2	14	✓				
5	✓	2	15	✓				
6	✓	1	16					
7	✓	2					Total	
8	✓	2					MS/ 13	
9			Grand Total				Name and Signature	
10								
Total								

To be filled by the examiner

Course Outcomes	1	2	3	4	5
Marks allotted		28/56	22/44		
Marks Obtained		17/34	15/30		

QAC Audit - Remarks

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

30

ANSWER BOOK

PRITHIV RAJ. A		Year / Semester / Section	III/VI/A
235012	Date / Session	17.05.2023/FN	Department ICE
EE8072	Course Title	MEMS AND NANO SCIENCE	
Assessment Test	I ☐	II ☐	III ☑ Model ☐ No. of pages used : 11
Signature of the Invigilator with date	17/5/23	M. Mahendran	

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. Ensure that the answer book contains sufficient pages and no additional sheets will be given.
5. Any attempt of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answers must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A ✔	Part A Marks	Part B / C Q. NO.	✔	(a) Marks	✔	(b) Marks	Total Marks
✓	2	11					
		12					6
✓	2	13	✓				
✓	1	14					
✓	2	15					9
✓	2	16	✓			Total	15
✓	2						
✓	1						
✓	2						
✓	1						
	15	Grand Total				Name and Signature of the Examiner with date	

17/5/23

To be filled by the examiner

	1	2	3	4	5	6	Total
Outcomes					30/60	20/40	50/100
Allotted					16/32	14/28	30/60
Obtained							

QAC Audit - Remarks

Name and Signature of the QAC member

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:3 Section:A: Assessment Test -1 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	CS3353	EI3351	EI3352	EI3353	EI3354	MA3353	Total	AVG	Att%
1	813821112001	245001	ANJALI. N	62	50	90	91	56	60	409	68.17	100.00[621.0,0.
2	813821112002	245002	DEEPTHI SWARNAA. M	30	50	90	73	40	36	319	53.17	97.42[621.0,16.
3	813821112004	245004	JEEVANATHAN. S	34	50	92	94	58	80	408	68.00	95.65[621.0,27.
4	813821112005	245005	KAAVYA. N R	60	62	92	82	72	92	460	76.67	94.85[621.0,32.
5	813821112006	245006	KARTHICK. N	A	18	90	81	A	50	239	39.83	83.09[621.0,105
6	813821112007	245007	KESAVAN. T	20	10	26	38	20	4	118	19.67	84.38[621.0,97.
7	813821112008	245008	KOUSHIK. T	72	52	86	80	68	72	430	71.67	88.57[621.0,71.
8	813821112009	245009	LAWRANCE. J	50	56	88	62	64	54	374	62.33	93.56[621.0,40.
9	813821112010	245010	MATHANGINI. M	70	56	90	94	86	98	494	82.33	95.81[621.0,26.
10	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S	50	50	76	78	54	22	330	55.00	93.40[621.0,41.
11	813821112012	245012	MOHAMMED ABDULLAH. N	76	54	86	92	80	84	472	78.67	97.10[621.0,18.
12	813821112013	245013	MURSHATH BASHA. I	56	10	86	76	46	58	332	55.33	95.33[621.0,29.
13	813821112014	245014	PRASANNA. V	62	58	94	88	82	94	478	79.67	94.36[621.0,35.
14	813821112015	245015	PRAVEENA. M	66	0	94	76	40	86	362	60.33	81.64[621.0,114
15	813821112016	245016	SACHIN. S	30	19	76	54	50	50	279	46.50	96.46[621.0,22.
16	813821112017	245017	THIRUMALAI KUMAR. G	76	50	96	84	84	88	478	79.67	99.03[621.0,6.0
17	813821112303	245018	SHUJATH ALI KHAN. M	32	50	86	62	70	62	362	60.33	100.00[621.0,0.
18	813821112301	245019	FURKHAN ANAS. H	52	50	72	65	74	60	373	62.17	99.68[621.0,2.0
19	813821112302	245020	LOGESH. A	A	A	A	50	A	A	50	8.33	99.84[621.0,1.0

Performance Analysis

Total Appeared	19	19	19	19	19	19
Total Passed	12	13	17	18	13	15
Total Failed(Fail + Absent)	7	6	2	1	6	4
Above 80	0	0	14	9	4	7
Between 50-59	4	12	0	2	4	4
Pass%	63	68	89	95	68	79

Subcode	Title	Faculty Name
CS3353	C PROGRAMMING AND DATA STRUCTURES	Ms.M.Banupriya
EI3351	ANALOG ELECTRONICS	Dr.M.Banu Sundareswari
EI3352	DIGITAL SYSTEM DESIGN AND APPLICATIONS	Dr.M.Shanmugavalli
EI3353	TRANSDUCERS ENGINEERING	Mr.R.Balasubramanian
EI3354	LINEAR INTEGRATED CIRCUITS AND APPLICATIONS	Mr.R.Seetharaman
MA3353	TRANSFORMS AND DIFFERENTIAL EQUATIONS	Dr.S.Dinesh

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:3 Section:A: Assessment Make-up Test-1 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	CS3353	EI3351	EI3352	EI3353	EI3354	MA3353	Total	AVG	Att%
1	813821112002	245002	DEEPTHI SWARNAA. M	68				68	60	196	32.67	97.42[621.0,16.
2	813821112004	245004	JEEVANATHAN. S	84						84	14.00	95.65[621.0,27.
3	813821112006	245006	KARTHICK. N	80	72			92		244	40.67	83.09[621.0,105
4	813821112007	245007	KESAVAN. T	A	A	80	64	A	8	152	25.33	84.38[621.0,97.
5	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S						32	32	5.33	93.40[621.0,41.
6	813821112013	245013	MURSHATH BASHA. I		64			92		156	26.00	95.33[621.0,29.
7	813821112015	245015	PRAVEENA. M		A			A		0	.00	81.64[621.0,114
8	813821112016	245016	SACHIN. S	60	64					124	20.67	96.46[621.0,22.
9	813821112303	245018	SHUJATH ALI KHAN. M	80						80	13.33	100.00[621.0,0.
10	813821112302	245020	LOGESH. A	52	52	60		68	56	288	48.00	99.84[621.0,1.0

Performance Analysis

Total Appeared	10	10	10	10	10	10
Total Passed	6	4	2	1	4	2
Total Failed(Fail + Absent)	1	2	0	0	2	2
Above 80	3	0	1	0	2	0
Between 50-59	1	1	0	0	0	1
Pass%	60	40	20	10	40	20

Subcode	Title	Faculty Name
CS3353	C PROGRAMMING AND DATA STRUCTURES	Ms.M.Banupriya
EI3351	ANALOG ELECTRONICS	Dr.M.Banu Sundareswari
EI3352	DIGITAL SYSTEM DESIGN AND APPLICATIONS	Dr.M.Shanmugavalli
EI3353	TRANSDUCERS ENGINEERING	Mr.R.Balasubramanian
EI3354	LINEAR INTEGRATED CIRCUITS AND APPLICATIONS	Mr.R.Seetharaman
MA3353	TRANSFORMS AND DIFFERENTIAL EQUATIONS	Dr.S.Dinesh

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:3 Section:A: Assessment Test -2 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	CS3353	EI3351	EI3352	EI3353	EI3354	MA3353	Total	AVG	Att%
1	813821112001	245001	ANJALI. N	70	36	84	78	44	66	378	63.00	100.00[621.0,0.
2	813821112002	245002	DEEPTHI SWARNAA. M	56	50	92	78	56	44	376	62.67	97.42[621.0,16.
3	813821112004	245004	JEEVANATHAN. S	56	36	92	70	60	36	350	58.33	95.65[621.0,27.
4	813821112005	245005	KAAVYA. N R	64	64	96	76	54	62	416	69.33	94.85[621.0,32.
5	813821112006	245006	KARTHICK. N	50	0	92	94	68	62	366	61.00	83.09[621.0,105
6	813821112007	245007	KESAVAN. T	8	14	50	50	18	8	148	24.67	84.38[621.0,97.
7	813821112008	245008	KOUSHIK. T	62	50	68	68	50	50	348	58.00	88.57[621.0,71.
8	813821112009	245009	LAWRANCE. J	50	26	74	56	54	50	310	51.67	93.56[621.0,40.
9	813821112010	245010	MATHANGINI. M	76	68	98	86	68	80	476	79.33	95.81[621.0,26.
10	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S	38	20	64	64	34	26	246	41.00	93.40[621.0,41.
11	813821112012	245012	MOHAMMED ABDULLAH. N	68	60	96	90	68	64	446	74.33	97.10[621.0,18.
12	813821112013	245013	MURSHATH BASHA. I	54	40	70	90	58	52	364	60.67	95.33[621.0,29.
13	813821112014	245014	PRASANNA. V	84	58	94	92	76	74	478	79.67	94.36[621.0,35.
14	813821112015	245015	PRAVEENA. M	64	50	94	88	64	74	434	72.33	81.64[621.0,114
15	813821112016	245016	SACHIN. S	50	30	70	58	56	24	288	48.00	96.46[621.0,22.
16	813821112017	245017	THIRUMALAI KUMAR. G	72	72	84	88	74	74	464	77.33	99.03[621.0,6.0
17	813821112303	245018	SHUJATH ALI KHAN. M	50	58	94	88	74	72	436	72.67	100.00[621.0,0.
18	813821112301	245019	FURKHAN ANAS. H	50	50	80	84	60	66	390	65.00	99.68[621.0,2.0
19	813821112302	245020	LOGESH. A	24	28	52	54	54	34	246	41.00	99.84[621.0,1.0

Performance Analysis

Total Appeared	19	19	19	19	19	19
Total Passed	16	10	19	19	16	13
Total Failed(Fail + Absent)	3	9	0	0	3	6
Above 80	1	0	12	9	0	1
Between 50-59	8	6	2	4	7	3
Pass%	84	53	100	100	84	68

Subcode	Title	Faculty Name
CS3353	C PROGRAMMING AND DATA STRUCTURES	Ms.M.Banupriya
EI3351	ANALOG ELECTRONICS	Dr.M.Banu Sundareswari
EI3352	DIGITAL SYSTEM DESIGN AND APPLICATIONS	Dr.M.Shanmugavalli
EI3353	TRANSDUCERS ENGINEERING	Mr.R.Balasubramanian
EI3354	LINEAR INTEGRATED CIRCUITS AND APPLICATIONS	Mr.R.Seetharaman
MA3353	TRANSFORMS AND DIFFERENTIAL EQUATIONS	Dr.S.Dinesh

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:3 Section:A: Assessment Make-up Test-2 Sem Period:22-

S.no	Regno	Batchno	Name	CS3353	EI3351	EI3354	MA3353	Total	AVG	Att%
1	813821112001	245001	ANJALI. N		72	28		100	25.00	100.00[621.0,0.0]
2	813821112002	245002	DEEPTHI SWARNAA. M				64	64	16.00	97.42[621.0,16.0]
3	813821112004	245004	JEEVANATHAN. S		64		76	140	35.00	95.65[621.0,27.0]
4	813821112006	245006	KARTHICK. N		76			76	19.00	83.09[621.0,105.0
5	813821112007	245007	KESAVAN. T	8	48	28	8	92	23.00	84.38[621.0,97.0]
6	813821112009	245009	LAWRANCE. J		72			72	18.00	93.56[621.0,40.0]
7	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S	52	64	8	28	152	38.00	93.40[621.0,41.0]
8	813821112013	245013	MURSHATH BASHA. I		80			80	20.00	95.33[621.0,29.0]
9	813821112016	245016	SACHIN. S		60		68	128	32.00	96.46[621.0,22.0]
10	813821112302	245020	LOGESH. A	52	52		32	136	34.00	99.84[621.0,1.0]

Performance Analysis

Total Appeared	10	10	10	10
Total Passed	2	8	0	3
Total Failed(Fail + Absent)	1	1	3	3
Above 80	0	1	0	0
Between 50-59	2	1	0	0
Pass%	20	80	0	30

Subcode	Title	Faculty Name
CS3353	C PROGRAMMING AND DATA STRUCTURES	Ms.M.Banupriya
EI3351	ANALOG ELECTRONICS	Dr.M.Banu Sundareswari
EI3354	LINEAR INTEGRATED CIRCUITS AND APPLICATIONS	Mr.R.Seetharaman
MA3353	TRANSFORMS AND DIFFERENTIAL EQUATIONS	Dr.S.Dinesh

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:3 Section:A: Assessment Test -3 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	CS3353	EI3351	EI3352	EI3353	EI3354	MA3353	Total	AVG	Att%
1	813821112001	245001	ANJALI. N	37	30	60	51	34	43	255	42.50	100.00[621.0,0.
2	813821112002	245002	DEEPTHI SWARNAA. M	39	14	54	46	32	37	222	37.00	97.42[621.0,16.
3	813821112004	245004	JEEVANATHAN. S	50	28	74	50	12	27	241	40.17	95.65[621.0,27.
4	813821112005	245005	KAAVYA. N R	50	50	83	70	43	71	367	61.17	94.85[621.0,32.
5	813821112006	245006	KARTHICK. N	43	43	78	57	38	32	291	48.50	83.09[621.0,105
6	813821112007	245007	KESAVAN. T	1	1	15	14	0	1	32	5.33	84.38[621.0,97.
7	813821112008	245008	KOUSHIK. T	56	23	63	45	16	14	217	36.17	88.57[621.0,71.
8	813821112009	245009	LAWRANCE. J	50	26	75	54	35	30	270	45.00	93.56[621.0,40.
9	813821112010	245010	MATHANGINI. M	64	56	85	75	63	54	397	66.17	95.81[621.0,26.
10	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S	39	23	50	38	17	7	174	29.00	93.40[621.0,41.
11	813821112012	245012	MOHAMMED ABDULLAH. N	50	56	89	73	55	61	384	64.00	97.10[621.0,18.
12	813821112013	245013	MURSHATH BASHA. I	39	43	77	56	47	24	286	47.67	95.33[621.0,29.
13	813821112014	245014	PRASANNA. V	55	62	79	77	61	75	409	68.17	94.36[621.0,35.
14	813821112015	245015	PRAVEENA. M	40	55	87	70	46	72	370	61.67	81.64[621.0,114
15	813821112016	245016	SACHIN. S	35	28	76	50	23	38	250	41.67	96.46[621.0,22.
16	813821112017	245017	THIRUMALAI KUMAR. G	59	70	91	85	75	76	456	76.00	99.03[621.0,6.0
17	813821112303	245018	SHUJATH ALI KHAN. M	26	0	A	38	35	A	99	16.50	100.00[621.0,0.
18	813821112301	245019	FURKHAN ANAS. H	40	50	59	52	25	32	258	43.00	99.68[621.0,2.0
19	813821112302	245020	LOGESH. A	8	22	50	40	7	35	162	27.00	99.84[621.0,1.0

Performance Analysis

Total Appeared	19	19	19	19	19	19
Total Passed	8	7	17	13	4	6
Total Failed(Fail + Absent)	11	12	2	6	15	13
Above 80	0	0	5	1	0	0
Between 50-59	7	5	4	7	1	1
Pass%	42	37	89	68	21	32

Subcode	Title	Faculty Name
CS3353	C PROGRAMMING AND DATA STRUCTURES	Ms.M.Banupriya
EI3351	ANALOG ELECTRONICS	Dr.M.Banu Sundareswari
EI3352	DIGITAL SYSTEM DESIGN AND APPLICATIONS	Dr.M.Shanmugavalli
EI3353	TRANSDUCERS ENGINEERING	Mr.R.Balasubramanian
EI3354	LINEAR INTEGRATED CIRCUITS AND APPLICATIONS	Mr.R.Seetharaman
MA3353	TRANSFORMS AND DIFFERENTIAL EQUATIONS	Dr.S.Dinesh

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:5 Section:A: Assessment Test -1 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	EE8551	EI8093	EI8551	EI8552	EI8553	OCE551	Total	AVG	Att%
1	813820112001	235001	BALAJI. V	42	24	50	58	30	58	262	43.67	100.00[579.0,0
2	813820112002	235002	BARANI DARAN. R	52	64	86	82	80	78	442	73.67	93.61[579.0,37
3	813820112003	235003	BOOMIKA. S	68	66	72	90	74	80	450	75.00	92.75[579.0,42
4	813820112004	235004	CHANDRU. V	58	52	72	62	54	52	350	58.33	98.62[579.0,8.
5	813820112005	235005	HARI PRAKASH. R	80	52	82	76	72	82	444	74.00	98.79[579.0,7.
6	813820112006	235006	HARI VARSHINI. S	A	A	76	92	54	84	306	51.00	90.67[579.0,54
7	813820112007	235007	IRSHATH AHMED. M S	58	50	60	60	46	60	334	55.67	92.06[579.0,46
8	813820112008	235008	JOE JASPER RAJA. B	32	40	62	52	50	52	288	48.00	97.75[579.0,13
9	813820112009	235009	KAVIN. G	64	78	82	70	72	76	442	73.67	97.41[579.0,15
10	813820112010	235010	KEERTHI VASAN. K	70	42	66	56	60	68	362	60.33	96.55[579.0,20
11	813820112011	235011	MUKESH. P	38	50	44	50	52	56	290	48.33	92.23[579.0,45
12	813820112012	235012	PRITHIV RAJ. A	64	52	74	62	56	74	382	63.67	98.62[579.0,8.
13	813820112013	235013	RAGUL. P	50	50	50	54	48	56	308	51.33	91.71[579.0,48
14	813820112014	235014	ROHAN. S	66	68	68	68	46	66	382	63.67	91.19[579.0,51
15	813820112015	235015	SANTHOSH. R	32	30	50	64	46	60	282	47.00	95.68[579.0,25
16	813820112016	235016	SARAVANA KUMAR. K P	38	38	50	50	34	51	261	43.50	97.06[579.0,17
17	813820112017	235017	SHARAN. R	60	58	86	76	72	60	412	68.67	95.51[579.0,26
18	813820112018	235018	SHERENE AMALIA. G	70	80	82	76	54	82	444	74.00	97.75[579.0,13
19	813820112019	235019	SIVA SUBRAMANIAN. A	50	50	64	64	47	52	327	54.50	91.19[579.0,51
20	813820112020	235020	SUDHARSAN. B	50	50	50	50	50	62	312	52.00	98.79[579.0,7.
21	813820112021	235021	SUDHARSAN. S	30	26	58	54	20	51	239	39.83	94.82[579.0,30
22	813820112022	235022	VIGNESH.S	56	60	66	66	58	74	380	63.33	95.85[579.0,24
23	813820112023	235023	VINOTH. M	44	50	60	58	54	54	320	53.33	94.30[579.0,33
24	813820112024	235024	VISHAL RAJ I P	74	70	62	64	68	68	406	67.67	92.92[579.0,41
25	813820112025	235025	YESHVANT. BA	64	26	52	62	36	60	300	50.00	92.23[579.0,45
26	813820112026	235026	YOKESWARAN. T	62	32	54	60	58	68	334	55.67	93.61[579.0,37
27	813820112303	235027	SUBHASAN. R	40	66	68	68	58	53	353	58.83	95.16[579.0,28
28	813820112301	235028	LEENA. R	64	66	62	74	50	64	380	63.33	97.24[579.0,16

Performance Analysis

Total Appeared	28	28	28	28	28	28
Total Passed	19	19	27	28	19	28
Total Failed(Fail + Absent)	9	9	1	0	9	0
Above 80	1	1	5	3	1	4
Between 50-59	7	10	8	9	12	10

Pass%	68	68	96	100	68	100

Subcode	Title	Faculty Name
EE8551	MICROPROCESSORS AND MICROCONTROLLERS	Dr.K.Malaisamy
EI8093	UNIT OPERATION AND CONTROL	Dr.A.Mercy Vasan
EI8551	ANALYTICAL INSTRUMENTS	Dr.P.Aravind
EI8552	INDUSTRIAL INSTRUMENTATION - II	Dr.M.Shanmugavalli
EI8553	PROCESS CONTROL	Dr.S.M.Giri Rajkumar
OCE551	AIR POLLUTION AND CONTROL ENGINEERING\	Dr.K.Gaayathry

Classwise Internal Assessment Mark Report

RANK HOLDERS & SUBJECT TOPPERS

Class:ICE Semester:5 Section:A: Assessment Make-up Test-1 Sem Period:22

S.no	Regno	Batchno	Name	EE8551	EI8093	EI8551	EI8553	Total	AVG	Att%
1	813820112001	235001	BALAJI. V	88	64		76	228	57.00	100.00[579.0,0.0
2	813820112006	235006	HARI VARSHINI. S	84	86			170	42.50	90.67[579.0,54.0
3	813820112007	235007	IRSHATH AHMED. M S				88	88	22.00	92.06[579.0,46.0
4	813820112008	235008	JOE JASPER RAJA. B	68	88			156	39.00	97.75[579.0,13.0
5	813820112010	235010	KEERTHI VASAN. K		72			72	18.00	96.55[579.0,20.0
6	813820112011	235011	MUKESH. P	68		60		128	32.00	92.23[579.0,45.0
7	813820112013	235013	RAGUL. P				64	64	16.00	91.71[579.0,48.0
8	813820112014	235014	ROHAN. S				52	52	13.00	91.19[579.0,51.0
9	813820112015	235015	SANTHOSH. R	68	A		68	136	34.00	95.68[579.0,25.0
10	813820112016	235016	SARAVANA KUMAR. K P	68	68		64	200	50.00	97.06[579.0,17.0
11	813820112019	235019	SIVA SUBRAMANIAN. A				84	84	21.00	91.19[579.0,51.0
12	813820112021	235021	SUDHARSAN. S	68	70		68	206	51.50	94.82[579.0,30.0
13	813820112023	235023	VINOTH. M	80				80	20.00	94.30[579.0,33.0
14	813820112025	235025	YESHVANT. BA		A		A	0	.00	92.23[579.0,45.0
15	813820112026	235026	YOKESWARAN. T		A			0	.00	93.61[579.0,37.0
16	813820112303	235027	SUBHASAN. R	72				72	18.00	95.16[579.0,28.0

Performance Analysis

Total Appeared	16	16	16	16
Total Passed	9	6	1	8
Total Failed(Fail + Absent)	0	3	0	1
Above 80	3	2	0	2
Between 50-59	0	0	0	1
Pass%	56	38	6	50

Subcode	Title	Faculty Name
EE8551	MICROPROCESSORS AND MICROCONTROLLERS	Dr.K.Malaisamy
EI8093	UNIT OPERATION AND CONTROL	Dr.A.Mercy Vasan
EI8551	ANALYTICAL INSTRUMENTS	Dr.P.Aravind
EI8553	PROCESS CONTROL	Dr.S.M.Giri Rajkumar

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:5 Section:A: Assessment Test -2 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	EE8551	EI8093	EI8551	EI8552	EI8553	OCE551	Total	AVG	Att%
1	813820112001	235001	BALAJI. V	54	50	64	66	50	52	336	56.00	100.00[579.0,0
2	813820112002	235002	BARANI DARAN. R	70	82	80	84	75	80	471	78.50	93.61[579.0,37
3	813820112003	235003	BOOMIKA. S	78	90	72	92	57	76	465	77.50	92.75[579.0,42
4	813820112004	235004	CHANDRU. V	72	66	68	58	52	60	376	62.67	98.62[579.0,8.
5	813820112005	235005	HARI PRAKASH. R	84	80	64	70	70	66	434	72.33	98.79[579.0,7.
6	813820112006	235006	HARI VARSHINI. S	66	66	72	80	60	80	424	70.67	90.67[579.0,54
7	813820112007	235007	IRSHATH AHMED. M S	68	76	56	68	50	72	390	65.00	92.06[579.0,46
8	813820112008	235008	JOE JASPER RAJA. B	68	66	50	56	32	52	324	54.00	97.75[579.0,13
9	813820112009	235009	KAVIN. G	78	88	78	74	62	74	454	75.67	97.41[579.0,15
10	813820112010	235010	KEERTHI VASAN. K	62	66	76	66	58	56	384	64.00	96.55[579.0,20
11	813820112011	235011	MUKESH. P	60	60	68	52	29	58	327	54.50	92.23[579.0,45
12	813820112012	235012	PRITHIV RAJ. A	80	72	66	74	58	60	410	68.33	98.62[579.0,8.
13	813820112013	235013	RAGUL. P	54	76	62	58	50	50	350	58.33	91.71[579.0,48
14	813820112014	235014	ROHAN. S	62	68	52	62	45	50	339	56.50	91.19[579.0,51
15	813820112015	235015	SANTHOSH. R	52	54	52	66	34	50	308	51.33	95.68[579.0,25
16	813820112016	235016	SARAVANA KUMAR. K P	54	60	56	68	54	26	318	53.00	97.06[579.0,17
17	813820112017	235017	SHARAN. R	74	60	66	84	79	66	429	71.50	95.51[579.0,26
18	813820112018	235018	SHERENE AMALIA. G	82	90	74	86	72	74	478	79.67	97.75[579.0,13
19	813820112019	235019	SIVA SUBRAMANIAN. A	60	76	50	62	38	52	338	56.33	91.19[579.0,51
20	813820112020	235020	SUDHARSAN. B	26	50	56	64	30	52	278	46.33	98.79[579.0,7.
21	813820112021	235021	SUDHARSAN. S	62	58	42	60	30	54	306	51.00	94.82[579.0,30
22	813820112022	235022	VIGNESH.S	58	66	54	76	60	68	382	63.67	95.85[579.0,24
23	813820112023	235023	VINOTH. M	66	54	62	62	54	52	350	58.33	94.30[579.0,33
24	813820112024	235024	VISHAL RAJ I P	74	96	74	80	78	54	456	76.00	92.92[579.0,41
25	813820112025	235025	YESHVANT. BA	72	76	52	50	60	50	360	60.00	92.23[579.0,45
26	813820112026	235026	YOKESWARAN. T	72	54	52	62	66	26	332	55.33	93.61[579.0,37
27	813820112303	235027	SUBHASAN. R	70	80	74	64	56	56	400	66.67	95.16[579.0,28
28	813820112301	235028	LEENA. R	62	90	68	78	62	62	422	70.33	97.24[579.0,16

Performance Analysis

Total Appeared	28	28	28	28	28	28
Total Passed	27	28	27	28	21	26
Total Failed(Fail + Absent)	1	0	1	0	7	2
Above 80	3	8	1	6	0	2
Between 50-59	5	6	10	5	10	14

Pass%	96	100	96	100	75	93

Subcode	Title	Faculty Name
EE8551	MICROPROCESSORS AND MICROCONTROLLERS	Dr.K.Malaisamy
EI8093	UNIT OPERATION AND CONTROL	Dr.A.Mercy Vasan
EI8551	ANALYTICAL INSTRUMENTS	Dr.P.Aravind
EI8552	INDUSTRIAL INSTRUMENTATION - II	Dr.M.Shanmugavalli
EI8553	PROCESS CONTROL	Dr.S.M.Giri Rajkumar
OCE551	AIR POLLUTION AND CONTROL ENGINEERING\	Dr.K.Gaayathry

Classwise Internal Assessment Mark Report

RANK HOLDERS & SUBJECT TOPPERS

Class:ICE Semester:5 Section:A: Assessment Make-up Test-2 Sem Period:22

S.no	Regno	Batchno	Name	EE8551	EI8551	EI8553	OCE551	Total	AVG	Att%
1	813820112008	235008	JOE JASPER RAJA. B			34		34	8.50	97.75[579.0,13.0
2	813820112011	235011	MUKESH. P			27		27	6.75	92.23[579.0,45.0
3	813820112014	235014	ROHAN. S			50		50	12.50	91.19[579.0,51.0
4	813820112015	235015	SANTHOSH. R			50		50	12.50	95.68[579.0,25.0
5	813820112016	235016	SARAVANA KUMAR. K P				64	64	16.00	97.06[579.0,17.0
6	813820112019	235019	SIVA SUBRAMANIAN. A			43		43	10.75	91.19[579.0,51.0
7	813820112020	235020	SUDHARSAN. B	80		20		100	25.00	98.79[579.0,7.0]
8	813820112021	235021	SUDHARSAN. S		44	0		44	11.00	94.82[579.0,30.0
9	813820112026	235026	YOKESWARAN. T				60	60	15.00	93.61[579.0,37.0

Performance Analysis

Total Appeared	9	9	9	9
Total Passed	1	0	2	2
Total Failed(Fail + Absent)	0	1	5	0
Above 80	1	0	0	0
Between 50-59	0	0	2	0
Pass%	11	0	22	22

Subcode	Title	Faculty Name
EE8551	MICROPROCESSORS AND MICROCONTROLLERS	Dr.K.Malaisamy
EI8551	ANALYTICAL INSTRUMENTS	Dr.P.Aravind
EI8553	PROCESS CONTROL	Dr.S.M.Giri Rajkumar
OCE551	AIR POLLUTION AND CONTROL ENGINEERING\	Dr.K.Gaayathry

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:5 Section:A: Assessment Test -3 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	EE8551	EI8093	EI8551	EI8552	EI8553	OCE551	Total	AVG	Att%
1	813820112001	235001	BALAJI. V	42	66	70	76	60	64	378	63.00	100.00[579.0,0
2	813820112002	235002	BARANI DARAN. R	52	84	82	76	76	82	452	75.33	93.61[579.0,37
3	813820112003	235003	BOOMIKA. S	32	56	74	90	66	34	352	58.67	92.75[579.0,42
4	813820112004	235004	CHANDRU. V	34	68	70	58	62	62	354	59.00	98.62[579.0,8.
5	813820112005	235005	HARI PRAKASH. R	52	82	88	90	78	76	466	77.67	98.79[579.0,7.
6	813820112006	235006	HARI VARSHINI. S	28	62	82	54	42	A	268	44.67	90.67[579.0,54
7	813820112007	235007	IRSHATH AHMED. M S	30	56	54	74	46	56	316	52.67	92.06[579.0,46
8	813820112008	235008	JOE JASPER RAJA. B	30	68	62	62	44	60	326	54.33	97.75[579.0,13
9	813820112009	235009	KAVIN. G	54	72	74	82	66	70	418	69.67	97.41[579.0,15
10	813820112010	235010	KEERTHI VASAN. K	42	60	60	68	44	58	332	55.33	96.55[579.0,20
11	813820112011	235011	MUKESH. P	42	64	64	72	42	52	336	56.00	92.23[579.0,45
12	813820112012	235012	PRITHIV RAJ. A	50	62	80	76	71	70	409	68.17	98.62[579.0,8.
13	813820112013	235013	RAGUL. P	34	44	50	64	50	54	296	49.33	91.71[579.0,48
14	813820112014	235014	ROHAN. S	50	62	68	64	56	56	356	59.33	91.19[579.0,51
15	813820112015	235015	SANTHOSH. R	34	50	54	70	52	60	320	53.33	95.68[579.0,25
16	813820112016	235016	SARAVANA KUMAR. K P	28	42	50	60	48	38	266	44.33	97.06[579.0,17
17	813820112017	235017	SHARAN. R	46	58	74	86	70	60	394	65.67	95.51[579.0,26
18	813820112018	235018	SHERENE AMALIA. G	60	88	84	92	78	70	472	78.67	97.75[579.0,13
19	813820112019	235019	SIVA SUBRAMANIAN. A	48	A	68	60	53	46	275	45.83	91.19[579.0,51
20	813820112020	235020	SUDHARSAN. B	6	30	42	44	14	20	156	26.00	98.79[579.0,7.
21	813820112021	235021	SUDHARSAN. S	22	68	62	50	36	50	288	48.00	94.82[579.0,30
22	813820112022	235022	VIGNESH.S	16	72	88	86	76	72	410	68.33	95.85[579.0,24
23	813820112023	235023	VINOTH. M	30	72	A	62	44	26	234	39.00	94.30[579.0,33
24	813820112024	235024	VISHAL RAJ I P	54	82	70	86	80	66	438	73.00	92.92[579.0,41
25	813820112025	235025	YESHVANT. BA	50	74	68	70	64	60	386	64.33	92.23[579.0,45
26	813820112026	235026	YOKESWARAN. T	28	60	68	50	34	38	278	46.33	93.61[579.0,37
27	813820112303	235027	SUBHASAN. R	38	92	76	86	68	68	428	71.33	95.16[579.0,28
28	813820112301	235028	LEENA. R	50	82	80	80	59	62	413	68.83	97.24[579.0,16

Performance Analysis

Total Appeared	28	28	28	28	28	28
Total Passed	9	24	26	27	18	21
Total Failed(Fail + Absent)	19	4	2	1	10	7
Above 80	0	6	7	9	1	1
Between 50-59	8	4	4	4	5	6

Pass%	32	86	93	96	64	75

Subcode	Title	Faculty Name
EE8551	MICROPROCESSORS AND MICROCONTROLLERS	Dr.K.Malaisamy
EI8093	UNIT OPERATION AND CONTROL	Dr.A.Mercy Vasan
EI8551	ANALYTICAL INSTRUMENTS	Dr.P.Aravind
EI8552	INDUSTRIAL INSTRUMENTATION - II	Dr.M.Shanmugavalli
EI8553	PROCESS CONTROL	Dr.S.M.Giri Rajkumar
OCE551	AIR POLLUTION AND CONTROL ENGINEERING\	Dr.K.Gaayathry

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:7 Section:A: Assessment Test -1 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	EC8093	EI8075	EI8091	EI8692	EI8751	GE8076[8]	OCS752	Total	AVG	Att%
1	813819112001	225001	ABARNA. R	60	64	66	66	64	84	74	478	68.29	96.78[653.0,2
2	813819112003	225003	ARUNKUMAR. R	60	38	50	66	54	62	72	402	57.43	95.41[653.0,3
3	813819112004	225004	BAIRAVI. S	70	82	65	98	24	80	92	511	73.00	91.88[653.0,5
4	813819112005	225005	BHARATH SAMVEL. D	92	82	90	98	86	90	94	632	90.29	91.12[653.0,5
5	813819112006	225006	DARWIN. I	64	76	68	60	74	76	56	474	67.71	89.13[653.0,7
6	813819112007	225007	DEEPAK. B	60	74	64	60	72	66	74	470	67.14	97.09[653.0,1
7	813819112008	225008	DHARSHINI. G	A	A	A	62	64	A	0	126	18.00	79.33[653.0,1
8	813819112009	225009	DHINESH. R	96	88	94	92	86	92	92	640	91.43	98.16[653.0,1
9	813819112011	225010	HARI KRISHNA. M	8	54	38	54	50	80	14	298	42.57	96.17[653.0,2
10	813819112010	225011	HARIHARAN. K	82	76	73	68	80	82	50	511	73.00	87.14[653.0,8
11	813819112012	225012	HARISH. R	72	70	64	72	72	72	26	448	64.00	93.72[653.0,4
12	813819112013	225013	HEMANTH. K K	82	78	80	72	82	88	82	564	80.57	88.67[653.0,7
13	813819112014	225014	JAYAKANTHAN. G P	92	84	80	80	90	80	84	590	84.29	92.04[653.0,5
14	813819112015	225015	JAYALAKSHMI. R	60	60	66	36	56	74	52	404	57.71	82.54[653.0,1
15	813819112016	225016	KANNAPPAN. S	58	76	80	80	86	88	70	538	76.86	90.35[653.0,6
16	813819112017	225017	KRISHNA KUMARAN. K	50	52	62	70	64	56	56	410	58.57	98.77[653.0,8
17	813819112018	225018	MOHAMED FAHIM. K	24	62	50	42	52	38	24	292	41.71	93.11[653.0,4
18	813819112019	225019	MOHAMED YAHYA. A	52	74	80	76	52	70	74	478	68.29	96.32[653.0,2
19	813819112020	225020	MOHAN RAJ. B	92	80	86	82	86	92	80	598	85.43	91.12[653.0,5
20	813819112021	225021	MUTHUKUMARAN. K	56	76	76	64	70	84	64	490	70.00	91.58[653.0,5
21	813819112022	225022	NICOLAS NESAN. G	80	74	74	70	80	84	70	532	76.00	94.79[653.0,3
22	813819112023	225023	NITHISH. S	82	84	88	92	86	90	78	600	85.71	84.23[653.0,1
23	813819112024	225024	PARITHI KUMAR. J	50	72	54	44	64	62	70	416	59.43	95.87[653.0,2
24	813819112025	225025	PRABAHARAN. M	50	92	78	82	84	86	90	562	80.29	88.36[653.0,7
25	813819112027	225027	RAGAVANTIRAN. G	60	58	56	40	64	40	78	396	56.57	86.83[653.0,8
26	813819112028	225028	RAGHURAM. M	72	80	74	90	82	90	88	576	82.29	88.67[653.0,7
27	813819112029	225029	RATNAGIRISH. R K	60	72	64	64	66	82	84	492	70.29	91.42[653.0,5
28	813819112030	225030	REGENA ARSHNI. S	52	60	50	62	68	72	72	436	62.29	98.77[653.0,8
29	813819112031	225031	SAKTHIGANESH. K	80	74	68	84	66	74	64	510	72.86	96.32[653.0,2
30	813819112033	225033	SHANJITH KUMAR. I	60	70	74	68	80	80	80	512	73.14	94.03[653.0,3
31	813819112034	225034	SHARLENE . A	78	68	74	84	82	76	80	542	77.43	92.80[653.0,4
32	813819112035	225035	SHYAM PRAKASH. G P	72	68	74	74	72	84	74	518	74.00	95.71[653.0,2
33	813819112036	225036	SIVABALAN. D	80	72	68	60	68	68	56	472	67.43	92.80[653.0,4
34	813819112037	225037	SUBASH. NS	56	66	58	76	60	74	54	444	63.43	89.28[653.0,7
35	813819112038	225038	SUNDHARADEVAN. S	5	54	44	38	42	52	50	285	40.71	94.03[653.0,3
36	813819112039	225039	SURYA. M	18	64	62	54	64	52	44	358	51.14	96.48[653.0,2
37	813819112040	225040	SWATHI. A	66	76	72	76	80	80	54	504	72.00	97.24[653.0,1
38	813819112041	225041	SYED ATHAULLAH. S	50	70	60	58	54	60	56	408	58.29	96.63[653.0,2
39	813819112042	225042	SYED FIZAL. S K	50	62	68	52	62	86	62	442	63.14	86.98[653.0,8
40	813819112043	225043	THANESHWARAN. S	56	60	64	78	68	82	84	492	70.29	93.72[653.0,4
41	813819112044	225044	THANGASABARI . S	56	70	70	74	52	84	56	462	66.00	88.82[653.0,7
42	813819112045	225045	VARUN. K	50	52	50	60	52	64	40	368	52.57	98.77[653.0,8
43	813819112046	225046	VIGNESH. G	52	52	52	64	50	60	78	408	58.29	96.17[653.0,2
44	813819112047	225047	VIGNESWARARAJAN. K	52	60	50	60	62	38	74	396	56.57	94.64[653.0,3

Performance Analysis							
Total Appeared	44	44	44	44	44	44	44
Total Passed	39	42	41	39	42	40	38
Total Failed(Fail + Absent)	5	2	3	5	2	4	6
Above 80	10	8	8	11	14	22	12
Between 50-59	15	6	9	4	9	3	10
Pass%	89	95	93	89	95	91	86

Subcode	Title	Faculty Name
EC8093	DIGITAL IMAGE PROCESSING	Mr.S.Hariprasath
EI8075	FIBRE OPTICS AND LASER INSTRUMENTATION	Dr.P.Aravind
EI8091	INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	Dr.M.Banu Sundareswari
EI8692	ELECTRONICS INSTRUMENTATION	Mr.R.Seetharaman
EI8751	INDUSTRIAL DATA NETWORKS	Dr.M.Shanmugavalli
GE8076[8]	PROFESSIONAL ETHICS IN ENGINEERING	Dr.K.Gayathry
OCS752	INTRODUCTION TO C PROGRAMMING	Mr.V.Senthil Balaji

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:7 Section:A: Assessment Make-up Test-1 Sem Period:22-23ODL

S.no	Regno	Batchno	Name	EC8093	EI8075	EI8091	EI8692	EI8751	OCS752	Total	AVG	Att%
1	813819112003	225003	ARUNKUMAR. R		70					70	11.67	95.41[653.0,30.
2	813819112004	225004	BAIRAVI. S					60		60	10.00	91.88[653.0,53.
3	813819112008	225008	DHARSHINI. G	A	A	A			A	0	.00	79.33[653.0,13!
4	813819112011	225010	HARI KRISHNA. M	56		64			78	198	33.00	96.17[653.0,25.
5	813819112012	225012	HARISH. R						67	67	11.17	93.72[653.0,41.
6	813819112015	225015	JAYALAKSHMI. R				88			88	14.67	82.54[653.0,11-
7	813819112018	225018	MOHAMED FAHIM. K	60			88		60	208	34.67	93.11[653.0,45.
8	813819112024	225024	PARITHI KUMAR. J				96			96	16.00	95.87[653.0,27.
9	813819112027	225027	RAGAVANTIRAN. G				88			88	14.67	86.83[653.0,86.
10	813819112038	225038	SUNDHARADEVAN. S	16		68	72	60		216	36.00	94.03[653.0,39.
11	813819112039	225039	SURYA. M	52					67	119	19.83	96.48[653.0,23.
12	813819112045	225045	VARUN. K						65	65	10.83	98.77[653.0,8.0

Performance Analysis

Total Appeared	12	12	12	12	12	12
Total Passed	3	1	2	5	2	5
Total Failed(Fail + Absent)	2	1	1	0	0	1
Above 80	0	0	0	4	0	0
Between 50-59	2	0	0	0	0	0
Pass%	25	8	17	42	17	42

Subcode	Title	Faculty Name
EC8093	DIGITAL IMAGE PROCESSING	Mr.S.Hariprasath
EI8075	FIBRE OPTICS AND LASER INSTRUMENTATION	Dr.P.Aravind
EI8091	INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	Dr.M.Banu Sundareswari
EI8692	ELECTRONICS INSTRUMENTATION	Mr.R.Seetharaman
EI8751	INDUSTRIAL DATA NETWORKS	Dr.M.Shanmugavalli
OCS752	INTRODUCTION TO C PROGRAMMING	Mr.V.Senthil Balaji

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:7 Section:A: Assessment Test -2 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	EC8093	EI8075	EI8091	EI8692	EI8751	GE8076[8]	OCS752	Total	AVG	Att%
1	813819112001	225001	ABARNA. R	70	80	68	60	64	66	80	488	69.71	96.78[653.0,2
2	813819112003	225003	ARUNKUMAR. R	72	72	62	68	60	62	89	485	69.29	95.41[653.0,3
3	813819112004	225004	BAIRAVI. S	92	78	84	76	82	72	92	576	82.29	91.88[653.0,5
4	813819112005	225005	BHARATH SAMVEL. D	94	86	90	98	92	86	96	642	91.71	91.12[653.0,5
5	813819112006	225006	DARWIN. I	62	72	70	68	74	52	50	448	64.00	89.13[653.0,7
6	813819112007	225007	DEEPAK. B	62	58	60	68	70	56	66	440	62.86	97.09[653.0,1
7	813819112008	225008	DHARSHINI. G	76	52	84	74	56	62	70	474	67.71	79.33[653.0,1
8	813819112009	225009	DHINESH. R	92	90	92	100	94	81	94	643	91.86	98.16[653.0,1
9	813819112011	225010	HARI KRISHNA. M	54	52	58	38	32	56	30	320	45.71	96.17[653.0,2
10	813819112010	225011	HARIHARAN. K	80	66	68	62	70	54	30	430	61.43	87.14[653.0,8
11	813819112012	225012	HARISH. R	72	54	38	68	60	58	50	400	57.14	93.72[653.0,4
12	813819112013	225013	HEMANTH. K K	82	78	58	84	82	34	62	480	68.57	88.67[653.0,7
13	813819112014	225014	JAYAKANTHAN. G P	80	74	72	76	90	66	92	550	78.57	92.04[653.0,5
14	813819112015	225015	JAYALAKSHMI. R	68	70	72	78	90	50	76	504	72.00	82.54[653.0,1
15	813819112016	225016	KANNAPPAN. S	82	82	76	74	76	68	76	534	76.29	90.35[653.0,6
16	813819112017	225017	KRISHNA KUMARAN. K	78	60	50	64	76	52	52	432	61.71	98.77[653.0,8
17	813819112018	225018	MOHAMED FAHIM. K	26	60	56	60	50	52	30	334	47.71	93.11[653.0,4
18	813819112019	225019	MOHAMED YAHYA. A	80	74	66	74	68	60	74	496	70.86	96.32[653.0,2
19	813819112020	225020	MOHAN RAJ. B	92	90	78	92	82	70	90	594	84.86	91.12[653.0,5
20	813819112021	225021	MUTHUKUMARAN. K	82	72	70	64	76	52	50	466	66.57	91.58[653.0,5
21	813819112022	225022	NICOLAS NESAN. G	90	72	74	88	68	54	62	508	72.57	94.79[653.0,3
22	813819112023	225023	NITHISH. S	88	90	78	88	94	76	78	592	84.57	84.23[653.0,1
23	813819112024	225024	PARITHI KUMAR. J	52	70	40	66	70	54	64	416	59.43	95.87[653.0,2
24	813819112025	225025	PRABAHARAN. M	80	86	72	82	70	60	74	524	74.86	88.36[653.0,7
25	813819112027	225027	RAGAVANTIRAN. G	56	52	54	62	62	56	78	420	60.00	86.83[653.0,8
26	813819112028	225028	RAGHURAM. M	82	80	88	90	76	74	78	568	81.14	88.67[653.0,7
27	813819112029	225029	RATNAGIRISH. R K	76	76	54	82	74	52	80	494	70.57	91.42[653.0,5
28	813819112030	225030	REGENA ARSHNI. S	70	68	64	66	60	58	74	460	65.71	98.77[653.0,8
29	813819112031	225031	SAKTHIGANESH. K	94	76	72	86	70	64	62	524	74.86	96.32[653.0,2
30	813819112033	225033	SHANJITH KUMAR. I	84	80	78	82	76	66	82	548	78.29	94.03[653.0,3
31	813819112034	225034	SHARLENE . A	88	74	72	82	72	58	74	520	74.29	92.80[653.0,4
32	813819112035	225035	SHYAM PRAKASH. G P	76	78	54	80	60	64	78	490	70.00	95.71[653.0,2
33	813819112036	225036	SIVABALAN. D	82	76	80	60	66	60	60	484	69.14	92.80[653.0,4
34	813819112037	225037	SUBASH. NS	76	70	74	70	66	60	58	474	67.71	89.28[653.0,7
35	813819112038	225038	SUNDHARADEVAN. S	52	50	28	38	32	52	16	268	38.29	94.03[653.0,3
36	813819112039	225039	SURYA. M	50	68	74	60	84	50	58	444	63.43	96.48[653.0,2
37	813819112040	225040	SWATHI. A	82	58	82	78	80	58	64	502	71.71	97.24[653.0,1
38	813819112041	225041	SYED ATHAULLAH. S	60	68	66	70	64	54	66	448	64.00	96.63[653.0,2
39	813819112042	225042	SYED FIZAL. S K	72	74	66	70	54	64	50	450	64.29	86.98[653.0,8
40	813819112043	225043	THANESHWARAN. S	78	66	60	72	76	50	72	474	67.71	93.72[653.0,4
41	813819112044	225044	THANGASABARI . S	74	62	74	78	52	52	50	442	63.14	88.82[653.0,7
42	813819112045	225045	VARUN. K	42	52	42	54	50	52	56	348	49.71	98.77[653.0,8
43	813819112046	225046	VIGNESH. G	56	62	21	68	64	36	76	383	54.71	96.17[653.0,2
44	813819112047	225047	VIGNESWARARAJAN. K	78	70	62	76	74	50	72	482	68.86	94.64[653.0,3

Performance Analysis							
Total Appeared	44	44	44	44	44	44	44
Total Passed	42	44	39	42	42	42	40
Total Failed(Fail + Absent)	2	0	5	2	2	2	4
Above 80	19	9	7	13	10	2	9
Between 50-59	6	8	7	1	5	23	9
Pass%	95	100	89	95	95	95	91

Subcode	Title	Faculty Name
EC8093	DIGITAL IMAGE PROCESSING	Mr.S.Hariprasath
EI8075	FIBRE OPTICS AND LASER INSTRUMENTATION	Dr.R.Aravind
EI8091	INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	Dr.M.Banu Sundareswari
EI8692	ELECTRONICS INSTRUMENTATION	Mr.R.Seetharaman
EI8751	INDUSTRIAL DATA NETWORKS	Dr.M.Shanmugavalli
GE8076[8]	PROFESSIONAL ETHICS IN ENGINEERING	Dr.K.Gayathry
OCS752	INTRODUCTION TO C PROGRAMMING	Mr.V.Senthil Balaji

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:7 Section:A: Assessment Make-up Test-2 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	EC8093	EI8091	EI8692	EI8751	GE8076[8]	OCS752	Total	AVG	Att%
1	813819112011	225010	HARI KRISHNA. M			56	68		54	178	29.67	96.17[653.0,2
2	813819112010	225011	HARIHARAN. K						60	60	10.00	87.14[653.0,8
3	813819112012	225012	HARISH. R		72					72	12.00	93.72[653.0,4
4	813819112013	225013	HEMANTH. K K					80		80	13.33	88.67[653.0,7
5	813819112018	225018	MOHAMED FAHIM. K	60					55	115	19.17	93.11[653.0,4
6	813819112024	225024	PARITHI KUMAR. J		80					80	13.33	95.87[653.0,2
7	813819112038	225038	SUNDHARADEVAN. S		68	60	56		65	249	41.50	94.03[653.0,3
8	813819112045	225045	VARUN. K	60	76					136	22.67	98.77[653.0,8
9	813819112046	225046	VIGNESH. G		84			60		144	24.00	96.17[653.0,2

Performance Analysis

Total Appeared	9	9	9	9	9	9
Total Passed	2	5	2	2	2	4
Total Failed(Fail + Absent)	0	0	0	0	0	0
Above 80	0	2	0	0	1	0
Between 50-59	0	0	1	1	0	2
Pass%	22	56	22	22	22	44

Subcode	Title	Faculty Name
EC8093	DIGITAL IMAGE PROCESSING	Mr.S.Hariprasath
EI8091	INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	Dr.M.Banu Sundareswari
EI8692	ELECTRONICS INSTRUMENTATION	Mr.R.Seetharaman
EI8751	INDUSTRIAL DATA NETWORKS	Dr.M.Shanmugavalli
GE8076[8]	PROFESSIONAL ETHICS IN ENGINEERING	Dr.K.Gaayathry
OCS752	INTRODUCTION TO C PROGRAMMING	Mr.V.Senthil Balaji

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:7 Section:A: Assessment Test -3 Sem Period:22-23ODD

S.no	Regno	Batchno	Name	EC8093	EI8075	EI8091	EI8692	EI8751	GE8076[8]	OCS752	Total	AVG	Att%
1	813819112001	225001	ABARNA. R	50	70	76	76	58	70	90	490	70.00	96.78[653.0,2
2	813819112003	225003	ARUNKUMAR. R	52	66	36	60	50	56	80	400	57.14	95.41[653.0,3
3	813819112004	225004	BAIRAVI. S	90	88	82	90	66	78	90	584	83.43	91.88[653.0,5
4	813819112005	225005	BHARATH SAMVEL. D	90	90	78	92	74	90	70	584	83.43	91.12[653.0,5
5	813819112006	225006	DARWIN. I	80	66	60	30	44	72	30	382	54.57	89.13[653.0,7
6	813819112007	225007	DEEPAK. B	66	70	52	40	44	60	55	387	55.29	97.09[653.0,1
7	813819112008	225008	DHARSHINI. G	74	68	66	68	56	58	60	450	64.29	79.33[653.0,1
8	813819112009	225009	DHINESH. R	96	90	92	100	84	96	75	633	90.43	98.16[653.0,1
9	813819112011	225010	HARI KRISHNA. M	66	68	54	52	28	62	50	380	54.29	96.17[653.0,2
10	813819112010	225011	HARIHARAN. K	70	78	72	A	54	72	20	366	52.29	87.14[653.0,8
11	813819112012	225012	HARISH. R	50	66	36	70	60	64	30	376	53.71	93.72[653.0,4
12	813819112013	225013	HEMANTH. K K	90	74	64	66	72	72	70	508	72.57	88.67[653.0,7
13	813819112014	225014	JAYAKANTHAN. G P	96	84	80	96	80	84	80	600	85.71	92.04[653.0,5
14	813819112015	225015	JAYALAKSHMI. R	68	68	52	62	56	56	70	432	61.71	82.54[653.0,1
15	813819112016	225016	KANNAPPAN. S	82	76	78	84	70	74	60	524	74.86	90.35[653.0,6
16	813819112017	225017	KRISHNA KUMARAN. K	62	66	58	68	66	62	60	442	63.14	98.77[653.0,8
17	813819112018	225018	MOHAMED FAHIM. K	36	72	52	40	38	60	20	318	45.43	93.11[653.0,4
18	813819112019	225019	MOHAMED YAHYA. A	90	74	80	68	62	76	60	510	72.86	96.32[653.0,2
19	813819112020	225020	MOHAN RAJ. B	84	90	88	78	74	88	70	572	81.71	91.12[653.0,5
20	813819112021	225021	MUTHUKUMARAN. K	56	84	68	76	66	70	50	470	67.14	91.58[653.0,5
21	813819112022	225022	NICOLAS NESAN. G	54	74	62	74	62	72	80	478	68.29	94.79[653.0,3
22	813819112023	225023	NITHISH. S	84	90	80	78	90	78	A	500	71.43	84.23[653.0,1
23	813819112024	225024	PARITHI KUMAR. J	54	66	54	48	54	68	75	419	59.86	95.87[653.0,2
24	813819112025	225025	PRABAHARAN. M	74	82	74	74	76	76	65	521	74.43	88.36[653.0,7
25	813819112027	225027	RAGAVANTIRAN. G	A	A	36	40	50	60	60	246	35.14	86.83[653.0,8
26	813819112028	225028	RAGHURAM. M	76	92	70	78	70	78	70	534	76.29	88.67[653.0,7
27	813819112029	225029	RATNAGIRISH. R K	64	72	70	56	58	68	75	463	66.14	91.42[653.0,5
28	813819112030	225030	REGENA ARSHNI. S	50	76	52	66	62	68	85	459	65.57	98.77[653.0,8
29	813819112031	225031	SAKTHIGANESH. K	80	76	62	86	64	66	80	514	73.43	96.32[653.0,2
30	813819112033	225033	SHANJITH KUMAR. I	82	84	78	80	64	74	70	532	76.00	94.03[653.0,3
31	813819112034	225034	SHARLENE . A	82	66	58	80	68	70	65	489	69.86	92.80[653.0,4
32	813819112035	225035	SHYAM PRAKASH. G P	60	72	66	58	62	66	70	454	64.86	95.71[653.0,2
33	813819112036	225036	SIVABALAN. D	66	78	64	64	70	78	80	500	71.43	92.80[653.0,4
34	813819112037	225037	SUBASH. NS	50	76	A	56	50	A	60	292	41.71	89.28[653.0,7
35	813819112038	225038	SUNDHARADEVAN. S	8	50	26	16	34	52	50	236	33.71	94.03[653.0,3
36	813819112039	225039	SURYA. M	38	70	60	38	64	56	50	376	53.71	96.48[653.0,2
37	813819112040	225040	SWATHI. A	60	78	62	52	70	70	55	447	63.86	97.24[653.0,1
38	813819112041	225041	SYED ATHAULLAH. S	60	70	60	58	56	70	75	449	64.14	96.63[653.0,2
39	813819112042	225042	SYED FIZAL. S K	26	A	60	32	58	68	75	319	45.57	86.98[653.0,8
40	813819112043	225043	THANESHWARAN. S	70	84	68	64	80	60	55	481	68.71	93.72[653.0,4
41	813819112044	225044	THANGASABARI . S	A	A	A	A	64	A	60	124	17.71	88.82[653.0,7
42	813819112045	225045	VARUN. K	26	62	64	62	50	54	60	378	54.00	98.77[653.0,8
43	813819112046	225046	VIGNESH. G	50	62	50	52	64	58	60	396	56.57	96.17[653.0,2
44	813819112047	225047	VIGNESWARARAJAN. K	52	74	50	36	54	56	65	387	55.29	94.64[653.0,3

Performance Analysis							
Total Appeared	44	44	44	44	44	44	44
Total Passed	37	41	38	33	39	42	39
Total Failed(Fail + Absent)	7	3	6	11	5	2	5
Above 80	13	11	6	8	4	4	8
Between 50-59	10	1	10	7	13	8	7
Pass%	84	93	86	75	89	95	89

Subcode	Title	Faculty Name
EC8093	DIGITAL IMAGE PROCESSING	Mr.S.Hariprasath
EI8075	FIBRE OPTICS AND LASER INSTRUMENTATION	Dr.R.Aravind
EI8091	INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	Dr.M.Banu Sundareswari
EI8692	ELECTRONICS INSTRUMENTATION	Mr.R.Seetharaman
EI8751	INDUSTRIAL DATA NETWORKS	Dr.M.Shanmugavalli
GE8076[8]	PROFESSIONAL ETHICS IN ENGINEERING	Dr.K.Gayathry
OCS752	INTRODUCTION TO C PROGRAMMING	Mr.V.Senthil Balaji

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:4 Section:A: Assessment Test -1 Sem Period:22-23EVEN

S.no	Regno	Batchno	Name	EI3451	GE3451	IC3401	IC3402	IC3451	IC3452	TP	Total	AVG	Att%
1	813821112001	245001	ANJALI. N	74	50	54	62	52	58	66	416	59.43	98.24[567.0,10
2	813821112002	245002	DEEPTHI SWARNAA. M	60	42	34	22	36	36	58	287	41.00	97.35[567.0,15
3	813821112004	245004	JEEVANATHAN. S	76	34	60	50	77	78	54	429	61.29	93.47[567.0,37
4	813821112005	245005	KAAVYA. N R	58	50	70	66	68	74	52	438	62.57	88.71[567.0,64
5	813821112006	245006	KARTHICK. N	64	54	84	73	50	64	50	439	62.71	83.42[567.0,94
6	813821112007	245007	KESAVAN. T	A	A	A	A	A	A	A	0	.00	13.40[567.0,49
7	813821112008	245008	KOUSHIK. T	62	11	74	54	44	58	64	367	52.43	85.36[567.0,83
8	813821112009	245009	LAWRANCE. J	78	35	56	56	42	50	64	381	54.43	97.71[567.0,13
9	813821112010	245010	MATHANGINI. M	86	60	76	82	80	88	42	514	73.43	97.53[567.0,14
10	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S	62	33	58	30	28	44	A	255	36.43	96.47[567.0,20
11	813821112012	245012	MOHAMMED ABDULLAH. N	90	60	84	68	70	76	A	448	64.00	97.35[567.0,15
12	813821112013	245013	MURSHATH BASHA. I	74	50	56	50	52	80	A	362	51.71	95.77[567.0,24
13	813821112014	245014	PRASANNA. V	88	69	76	72	87	94	52	538	76.86	92.77[567.0,41
14	813821112015	245015	PRAVEENA. M	68	50	64	56	74	78	46	436	62.29	92.42[567.0,43
15	813821112016	245016	SACHIN. S	60	22	58	46	66	64	38	354	50.57	94.18[567.0,33
16	813821112017	245017	THIRUMALAI KUMAR. G	80	50	80	84	84	92	50	520	74.29	99.29[567.0,4.(
17	813821112303	245018	SHUJATH ALI KHAN. M	92	50	74	44	73	80	48	461	65.86	98.94[567.0,6.(
18	813821112301	245019	FURKHAN ANAS. H	76	39	64	56	60	78	42	415	59.29	97.18[567.0,16
19	813821112302	245020	LOGESH. A	70	40	42	26	34	54	40	306	43.71	100.00[567.0,0

Performance Analysis

Total Appeared	19	19	19	19	19	19	19
Total Passed	18	10	16	13	13	16	9
Total Failed(Fail + Absent)	1	9	3	6	6	3	10
Above 80	5	0	3	2	3	5	0
Between 50-59	1	7	5	6	3	4	6
Pass%	95	53	84	68	68	84	47

Subcode	Title	Faculty Name
EI3451	INDUSTRIAL INSTRUMENTATION	Dr.M.Shanmugavalli
GE3451	ENVIRONMENTAL SCIENCES AND SUSTAINABILITY	Dr.G.Thulasi
IC3401	MODERN ELECTRONIC INSTRUMENTATION	Mr.R.Seetharaman
IC3402	EMBEDDED SYSTEMS AND IOT	Ms.B.Divya
IC3451	AUTOMATIC CONTROL SYSTEMS	Dr.A.Gopikrishnan
IC3452	ELECTRICAL MACHINES AND DRIVES	Mr.R.Balasubramanian
TP	TRAINING AND PLACEMENT	Dr.N.Subashini

Classwise Internal Assessment Mark Report

RANK HOLDERS & SUBJECT TOPPERS

Class:ICE Semester:4 Section:A: Assessment Make-up Test-1 Sem Period:22-23I

S.no	Regno	Batchno	Name	GE3451	IC3401	IC3402	IC3451	IC3452	Total	AVG	Att%
1	813821112002	245002	DEEPTHI SWARNAA. M	84	56	80	84	66	370	74.00	97.35[567.0,15.0
2	813821112004	245004	JEEVANATHAN. S	78					78	15.60	93.47[567.0,37.0
3	813821112007	245007	KESAVAN. T	A	A	A	A	A	0	.00	13.40[567.0,491.
4	813821112008	245008	KOUSHIK. T	66			88		154	30.80	85.36[567.0,83.0
5	813821112009	245009	LAWRANCE. J	62			76		138	27.60	97.71[567.0,13.0
6	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S	52		56	40	70	218	43.60	96.47[567.0,20.0
7	813821112016	245016	SACHIN. S	44		60			104	20.80	94.18[567.0,33.0
8	813821112303	245018	SHUJATH ALI KHAN. M			56			56	11.20	98.94[567.0,6.0]
9	813821112301	245019	FURKHAN ANAS. H	64					64	12.80	97.18[567.0,16.0
10	813821112302	245020	LOGESH. A	70	52	36	52		210	42.00	100.00[567.0,0.0

Performance Analysis

Total Appeared	10	10	10	10	10
Total Passed	7	2	4	4	2
Total Failed(Fail + Absent)	2	1	2	2	1
Above 80	1	0	1	2	0
Between 50-59	1	2	2	1	0
Pass%	70	20	40	40	20

Subcode	Title	Faculty Name
GE3451	ENVIRONMENTAL SCIENCES AND SUSTAINABILITY	Dr.G.Thulasi
IC3401	MODERN ELECTRONIC INSTRUMENTATION	Mr.R.Seetharaman
IC3402	EMBEDDED SYSTEMS AND IOT	Ms.B.Divya
IC3451	AUTOMATIC CONTROL SYSTEMS	Dr.A.Gopikrishnan
IC3452	ELECTRICAL MACHINES AND DRIVES	Mr.R.Balasubramanian

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:4 Section:A: Assessment Test -2 Sem Period:22-23EVEN

S.no	Regno	Batchno	Name	EI3451	GE3451	IC3401	IC3402	IC3451	IC3452	TP	Total	AVG	Att%
1	813821112001	245001	ANJALI. N	50	64	60	18	50	80	52	374	53.43	98.24[567.0,10
2	813821112002	245002	DEEPTHI SWARNAA. M	56	50	48	62	50	42	50	358	51.14	97.35[567.0,15
3	813821112004	245004	JEEVANATHAN. S	64	62	64	36	52	98	56	432	61.71	93.47[567.0,37
4	813821112005	245005	KAAVYA. N R	70	64	36	59	72	100	48	449	64.14	88.71[567.0,64
5	813821112006	245006	KARTHICK. N	80	68	52	42	56	96	36	430	61.43	83.42[567.0,94
6	813821112007	245007	KESAVAN. T	A	A	A	A	A	A	A	0	.00	13.40[567.0,49
7	813821112008	245008	KOUSHIK. T	56	55	68	6	42	90	44	361	51.57	85.36[567.0,83
8	813821112009	245009	LAWRANCE. J	76	57	56	32	54	80	A	355	50.71	97.71[567.0,13
9	813821112010	245010	MATHANGINI. M	86	76	86	59	80	100	66	553	79.00	97.53[567.0,14
10	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S	64	54	42	40	19	82	60	361	51.57	96.47[567.0,20
11	813821112012	245012	MOHAMMED ABDULLAH. N	62	79	64	59	62	88	66	480	68.57	97.35[567.0,15
12	813821112013	245013	MURSHATH BASHA. I	68	58	76	26	68	96	66	458	65.43	95.77[567.0,24
13	813821112014	245014	PRASANNA. V	90	71	78	68	84	100	70	561	80.14	92.77[567.0,41
14	813821112015	245015	PRAVEENA. M	62	71	44	62	66	96	52	452	64.57	92.42[567.0,43
15	813821112016	245016	SACHIN. S	50	38	44	A	52	78	58	320	45.71	94.18[567.0,33
16	813821112017	245017	THIRUMALAI KUMAR. G	80	62	94	56	83	100	64	539	77.00	99.29[567.0,4.(
17	813821112303	245018	SHUJATH ALI KHAN. M	88	44	78	27	42	82	50	411	58.71	98.94[567.0,6.(
18	813821112301	245019	FURKHAN ANAS. H	76	61	56	29	58	88	44	412	58.86	97.18[567.0,16
19	813821112302	245020	LOGESH. A	64	60	60	6	50	86	54	380	54.29	100.00[567.0,0

Performance Analysis

Total Appeared	19	19	19	19	19	19	19
Total Passed	18	16	13	7	15	17	13
Total Failed(Fail + Absent)	1	3	6	12	4	2	6
Above 80	5	0	2	0	3	16	0
Between 50-59	4	5	3	4	8	0	7
Pass%	95	84	68	37	79	89	68

Subcode	Title	Faculty Name
EI3451	INDUSTRIAL INSTRUMENTATION	Dr.M.Shanmugavalli
GE3451	ENVIRONMENTAL SCIENCES AND SUSTAINABILITY	Dr.G.Thulasi
IC3401	MODERN ELECTRONIC INSTRUMENTATION	Mr.R.Seetharaman
IC3402	EMBEDDED SYSTEMS AND IOT	Ms.B.Divya
IC3451	AUTOMATIC CONTROL SYSTEMS	Dr.A.Gopikrishnan
IC3452	ELECTRICAL MACHINES AND DRIVES	Mr.R.Balasubramanian
TP	TRAINING AND PLACEMENT	Dr.N.Subashini

Classwise Internal Assessment Mark Report

RANK HOLDERS & SUBJECT TOPPERS

Class:ICE Semester:4 Section:A: Assessment Make-up Test-2 Sem Period:22-23I

S.no	Regno	Batchno	Name	GE3451	IC3401	IC3402	IC3451	IC3452	Total	AVG	Att%
1	813821112001	245001	ANJALI. N			68			68	13.60	98.24[567.0,10.0
2	813821112002	245002	DEEPTHI SWARNAA. M		68			32	100	20.00	97.35[567.0,15.0
3	813821112004	245004	JEEVANATHAN. S			70			70	14.00	93.47[567.0,37.0
4	813821112005	245005	KAAVYA. N R		68				68	13.60	88.71[567.0,64.0
5	813821112006	245006	KARTHICK. N			A			0	.00	83.42[567.0,94.0
6	813821112007	245007	KESAVAN. T	A	A	A	A	A	0	.00	13.40[567.0,491.
7	813821112008	245008	KOUSHIK. T			70	A		70	14.00	85.36[567.0,83.0
8	813821112009	245009	LAWRANCE. J			58			58	11.60	97.71[567.0,13.0
9	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S		36	70	22		128	25.60	96.47[567.0,20.0
10	813821112013	245013	MURSHATH BASHA. I			86			86	17.20	95.77[567.0,24.0
11	813821112015	245015	PRAVEENA. M		62				62	12.40	92.42[567.0,43.0
12	813821112016	245016	SACHIN. S	20	58	38			116	23.20	94.18[567.0,33.0
13	813821112303	245018	SHUJATH ALI KHAN. M	35		70	26		131	26.20	98.94[567.0,6.0]
14	813821112301	245019	FURKHAN ANAS. H			90			90	18.00	97.18[567.0,16.0
15	813821112302	245020	LOGESH. A			16			16	3.20	100.00[567.0,0.0

Performance Analysis

Total Appeared	15	15	15	15	15
Total Passed	0	4	8	0	0
Total Failed(Fail + Absent)	3	2	4	4	2
Above 80	0	0	2	0	0
Between 50-59	0	1	1	0	0
Pass%	0	27	53	0	0

Subcode	Title	Faculty Name
GE3451	ENVIRONMENTAL SCIENCES AND SUSTAINABILITY	Dr.G.Thulasi
IC3401	MODERN ELECTRONIC INSTRUMENTATION	Mr.R.Seetharaman
IC3402	EMBEDDED SYSTEMS AND IOT	Ms.B.Divya
IC3451	AUTOMATIC CONTROL SYSTEMS	Dr.A.Gopikrishnan
IC3452	ELECTRICAL MACHINES AND DRIVES	Mr.R.Balasubramanian

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:4 Section:A: Assessment Test -3 Sem Period:22-23EVEN

S.no	Regno	Batchno	Name	EI3451	GE3451	IC3401	IC3402	IC3451	IC3452	Total	AVG	Att%
1	813821112001	245001	ANJALI. N	42	8	66	64	50	84	314	52.33	98.24[567.0,10.
2	813821112002	245002	DEEPTHI SWARNAA. M	32	15	72	50	52	66	287	47.83	97.35[567.0,15.
3	813821112004	245004	JEEVANATHAN. S	50	44	44	A	50	60	248	41.33	93.47[567.0,37.
4	813821112005	245005	KAAVYA. N R	52	37	62	74	72	84	381	63.50	88.71[567.0,64.
5	813821112006	245006	KARTHICK. N	62	23	34	A	50	80	249	41.50	83.42[567.0,94.
6	813821112007	245007	KESAVAN. T	A	A	A	A	A	A	0	.00	13.40[567.0,491
7	813821112008	245008	KOUSHIK. T	50	13	A	A	A	84	147	24.50	85.36[567.0,83.
8	813821112009	245009	LAWRANCE. J	72	17	54	60	66	86	355	59.17	97.71[567.0,13.
9	813821112010	245010	MATHANGINI. M	66	52	86	92	76	90	462	77.00	97.53[567.0,14.
10	813821112011	245011	MOHAMED FAYIQ SHAREEF. M F S	50	20	42	50	34	64	260	43.33	96.47[567.0,20.
11	813821112012	245012	MOHAMMED ABDULLAH. N	72	51	82	82	70	86	443	73.83	97.35[567.0,15.
12	813821112013	245013	MURSHATH BASHA. I	58	31	56	40	A	80	265	44.17	95.77[567.0,24.
13	813821112014	245014	PRASANNA. V	A	62	90	58	84	86	380	63.33	92.77[567.0,41.
14	813821112015	245015	PRAVEENA. M	42	A	64	A	72	84	262	43.67	92.42[567.0,43.
15	813821112016	245016	SACHIN. S	52	12	52	42	34	76	268	44.67	94.18[567.0,33.
16	813821112017	245017	THIRUMALAI KUMAR. G	68	37	84	82	82	78	431	71.83	99.29[567.0,4.0
17	813821112303	245018	SHUJATH ALI KHAN. M	52	25	90	50	56	74	347	57.83	98.94[567.0,6.0
18	813821112301	245019	FURKHAN ANAS. H	68	40	50	76	54	76	364	60.67	97.18[567.0,16.
19	813821112302	245020	LOGESH. A	50	16	74	30	18	62	250	41.67	100.00[567.0,0.

Performance Analysis

Total Appeared	19	19	19	19	19	19
Total Passed	14	3	14	11	13	18
Total Failed(Fail + Absent)	5	16	5	8	6	1
Above 80	0	0	5	3	2	10
Between 50-59	8	2	4	4	6	0
Pass%	74	16	74	58	68	95

Subcode	Title	Faculty Name
EI3451	INDUSTRIAL INSTRUMENTATION	Dr.M.Shanmugavalli
GE3451	ENVIRONMENTAL SCIENCES AND SUSTAINABILITY	Dr.G.Thulasi
IC3401	MODERN ELECTRONIC INSTRUMENTATION	Mr.R.Seetharaman
IC3402	EMBEDDED SYSTEMS AND IOT	Ms.B.Divya
IC3451	AUTOMATIC CONTROL SYSTEMS	Dr.A.Gopikrishnan
IC3452	ELECTRICAL MACHINES AND DRIVES	Mr.R.Balasubramanian

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:6 Section:A: Assessment Test -1 Sem Period:22-23EVEN

S.no	Regno	Batchno	Name	CS8391	EE8072	EI8092	EI8651	IC8651	MG8591[8]	TP	Total	AVG	Att%
1	813820112001	235001	BALAJI. V	36	70	52	54	52	50	40	354	50.57	98.81[505.0,6
2	813820112002	235002	BARANI DARAN. R	66	78	64	76	50	57	36	427	61.00	95.64[505.0,2
3	813820112003	235003	BOOMIKA. S	84	72	54	78	52	64	44	448	64.00	89.31[505.0,5
4	813820112004	235004	CHANDRU. V	60	74	40	58	52	46	24	354	50.57	97.03[505.0,1
5	813820112005	235005	HARI PRAKASH. R	86	80	74	96	70	60	44	510	72.86	98.42[505.0,8
6	813820112006	235006	HARI VARSHINI. S	62	66	50	42	52	88	42	402	57.43	92.28[505.0,3
7	813820112007	235007	IRSHATH AHMED. M S	58	54	50	56	28	62	60	368	52.57	92.28[505.0,3
8	813820112008	235008	JOE JASPER RAJA. B	58	50	50	40	38	72	58	366	52.29	93.07[505.0,3
9	813820112009	235009	KAVIN. G	64	78	71	40	58	80	51	442	63.14	94.65[505.0,2
10	813820112010	235010	KEERTHI VASAN. K	52	62	40	50	56	52	30	342	48.86	97.23[505.0,1
11	813820112011	235011	MUKESH. P	66	56	54	60	42	A	44	322	46.00	91.29[505.0,4
12	813820112012	235012	PRITHIV RAJ. A	86	78	73	82	62	54	46	481	68.71	96.83[505.0,1
13	813820112013	235013	RAGUL. P	42	50	40	A	14	43	20	209	29.86	92.08[505.0,4
14	813820112014	235014	ROHAN. S	56	58	50	38	20	52	52	326	46.57	92.87[505.0,3
15	813820112015	235015	SANTHOSH. R	58	66	26	52	20	37	36	295	42.14	94.26[505.0,2
16	813820112016	235016	SARAVANA KUMAR. K P	82	64	50	72	40	50	48	406	58.00	95.05[505.0,2
17	813820112017	235017	SHARAN. R	64	74	60	72	52	70	44	436	62.29	98.42[505.0,8
18	813820112018	235018	SHERENE AMALIA. G	72	86	60	74	72	81	60	505	72.14	99.01[505.0,5
19	813820112019	235019	SIVA SUBRAMANIAN. A	56	66	39	60	50	70	36	377	53.86	95.64[505.0,2
20	813820112020	235020	SUDHARSAN. B	24	60	50	52	18	28	32	264	37.71	98.22[505.0,9
21	813820112021	235021	SUDHARSAN. S	50	50	35	50	28	74	44	331	47.29	96.44[505.0,1
22	813820112022	235022	VIGNESH.S	44	82	50	50	36	62	26	350	50.00	98.22[505.0,9
23	813820112023	235023	VINOTH. M	50	64	50	38	38	53	46	339	48.43	91.49[505.0,4
24	813820112024	235024	VISHAL RAJ I P	76	80	60	76	58	66	34	450	64.29	94.65[505.0,2
25	813820112025	235025	YESHVANT. BA	74	58	50	80	34	64	54	414	59.14	94.06[505.0,3
26	813820112026	235026	YOKESWARAN. T	68	62	50	58	96	32	38	404	57.71	94.06[505.0,3
27	813820112303	235027	SUBHASAN. R	74	78	50	70	54	58	36	420	60.00	96.04[505.0,2
28	813820112301	235028	LEENA. R	74	74	52	54	58	66	38	416	59.43	97.43[505.0,1

Performance Analysis

Total Appeared	28	28	28	28	28	28	28
Total Passed	24	28	22	22	16	22	6
Total Failed(Fail + Absent)	4	0	6	6	12	6	22
Above 80	4	4	0	3	1	3	0
Between 50-59	8	7	15	10	12	8	4
Pass%	86	100	79	79	57	79	21

Subcode	Title	Faculty Name

CS8391	DATA STRUCTURES	Mr.V.Senthil Balaji
EE8072	MEMS AND NANO SCIENCE	Dr.M.Shanmugavalli
EI8092	THERMAL POWER PLANT INSTRUMENTATION	Dr.A.Gopikrishnan
EI8651	LOGIC AND DISTRIBUTED CONTROL SYSTEM	Mr.R.Seetharaman
IC8651	ADVANCED CONTROL SYSTEM	Dr.M.Shanmugavalli
MG8591[8]	PRINCIPLES OF MANAGEMENT	Dr.S.M.Giri Rajkumar
TP	TRAINING AND PLACEMENT	Dr.M.Shanmugavalli

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:6 Section:A: Assessment Make-up Test-1 Sem Period:22-23E . . .

S.no	Regno	Batchno	Name	CS8391	EI8092	EI8651	IC8651	MG8591[8]	Total	AVG	Att%
1	813820112001	235001	BALAJI. V	50					50	10.00	98.81[505.0,6.0
2	813820112004	235004	CHANDRU. V		60			64	124	24.80	97.03[505.0,15.
3	813820112006	235006	HARI VARSHINI. S			80			80	16.00	92.28[505.0,39.
4	813820112007	235007	IRSHATH AHMED. M S				50		50	10.00	92.28[505.0,39.
5	813820112008	235008	JOE JASPER RAJA. B			48	50		98	19.60	93.07[505.0,35.
6	813820112009	235009	KAVIN. G			72			72	14.40	94.65[505.0,27.
7	813820112010	235010	KEERTHI VASAN. K		52				52	10.40	97.23[505.0,14.
8	813820112011	235011	MUKESH. P				60	56	116	23.20	91.29[505.0,44.
9	813820112013	235013	RAGUL. P	58	52	24	56	68	258	51.60	92.08[505.0,40.
10	813820112014	235014	ROHAN. S			68	52		120	24.00	92.87[505.0,36.
11	813820112015	235015	SANTHOSH. R		36		52	52	140	28.00	94.26[505.0,29.
12	813820112016	235016	SARAVANA KUMAR. K P				60		60	12.00	95.05[505.0,25.
13	813820112019	235019	SIVA SUBRAMANIAN. A		40				40	8.00	95.64[505.0,22.
14	813820112020	235020	SUDHARSAN. B	54			28	56	138	27.60	98.22[505.0,9.0
15	813820112021	235021	SUDHARSAN. S		56		52		108	21.60	96.44[505.0,18.
16	813820112022	235022	VIGNESH.S	57			50		107	21.40	98.22[505.0,9.0
17	813820112023	235023	VINOTH. M			20	72		92	18.40	91.49[505.0,43.
18	813820112025	235025	YESHVANT. BA				50		50	10.00	94.06[505.0,30.
19	813820112026	235026	YOKESWARAN. T					32	32	6.40	94.06[505.0,30.

Performance Analysis

Total Appeared	19	19	19	19	19
Total Passed	4	4	3	11	5
Total Failed(Fail + Absent)	0	2	3	1	1
Above 80	0	0	1	0	0
Between 50-59	4	3	0	8	3
Pass%	21	21	16	58	26

Subcode	Title	Faculty Name
CS8391	DATA STRUCTURES	Mr.V.Senthil Balaji
EI8092	THERMAL POWER PLANT INSTRUMENTATION	Dr.A.Gopikrishnan
EI8651	LOGIC AND DISTRIBUTED CONTROL SYSTEM	Mr.R.Seetharaman
IC8651	ADVANCED CONTROL SYSTEM	Dr.M.Shanmugavalli
MG8591[8]	PRINCIPLES OF MANAGEMENT	Dr.S.M.Giri Rajkumar

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:6 Section:A: Assessment Test -2 Sem Period:22-23EVEN

S.no	Regno	Batchno	Name	CS8391	EE8072	EI8092	EI8651	IC8651	MG8591[8]	TP	Total	AVG	Att%
1	813820112001	235001	BALAJI. V	62	50	55	58	52	50	28	355	50.71	98.81[505.0,6
2	813820112002	235002	BARANI DARAN. R	76	70	70	80	78	60	28	462	66.00	95.64[505.0,2
3	813820112003	235003	BOOMIKA. S	0	80	71	A	A	76	32	259	37.00	89.31[505.0,5
4	813820112004	235004	CHANDRU. V	76	62	50	62	62	50	32	394	56.29	97.03[505.0,1
5	813820112005	235005	HARI PRAKASH. R	78	70	64	94	86	67	46	505	72.14	98.42[505.0,8
6	813820112006	235006	HARI VARSHINI. S	76	52	64	52	62	72	26	404	57.71	92.28[505.0,3
7	813820112007	235007	IRSHATH AHMED. M S	56	64	50	50	50	56	48	374	53.43	92.28[505.0,3
8	813820112008	235008	JOE JASPER RAJA. B	58	52	50	2	36	50	32	280	40.00	93.07[505.0,3
9	813820112009	235009	KAVIN. G	82	74	80	56	78	66	20	456	65.14	94.65[505.0,2
10	813820112010	235010	KEERTHI VASAN. K	62	58	27	44	34	54	16	295	42.14	97.23[505.0,1
11	813820112011	235011	MUKESH. P	80	70	55	12	54	36	24	331	47.29	91.29[505.0,4
12	813820112012	235012	PRITHIV RAJ. A	90	60	89	78	66	54	28	465	66.43	96.83[505.0,1
13	813820112013	235013	RAGUL. P	68	38	51	12	58	41	18	286	40.86	92.08[505.0,4
14	813820112014	235014	ROHAN. S	60	64	61	36	66	54	60	401	57.29	92.87[505.0,3
15	813820112015	235015	SANTHOSH. R	61	68	50	34	52	32	44	341	48.71	94.26[505.0,2
16	813820112016	235016	SARAVANA KUMAR. K P	72	50	50	86	14	44	44	360	51.43	95.05[505.0,2
17	813820112017	235017	SHARAN. R	73	68	53	82	76	75	50	477	68.14	98.42[505.0,8
18	813820112018	235018	SHERENE AMALIA. G	60	74	80	56	62	80	40	452	64.57	99.01[505.0,5
19	813820112019	235019	SIVA SUBRAMANIAN. A	61	66	50	4	56	56	24	317	45.29	95.64[505.0,2
20	813820112020	235020	SUDHARSAN. B	60	32	50	4	2	16	24	188	26.86	98.22[505.0,9
21	813820112021	235021	SUDHARSAN. S	80	60	58	8	54	70	28	358	51.14	96.44[505.0,1
22	813820112022	235022	VIGNESH.S	60	80	60	38	80	76	30	424	60.57	98.22[505.0,9
23	813820112023	235023	VINOTH. M	73	50	50	8	50	48	40	319	45.57	91.49[505.0,4
24	813820112024	235024	VISHAL RAJ I P	71	68	75	72	72	50	44	452	64.57	94.65[505.0,2
25	813820112025	235025	YESHVANT. BA	70	68	56	56	72	58	64	444	63.43	94.06[505.0,3
26	813820112026	235026	YOKESWARAN. T	77	52	20	76	94	35	46	400	57.14	94.06[505.0,3
27	813820112303	235027	SUBHASAN. R	73	66	63	58	56	62	32	410	58.57	96.04[505.0,2
28	813820112301	235028	LEENA. R	70	84	68	66	78	62	24	452	64.57	97.43[505.0,1

Performance Analysis

Total Appeared	28	28	28	28	28	28	28
Total Passed	27	26	26	16	23	21	3
Total Failed(Fail + Absent)	1	2	2	12	5	7	25
Above 80	4	3	3	4	3	1	0
Between 50-59	2	7	14	7	9	10	1
Pass%	96	93	93	57	82	75	11

Subcode	Title	Faculty Name

CS8391	DATA STRUCTURES	Mr.V.Senthil Balaji
EE8072	MEMS AND NANO SCIENCE	Dr.M.Shanmugavalli
EI8092	THERMAL POWER PLANT INSTRUMENTATION	Dr.A.Gopikrishnan
EI8651	LOGIC AND DISTRIBUTED CONTROL SYSTEM	Mr.R.Seetharaman
IC8651	ADVANCED CONTROL SYSTEM	Dr.M.Shanmugavalli
MG8591[8]	PRINCIPLES OF MANAGEMENT	Dr.S.M.Giri Rajkumar
TP	TRAINING AND PLACEMENT	Dr.M.Shanmugavalli

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:6 Section:A: Assessment Make-up Test-2 Sem Period:22-23E . .

S.no	Regno	Batchno	Name	EE8072	EI8092	EI8651	IC8651	MG8591[8]	Total	AVG	Att%
1	813820112003	235003	BOOMIKA. S			80	84		164	32.80	89.31[505.0,54.
2	813820112008	235008	JOE JASPER RAJA. B			50	52		102	20.40	93.07[505.0,35.
3	813820112010	235010	KEERTHI VASAN. K		16	14	50		80	16.00	97.23[505.0,14.
4	813820112011	235011	MUKESH. P			22		62	84	16.80	91.29[505.0,44.
5	813820112013	235013	RAGUL. P	12		2		56	70	14.00	92.08[505.0,40.
6	813820112014	235014	ROHAN. S			24			24	4.80	92.87[505.0,36.
7	813820112015	235015	SANTHOSH. R			10		30	40	8.00	94.26[505.0,29.
8	813820112016	235016	SARAVANA KUMAR. K P				10	60	70	14.00	95.05[505.0,25.
9	813820112019	235019	SIVA SUBRAMANIAN. A			A			0	.00	95.64[505.0,22.
10	813820112020	235020	SUDHARSAN. B	12		22	6	28	68	13.60	98.22[505.0,9.0
11	813820112021	235021	SUDHARSAN. S			26			26	5.20	96.44[505.0,18.
12	813820112022	235022	VIGNESH.S			50			50	10.00	98.22[505.0,9.0
13	813820112023	235023	VINOTH. M			6		58	64	12.80	91.49[505.0,43.
14	813820112026	235026	YOKESWARAN. T		28			28	56	11.20	94.06[505.0,30.

Performance Analysis

Total Appeared	14	14	14	14	14
Total Passed	0	0	3	3	4
Total Failed(Fail + Absent)	2	2	9	2	3
Above 80	0	0	1	1	0
Between 50-59	0	0	2	2	2
Pass%	0	0	21	21	29

Subcode	Title	Faculty Name
EE8072	MEMS AND NANO SCIENCE	Dr.M.Shanmugavalli
EI8092	THERMAL POWER PLANT INSTRUMENTATION	Dr.A.Gopikrishnan
EI8651	LOGIC AND DISTRIBUTED CONTROL SYSTEM	Mr.R.Seetharaman
IC8651	ADVANCED CONTROL SYSTEM	Dr.M.Shanmugavalli
MG8591[8]	PRINCIPLES OF MANAGEMENT	Dr.S.M.Giri Rajkumar

RANK HOLDERS & SUBJECT TOPPERS

Classwise Internal Assessment Mark Report

Class:ICE Semester:6 Section:A: Assessment Test -3 Sem Period:22-23EVEN

S.no	Regno	Batchno	Name	CS8391	EE8072	EI8092	EI8651	IC8651	MG8591[8]	TP	Total	AVG	Att%
1	813820112001	235001	BALAJI. V	85	58	66	40	16	62	23	350	50.00	98.81[505.0,6
2	813820112002	235002	BARANI DARAN. R	90	56	82	70	18	76	32	424	60.57	95.64[505.0,2
3	813820112003	235003	BOOMIKA. S	93	A	36	58	50	A	59	296	42.29	89.31[505.0,5
4	813820112004	235004	CHANDRU. V	88	60	34	40	50	50	30	352	50.29	97.03[505.0,1
5	813820112005	235005	HARI PRAKASH. R	81	64	84	86	68	78	39	500	71.43	98.42[505.0,8
6	813820112006	235006	HARI VARSHINI. S	83	52	A	50	24	A	30	239	34.14	92.28[505.0,3
7	813820112007	235007	IRSHATH AHMED. M S	80	A	36	34	20	50	48	268	38.29	92.28[505.0,3
8	813820112008	235008	JOE JASPER RAJA. B	80	32	26	28	16	54	41	277	39.57	93.07[505.0,3
9	813820112009	235009	KAVIN. G	82	56	66	72	62	68	36	442	63.14	94.65[505.0,2
10	813820112010	235010	KEERTHI VASAN. K	86	38	12	28	30	54	32	280	40.00	97.23[505.0,1
11	813820112011	235011	MUKESH. P	82	26	14	22	26	38	22	230	32.86	91.29[505.0,4
12	813820112012	235012	PRITHIV RAJ. A	87	60	72	74	56	56	31	436	62.29	96.83[505.0,1
13	813820112013	235013	RAGUL. P	72	42	40	2	34	42	A	232	33.14	92.08[505.0,4
14	813820112014	235014	ROHAN. S	75	50	16	30	32	52	36	291	41.57	92.87[505.0,3
15	813820112015	235015	SANTHOSH. R	88	38	24	8	12	58	30	258	36.86	94.26[505.0,2
16	813820112016	235016	SARAVANA KUMAR. K P	78	26	34	18	8	54	36	254	36.29	95.05[505.0,2
17	813820112017	235017	SHARAN. R	91	50	50	80	26	74	38	409	58.43	98.42[505.0,8
18	813820112018	235018	SHERENE AMALIA. G	72	78	70	66	50	72	51	459	65.57	99.01[505.0,5
19	813820112019	235019	SIVA SUBRAMANIAN. A	86	38	44	30	28	60	17	303	43.29	95.64[505.0,2
20	813820112020	235020	SUDHARSAN. B	73	34	20	14	6	36	19	202	28.86	98.22[505.0,9
21	813820112021	235021	SUDHARSAN. S	70	54	50	62	24	52	33	345	49.29	96.44[505.0,1
22	813820112022	235022	VIGNESH.S	75	58	66	12	50	64	26	351	50.14	98.22[505.0,9
23	813820112023	235023	VINOTH. M	81	50	44	24	28	58	20	305	43.57	91.49[505.0,4
24	813820112024	235024	VISHAL RAJ I P	81	52	78	70	50	64	38	433	61.86	94.65[505.0,2
25	813820112025	235025	YESHVANT. BA	82	52	30	2	14	60	57	297	42.43	94.06[505.0,3
26	813820112026	235026	YOKESWARAN. T	81	26	26	8	60	60	39	300	42.86	94.06[505.0,3
27	813820112303	235027	SUBHASAN. R	88	56	50	64	54	50	42	404	57.71	96.04[505.0,2
28	813820112301	235028	LEENA. R	97	84	58	64	50	60	A	413	59.00	97.43[505.0,1

Performance Analysis

Total Appeared	28	28	28	28	28	28	28
Total Passed	28	17	12	12	11	23	3
Total Failed(Fail + Absent)	0	11	16	16	17	5	25
Above 80	21	1	2	2	0	0	0
Between 50-59	0	12	4	2	8	11	3
Pass%	100	61	43	43	39	82	11

Subcode	Title	Faculty Name

CS8391	DATA STRUCTURES	Mr.V.Senthil Balaji
EE8072	MEMS AND NANO SCIENCE	Dr.M.Shanmugavalli
EI8092	THERMAL POWER PLANT INSTRUMENTATION	Dr.A.Gopikrishnan
EI8651	LOGIC AND DISTRIBUTED CONTROL SYSTEM	Mr.R.Seetharaman
IC8651	ADVANCED CONTROL SYSTEM	Dr.M.Shanmugavalli
MG8591[8]	PRINCIPLES OF MANAGEMENT	Dr.S.M.Giri Rajkumar
TP	TRAINING AND PLACEMENT	Dr.M.Shanmugavalli

Classwise Internal Assessment Mark Report

RANK HOLDERS & SUBJECT TOPPERS

Class:ICE Semester:8 Section:A: Assessment Test -1 Sem Period:

S.no	Regno	Batchno	Name	GE8073	Total	AVG	Att%
1	813819112001	225001	ABARNA. R	74	74	74.00	96.51[229.0,8.0]
2	813819112003	225003	ARUNKUMAR. R	0	0	.00	93.01[229.0,16.0]
3	813819112004	225004	BAIRAVI. S	0	0	.00	99.56[229.0,1.0]
4	813819112005	225005	BHARATH SAMVEL. D	0	0	.00	100.00[229.0,0.0]
5	813819112006	225006	DARWIN. I	0	0	.00	82.53[229.0,40.0]
6	813819112007	225007	DEEPAK. B	0	0	.00	96.51[229.0,8.0]
7	813819112008	225008	DHARSHINI. G	0	0	.00	86.03[229.0,32.0]
8	813819112009	225009	DHINESH. R	0	0	.00	100.00[229.0,0.0]
9	813819112011	225010	HARI KRISHNA. M	0	0	.00	100.00[229.0,0.0]
10	813819112010	225011	HARIHARAN. K	0	0	.00	82.53[229.0,40.0]
11	813819112012	225012	HARISH. R	0	0	.00	89.52[229.0,24.0]
12	813819112013	225013	HEMANTH. K K	0	0	.00	89.52[229.0,24.0]
13	813819112014	225014	JAYAKANTHAN. G P	0	0	.00	100.00[229.0,0.0]
14	813819112015	225015	JAYALAKSHMI. R	0	0	.00	86.03[229.0,32.0]
15	813819112016	225016	KANNAPPAN. S	0	0	.00	79.04[229.0,48.0]
16	813819112017	225017	KRISHNA KUMARAN. K	80	80	80.00	100.00[229.0,0.0]
17	813819112018	225018	MOHAMED FAHIM. K	0	0	.00	96.51[229.0,8.0]
18	813819112019	225019	MOHAMED YAHYA. A	0	0	.00	89.52[229.0,24.0]
19	813819112020	225020	MOHAN RAJ. B	0	0	.00	96.51[229.0,8.0]
20	813819112021	225021	MUTHUKUMARAN. K	0	0	.00	87.77[229.0,28.0]
21	813819112022	225022	NICOLAS NESAN. G	0	0	.00	96.51[229.0,8.0]
22	813819112023	225023	NITHISH. S	0	0	.00	73.80[229.0,60.0]
23	813819112024	225024	PARITHI KUMAR. J	0	0	.00	96.51[229.0,8.0]
24	813819112025	225025	PRABAHARAN. M	0	0	.00	87.77[229.0,28.0]
25	813819112027	225027	RAGAVANTIRAN. G	0	0	.00	93.01[229.0,16.0]
26	813819112028	225028	RAGHURAM. M	0	0	.00	96.51[229.0,8.0]
27	813819112029	225029	RATNAGIRISH. R K	0	0	.00	89.52[229.0,24.0]

28	813819112030	225030	REGENA ARSHNI. S	0	0	.00	86.03[229.0,32.0]
29	813819112031	225031	SAKTHIGANESH. K	0	0	.00	89.52[229.0,24.0]
30	813819112033	225033	SHANJITH KUMAR. I	0	0	.00	100.00[229.0,0.0]
31	813819112034	225034	SHARLENE . A	0	0	.00	100.00[229.0,0.0]
32	813819112035	225035	SHYAM PRAKASH. G P	0	0	.00	96.51[229.0,8.0]
33	813819112036	225036	SIVABALAN. D	0	0	.00	100.00[229.0,0.0]
34	813819112037	225037	SUBASH. NS	0	0	.00	86.03[229.0,32.0]
35	813819112038	225038	SUNDHARADEVAN. S	14	14	14.00	93.01[229.0,16.0]
36	813819112039	225039	SURYA. M	0	0	.00	89.52[229.0,24.0]
37	813819112040	225040	SWATHI. A	0	0	.00	100.00[229.0,0.0]
38	813819112041	225041	SYED ATHAULLAH. S	0	0	.00	89.52[229.0,24.0]
39	813819112042	225042	SYED FIZAL. S K	0	0	.00	84.28[229.0,36.0]
40	813819112043	225043	THANESHWARAN. S	0	0	.00	93.01[229.0,16.0]
41	813819112044	225044	THANGASABARI . S	0	0	.00	100.00[229.0,0.0]
42	813819112045	225045	VARUN. K	0	0	.00	100.00[229.0,0.0]
43	813819112046	225046	VIGNESH. G	0	0	.00	89.52[229.0,24.0]
44	813819112047	225047	VIGNESWARARAJAN. K	0	0	.00	93.01[229.0,16.0]

Performance Analysis

Total Appeared	44
Total Passed	2
Total Failed(Fail + Absent)	42
Above 80	1
Between 50-59	0
Pass%	**5**

Subcode	Title	Faculty Name
GE8073	FUNDAMENTALS OF NANO SCIENCE	Dr.M.Shanmugavalli

Classwise Internal Assessment Mark Report

RANK HOLDERS & SUBJECT TOPPERS

Class:ICE Semester:8 Section:A: Assessment Test -2 Sem Period:

S.no	Regno	Batchno	Name	GE8073	Total	AVG	Att%
1	813819112001	225001	ABARNA. R	70	70	70.00	96.51[229.0,8.0]
2	813819112003	225003	ARUNKUMAR. R	0	0	.00	93.01[229.0,16.0]
3	813819112004	225004	BAIRAVI. S	70	70	70.00	99.56[229.0,1.0]
4	813819112005	225005	BHARATH SAMVEL. D	0	0	.00	100.00[229.0,0.0]
5	813819112006	225006	DARWIN. I	0	0	.00	82.53[229.0,40.0]
6	813819112007	225007	DEEPAK. B	0	0	.00	96.51[229.0,8.0]
7	813819112008	225008	DHARSHINI. G	0	0	.00	86.03[229.0,32.0]
8	813819112009	225009	DHINESH. R	0	0	.00	100.00[229.0,0.0]
9	813819112011	225010	HARI KRISHNA. M	52	52	52.00	100.00[229.0,0.0]
10	813819112010	225011	HARIHARAN. K	0	0	.00	82.53[229.0,40.0]
11	813819112012	225012	HARISH. R	0	0	.00	89.52[229.0,24.0]
12	813819112013	225013	HEMANTH. K K	0	0	.00	89.52[229.0,24.0]
13	813819112014	225014	JAYAKANTHAN. G P	0	0	.00	100.00[229.0,0.0]
14	813819112015	225015	JAYALAKSHMI. R	0	0	.00	86.03[229.0,32.0]
15	813819112016	225016	KANNAPPAN. S	0	0	.00	79.04[229.0,48.0]
16	813819112017	225017	KRISHNA KUMARAN. K	76	76	76.00	100.00[229.0,0.0]
17	813819112018	225018	MOHAMED FAHIM. K	0	0	.00	96.51[229.0,8.0]
18	813819112019	225019	MOHAMED YAHYA. A	0	0	.00	89.52[229.0,24.0]
19	813819112020	225020	MOHAN RAJ. B	0	0	.00	96.51[229.0,8.0]
20	813819112021	225021	MUTHUKUMARAN. K	0	0	.00	87.77[229.0,28.0]
21	813819112022	225022	NICOLAS NESAN. G	0	0	.00	96.51[229.0,8.0]
22	813819112023	225023	NITHISH. S	0	0	.00	73.80[229.0,60.0]
23	813819112024	225024	PARITHI KUMAR. J	0	0	.00	96.51[229.0,8.0]
24	813819112025	225025	PRABAHARAN. M	0	0	.00	87.77[229.0,28.0]
25	813819112027	225027	RAGAVANTIRAN. G	0	0	.00	93.01[229.0,16.0]
26	813819112028	225028	RAGHURAM. M	0	0	.00	96.51[229.0,8.0]
27	813819112029	225029	RATNAGIRISH. R K	0	0	.00	89.52[229.0,24.0]

28	813819112030	225030	REGENA ARSHNI. S	0	0	.00	86.03[229.0,32.0]
29	813819112031	225031	SAKTHIGANESH. K	0	0	.00	89.52[229.0,24.0]
30	813819112033	225033	SHANJITH KUMAR. I	0	0	.00	100.00[229.0,0.0]
31	813819112034	225034	SHARLENE . A	0	0	.00	100.00[229.0,0.0]
32	813819112035	225035	SHYAM PRAKASH. G P	0	0	.00	96.51[229.0,8.0]
33	813819112036	225036	SIVABALAN. D	0	0	.00	100.00[229.0,0.0]
34	813819112037	225037	SUBASH. NS	0	0	.00	86.03[229.0,32.0]
35	813819112038	225038	SUNDHARADEVAN. S	56	56	56.00	93.01[229.0,16.0]
36	813819112039	225039	SURYA. M	0	0	.00	89.52[229.0,24.0]
37	813819112040	225040	SWATHI. A	0	0	.00	100.00[229.0,0.0]
38	813819112041	225041	SYED ATHAULLAH. S	0	0	.00	89.52[229.0,24.0]
39	813819112042	225042	SYED FIZAL. S K	0	0	.00	84.28[229.0,36.0]
40	813819112043	225043	THANESHWARAN. S	0	0	.00	93.01[229.0,16.0]
41	813819112044	225044	THANGASABARI . S	0	0	.00	100.00[229.0,0.0]
42	813819112045	225045	VARUN. K	0	0	.00	100.00[229.0,0.0]
43	813819112046	225046	VIGNESH. G	0	0	.00	89.52[229.0,24.0]
44	813819112047	225047	VIGNESWARARAJAN. K	0	0	.00	93.01[229.0,16.0]

Performance Analysis

Total Appeared	44
Total Passed	5
Total Failed(Fail + Absent)	39
Above 80	0
Between 50-59	2
Pass%	**11**

Subcode	Title	Faculty Name
GE8073	FUNDAMENTALS OF NANO SCIENCE	Dr.M.Shanmugavalli

Classwise Internal Assessment Mark Report

RANK HOLDERS & SUBJECT TOPPERS

Class:ICE Semester:8 Section:A: Assessment Test -3 Sem Period:

S.no	Regno	Batchno	Name	GE8073	Total	AVG	Att%
1	813819112001	225001	ABARNA. R	80	80	80.00	96.51[229.0,8.0]
2	813819112003	225003	ARUNKUMAR. R	0	0	.00	93.01[229.0,16.0]
3	813819112004	225004	BAIRAVI. S	80	80	80.00	99.56[229.0,1.0]
4	813819112005	225005	BHARATH SAMVEL. D	0	0	.00	100.00[229.0,0.0]
5	813819112006	225006	DARWIN. I	0	0	.00	82.53[229.0,40.0]
6	813819112007	225007	DEEPAK. B	0	0	.00	96.51[229.0,8.0]
7	813819112008	225008	DHARSHINI. G	0	0	.00	86.03[229.0,32.0]
8	813819112009	225009	DHINESH. R	0	0	.00	100.00[229.0,0.0]
9	813819112011	225010	HARI KRISHNA. M	60	60	60.00	100.00[229.0,0.0]
10	813819112010	225011	HARIHARAN. K	0	0	.00	82.53[229.0,40.0]
11	813819112012	225012	HARISH. R	0	0	.00	89.52[229.0,24.0]
12	813819112013	225013	HEMANTH. K K	0	0	.00	89.52[229.0,24.0]
13	813819112014	225014	JAYAKANTHAN. G P	0	0	.00	100.00[229.0,0.0]
14	813819112015	225015	JAYALAKSHMI. R	0	0	.00	86.03[229.0,32.0]
15	813819112016	225016	KANNAPPAN. S	0	0	.00	79.04[229.0,48.0]
16	813819112017	225017	KRISHNA KUMARAN. K	60	60	60.00	100.00[229.0,0.0]
17	813819112018	225018	MOHAMED FAHIM. K	0	0	.00	96.51[229.0,8.0]
18	813819112019	225019	MOHAMED YAHYA. A	0	0	.00	89.52[229.0,24.0]
19	813819112020	225020	MOHAN RAJ. B	0	0	.00	96.51[229.0,8.0]
20	813819112021	225021	MUTHUKUMARAN. K	0	0	.00	87.77[229.0,28.0]
21	813819112022	225022	NICOLAS NESAN. G	0	0	.00	96.51[229.0,8.0]
22	813819112023	225023	NITHISH. S	0	0	.00	73.80[229.0,60.0]
23	813819112024	225024	PARITHI KUMAR. J	0	0	.00	96.51[229.0,8.0]
24	813819112025	225025	PRABAHARAN. M	0	0	.00	87.77[229.0,28.0]
25	813819112027	225027	RAGAVANTIRAN. G	0	0	.00	93.01[229.0,16.0]
26	813819112028	225028	RAGHURAM. M	0	0	.00	96.51[229.0,8.0]
27	813819112029	225029	RATNAGIRISH. R K	0	0	.00	89.52[229.0,24.0]

28	813819112030	225030	REGENA ARSHNI. S	0	0	.00	86.03[229.0,32.0]
29	813819112031	225031	SAKTHIGANESH. K	0	0	.00	89.52[229.0,24.0]
30	813819112033	225033	SHANJITH KUMAR. I	0	0	.00	100.00[229.0,0.0]
31	813819112034	225034	SHARLENE . A	0	0	.00	100.00[229.0,0.0]
32	813819112035	225035	SHYAM PRAKASH. G P	0	0	.00	96.51[229.0,8.0]
33	813819112036	225036	SIVABALAN. D	0	0	.00	100.00[229.0,0.0]
34	813819112037	225037	SUBASH. NS	0	0	.00	86.03[229.0,32.0]
35	813819112038	225038	SUNDHARADEVAN. S	60	60	60.00	93.01[229.0,16.0]
36	813819112039	225039	SURYA. M	0	0	.00	89.52[229.0,24.0]
37	813819112040	225040	SWATHI. A	0	0	.00	100.00[229.0,0.0]
38	813819112041	225041	SYED ATHAULLAH. S	0	0	.00	89.52[229.0,24.0]
39	813819112042	225042	SYED FIZAL. S K	0	0	.00	84.28[229.0,36.0]
40	813819112043	225043	THANESHWARAN. S	0	0	.00	93.01[229.0,16.0]
41	813819112044	225044	THANGASABARI . S	0	0	.00	100.00[229.0,0.0]
42	813819112045	225045	VARUN. K	0	0	.00	100.00[229.0,0.0]
43	813819112046	225046	VIGNESH. G	0	0	.00	89.52[229.0,24.0]
44	813819112047	225047	VIGNESWARARAJAN. K	0	0	.00	93.01[229.0,16.0]

Performance Analysis

Total Appeared	44
Total Passed	5
Total Failed(Fail + Absent)	39
Above 80	2
Between 50-59	0
Pass%	**11**

Subcode	Title	Faculty Name
GE8073	FUNDAMENTALS OF NANO SCIENCE	Dr.M.Shanmugavalli

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.16.09.2022

Circular

Internal Assessment Test – I for II Year B.E./B.Tech., Classes will commence from 19.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
19.09.2022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
20.09.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
21.09.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
22.09.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.09.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
24.09.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.07.10.2022

Circular

Internal Assessment Test – II for III & IV Year B.E./B.Tech., Classes will commence from 10.10.2022 (Monday) as per the academic planner.

Test Duration

9.15 am to 10.45 am (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.05 a.m. Break

11.05 a.m. – 11.55 a.m. – 1st Hour

11.55 a.m. – 12.45 p.m. – 2nd Hour

Afternoon classes will be held as per regular timetable.

Question paper pattern will be informed by the respective subject handling staff member's

As per the instruction from the Anna University , Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal marks will be awarded by the Anna University based on your performance in I.A. Tests. Students are advised to take the Tests seriously and to score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2020 - 2024 _ (III) _Third Year - 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th October 2022	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
11th October 2022	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
12th October 2022	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
13th October 2022	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
14th October 2022	OCE552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
15th October 2022	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control		OA1551 - Environment and Agriculture

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2019 - 2023 _ (IV) _ Final Year - 7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10th October 2022	MG8591 – Principles of Management	EC8701 - Antennas and Microwave Engineering	EE8701- High Voltage Engineering	MG8591 - Principles of Management	EI8751 - INDUSTRIAL DATA NETWORKS	ME 8792 - Power Plant Engineering	CE8701 - Estimation, Costing and Valuation Engineering
11th October 2022	CS8791 – Cloud Computing	EC8751 - Optical Communication	EE8702- Power System Operation and Control	CS8792 - Cryptography and Network Security	EI8091 - INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	ME 8793 - Process Planning and Cost Estimation	CE8702 - Railways, Airports, Docks and Harbour Engineering
12th October 2022	CS8792 – Cryptography and Network Security	EC8791 - Embedded and Real Time Systems	EE8703- Renewable Energy Systems	OBM752 – Hospital Management	EC8093 - DIGITAL IMAGE PROCESSING	ME 8791 - Mechatronics	CE8703 - Structural Design and Drawing
13th October 2022	OBM752 – Hospital Management	EC8702 - Adhoc and Wireless Sensor Networks	EI8075- Fiber Optics and Laser Instrumentation	CS8791 - Cloud Computing	EI8075 - FIBRE OPTICS AND LASER INSTRUMENTATION	OMF 751 - Lean Six Sigma	EN8591 - Municipal Solid Waste Management
14th October 2022	IT8075 – Software Project Management	OIC751 - Transducer Engineering	EE8010- Power System Transients	IT8075 - Software Project Management	EI8692 - ELECTRONICS INSTRUMENTATION	ME 8072 - Renewable Sources of Energy / GE 8077 - Total Quality Management	OME754 - Industrial Safety
15th October 2022	GE8076 – Professional Ethics in Engineering	GE8076 - Professional Ethics in Engineering	OCS752- Introduction to C Programming	IT8005 - Electronic Commerce	OCS752 - INTRODUCTION TO C PROGRAMMING	ME 8099 - Robotics	
17th October 2022			EE8017-High Voltage Direct Current Transmission		GE8076 - PROFESSIONAL ETHICS IN ENGINEERING	IE8693 - Production Planning and Control	

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli – 620 012

Dt.9th December 2022

MODEL EXAMINATION _ FOR Second Year B.E./B.Tech., Classes will be from 12.12.2022 (Monday) as per the academic planner.

Test Duration

10.00 AM to 1.00 PM

As per the instruction from the Anna University, Chennai Model Exam Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal Marks will be awarded by the Anna University based on your performance in Model Exam students are advised to take the exam seriously and to score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

MODEL EXAM for Second Year _ December 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
12.12.022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
14.12.022	CS3353 - Foundations of Data Science	EC3351 - Control Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
16.12.022	CS3391 - Object Oriented Programming	EC3354 - Signals and Systems	EE3301 - Electromagnetic Fields	CD3291 - Data Structures and Algorithms	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
19.12.022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CS3391 - Object Oriented Programming	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
21.12.022	CS3352 - Digital Principles and Computer Organization	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3351 - Digital Principles and Computer Organization	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.12.022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell



Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.7.3.2023

Circular

Internal Assessment Test – I for II & III & IV Year B.E./B.Tech., Classes will commence from 9.03.2023 (Thursday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester

DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
9th March 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th March 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
13th March 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	EI3451 - Industrial Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
14th March 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3491 - Theory of Machines	CE3403 - Concrete Technology	AD3491 - Fundamentals of Data Science and Analysis	AL3452 - Operating Systems
15th March 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3401 - Modern Electronic Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
16th March 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	IC3452 - Electrical Machines and Drives	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CW3401 - Introduction to Business System

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
9th March 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8092 - Thermal Power Plant Instrumentation	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th March 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EE8072 - MEMS and Nano Science	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
13th March 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	EI8651 - Logic and Distributed Control System	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
14th March 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	IC8651 - Advanced Control System	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
15th March 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	CS8391 - Data Structures	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
16th March 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	MG8591 - Principles of Management	ME8694 - Hydralics and Pneumatics	

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
13th March 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
14th March 2023			EE8017 - High Voltage Direct Current Transmission			IE8693 - Production Planing and Control	
15th March 2023			GE8076 -Professional Ethics in Engineering				

Principal

SARANATHAN COLLEGE OF ENGINEERING 8138 EXAM CELL

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.5.4.2023

Circular (R)

Internal Assessment Test – 2 _for II & III Year B.E./B.Tech., Classes will commence from 10th April 2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – First Hour

11.50 a.m. – 12.45 p.m. – Second Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023 (R)

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester

DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
10th April 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	IT3401 - Web Essentials	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AD3491 - Fundamentals of Data Science and Analysis	AL3451 - Machine Learning
11th April 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	IC3401 - Modern Electronic Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	AL3451 - Machine Learning	CW3401 - Introduction to Business System
12th April 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3491 - Artificial Intelligence and Mechine Learning	IC3452 - Electrical Machines and Drives	ME3491 - Theory of Machines	CE3403 - Concrete Technology	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
13th April 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3451 - Introduction to Operating System	EI3451 - Industrial Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3452 - Operating Systems
17th April 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CS3492 - Database Management System
20th April 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023 (R)

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th April 2023	CS8651 - Internet Programming	MG8591 - Principles of Management		IT8602 - Mobile Communication		ME8693 - Heat and Mass Transfer	
11th April 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EI8092 - Thermal Power Plant Instrumentation	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
12th April 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	MG8591 - Principles of Management	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
13th April 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	EE8072 - MEMS and Nano Science	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
17th April 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	IC8651 - Advanced Control System	ME8692 - Finite Element Analysis	
20th April 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering	EE8691 - Embedded Systems	GE8076 - Professional Ethics in Engineering	CS8391 - Data Structures	ME8694 - Hydralics and Pneumatics	CE8601 - Design of Steel Structural Elements
21st April 2023					EI8651 - Logic and Distributed Control System		EN8592 - Wastewater Engineering

Principal

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	22.09.2022	Marks	50
Course code	CD3291	Course Title	Data Structures and Algorithms			
Batch No.		Duration	90 mins	Academic Year	2021 - 2022	
Year	II	Semester	III	Department	IT	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is an Abstract Data type (ADT)? Give examples.	CO1	R
2	Why is __init__() function used in Python?	CO1	U
3	List the types of namespaces in python.	CO1	R
4	Differentiate deep and shallow copying in python.	CO1	R
5	Define Algorithm.	CO2	R
6	What is recursion? Write the recursive algorithm for generating Fibonacci series.	CO2	U
7	Convert x*y+(w-s/t)into prefix and postfix notation.	CO3	R
8	When do overflow and underflow exceptions occur in stack?	CO3	U
9	What are the advantages and disadvantages of arrays?	CO3	U
10	What is a queue? Mention its operations.	CO3	R

Part – B

(Answer all the questions 2 x 10 = 20marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11a	Explain the features of OOPs .(6)	CO1	U
11b	Write a Python class to represent a bank account. The class contains name of the account holder, account number, type of account and balance amount as the data members. The member functions are: to initialize the data members, to deposit an amount, to withdraw amount after checking balance and to display name and balance. (4)	CO1	A
	OR		
12 a	.Explain the types of inheritance in Python with example (7)	CO1	U
12 b	Write a base class Animal and inherit two animals and write methods for displaying the kind of sound they produce. (3)	CO1	A
13	Explain asymptotic notations in detail.	CO2	U
	OR		
14a	Explain divide and conquer algorithm design technique and analyze it with an example.	CO2	U

Part – C

(Answer all the questions 1 x 10 = 10marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15.	Explain the following operations of List ADT. Write the algorithm. i. Inserting an element (3) ii. Deleting an element (3) iii. Search for an element (4)	CO3	U
16.a	Explain the operations of stack ADT with algorithms. (6)	CO3	U
16b	Write the algorithm for balancing parenthesis using stack. (4)	CO3	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Name of the Staff : Ms.N.Bhavani

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

Dharshana. C

ANSWER BOOK

Name	Dharshana. C			Year / Semester / Section	II / IV / A
Batch No.	244009	Date / Session	14.03.23 / FN	Department	IT
Course Code	CS3452	Course Title	Theory of Computation		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	S. Harshathi 14/3/23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	1	12	✓	5	✓	5	10
3	✓	2	13	✓				
4	✓	0	14	✓				10
5	✓	2	15					
6	✓	1	16	✓				8
7	✓	2					Total	28
8	✓	1						
9	✓	0						
10	✓	2						
Total		13						

41/50 Grand Total

Dr. R. M. Kalaikavi 15/3/23 Name and Signature of the Examiner with date

To be filled by the examiner

	1	2	3	4	5	6	Total
Course Outcomes							
Marks allotted	34	16					50
Marks Obtained	30	11					41

QAC Audit - Remarks

NIL

A. SRIDEVI

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF INFORMATION TECHNOLOGY

Subject Wise Internal Assessment Tests Mark Report

Class:IT Semester:6 Section:A **Subject Code:IT8602 Title : MOBILE COMMUNICATION**

Subject Handled by: bhavani-it

S.no	Regno	Batchno	Name	IATEST-A1 3/9/2023	IATEST-A2 4/10/2023	IATEST-A3 5/22/2023
1	813820205001	234001	ALMAS BEGUM. M	40	56	30
2	813820205002	234002	ARUL SAMUEL. A	30	50	A
3	813820205003	234003	ARUN RADHAKRISHNAN	52	50	14
4	813820205004	234004	AVINASH. P	10	44	6
5	813820205005	234005	BALAMURUGAN. R	38	42	38
6	813820205006	234006	BALAPAVITHRAN. P	10	38	4
7	813820205007	234007	CHIBI NARAYANA. B	50	50	40
8	813820205008	234008	DIVYE DARSHINY. S	68	70	30
9	813820205009	234009	GOUTHAM. R	40	50	24
10	813820205022	234010	NITHIYASRI H	58	70	52
11	813820205010	234011	ILAKKIA. E	72	68	38
12	813820205011	234012	KAMALNATH. D	32	34	A
13	813820205012	234013	KAVISELVAN. S	20	28	0
14	813820205013	234014	KRISHNAKUMAR. D	36	40	20
15	813820205014	234015	LETITIA. A	54	58	24
16	813820205015	234016	LINGESH WARAN. G	58	40	0
17	813820205016	234017	LOGESHWARAN. S	30	42	4
18	813820205017	234018	LOKESHWAR. S A	36	6	2
19	813820205018	234019	MAHABOOB NISHA. N	42	56	22
20	813820205019	234020	MANIBHARATHI. M	36	44	28
21	813820205020	234021	NAVEENKUMAR. S	38	58	28
22	813820205021	234022	NIRANJANA. R	36	64	20
23	813820205024	234023	PARKAVI. B	44	66	40
24	813820205025	234024	PAVETHRA. A	40	50	30
25	813820205026	234025	POONKUNRAN. T	64	62	66
26	813820205023	234026	PRAGADEESHRAM. S	52	68	44
27	813820205027	234027	PRIYA DARSHINI. P	28	52	18

28	813820205028	234028	PRIYADHARSHNI. K	40	62	34
29	813820205029	234029	RAHUL. B S	52	38	24
30	813820205030	234030	RAJALAKSHMI. R	58	58	38
31	813820205031	234031	RAJKUMAR. M	32	A	A
32	813820205032	234032	RITHEKA. B	42	58	A
33	813820205033	234033	ROHEETH KUMAR. R J	10	42	0
34	813820205034	234034	ROSHINI.N	38	50	A
35	813820205036	234035	SHAMABANU	50	50	2
36	813820205037	234036	SHAMEENA BANU. S	56	64	18
37	813820205038	234037	SHUNMUGA PRIYA. M	50	70	42
38	813820205039	234038	SIVANESH. S	60	62	4
39	813820205041	234040	SRINATH. M	38	44	40
40	813820205042	234041	SUBRAJA. C	50	54	30
41	813820205043	234042	SUDHAN KUMAR. S S	72	52	32
42	813820205044	234043	SWETHA. S	52	58	68
43	813820205045	234044	UMA. M	60	58	34
44	813820205046	234045	VENKATRAMAN. S S	40	50	2
45	813820205047	234046	VIGNESHWARAN. M	50	50	8
46	813820205035	234047	SAMUVEL. A	52	60	56
47	813820205301	234048	IMRAN AHAMED. A B	50	16	4
48	813820205302	234049	PRAVEEN KUMAR. K	30	A	4
49	813820205701	234050	RAMAJEYAM. A	56	64	38

N. BHAVANI

Dr. R. Thillaikarasi

H.O.D. (IT)
Saranathan College of Engg.,
Trichirapalli - 620 012.

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.Tech Information Technology

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester

COURSE CODE/TITLE	FOUNDATIONS OF DATA SCIENCE PCC 3 0 0 3	Batch	2021 - 2025
CLASS / SECTION	Sem 3 / IT	COURSE OUTCOME	1 2 3 4 5 6
COURSE COORDINATOR	Mr.P.Anand	TARGET	65 65 65 65 65 65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	40					72	28							36	36	18	10	60	112	64	36	18	10
1	813821205001	AARTHI. I	46	20					54	26							0	0	0	0	46	74	26	0	0	0
2	813821205002	ARUN KUMAR. J	34	12					30	20							0	0	0	0	34	42	20	0	0	0
3	813821205003	ASIKA. M	42	18					48	24							0	0	0	0	42	66	24	0	0	0
4	813821205004	ASWIN. B	46	26					46	24							0	0	0	0	46	72	24	0	0	0
5	813821205005	AUKUSTIN. R C	6	6					24	20							0	0	0	0	6	30	20	0	0	0
6	813821205006	BARATH. S	38	20					56	24							0	0	0	0	38	76	24	0	0	0
7	813821205007	BHARADWAJ. R	42	20					6	12							0	0	0	0	42	26	12	0	0	0
8	813821205008	CYRILSIGMOND. A	28	8					34	16							0	0	0	0	28	42	16	0	0	0
9	813821205009	DHARSHANA. C	38	16					36	24							0	0	0	0	38	52	24	0	0	0
10	813821205010	DILIP. R	38	20					48	24							0	0	0	0	38	68	24	0	0	0
11	813821205011	DINESH. S	26	16					36	16							0	0	0	0	26	52	16	0	0	0
12	813821205012	GAYATHRI. A	40	18					54	20							0	0	0	0	40	72	20	0	0	0
13	813821205013	GLORY NIKITA. G	44	26					60	20							0	0	0	0	44	86	20	0	0	0
14	813821205014	GOKULA KRISHNAJI. S J	22	8					24	14							0	0	0	0	22	32	14	0	0	0
15	813821205015	HARISH. C	44	22					34	20							0	0	0	0	44	56	20	0	0	0
16	813821205016	HARRIS SAMUEL. D	36	12					50	18							0	0	0	0	36	62	18	0	0	0
17	813821205017	HARSHITHA. S	42	26					52	18							0	0	0	0	42	78	18	0	0	0
18	813821205018	ISHWARYA. S	48	38					44	20							0	0	0	0	48	82	20	0	0	0
19	813821205019	JAI PRAKASH. R	18	12					40	18							0	0	0	0	18	52	18	0	0	0
20	813821205020	JANANI. M	28	10					24	12							0	0	0	0	28	34	12	0	0	0
21	813821205021	JOANNE PRANITA. G	38	20					30	16							0	0	0	0	38	50	16	0	0	0
22	813821205022	KABILAN. S	46	24					58	18							0	0	0	0	46	82	18	0	0	0
23	813821205023	KAVIYA. S	40	24					52	22							0	0	0	0	40	76	22	0	0	0
24	813821205024	KIRUTHIKA LAKSHMI. D	44	24					40	16							0	0	0	0	44	64	16	0	0	0
25	813821205025	KISHORE KUMAR. S	48	30					60	20							0	0	0	0	48	90	20	0	0	0
26	813821205026	KUMARA KABILAN. P	38	20					40	18							0	0	0	0	38	60	18	0	0	0
27	813821205027	LOKESH. T	50	26					38	22							0	0	0	0	50	64	22	0	0	0
28	813821205028	MADHUMITA. V	36	20					46	18							0	0	0	0	36	66	18	0	0	0
29	813821205029	MANIKANDAN. M	24	24					34	18							0	0	0	0	24	58	18	0	0	0
30	813821205030	MANIKANDAN. S	38	18					32	20							0	0	0	0	38	50	20	0	0	0
31	813821205031	MANJU SRI. S	44	18					62	18							0	0	0	0	44	80	18	0	0	0
32	813821205032	MOHAN BABU. V	20	12					24	16							0	0	0	0	20	36	16	0	0	0
33	813821205033	MURUGANANTHAN. C	30	28					38	22							0	0	0	0	30	66	22	0	0	0
34	813821205034	MUTHU KUMAR. S	30	18					22	16							0	0	0	0	30	40	16	0	0	0
35	813821205035	NEELAVENI. S	40	18					56	20							0	0	0	0	40	74	20	0	0	0
36	813821205036	NIKILRAJ. L	22	0					10	16							0	0	0	0	22	10	16	0	0	0
37	813821205037	NIVETAA. M	48	26					54	24							0	0	0	0	48	80	24	0	0	0
38	813821205038	NIVETHETHAA. A S	48	20					70	24							0	0	0	0	48	90	24	0	0	0
39	813821205039	PRIYADHARSHINI. S	36	26					70	24							0	0	0	0	36	96	24	0	0	0
40	813821205040	RAMALAKSHMI ALIES PONMATHI. S	12	12					24	10							0	0	0	0	12	36	10	0	0	0
41	813821205041	RAMA MARIYAPPAN. K	42	28					62	22							0	0	0	0	42	90	22	0	0	0
42	813821205042	RAMYA. B	44	36					60	20							0	0	0	0	44	96	20	0	0	0
43	813821205043	SABREEN BEGAM. M	38	30					58	22							0	0	0	0	38	88	22	0	0	0
44	813821205044	SAI ARAVIND. S	22	30					30	22							0	0	0	0	22	60	22	0	0	0
45	813821205045	SARAVANAKKUMAR. D	36	30					52	24							0	0	0	0	36	82	24	0	0	0
46	813821205046	SELLINE. E	36	30					48	24							0	0	0	0	36	78	24	0	0	0
47	813821205047	SIBINESH. G	32	14					32	14							0	0	0	0	32	46	14	0	0	0
48	813821205048	SRI DHANALAKSHMI. R	36	18					38	16							0	0	0	0	36	56	16	0	0	0
49	813821205049	SRIHARIHARAN. T	40	22					42	18							0	0	0	0	40	64	18	0	0	0
50	813821205050	SRIVIGNESH. S M	44	20					42	20							0	0	0	0	44	62	20	0	0	0

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51	813821205051	SUBHASHINI. R	50	30							56	22					0	0	0	0	50	86	22	0	0
52	813821205052	SUVETHA. V	48	30							64	24					0	0	0	0	48	94	24	0	0
53	813821205053	THIRISHA SRI. J	46	24							64	18					0	0	0	0	46	88	18	0	0
54	813821205054	VEERENDRAN. A	28	20							42	16					0	0	0	0	28	62	16	0	0
55	813821205055	VENGADASHAN. S	22	22							30	16					0	0	0	0	22	52	16	0	0
56	813821205056	VIBILAN. S	48	28							68	24					0	0	0	0	48	96	24	0	0
57	813821205057	VIJAY. I	36	18							28	14					0	0	0	0	36	46	14	0	0
58	813821205058	VISHNU PRIYA. S	50	34							66	26					0	0	0	0	50	100	26	0	0
59	813821205059	VISHWA. S	16	24							14	8					0	0	0	0	16	38	8	0	0
60	813821205060	YAMUNA. B	32	20							14	18					0	0	0	0	32	34	18	0	0
61	813821205301	GOKULAN. G	0	0							20	16					0	0	0	0	0	20	16	0	0
62	813821205302	RICHARD AARON. S	0	0							22	20					0	0	0	0	0	22	20	0	0
63	813821205303	SARAN. R	0	0							24	22					0	0	0	0	0	24	22	0	0
64	813821205304	SIVADHARSHINI. R B	0	0							16	20					0	0	0	0	0	16	20	0	0
																					CO's Target Value				
																					No. of Student Secured above CO's Target value				
																					Percentage of Student Secured above Target				

39.00	72.80	41.60	23.40	11.70	6.
27	23	0	0	0	
42.19	35.94	0.00	0.00	0.00	0.

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SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.Tech Information Technology

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	CS3352 FOUNDATIONS OF DATA SCIENCE PCC 3 0 0 3	Batch 2021 - 2025
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)		

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813821205001	AARTHI. I	A
2	813821205002	ARUN KUMAR. J	B+
3	813821205003	ASIKA. M	A
4	813821205004	ASWIN. B	A
5	813821205005	AUKUSTIN. R C	U
6	813821205006	BARATH. S	A
7	813821205007	BHARADWAJ. R	B+
8	813821205008	CYRILSIGMOND. A	B+
9	813821205009	DHARSHANA. C	B+
10	813821205010	DILIP. R	A+
11	813821205011	DINESH. S	A
12	813821205012	GAYATHRI. A	A
13	813821205013	GLORY NIKITA. G	A
14	813821205014	GOKULA KRISHNAJI. S J	B+
15	813821205015	HARISH. C	B+
16	813821205016	HARRIS SAMUEL. D	B+
17	813821205017	HARSHITHA. S	B+
18	813821205018	ISHWARYA. S	A+
19	813821205019	JAI PRAKASH. R	A
20	813821205020	JANANI. M	B+
21	813821205021	JOANNE PRANITA. G	A
22	813821205022	KABILAN. S	O
23	813821205023	KAVIYA. S	O
24	813821205024	KIRUTHIKA LAKSHMI. D	A+
25	813821205025	KISHORE KUMAR. S	A
26	813821205026	KUMARA KABILAN. P	B+
27	813821205027	LOKESH. T	B+
28	813821205028	MADHUMITA. V	A
29	813821205029	MANIKANDAN. M	B+
30	813821205030	MANIKANDAN. S	A+
31	813821205031	MANJU SRI. S	A+
32	813821205032	MOHAN BABU. V	A
33	813821205033	MURUGANANTHAN. C	A+
34	813821205034	MUTHU KUMAR. S	A
35	813821205035	NEELAVENI. S	A
36	813821205036	NIKILRAJ. L	B+
37	813821205037	NIVETAA. M	A
38	813821205038	NIVETHETHAA. A S	A
39	813821205039	PRIYADHARSHINI. S	A
40	813821205040	RAMALAKSHMI ALIES PONMATHI. S	A
41	813821205041	RAMA MARIYAPPAN. K	A+
42	813821205042	RAMYA. B	A
43	813821205043	SABREEN BEGAM. M	A
44	813821205044	SAI ARAVIND. S	A
45	813821205045	SARAVANAKKUMAR. D	A+
46	813821205046	SELLINE. E	B+
47	813821205047	SIBINESH. G	B+
48	813821205048	SRI DHANALAKSHMI. R	B+
49	813821205049	SRIHARIHARAN. T	A
50	813821205050	SRIVIGNESH. S M	B+
51	813821205051	SUBHASHINI. R	B+
52	813821205052	SUVETHA. V	A
53	813821205053	THIRISHA SRI. J	A
54	813821205054	VEERENDRAN. A	B+
55	813821205055	VENGADASHAN. S	B+
56	813821205056	VIBILAN. S	A
57	813821205057	VIJAY. I	B+
58	813821205058	VISHNU PRIYA. S	A+
59	813821205059	VISHWA. S	B+

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60	813821205060	YAMUNA. B	B+
61	813821205301	GOKULAN. G	UA
62	813821205302	RICHARD AARON. S	U
63	813821205303	SARAN. R	B+
64	813821205304	SIVADHARSHINI. R B	B+
No. of S/O Grade			2
No. of A/A+ Grade			25
No. of B/A Grade			0
No. of C/B+ Grade			0
No. of D/B Grade			0
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			27
CO-Attainment University			42.00

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CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C203.1	42.19	42.00	42.07	100.00	53.66	1
C203.2	35.94	42.00	39.58	100.00	51.66	1
C203.3	0.00	42.00	25.20	79.17	35.99	1
C203.4	0.00	42.00	25.20	81.77	36.51	1
C203.5	0.00	42.00	25.20	83.33	36.83	1
C203.6	0.00	42.00	25.20	100.00	40.16	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C203.1	3	3	3	3	3	3	2		1	1		3	3	3	
C203.2	3	3	3	3	3	3	2		1	1		3	3	3	
C203.3	3	3	3	3	3	3	2		1	1		3	3	3	
C203.4	3	3	3	3	3	3	2		1	1		3	3	3	
C203.5	3	3	3	3	3	3	2		1	1		3	3	3	
C203.6	3	3	3	3	3	3	2		1	1		3	3	3	
C203	3.00	3.00	3.00	3.00	3.00	3.00	2.00		1.00	1.00		3.00	3.00	3.00	

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C203.1	1.00	1.00	1.00	1.00	1.00	1.00	0.67		0.33	0.33		1.00	1.00	1.00	
C203.2	1.00	1.00	1.00	1.00	1.00	1.00	0.67		0.33	0.33		1.00	1.00	1.00	
C203.3	1.00	1.00	1.00	1.00	1.00	1.00	0.67		0.33	0.33		1.00	1.00	1.00	
C203.4	1.00	1.00	1.00	1.00	1.00	1.00	0.67		0.33	0.33		1.00	1.00	1.00	
C203.5	1.00	1.00	1.00	1.00	1.00	1.00	0.67		0.33	0.33		1.00	1.00	1.00	
C203.6	1.00	1.00	1.00	1.00	1.00	1.00	0.67		0.33	0.33		1.00	1.00	1.00	
C203	1.00	1.00	1.00	1.00	1.00	1.00	0.67		0.33	0.33		1.00	1.00	1.00	

P. [signature]
FACULTY

R. Thill
HOD/IT

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SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 EVEN SEMESTER

NAME OF THE DEPARTMENT IT | DETAILS OF EXAMINATION IA TEST : IA1 Makeup Test : MT1

YEAR/SEM/SEC : 2/4

Sl.No	Subject Code	List of Batch Nos Verified			
		IA Test	Makeup Test	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
1	IT3401	244023,16,61	244008,16,34	Y	Y	
2	CS3451	244037,53,62	244016,33,34	Y	Y	
3	CS3452	244045,01,09	244047,7,33	Y	Y	
4	CS3491	244027,15,03	244062,41,1	Y	Y	
5	CS3492	244024,033,38	244036,64,63	Y	Y	
6	GE3451	244009,043,054	244014,20,24	Y	Y	

VERIFIED BY

1 Athish 12/05/23

2

SIGNATURE WITH DATE OF THE QAC MEMBERS

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SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 EVEN SEMESTER

NAME OF THE DEPARTMENT: IT

DETAILS OF EXAMINATION: IA TEST: 1A1 Makeup Test: NIL

YEAR/SEM/SEC: 2/4

Sl.No	Subject Code	List of Batch Nos Verified				
		IA Test	Makeup Test	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
1	IT3401	244023,16,61	244008,16,34	Y	Y	
2	CS3451	244037,53,62	244016,3334	Y	Y	
3	CS3452	244045,01,09	244047,7,33	Y	Y	
4	CS3491	244027,15,03	244062,41,1	Y	Y	
5	CS3492	244024,033,35	244036,6433	Y	Y	
6	GE3451	244009,043,054	244014,2024	Y	Y	

VERIFIED BY

1 12/05/23

2

SIGNATURE WITH DATE OF THE QAC MEMBERS

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SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2018-2019 22-23 EVEN SEMESTER

NAME OF THE DEPARTMENT IT

DETAILS OF EXAMINATION IA TEST : I A2 Makeup Test : MT2

YEAR/SEM/SEC : 2/4

Sl.No	Subject Code	List of Batch Nos Verified		Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
		IA Test	Makeup Test			
1	IT3401	244023, 58, 27	244008, 36, 16	Y	Y	
2	CS3451	244009, 15, 62	244036, 65, 05	Y	Y	
3	CS3452	244003, 31, 02	244065, 52, 02	Y	Y	
4	CS3491	244001, 04, 02	244010, 05, 03	Y	Y	
5	CS3492	244023, 27, 31	244007, 21, 26	Y	Y	
6	GE3451	244018, 016, 037	244002, 11, 47	Y	Y	

VERIFIED BY

1 12/05/23

2

SIGNATURE WITH DATE OF THE QAC MEMBERS

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SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2018-2019 EVEN SEMESTER

NAME OF THE DEPARTMENT IT

DETAILS OF EXAMINATION IA TEST : I A3 Makeup Test : -

YEAR/SEM/SEC : 2/4

Sl.No	Subject Code	List of Batch Nos Verified		Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
		IA Test	Makeup Test			
1	IT3401	244042,04,05	-	Y	Y	
2	CS3451	244039,08,04	-	Y	Y	
3	CS3452	244007,61,09	-	Y	Y	
4	CS3491	244057,013,002	-	Y	Y	
5	CS3492	244011,012,013	-	Y	Y	
6	GE3451	244001,023,053	-	Y	Y	

VERIFIED BY

1 22/05/23

2

SIGNATURE WITH DATE OF THE QAC MEMBERS

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Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-23

Sem: ~~ODD~~/ EVEN

Dept: IT

Year/ Sem/Sec	2/4																
			Test I					Test II					Test III				
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
IT3401	Ms. G. Sathiya	IA Test	64	63	01	14	76	64	63	01	20	67.1	64	61	03	12	77
		Make up Test	15	14	01	02	80	20	20	–	8	60					
		Remarks	–					–					–				
CS3451	Ms. J. Sangeetha Priya	IA Test	64	62	02	11	80	64	64	–	5	92	64	64	–	13	80
		Make up Test	13	12	01	12	0	05	05	–	2	60					
		Remarks	Students did mistakes in Problems so advised to ...					–					–				
CS3452	Dr. R. Thillai -Karasi	IA Test	64	62	02	24	59	64	62	02	21	64	64	64	–	30	53
		Make up Test	26	26	–	23	12	23	23	–	8	65					
		Remarks	Students got confused with FAS.					–					Not prepared well				
Signature of QAC members with name			A. SRIDEVI					A. SRIDEVI					A. SRIDEVI				
Signature of HOD			R. Thill					R. Thill					R. Thill				
QAC In-Charge			S. A. Arul					S. A. Arul					S. A. Arul				
IQAC Co-ordinator																	
Principal																	

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Saranathan College of Engineering
QAC - Audit Report
Academic Year : 2022-23

Sem: ~~ODD~~/ EVEN
Dept IT

Year/ Sem/Sec	2/4																			
Subject Code	Name of faculty		Test I					Test II					Test III							
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %			
CS3491	Ms. N. Bhavani	IA Test	64	64	-	17	73	64	62	02	22	63	64	62	02	34	44			
		Make up Test	17	16	01	07	53	24	24	-	0	100								
		Remarks	Students got confused with the algorithms. The doubts were clarified and assignments given					—					Students have made mistakes in problems. Therefore they were asked to perform units for the University exams.							
CS3492	Mr. R. Rangaraj alias Muralidharan	IA Test	64	63	01	12	80	64	64	-	09	86	64	64	-	14	78			
		Make up Test	13	11	02	01	77	09	09	-	0	100								
		Remarks	—					—					—							
GE3451	Mr. Balaprasad [CHE]	IA Test	64	62	02	24	59	64	64	-	20	69	64	64	-	34	47			
		Make up Test	26	25	01	16	35	20	20	-	06	70								
		Remarks	Students didn't write Part-A well					—					Students didn't write elaborate answers							
Signature of QAC members with name			A. SRIDEVI					A. SRIDEVI					A. SRIDEVI							
Signature of HOD																				
QAC In-Charge																				
IQAC Co-ordinator																				
Principal																				

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SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT : B. Tech - IT

DETAILS OF EXAMINATION IA TEST : III Makeup Test :

YEAR/SEM/SEC : II / III

Sl.No	Subject Code	List of Batch Nos Verified		Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
		IA Test	Makeup Test			
1	MA3354	244012, 244047 244049	–	Y	–	
2	CS3351	244001, 244002, 244010	–	Y	–	
3	CS3352	244042, 244018, 244046.	–	Y	–	
4	CD3291	244003, 244013 244009	–	Y	–	
5	CS3391	244001, 244030, 244003.	–	Y	–	
6						

VERIFIED BY

1 D. Ambalavanan

2

SIGNATURE WITH DATE OF THE QAC MEMBERS

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SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT : B.E. Civil Engg

DETAILS OF EXAMINATION IA TEST : III Makeup Test :

Sl.No	Subject Code	List of Batch Nos Verified	Subject wise mark verified Y/N	Assignments verified Y/N	Remarks
YEAR/SEM/SEC : III / VI / A					
		IA Test / Makeup Test			
1	1413551	236001, 236013, 236030	Y	Y	
2	CE8591	236002, 236003, 236043	Y	Y	
3	GE8691	236025, 236012, 236002	Y	Y	
4	IT8501	236035, 236017, 236004	Y	Y	
5	CE8494	236001, 236031, 236033	Y	Y	
6	OCE552	236042, 236001, 236032	Y	Y	

VERIFIED BY

1 D. Sahaya Nancy 27/12/22

2

SIGNATURE WITH DATE OF THE QAC MEMBERS

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SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT : B.Tech. IT

DETAILS OF EXAMINATION IA TEST : II Makeup Test :

YEAR/SEM/SEC : IV / VII

Sl.No	Subject Code	List of Batch Nos Verified		Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
		IA Test	Makeup Test			
1	MA8591	224001, 224002, 224012		Y	N	–
2	CS8792	224027, 224044, 224030.		Y	N	–
3	CB8791	224013, 224033, 224051		Y	N.	–
4	OBM752	224008, 224015, 224017		Y	N	–
5	IT8075	224001, 224007 224014.		Y	N	–
6	IT8005	224030, 224057 224059		Y	N	–

VERIFIED BY

1 D. Barbara Nivitha 2/12/2022

2

SIGNATURE WITH DATE OF THE QAC MEMBERS

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Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022 - 2023 - ODD

Sem: ODD / EVEN

Year/ Sem/Sec: IV / VII

Dept: IT

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
MG8591	M. PADMA PRIYA	IA Test	61	47	03	11	54%	61	60	01	7	87	61	60	01	03	93%
		Make up Test	14	10	04	02	57%	08	07	01	2	63					
		Remarks	Due to placement 6 students didn't prepare well & 4 students gone for internship					—					—				
CS8792	Dr. R. THILLAI KARASI	IA Test	61	55	06	37	39%	61	61	0	29	53%	61	61	0	41	32.8%
		Make up Test	37	30	07	06	65%	20	26	03	05	72					
		Remarks	Due to placement students haven't prepared well. 6-students gone to internship.					Due to placement three students didn't prepare well.					Due to placement most of the students have n't attended the classes regularly.				
CS8791	R. RENGARAJ @ ITTURALIDHARAN	IA Test	61	55	06	07	78.6%	61	61	0	08	87	61	61	0	12	80%
		Make up Test	13	07	06	—	53.8%	08	04	04	0	50					
		Remarks	Due to Internship six students could not attended.					Due to internship 2 students didn't attend.									
Signature of QAC members with name			D. Boobala Murali 11/10/2022 D. BOOBALA MURALITHARAN					D. Boobala Murali 7/11/2022 D. BOOBALA MURALITHARAN					D. Boobala Murali 2/12/2022 D. BOOBALA MURALITHARAN				
Signature of HOD			R. Thill 11/10/22					R. Thill 7/11/22					R. Thill				
QAC In-Charge			S. A. A					S. A. A					S. A. A				
IQAC Co-ordinator																	
Principal																	

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Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022 - 2023 - ODD

Sem: ODD/ ~~EVEN~~

Dept IT

Year/ Sem/Sec	IV / VII		Test I					Test II					Test III				
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
OBM752	V. SENTHIL BALAJI	IA Test	61	61	-	04	93%	61	61	0	2	97	61	61	0	0	100%
		Make up Test	04	04	-	-	100%	02	02	0	0	100					
		Remarks	-					-					-				
IT8075	P. DINESH KUMAR.	IA Test	61	55	06	14	67%	61	59	02	9	82	61	50	11	14	59%
		Make up Test	20	14	06	06	70%	11	10	01	0	91					
		Remarks	-					-					Due to Placement Students not done well				
IT8005	P. ANAND	IA Test	61	52	09	02	81.9%	61	60	01	08	85	61	56	05	05	83%
		Make up Test	13	02	09	-	22%	09	09	0	2	78					
		Remarks	Due to Many students are in internship, they are not writing the Exam					-									
Signature of QAC members with name			D. Boobala Murali 11/10/2022 D. BOOBALA MURALITHARAN					D. Boobala Murali 7/11/2022 D. BOOBALA MURALITHARAN					D. Boobala Murali 2/12/2022 D. BOOBALA MURALITHARAN				
Signature of HOD			R. Thill 11/10/22					R. Thill 7/11/22					R. Thill				
QAC In-Charge			S. A. A					S. A. A					S. A. A				
IQAC Co-ordinator																	
Principal																	

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Saranathan College of Engineering
QAC - Audit Report
Academic Year : 2021-2023 - ODD

Sem: ODD/EVEN

Dept IT

Year/ Sem/Sec	III / V		Test I					Test II					Test III				
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
MA8551	Dr. S. SELVARANI	IA Test	49	48	01	15	68%	49	47	02	07	81.6%	49	49	0	17	65%
		Make up Test	16	15	01	03	80%	09	09	0	02	78.1%					
		Remarks	—					—									
CS8591	J.S. SANGEETHA PRIYA	IA Test	49	48	01	05	87.75	49	49	0	06	88%	49	47	02	09	77%
		Make up Test	06	03	03	01	33%	06	06	0	04	33%					
		Remarks	Due to illness, three students not attended the Test					Advised to study well. They are not able to merge the time.									
EC8691	P. SIVAGAMA SUNDARI	IA Test	49	47	02	13	69	49	49	0	04	92%	49	48	01	14	67%
		Make up Test	15	13	02	13	86.6	04	04	0	0	100%					
		Remarks	—					—									
Signature of QAC members with name			D. Boobala Murali Tharan					D. Boobala Murali Tharan					D. Boobala Murali Tharan				
Signature of HOD			P. Thilagavathi 11/10/22					P. Thilagavathi 7/11/22					P. Thilagavathi				
QAC In-Charge			S.A.A.					S.A.A.					S.A.A.				
IQAC Co-ordinator																	
Principal																	

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Saranathan College of Engineering
QAC - Audit Report
Academic Year : 2022 - 2023 - ODD

Year/ Sem/Sec: III / V

Sem: ODD/ EVEN

Dept: IT

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
IT8501	G.GATHIYA.	IA Test	49	49	-	10	79.59	49	48	01	08	82%	49	43	06	08	71%
		Make up Test	10	09	01	-	90%	09	06	03	0	67%					
		Remarks	-					-					-				
CS8494	M.PADMAPRIYA	IA Test	49	47	02	11	73%	49	47	02	11	73%	49	48	01	11	76%
		Make up Test	13	11	02	07	30.76	13	13	0	08	38%					
		Remarks	Students find it difficult to write the theory part					Students are not able to write as it is a complex topic. motivated to study better					-				
OCE552	R.RENGARAJ @ MURALI DHARAN.	IA Test	49	49	-	05	89.7	49	49	0	04	92%	49	47	02	11	73%
		Make up Test	05	04	01	-	80%	04	04	0	0	100%					
		Remarks	-					-					-				
Signature of QAC members with name			D. Boobala Murali 11/10/2022 D.BOOBALA MURALITHARAN					D. Boobala Murali 7/11/2022 D.BOOBALA MURALITHARAN					D. Boobala Murali 2/12/2022 D.BOOBALA MURALITHARAN				
Signature of HOD			P. Thilli 11/10/22					P. Thilli 7/11/22					P. Thilli				
QAC In-Charge			S.A.A 11/10/22					S.A.A 7/11/22					S.A.A				
IQAC Co-ordinator																	
Principal																	

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Saranathan College of Engineering
QAC - Audit Report
Academic Year : 2021 - 2022 (Odd)

Year/ Sem/Sec	II / III /																		
Subject Code	Name of faculty		Test I					Test II					Semester Exam						
			No. of students appeared	No. of students absent	No. of students passed	No. of failures	Pass %	No. of students appeared	No. of students absent	No. of students passed	No. of failures	Pass %	No. of students appeared	No. of students absent	No. of students passed	No. of failures	Pass %		
MA3354	D. GEETHA	IA Test	64	60	04	07	90%	64	64	0	21	67%	64	64	0	22	65%		
		Make up Test	13	13	-	02	85%	21	17	04	04	82%							
		Remarks	-					-					Less Absentees could participate in assignment and test. Encourage them.						
CS3351	J. SANGEETHA PRIYA.	IA Test	64	60	04	09	89.6%	64	62	02	12	84%	64	63	01	15	32%		
		Make up Test	13	13	-	02	84.6%	20	19	01	11	55%							
		Remarks	-					Did mistakes in Problems. Need more Practice & Assignment given.					-						
CS3352	P. ANAND	IA Test	64	60	04	17	67%	64	64	0	13	79%	64	64	0	04	94%		
		Make up Test	21	21	-	01	95%	18	18	0	01	94%							
		Remarks	-					-					-						
Signature of QAC members with name			D. Balasubramanian, D. BOOPALA MURALITHARAN					D. Balasubramanian, D. BOOPALA MURALITHARAN					D. Balasubramanian, D. BOOPALA MURALITHARAN						
Signature of HOD																			
QAC In-Charge			S. A. Anand																
IQAC Co-ordinator																			
Principal																			

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Saranathan College of Engineering
OAC - Audit Report
Academic Year : 2022 - 2023 (ODD)

Year/ Sem/Sec	III / VI																			
Subject Code	Name of faculty		Test I					Test II						Test III						
			No of Students registered	No of Students Attended	No of Absentees	No of Failures	% pass	No of Students registered	No of Students Attended	No of Absentees	No of Failures	% pass		No of Students registered	No of Students Attended	No of Absentees	No of Failures	% pass		
CD3291	N. BHAVANI	IA Test	64	60	04	15	70%	64	64	0	19	70%		64	61	02	17	70%		
		Make up Test	19	19	-	03	84%	19	19	0	15	21%								
		Remarks	-					Absent students attended Test-II will.												
CS3391	K. MUTHU KARUPAEE6	IA Test	64	60	04	08	81%	64	64	0	20	69%		64	63	01	14	78%		
		Make up Test	12	12	-	02	83%	20	20	0	08	60%								
		Remarks	-					-												
		IA Test																		
		Make up Test																		
		Remarks																		
Signature of OAC members with name																				
Signature of HOD																				
OAC In-Charge																				
IQAC Co-ordinator																				
Principal																				

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Saranathan College of Engineering
Tiruchirapalli – 12

Dt.16.09.2022

Circular

Internal Assessment Test – I for II Year B.E./B.Tech., Classes will commence from 19.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_ A&B	Second_ECE_ A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech.,	Second_CIVIL	Second_AIDS	Second_CSBS
19.09.2022	MA3354 - Discrete Mathematics	MA3355 - Random Processes and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3353 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
20.09.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EI3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
21.09.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EI3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3391 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
22.09.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EI3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics
23.09.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EI3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
24.09.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

14.10.2022

CIRCULAR

Internal Assessment Test- II for II Year B.E / B.Tech classes will commence from 15.10.2022 (Saturday) as per the Academic schedule.

Test duration:

09.15 a.m. to 10.45 a.m. (1 ½ Hour)

Class timings after the I.A.Test

10.45 a.m. – 11.05 a.m. : Break

11.05 a.m -11.55a.m – 1st hour

11.55 a.m – 12.45 p.m – 2nd hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

As per the instructions from Anna University Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal "as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

PRINCIPAL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Second_Internal Assessment Test for II Year_ October 2022

- 2021 - 2025 _ (II Year) Second Year - 3rd Semester

DATES	Second_CSE_A&B	Second_ECE_A&B	Second_EEE	Second_IT	Second_ICE	Second_Mech_	Second_CIVIL	Second_AIDS	Second_CSBS
11.10.2022	MA3354 - Discrete Mathematics	MA3355 - Probability and Linear Algebra	MA3303 - Probability and Complex Functions	MA3354 - Discrete Mathematics	MA3351 - Transforms and Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3351 - Transforms and Partial Differential Equations	MA3354 - Discrete Mathematics	MA3354 - Discrete Mathematics
17.10.2022	CS3352 - Digital Principles and Computer Organization	EC3351 - Control Systems	EE3301 - Electromagnetic Fields	CS3351 - Digital Principles and Computer Organization	EE3351 - Analog Electronics	ME3351 - Engineering Mechanics	ME3351 - Engineering Mechanics	CS3351 - Digital Principles and Computer Organization	CS3351 - Digital Principles and Computer Organization
18.10.2022	CS3353 - Foundations of Data Science	EC3354 - Signals and Systems	EE3302 - Digital Logic Circuits	CS3352 - Foundatio of Data Science	EE3352 - Digital System Design and Applications	ME3391 - EngineeringThermodynamics	CE3301 - Fluid Mechanics	AD3351 - Design and Analysis of Algorithms	AD3351 - Design and Analysis of Algorithms
19.10.2022	CS3351 - Data Structures	EC3352 - Digital Systems Design	EC3301 - Electron Devices and Circuits	CD3291 - Data Structures and Algorithms	EE3353 - Transducers Engineering	CE3391 - Fluid Mechanics and Machinery	CE3302 - Construction Materials and Technology	AD3351 - Database Design and Management	AD3491 - Fundamentals of Data science and Analytics
20.10.2022	CS3391 - Object Oriented Programming	EC3353 - Electronic Devices and Circuits	EE3303 - Electrical Machines - I	CS3391 - Object Oriented Programming	EE3354 - Linear Integrated Circuits and Applications	ME3392 - Engineering Materials and Metallurgy	CE3303 - Water Supply and Wastewater Engineering	AD3301 - Data Exploration and Visualization	CS3391 - Object Oriented Programming
21.10.2022		CS3353 - C Programming and Data Structures	CS3353 - C Programming and Data Structures		CS3353 - C Programming and Data Structures	ME3393 - Manufacturing Processes	CE3351 - Surveying and Levelling	AL3391 - Artificial Intelligence	CW3301 - Fundamentals of Economics

Exam Cell

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.08.09.2022

Circular

Internal Assessment Test – I for III & IV Year B.E./B.Tech., Classes will commence from 12.09.2022 (Monday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 A.M – 11.00 A.M Break

11.00 A.M. – 11.50 A.M – 3rd Hour

11.50 A.M – 12.45 P.M – 4 th Hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

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As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Principal

II year Mech –

III year Mech –

IV year Mech 'A' –

IV year Mech 'B' –

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - I _ September 2022

Batch - 2020 - 2024 _ Third Year - 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
12.09.2022	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
13.09.2022	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
14.09.2022	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
15.09.2022	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
16.09.2022	OEC552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
17.09.2022	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control	[illegible]	OA1551 - Environment and Agriculture

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.07.10.2022

Circular

Internal Assessment Test – II for III & IV Year B.E./B.Tech., Classes will commence from 10.10.2022 (Monday) as per the academic planner.

Test Duration

9.15 am to 10.45 am (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.05 a.m. Break

11.05 a.m. – 11.55 a.m. – 1st Hour

11.55 a.m. – 12.45 p.m. – 2nd Hour

Afternoon classes will be held as per regular timetable.

Question paper pattern will be informed by the respective subject handling staff member's

As per the instruction from the Anna University , Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The Internal marks will be awarded by the Anna University based on your performance in I.A. Tests. Students are advised to take the Tests seriously and to score more marks.

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2020 - 2024 _ (III) _Third Year - 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th October 2022	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
11th October 2022	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
12th October 2022	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
13th October 2022	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
14th October 2022	OCE552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
15th October 2022	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control		OA1551 - Environment and Agriculture

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - II _ October 2022

Batch - 2019 - 2023 _ (IV) _ Final Year - 7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10th October 2022	MG8591 – Principles of Management	EC8701 - Antennas and Microwave Engineering	EE8701- High Voltage Engineering	MG8591 - Principles of Management	EI8751 - INDUSTRIAL DATA NETWORKS	ME 8792 - Power Plant Engineering	CE8701 - Estimation, Costing and Valuation Engineering
11th October 2022	CS8791 – Cloud Computing	EC8751 - Optical Communication	EE8702- Power System Operation and Control	CS8792 - Cryptography and Network Security	EI8091 - INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	ME 8793 - Process Planning and Cost Estimation	CE8702 - Railways, Airports, Docks and Harbour Engineering
12th October 2022	CS8792 – Cryptography and Network Security	EC8791 - Embedded and Real Time Systems	EE8703- Renewable Energy Systems	OBM752 – Hospital Management	EC8093 - DIGITAL IMAGE PROCESSING	ME 8791 - Mechatronics	CE8703 - Structural Design and Drawing
13th October 2022	OBM752 – Hospital Management	EC8702 - Adhoc and Wireless Sensor Networks	EI8075- Fiber Optics and Laser Instrumentation	CS8791 - Cloud Computing	EI8075 - FIBRE OPTICS AND LASER INSTRUMENTATION	OMF 751 - Lean Six Sigma	EN8591 - Municipal Solid Waste Management
14th October 2022	IT8075 – Software Project Management	OIC751 - Transducer Engineering	EE8010- Power System Transients	IT8075 - Software Project Management	EI8692 - ELECTRONICS INSTRUMENTATION	ME 8072 - Renewable Sources of Energy / GE 8077 - Total Quality Management	OME754 - Industrial Safety
15th October 2022	GE8076 – Professional Ethics in Engineering	GE8076 - Professional Ethics in Engineering	OCS752- Introduction to C Programming	IT8005 - Electronic Commerce	OCS752 - INTRODUCTION TO C PROGRAMMING	ME 8099 - Robotics	
17th October 2022			EE8017-High Voltage Direct Current Transmission		GE8076 - PROFESSIONAL ETHICS IN ENGINEERING	IE8693 - Production Planning and Control	

Exam Cell

Principal

SARANATHAN COLLEGE OF ENGINEERING

08.11.2022

CIRCULAR

Internal Assessment Test- III for III and IV Year B.E / B.Tech classes will commence from 10.11.2022 (Thursday) as per the Academic schedule.

Test duration:

09.15 a.m. to 10.45 a.m. (1 ½ Hour)

Class timings after the I.A.Test

10.45 a.m. – 11.05 a.m. : Break

11.05 a.m -11.55a.m – 3rd hour

11.55 a.m – 12.45 p.m – 4th hour

Afternoon classes will be held as per regular timetable

Question Paper Pattern will be informed by the respective subject handling Staff Members

As per the instructions from Anna University Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal "as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

PRINCIPAL

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 3 _ November 2022

Batch - 2020 - 2024 _ Third Year_ III Year_ 5th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10-Nov-22	CS8591 – Computer Networks	EC8073 - MEDICAL ELECTRONICS	EE8501-Power System Analysis	IT8501 - Web Technology	EI8551 - Analytical Instruments	ME 8595 Thermal Engineering - II	CE8501 - Design of Reinforced Cement Concrete Elements
11-Nov-22	CS8501 – Theory of Computation	OMD551 - BIOMEDICAL INSTRUMENTATION	EE8551-Microprocessors and Microcontrollers	OCE552 - Geographic Information System	EI8552 - Industrial Instrumentation II	ME 8593 Design of Machine Elements	CE8502 - Structural Analysis - I
14-Nov-22	MA8551 – Algebra and Number Theory	EC8551 - COMMUNICATION NETWORKS	OMD551-Basics of Biomedical Instrumentation	MA8551 - Algebra and Number Theory	OCE551 - Air Polution and Control Engineering	ME 8501 Metrology and Measurements	EN8491 - Water Supply Engineering
15-Nov-22	CS8592 – Object Oriented Analysis and Design	EC8552 - COMPUTER ARCHITECTURE AND ORGANIZATION	CS8392-Object Oriented Programming	CS8494 - Software Engineering	EI8093 - Unit Operation and Control	ME 8594 Dynamics of Machines	CE8591 - Foundation Engineering
16-Nov-22	OEC552 – Geographical Information System	EC8501 - DIGITAL COMMUNICATION	EE8591-Digital Signal Processing	CS8591 - Computer Networks	EE8551 - Microprocessor and Microcontrollers	OAT 552 Internal Combustion Engines / ORO 551 Renewable Energy Sources	GE8071 - Disaster Management
17-Nov-22	EC8691 – Microprocessors and Microcontrollers	EC8553 - DISCRETE TIME SIGNAL PROCESSING	EE8552-Power Electronics	EC8691 - Microprocessors and Microcontrollers	EI8553 - Process Control		OA1551 - Environment and Agriculture

Exam Cell

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 3 _ November 2022

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10-Nov-22	MG8591 – Principles of Management	EC8701 - Antennas and Microwave Engineering	EE8701- High Voltage Engineering	MG8591 - Principles of Management	EI8751 - INDUSTRIAL DATA NETWORKS	ME 8792 - Power Plant Engineering	CE8701 - Estimation, Costing and Valuation Engineering
11-Nov-22	CS8791 – Cloud Computing	EC8751 - Optical Communication	EE8702- Power System Operation and Control	CS8792 - Cryptography and Network Security	EI8091 - INSTRUMENTATION IN PETROCHEMICAL INDUSTRIES	ME 8791 - Mechatronics	CE8702 - Railways, Airports, Docks and Harbour Engineering
14-Nov-22	CS8792 – Cryptography and Network Security	EC8791 - Embedded and Real Time Systems	EE8703- Renewable Energy Systems	OBM752 – Hospital Management	EC8093 - DIGITAL IMAGE PROCESSING	OMF 751 - Lean Six Sigma	CE8703 - Structural Design and Drawing
15-Nov-22	OBM752 – Hospital Management	EC8702 - Adhoc and Wireless Sensor Networks	EI8075- Fiber Optics and Laser Instrumentation	CS8791 - Cloud Computing	EI8075 - FIBRE OPTICS AND LASER INSTRUMENTATION	ME 8072 - Renewable Sources of Energy / GE 8077 - Total Quality Management	EN8591 - Municipal Solid Waste Management
16-Nov-22	IT8075 – Software Project Management	OIC751 - Transducer Engineering	EE8010- Power System Transients	IT8075 - Software Project Management	EI8692 - ELECTRONICS INSTRUMENTATION	ME 8099 -Robotics	OME754 - Industrial Safety
17-Nov-22	GE8076 – Professional Ethics in Engineering	GE8076 - Professional Ethics in Engineering	OCS752- Introduction to C Programming	IT8005 - Electronic Commerce	OCS752 - INTRODUCTION TO C PROGRAMMING	ME 8793 - Process Planning and Cost Estimation	
18-Nov-22			EE8017-High Voltage Direct Current Transmission		GE8076 - PROFESSIONAL ETHICS IN ENGINEERING	IE8693 - Production Planning and Control	

Exam Cell

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.7.3.2023

Circular

Internal Assessment Test – I for II & III & IV Year B.E./B.Tech., Classes will commence from 9.03.2023 (Thursday) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester									
DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
9th March 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th March 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3451 - Automatic Control Systems	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
13th March 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	EI3451 - Industrial Instrumentation	CE3491 - Strength of Materials	CE3402 - Strength of Materials	AD3491 - Fundamentals of Data Science and Analysis	MA3391 - Prabability and Statistics
14th March 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	IC3402 - Embedded Systems and IOT	ME3491 - Theory of Machines	CE3403 - Concrete Technology	MA3391 - Probability and Statistics	AL3452 - Operating Systems
15th March 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3401 - Modern Electronic Instrumentation	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
16th March 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	IC3452 - Electrical Machines and Drives	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering		CW3401 - Introduction to Business System

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
9th March 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8092 - Thermal Power Plant Instrumentation	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th March 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EE8072 - MEMS and Nano Science	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
13th March 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	EI8651 - Logic and Distributed Control System	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
14th March 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	IC8651 - Advanced Control System	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
15th March 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	CS8391 - Data Structures	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
16th March 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	MG8591 - Principles of Management	ME8694 - Hydralics and Pneumatics	

Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 1 _ March 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
13th March 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
14th March 2023						IE8693 - Production Planing and Control	

Principal

Saranathan College of Engineering
Tiruchirapalli – 12

Dt.5.4.2023

Circular

Internal Assessment Test – 2 _for II & III & IV Year B.E./B.Tech., Classes will commence from 10th April 2023 (MONDAY) as per the time table attached.

Test Duration

9.15 am to 10.45 pm (1 ½ Hours)

Class Timings after the I.A. Test

10.45 a.m. – 11.00 Break

11.00 a.m. – 11.50 a.m. – 3rd Hour

11.50 a.m. – 12.45 p.m. – 4th Hour

Afternoon classes will be held as per regular timetable

As per the instructions from Anna University, Chennai, the Internal Assessment Test Marks will be entered in the "Anna University WEB Portal" as soon as the tests are over. The internal marks will be awarded by Anna University Chennai based on your performance in I.A. Tests. Students are advised to take the I.A. Tests seriously and score more marks.

Question Paper Pattern will be informed by the respective subject handling Staff Members

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Principal

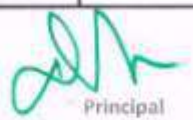
SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023

Batch - 2021- 2025 _ (2nd Year _ 4th Semester) II Year / IVth Semester									
DATES	Second_CSE - A &B	Second_ECE - A & B	Second_EEE - A & B	Second_IT	Second_ICE	Second_MECH	Second_CIVIL	Second_AIDS	Second_CSBS
10th April 2023	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	IC3451 - Automatic Control Systems	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability	GE3451 - Environmental Sciences and Sustainability
11th April 2023	CS3452 - Theory of Computation	EC3491 - Communication Systems	EE3401 - Transmission and Distribution	CS3451 - Introduction to Operating System	IC3401 - Modern Electronic Instrumentation	ME3492 - Hydralics and Pneumatics	CE8401 - Applied Hydraulics Engineering	AL3451 - Machine Learning	CS3492 - Database Management System
12th April 2023	CS3451 - Introduction to Operating System	EC3451 - Linear Integrated Circuits	EE3402 - Linear Integrated Circuits	CS3492 - Data Base Management System	IC3452 - Electrical Machines and Drives	CE3491 - Strength of Materials	CE3402 - Strength of Materials	MA3391 - Probability and Statistics	MA3391 - Prabability and Statistics
13th April 2023	CS3492 - Database Management System	EC3401 - Network and Security	EE3403 - Measurements and Instrumentation	CS3452 - Theory of Computation	EI3451 - Industrial Instrumentation	ME3491 - Theory of Machines	CE3403 - Concrete Technology	AD3491 - Fundamentals of Data Science and Analysis	AL3452 - Operating Systems
17th April 2023	CS3401 - Algorithms	EC3452 - Electromagnetic Fields	EE3404 - Microprocessor and Microcontroller	CS3491 - Artificial Intelligence and Mechine Learning	IC3402 - Embedded Systems and IOT	ME3493 - Manufacturing Technology	CE3404 - Soil Mechanics	AL3452 - Operating Systems	AL3451 - Machine Learning
20th April 2023	CS3491 - Artificial Intelligence and Mechine Learning	EC3492 - Digital Signal Processing	EE3405 - Electrical Machines - II	IT3401 - Web Essentials	GE3451 - Environmental Sciences and Sustainability	ME3451 - Thermal Engineering	CE3405 - Highway and Railway Engineering	CS3591- Computer Networks	CW3401 - Introduction to Business System



Principal

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023

Batch - 2020- 2024 _ (3rd Year _ Sixth Semester) III Year / VI th Semester

DATES	Third_CSE - A &B	Third_ECE - A & B	Third_EEE	Third_IT	Third_ICE	Third_MECH	Third_CIVIL
10th April 2023	CS8651 - Internet Programming	MG8591 - Principles of Management	EE8691 - Embedded Systems	IT8602 - Mobile Communication	EI8651 - Logic and Distributed Control System	ME8693 - Heat and Mass Transfer	CE8601 - Design of Steel Structural Elements
11th April 2023	CS8691 - Artificial Intelligence	EC8652 - Wireless Communication	EE8602 - Protection and Switchgear	CS8592 - Object Oriented Analysis and Design	EI8092 - Thermal Power Plant Instrumentation	ME8691 - Computer Aided Design and Manufacturing	CE8602 - Structural Analysis II
12th April 2023	CS8601 - Mobile Computing	EC8651 - Transmission Lines and RF Systems	EE8005 - Special Electrical Machines	CS8091 - Big Data Analytics	MG8591 - Principles of Management	MG8591 - Principles of Management	CE8603 - Irrigation Engineering
13th April 2023	CS8602 - Compiler Design	EC8095 - VLSI Design	EE8601 - Solid State Drives	IT8601 - Computational Intelligence	EE8072 - MEMS and Nano Science	ME8651 - Design of Transmission Systems	CE8604 - Highway Engineering
17th April 2023	CS8603 - Distributed Systems	EC8691 - Microprocessor and Microcontroller	GE8076 - Professional Ethics in Engineering	CS8092 - Computer Graphics and Multimedia	IC8651 - Advanced Control System	ME8692 - Finite Element Analysis	EN8592 - Wastewater Engineering
20th April 2023	CS8080 - Information Retrival Techniques	GE8076 - Professional Ethics in Engineering		GE8076 - Professional Ethics in Engineering	CS8391 - Data Structures	ME8694 - Hydralics and Pneumatics	

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 12

Exam Cell

Internal Assessment Test - 2 _ April 2023

Batch - 2019 - 2023 _ Final Year - IV Year _7th Semester

DATES	Final_CSE - A &B	Final_ECE - A & B	Final_EEE - A & B	Final_IT	Final_ICE	Final_MECH - A & B	Final_CIVIL
10th April 2023					GE8073 - Fundamentals of Nano Science	MG8591 - Principles of Management	CE8020 - Maintenance, Repair and Rehabilitation of Structures
11th April 2023			EE8017 - High Voltage Direct Current Transmission			IE8693 - Production Planing and Control	
12th April 2023			GE8076 -Professional Ethics in Engineering				

Principal

Saranathan College of Engineering

Tiruchirappalli

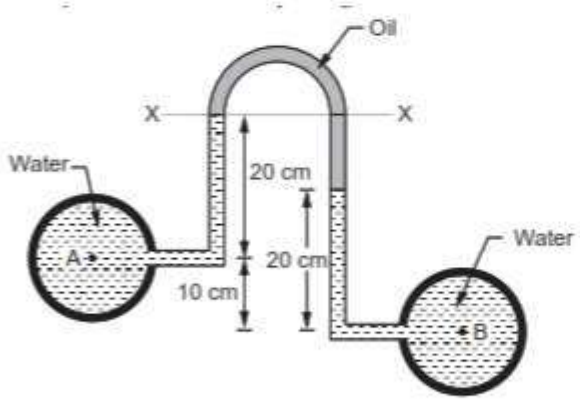
Internal Assessment Test - 1			Date/Session	22.09.2022/FN	Marks	50
Course code	CE3391	Course Title	Fluid Mechanics and Machinery			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II Year	Semester/ Section	III/ A& B	Department	Mechanical	

Part - A (10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	State Newton's law of viscosity	C204.1	R
2	State the assumptions made in Bernoulli's Equation	C204.1	R
3	Write down the effect of viscosity on temperature of liquids and gases	C204.1	U
4	List down the various types of fluid flow	C204.1	R
5	A plate 0.025 mm distance from a fixed plate, moves at 0.6 m/s and requires a force of 2 N per unit area to maintain this speed. Determine the fluid viscosity between the plates.	C204.1	E
6	Define surface tension	C204.1	R
7	Calculate the capillarity rise of water (σ = 0.073 N/m) for a glass tube of diameter 1mm.	C204.1	E
8	State Buckingham's π theorem.	C204.4	R
9	What do you understand by the term "Dimensionally homogeneous equation"	C204.4	R
10	Give the dimensions of the following physical quantities Surface Tension, Dynamic viscosity, Shear stress and Angular velocity	C204.4	U

Part - B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11. a.	i)An inverted U-tube manometer is connected to two pipes A and B A manometric fluid is oil with specific gravity 0.9. Find the pressure difference between A and B (6)  ii) Define Pascal's law and Hydrostatic law of pressure (4)	C204.1	E&R
	OR		
11. b.	The dynamic viscosity of an oil, used for lubrication between a shaft and sleeve is 6 poise. The shaft is of diameter 0.4m and rotates at 190 r.p.m. Calculate the power lost in the bearing for a sleeve length of 90 mm and the thickness of the oil film is 1.5mm	C204.1	E
12. a.	Define Newton's Second Law of Motion and Derive the Euler's Equation of Motion.	C204.1	R
	OR		
12. b.	The water is flowing through a pipe having diameters 20 cm and 15 cm at sections 1 and 2 respectively. The rate of flow through pipe is 40 litres/s. The section 1 is 6 m above datum and section 2 is 3 m above datum. If the pressure at section 1 is 29.43 N/cm^2, find the intensity of pressure at section 2.	C204.1	E

Part - C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
13. a.	The power P developed by a water turbine depends on rotational speed N, operating head H, gravity g, diameter D, and breadth B of the runner, density ρ and viscosity μ of water. Show by dimensional analysis that $P = \rho D^5 N^3 \phi [H/D, D/B, \rho D^2 N/\mu, ND/(gH)^{1/2}]$	C204.4	E
	OR		
13. b.	The power developed by hydraulic machines is found to depend on the head H, flow rate Q, density ρ, Speed N, runner diameter D and acceleration due to gravity g. Obtain suitable dimensionless parameters to correlate experimental results.	C204.4	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - I			Date/Session	15-09-22/ FN	Marks	50
Course code	ME8594	Course Title	Dynamics of machines			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	V	Department	Mechanical	

Part – A
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is meant by static balancing?	C304.3	R
2	What is meant by dynamic balancing?	C304.3	R
3	Why complete balancing is not possible in reciprocating engine?	C304.3	U
4	What is meant by swaying couple?	C304.3	R
5	Define hammer blow in reciprocating engines.	C304.3	R
6	What is meant by tractive force?	C304.3	R
7	Why balancing is very important?	C304.3	U
8	Define Precessional angular motion.	C304.6	R
9	Define gyroscopic couple.	C304.6	R
10	What is the effect of gyroscopic couple?	C304.6	U

Part – B
(Answer all the questions2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	A shaft carries four masses A, B, C and D of magnitude 200 kg, 300 kg, 400 kg and 200 kg respectively and revolving at radii 80 mm, 70 mm, 60 mm and 80 mm in planes measured from A at 300 mm, 400 mm and 700 mm. The angles between the cranks measured anticlockwise are A to B 45°, B to C 70° and C to D 120°. The balancing masses are to be placed in planes X and Y. The distance between the planes A and X is 100 mm, between X and Y is 400 mm and between Y and D is 200 mm. If the balancing masses revolve at a radius of 100 mm, find their magnitudes and angular positions.	C304.3	AZ
	or		
12	A, B, C and D are four masses carried by a rotating shaft at radii 100, 125, 200 and 150 mm respectively. The planes in which the masses revolve are spaced 600 mm apart and the mass of B, C and D are 10 kg, 5 kg, and 4 kg respectively. Find the required mass A and the relative angular settings of the four masses so that the shaft shall be in complete balance.	C304.3	AZ
13	The following data apply to an outside cylinder uncoupled locomotive: Mass of rotating parts per cylinder = 360 kg; Mass of reciprocating parts per cylinder = 300 kg; Angle between cranks = 90°; Crank radius = 0.3 m; Cylinder centres = 1.75 m; Radius of balance masses = 0.75 m; Wheel centres = 1.45 m. If whole of the rotating and two-thirds of reciprocating parts are to be balanced in planes of the driving wheels, find : 1. Magnitude and angular positions of balance masses, 2. Speed in kilometres per hour at which the wheel will lift off the rails when the load oneach driving wheel is 30 kN and the diameter of tread of driving wheels is 1.8 m, and3. Swaying couple at speed arrived at in (2) above.	C304.3	AZ
	or		
14	The three cranks of a three cylinder locomotive are all on the same axle and are set at 120°. The pitch of the cylinders is 1 metre and the stroke of each piston is 0.6 m. The reciprocating masses are 300 kg for inside cylinder and 260 kg for each outside cylinder and the planes of rotation of the balance masses are 0.8 m from the inside crank. If 40% of the reciprocating parts are to be balanced, find : 1. the magnitude and the position of the balancing masses required at a radius of 0.6 m ; and 2. the hammer blow per wheel when the axle makes 6 r.p.s.	C304.3	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15 a	An aeroplane makes a complete half circle of 50 metres radius, towards left,when flying at 200 km per hr. The rotary engine and the propeller of the plane has a mass of 400 kg and a radius of gyration of 0.3 m. The engine rotates at 2400 r.p.m. clockwise when viewed from the rear. Find the gyroscopic couple on the aircraft and state its effect on it.	C304.6	A
	OR		
15b	The turbine rotor of a ship has a mass of 3500 kg. It has a radius of gyration of 0.45 m and a speed of 3000 r.p.m. clockwise when looking from stern. Determine the gyroscopic couple and its effect upon the ship: 1. when the ship is steering to the left on a curve of 100 m radius at a speed of 36 km/h. 2. when the ship is pitching in a simple harmonic motion, the bow falling with its maximum velocity. The period of pitching is 40 seconds and the total angular displacement between the two extreme positions of pitching is 12 degrees.	C304.6	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - I			Date/ Session	14.09.2022/FN	Marks	50
Course code	ME8791	Course Title	Mechatronics			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year/	III	Semester/ Section	VII/ A&B	Department	Mechanical	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define the term Mechatronics.	C403.1	R
2	Draw the block diagram of measurement system.	C403.1	U
3	What are the key elements of mechatronics system.	C403.1	R
4	Differentiate sensor and transducers.	C403.2	U
5	Define Gauge factor in strain gauge.	C403.2	R
6	The output of a LVDT appears across the terminals of LVDT is 1.8 mV, When the core moves through a distance of 0.6 mm. Calculate the sensitivity of LVDT.	C403.2	U
7	What is meant by microprocessor?	C403.3	U
8	Define the objective of Address Latch Enable pin.	C403.3	U
9	Define flag register and list out the flags in 8085.	C403.3	R
10	List out the vectored interrupts in 8085 microprocessor.	C403.3	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11.	List and explain the steady state and dynamic characteristics of sensors.	C403.1	U
	Or		
12	Explain the construction and working principle of potentiometer with neat sketch.	C403.1	U
13	A parallel plate capacitance transducer uses plates of area 300mm^2 which are separated by a distance 0.2 mm. i) Determine the value of capacitance when the dielectric air having a permittivity of 7.85×10^{-12} F/m. ii) Determine the change in capacitance if a linear displacement reduces the distance between the plates to 0.19 mm. Also determine the ratio of per unit change of capacitance to per unit change of displacement. iii) If a mica sheet 0.02 mm thick is inserted in the gap, calculate the value of original capacitance and change in capacitance for the same displacement. Also calculate the ratio of per unit change in capacitance to per unit change in displacement. The dielectric constant of mica is 6.	C403.2	A
	Or		
14.	Explain the working principle of any two temperature sensors with neat sketches.	C403.2	U

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Draw the architecture diagram of 8085 microprocessor and explain the registers of 8085 in detail.	C403.3	U
	Or		
16.	Draw and explain in detail about the pin diagram of 8085 microprocessor.	C403.3	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirappalli

Internal Assessment Test - II			Date/Session	19.10.2022/FN	Marks	50
Course code	CE3391	Course Title	Fluid Mechanics and Machinery			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II Year	Semester/ Section	III/ A& B	Department	Mechanical	

Part - A (10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Boundary layer thickness	C204.2	R
2	Give the classification of boundary layer flow based on Reynolds number	C204.2	R
3	Calculate the boundary layer thickness for the fluid having kinematic viscosity $10^{-4}m^2/s$ and flowing with a velocity of 6m/s over a flat plate of length 600mm	C204.2	A
4	Define Displacement thickness	C204.2	R
5	Write down Chezy's Formula	C204.3	E
6	Define minor loss and list out the minor losses in the flow	C204.3	R
7	Differentiate HGL and EGL.	C204.3	E
8	What is the use of moody's diagram?	C204.3	R
9	Define equivalent pipe and write the equation for the equivalent pipe	C204.3	R
10	A liquid flowing through a pipe of diameter 300mm at the rate of 300 lps. Find the head loss due to friction for the length of 50m. Assume f=0.006	C204.3	E

Part - B(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11. a.	Derive the Darcy Weisbach's equation for the loss of head due to friction in pipes	C204.3	R
	OR		
11. b.	Two reservoirs are connected by a pipeline consisting of two pipes, one of 15cm diameter and length 6m and the other pipe of diameter 22.5cm and 16m length. If difference of water level in the two reservoirs is 6m, Calculate the discharge and draw E.G.L and H.G.L. Assume f = 0.04	C204.3	E
12. a.	Three pipes are connected in series to make a compound pipe. The ends of the compound pipe are connected with two tanks whose difference in water level is 20m. If f = 0.006 for all the pipes then determine the discharge through the compound pipe. Sizes of the pipes are given below Pipe1 of Diameter 200mm and length 400m Pipe2 of Diameter 400mm and length 800m Pipe3 of Diameter 600mm and length 1200m	C204.3	E
	OR		
12. b.	A straight 15cm dia pipeline 4 km long is laid between two reservoirs having a difference in water level is 26m. To increase the capacity of system an additional 2 km long pipe of same diameter is laid parallel to the first pipe. Calculate the increase in discharge by assuming 4f =0.025	C204.3	E

Part - C(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
13. a.	Define and derive Momentum thickness and Energy thicness	C204.2	R
	OR		
13. b.	Prove that for the following velocity distribution $\frac{u}{U} = \frac{3}{2}\left(\frac{y}{\delta}\right) - \frac{1}{2}\left(\frac{y}{\delta}\right)^3$ the ratio of momentum displacement thickness to boundary layer thickness is 39/280.	C204.2	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	18/10/2022/FN	Marks	50
Course code	ME 3391	Course Title	Engineering Thermodynamics			
Batch No.		Duration	90 min	Academic Year	2022-2023	
Year	II	Semester/ Section	III / A	Department	Mechanical Engg.	

Part – A (Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Define Second law of thermodynamics.	C203.2	R
2.	State Clausius statement of second law of thermodynamics.	C203.2	R
3.	State Kelvin Planck statement of second law of thermodynamics.	C203.2	R
4.	What is the difference between a heat pump and refrigerator?	C203.2	U
5.	Define COP.	C203.2	R
6.	Draw the schematic diagram of refrigerator.	C203.3	U
7.	List the different processes in a carnot cycle.	C203.3	U
8.	What do you understand by the concept of entropy?	C203.3	U
9.	What is the difference between reversible and irreversible process?	C203.3	U
10.	Draw the PV diagram for carnot cycle.	C203.3	U

Part – B (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	(i) A carnot engine receives 650KJ of heat from a source of unknown temperature and rejects 250KJ of it to a sink at 297K. Determine the temperature of the source and the thermal efficiency of the heat engine.(5M) (ii)An inventor claims to have developed an engine which receives 1000KJ at a temperature of 160°C. It rejects heat at a temperature of 5°C and delivers 0.12KW of mechanical work. Is it a valid claim? Justify your answer through Clausius Inequality.(5M)	C203.2	E
	OR		
12.	An engine is supplied with 1120KJ/s of heat. The source and the sink temperatures are maintained at 560K and 280K. Determine whether the following cases represent the reversible, irreversible or impossible heat engines. (i) 900KW of heat rejected (ii) 560KW of heat rejected (iii) 108KW of heat rejected	C203.2	E
13.	An office room is heated by a heat pump which is having 20% of COP of the ideal carnot pump. The room temperature is 24°C while the surrounding is at 0°C. If the heat supplied from the surrounding by the heat pump is 0.65KJ, determine the COP and work done.	C203.3	E
	OR		
14.	$5m^3$ of air at 20bar, 27°C is compressed upto 6bar pressure following $pv^{1.3}$=constant. It is subsequently expanded adiabatically to 2bar. Considering the two processes to be reversible, determine the net work, net heat transfer and change in entropy.	C203.3	E

Part – C (Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Derive the T-ds Equations	C203.6	R
	OR		
16.	Air in a closed vessel of fixed volume $0.15m^3$ exerts pressure of 12bar at 250°C. If the vessel is cooled so that the pressure falls to 3.5bar, determine the final temperature, heat transfer and change in entropy.	C203.6	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/Session	20.10.2022/ FN	Marks	50
Course code	ME3392	Course Title	ENGINEERING MATERIALS AND METALLURGY			
Batch No		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/Section	III	Department	Mechanical	

Part – A
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define heat treatment process?	C205.2	R
2	List any two factors that affect hardenability of steels.	C205.2	R
3	What is quenching?	C205.2	U
4	Differentiate Annealing and normalizing	C205.2	U
5	What is Tempering?	C205.2	R
6	What are the various types of Tool steels?	C205.3	U
7	what are the types of bronze?	C205.3	U
8	Which steel is called as carbon steel?	C205.3	R
9	List out different ferrous materials	C205.3	U
10	What is pig iron?	C205.3	U

Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Brief about tempering process and explain CCT diagram.	C205.2	R
	Or		
12	Discuss the method of constructing in Time-Temperature-Transformation Curve	C205.2	U
13	Explain the procedure of Jominy end quench test.	C205.2	U
	Or		
14	Explain the types of case hardening methods.	C205.2	U

Part – C
(Answer all the questions 1 x 10 = 10marks)

15	Write the composition, mechanical properties and application of Aluminum and brass	C205.3	U
	Or		
16	Write the composition, mechanical properties and application of Grey and white Cast iron.	C205.3	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering
Tiruchirapalli- 620 012

Internal Assessment Test - II			Date/ Session	21/10/2022/FN	Marks	50
Course code	ME3393	Course Title	Manufacturing Processes			
Batch No.		Duration	90 min	Academic Year	2022 - 2023	
Year	II	Semester/ Section	III / A	Department	Mechanical Engg.	

Part - A
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1.	What are the functions of flux in welding electrodes?	C206.3	U
2.	List the advantages of Resistance welding..	C206.3	U
3.	Give some filler metal used in Brazing.	C206.3	R
4.	What are the soldering methods?	C206.3	R
5.	State the limitation of friction welding process.	C206.3	U
6.	Distinguish between hot working and cold working of metal.	C206.4	U
7.	Why is drop forging called, So?	C206.4	R
8.	What does angle of bite in rolling process?	C206.4	R
9.	What are the various forming processes?	C206.4	R
10.	Define Tube Drawing.	C206.4	U

Part - B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11.	Explain the following with suitable sketches a. Resistance Seam welding (5 Marks). b. Friction Welding (5 Marks).	C206.3	U
	OR		
12.	What is meant by welding defects? Explain any five welding defects.	C206.3	U
13.	Explain the different forging operation with neat sketches.	C206.4	U
	OR		
14.	Explain the principle operation of following with sketches (a) Open die forging ,(b) Closed die forging (c)Impression die forging .	C206.4	U

Part - C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15.	With neat sketches explain the different types roll stand arrangements used in the rolling mills and state clearly for what purpose each arrangement is used.	C206.4	U
	OR		
16.	Define drawing and discuss the classifications with suitable diagram.	C206.4	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/Session	14.11.2022/FN	Marks	50
Course code	ME8501	Course Title	Metrology and Measurements			
Batch No.		Duration	90 min	Academic Year	2022 - 2023	
Year/	III	Semester/Section	V/ A	Department	Mechanical	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is meant by "Best size wire" in screw thread measurement?	C301.5	U
2	Explain drunken error in screw threads.	C301.5	U
3	How straightness is tested?	C301.5	R
4	Define flatness?	C301.5	U
5	What are the various methods for measuring roundness?	C301.5	U
6	Name the various types of pitch errors found in screw.	C301.5	U
7	Give the various elements of surface texture.	C301.5	R
8	Differentiate direct and indirect force measurements.	C301.6	U
9	What is the working principle of bimetallic strips?	C301.6	U
10	What is load cell?	C301.6	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	What are the methods of measuring surface finish? With neat sketch explain the construction and working of Tomlinson surface meter.	C301.5	U
	Or		
12	Draw and explain the measurement of effective diameter of a screw thread using three wire method.	C301.5	R
13	What are the methods of testing a gear? With neat sketch explain the principle of operation of Parkinson gear tester.	C301.5	R
	Or		
14	Name and explain the nomenclature of a gear with neat sketch. What are the various methods of measuring gear tooth thickness?	C301.5	U

Part – C

(Answer all the questions 1 x 10 = 10marks)

15	What are the types of force measurement? Explain Bourdon tube method with neat sketch.	C301.6	R
	Or		
16	What are various temperature measuring instruments? Explain detail about the working principle of RTD with neat sketch	C301.6	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date	10.11.2022/ F.N	Marks	50
Course code	ME8595	Course Title	Thermal Engineering II			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	III	Semester/ Section	05/A	Department	Mechanical	

Part – A

Q. No.	Questions	CO	Skills
1	Define refrigeration. Name a few applications.	301.5	U
2	Define COP of a Refrigerator.Determine the C.O.P. of refrigerator working on a Carnot cycle between 305K and 260K.	3015	E
3	What is a refrigerant? Name a few eco- friendly refrigerants.	301.5	R
4	How is the capacity of refrigeration measured? Give its definition.	301.5	U
5	Draw the T-s and p-h diagram for a reversed Carnot cycle.	301.5	AZ
6	What are the limitations of air refrigeration?	301.5	R
7	What is air-Conditioning? What is its classification based on seasons?	301.6	R
8	What is the function of a cooling tower? What are the types?	301.6	U
9	What is waste heat recovery? Name a few quality sources of WHR.	301.4	U
10	What is cogeneration? What is the need for cogeneration?	301.4	U

Part – B

Q. No.	Questions	CO	Skills
11a	Explain theTopping and Bottoming Cycles in Cogeneration with a schematic diagram.	301.4	U
	OR		
11b.	With a neat sketch, explain the working of a heat pipe. Mention its applications.	301.4	U
12 a	Describe Vapor compression refrigeration system along with neat layout	301.5	U
	OR		
12b	A cold storage plant is required to store 20 tonnes of fish. The fish is supplied at a temperature of 30□C. The specific heat of fish above freezing point is 2.93 kJ/kg K. The specific heat of fish below freezing point is 1.26 kJ/kg K. The fish is stored in colds storage which is maintained at −8°C. The freezing point of fish is −4°C. The latent heat of fish is 235 kJ/kg. If the plant requires 75 kW to drive it. Assume actual C.O.P. of the plant as 0.3 of the Carnot C.O.P. (i) Find the capacity of the plant. (ii) Calculate the time taken to achieve cooling.	301.5	E

Part – C

Q. No.	Questions	CO	Skills
13 .a)	Discuss in detail about i) summer air conditioning and ii) winter air conditioning with a neat sketch.	C301.6	U
	OR		
13. b)	Explain in detail about working of Natural draft cooling tower along with neat sketch.	C301.6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirappalli - 620012

Internal Assessment Test - III			Date/Session	11.11.2022	Marks	50
Course code	ME8593	Course Title	Design of Machine Elements			
Batch No.		Duration	90 Minutes	Academic Year	2022-2023/ODD	
Year	Third	Semester	Fifth	Department	Mechanical	

Part – A

(Answer all the questions 10 x 2 = 20 Marks)

Q. No.	Questions	CO	Skills
1.	What is the meaning of bolt M20x2.5?	C302.4	R
2.	State the advantages of threaded joints	C302.4	R
3.	Define the term self locking of power screws	C302.4	R
4.	Why welded joints preferred over riveted joints?	C302.4	R
5.	Name the possible modes of failure of riveting joint.	C302.4	R
6.	Classify springs.	C302.5	R
7.	What is spring index?	C302.5	R
8.	What is the function of the fly wheel?	C302.5	R
9.	What is flywheel effect?	C302.5	R
10.	Define the term fluctuation of energy	C302.5	R

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	In a steam engine, the cylinder head is subjected to a steam pressure of 1.2N/mm^2. The effective diameter of the cylinder is 280mm. The initial preload on the bolt is 1.5 times the steam load acting on the cylinder head. Take ultimate strength of the bolt = 500 N/mm^2, yield strength of the bolt = 300 N/mm^2, Endurance limit in bending = 220 N/mm^2, Fatigue stress concentration factor = 0.5, Factor of safety = 2 and Number of bolts = 10. Determine the size of the bolt.	C302.4	AZ
	Or		
12	Design a knuckle joint to transmit 150kN. Allowable stresses in tension, compression and shear are 80 N/mm^2, 150 N/mm^2 and 70 N/mm^2 respectively.	C302.4	AZ
13	Calculate the dimensions of the helical spring for a spring loaded safety valve from the following data: i. Valve Diameter = 65mm ii. Operating Pressure = 0.7 N/mm^2 iii. Maximum pressure when the valve blow off freely = 0.73 N/mm^2 iv. Valve lift when the pressure rises from 0.7 to 0.73 N/mm^2 = 3.2 mm v. Maximum permissible stress = 500 N/mm^2 vi. Spring index = 6 vii. Modulus of rigidity = 0.85 x 10^5 N/mm^2	C302.5	AZ
	Or		
14	Design a rim type cast iron flywheel for a four stroke engine from the following date: i. Power = 75 kW ii. Speed = 250 rpm iii. Fluctuation of speed = 2.5%	C302.5	AZ

	iv. Work done during power stroke is 30% greater than the average work done during whole cycle. v. Allowable shear stress for shaft = 45 N/mm^2 vi. Density of cast iron = 7200 kg/m^3 vii. Hoop stress = 5.2 N/mm^2 viii. Factor of safety = 2 ix. Material for key = C55		

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Design a suitable connecting rod for a 4-S engine by using the following data: i. Piston diameter = 68 mm ii. Stroke length = 75mm iii. Length of the connecting rod = 150 mm iv. Compression ratio = 8 : 1 v. Maximum explosion pressure = 3.5 N/mm^2 vi. Engine speed = 4400 rpm vii. Weight of the reciprocation parts / cylinder = 25 N Assume any relevant data required.	C302.5	AZ
	Or		
16	A safety valve of 70mm diameter is to blow off at a pressure of 1.1 MPa. The mean diameter of each coil is 150mm and compression of the spring is 25mm. Find the diameter of the spring bar, number of active turns and total number of coils. Take allowable shear stress is 130 MPa and modulus of rigidity is 0.084×10^6 MPa and wahl's stress factor is 1.	C302.5	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - III			Date/Session	16-11-2022/FN	Marks	50
Course code	OAT552	Course Title	Internal Combustion Engines			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	V / A	Department	Mechanical	

Part - A
(Answer all the questions - 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	What is HCCI engine? Write any 2 advantages of it?	C305-OE9.6	U
2.	Write a short note on pressure pickup used in engine measurement	C305-OE9.6	U
3.	Write any two merits and demerits of the scarified charge engine	C305-OE9.6	U
4.	List out the advantages of plasma ignition system	C305-OE9.6	U
5.	What is CRDI engine?	C305-OE9.6	U
6.	What are the fuels used in HCCI engines?	C305-OE9.6	U
7.	List out the types of hybrid system	C305-OE9.6	U
8.	What is E-Turbocharger	C305-OE9.6	U
9.	List out the type of fuel cells	C305-OE9.6	U
10.	Give some examples for series system	C305-OE9.6	U

Part - B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	With neat sketch explain the working and construction of HCCI engine	C305-OE.6	U
	OR		
12.	With neat sketch explain the working and construction of CRDI engine	C305-OE.6	U
13.	With neat sketch explain the working and construction of E-Turbocharger	C305-OE.6	U
	OR		U
14.	With neat sketch explain the working and construction of gasoline direct injection system	C305-OE.6	U

Part - C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	With neat sketch explain the working and construction of fuel cell	C305-OE.6	U
	OR		
16.	Explain the types of hybrid system	C305-OE.6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C).
Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment-III			Date/ Session	16/11/2022	Marks	50
Course code	ORO551	Course Title	Renewable Energy Sources			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	III	Semester/ Section	VI / A & B	Department	Mechanical	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define energy	C305-OE19.1	U
2	How the energy resources are classified	C305-OE19.1	U
3	What is meant by primary and secondary energy sources?	C305-OE19.1	U
4	Write any four differences between renewable and non renewable sources	C305-OE19.1	U
5	List the common forms of renewable energy sources	C305-OE19.1	U
6	What are the advantage and disadvantages of renewable energy sources	C305-OE19.1	U
7	List down the environmental impacts with solar power	C305-OE19.1	U
8	Mention the applications of solar energy	C305-OE19.1	U
9	Define solar constant	C305-OE19.1	U
10	What is total radiation	C305-OE19.1	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Classify sources of energy	C305-OE19.1	U
	OR		
12	Write a short notes on renewable and non renewable sources	C305-OE19.1	U
13	What are the roles of new and renewable energy sources?	C305-OE19.1	U
	OR		
14	Explain about the renewable energy potential in India	C305-OE19.1	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	With neat sketch explain the working and construction of geothermal energy	C305-OE19.6	U
	OR		
16	With neat sketch explain the working and construction of fuel cell	C305-OE19.6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/Session	15.11.2022/ FN	Marks	50
Course code	GE8077	Course Title	Total Quality Management			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	IV	Semester/Section	VII / A & B	Department	Mechanical	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is a QFD?	C404.4	U
2	What are the benefits of QFD?	C404.4	R
3	What are the goals of TPM	C404.4	U
4	What are the major loss areas?	C404.4	R
5	Give 6 steps of preparation stage of TPM?	C404.4	U
6	What is the need for ISO 9000?	C404.5	R
7	What are the benefits of ISO 14000?	C404.5	U
8	What are the requirements of ISO 14001?	C404.5	R
9	Define Quality Audits?	C404.5	R
10	Give four Basic Documentation of Quality system	C404.5	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	What are the six major loss areas need to be measured for implementing TPM?	C404.4	U
	Or		
12	Explain the details about the Documentation of Quality System	C404.4	R
13	Give the list of various elements of ISO 9000	C404.5	U
	Or		
14	Explain the details about difference between ISO 9000 and ISO 14000	C404.5	U

Part – C

(Answer all the questions 1 x 10 = 10marks)

15	List out what are the documents are need for quality and explain in detail	C404.5	R
	Or		
16	List out what are the important points for quality audits	C404.5	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering
Tiruchirappalli

Internal Assessment Test - III			Date/Session	18-11-2022/FN	Marks	50
Course code	IE 8693	Course Title	Production Planning and Control			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	IV Year	Semester/ Section	VII / A& B	Department	Mechanical	

Part - A
(Answer all the questions - 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Name the 4 elements of production control.	C411.E41.4	U
2.	Define Scheduling.	C411.E41.4	R
3.	Name any four techniques to record loading and scheduling.	C411.E41.5	R
4.	Name any four priority sequencing rules.	C411.E41.5	R
5.	Define Inventory.	C411.E41.5	R
6.	What do you mean by inventory control?	C411.E41.5	U
7.	Define buffer stock.	C411.E41.6	U
8.	Define work in progress.	C411.E41.6	R
9.	What is meant by Transit Inventory?	C411.E41.6	U
10.	Define Q system of replenishment.	C411.E41.6	R

Part - B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Discuss the concepts, inputs, characteristics, working, outputs, and benefits of MRP.	C411.4	E
	OR		
12.	Briefly explain about production scheduling.	C411.4	AZ
13.	Elaborate the scheduling types with examples.	C411.5	AZ
	OR		
14.	Explain ERP.	C411.5	R

Part - C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	What do you understand by inventory control? Explain the purpose of maintaining inventory in any production unit.	C411.6	U
	OR		
16.	Write a brief note on ABC analysis with a neat diagram.	C411.6	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

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Internal Assessment-III			Date/ Session	15/11/2022	Marks	50
Course code	ME8072	Course Title	Renewable Sources of Energy			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	IV	Semester/ Section	VII / A & B	Department	Mechanical	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q.No.	Questions	CO	Skills
1	Write any four difference between renewable and non-renewable sources	C405-E12.1	U
2	List some renewable sources of energy	C405-E12.1	U
3	What are the different forms of energy?	C405-E12.1	U
4	Define global warming	C405-E12. 1	U
5	How global warming is be controlled?	C405-E12. 1	U
6	List the significance renewable sources of energy	C405-E12.1	U
7	What are the 3 major energy sources?	C405-E12.1	U
8	Give a short note on renewable energy potential in India	C405-E12.1	U
9	Disadvantages of renewable energy sources	C405-E12.1	U
10	Define hybrid system	C405-E12.6	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q.No.	Questions	CO	Skills
11	Explain in details about environmental aspect of energy utilization	C405-E12. 1	U
	OR		
12	Discuss in detail about the applications of renewable energy	C405-E12. 1	U
13	Explain in details about renewable energy scenario India	C405-E12. 1	U
	OR		
14	Write the short notes on renewable and non-renewable sources	C405-E12. 1	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q.No.	Questions	CO	Skills
15	With neat sketch explain working and construction of fuel cell technology	C405-E12.6	U
	OR		
16	With neat sketch explain working and construction of hybrid systems	C405-E12.6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

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Internal Assessment Test - III			Date/Session	11.11.2022/FN	Marks	50
Course code	ME 8791	Course Title	Mechatronics			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	IV Year	Semester/ Section	VII/ A& B	Department	Mechanical	

Part - A
(Answer all the questions - 10 x 2 = 20 marks)

Q.No	Questions	CO	Skills
1	Define PLC.	C402.5	R
2	Draw NOT logic gate function using ladder diagram.	C402.5	U
3	List out the criteria for selection of PLC.	C402.5	R
4	Draw the ladder diagram of latching in PLC.	C402.5	U
5	What are the programming methods of PLCs?	C402.5	R
6	List out the stages involved in design of mechatronics system.	C402.6	R
7	Differentiate traditional and mechatronics design approach.	C402.6	U
8	A stepper motor has a step angle of 7.5 degree. How many pulses required for the motor to rotate through five complete revolutions?	C402.6	E
9	What are the sensors used in engine management system?	C402.6	R
10	Mention the applications of servo motor.	C402.6	U

Part - B
(Answer all the questions 2 x 10 = 20 marks)

Q.No	Questions	CO	Skills
11	Explain the architecture of a PLC and explain about its elements.	C402.5	U
	OR		
12.	Explain the following in detail i) Timers & ii) Counters.	C402.5	U
13	Draw the ladder diagram with programming for the following logic gates 1)OR 2)AND 3)NOR and 4)NAND	C402.5	A
	OR		
14	Create a ladder diagram for the following application: A Pneumatic system with double – solenoid valves controls two double acting cylinders A and B. The sequence is $A^+B^+B^-A^-$. Explain the logic of the PLC circuit used.	C402.5	AZ
	PART-C (10x1=10)		
15	Demonstrate in detail about the mechatronics design of pick and place robot with neat sketched	C402.6	A
	OR		
16	With necessary diagrams, explain in detail about the automatic car parking system	C402.6	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

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Internal Assessment Test - III			Date/ Session	10.11.2022	Marks	50
Course code	ME8792	Course Title	Power Plant Engineering			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	IV	Semester/ Section	VII / A & B	Department	Mechanical	

Part – A (Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is fuel cell?	C401.5	R
2	What is solar photovoltaic cell and module?	C401.5	U
3	List the difference between Francis and Kaplan turbine	C401.5	R
4	What is spillway?	C401.5	U
5	Why is a tall tower essential for mounting a horizontal axis wind turbine?	C401.5	U
6	Define load curve?	C401.6	U
7	What are the pollutants come out of the coal fired power plant?	C401.6	R
8	What is the purpose of electrostatic precipitator?	C401.6	U
9	Define plant use factor? How is it related to the plant capacity factor?	C401.6	U
10	What is main objective of tariff?	C401.6	U

Part – B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Write short notes on Wind power systems	C401.5	R
	OR		
12	Write short notes on bio gas	C401.5	R
13	What is a tariff? Discuss and compare various tariff used in practice	C401.6	R
	OR		
14	Explain the pollution control technologies including waste disposal option for nuclear power plant?	C401.6	U

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	A peak load on the thermal power plant is 75MW. The loads having maximum demands of 35 MW, 20 MW, 15 MW and 18MW are connected to the power plant. The capacity of the plant is 90 MW and annual load factor is 0.53. Calculate the average load on power plant, energy supplied per year, demand factor and diversity factor.	C401.6	A
	OR		
16	A power station has to supply load as follows: Time (hours) 0-6 6-12 12-14 14-18 18-24 Load (MW) 30 90 60 100 50 (i) Draw the load curve (ii) Draw the load duration curve (iii) Calculate the load factor (iv) Calculate the capacity of the plant and the plant capacity factor.	C401.6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	15.03.2023 / FN	Marks	50
Course code	ME 3493	Course Title	Manufacturing Technology			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	II	Semester/ Section	IV / A	Department	Mechanical Engg.	

Part - A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Classify the various angles in cutting tool.	C212.1	R
2.	Briefly explain the effect of rake angle during cutting.	C212.1	AZ
3.	Name the factors that contribute to poor surface.	C212.1	AZ
4.	List the various types of forces acting during metal cutting.	C212.1	R
5.	Classify the different types of cutting fluids.	C212.1	AZ
6.	What are the properties of coolants?	C212.1	U
7.	Define the term machinability.	C212.1	R
8.	Name the types of lathe.	C212.2	U
9.	What is apron?	C212.2	U
10.	List the specifications of a lathe.	C212.2	R

Part - B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	With the neat sketch, describe the various types of chips produced during metal machining.	C212.1	U
	OR		
12.	Explain a single point cutting tool nomenclature with a neat sketch	C212.1	AZ
13.	Compare and contrast orthogonal cutting and oblique cutting.	C212.1	AZ
	OR		
14.	(i) State the parameters that influence tool life and discuss. (ii) The Taylor's tool life equation for machining a C-45 Steel with HSS cutting tool at a feed of 0.2 mm/min and a depth of cut of 2mm is given by $VT^n = C$, where n and C are constants. The following observations are made: V (m/min) 25 35 T (min) 90 20	C212.1	E

Part - C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Explain with a neat sketch, the operations performed in a lathe machine	C212.1	AZ
	OR		
16.	What are the various methods of taper turning in lathe? Explain any two with a neat sketch.	C212.1	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	11-03-2023/FN	Marks	50
Course code	ME 3492	Course Title	Hydraulics and Pneumatics			
Batch No.		Duration	90 min	Academic Year	2022-2023	
Year	II	Semester/ Section	IV / A	Department	Mechanical Engg.	

Part - A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Define hydraulic power.	C212.1	R
2.	State Pascal's law along with formula.	C212.1	R
3.	State Bernoulli's theorem along with formula.	C212.1	R
4.	Differentiate laminar and turbulent flow.	C212.1	U
5.	Oil is flowing through a 30mm diameter pipe at 60 litres per minute. Determine the velocity?	C212.1	E
6.	Why gear pump cannot be used as variable displacement pump?	C212.1	A
7.	What is meant by hydraulic actuator? What are its types?	C212.2	U
8.	Differentiate between hydraulic motor and hydraulic pump.	C212.2	U
9.	Define directional control valve and draw the graphical symbol for 3/2 DCV.	C212.2	R
10.	Classify control valves.	C212.2	R

Part - B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	What is gear pump? Explain anyone gear pump with a neat sketch.	C212.1	U
	OR		
12.	What is vane pump? Explain the working of balanced vane pump with neat sketch.	C212.1	U
13.	A pump has a displacement of 80cm^3. It delivers 1.25Lps at 100rpm and 75bar. If the prime mover input torque is 110Nm, what is the overall efficiency of the pump? What is the theoretical torque required to operate the pump?	C212.1	E
	OR		
14.	The following data pertains to a hydraulic jack: Area(A1)= 50.8mm^2, Area(A2)= 508mm^2, Displacement(S1)= 25.4mm, Force(F1)= 444.822N. Determine: (1) Force (F2) (2) Displacement (S2), (3) Energy input and energy output	C212.1	E

Part - C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Explain any two reciprocating actuator with neat sketch.	C212.2	U
	OR		
16.	Explain about two-way and three-way DC valve with neat sketch.	C212.2	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

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Internal Assessment Test - I			Date/ Session	16.03.2023	Marks	50
Course code	ME3451	Course Title	Thermal Engineering			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	II	Semester/ Section	IV (A)	Department	MECHANICAL	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define (a) compression ratio (b) cut off ratio	C211.1	U
2	What is an air standard efficiency and their assumptions?	C211.1	R
3	Write major differences between Otto cycle and diesel cycle.	C211.1	U
4	How does brayton cycle work ? draw the brayton cycle in P-V	C211.1	R
5	What is function of regenerator and reheater	C211.1	U
6	Difference between 2stroke and 4stroke engine	C211.5	U
7	What are the applications of IC Engine?	C211.5	E
8	Draw the theoretical valve timing diagram for 4 stroke CI engine?	C211.5	U
9	Write the classification of IC engine	C211.5	U
10	Why scavenging is required in IC engine?	C211.5	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	An engine works on otto cycle. The initial pressure and temperature of the air is 1 bar and 40°C. 825 kJ of heat is supplied per kg of air at the end of compression find the temperature and pressure at all salient points if the compression ratio is 6. Also find the efficiency and MEP for the cycle. Assume air as the working fluid & take all ideal conditions.	C211.1	U
	OR		
12	Air standard Diesel cycle has a compression ratio of 8. The pressure at the beginning of the compression stroke is 1 bar and the temperature is 300K.The heat supplied is 1800 kJ/kg. Determine: (i) Air Standard efficiency, (ii) Pressure and temperature at salient points, (iii) Mean effective pressure. Assume, Cp = 1.005, R = 0.287.	C211.1	U
13	Draw and explain the working principle of 2-Stroke gasoline engine and also explain the actual valve timing diagram	C211.5	U
	OR		
14	Draw and explain the working principle of 4-Stroke compression ignition engine.	C211.5	U & A

Part – C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	A gas turbine on works air standard brayton cycle. The initial condition of air is 25 °C and 1 bar the maximum pressure and temperature are limited to 3bar and 650°C. Determine i) Cycle efficiency ii) Heat supplied and rejected per kg of air iii)Work output iv) Exhaust temperature.	C211.1	U
	OR		
16	An air-standard dual cycle has a compression ratio of 10. The pressure and temperature at the beginning of compression are 1 bar and 27 °C. The maximum pressure reached is 42 bar and maximum temperature is 1500°C. Determine (i) the temperature at the end of constant volume heat addition (ii)cut-off ratio (iii) work done per kg of air and (iv) the cycle efficiency. Assume Cp = 1.004 kJ/kg K, Cv = 0.717 kJ/kg K for air.	C211.1	U

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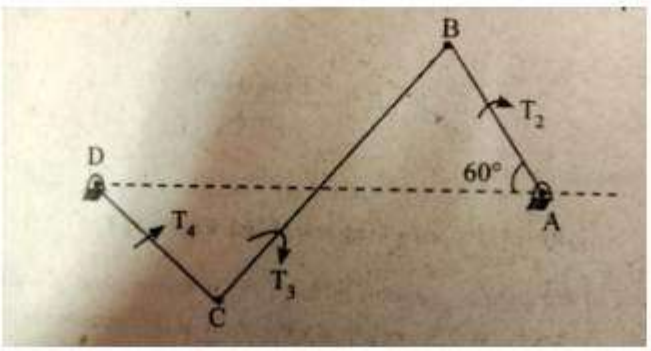
Internal Assessment Test - 1			Date/Session	14.03.2023/FN	Marks	50
Course code	ME3491	Course Title	Theory of Machines			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II Year	Semester/ Section	IV/ A	Department	Mechanical	

Part - A (10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Differentiate Mechanism and Machine	C210.1	U
2	Calculate the Degree of freedom for a mechanism with 14 links and 18 binary joints and a higher pair	C210.1	A
3	Classify Kinematic pairs based on nature of contact. Give examples.	C210.1	R
4	Define Pressure angle and where it will be maximum in the cam profile	C210.2	R
5	Why roller follower is preferred to that of a knife edge follower mechanism	C210.2	U
6	Define Inertia and Inertial Force	C210.5	R
7	Differentiate Static and Dynamic Equilibrium	C210.5	U
8	Define D'Alembert's Principle	C210.5	R
9	Distinguish between Crank effort and Piston effort	C210.5	U
10	Calculate the inertia force of a horizontal steam engine running at 200 rpm with obliquity ratio as 3 and having 100kg mass of reciprocating part when crank is at 30° from I.D.C	C210.5	E

Part - B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11. a.	Explain in detail about the Four bar Mechanism and its Inversions	C210.1	R
	OR		
11. b.	The Crank of a slider crank mechanism is 15cm and the connecting rod is 60cm long. The crank rotates at 300 rpm in the clockwise direction. When the crank at 45° from I.D.C, determine i) acceleration of the midpoint of the connecting rod and ii)angular acceleration of the connecting rod	C210.1	E
12. a.	The crank-pin circle radius of a horizontal engine is 300 mm. The mass of the reciprocating parts is 250 kg. When the crank has travelled 60° from I.D.C., the difference between the driving and the back pressures is 0.35 N/mm^2. The connecting rod length between centres is 1.2m and the cylinder bore is 0.5 m. If the engine runs at 250 r.p.m and if the effect of piston rod diameter is neglected, calculate : 1. Thrust on the cylinder walls, 2.Thrust in the connecting rod, 3. Crank-pin effort and 4. Turning moment on the crank shaft.	C210.5	E
	OR		
12. b.	In a four bar mechanism shown in figure, torques T_3 and T_4 have magnitudes of 30Nm and 20Nm respectively. The link lengths are AD=800mm, AB=300mm, BC=700mm and CD=400mm. Determine the required torque T_2 for attaining stable equilibrium of the mechanism 	C210.5	E

Part - C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
13. a.	Draw the profile of cam operating a roller follower with minimum radius of cam is 25mm, lift is 30 mm and roller diameter is 20 mm. The cam lifts the follower for 120° with SHM followed by dwell period of 30°. Then the follower lowers down during 150 ° of cam rotation with uniform velocity motion followed by dwell period.	C210.2	C
	OR		
13. b.	It is required to set out the profile of an offset cam to give the following motion to the reciprocating follower with a knife edge follower with the offset distance of 10mm to the right of the centre of cam: (i) Follower to have a stroke of 20 mm during 120° of cam rotation, (ii) Follower to dwell for 30° of cam rotation, (iii) Follower to return to its initial position during 120° of cam rotation, (iv) Follower to dwell for remaining 90° of cam rotation. The minimum radius of the cam is 30 mm. The out stroke and return stroke of the follower with uniform acceleration and retardation motion.	C210.2	C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

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Internal Assessment Test - I			Date/Session	14.03.2023 / FN	Marks	50
Course code	ME8651	Course Title	DESIGN OF TRANSMISSION SYSTEMS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI/ A	Department	MECHANICAL	

Part – A
(Answer all the questions 10 x 2 = 20marks)

Q.No.	Questions	CO	SKILLS
1	What is Herringbone gear?	C309.3	U
2	Explain the term pressure angle.	C309.3	U
3	State the law of gearing	C309.3	R
4	A pair of helical gears consists of 25 teeth pinion meshing with 75 teeth gear. The normal module is 4mm. Find the required helix angle, if the centre distance is exactly 170mm.	C309.3	E
5	A pinion with 20 teeth rotating at 1000 rpm drives the gear, which rotates at 175 rpm. The module is 3mm. Calculate the centre distance between the spur gears.	C309.3	E
6	What are the forces acting on a bevel gear?	C309.4	U
7	What is zerol bevel gear?	C309.4	U
8	What is crown gear?	C309.4	U
9	Define the term cone distance	C309.4	U
10	When do we use bevel gears?	C309.4	U

Part – B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	A compressor running at 300rpm is driven by a 15 kW, 1200 rpm motor through a 14.5° full depth spur gears. The center distance is 375 mm. The motor pinion is made up of C30 forged steel hardened & tempered and the driven gear is made up of cast iron grade 25. Design the spur gear drive by Lewis and Buckingham's equation. Take number of teeth in the pinion as 18.	C309.3	AZ
	Or		
12	A helical gear with helix angle of 30° is used to transmit 35 kW at 1500 rpm with a speed reduction of 2.5, number of teeth in pinion is 24. Determine the necessary module, pitch circle diameter and face width by using Lewis and Buckingham's equation for 20° full depth teeth. Pinion and gear are made up of 15 Ni 2 Cr 1 Mo 15 by taking $[\sigma_b]_{pinion}$=180 N/mm^2.	C309.3	AZ
13	Design the spur gear drive for the following data: Power to be transmitted – 18 kW, Speed of the pinion 1200 rpm, Angular velocity – 3.5:1, Tooth profile - 20° stub teeth, Material of gears – 15 Ni 2 Cr 1 Mo 15 Case Hardened alloy steel with k_{bl} = 0.7, factor of safety = 2, k_σ = 1.2, Gear life – 20000 hours and Number of teeth in the pinion – 16.	C309.3	AZ

	Or		
14	Calculate the design bending stress, design contact stress, design torque, center distance and module for helical gear using the following data: i. Power to be transmitted – 40 kW ii. Pinion speed – 2000 rpm iii. Velocity ratio – 4.5:1 iv. Helix angle - 15° v. Tooth profile - 20° full depth vi. Gear life – 12000 Hours vii. Materials of both pinion and gear – Alloy steel (40Ni 2Cr 1Mo 28) hardened and tempered. viii. Number of teeth in gear - 90	C309.3	AZ

Part – C
(Answer all the questions 1 x 10 = 10marks)

15	Calculate the design bending stress and transverse module for bevel gear using the following data: i. Power to be transmitted – 7.36 kW ii. Pinion speed – 1440 rpm iii. Velocity ratio – 3:1 iv. Gear life – 10000 Hours v. Materials of both pinion and gear – C45 – Surface hardened vi. Number of teeth in pinion - 20	C309.4	AZ
	Or		
16	A 25 kW motor running at 1200 rpm drives a compressor at 780 rpm through a 90° bevel gear arrangement. The pinion has 30 teeth. The pressure angle of the teeth in 20°. The gears are made by cast iron grade 35. Determine the cone distance, average module and face width of the gear for a gear life of 10000 hours.	C309.4	AZ

***Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned** against each question*

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Internal Assessment Test - I			Date / Session	15/03/2023/FN	Marks	50
Course code	ME 8692	Course Title	Finite Element Analysis			
Batch No.		Duration	90 mins.	Academic Year	2022 - 2023	
Year	III	Semester / Section	VI / A	Department	Mechanical	

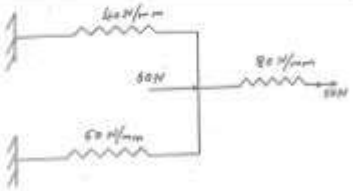
Part - A

(Answer all the questions 10 x 2 = 20 Marks)

Q. No.	Questions	CO	Skills
1.	What is meant by finite element method?	C312.1	U
2.	State the difference between the structural and non-structural problem.	C312.1	U
3.	List the various weighted residual methods.	C312.1	R
4.	What is meant by Rayleigh-Ritz method?	C312.1	U
5.	What is Galerkin's method of approximation?	C312.1	U
6.	What are the advantages and limitations of FEM?	C312.1	R
7.	If a displacement field in x direction is given by $u = 2x^2 + 4y^2 + 6xy$. Determine the strain in x direction.	C312.1	E
8.	Differentiate between the Ritz Technique and Galerkin's Method.	C312.1	U
9.	What are the properties of the Stiffness matrix?	C312.2	R
10.	What are the characteristics of shape function?	C312.2	U

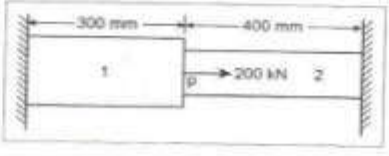
Part - B

(Answer all the questions 2 x 10 = 20 Marks)

Q. No.	Questions	CO	Skills
11.	Explain briefly the general procedure for FEA problems.	C312.1	U
	or		
12.	A physical phenomenon is governed by the differential equation $\frac{d^2y}{dx^2} + 50 = 0$ for $0 \le x \le 10$. The trial function $y = a_1 x (10 - x)$. The boundary conditions are given by $y(0) = 0$; $y(10) = 0$. Find the value of the parameter by the following methods. (i) Point Collocation method (ii) Sub-domain method (iii) Least Square method (iv) Galerkin's method.	C312.1	E
13.	Obtain the bending moment and deflection at the mid span of the simply supported beam subjected to uniformly distributed load over entire span, by using Rayleigh-Ritz method and also compare with exact solution.	C312.1	E
	or		
14.	Determine the displacement and the reaction forces at nodes in the spring system shown in figure below. Use minimum of potential energy principle to assemble equations of equilibrium. 	C312.1	E

Part - C

(Answer all the questions 1 x 10 = 10 Marks)

Q. No.	Questions	CO	Skills
15.	Derive the stiffness matrix [K] for one dimensional linear bar element.	C312.2	U
	or		
16.	Consider a bar as shown in figure. An axial load of 200 KN is applied at a point P. Take $A_1 = 2400\ mm^2$, $E_1 = 70x10^9\ N/m^2$, $A_2 = 600\ mm^2$, $E_2 = 200x10^9\ N/m^2$. Calculate the following: (a) Nodal displacement (b) Stress in each material (c) Reaction force. 	C312.2	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - I			Date/ Session	09.03.2023/ F.N	Marks	50
Course code	ME8693	Course Title	Heat and Mass Transfer			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year/	III	Semester/ Section	IV/ A	Department	Mechanical Engineering	

Part – A (Answer all the questions 10 x 2 = 20marks) (Usage of HMT DATA BOOK is permitted)

Q. No.	Questions	CO	Skills
1	Write down equations for conduction of heat through a slab	C302.1	R
2	Write down equations for conduction of heat through a composite plane wall	C302.1	R
3	Define thermal conductivity. Give its unit.	C302.1	R
4	State the Newton's law of heating or cooling and give an expression for it.	C302.1	R
5	State Fourier law of conduction	C302.1	R
6	What are extended surfaces? Name some practical applications.	C302.2	R
7	Differentiate steady and unsteady conditions.	C302.2	U
8	Define biot number	C302.2	R
9	Explain the significance of Fourier number	C302.2	U
10	Define lumped system analysis.	C302.2	R

Part – B (Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11.	A thick walled tube of stainless steel k=77.85 kj/hrm°C, 25mm ID and 50mm OD is covered with 25mm layer of asbestos k=0.88 kj/hrm°C. If the inside wall temperature of the pipe is maintained at 550°C and the outside of the insulator at 45°C .calculate the heat loss per meter length of the pipe.	C302.1	E
	Or		
12	A steel tube with 5cm ID, 7.6cm OD and k=15 W/m°C is covered with an insulative covering of thickness 2 cm and k=0.2 W/m°C. A hot gas at 330°C with h=400 W/m^2°C flows inside the tube. The outer surface of the insulation is exposed to cooler air at 30°C with h=60 W/m^2°C. Calculate the heat loss from the tube to the air for 10m of the tube and the temperature drops resulting from the thermal resistance of the hot gas flow, the steel tube, and the insulation layer and outside air.	C302.1	E
13	An aluminum plate (k=160 W/m^2C, C=2790 kg/m^3, Cp=0.88 kj/kg°C) of thickness L=3cm and at a uniform temperature at of 225°C is suddenly immersed at a time t=0 in a well stirred fluid maintained at a constant temperature T=25°C, take h=320 W/m^2C. Determine the time required or the center of the plate to reach 50°C.	C302.2	E
	Or		
14.	An aluminum alloy fin of 7mm tick and 50mm long and wide d=protrudes from a wall, which is maintained at 120°C the ambient air temperature is 22°C. The heat transfer coefficient and conductivity if the fin material is 140w/m2k and 55w/mk. Determine a) Temperature at the end of the fin b) Temperature at the middle of the fin c) Total heat dissipated by the fin	C302.2	E

Part – C (Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15.	A furnace all consists of steel plate of 20 mm thick thermal conductivity 16.2 w/mk lined on inside with silica bricks 150 mm thick with conductivity 2.2W/mk and on the outside with magnesia brick 200mm thick of conductivity 5.1w/mk. The inside and outside surfaces of the wall are maintained at 650°C and 150°C. Calculate the heat loss from the wall per unit area. If the heat loss is reduced to 2850 W/m^2 by providing and air gap between steel and silica bricks .find the necessary width of air gap if the thermal conductivity of air may be taken as 0.030W/mk	C302.1	E
	Or		
16.	A furnace wall consists of three layers. The inner layer of 10cm thickness is made up of fire brick (k=1.04W/mK). The intermediate layer of 25cm thickness is made up of masonry brick (k=0.69W/mK), followed by a 5cm thickness concrete wall (k=1.37W/mK). When the furnace is in continues operation in the inner surface of the furnace is at 800°C. While the outer concrete surface is at 50°C. Calculate the rate of heatloss per unit area of the wall, the temperature at the interface of the fire brick and masonry brick and the temperature at the inner surface of the interface masonry brick and concrete.	C302.1	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	11.03.2023/FN	Marks	50
Course code	ME8691	Course Title	Computer Aided Design and Manufacturing			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	III	Semester/ Section	VI	Department	Mechanical	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Computer graphics?	C310.1	R
2	Define clipping.	C310.1	U
3	List out the various stages in the life cycle of a product.	C310.1	R
4	Explain viewing transformation?	C310.1	U
5	What are the benefits of CAD?	C310.1	U
6	Give the reasons for implementing CAD.	C310.1	U
7	What is meant by view port and windowing?	C310.1	R
8	Define geometrical modeling.	C310.2	U
9	Discuss the various types of surface patches.	C310.2	U
10	Mention any two advantages and disadvantages of wireframe modeling.	C310.2	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain the design process in CAD system in detail.	C310.1	R
	OR		
12	Explain any 3 types of 2D transformation matrix with sketch.	C310.1	R
13	What are the types of engineering in CAD/CAM? Explain in detail with its advantages and disadvantages.	C310.1	
	OR		
14	Explain in detail about the types of coordinate systems in CAD package?	C310.1	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain surface modeling with neat sketches and give the advantages, disadvantages and applications of surface modeling.	C310.2	A
	OR		
16	Explain solid modeling and discuss CSG and B-rep with its advantages, disadvantages and applications of solid modeling.	C310.2	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - I			Date/Session	16.03.2023 / FN	Marks	50
Course code	ME8694	Course Title	Hydraulics and Pneumatics			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI	Department	Mechanical	

Part – A
(Answer all the questions 10 x 2 = 20marks)

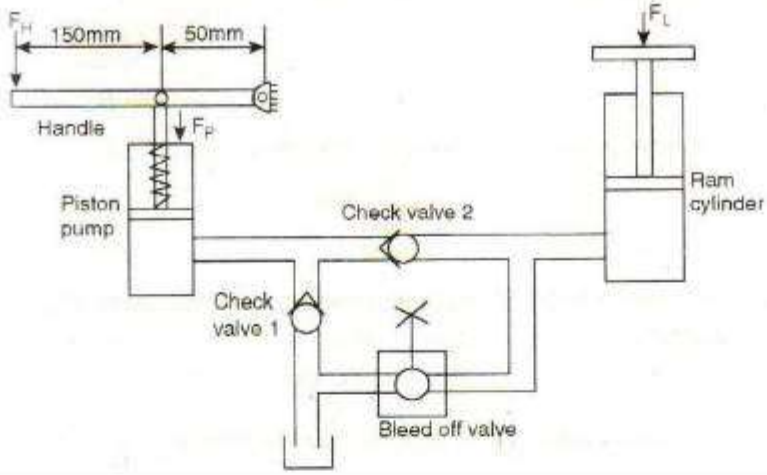
Q. No.	Questions	CO	Skills
1	What are the factors affecting selection of hydraulic fluids?	C313.1	U
2	What is meant by positive displacement pump and its advantages .	C313.1	U
3	List the different components of fluid power system.	C313.1	R
4	How the hydraulic pumps are classified?	C313.1	U
5	Define Pascal"s law.	C313.1	R
6	Define Hydraulic actuators	C313.2	R
7	How do you classify direction control valves?	C313.2	U
8	What are the major components of hydraulics systems ?	C313.2	U
9	What are the advantages of telescope cylinders?	C313.2	U
10	Draw any three fluid power ANSI symbol	C313.2	R

Part – B
(Answer all the questions2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the working principles of various types of vane pump with neat sketch	C313.1	U
	or		
12	Explain the working principles of radial and axial piston pump with neat sketch	C313.1	U
13	Explain the working principle following types of cylinders 1) Single acting cylinder 2) Double acting cylinder 3) Double rod cylinders	C313.2	U
	or		
14	Explain with neat sketch ,the principle and operation of telescopic cylinders	C313.2	U

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15 a	A hand operated hydraulic jack has piston pump with cylinder diameter of 30 mm and stroke of 50mm.Operator makes one cycle per second in the pump. Ram cylinder of 60 mm diameter raises a load of 8000 N. Calculate the pressure in the system, force exerted on rod of pump, force on the handle given by the operator, no of cycles of hand pump to lift load by 500mm,what is the output power assuming 90 percentage efficiency.	C313.1	AZ

			
	OR		
15b	A pump has a displacement volume of 98.43 cm^3. It delivers 00015 m^3/s at 1000 rpm & 70 bars. If the prime mover input torque is 120 N.m a. What is the overall efficiency of the pump? b. What is the theoretical torque required to operate the pump?	C313.1	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - I			Date/Session	14-03-2023/FN	Marks	50
Course code	IE 8693	Course Title	Production Planning and Control			
Batch No.		Duration	90 min	Academic Year	2022 - 2023	
Year	IV Year	Semester/ Section	VIII / A& B	Department	Mechanical	

Part - A
(Answer all the questions - 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	State the objectives of planning and control.	C411.1	R
2.	What is Break Even Analysis?	C411.1	R
3.	Indicate the significance of product development.	C411.1	U
4.	What is meant by standardization?	C411.1	R
5.	Define Production Planning and Control.	C411.1	R
6.	What are the phases of PPC?	C411.1	U
7.	Define the term Work Study.	C411.2	R
8.	State the objectives of Work Study.	C411.2	R
9.	What is meant by method study?	C411.2	U
10.	What are the techniques used for work measurement?	C411.2	U

Part - B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Enumerate about the different types of production with suitable sketches.	C411.1	U
	OR		
12.	Explain various aspects of product development and design with suitable examples.	C411.1	U
13.	Discuss in detail about the various functions of production planning and control.	C411.1	U
	OR		
14.	Explain the various factors responsible for product design.	C411.1	U

Part - C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Explain the basic procedure of method study in detail.	C411.2	U
	OR		
16.	Explain briefly the various steps involved in conducting the work study.	C411.2	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering
Tiruchirapalli

Internal Assessment Test - II			Date/ Session	11-04-2023	Marks	50
Course code	CE3491	Course Title	Strength of Materials			
Batch No.		Duration	90 min.	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV / A	Department	Mechanical	

Part - A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1.	What is mean by simple bending?	C214.3	U
2.	What is Neutral axis of beam and how to locate it for simple bending	C214.3	U
3.	Draw SFD of cantilever beam of length L carrying a point load of W at free end	C214.3	A
4.	Sketch the bending stress distribution for Rectangular cross section	C214.3	A
5.	What is meant by section modulus?	C214.3	R
6.	What is Polar Modulus?	C214.4	R
7.	Define torsional rigidity of the solid circular shaft.	C214.4	U
8.	Distinguish between closed coil helical spring and open coil helical spring.	C214.4	U
9.	What is meant by composite shaft?	C214.4	U
10.	What is called Twisting moment?	C214.4	U

Part - B (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	A Beam simply supported at its ends is of I cross section having top flange of 100mm×30 mm, web 30mm×120mm, bottom flange 120 mm×30mm. The beam is loaded with UDL over the entire span of 8m. Find the UDL if the maximum permissible stress is not to exceed 50 N/mm2 in tension and 45 N/mm2 in compression.	C214.3	E
	or		
12.	A Timber beam of rectangular cross section of length 8m is simply supported. The beam carries a UDL of 12KN/m run over the entire span and a point load of 10KN at 3m from the left support. If the depth is twice the width and stress in the timber is not to exceed 8N/mm2, find the suitable dimensions for the section.	C214.3	E
13.	Calculate the power that can be transmitted at a 300rpm by a hollow steel shaft of 75mm external diameter and 50mm internal diameter when the permissible shear stress for the steel is 70N/mm2 and the maximum torque is 1.3 times the mean. Compare the strength of this hollow shaft with that of a solid shaft .The same material, weight and the length of both the shafts are the same.	C214.4	E
	or		
14.	Derive the relation $T/J = C\Theta/L = \tau/R$	C214.4	E

Part - C (Answer all the questions 1 x 10 = 10 marks)

15.	It is required to design a close coiled helical spring which shall deflect 10mm under an axial load of 100 N with a shear stress of 90 N/mm^2.the spring is to be made out of round wire of modulus of rigidity 0.8×10^5 N/mm^2 and the mean diameter of the coils is to be 10 times the diameter of wire. Find the diameter of the spring wire and the length of the wire.	C214.4	E
	or		
16.	A Closely Coiled Helical Spring made of 10 mm diameter steel wire has 15 coils of 100 mm mean diameter. The spring is subjected to an axial load of 100 N. Calculate (i) Maximum shear stress induced (ii) Deflection (iii) Stiffness of the Spring Take Modulus of Rigidity, $C = 8.16 \times 10^4$ N/mm^2	C214.4	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	17.04.2023	Marks	50
Course code	ME3451	Course Title	Thermal Engineering			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	II	Semester/ Section	IV (A)	Department	MECHANICAL	

Part – A (Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define specific steam consumption?	C315.1	U
2	Define specific heat rate and work ratio?	C315.1	R
3	State advantages of superheated steam?	C315.1	U
4	Draw the T-S diagram of ideal reheat cycle.	C315.1	R
5	Give the difference between reheat and regenerative cycle.	C315.1	U
6	What is a steam nozzle? What are its types?	C315.2	U
7	What do you understand by the term critical pressure ratio?	C315.2	E
8	What is the effect of friction on the flow through a steam nozzle?	C315.2	U
9	What is meant by supersaturated flow or metastable flow?	C315.2	U
10	What are the effects of super saturation in nozzle?	C315.2	R

Part – B (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Steam at 50 bar, 400^{0}C expands in a Rankine cycle to 0.34 bar. For a mass flow rate of 150 kg/s of steam, determine (i) Power developed (ii) Thermal efficiency (iii) Specific steam consumption.	C315.1	U
	OR		
12	In an ideal steam reheat Rankine cycle, steam enters the high pressure turbine at 30 bar and 420^{0}C and then expands to 7.5 bar. The steam is reheated at constant pressure 7.5 bar and 420^{0}C and expands to 0.1 bar in the low pressure turbine. Determine the thermal efficiency and quality of steam leaving the low pressure turbine.	C315.1	U
13	Dry saturated steam enters a steam nozzle at a pressure of 12 bar and is discharged to a pressure of 1.3 bar. What will be the final velocity of steam for isentropic expansion	C315.2	U
	OR		
14	In a steam nozzle, dry saturated steam expands from 15 bar to 0.1 bar. Find the velocity of steam at nozzle exit if the nozzle efficiency is 90% Neglect the initial velocity of steam.	C315.2	U & A

Part – C (Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	The inlet conditions of steam to a convergent – divergent nozzle is 22 bar and 260^{0}C. The exit pressure is 4 bar. The mass flow rate is 11 kg/s. Assume the expansion is isentropic and the inlet velocity is negligible. Determine throat area , exit area, exit velocity and exit area. Take n= 1.3 for superheated steam.	C315.2	U
	OR		
16	Inlet conditions to a steam nozzle are 10 bar and 250^{0}C. The exit pressure is 2 bar and mass flow rate of steam is 0.2kg/s. Assuming isentropic expansion and negligible velocity, determine: (i) The throat area (ii) The exit velocity (iii) The exit area of the nozzle.	C315.2	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

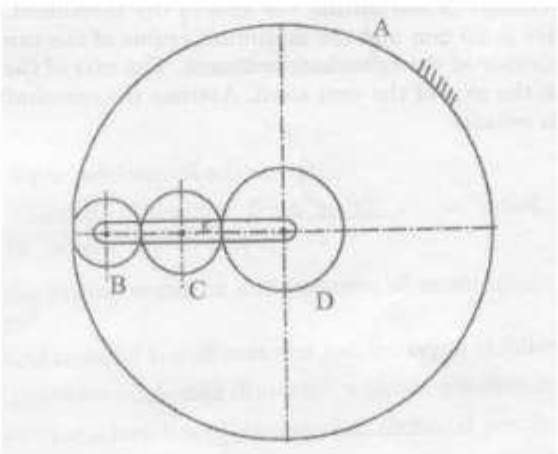
Tiruchirappalli

Internal Assessment Test - II			Date/Session	12.04.2023/FN	Marks	50
Course code	ME3491	Course Title	Theory of Machines			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II Year	Semester/ Section	IV/ A	Department	Mechanical	

Part - A
(10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	State law of gearing	C210.3	R
2	Define the terms: Module and Pitch Circle diameter of a spur gear.	C210.3	R
3	What is meant by interference and undercutting of gears?	C210.3	U
4	In a simple gear train, if input speed is 240rpm and output speed is 120rom. Find speed ration and train value of the gear train	C210.3	U
5	List out the advantages of epicyclic gear train	C210.3	U
6	Define hammer blow in locomotives	C210.6	R
7	Mention the conditions of dynamic balancing	C210.6	R
8	What is meant by balancing of rotating masses ?	C210.6	U
9	What is tractive force?	C210.6	R
10	What are primary and secondary unbalanced forces?	C210.6	U

Part - B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11. a.	Two involute gears having the diameters of 90mm and 300mm with a module of 6mm and the pressure angle 20^0. The addendum of both the gears is equal as larger as possible to avoid interference. Find the addendum, contact ratio and the sliding velocity at the beginning of contact if the pinion is driving at 2500rpm	C210.3	E
	OR		
11. b.	Calculate :(i) the length of path of contract, (ii) arc of contract and (iii) the contact ratio when a pinion having 23 teeth drives a gear having teeth 57. The profile of the gears is involute with pressure angle 20°, module 8 mm and addendum equal to one module.	C210.3	E
12. a.	An epicyclic gear train shown in fig is composed of a fixed annular wheel A having 150 teeth. Gear B and Gear D has 25 and 40 teeth respectively and C is an idle gear. Gear D is concentric with gear A. Wheel B and C are carried on an arm E which revolves clockwise at 120 rpm about the axis of A. Find the number of teeth of gear C and its speed and sense of rotation 	C210.3	E

	OR		
12. b.	In an epicyclic gear train, an arm carries two gears A and B having 36 and 45 teeth respectively. If the arm rotates at 150rpm in the anticlockwise direction about the centre of gear A which is fixed, determine the speed of gear B. And if the gear A instead of being fixed, makes 300rpm in the clockwise direction, what will be the speed of gear B.	C210.3	E

Part - C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
13. a.	A shaft carries four masses A,B,C and D of magnitude 200kg, 300kg, 400kg and 200kg respectively and revolving at radii 80mm, 70mm, 60mm and 80mm in planes measured from A at 300mm, 400mm and 700mm. The angle between the masses measured anticlockwise are A to B as 45^0, B to C as 70^0 and C to D as 120^0. The balancing masses are to be placed in planes X and Y. The distance between A and X is 100mm, and between X and Y is 400mm and between Y and D is 200mm. If the balancing masses revolve at radius of 100mm, Find their magnitudes and angular positions	C210.6	E
	OR		
13. b.	The following particulars relate to an inside cylinder uncoupled locomotives Rotating mass per cylinder 200 kg Reciprocating mass per cylinder 240 kg Angle between cranks 90° Stroke length 0.5 m Cylinder centres apart 0.8 m Wheel centres apart 1.7 m The whole of the rotating and two-third of reciprocating masses are balanced by masses at a radius of 0.6 m. Find the magnitude and angular position of balancing masses.	C210.6	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date	13.04.2023	Marks	50
Course code	ME8651	Course Title	DESIGN OF TRANSMISSION SYSTEMS			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI / A	Department	MECHANICAL	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q.No.	Questions	CO	Skills
1	In worm gear drive, only the wheel is designed. Why?	C309.4	R
2	How the efficiency of worm gear is calculated?	C309.4	R
3	In which gear-drive, self-locking is available?	C309.4	R
4	Calculate the center distance of a worm gear drive which is designated as 2/54/10/5	C309.4	R
5	List the various spindle speeds of a 15 speed gear box having the standard progression ratio as 1.06 with the maximum speed of 1000rpm.	C309.5	E
6	Define Progression ratio.	C309.5	U
7	What is a Ray diagram?	C309.5	U
8	What are preferred numbers?	C309.5	U
9	Find the various spindle speeds of a 12speed gear box having maximum and minimum speeds of 355rpm and 100rpm respectively.	C309.5	E
10	What are the conditions to be followed while constructing the ray diagram?	C309.5	R

Part – B

(Answer all the questions 2 x 15 = 30 marks)

Q. No.	Questions	CO	Skills
11	A 2.5 kW power is applied to a C.I worm shaft at 800rpm. The number of starts is 4 with 60mm as pitch circle diameter. The worm gear has 500 teeth with 5mm module. The pressure angle in the diametrical plane is 20°. Determine, i. Lead angle of the worm ii. Velocity ratio iii. Centre distance iv. Efficiency of the worm gear drive v. Power loss due to friction	C309.4	AZ
	Or		
12	Design a worm gear drive to transmit 22.5 kW at a worm speed of 1440 rpm. Velocity ratio is 24:1. An efficiency of at least 85% is desired. The temperature rise should be restricted to 40°C. Determine the required cooling area.	C309.4	AZ
13	Design a nine speed gear box completely having standard progression ratio as 1.25 with the minimum speed of 180rpm by using the structural formula 3(1) 3(3) and also calculate the percentage deviation between the standard speed and obtainable speed. The drive is from 2kW at 1000rpm. Gear material is C40 having the shear stress of 50N/mm^2.	C309.5	AZ
	Or		
14	The minimum and maximum speeds of a six speed gear box are to be 160rpm and 500 rpm. Design the gear box completely and also find the percentage deviation between the standard speed and obtainable speed. Use 3(1) 2(3) structural formula. Gear material is C45 having the shear stress as 30 N/mm^2. The drive is from 1.5kW at 500rpm.	C309.5	AZ

***Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned** against each question*

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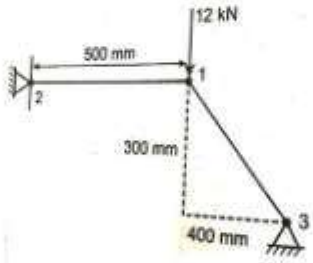
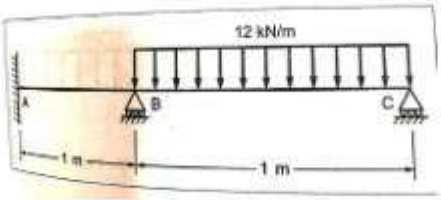
Tiruchirappalli

Internal Assessment Test - II			Date/Session	17-04-2023/FN	Marks	50
Course code	ME 8692	Course Title	Finite Element Analysis			
Batch No.		Duration	90 min	Academic Year	2022 - 2023	
Year	III Year	Semester/ Section	VI / A	Department	Mechanical	

Part - A (Answer all the questions: 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1.	Distinguish between 1D bar element and 1D beam element.	C312.2	R
2.	What is truss?	C312.2	U
3.	Write the shape function for a 1D quadratic bar element.	C312.2	R
4.	Write down the finite element equation for one dimensional two noded bar elements.	C312.2	R
5.	State the assumptions are made while finding the forces in a truss element.	C312.2	R
6.	What are the types of transverse load act on a beam?	C312.2	U
7.	What are the characteristics of a shape function?	C312.2	U
8.	Write down the shape function for Linear Strain Triangular (LST) elements used for a scalar variable problem.	C312.3	R
9.	What are CST and LST elements?	C312.3	R
10.	List out the limitations of CST elements.	C312.3	U

Part – B (Answer all the questions: 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11.	Derive the expression for stiffness matrix for truss elements.	C312.2	U
	OR		
12.	For the two bar truss as shown in Figure, determine the Displacements of node 1 and Stress in elements 1-3. Take E = 70 GPa and A = 200 mm^2. 	C312.2	E
13.	For the beam and loading shown in Figure. Calculate the Rotations at B and C. 	C312.2	E
	OR		
14.	Derive the shape function for beam element.	C312.2	U

Part – C (Answer all the questions: 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15.	Derive an expression for shape function of CST element.	C312.3	U
	OR		
16.	Derive the Strain Displacement Matrix for CST Element.	C312.3	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/ Session	11.04.2023/FN	Marks	50
Course code	ME8691	Course Title	Computer Aided Design and Manufacturing			
Batch No.		Duration	90 mins	Academic Year	2022-2023	
Year	III	Semester/ Section	VI / A	Department	Mechanical	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is the use of surface patches?	C310.3	R
2	Name the various types of modeling?	C310.3	U
3	State the limitations of hermite Curve.	C310.3	R
4	Write down 'Bernstein' polynomial.	C310.3	U
5	Differentiate analytical & synthetic Curve.	C310.3	U
6	Define NURBS.	C310.3	U
7	What are the methods of data exchange?	C310.4	R
8	What are CAD standards and its needs?	C310.4	U
9	What is the use of communication standard?	C310.4	U
10	Write any four data exchange formats?	C310.4	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain the features of B-spline Curve.	C310.3	R
	OR		
12	Briefly explain about Hermite curve.	C310.3	R
13	Briefly discuss about Surface Modeling with its applications.	C310.3	
	OR		
14	Explain CSG and B-rep in solid modeling with neat sketches.	C310.3	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain the types of computer networks. Also explain any two networking topology with neat sketch.	C310.3	A
	OR		
16	Explain Initial Graphics Exchange Specification (IGES) Methodology.	C310.3	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Internal Assessment Test - II			Date/Session	20-04-23/ FN	Marks	50
Course code	ME8694	Course Title	Hydraulics and Pneumatics			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI / A	Department	Mechanical	

Part – A
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Why cushioning mechanism is needed for hydraulic cylinders?	C313.2	U
2	Classify control valves.	C313.2	R
3	State the functions of pressure control valve	C313.2	U
4	Difference between servo and proportional valves.	C313.2	U
5	List the applications of pressure sequence valves	C313.2	U
6	State the functions of flow control valve.	C313.2	R
7	Define check valve? Draw its graphical symbol.	C313.2	U
8	What is a failsafe circuit?	C313.3	R
9	What is bleed off circuit?	C313.3	R
10	State the purpose of regenerative circuit.	C313.3	U

Part – B
(Answer all the questions2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain the working of pressure relieve valve and unloading valve	C313.2	U
	or		
12	Explain the working of flow control valve and counter balance valve	C313.2	U
13	Explain the Pump unloading circuit with circuit diagram.	C313.3	U
	or		
14	Explain any one of the speed control circuits with circuit diagram	C313.3	U

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15 a	Explain regenerative cylinder circuit with neat diagram	C313.3	U
	OR		
15b	Explain sequencing circuit of two double acting cylinders.	C313.3	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - II			Date/Session	12.04.23/FN	Marks	50
Course code	MG8591	Course Title	PRINCIPLES OF MANAGEMENT			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI	Department	MECH	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is SMART Objectives?	2	U
2	What do you mean by Policies?	2	R
3	What is Planning Premises?	2	U
4	Define Strategy.	2	AZ
5	Define Organizing.	3	R
6	Differentiate Line and Staff Authority?	3	R
7	What do you mean by departmentation?	3	U
8	What is Span of Control?	3	E
9	What is centralization and decentralization?	3	R
10	What is job description and Job specification?	3	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about Management by objectives (MBO)?	2	E
	Or		
12	What are the steps involved in Decision making?	2	R
13	Define Organization. (2) Differentiate formal and informal Organization? (8)	3	A
	Or		
14	Explain in detail about the Process of Recruitment and Selection in an organisation?	3	AZ

Part – C

(Answer all the questions 1 x 10 = 10marks)

15		CO	Skills
	Govardhan Engineering Works specializes in the installation of heating and air conditioning equipment in a metropolitan area of about one million people. Although the company usually installs nationally known equipment, it engages in limited manufacturing of certain components needed for commercial installations. Since it was established some forty years ago, the company has earned a reputation for quality work. Prabhu has been with the company as sales representative for two years. During this period he believes that the company has missed a number of opportunities to obtain lucrative contracts because of the conditions under which he is forced to operate. Particularly in the case of commercial installations, he does not have the authority to make any decision or commitments during preliminary contract negotiations. He has to postpone discussion of price, completion time and credit terms until after each of the technical experts in these areas has studied the job and made formal commitments. By this time some competing firm already completes negotiations and gets the contract. Prabhu considers this as a continuing problem and feels hampered. (a) In what respects do you think Prabhu is justified or not justified in his complaint? (b) What can be done on a company wide basis to improve the situation?	6	C

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

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Tiruchirapalli

Internal Assessment Test - III			Date / Session	16-05-2023 / FN	Marks	50
Course code	CE3491	Course Title	Strength of Materials			
Batch No.		Duration	90 min.	Academic Year	2022 - 2023	
Year	II	Semester/ Section	IV / A	Department	Mechanical	

Part – A (Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skill
1.	Write the equation giving maximum deflection in Cantilever Beam subjected to point load at free end.	C214.5	U
2.	What is Moment equation used in double integration method.	C214.5	U
3.	What are the advantages of Macaulay's method over double integration method?	C214.5	U
4.	What are the methods available to find slope and deflection of beam?	C214.5	R
5.	What is meant by slope?	C214.5	U
6.	List out the stresses included in thin cylindrical shell due to internal pressure.	C214.6	R
7.	Mention the use of assumptions made in Lame's theory.	C214.6	R
8.	Write the expression for volumetric strain and change in volume of a thick cylinder due to internal pressure.	C214.6	A
9.	How do classify a cylinder into thick or thin?	C214.6	R
10.	List out the modes of failure in thin cylindrical shell due to an internal pressure	C214.6	U

Part – B (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skill
11.	A thin cylindrical drum 800mm in dia and 3m long has a shell thickness of 10mm .If the drum is subjected to an external pressure of 2.5N/mm2,determine (i) change in diameter (ii) change in length (iii) change in volume. E = 200 kN/mm2, poisson's ratio = 0.25	C214.6	E
	Or		
12.	Derive a relation for change in diameter and change in volume of a thin spherical shell due to internal pressure 'P'.	C214.6	E
13.	A thin cylindrical shell 1.5 m long, internal diameter 300 mm and wall thickness 10 mm is filled up with a fluid at atmosphere pressure. If the additional fluid of 300 x 103 mm3 is pumped in the shell, find the pressure exerted by the fluid on the shell. Take E= 2 x 105 N/mm2 and 1/m=0.3. Also find the hoop stress induced.	C214.6	E
	Or		
14.	Determine the maximum and minimum hoop stress across the section of a pipe of 400 mm internal diameter and 100 mm thick, when the pipe contains a fluid at the pressure of 8 N/mm^2. Also sketch the radial pressure distribution and hoop stress distribution across the section.	C214.6	E

Part - C(Answer all the questions 1 x 10 = 10 marks)

15.	A beam of uniform section 10 m long is simply supported at ends. It carries a point loads of 100 kN and 60kN at distance of 2m and 5m respectively from left end. Calculate slope at supports and Deflection under 100 kN. Take E= 2×10^5 N/mm^2 and Moment of Inertia as 118×10^4 mm^4.	C214.5	E
	Or		
16.	A Cantilever beam of length L m carries a UDL of w kN/m for whole length Derive slope and Deflection at free end by using double integration method. Calculate Deflection if w= 20 kN/m, L=2.3m, EI=12000kN/m^2.	C214.5	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

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Tiruchirapalli

Internal Assessment Test - III			Date/ Session	22.05.2023	Marks	50
Course code	ME3451	Course Title	Thermal Engineering			
Batch No.		Duration	90 min	Academic Year	2022-2023	
Year	II	Semester/ Section	IV (A)	Department	MECHANICAL	

Part – A (Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Distinguish between impulse and reaction turbine	C315.3	U
2	Define stage efficiency	C315.3	R
3	Define the term compounding in turbines	C315.3	U
4	What is the principle of an impulse turbine	C315.3	R
5	List out the essential requirements of a good fuel.	C315.4	U
6	Name the four stages of combustion in a CI engines	C315.4	U
7	What do you understand by knocking? What are the causes for it?	C315.4	E
8	What is ignition delay? what is its effect on knocking on SI engine.	C315.6	U
9	What is unit injection system?	C315.6	U
10	What is meant by injection lag?	C315.6	R

Part – B (Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Steam enters the blade row of an impulse turbine with a velocity of 600 m/s at an angle of 25^0 to the plane of rotation of the blades the mean blade speed is 250 m/s. The blade angle at the exit side is 30^0. The blade friction loss is 10%. Determine (i) The blade angle inlet (ii) The work done per kg of steam (iii) blade efficiency.	C315.3	U
	OR		
12	The velocity of steam at inlet to a simple impulse turbine is 1000 m/s and the nozzle angle is 20^0. The mean blade speed is 400 m/s and the blades are symmetrical. The mass flow rate of steam is 0.75 kg/s. The friction effects on the blades are negligible. Estimate: (1) The blade angles (2) The tangential force on the blades (3) The axial thrust (4) The diagram power; and (5) The diagram efficiency	C315.3	U
13	Explain the various stage of combustion process in SI engine with P-O diagram.	C315.4	U
	OR		
14	Explain the various stage of combustion process in CI engine with P-O diagram.	C315.4	U & A

Part – C (Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Explain the working principle of common rail injection system with a neat diagram.	C315.6	U
	OR		
16	Explain the principle of magneto ignition system. Enumerate its advantages and disadvantages.	C315.6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

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Internal Assessment Test - III			Date/Session	17.05.2023/FN	Marks	50
Course code	ME3491	Course Title	Theory of Machines			
Batch No.		Duration	90 mins	Academic Year	2022 - 2023	
Year	II Year	Semester/ Section	IV/ A	Department	Mechanical	

Part - A
(10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What kind of friction acts between the tyre and road in an automobile	C103.4	U
2	Write the mathematical expression for maximum efficiency of screw jack	C103.4	R
3	Why self locking screws have lesser efficiency?	C103.4	U
4	What are the advantages of using friction clutches?	C103.4	R
5	Write down the relation of torque required in bearing by both uniform pressure and uniform wear theory	C103.4	R
6	Write the conditions for the maximum power transmission by a belt from one pulley to another	C103.4	R
7	List down the disadvantages of V-belt over flat belt	C103.4	U
8	In an open belt drive of horizontal type, slack side of belt should be kept on the top side of the pulleys. Why?	C103.4	U
9	State the functional difference between brakes and clutches	C103.4	R
10	Distinguish between brakes and dynamometer	C103.4	R

Part - B
(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11. a.	The mean diameter of the screw jack having pitch of 10 mm is 50 mm. A load of 20 kN is lifted through a distance of 170 mm. Find the work done in lifting the load and efficiency of the screw jack when 1. the load rotates with the screw, and 2. the load rests on the loose head which does not rotate with the screw. The external and internal diameter of the bearing surface of the loose head are 60 mm and 10 mm respectively. The coefficient of friction for the screw as well as the bearing surface may be taken as 0.08.	C210.4	E
	OR		
11. b.	The pitch of 50 mm mean diameter threaded screw of a screw jack is 12.5 mm. The coefficient of friction between the screw and the nut is 0.13. Determine the torque required on the screw to raise a load of 25 kN, assuming the load to rotate with the screw. Determine 1.the ratio of the torque required to raise the load to the torque required to lower the load 2. the efficiency of the machine.	C210.4	E

12. a.	A conical pivot supports a load of 20 kN, the cone angle is 120° and the intensity of normal pressure is not to exceed 0.3 N/mm^2. The external diameter is twice the internal diameter. Find the outer and inner radii of the bearing surface. If the shaft rotates at 200 r.p.m. and the coefficient of friction is 0.1, find the power absorbed by uniform pressure and uniform wear	C210.4	E
	OR		
12. b.	A single plate clutch, effective on both sides, is required to transmit 25 kW at 3000 r.p.m. Determine the outer and inner radii of frictional surface if the coefficient of friction is 0.255, the ratio of radii is 1.25 and the maximum pressure is not to exceed 0.1 N/mm^2 . Also determine the axial thrust to be provided by springs. Assume the theory of uniform wear	C210.4	E

Part - C
(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
13. a.	Two pulleys, one 450 mm diameter and the other 200 mm diameter are on parallel shafts 1.95 m apart and are connected by an open belt. Find the length of the belt required and the angle of contact between the belt and each pulley. What power can be transmitted by the belt when the larger pulley rotates at 200 rpm, if the maximum permissible tension in the belt is 1 kN, and the coefficient of friction between the belt and pulley is 0.25?	C210.4	E
	OR		
13. b.	A pulley is driven by a flat belt, the angle of lap being 120°. The belt is 100 mm wide by 6 mm thick and density1000 kg/m^3. If the coefficient of friction is 0.3 and the maximum stress in the belt is not to exceed 2 MPa, find the greatest power which the belt can transmit and the corresponding speed of the belt.	C210.4	E

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

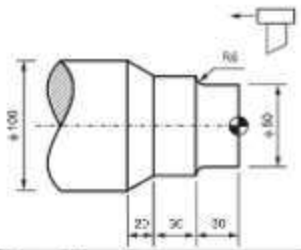
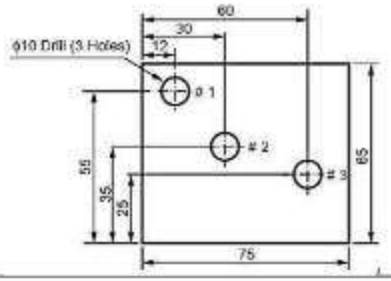
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Tiruchirapalli

Internal Test - III			Date/ Session	18-05-2023	Marks	50
Course code	ME3493	Course Title	Manufacturing Technology			
Batch No.		Duration	90 min	Academic Year	2022-23	
Year	II	Sem/ Sec	IV	Department	Mechanical	

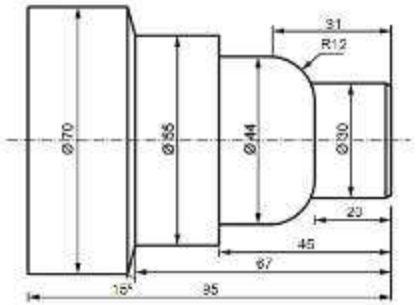
Part - A
(Answer all the questions 10 x 2 = 20marks)

Q.No	Questions	CO	Skills
1.	What is DNC?	C212.5	U
2.	Distinguish between DNC and CNC.	C212.5	U
3.	What is NC?	C212.5	R
4.	State the advantages of a NC system.	C212.5	R
5.	What are G codes and M codes?	C212.6	U
6.	Mention the main different between C NC and DNC	C212.6	R
7.	Define absolute and incremental programming.	C212.6	R
8.	What do mean by canned cycle	C212.6	R
9.	What is meant by APT programme	C212.6	R
10.	Difference between open loop and closed loop system	C212.6	U

Part - B
(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11.	Explain the basic components of a CNC system.	C212.5	U
	OR		
12.	Wirte part progmming for given diagram 	C212.5	U
13.	Explain the part programming procedure with a good example	C212.6	U
	OR		
14.	Wirte part progmming for given diagram 	C212.6	U

Part - C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15.	Wirte part progmming for given diagram 	C212.6	U
	OR		
16.	Write a sample part programming for plain turning on a component of your desired dimensions.	C212.6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

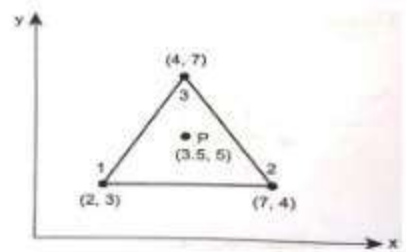
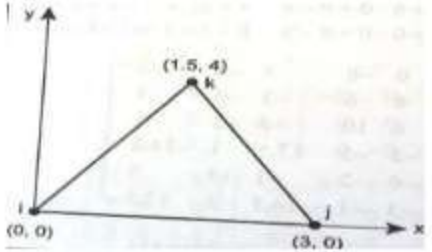
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Tiruchirappalli

Internal Assessment Test - III			Date/Session	22.05.2023/FN	Marks	50
Course code	ME8692	Course Title	Finite Element Analysis			
Batch No.		Duration	90 min	Academic Year	2022 - 2023	
Year	III Year	Semester/ Sec	VI/ A	Department	Mechanical	

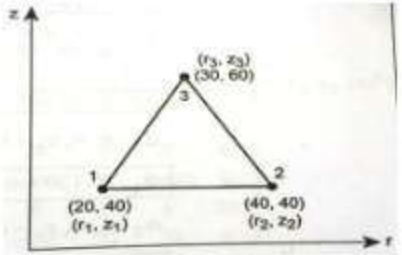
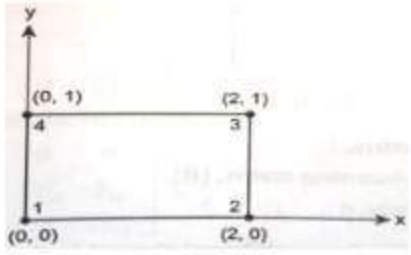
Part - A
Answer all the questions (10 x 2 = 20)

Q. No.	Questions	CO	Skills
1	What is meant by plane stress analysis?	C312.4	U
2	Write a strain – displacement matrix for CST element.	C312.4	R
3	Write down the stiffness matrix equation for two dimensional CST element.	C312.4	U
4	What is an axisymmetric element?	C312.5	R
5	What are the conditions for a problem to be axisymmetric?	C312.5	R
6	Give the strain – Displacement matrix equation.	C312.5	R
7	Define super parametric element.	C312.6	U
8	What is the purpose of Isoparametric element?	C312.6	U
9	Write down the shape functions for four noded rectangular element using natural co-ordinate system.	C312.6	R
10	Name the software used in Finite element Analysis.	C312.6	R

Part - B
Answer all the questions (2 x 10 = 20)

Q. No.	Questions	CO	Skills
11	Determine the shape function N_1, N_2 and N_3 at the interior point P for the triangular element shown in fig.1	C312.4	E
	OR		
12	Evaluate the elemental stiffness matrix for the triangular element shown in fig.2 under plane stress conditions. Assume the following values: $E=2x10^5$ N/mm^2, v=0.3, t=10mm	C312.4	E
	 Fig. 1  Fig. 2		
13	Derive an expression of shape function for Axisymmetric element.	C312.5	E
	OR		
14	The nodal co-ordinates for an axisymmetric triangular element are given below r_1=20mm, r_2=40mm, r_3=30mm, z_1=40mm, z_2=40mm, z_3=60mm. Evaluate [B] matrix for that element. (fig.3)	C312.5	E

Part - C
Answer all the questions (1 x 10 = 10)

Q. No.	Questions	CO	Skills
15	Derive shape function for 4 noded rectangular parent element by using natural co-ordinate system and co-ordinate transformation.	C312.6	E
	OR		
16	A four noded rectangular element is shown in fig.4 Determine the following. (a) Jacobian matrix (b) Strain displacement matrix. Take $E=2x10^5$ N/mm^2, v=0.25, $\xi = \eta = 0$	C312.6	E
	 Fig. 3  Fig. 4		

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date	18.05.23	Marks	50
Course code	ME8651	Course Title	DESIGN OF TRANSMISSION SYSTEMS			
Batch No.		Duration	90 min	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI/ A	Department	MECHANICAL	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

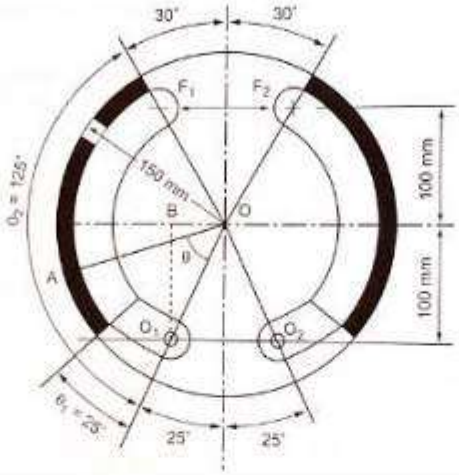
Q.No.	Questions	CO	SKILLS
1	What are the materials used for belt?	C309.1	R
2	State law of belting.	C309.1	R
3	Explain the term crowning of pulleys.	C309.1	U
4	What is meant by the ply of belt?	C309.1	U
5	Explain creep in belts.	C309.1	R & U
6	Differentiate brake and clutch?	C309.6	R & U
7	What is self locking brake?	C309.6	U
8	What are the functions of clutch?	C309.6	U
9	List any 4 friction materials used in a clutch plate.	C309.6	R
10	Classify clutch.	C309.6	R

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	An open type flat belt drive connects two parallel shafts 1.2 m apart. The driving and driven shaft rotate at 350 rpm and 140 rpm respectively, and the driven pulley diameter is 400 mm. The power to be transmitted is 1.1 kW. Design the drive.	C309.2	AZ
	Or		
12	A centrifugal pump running at 340 rpm is to be driven by a 100 kW motor running at 1440 rpm. The drive is to work for at least 20 hours every day. The center distance between the motor shaft and the pump shaft is 1200 mm. Suggest a suitable multiple V-belt drive for this application. Also calculate the actual belt tensions and stress induced.	C309.2	AZ
13	A 7.5 kW electric motor running at 1400 rpm is used to drive the input shaft of the gear box of a special purpose machine. Design a suitable roller chain to connect the motor shaft to the gear box shaft to an exact speed ratio of 10 to 1. Assume the minimum center distance between the driver and driven shafts as 600 mm.	C309.2	AZ
	Or		
14	Design a chain drive to run a compressor from a 11 kW electric motor running at 970 rpm, the compressor speed being 330 rpm. The compressor operates 16 hours/day. The centre distance should be approximately 500 mm. The chain tension can be adjusted by shifting the motor on slides.	C309.2	AZ

Part – C
(Answer all the questions 1 x 10 = 10 marks)

15	The figure shows the arrangements of two brakes shoes which act on internal surface of a cylindrical brake drum. The breaking force F_1 & F_2 are applied as shown and each shoe pivots on its fulcrums O_1 & O_2. The width of the brake lining is 35mm and the intensity of pressure at any point A is $4x10^5 \sin\theta N/m^2$. The coefficient of friction is 0.40. Determine the breaking torque & the magnitude of the forces F_1 & F_2 	C309.6	AZ
	Or		
16	A multi-disc clutch has three discs on the driving shaft and two on the driving shafts is to be designed for a machine tool, driven by an electric motor of 22 kW running at 1400 rpm .The inside diameter of the contact surface is 130 mm. The maximum pressure between the surface is limited to 0.1 N/mm^2 . Design the clutch. Take co-efficient of friction is 0.3.	C309.6	AZ

***Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned** against each question*

Internal Assessment Test - III			Date/Session	23-5-23/ FN	Marks	50
Course code	ME8694	Course Title	Hydraulics and Pneumatics			
Batch No.		Duration	90 min	Academic Year	2022 - 2023	
Year	III	Semester/Section	VI / A	Department	Mechanical	

Part – A
(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What is a ladder diagram ?	C313.4	U
2	What is air oil intensifier ?	C313.4	R
3	What is servo valve? How does it work ?	C313.4	U
4	Define Programmable Logic Control (PLC)	C313.4	U
5	What are the basic requirements for trouble free life of fluid power systems?	C313.5	U
6	List any two selection criteria of hydraulic systems	C313.5	R
7	List any four causes for pump making more noise.	C313.5	U
8	List four causes of hydraulic system break down.	C313.5	R
9	Distinguish between hydraulic and pneumatic systems.	C313.6	R
10	What is a power pack? What are the important components of a hydraulic power Pack?	C313.6	U

Part – B
(Answer all the questions2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Design a pneumatic circuit using cascade method for the sequence A+ A- B+ B- and explain its working principle.	C313.4	U
	or		
12	Design a pneumatic cascade circuit for the following sequence of operation: $A^+B^+B^-C^+C^-A^-$.	C313.4	U
13	Tabulate the various faults, probable causes and also the remedialactions for the following hydraulic system components: a. Pump b. DC valve c. Hydraulic motors d. Hydraulic cylinders	C313.5	U
	or		
14	Enlist the various faults, probable causes and also the remedial actionsfor the following pneumatic system components: a. Compressor b. FRL unit c.Air cylinder d. Pipelines and hoses	C313.5	U

Part – C
(Answer all the questions 1 x 10 = 10marks)

Q. No.	Questions	CO	Skills
15	Design and draw a circuit using the hydraulic components for the Drilling operation.	C313.6	U
	OR		
16	Design a circuit using the hydraulic components for the Press operation.	C313.6	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - III			Date/Session	17.05.23/FN	Marks	50
Course code	MG8591	Course Title	PRINCIPLES OF MANAGEMENT			
Batch No.		Duration	90 mins	Academic Year		2022 - 2023
Year	III	Semester/Section	VI/ A	Department		MECH

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define Directing.	4	R
2	Define Motivation.	4	R
3	What are the various ways of Positive and Negative Motivation?	4	E
4	List some difference between Maslow's and ERG Theory?	4	AZ
5	How does Leadership differ from Management	4	U
6	Write short notes on Laissez faire Leader?	4	R
7	What is upward and downward communication?	4	E
8	What is grapevine communication?	4	U
9	Define Controlling.	5	R
10	List some important characteristics of controlling.	5	E

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Explain in detail about any 2 theories of Motivation.	4	AZ
12	Explain in detail about Managerial Grid models of leadership based on behavioral theory.	4	E
13	Explain in detail about the various barriers in effective communication.	4	R
14	Explain in detail about the Process of Controlling.	5	E

Part – C

(Answer all the questions 1 x 10 = 10marks)

15		CO	Skills
	Ice Cool Private Limited was an Ice cream manufacturing company employing about 100 persons including persons at various levels of management. Because of increasing business, the company needed to strengthen its accounting procedure particularly through computerization. For this purpose, the company decided to hire a new manager designated as assistant manager. The company invited applications through press advertisement. After receiving the applications, it appointed a selection committee consisting of members of top management including business manager Rakesh Mohan. The Committee interviewed several candidates and finally selected Bishwash as new Assistant Business manager. Biswash was neat, well dressed and quite articulate. Biswash joined the company immediately and started working very hard. He used to put extra efforts and even worked during holidays as he did not have any family responsibility. He gained the reputation of being dedicated and competent employee, his strong point being his knowledge of accounting and computer system. He was reporting to Rakesh Mohan, the business manager	6	A

	who was quite impressed with his working. At that time, the company had no computer system, and their accounting procedures were in need of considerable improvement. Anil kumar, the managing director of the company, directed Rakesh Mohan to get the needful done. Since most of the accounting work related to sales, no separate accounting department existed and the work was performed under the direction of business manager. Biswash was mainly appointed to strengthen the accounting aspects of the business. He was asked to prepare a project report so that necessary changes could be made. In order to get the first hand information about the problem, Biswash began meeting regularly with Anil kumar without the knowledge of Rakesh Mohan. There was no attempt to have secret meeting. Anil kumar would just call Biswash in for a report without bothering to tell Rakesh Mohan. The management team, whose members were with the company for a quite long period had formed a tight-knit group and appeared satisfied with the company. They all worked together and the company prospered in spite of fierce competition. The meetings between Anil kumar and Biswash continued and Rakesh Mohan was gradually losing contact with the Project and its Progress. In fact, Biswash was almost reporting directly to the managing director though he was placed under the Business manager and retained his title of assistant business manager. Rakesh Mohan was visibly upset over the development and was also concerned about Biswash's spreading share of influence. He started feeling let down in the company. **QUESTIONS:-** ■ What is the nature of problem in this case? ■ Could Rakesh Mohan have prevented Biswash's assumption of power? If so, how specifically could it have been done? ■ Suggest the course of action now available to Anil Kumar, Rakesh Mohan and Biswash?		

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question.

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	D. Lokesh			Year / Semester / Section	IV / VII / A
Batch No.	226051	Date / Session	15.9.22 / FN	Department	Mechanical
Course Code	ME 8791	Course Title	Mechatronics		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	S. Hariprasath 14/9/22				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	1	11					
2			12	✓	9			
3	✓	1	13					
4	✓	1	14	✓	8			
5	✓	0	15	✓	8			
6			16					
7	✓	1					Total	
8	✓	1						
9								
10	✓	1						
Total								

31/50 → 62

Grand Total

15/9/22 Prigneshwar

Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	32	32	36				100
Marks Obtained	22	18	22				62

QAC Audit - Remarks

C. Vellaisamy Raja

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	B. Giridharan			Year / Semester / Section	IV / 7 / A
Batch No.	226032	Date / Session	12.10.22 / FN	Department	MECH
Course Code	ME8791	Course Title	Mechatronics		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	A. KESAVAN 12/10/22				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1			11					
2			12					
3			13					
4			14					
5			15					
6			16					
7							Total	
8								
9								
10								
Total			Grand Total				Name and Signature of the Examiner with date	

28/50 — 56 — 13/10/22 Priyadharsini.

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted			36	64			100
Marks Obtained			14	42			56

QAC Audit - Remarks

—

Verified 9/11/22

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	P. Anbarasu			Year / Semester / Section	IV / VII / A
Batch No.	22b011	Date / Session	18.11.22 / FN	Department	MECH
Course Code	ME8791	Course Title	Mechatronics.		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used : 16
Name and Signature of the Invigilator with date	18/11 P. Shanmugapriya				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	2.	11	✓				9.
2	✓	2.	12					
3	✓	1.	13	✓				10
4	✓	1	14					
5	✗		15	✓				
6	✓	2	16					5
7	✓	2					Total	24
8			37/50	74%				
9	✓	2						
10	✓	1						
Total		13.	Grand Total					Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted					60	40	100
Marks Obtained					50	24	74

QAC Audit - Remarks

C. Keshava Raja
Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	HARISH M			Year / Semester / Section	III / VI
Batch No.	236017	Date / Session	14/03/2023 - FN	Department	MECH
Course Code	ME8651	Course Title	DESIGN OF TRANSMISSION SYSTEMS		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 15
Name and Signature of the Invigilator with date	14/3/23 R. Mohan Kumar				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	2	11					
2	✓	2	12	✓	09			09
3	✓	2	13					
4	✓	2	14	✓	09			09
5	✓	2	15	✓	02			02
6	✓	2	16					
7	✓	2					Total	20
8	✓	2						
9	✓	2						
10	✓	2						
Total		20	Grand Total		40		R. SURESH BABU 14/03/23 Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted			30	20			50
Marks Obtained			28	12			40

QAC Audit - Remarks

—— nil ——

12/5/23

(C. Keshava Raja)
Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	R.Lai Prasanna			Year / Semester / Section	III / VI / A'
Batch No.	236071	Date / Session	05.05.23	Department	MECH
Course Code	ME8651	Course Title	Design of Transmission systems		
Internal Assessment Test	I ☐	II ☑	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date	MAKE UP TEST				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✔	-0-	11					
2	✔	—	12	✔	08			08
3		/	13					
4		/	14		-0-			-0-
5		/	15					
6	✔	-0-	16					
7		/					Total	08
8		/						
9		/	08				R. SURESH BABU	
10		/						
Total		-0-	Grand Total				Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total	
Marks allotted				23	27		50	100
Marks Obtained				08	-0-		08	16

QAC Audit - Remarks

— NIL —

C. Kumar Raja
Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	SRINIVASA PERUMAL R			Year / Semester / Section	III / VI / A
Batch No.	236057	Date / Session	18.05.23 / FN	Department	MECHANICAL ENGINEERING
Course Code	ME8651	Course Title	DESIGN OF TRANSMISSION SYSTEM		
Internal Assessment Test	I ☐	II ☐	III ☑	Model ☐	No. of pages used : 13
Name and Signature of the Invigilator with date	Jothi Palavesam P 18/5/23				

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	1	12	✓				10
3	✓	1	13					
4	✓	2	14					
5			15	✓				10
6	✓	2	16					
7			Total					20
8			30				R. SURESH BABU 19/05/23	
9	✗							
10	✓	2						
Total		10	Grand Total				Name and Signature of the Examiner with date	

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted	10	20				20	50
Marks Obtained	06	10				14	30

QAC Audit - Remarks

G. KESAVA RAJA 28/6/23
Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester			
COURSE CODE/TITLE	TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	Batch	2021 - 2025
CLASS / SECTION	Sem 3 / MECH		
COURSE COORDINATOR	Dr.G.Ravichandran		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	60	60	60	60	60	60

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			36	**64**					**36**		**64**						**40**	**38**	**14**	**8**	**72**	**64**	**104**	**38**	**14**	**8**
1	813821114001	ABINESH. R	0	0					0		34						2	0	0	0	0	0	36	0	0	0
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	0	6					8		16						03	0	2	0	8	6	19	0	2	0
3	813821114003	ARUN. M	24	34					16		56						22	20	5	3	40	34	78	20	5	3
4	813821114004	ASWIN. G	0	0					0		0						2	0	0	0	0	0	2	0	0	0
5	813821114005	ASWIN. S	0	0					2		16						10	0	0	0	2	0	26	0	0	0
6	813821114006	BALAJI. G	4	4					20		30						10	3	3	7	24	4	40	3	3	7
7	813821114007	BALAJI. M	0	0					0		0						0	0	0	0	0	0	0	0	0	0
8	813821114008	BARANIDARAN. R	12	4					2		18						2	2	0	0	14	4	20	2	0	0
9	813821114009	DHANUSH KUMAR. R	0	0					0		2						5	0	0	0	0	0	7	0	0	0
10	813821114010	DHINESHWARAN. R	0	0					0		12						10	7	0	0	0	0	22	7	0	0
11	813821114011	GAJENDRAN. G	22	34					18		60						23	27	0	0	40	34	83	27	0	0
12	813821114012	GOWSICK. S	0	0					2		38						5	0	0	0	2	0	43	0	0	0
13	813821114013	HARI BABU. A	0	0					0		16						9	0	4	0	0	0	25	0	4	0
14	813821114014	HARIHARAN. S	0	6					12		16						10	0	0	0	12	6	26	0	0	0
15	813821114015	IRFAN AHAMED. I	34	36					8		50						24	18	8	0	42	36	74	18	8	0
16	813821114016	JEFFREY MELWIN. J	0	0					6		44						2	0	0	0	6	0	46	0	0	0
17	813821114017	KAMALNATH. S	0	0					2		22						2	0	1	0	2	0	24	0	1	0
18	813821114018	KANAGAMUTHU. M	6	0					2		22						8	0	1	0	8	0	30	0	1	0
19	813821114019	KEERTHIVASAN. S	4	14					8		24						10	18	9	0	12	14	34	18	9	0
20	813821114020	KESAVAN. Y	0	0					16		62						22	16	4	8	16	0	84	16	4	8
21	813821114021	KIRAN DEVA. C N	16	20					20		54						29	30	5	0	36	20	83	30	5	0
22	813821114022	KISHOORE. G R	22	34					26		54						34	15	2	0	48	34	88	15	2	0
23	813821114023	KISHORE. A	4	24					14		60						18	28	5	0	18	24	78	28	5	0
24	813821114024	KRITHICK PRASADH. S	0	0					0		14						2	0	0	0	0	0	16	0	0	0
25	813821114025	LANESH. N	0	4					0		16						7	0	0	0	0	4	23	0	0	0
26	813821114026	LEO DHOBYAS. A	0	4					0		30						7	0	0	2	0	4	37	0	0	2
27	813821114027	MITHUL CHAVAN. R S	24	4					26		52						30	12	8	0	50	4	82	12	8	0
28	813821114028	MOHAMED FAISAL. S	0	8					10		24						12	5	0	0	10	8	36	5	0	0
29	813821114029	MOHAMED YAHAYA. A	0	4					10		42						16	2	3	0	10	4	58	2	3	0
30	813821114030	MOHAMMED ASLAM. S	30	46					24		52						12	10	8	5	54	46	64	10	8	5
31	813821114032	NAVEEN. V	14	30					20		50						36	18	9	8	34	30	86	18	9	8
32	813821114033	PARAMESH. M	34	52					18		56						36	28	8	0	52	52	92	28	8	0
33	813821114034	PRAVEEN KUMAR.M	0	0					0		36						19	15	4	0	0	0	55	15	4	0
34	813821114035	RAGAVIGA. T	0	0					22		44						29	19	8	5	22	0	73	19	8	5
35	813821114036	RAHUL RAMESH BABU. B	12	18					8		42						10	11	0	0	20	18	52	11	0	0
36	813821114037	RAM PRASATH. R	0	8					12		42						09	0	0	0	12	8	51	0	0	0
37	813821114038	RAMSHANKAR. C	22	0					0		22						0	0	0	0	22	0	22	0	0	0
38	813821114039	SANTHOSH KUMAR. R	0	0					6		48						14	7	0	0	6	0	62	7	0	0
39	813821114040	SATHISH. S	32	18					22		64						39	28	8	8	54	18	103	28	8	8
40	813821114041	SHANMUGAPRIYAN. S	6	0					8		48						19	2	6	2	14	0	67	2	6	2
41	813821114043	SHUBHANKHAR. M	8	14					4		56						017	16	4	0	12	14	73	16	4	0
42	813821114044	SIVASHANKARAN. K	0	0					0		8						0	0	0	0	0	0	8	0	0	0
43	813821114045	SOWMYANARAYANAN. S	28	34					14		56						24	18	7	3	42	34	80	18	7	3
44	813821114046	SRIRAMKUMAR. R	6	12					16		46						13	6	0	0	22	12	59	6	0	0

45	813821114047	SUNDAR. V	20	0					4		36						13	12	0	0	24	0	49	12	0	0
46	813821114048	SURYA. S	0	0					12		38						23	2	5	0	12	0	61	2	5	0
47	813821114049	VENKATESHWARAN. B	0	2					6		44						14	4	4	0	6	2	58	4	4	0
48	813821114050	VETRIVEL. S	4	4					12		38						28	0	0	0	16	4	66	0	0	0
49	813821114051	VIGNESH. N S	0	2					6		44						18	9	0	0	6	2	62	9	0	0
50	813821114052	VISHAL. R B	34	16					24		48						35	20	5	0	58	16	83	20	5	0
51	813821114053	VISHANTH. M	22	30					16		38						12	14	3	4	38	30	50	14	3	4
52	813821114054	YUGA. M	4	0					0		36						19	6	0	0	4	0	55	6	0	0
53	813821114055	YUVARAJAN. T	0	0					0		0						6	6	4	6	0	0	6	6	4	6
54	813821114301	CHANDRU. S	0	0					6		44						32	10	0	8	6	0	76	10	0	8
55	813821114302	GOPINATH. P	0	0					2		48						14	0	0	0	2	0	62	0	0	0
56	813821114303	HARI HARA SUDHAN. G	0	0					8		44						35	16	8	0	8	0	79	16	8	0
57	813821114304	HARI KRISHNAN. R	4	18					12		54						13	13	6	2	16	18	67	13	6	2
58	813821114305	KATHIR. R	0	0					0		26						10	0	0	0	0	0	36	0	0	0
59	813821114307	ROHITH. R	0	0					14		44						30	17	8	6	14	0	74	17	8	6
60	813821114308	VARKEY PUNNOOSE SABU	0	0					2		10						0	0	0	0	2	0	10	0	0	0
61	813821114309	YOONIS NAVIN. G	0	0					6		44						19	16	8	7	6	0	63	16	8	7
CO's Target Value																					43.20	38.40	62.40	22.80	8.40	4.80
No. of Student Secured above CO's Target value																					6	2	23	5	2	10
Percentage of Student Secured above Target																					9.84	3.28	37.70	8.20	3.28	16.39

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	MA3351 TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	Batch	2021 - 2025
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813821114001	ABINESH. R	B+
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	B+
3	813821114003	ARUN. M	A
4	813821114004	ASWIN. G	B+
5	813821114005	ASWIN. S	U
6	813821114006	BALAJI. G	B+
7	813821114007	BALAJI. M	B+
8	813821114008	BARANIDARAN. R	B+
9	813821114009	DHANUSH KUMAR. R	B+
10	813821114010	DHINESHWARAN. R	B+
11	813821114011	GAJENDRAN. G	A+
12	813821114012	GOWSICK. S	A
13	813821114013	HARI BABU. A	B+
14	813821114014	HARIHARAN. S	B+
15	813821114015	IRFAN AHAMED. I	B+
16	813821114016	JEFFREY MELWIN. J	B+
17	813821114017	KAMALNATH. S	B+
18	813821114018	KANAGAMUTHU. M	B+
19	813821114019	KEERTHIVASAN. S	B+
20	813821114020	KESAVAN. Y	B+
21	813821114021	KIRAN DEVA. C N	B+
22	813821114022	KISHOORE. G R	B+
23	813821114023	KISHORE. A	B+
24	813821114024	KRITHICK PRASADH. S	B+
25	813821114025	LANESH. N	B+
26	813821114026	LEO DHOBYAS. A	B+
27	813821114027	MITHUL CHAVAN. R S	B+
28	813821114028	MOHAMED FAISAL. S	B+
29	813821114029	MOHAMED YAHAYA. A	B+
30	813821114030	MOHAMMED ASLAM. S	B+
31	813821114032	NAVEEN. V	B+
32	813821114033	PARAMESH. M	A
33	813821114034	PRAVEEN KUMAR.M	B+
34	813821114035	RAGAVIGA. T	B+
35	813821114036	RAHUL RAMESH BABU. B	B+
36	813821114037	RAM PRASATH. R	B+
37	813821114038	RAMSHANKAR. C	U
38	813821114039	SANTHOSH KUMAR. R	B+
39	813821114040	SATHISH. S	B+
40	813821114041	SHANMUGAPRIYAN. S	B+
41	813821114043	SHUBHANKHAR. M	B+
42	813821114044	SIVASHANKARAN. K	B+
43	813821114045	SOWMYANARAYANAN. S	B+
44	813821114046	SRIRAMKUMAR. R	A
45	813821114047	SUNDAR. V	B+
46	813821114048	SURYA. S	B+
47	813821114049	VENKATESHWARAN. B	B+
48	813821114050	VETRIVEL. S	B+
49	813821114051	VIGNESH. N S	B+
50	813821114052	VISHAL. R B	B+
51	813821114053	VISHANTH. M	B+
52	813821114054	YUGA. M	B+

53	813821114055	YUVARAJAN. T	B+
54	813821114301	CHANDRU. S	B+
55	813821114302	GOPINATH. P	B+
56	813821114303	HARI HARA SUDHAN. G	B+
57	813821114304	HARI KRISHNAN. R	B+
58	813821114305	KATHIR. R	UA
59	813821114307	ROHITH. R	B+
60	813821114308	VARKEY PUNNOOSE SABU	U
61	813821114309	YOONIS NAVIN. G	B+
No. of S/O Grade			0
No. of A/A+ Grade			4
No. of B/A Grade			0
No. of C/B+ Grade			0
No. of D/B Grade			0
No. of E/B Grade			0
Target for course outcome Attainment			60
No of students above the target			4
CO-Attainment University			6.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C201.1	9.84	6.00	7.53	100.00	26.03	1
C201.2	3.28	6.00	4.91	100.00	23.93	1
C201.3	37.70	6.00	18.68	85.25	32.00	1
C201.4	8.20	6.00	6.88	83.06	22.11	1
C201.5	3.28	6.00	4.91	83.61	20.65	1
C201.6	16.39	6.00	10.16	100.00	28.13	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C201.1	3	3	2							1		1			
C201.2	3	3	2							1		1			
C201.3	3	3	2							1		1			
C201.4	3	3	2							1		1			
C201.5	3	3	2							1		1			
C201.6	3	3	2							1		1			
C201	3.00	3.00	2.00							1.00		1.00			

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C201.1	1.00	1.00	0.67							0.33		0.33			
C201.2	1.00	1.00	0.67							0.33		0.33			
C201.3	1.00	1.00	0.67							0.33		0.33			
C201.4	1.00	1.00	0.67							0.33		0.33			
C201.5	1.00	1.00	0.67							0.33		0.33			
C201.6	1.00	1.00	0.67							0.33		0.33			
C201	1.00	1.00	0.67							0.33		0.33			

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester			
COURSE CODE/TITLE	ENGINEERINGTHERMODYNAMICS	Batch	2021 - 2025
CLASS / SECTION	Sem 3 / MECH		
COURSE COORDINATOR	Mr.S.Vinoth Kumar		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			80					**20**		**40**	**40**			**20**			**32**	**19**	**17**	**32**	**80**	**40**	**72**	**19**	**17**	**72**
1	813821114001	ABINESH. R	4					8		16	12			12			10	10	10	12	4	16	22	10	10	32
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	35					15		6	16			2			10	10	10	10	35	6	26	10	10	27
3	813821114003	ARUN. M	35					15		18	32			6			20	10	10	20	35	18	52	10	10	41
4	813821114004	ASWIN. G	30					12		0	0			0			10	10	10	0	30	0	10	10	10	12
5	813821114005	ASWIN. S	8					8		18	8			0			10	18	0	0	8	18	18	18	0	8
6	813821114006	BALAJI. G	30					12		34	15			15			10	10	10	24	30	34	25	10	10	51
7	813821114007	BALAJI. M	9					9		21	21			8			10	10	10	12	9	21	31	10	10	29
8	813821114008	BARANIDARAN. R	12					10		26	12			8			10	11	0	0	12	26	22	11	0	18
9	813821114009	DHANUSH KUMAR. R	4					4		8	8			2			10	17	0	0	4	8	18	17	0	6
10	813821114010	DHINESHWARAN. R	6					4		32	10			18			10	10	10	20	6	32	20	10	10	42
11	813821114011	GAJENDRAN. G	65					15		32	28			20			10	10	10	21	65	32	38	10	10	56
12	813821114012	GOWSICK. S	4					4		10	20			0			10	10	16	0	4	10	30	10	16	4
13	813821114013	HARI BABU. A	4					4		8	10			4			5	5	0	0	4	8	15	5	0	8
14	813821114014	HARIHARAN. S	10					10		14	30			10			10	10	12	0	10	14	40	10	12	20
15	813821114015	IRFAN AHAMED. I	60					20		23	40			13			25	19	17	26	60	23	65	19	17	59
16	813821114016	JEFFREY MELWIN. J	6					6		22	8			4			6	6	0	0	6	22	14	6	0	10
17	813821114017	KAMALNATH. S	6					6		0	0			0			10	7	0	0	6	0	10	7	0	6
18	813821114018	KANAGAMUTHU. M	5					5		14	10			16			10	10	10	0	5	14	20	10	10	21
19	813821114019	KEERTHIVASAN. S	4					4		10	8			20			10	10	10	13	4	10	18	10	10	37
20	813821114020	KESAVAN. Y	40					14		30	24			20			20	15	15	10	40	30	44	15	15	44
21	813821114021	KIRAN DEVA. C N	68					20		33	33			20			10	10	9	23	68	33	43	10	9	63
22	813821114022	KISHOORE. G R	68					18		33	38			17			21	15	15	22	68	33	59	15	15	57
23	813821114023	KISHORE. A	40					20		28	28			20			10	10	10	25	40	28	38	10	10	65
24	813821114024	KRITHICK PRASADH. S	0					0		8	6			8			10	12	0	0	0	8	16	12	0	8
25	813821114025	LANESH. N	2					2		4	4			8			6	6	0	0	2	4	10	6	0	10
26	813821114026	LEO DHOBYAS. A	4					4		14	20			8			9	9	0	0	4	14	29	9	0	12
27	813821114027	MITHUL CHAVAN. R S	21					15		37	33			6			10	10	10	15	21	37	43	10	10	36
28	813821114028	MOHAMED FAISAL. S	30					20		10	24			16			10	10	10	12	30	10	34	10	10	48
29	813821114029	MOHAMED YAHAYA. A	19					15		24	10			16			10	10	10	0	19	24	20	10	10	31
30	813821114030	MOHAMMED ASLAM. S	37					17		24	33			11			21	15	15	21	37	24	54	15	15	49
31	813821114032	NAVEEN. V	42					20		34	26			20			20	10	10	15	42	34	46	10	10	55
32	813821114033	PARAMESH. M	42					20		32	34			20			20	15	15	16	42	32	54	15	15	56
33	813821114034	PRAVEEN KUMAR.M	10					10		32	33			5			10	10	10	10	10	32	43	10	10	25
34	813821114035	RAGAVIGA. T	30					20		32	38			20			23	15	15	22	30	32	61	15	15	62
35	813821114036	RAHUL RAMESH BABU. B	21					15		5	11			20			10	10	8	0	21	5	21	10	8	35
36	813821114037	RAM PRASATH. R	6					6		18	12			20			10	10	13	0	6	18	22	10	13	26
37	813821114038	RAMSHANKAR. C	3					3		16	18			18			10	10	10	0	3	16	28	10	10	21
38	813821114039	SANTHOSH KUMAR. R	19					15		17	4			17			10	1	010	3	19	17	14	1	10	35
39	813821114040	SATHISH. S	50					18		32	24			18			20	15	15	11	50	32	44	15	15	47
40	813821114041	SHANMUGAPRIYAN. S	12					12		28	20			20			10	10	10	20	12	28	30	10	10	52
41	813821114043	SHUBHANKHAR. M	40					20		16	14			20			20	10	10	20	40	16	34	10	10	60
42	813821114044	SIVASHANKARAN. K	1					1		10	14			6			1	1	1	3	1	10	15	1	1	10
43	813821114045	SOWMYANARAYANAN. S	60					20		16	34			20			20	15	15	21	60	16	54	15	15	61
44	813821114046	SRIRAMKUMAR. R	40					18		20	14			16			10	10	10	13	40	20	24	10	10	47

45	813821114047	SUNDAR. V	9					9		0	0			0			10	10	0	0	9	0	10	10	0	9
46	813821114048	SURYA. S	30					20		12	6			20			10	10	10	15	30	12	16	10	10	55
47	813821114049	VENKATESHWARAN. B	34					20		8	28			20			10	10	10	6	34	8	38	10	10	46
48	813821114050	VETRIVEL. S	16					10		24	28			18			10	10	10	12	16	24	38	10	10	40
49	813821114051	VIGNESH. N S	38					20		12	18			20			10	10	15	16	38	12	26	10	15	56
50	813821114052	VISHAL. R B	36					20		24	24			18			20	10	10	11	36	24	44	10	10	49
51	813821114053	VISHANTH. M	52					20		18	30			4			20	15	15	10	52	18	50	15	15	34
52	813821114054	YUGA. M	17					15		10	6			20			10	10	9	0	17	10	16	10	9	35
53	813821114055	YUVARAJAN. T	30					10		6	2			0			10	10	11	0	30	6	12	10	11	10
54	813821114301	CHANDRU. S	0					0		11	19			10			13	10	10	20	0	11	32	10	10	30
55	813821114302	GOPINATH. P	0					0		15	18			17			20	15	15	15	0	15	38	15	15	32
56	813821114303	HARI HARA SUDHAN. G	0					0		34	12			20			10	10	14	0	0	34	22	10	14	20
57	813821114304	HARI KRISHNAN. R	30					10		28	26			10			20	15	15	10	30	28	46	15	15	30
58	813821114305	KATHIR. R	0					0		10	14			10			10	10	13	0	0	10	24	10	13	10
59	813821114307	ROHITH. R	20					10		12	18			10			10	10	10	15	20	12	28	10	10	35
60	813821114308	VARKEY PUNNOOSE SABU	5					5		6	0			0			10	3	0	0	5	6	10	3	0	5
61	813821114309	YOONIS NAVIN. G	0					0		29	11			10			10	10	10	13	0	29	21	10	10	23
CO's Target Value																					52.00	26.00	46.80	12.35	11.05	46.80
No. of Student Secured above CO's Target value																					5	17	8	13	17	19
Percentage of Student Secured above Target																					8.20	27.87	13.11	21.31	27.87	31.15

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	ME3391 ENGINEERINGTHERMODYNAMICS	Batch	2021 - 2025
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813821114001	ABINESH. R	B+
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	B+
3	813821114003	ARUN. M	A
4	813821114004	ASWIN. G	U
5	813821114005	ASWIN. S	U
6	813821114006	BALAJI. G	A
7	813821114007	BALAJI. M	B+
8	813821114008	BARANIDARAN. R	B+
9	813821114009	DHANUSH KUMAR. R	B+
10	813821114010	DHINESHWARAN. R	B+
11	813821114011	GAJENDRAN. G	B+
12	813821114012	GOWSICK. S	A
13	813821114013	HARI BABU. A	U
14	813821114014	HARIHARAN. S	U
15	813821114015	IRFAN AHAMED. I	A
16	813821114016	JEFFREY MELWIN. J	B+
17	813821114017	KAMALNATH. S	U
18	813821114018	KANAGAMUTHU. M	B+
19	813821114019	KEERTHIVASAN. S	B+
20	813821114020	KESAVAN. Y	A
21	813821114021	KIRAN DEVA. C N	A
22	813821114022	KISHOORE. G R	A+
23	813821114023	KISHORE. A	A+
24	813821114024	KRITHICK PRASADH. S	B+
25	813821114025	LANESH. N	B+
26	813821114026	LEO DHOBYAS. A	B+
27	813821114027	MITHUL CHAVAN. R S	B+
28	813821114028	MOHAMED FAISAL. S	B+
29	813821114029	MOHAMED YAHAYA. A	B+
30	813821114030	MOHAMMED ASLAM. S	B+
31	813821114032	NAVEEN. V	A
32	813821114033	PARAMESH. M	B+
33	813821114034	PRAVEEN KUMAR.M	B+
34	813821114035	RAGAVIGA. T	B+
35	813821114036	RAHUL RAMESH BABU. B	U
36	813821114037	RAM PRASATH. R	B+
37	813821114038	RAMSHANKAR. C	U
38	813821114039	SANTHOSH KUMAR. R	B+
39	813821114040	SATHISH. S	B+
40	813821114041	SHANMUGAPRIYAN. S	B+
41	813821114043	SHUBHANKHAR. M	B+
42	813821114044	SIVASHANKARAN. K	UA
43	813821114045	SOWMYANARAYANAN. S	B+
44	813821114046	SRIRAMKUMAR. R	B+
45	813821114047	SUNDAR. V	U
46	813821114048	SURYA. S	B+
47	813821114049	VENKATESHWARAN. B	B+
48	813821114050	VETRIVEL. S	B+
49	813821114051	VIGNESH. N S	B+
50	813821114052	VISHAL. R B	A
51	813821114053	VISHANTH. M	B+
52	813821114054	YUGA. M	U
53	813821114055	YUVARAJAN. T	B+

54	813821114301	CHANDRU. S	B+
55	813821114302	GOPINATH. P	B+
56	813821114303	HARI HARA SUDHAN. G	A
57	813821114304	HARI KRISHNAN. R	B+
58	813821114305	KATHIR. R	UA
59	813821114307	ROHITH. R	B+
60	813821114308	VARKEY PUNNOOSE SABU	B+
61	813821114309	YOONIS NAVIN. G	B+
No. of S/O Grade			0
No. of A/A+ Grade			9
No. of B/A Grade			0
No. of C/B+ Grade			0
No. of D/B Grade			0
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			9
CO-Attainment University			14.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C203.1	8.20	14.00	11.68	100.00	29.34	1
C203.2	27.87	14.00	19.55	100.00	35.64	1
C203.3	13.11	14.00	13.65	82.51	27.42	1
C203.4	21.31	14.00	16.92	82.51	30.04	1
C203.5	27.87	14.00	19.55	83.06	32.25	1
C203.6	31.15	14.00	20.86	100.00	36.69	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C203.1	3	3	1	1		1	1			1		1	2		2
C203.2	3	3	3	3	1	1	1			1		1	3		3
C203.3	3	3	3	3	1	1	1			1		1	3		3
C203.4	3	3	3	2	1	1	1			1		1	3		3
C203.5	3	3				1				1		1			
C203.6	3	3	3	2	1	1	1			1		1	3		3
C203	3.00	3.00	2.17	1.83	0.67	1.00	0.83			1.00		1.00	2.33		2.33

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C203.1	1.00	1.00	0.33	0.33		0.33	0.33			0.33		0.33	0.67		0.67
C203.2	1.00	1.00	1.00	1.00	0.33	0.33	0.33			0.33		0.33	1.00		1.00
C203.3	1.00	1.00	1.00	1.00	0.33	0.33	0.33			0.33		0.33	1.00		1.00
C203.4	1.00	1.00	1.00	0.67	0.33	0.33	0.33			0.33		0.33	1.00		1.00
C203.5	1.00	1.00				0.33				0.33		0.33			
C203.6	1.00	1.00	1.00	0.67	0.33	0.33	0.33			0.33		0.33	1.00		1.00
C203	1.00	1.00	0.72	0.61	0.22	0.33	0.28			0.33		0.33	0.78		0.78

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester

COURSE CODE/TITLE	METROLOGY AND MEASUREMENTS	Batch	2020 - 2024
CLASS / SECTION	Sem 5 / MECH		
COURSE COORDINATOR	Dr.S.Karthikeyan		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			64	**36**							**36**	**64**							**68**	**32**	**64**	**36**	**36**	**64**	**68**	**32**
1	813820114001	ABDUL AZIZ. M	45	7							28	44							44	28	45	7	28	44	44	28
2	813820114002	ADHITHYA. V	56	22							32	46							48	26	56	22	32	46	48	26
3	813820114003	AJAY. M	18	14							26	38							38	20	18	14	26	38	38	20
4	813820114004	ANNAMALAI. S	20	18							28	38							40	14	20	18	28	38	40	14
5	813820114005	ANTONY ROSARIO. S	38	22							24	44							44	16	38	22	24	44	44	16
6	813820114006	ARUN KUMAR. S	20	18							28	36							42	18	20	18	28	36	42	18
7	813820114007	ASHVIN. J	46	24							22	50							0	0	46	24	22	50	0	0
8	813820114008	ASHWANTH KRISHNA. K	40	30							30	34							44	26	40	30	30	34	44	26
9	813820114009	BALRAJ. E	42	22							22	50							50	28	42	22	22	50	50	28
10	813820114010	EVANGELINE SHEEBA. M	50	26							30	58							52	28	50	26	30	58	52	28
11	813820114011	EZHUMALAI. M	50	18							28	32							34	18	50	18	28	32	34	18
12	813820114012	GANISHKAR. S B	50	24							26	54							54	20	50	24	26	54	54	20
13	813820114013	HARAN. K P	0	0							16	22							0	6	0	0	16	22	0	6
14	813820114014	HARI BALAJI. R	44	24							28	32							36	24	44	24	28	32	36	24
15	813820114015	HARI HARAN. R	26	6							28	44							42	18	26	6	28	44	42	18
16	813820114016	HARISH. M	48	32							30	38							52	28	48	32	30	38	52	28
17	813820114018	HEWIN ARMSTRONG. J	38	22							30	52							42	18	38	22	30	52	42	18
18	813820114019	HUMAID KHALIFA. A Y	44	28							0	0							52	26	44	28	0	0	52	26
19	813820114020	JAMES ANTONY GODWIN. L	34	28							28	34							50	26	34	28	28	34	50	26
20	813820114021	JAVITH AHAMED. A	42	26							28	38							14	6	42	26	28	38	14	6
21	813820114022	JEGADEESWARAN. B	44	24							28	40							52	28	44	24	28	40	52	28
22	813820114023	JITHENDIRAN. J	16	6							30	30							24	14	16	6	30	30	24	14
23	813820114024	JOSHUA. M	16	16							26	26							42	22	16	16	26	26	42	22
24	813820114025	JUDOROHITH. S	36	28							32	34							36	16	36	28	32	34	36	16
25	813820114026	KARTHIKEYAN. R	40	30							22	38							32	28	40	30	22	38	32	28
26	813820114027	KAVIN. A	32	18							20	42							40	10	32	18	20	42	40	10
27	813820114028	KISHORE. A	14	14							24	30							10	0	14	14	24	30	10	0
28	813820114029	KISHORE. G	52	34							34	50							50	24	52	34	34	50	50	24
29	813820114030	MICHAEL SANTHOSH. Y	42	28							32	44							52	26	42	28	32	44	52	26
30	813820114031	MOHAMED KHUTBUDDIN. S	48	22							32	46							44	18	48	22	32	46	44	18
31	813820114032	MOHAMED MANSOOR. N	48	32							32	54							52	26	48	32	32	54	52	26
32	813820114033	MOHAMED NURUL ISLAM. A	38	28							28	30							46	12	38	28	28	30	46	12
33	813820114034	MOHAN BHABU. S	44	24							28	42							46	22	44	24	28	42	46	22
34	813820114035	MONIKA. B	48	32							32	52							52	26	48	32	32	52	52	26
35	813820114036	NAGARAJAN. M	36	18							28	36							32	18	36	18	28	36	32	18
36	813820114037	NIKIL SANKAR. S S	50	28							16	48							32	22	50	28	16	48	32	22
37	813820114038	PAINTHAMIL CHEZHIAN. K	34	20							24	38							34	22	34	20	24	38	34	22
38	813820114039	POOJA. R	38	32							26	44							42	22	38	32	26	44	42	22
39	813820114040	PRABHAKARAN. K A	38	24							28	36							38	12	38	24	28	36	38	12
40	813820114041	PRAVEEN RAJ. P	42	22							30	44							48	26	42	22	30	44	48	26
41	813820114042	RAAJ BHARATH. R	34	30							28	30							48	22	34	30	28	30	48	22
42	813820114043	RANJITH BALAJI. S	30	22							24	24							16	14	30	22	24	24	16	14
43	813820114044	RIYAZ AHAMED MUSTAFFA	42	24							24	28							48	24	42	24	24	28	48	24
44	813820114045	ROHAN. B V	50	28							28	40							34	24	50	28	28	40	34	24
45	813820114046	RUFUS. J	46	20							22	22							48	20	46	20	22	22	48	20

46	813820114047	SAM JESUDOSS. P	34	26							32	48							34	20	34	26	32	48	34	20
47	813820114048	SANTHOSH. B	32	24							26	46							50	18	32	24	26	46	50	18
48	813820114049	SATHYA JOTHI. K	40	22							0	0							34	2	40	22	0	0	34	2
49	813820114050	SESHAAN ALLIESTER. I	30	22							16	52							52	12	30	22	16	52	52	12
50	813820114051	SHAM. I	16	16							28	30							48	2	16	16	28	30	48	2
51	813820114052	SHANMUGHA PANDIAN. I	46	18							32	50							38	22	46	18	32	50	38	22
52	813820114053	SHIYAM. V	46	24							30	48							44	16	46	24	30	48	44	16
53	813820114054	SIBIRAJ. K	20	12							26	30							24	12	20	12	26	30	24	12
54	813820114055	SIRANJEEVI. S	0	0							0	0							0	0	0	0	0	0	0	0
55	813820114056	SRI KRISHNA PRASATH. K	48	24							30	50							42	24	48	24	30	50	42	24
56	813820114057	SRINIVASAN. M	50	30							30	40							42	16	50	30	30	40	42	16
57	813820114058	SRINIVASA PERUMAL. R	42	24							30	42							32	18	42	24	30	42	32	18
58	813820114059	SRISOORYA. S	52	30							22	48							56	26	52	30	22	48	56	26
59	813820114060	THARVIN. S	46	28							28	42							54	20	46	28	28	42	54	20
60	813820114061	TILAKAN. S	28	16							30	36							36	18	28	16	30	36	36	18
61	813820114062	VASANTHAKUMAR. C	36	24							28	44							40	22	36	24	28	44	40	22
62	813820114063	VIGNESHWARAN. R	50	32							32	50							44	20	50	32	32	50	44	20
63	813820114064	VIGNESHWER. K	46	24							24	40							48	22	46	24	24	40	48	22
64	813820114065	VIJAY. S	24	30							22	46							38	18	24	30	22	46	38	18
65	813820114066	YOGESH. S	34	22							30	46							48	24	34	22	30	46	48	24
66	813820114067	YOGESWARAN. S	38	26							30	34							38	18	38	26	30	34	38	18
67	813820114301	ARUNACHALAM. M	40	30							32	50							0	0	40	30	32	50	0	0
68	813820114302	ASWIN. R	46	24							28	48							48	22	46	24	28	48	48	22
69	813820114303	BALA. U	18	14							24	28							32	8	18	14	24	28	32	8
70	813820114304	JAWAHAR FAROOK. S	18	12							24	40							34	10	18	12	24	40	34	10
71	813820114305	KISHORE V	10	10							32	50							44	18	10	10	32	50	44	18
72	813820114306	NIDHEESH. S	0	6							20	20							4	4	0	6	20	20	4	4
73	813820114307	NOORUL ARSHADH. A	40	30							32	50							40	20	40	30	32	50	40	20
74	813820114308	SAI PRASANNA. R	0	2							22	24							30	22	0	2	22	24	30	22
75	813820114309	SANJAI. S	32	22							30	40							14	12	32	22	30	40	14	12
76	813820114310	SANTHOSH KUMAR. V	2	0							12	22							10	8	2	0	12	22	10	8
77	813820114311	YOGESH. R	28	22							26	50							32	18	28	22	26	50	32	18
																		CO's Target Value			41.60	23.40	23.40	41.60	44.20	20.80
																		No. of Student Secured above CO's Target value			33	40	61	37	26	32
																		Percentage of Student Secured above Target			42.86	51.95	79.22	48.05	33.77	41.56

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	ME8501 METROLOGY AND MEASUREMENTS	Batch	2020 - 2024
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813820114001	ABDUL AZIZ. M	B+
2	813820114002	ADHITHYA. V	A
3	813820114003	AJAY. M	B+
4	813820114004	ANNAMALAI. S	B+
5	813820114005	ANTONY ROSARIO. S	B
6	813820114006	ARUN KUMAR. S	B
7	813820114007	ASHVIN. J	B+
8	813820114008	ASHWANTH KRISHNA. K	B+
9	813820114009	BALRAJ. E	A
10	813820114010	EVANGELINE SHEEBA. M	B+
11	813820114011	EZHUMALAI. M	B
12	813820114012	GANISHKAR. S B	B+
13	813820114013	HARAN. K P	B+
14	813820114014	HARI BALAJI. R	A
15	813820114015	HARI HARAN. R	B+
16	813820114016	HARISH. M	A
17	813820114018	HEWIN ARMSTRONG. J	B+
18	813820114019	HUMAID KHALIFA. A Y	B+
19	813820114020	JAMES ANTONY GODWIN. L	B+
20	813820114021	JAVITH AHAMED. A	B+
21	813820114022	JEGADEESWARAN. B	B+
22	813820114023	JITHENDIRAN. J	B
23	813820114024	JOSHUA. M	B+
24	813820114025	JUDOROHITH. S	A
25	813820114026	KARTHIKEYAN. R	A
26	813820114027	KAVIN. A	A
27	813820114028	KISHORE. A	B
28	813820114029	KISHORE. G	A
29	813820114030	MICHAEL SANTHOSH. Y	A+
30	813820114031	MOHAMED KHUTBUDDIN. S	A+
31	813820114032	MOHAMED MANSOOR. N	B+
32	813820114033	MOHAMED NURUL ISLAM. A	A
33	813820114034	MOHAN BHABU. S	B+
34	813820114035	MONIKA. B	A
35	813820114036	NAGARAJAN. M	B
36	813820114037	NIKIL SANKAR. S S	A
37	813820114038	PAINTHAMIL CHEZHIAN. K	B
38	813820114039	POOJA. R	A
39	813820114040	PRABHAKARAN. K A	A
40	813820114041	PRAVEEN RAJ. P	B+
41	813820114042	RAAJ BHARATH. R	B
42	813820114043	RANJITH BALAJI. S	B+
43	813820114044	RIYAZ AHAMED MUSTAFFA	B
44	813820114045	ROHAN. B V	B+
45	813820114046	RUFUS. J	B+
46	813820114047	SAM JESUDOSS. P	B
47	813820114048	SANTHOSH. B	B+
48	813820114049	SATHYA JOTHI. K	U
49	813820114050	SESHAAN ALLIESTER. I	B
50	813820114051	SHAM. I	B+
51	813820114052	SHANMUGHA PANDIAN. I	A
52	813820114053	SHIYAM. V	B+
53	813820114054	SIBIRAJ. K	B

54	813820114055	SIRANJEEVI. S	
55	813820114056	SRI KRISHNA PRASATH. K	A
56	813820114057	SRINIVASAN. M	B+
57	813820114058	SRINIVASA PERUMAL. R	B+
58	813820114059	SRISOORYA. S	A
59	813820114060	THARVIN. S	A
60	813820114061	TILAKAN. S	A
61	813820114062	VASANTHAKUMAR. C	A
62	813820114063	VIGNESHWARAN. R	B
63	813820114064	VIGNESHWER. K	A
64	813820114065	VIJAY. S	B
65	813820114066	YOGESH. S	B
66	813820114067	YOGESWARAN. S	B
67	813820114301	ARUNACHALAM. M	B+
68	813820114302	ASWIN. R	B
69	813820114303	BALA. U	B
70	813820114304	JAWAHAR FAROOK. S	B+
71	813820114305	KISHORE V	A
72	813820114306	NIDHEESH. S	U
73	813820114307	NOORUL ARSHADH. A	B
74	813820114308	SAI PRASANNA. R	U
75	813820114309	SANJAI. S	B+
76	813820114310	SANTHOSH KUMAR. V	U
77	813820114311	YOGESH. R	B+
No. of S/O Grade			0
No. of A/A+ Grade			2
No. of B/A Grade			21
No. of C/B+ Grade			30
No. of D/B Grade			19
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			53
CO-Attainment University			68.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C303.1	42.86	68.00	57.94	100.00	66.35	2
C303.2	51.95	68.00	61.58	100.00	69.26	2
C303.3	79.22	68.00	72.49	87.88	75.57	2
C303.4	48.05	68.00	60.02	83.55	64.73	2
C303.5	33.77	68.00	54.31	85.71	60.59	1
C303.6	41.56	68.00	57.42	100.00	65.94	2

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C303.1	3	2	2	1	2	2	1	1	1	1	1	1	2	2	2
C303.2	3	3	2	2	2	1	1	1	1	2	2	2	2	2	2
C303.3	3	2	2	2	3	1	2	1	1	2	2	2	2	2	2
C303.4	2	2	1	2	1	1	2	2	1	1	1	1	2	2	2
C303.5	2	3	2	2	2	1	1	1	1	2	2	2	2	2	2
C303.6	3	2	2	2	2	1	1	1	1	2	1	1	2	2	2
C303	2.67	2.33	1.83	1.83	2.00	1.17	1.33	1.17	1.00	1.67	1.50	1.50	2.00	2.00	2.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C303.1	2.00	1.33	1.33	0.67	1.33	1.33	0.67	0.67	0.67	0.67	0.67	0.67	1.33	1.33	1.33
C303.2	2.00	2.00	1.33	1.33	1.33	0.67	0.67	0.67	0.67	1.33	1.33	1.33	1.33	1.33	1.33
C303.3	2.00	1.33	1.33	1.33	2.00	0.67	1.33	0.67	0.67	1.33	1.33	1.33	1.33	1.33	1.33
C303.4	1.33	1.33	0.67	1.33	0.67	0.67	1.33	1.33	0.67	0.67	0.67	0.67	1.33	1.33	1.33
C303.5	0.67	1.00	0.67	0.67	0.67	0.33	0.33	0.33	0.33	0.67	0.67	0.67	0.67	0.67	0.67
C303.6	2.00	1.33	1.33	1.33	1.33	0.67	0.67	0.67	0.67	1.33	0.67	0.67	1.33	1.33	1.33
C303	1.67	1.39	1.11	1.11	1.22	0.72	0.83	0.72	0.61	1.00	0.89	0.89	1.22	1.22	1.22

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester

COURSE CODE/TITLE	DESIGN OF MACHINE ELEMENTS	Batch	2020 - 2024
CLASS / SECTION	Sem 5 / MECH		
COURSE COORDINATOR	Mr.R.Suresh Babu		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			32	**32**	**36**						**36**			**64**				**50**	**50**		**32**	**32**	**72**	**50**	**50**	**64**
1	813820114001	ABDUL AZIZ. M	20	18	6						16			8				12	38		20	18	22	12	38	8
2	813820114002	ADHITHYA. V	32	32	16						36			26				26	36		32	32	52	26	36	26
3	813820114003	AJAY. M	22	4	6						16			6				32	34		22	4	22	32	34	6
4	813820114004	ANNAMALAI. S	6	6	16						8			42				12	6		6	6	24	12	6	42
5	813820114005	ANTONY ROSARIO. S	12	22	4						14			20				22	32		12	22	18	22	32	20
6	813820114006	ARUN KUMAR. S	6	8	8						28			40				26	44		6	8	36	26	44	40
7	813820114007	ASHVIN. J	32	14	36						20			54				46	32		32	14	56	46	32	54
8	813820114008	ASHWANTH KRISHNA. K	32	16	22						32			46				44	40		32	16	54	44	40	46
9	813820114009	BALRAJ. E	26	18	10						34			30				24	42		26	18	44	24	42	30
10	813820114010	EVANGELINE SHEEBA. M	26	20	8						32			28				44	40		26	20	40	44	40	28
11	813820114011	EZHUMALAI. M	8	4	10						14			14				26	12		8	4	24	26	12	14
12	813820114012	GANISHKAR. S B	20	12	8						26			32				20	38		20	12	34	20	38	32
13	813820114013	HARAN. K P	0	0	0						0			0				0	0		0	0	0	0	0	0
14	813820114014	HARI BALAJI. R	24	16	16						32			30				26	42		24	16	48	26	42	30
15	813820114015	HARI HARAN. R	0	0	0						26			4				28	22		0	0	26	28	22	4
16	813820114016	HARISH. M	32	12	36						34			52				34	46		32	12	70	34	46	52
17	813820114018	HEWIN ARMSTRONG. J	8	10	12						20			16				20	42		8	10	32	20	42	16
18	813820114019	HUMAID KHALIFA. A Y	28	20	22						0			0				34	44		28	20	22	34	44	0
19	813820114020	JAMES ANTONY GODWIN. L	8	2	10						30			20				20	36		8	2	40	20	36	20
20	813820114021	JAVITH AHAMED. A	4	18	12						28			8				10	40		4	18	40	10	40	8
21	813820114022	JEGADEESWARAN. B	12	28	30						26			34				28	40		12	28	56	28	40	34
22	813820114023	JITHENDIRAN. J	10	2	6						24			6				24	26		10	2	30	24	26	6
23	813820114024	JOSHUA. M	2	24	4						32			20				12	40		2	24	36	12	40	20
24	813820114025	JUDOROHITH. S	8	18	4						28			32				34	40		8	18	32	34	40	32
25	813820114026	KARTHIKEYAN. R	28	14	8						28			32				36	34		28	14	36	36	34	32
26	813820114027	KAVIN. A	4	6	4						10			28				12	20		4	6	14	12	20	28
27	813820114028	KISHORE. A	2	0	0						14			0				12	0		2	0	14	12	0	0
28	813820114029	KISHORE. G	22	22	24						16			22				42	26		22	22	40	42	26	22
29	813820114030	MICHAEL SANTHOSH. Y	18	24	36						36			48				48	48		18	24	72	48	48	48
30	813820114031	MOHAMED KHUTBUDDIN. S	22	16	14						32			32				34	46		22	16	46	34	46	32
31	813820114032	MOHAMED MANSOOR. N	14	10	6						32			32				28	44		14	10	38	28	44	32
32	813820114033	MOHAMED NURUL ISLAM. A	22	8	14						20			20				20	38		22	8	34	20	38	20
33	813820114034	MOHAN BHABU. S	12	18	8						28			42				24	38		12	18	36	24	38	42
34	813820114035	MONIKA. B	24	26	22						20			34				44	46		24	26	42	44	46	34
35	813820114036	NAGARAJAN. M	8	10	0						10			12				10	16		8	10	10	10	16	12
36	813820114037	NIKIL SANKAR. S S	6	24	20						30			30				28	36		6	24	50	28	36	30
37	813820114038	PAINTHAMIL CHEZHIAN. K	30	22	10						26			48				28	38		30	22	36	28	38	48
38	813820114039	POOJA. R	12	22	18						24			26				14	24		12	22	42	14	24	26
39	813820114040	PRABHAKARAN. K A	12	20	2						30			24				14	22		12	20	32	14	22	24
40	813820114041	PRAVEEN RAJ. P	12	4	26						8			6				28	18		12	4	34	28	18	6
41	813820114042	RAAJ BHARATH. R	28	12	10						30			20				26	42		28	12	40	26	42	20
42	813820114043	RANJITH BALAJI. S	8	0	0						12			12				10	0		8	0	12	10	0	12
43	813820114044	RIYAZ AHAMED MUSTAFFA	14	22	10						32			12				18	32		14	22	42	18	32	12
44	813820114045	ROHAN. B V	4	22	0						20			20				20	32		4	22	20	20	32	20
45	813820114046	RUFUS. J	14	20	16						18			18				24	42		14	20	34	24	42	18

46	813820114047	SAM JESUDOSS. P	24	12	24						26			42				22	36		24	12	50	22	36	42
47	813820114048	SANTHOSH. B	10	14	20						20			46				26	42		10	14	40	26	42	46
48	813820114049	SATHYA JOTHI. K	10	0	4						0			0				0	4		10	0	4	0	4	0
49	813820114050	SESHAAN ALLIESTER. I	14	14	4						32			28				34	22		14	14	36	34	22	28
50	813820114051	SHAM. I	8	4	4						24			14				4	22		8	4	28	4	22	14
51	813820114052	SHANMUGHA PANDIAN. I	22	18	24						34			38				24	46		22	18	58	24	46	38
52	813820114053	SHIYAM. V	10	22	12						24			26				28	34		10	22	36	28	34	26
53	813820114054	SIBIRAJ. K	12	22	10						22			2				4	12		12	22	32	4	12	2
54	813820114055	SIRANJEEVI. S	0	0	0						0			0				0	0		0	0	0	0	0	0
55	813820114056	SRI KRISHNA PRASATH. K	30	26	8						28			36				42	44		30	26	36	42	44	36
56	813820114057	SRINIVASAN. M	32	22	34						16			34				30	38		32	22	50	30	38	34
57	813820114058	SRINIVASA PERUMAL. R	28	30	24						28			32				44	28		28	30	52	44	28	32
58	813820114059	SRISOORYA. S	28	24	24						22			36				20	34		28	24	46	20	34	36
59	813820114060	THARVIN. S	18	30	34						32			56				34	46		18	30	66	34	46	56
60	813820114061	TILAKAN. S	4	26	20						20			30				26	38		4	26	40	26	38	30
61	813820114062	VASANTHAKUMAR. C	18	22	20						26			44				18	36		18	22	46	18	36	44
62	813820114063	VIGNESHWARAN. R	24	8	18						32			48				38	32		24	8	50	38	32	48
63	813820114064	VIGNESHWER. K	24	26	8						32			36				36	46		24	26	40	36	46	36
64	813820114065	VIJAY. S	28	12	2						22			8				48	20		28	12	24	48	20	8
65	813820114066	YOGESH. S	6	4	26						22			14				40	24		6	4	48	40	24	14
66	813820114067	YOGESWARAN. S	18	22	30						24			36				26	44		18	22	54	26	44	36
67	813820114301	ARUNACHALAM. M	24	24	20						30			36				14	36		24	24	50	14	36	36
68	813820114302	ASWIN. R	26	22	2						20			36				14	18		26	22	22	14	18	36
69	813820114303	BALA. U	0	8	0						14			8				14	12		0	8	14	14	12	8
70	813820114304	JAWAHAR FAROOK. S	8	8	10						12			18				8	20		8	8	22	8	20	18
71	813820114305	KISHORE V	18	12	4						18			38				4	40		18	12	22	4	40	38
72	813820114306	NIDHEESH. S	6	18	0						6			0				2	4		6	18	6	2	4	0
73	813820114307	NOORUL ARSHADH. A	18	24	8						34			20				34	36		18	24	42	34	36	20
74	813820114308	SAI PRASANNA. R	6	2	0						14			12				10	12		6	2	14	10	12	12
75	813820114309	SANJAI. S	8	6	4						16			6				4	28		8	6	20	4	28	6
76	813820114310	SANTHOSH KUMAR. V	2	0	2						14			0				0	4		2	0	16	0	4	0
77	813820114311	YOGESH. R	14	4	10						24			8				30	30		14	4	34	30	30	8
																	CO's Target Value				20.80	20.80	46.80	32.50	32.50	41.60
																	No. of Student Secured above CO's Target value				27	26	17	20	43	12
																	Percentage of Student Secured above Target				35.06	33.77	22.08	25.97	55.84	15.58

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	ME8593 DESIGN OF MACHINE ELEMENTS	Batch	2020 - 2024
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813820114001	ABDUL AZIZ. M	U
2	813820114002	ADHITHYA. V	B
3	813820114003	AJAY. M	B
4	813820114004	ANNAMALAI. S	B
5	813820114005	ANTONY ROSARIO. S	B
6	813820114006	ARUN KUMAR. S	U
7	813820114007	ASHVIN. J	B+
8	813820114008	ASHWANTH KRISHNA. K	B
9	813820114009	BALRAJ. E	B
10	813820114010	EVANGELINE SHEEBA. M	B
11	813820114011	EZHUMALAI. M	B
12	813820114012	GANISHKAR. S B	B
13	813820114013	HARAN. K P	U
14	813820114014	HARI BALAJI. R	B
15	813820114015	HARI HARAN. R	B+
16	813820114016	HARISH. M	B
17	813820114018	HEWIN ARMSTRONG. J	B
18	813820114019	HUMAID KHALIFA. A Y	B
19	813820114020	JAMES ANTONY GODWIN. L	B
20	813820114021	JAVITH AHAMED. A	B
21	813820114022	JEGADEESWARAN. B	B
22	813820114023	JITHENDIRAN. J	B
23	813820114024	JOSHUA. M	B
24	813820114025	JUDOROHITH. S	B
25	813820114026	KARTHIKEYAN. R	B+
26	813820114027	KAVIN. A	B+
27	813820114028	KISHORE. A	B
28	813820114029	KISHORE. G	B+
29	813820114030	MICHAEL SANTHOSH. Y	B+
30	813820114031	MOHAMED KHUTBUDDIN. S	B+
31	813820114032	MOHAMED MANSOOR. N	B+
32	813820114033	MOHAMED NURUL ISLAM. A	B+
33	813820114034	MOHAN BHABU. S	B+
34	813820114035	MONIKA. B	B+
35	813820114036	NAGARAJAN. M	U
36	813820114037	NIKIL SANKAR. S S	B+
37	813820114038	PAINTHAMIL CHEZHIAN. K	B
38	813820114039	POOJA. R	B
39	813820114040	PRABHAKARAN. K A	B
40	813820114041	PRAVEEN RAJ. P	B
41	813820114042	RAAJ BHARATH. R	B
42	813820114043	RANJITH BALAJI. S	B+
43	813820114044	RIYAZ AHAMED MUSTAFFA	B+
44	813820114045	ROHAN. B V	B
45	813820114046	RUFUS. J	B+
46	813820114047	SAM JESUDOSS. P	B
47	813820114048	SANTHOSH. B	B
48	813820114049	SATHYA JOTHI. K	B
49	813820114050	SESHAAN ALLIESTER. I	B
50	813820114051	SHAM. I	B
51	813820114052	SHANMUGHA PANDIAN. I	B
52	813820114053	SHIYAM. V	B
53	813820114054	SIBIRAJ. K	U

54	813820114055	SIRANJEEVI. S	
55	813820114056	SRI KRISHNA PRASATH. K	B+
56	813820114057	SRINIVASAN. M	B
57	813820114058	SRINIVASA PERUMAL. R	B+
58	813820114059	SRISOORYA. S	B
59	813820114060	THARVIN. S	B+
60	813820114061	TILAKAN. S	B
61	813820114062	VASANTHAKUMAR. C	A
62	813820114063	VIGNESHWARAN. R	B+
63	813820114064	VIGNESHWER. K	B+
64	813820114065	VIJAY. S	B
65	813820114066	YOGESH. S	B
66	813820114067	YOGESWARAN. S	B
67	813820114301	ARUNACHALAM. M	B+
68	813820114302	ASWIN. R	B
69	813820114303	BALA. U	B
70	813820114304	JAWAHAR FAROOK. S	B
71	813820114305	KISHORE V	B+
72	813820114306	NIDHEESH. S	U
73	813820114307	NOORUL ARSHADH. A	B
74	813820114308	SAI PRASANNA. R	B
75	813820114309	SANJAI. S	B
76	813820114310	SANTHOSH KUMAR. V	U
77	813820114311	YOGESH. R	B
No. of S/O Grade			0
No. of A/A+ Grade			0
No. of B/A Grade			1
No. of C/B+ Grade			22
No. of D/B Grade			46
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			23
CO-Attainment University			29.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C302.1	35.06	29.00	31.43	100.00	45.14	1
C302.2	33.77	29.00	30.91	100.00	44.73	1
C302.3	22.08	29.00	26.23	80.52	37.09	1
C302.4	25.97	29.00	27.79	82.25	38.68	1
C302.5	55.84	29.00	39.74	80.52	47.89	1
C302.6	15.58	29.00	23.63	100.00	38.91	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C302.1	3	3	3	3	2	2	2	1	1	1		2	2	2	2
C302.2	2	2	2	3	2	2	1	1	1	2		2	1	2	2
C302.3	2	2	2	3	2	1	1		2	1		2	2		2
C302.4	2	2	1	2	1	1		1	2			2	2	1	2
C302.5	2	2	2	3	1	1	1		2	1		2	2	2	2
C302.6	1	1	1	3	1	1		1	2	1		2	2	2	2
C302	2.00	2.00	1.83	2.83	1.50	1.33	0.83	0.67	1.67	1.00		2.00	1.83	1.50	2.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C302.1	1.00	1.00	1.00	1.00	0.67	0.67	0.67	0.33	0.33	0.33		0.67	0.67	0.67	0.67
C302.2	0.67	0.67	0.67	1.00	0.67	0.67	0.33	0.33	0.33	0.67		0.67	0.33	0.67	0.67
C302.3	0.67	0.67	0.67	1.00	0.67	0.33	0.33		0.67	0.33		0.67	0.67		0.67
C302.4	0.67	0.67	0.33	0.67	0.33	0.33		0.33	0.67			0.67	0.67	0.33	0.67
C302.5	0.67	0.67	0.67	1.00	0.33	0.33	0.33		0.67	0.33		0.67	0.67	0.67	0.67
C302.6	0.33	0.33	0.33	1.00	0.33	0.33		0.33	0.67	0.33		0.67	0.67	0.67	0.67
C302	0.67	0.67	0.61	0.94	0.50	0.44	0.28	0.22	0.56	0.33		0.67	0.61	0.50	0.67

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester

COURSE CODE/TITLE	RENEWABLE ENERGY SOURCES	Batch	2020 - 2024
CLASS / SECTION	Sem 5 / MECH		
COURSE COORDINATOR	Mr.M.Sriram Prasanth		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
						60	40			44	56				80					20	80	44	56	60	40	20
1	813820114001	ABDUL AZIZ. M				36	24			36	38				60					6	60	36	38	36	24	6
2	813820114002	ADHITHYA. V				48	34			30	36				72					8	72	30	36	48	34	8
3	813820114003	AJAY. M				34	20			31	37				52					4	52	31	37	34	20	4
4	813820114004	ANNAMALAI. S				24	26			36	28				46					12	46	36	28	24	26	12
5	813820114005	ANTONY ROSARIO. S				48	28			32	44				68					16	68	32	44	48	28	16
6	813820114006	ARUN KUMAR. S				18	32			24	26				44					0	44	24	26	18	32	0
7	813820114007	ASHVIN. J				44	30			34	34				0					0	0	34	34	44	30	0
8	813820114008	ASHWANTH KRISHNA. K				44	30			36	40				72					16	72	36	40	44	30	16
9	813820114009	BALRAJ. E				44	26			36	34				72					12	72	36	34	44	26	12
10	813820114010	EVANGELINE SHEEBA. M				0	0			0	0				0					0	0	0	0	0	0	0
11	813820114011	EZHUMALAI. M				40	34			32	40				56					6	56	32	40	40	34	6
12	813820114012	GANISHKAR. S B				46	16			38	44				52					6	52	38	44	46	16	6
13	813820114013	HARAN. K P				0	0			0	0				0					0	0	0	0	0	0	0
14	813820114014	HARI BALAJI. R				0	0			0	0				0					0	0	0	0	0	0	0
15	813820114015	HARI HARAN. R				0	0			0	0				0					0	0	0	0	0	0	0
16	813820114016	HARISH. M				40	34			38	36				64					0	64	38	36	40	34	0
17	813820114018	HEWIN ARMSTRONG. J				36	22			30	22				56					0	56	30	22	36	22	0
18	813820114019	HUMAID KHALIFA. A Y				0	0			0	0				0					0	0	0	0	0	0	0
19	813820114020	JAMES ANTONY GODWIN. L				34	32			34	42				60					6	60	34	42	34	32	6
20	813820114021	JAVITH AHAMED. A				42	28			32	40				62					0	62	32	40	42	28	0
21	813820114022	JEGADEESWARAN. B				46	34			38	44				64					0	64	38	44	46	34	0
22	813820114023	JITHENDIRAN. J				22	6			30	12				52					0	52	30	12	22	6	0
23	813820114024	JOSHUA. M				26	18			32	28				40					8	40	32	28	26	18	8
24	813820114025	JUDOROHITH. S				30	36			40	42				68					0	68	40	42	30	36	0
25	813820114026	KARTHIKEYAN. R				40	30			36	28				54					16	54	36	28	40	30	16
26	813820114027	KAVIN. A				0	0			0	0				0					0	0	0	0	0	0	0
27	813820114028	KISHORE. A				0	0			0	0				0					0	0	0	0	0	0	0
28	813820114029	KISHORE. G				42	32			38	42				68					16	68	38	42	42	32	16
29	813820114030	MICHAEL SANTHOSH. Y				44	22			38	40				64					12	64	38	40	44	22	12
30	813820114031	MOHAMED KHUTBUDDIN. S				38	26			34	40				70					14	70	34	40	38	26	14
31	813820114032	MOHAMED MANSOOR. N				40	34			36	40				68					6	68	36	40	40	34	6
32	813820114033	MOHAMED NURUL ISLAM. A				34	28			28	30				68					0	68	28	30	34	28	0
33	813820114034	MOHAN BHABU. S				40	28			38	44				60					8	60	38	44	40	28	8
34	813820114035	MONIKA. B				0	0			0	0				0					0	0	0	0	0	0	0
35	813820114036	NAGARAJAN. M				30	30			36	32				62					0	62	36	32	30	30	0
36	813820114037	NIKIL SANKAR. S S				42	34			22	34				60					12	60	22	34	42	34	12
37	813820114038	PAINTHAMIL CHEZHIAN. K				40	32			30	30				68					0	68	30	30	40	32	0
38	813820114039	POOJA. R				48	32			36	44				68					8	68	36	44	48	32	8
39	813820114040	PRABHAKARAN. K A				38	32			26	36				68					0	68	26	36	38	32	0
40	813820114041	PRAVEEN RAJ. P				26	34			24	34				66					4	66	24	34	26	34	4
41	813820114042	RAAJ BHARATH. R				40	26			38	36				56					12	56	38	36	40	26	12
42	813820114043	RANJITH BALAJI. S				38	28			36	44				60					6	60	36	44	38	28	6
43	813820114044	RIYAZ AHAMED MUSTAFFA				0	0			0	0				0					0	0	0	0	0	0	0
44	813820114045	ROHAN. B V				0	0			0	0				0					0	0	0	0	0	0	0
45	813820114046	RUFUS. J				40	30			30	36				68					12	68	30	36	40	30	12

46	813820114047	SAM JESUDOSS. P				28	24			24	40				64					0	64	24	40	28	24	0
47	813820114048	SANTHOSH. B				44	32			38	30				54					14	54	38	30	44	32	14
48	813820114049	SATHYA JOTHI. K				0	0			0	0				0					0	0	0	0	0	0	0
49	813820114050	SESHAAN ALLIESTER. I				0	0			0	0				0					0	0	0	0	0	0	0
50	813820114051	SHAM. I				0	0			0	0				0					0	0	0	0	0	0	0
51	813820114052	SHANMUGHA PANDIAN. I				0	0			0	0				0					0	0	0	0	0	0	0
52	813820114053	SHIYAM. V				40	30			36	30				68					4	68	36	30	40	30	4
53	813820114054	SIBIRAJ. K				0	0			26	24				42					10	42	26	24	0	0	10
54	813820114055	SIRANJEEVI. S				0	0			0	0				0					0	0	0	0	0	0	0
55	813820114056	SRI KRISHNA PRASATH. K				46	30			38	34				64					4	64	38	34	46	30	4
56	813820114057	SRINIVASAN. M				0	0			0	0				0					0	0	0	0	0	0	0
57	813820114058	SRINIVASA PERUMAL. R				46	30			38	34				48					8	48	38	34	46	30	8
58	813820114059	SRISOORYA. S				34	38			36	44				68					14	68	36	44	34	38	14
59	813820114060	THARVIN. S				48	32			38	36				72					10	72	38	36	48	32	10
60	813820114061	TILAKAN. S				20	30			36	31				58					12	58	36	31	20	30	12
61	813820114062	VASANTHAKUMAR. C				46	20			30	30				72					12	72	30	30	46	20	12
62	813820114063	VIGNESHWARAN. R				40	30			38	44				68					14	68	38	44	40	30	14
63	813820114064	VIGNESHWER. K				42	28			34	40				70					14	70	34	40	42	28	14
64	813820114065	VIJAY. S				28	30			34	30				52					0	52	34	30	28	30	0
65	813820114066	YOGESH. S				36	32			36	40				68					14	68	36	40	36	32	14
66	813820114067	YOGESWARAN. S				44	34			22	40				72					0	72	22	40	44	34	0
67	813820114301	ARUNACHALAM. M				46	34			40	40				46					12	46	40	40	46	34	12
68	813820114302	ASWIN. R				44	28			34	38				56					8	56	34	38	44	28	8
69	813820114303	BALA. U				0	0			0	0				0					0	0	0	0	0	0	0
70	813820114304	JAWAHAR FAROOK. S				0	0			0	0				0					0	0	0	0	0	0	0
71	813820114305	KISHORE V				0	0			0	0				0					0	0	0	0	0	0	0
72	813820114306	NIDHEESH. S				20	24			32	20				20					4	20	32	20	20	24	4
73	813820114307	NOORUL ARSHADH. A				0	0			0	0				0					0	0	0	0	0	0	0
74	813820114308	SAI PRASANNA. R				0	0			0	0				0					0	0	0	0	0	0	0
75	813820114309	SANJAI. S				36	22			24	26				54					0	54	24	26	36	22	0
76	813820114310	SANTHOSH KUMAR. V				0	0			0	0				0					0	0	0	0	0	0	0
77	813820114311	YOGESH. R				44	22			38	36				58					12	58	38	36	44	22	12
																			CO's Target Value		52.00	28.60	36.40	39.00	26.00	13.00
																			No. of Student Secured above CO's Target value		43	46	25	32	38	10
																			Percentage of Student Secured above Target		55.84	59.74	32.47	41.56	49.35	12.99

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	ORO551 RENEWABLE ENERGY SOURCES	Batch	2020 - 2024
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813820114001	ABDUL AZIZ. M	B
2	813820114002	ADHITHYA. V	B+
3	813820114003	AJAY. M	B
4	813820114004	ANNAMALAI. S	B+
5	813820114005	ANTONY ROSARIO. S	B+
6	813820114006	ARUN KUMAR. S	U
7	813820114007	ASHVIN. J	A
8	813820114008	ASHWANTH KRISHNA. K	A+
9	813820114009	BALRAJ. E	A
10	813820114010	EVANGELINE SHEEBA. M	
11	813820114011	EZHUMALAI. M	U
12	813820114012	GANISHKAR. S B	B+
13	813820114013	HARAN. K P	
14	813820114014	HARI BALAJI. R	
15	813820114015	HARI HARAN. R	
16	813820114016	HARISH. M	B
17	813820114018	HEWIN ARMSTRONG. J	B+
18	813820114019	HUMAID KHALIFA. A Y	
19	813820114020	JAMES ANTONY GODWIN. L	B
20	813820114021	JAVITH AHAMED. A	B
21	813820114022	JEGADEESWARAN. B	B+
22	813820114023	JITHENDIRAN. J	B
23	813820114024	JOSHUA. M	B
24	813820114025	JUDOROHITH. S	B
25	813820114026	KARTHIKEYAN. R	A
26	813820114027	KAVIN. A	
27	813820114028	KISHORE. A	
28	813820114029	KISHORE. G	B
29	813820114030	MICHAEL SANTHOSH. Y	B+
30	813820114031	MOHAMED KHUTBUDDIN. S	B
31	813820114032	MOHAMED MANSOOR. N	B
32	813820114033	MOHAMED NURUL ISLAM. A	B
33	813820114034	MOHAN BHABU. S	B+
34	813820114035	MONIKA. B	
35	813820114036	NAGARAJAN. M	B
36	813820114037	NIKIL SANKAR. S S	B
37	813820114038	PAINTHAMIL CHEZHIAN. K	B
38	813820114039	POOJA. R	B+
39	813820114040	PRABHAKARAN. K A	B
40	813820114041	PRAVEEN RAJ. P	B
41	813820114042	RAAJ BHARATH. R	B
42	813820114043	RANJITH BALAJI. S	B+
43	813820114044	RIYAZ AHAMED MUSTAFFA	
44	813820114045	ROHAN. B V	
45	813820114046	RUFUS. J	B+
46	813820114047	SAM JESUDOSS. P	B
47	813820114048	SANTHOSH. B	B+
48	813820114049	SATHYA JOTHI. K	
49	813820114050	SESHAAN ALLIESTER. I	
50	813820114051	SHAM. I	
51	813820114052	SHANMUGHA PANDIAN. I	
52	813820114053	SHIYAM. V	B
53	813820114054	SIBIRAJ. K	B

54	813820114055	SIRANJEEVI. S	
55	813820114056	SRI KRISHNA PRASATH. K	B
56	813820114057	SRINIVASAN. M	
57	813820114058	SRINIVASA PERUMAL. R	B
58	813820114059	SRISOORYA. S	B+
59	813820114060	THARVIN. S	B
60	813820114061	TILAKAN. S	B
61	813820114062	VASANTHAKUMAR. C	B
62	813820114063	VIGNESHWARAN. R	B+
63	813820114064	VIGNESHWER. K	B+
64	813820114065	VIJAY. S	B
65	813820114066	YOGESH. S	B+
66	813820114067	YOGESWARAN. S	B
67	813820114301	ARUNACHALAM. M	A
68	813820114302	ASWIN. R	B+
69	813820114303	BALA. U	
70	813820114304	JAWAHAR FAROOK. S	
71	813820114305	KISHORE V	
72	813820114306	NIDHEESH. S	B
73	813820114307	NOORUL ARSHADH. A	
74	813820114308	SAI PRASANNA. R	
75	813820114309	SANJAI. S	U
76	813820114310	SANTHOSH KUMAR. V	
77	813820114311	YOGESH. R	B
No. of S/O Grade			0
No. of A/A+ Grade			1
No. of B/A Grade			4
No. of C/B+ Grade			17
No. of D/B Grade			30
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			22
CO-Attainment University			28.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C305-OE19.1	55.84	28.00	39.14	100.00	51.31	1
C305-OE19.2	59.74	28.00	40.70	100.00	52.56	1
C305-OE19.3	32.47	28.00	29.79	84.85	40.80	1
C305-OE19.4	41.56	28.00	33.42	85.71	43.88	1
C305-OE19.5	49.35	28.00	36.54	87.01	46.63	1
C305-OE19.6	12.99	28.00	21.99	100.00	37.60	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C305-OE19.1	3	3	3	3					3	3	2	2	2		1
C305-OE19.2	3	3		3						3	2		2		1
C305-OE19.3	3									3			2		1
C305-OE19.4	3	3				3	3	1	3	3		2	2		1
C305-OE19.5	3	3		2		3	3	1	3	3		2	2		1
C305-OE19.6	3					3	3	1	3	2		2	2	2	1
C305-OE19	3.00	2.00	0.50	1.33		1.50	1.50	0.50	2.00	2.83	0.67	1.33	2.00	0.33	1.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C305-OE19.1	1.00	1.00	1.00	1.00					1.00	1.00	0.67	0.67	0.67		0.33
C305-OE19.2	1.00	1.00		1.00						1.00	0.67		0.67		0.33
C305-OE19.3	1.00									1.00			0.67		0.33
C305-OE19.4	1.00	1.00				1.00	1.00	0.33	1.00	1.00		0.67	0.67		0.33
C305-OE19.5	1.00	1.00		0.67		1.00	1.00	0.33	1.00	1.00		0.67	0.67		0.33
C305-OE19.6	1.00					1.00	1.00	0.33	1.00	0.67		0.67	0.67	0.67	0.33
C305-OE19	1.00	0.67	0.17	0.44		0.50	0.50	0.17	0.67	0.94	0.22	0.44	0.67	0.11	0.33

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester			
COURSE CODE/TITLE	ROBOTICS	Batch	2019 - 2023
CLASS / SECTION	Sem 7 / MECH A & B		
COURSE COORDINATOR	Mr.K.Amarnath / Mr.P.Jothi Palavasam		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	40						40	60							28	32	40	60	80	60	28	32	40
1	813819114001	ABDUL RAHMAN. M	42	8						18	32							8	18	4	42	26	32	8	18	4
2	813819114002	ABINAYA. R	46	26						32	46							8	26	30	46	58	46	8	26	30
3	813819114003	ABISHEIK. S	26	30						26	46							12	4	18	26	56	46	12	4	18
4	813819114004	ADHARSH NIJASTAN. M	44	6						0	0							8	4	12	44	6	0	8	4	12
5	813819114005	AJAYESHWAR. K	30	28						34	46							16	24	28	30	62	46	16	24	28
6	813819114006	AJAY KUMAR. K	28	2						28	30							12	8	30	28	30	30	12	8	30
7	813819114007	AKASH. K	14	8						22	30							8	18	14	14	30	30	8	18	14
8	813819114008	AKASH. R	34	18						34	44							8	26	22	34	52	44	8	26	22
9	813819114009	AKILAN. P	46	18						10	20							2	16	4	46	28	20	2	16	4
10	813819114010	AMALRAJ. C	36	28						28	48							22	24	30	36	56	48	22	24	30
11	813819114011	ANBARASU. P	44	26						34	44							10	20	34	44	60	44	10	20	34
12	813819114012	ARAVINDH. S	18	20						28	38							12	4	16	18	48	38	12	4	16
13	813819114013	ARAVINDHAN. R	38	14						32	44							20	24	30	38	46	44	20	24	30
14	813819114014	ARUL ARASU. T	40	18						34	32							22	22	32	40	52	32	22	22	32
15	813819114015	ARUMUGA VIGNESH. S R	0	0						34	42							14	16	26	0	34	42	14	16	26
16	813819114016	ARUN. P	0	0						0	0							4	6	10	0	0	0	4	6	10
17	813819114017	BABURAJ. K	28	8						20	40							14	4	20	28	28	40	14	4	20
18	813819114018	BALAGANGATHARAN. M	42	14						22	34							12	12	22	42	36	34	12	12	22
19	813819114019	BALAJI. S	38	12						22	48							12	0	8	38	34	48	12	0	8
20	813819114020	BALARAJASURYA. R	28	6						32	36							0	0	0	28	38	36	0	0	0
21	813819114021	BALAVINAYAK. V M	16	6						26	50							18	14	18	16	32	50	18	14	18
22	813819114022	BHAVAN. R B N	36	14						20	40							0	0	8	36	34	40	0	0	8
23	813819114023	BODHIRAM. M B	32	8						34	32							0	6	16	32	42	32	0	6	16
24	813819114024	CHANAKYA. M	34	20						30	38							12	12	16	34	50	38	12	12	16
25	813819114025	DEEPAK. M	40	30						34	44							20	12	34	40	64	44	20	12	34
26	813819114026	DEEPAMANI. R	44	24						34	36							12	16	24	44	58	36	12	16	24
27	813819114027	DESIGAN. M	40	26						26	44							20	10	32	40	52	44	20	10	32
28	813819114028	DHAMOTHARAN. M	42	20						28	42							0	0	0	42	48	42	0	0	0
29	813819114030	DINESH KUMAR. G	0	0						28	40							18	22	32	0	28	40	18	22	32
30	813819114031	DINESH KUMAR. G	40	26						28	22							10	14	18	40	54	22	10	14	18
31	813819114032	GIRIHARAN. B	18	10						26	42							2	12	14	18	36	42	2	12	14
32	813819114033	GIRISH KANNAH. M	46	22						28	40							20	10	34	46	50	40	20	10	34
33	813819114034	GOKUL. S	24	26						16	34							16	22	16	24	42	34	16	22	16
34	813819114035	GOPI. M	42	28						30	36							18	20	26	42	58	36	18	20	26
35	813819114037	HARIHARAN. V	36	16						0	0							6	14	24	36	16	0	6	14	24
36	813819114038	HARI KARAN. K	28	32						32	42							18	12	34	28	64	42	18	12	34
37	813819114039	HARISH. S	44	26						36	50							16	22	34	44	62	50	16	22	34
38	813819114040	HEMAPRIYA. P	34	30						26	38							18	20	14	34	56	38	18	20	14
39	813819114041	JAIRUS. S	40	18						24	34							16	10	26	40	42	34	16	10	26
40	813819114042	JAISRIRAM. R	36	28						26	34							10	18	24	36	54	34	10	18	24
41	813819114043	JOYAL. C	46	18						24	52							18	26	26	46	42	52	18	26	26
42	813819114044	KAARTHIKESH. U	44	12						10	32							8	12	20	44	22	32	8	12	20
43	813819114045	KANNAN. J	32	24						26	32							12	20	28	32	50	32	12	20	28
44	813819114046	KARTHI. M	38	16						30	32							18	16	32	38	46	32	18	16	32
45	813819114048	KIRTHIK. K	38	14						30	46							10	18	24	38	44	46	10	18	24

46	813819114049	KISHAN. R	40	32						32	44						18	18	24	40	64	44	18	18	24
47	813819114051	LOKESH. D	48	30						34	44						18	10	28	48	64	44	18	10	28
48	813819114052	LOKESHWARAN. B	44	14						36	34						20	16	10	44	50	34	20	16	10
49	813819114053	MARCELL FRANKLINE. V	48	20						28	52						12	22	22	48	48	52	12	22	22
50	813819114054	MARIMUTHU. R	0	0						30	30						16	20	20	0	30	30	16	20	20
51	813819114055	MITHUNKUMAR. K	44	28						0	0						12	16	22	44	28	0	12	16	22
52	813819114056	MOHAMED AJMAL. M I	40	28						28	38						16	16	26	40	56	38	16	16	26
53	813819114057	MOHAMED SHAHIR . S	34	30						30	44						22	16	20	34	60	44	22	16	20
54	813819114058	MOHAMMED FAZIL. N	46	32						32	44						20	28	26	46	64	44	20	28	26
55	813819114059	MOHITHKUMAR. A	36	22						22	34						10	12	30	36	44	34	10	12	30
56	813819114060	MUGUNDHAN. S	42	12						34	32						18	22	20	42	46	32	18	22	20
57	813819114061	MUKESH. M	36	16						28	42						8	24	14	36	44	42	8	24	14
58	813819114062	MURALI MANOHAR. K	26	10						0	0						0	0	0	26	10	0	0	0	0
59	813819114063	MUTHU SAI CHARAN. V R	48	34						30	38						0	0	0	48	64	38	0	0	0
60	813819114064	NAGARAJ. L	40	18						14	42						8	24	18	40	32	42	8	24	18
61	813819114065	NARESHKUMAR. R	34	4						18	38						0	0	0	34	22	38	0	0	0
62	813819114066	NAVEEN. M	0	0						32	32						8	28	30	0	32	32	8	28	30
63	813819114067	NAVEEN PRASATH. S	12	4						10	32						4	12	4	12	14	32	4	12	4
64	813819114068	NITHIS ANTRO. M	0	0						32	42						8	32	24	0	32	42	8	32	24
65	813819114069	NITHISKUMAR. P	36	22						28	42						10	22	22	36	50	42	10	22	22
66	813819114070	NIVAS. G	26	12						14	24						6	12	18	26	26	24	6	12	18
67	813819114071	PADMANAABHAN. S	28	6						28	24						10	26	22	28	34	24	10	26	22
68	813819114072	PRAGADEESH. N	0	0						34	40						14	30	34	0	34	40	14	30	34
69	813819114073	PRAGATHEESHWARAN. S	36	14						30	24						6	10	22	36	44	24	6	10	22
70	813819114074	PRASANNA. R	0	0						32	36						14	12	34	0	32	36	14	12	34
71	813819114075	PRAVEEN. K	24	0						22	38						4	14	14	24	22	38	4	14	14
72	813819114076	PRAVIN KUMAR. P	32	20						20	34						0	0	0	32	40	34	0	0	0
73	813819114077	PREETHAM RAJ. T	36	26						32	40						10	28	30	36	58	40	10	28	30
74	813819114078	RACKESH KUMARAN. K R	36	32						24	40						0	0	0	36	56	40	0	0	0
75	813819114079	RADHAKRISHNAN. S	0	0						24	26						16	32	24	0	24	26	16	32	24
76	813819114081	RAJPRABU. K	32	10						28	32						0	0	0	32	38	32	0	0	0
77	813819114082	RAMANESHWER. P	38	14						28	32						22	12	34	38	42	32	22	12	34
78	813819114083	ROSHAN. R	16	10						16	36						8	12	22	16	26	36	8	12	22
79	813819114084	SABARISHAN. S	16	8						16	20						18	16	24	16	24	20	18	16	24
80	813819114085	SABARIVASAN. K	30	18						28	34						8	24	24	30	46	34	8	24	24
81	813819114086	SALMAN FARIS. M	40	14						28	40						18	26	22	40	42	40	18	26	22
82	813819114087	SAMBUGESH. D	32	10						34	20						0	0	0	32	44	20	0	0	0
83	813819114088	SAM DANIEL. P	32	22						30	48						6	14	16	32	52	48	6	14	16
84	813819114089	SAM NITHIN. P	28	12						30	40						0	0	0	28	42	40	0	0	0
85	813819114090	SANJAI. M	30	6						18	42						14	18	26	30	24	42	14	18	26
86	813819114091	SANJAY. T	34	4						32	42						8	16	20	34	36	42	8	16	20
87	813819114092	SANJAY KUMAR. D	18	6						14	28						10	20	8	18	20	28	10	20	8
88	813819114093	SANJEEV PRAMESH. M	36	0						32	32						8	16	8	36	32	32	8	16	8
89	813819114094	SANTHANA KRISHNAN. M	0	0						34	44						16	28	34	0	34	44	16	28	34
90	813819114095	SANTHOSH. P	38	14						24	34						12	32	22	38	38	34	12	32	22
91	813819114096	SANTHOSH. P	40	30						26	46						8	8	2	40	56	46	8	8	2
92	813819114097	SANTHOSH KUMAR. P V	18	4						28	28						10	8	8	18	32	28	10	8	8
93	813819114098	SIDDARTH. S	40	10						34	46						8	32	20	40	44	46	8	32	20
94	813819114099	SIDDHARTH. T K	0	0						0	0						8	8	28	0	0	0	8	8	28
95	813819114100	SIVA SUBRAMANIAN. G	32	8						30	24						0	0	0	32	38	24	0	0	0
96	813819114101	SRIHARI. S	24	14						34	40						14	12	20	24	48	40	14	12	20
97	813819114102	SRI HARIHARAN. V	44	18						30	40						12	22	34	44	48	40	12	22	34
98	813819114103	SRIRAM. S	32	18						26	36						14	12	16	32	44	36	14	12	16
99	813819114104	SRI RANGARAJAN. N	0	0						32	48						18	32	34	0	32	48	18	32	34
100	813819114105	SRIVARDHAN. C	0	0						36	48						18	32	40	0	36	48	18	32	40
101	813819114106	SUDARSON. A	0	0						0	0						8	26	24	0	0	0	8	26	24
102	813819114107	SUDHAKAR. G	8	12						14	18						18	10	30	8	26	18	18	10	30
103	813819114108	SUHAIL. S	32	18						24	40						0	0	0	32	42	40	0	0	0
104	813819114109	SURYA. J	36	14						30	36						8	12	16	36	44	36	8	12	16
105	813819114110	SUTHARSH KRISHNA. K A	26	10						22	30						0	0	0	26	32	30	0	0	0

106	813819114111	TAMILMARAN. M	0	0						0	0							0	0	6	0	0	0	0	0	6
107	813819114112	TAMIL VANAN. J	24	12						22	22							4	10	2	24	34	22	4	10	2
108	813819114113	THILAK. K	4	0						30	26							8	12	4	4	30	26	8	12	4
109	813819114114	UTHAYA SANKAR. V S	0	0						28	42							20	32	34	0	28	42	20	32	34
110	813819114115	VASANTH. R	34	16						26	40							16	22	28	34	42	40	16	22	28
111	813819114116	VENKATACHALAM. P	12	0						0	6							0	0	0	12	0	6	0	0	0
112	813819114118	VENKATESH. M	28	6						34	32							8	8	6	28	40	32	8	8	6
113	813819114119	VIGNESH. M	14	0						0	0							8	10	10	14	0	0	8	10	10
114	813819114120	VIGNESH. N	24	12						28	34							18	32	32	24	40	34	18	32	32
115	813819114122	VISHAL. S	34	8						32	32							12	8	12	34	40	32	12	8	12
116	813819114123	VISHVATH. M	32	18						32	42							8	8	12	32	50	42	8	8	12
117	813819114124	VYDEESKUMAR. R	38	18						22	38							22	12	30	38	40	38	22	12	30
118	813819114301	AKASH. K	22	10						22	6							6	10	10	22	32	6	6	10	10
119	813819114302	GOPIKRISHNAN. S	26	14						34	32							8	16	10	26	48	32	8	16	10
120	813819114303	GURUPRASANTH. R	34	30						34	44							22	28	34	34	64	44	22	28	34
121	813819114304	HARIHARAN. M	46	24						18	26							16	8	18	46	42	26	16	8	18
122	813819114305	HARIHARAN. S	46	22						30	42							20	28	32	46	52	42	20	28	32
123	813819114306	HARI HARAN. T	28	10						34	40							8	12	10	28	44	40	8	12	10
124	813819114307	KHAJA MOINUDEEN. K	0	0						36	34							12	12	32	0	36	34	12	12	32
125	813819114308	SAM WILLIAM. A	36	22						30	16							12	10	14	36	52	16	12	10	14
126	813819114309	SANJAY. S	28	12						18	36							14	8	24	28	30	36	14	8	24
127	813819114310	SELVA MURALIDARAN S	32	18						22	20							0	0	0	32	40	20	0	0	0
CO's Target Value																					39.00	52.00	39.00	18.20	20.80	26.00
No. of Student Secured above CO's Target value																					34	23	53	14	36	35
Percentage of Student Secured above Target																					26.77	18.11	41.73	11.02	28.35	27.56

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	ME8099 ROBOTICS	Batch	2019 - 2023
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813819114001	ABDUL RAHMAN. M	B
2	813819114002	ABINAYA. R	B+
3	813819114003	ABISHEIK. S	B
4	813819114004	ADHARSH NIJASTAN. M	A
5	813819114005	AJAYESHWAR. K	B+
6	813819114006	AJAY KUMAR. K	B+
7	813819114007	AKASH. K	B
8	813819114008	AKASH. R	B+
9	813819114009	AKILAN. P	B
10	813819114010	AMALRAJ. C	B
11	813819114011	ANBARASU. P	B+
12	813819114012	ARAVINDH. S	B+
13	813819114013	ARAVINDHAN. R	B
14	813819114014	ARUL ARASU. T	B+
15	813819114015	ARUMUGA VIGNESH. S R	B+
16	813819114016	ARUN. P	B
17	813819114017	BABURAJ. K	B+
18	813819114018	BALAGANGATHARAN. M	B+
19	813819114019	BALAJI. S	B+
20	813819114020	BALARAJASURYA. R	A
21	813819114021	BALAVINAYAK. V M	A
22	813819114022	BHAVAN. R B N	B+
23	813819114023	BODHIRAM. M B	B
24	813819114024	CHANAKYA. M	B+
25	813819114025	DEEPAK. M	B+
26	813819114026	DEEPAMANI. R	A+
27	813819114027	DESIGAN. M	A
28	813819114028	DHAMOTHARAN. M	B+
29	813819114030	DINESH KUMAR. G	A+
30	813819114031	DINESH KUMAR. G	B+
31	813819114032	GIRIHARAN. B	B+
32	813819114033	GIRISH KANNAH. M	A
33	813819114034	GOKUL. S	A
34	813819114035	GOPI. M	A
35	813819114037	HARIHARAN. V	B+
36	813819114038	HARI KARAN. K	A
37	813819114039	HARISH. S	B+
38	813819114040	HEMAPRIYA. P	A
39	813819114041	JAIRUS. S	B+
40	813819114042	JAISRIRAM. R	A
41	813819114043	JOYAL. C	B
42	813819114044	KAARTHIKESH. U	B
43	813819114045	KANNAN. J	B
44	813819114046	KARTHI. M	B+
45	813819114048	KIRTHIK. K	B+
46	813819114049	KISHAN. R	A
47	813819114051	LOKESH. D	B+
48	813819114052	LOKESHWARAN. B	B+
49	813819114053	MARCELL FRANKLINE. V	B+
50	813819114054	MARIMUTHU. R	B
51	813819114055	MITHUNKUMAR. K	B+
52	813819114056	MOHAMED AJMAL. M I	B+
53	813819114057	MOHAMED SHAHIR . S	B+

54	813819114058	MOHAMMED FAZIL. N	B+
55	813819114059	MOHITHKUMAR. A	B+
56	813819114060	MUGUNDHAN. S	B+
57	813819114061	MUKESH. M	B+
58	813819114062	MURALI MANOHAR. K	B+
59	813819114063	MUTHU SAI CHARAN. V R	B
60	813819114064	NAGARAJ. L	B+
61	813819114065	NARESHKUMAR. R	B+
62	813819114066	NAVEEN. M	B+
63	813819114067	NAVEEN PRASATH. S	B
64	813819114068	NITHIS ANTRO. M	A
65	813819114069	NITHISKUMAR. P	B+
66	813819114070	NIVAS. G	B
67	813819114071	PADMANAABHAN. S	B
68	813819114072	PRAGADEESH. N	A
69	813819114073	PRAGATHEESHWARAN. S	B+
70	813819114074	PRASANNA. R	A
71	813819114075	PRAVEEN. K	B+
72	813819114076	PRAVIN KUMAR. P	A
73	813819114077	PREETHAM RAJ. T	A+
74	813819114078	RACKESH KUMARAN. K R	A
75	813819114079	RADHAKRISHNAN. S	A+
76	813819114081	RAJPRABU. K	B+
77	813819114082	RAMANESHWER. P	A
78	813819114083	ROSHAN. R	B
79	813819114084	SABARISHAN. S	A
80	813819114085	SABARIVASAN. K	B+
81	813819114086	SALMAN FARIS. M	B
82	813819114087	SAMBUGESH. D	B+
83	813819114088	SAM DANIEL. P	B+
84	813819114089	SAM NITHIN. P	B+
85	813819114090	SANJAI. M	B
86	813819114091	SANJAY. T	B+
87	813819114092	SANJAY KUMAR. D	B+
88	813819114093	SANJEEV PRAMESH. M	B+
89	813819114094	SANTHANA KRISHNAN. M	A
90	813819114095	SANTHOSH. P	B
91	813819114096	SANTHOSH. P	A
92	813819114097	SANTHOSH KUMAR. P V	B+
93	813819114098	SIDDARTH. S	B+
94	813819114099	SIDDHARTH. T K	B
95	813819114100	SIVA SUBRAMANIAN. G	B+
96	813819114101	SRIHARI. S	B+
97	813819114102	SRI HARIHARAN. V	A
98	813819114103	SRIRAM. S	A
99	813819114104	SRI RANGARAJAN. N	A
100	813819114105	SRIVARDHAN. C	B+
101	813819114106	SUDARSON. A	B
102	813819114107	SUDHAKAR. G	B
103	813819114108	SUHAIL. S	A
104	813819114109	SURYA. J	B
105	813819114110	SUTHARSH KRISHNA. K A	B+
106	813819114111	TAMILMARAN. M	B
107	813819114112	TAMIL VANAN. J	B+
108	813819114113	THILAK. K	A
109	813819114114	UTHAYA SANKAR. V S	A+
110	813819114115	VASANTH. R	B+
111	813819114116	VENKATACHALAM. P	B+
112	813819114118	VENKATESH. M	B+
113	813819114119	VIGNESH. M	B

114	813819114120	VIGNESH. N	B+
115	813819114122	VISHAL. S	B
116	813819114123	VISHVATH. M	B+
117	813819114124	VYDEESKUMAR. R	A
118	813819114301	AKASH. K	A
119	813819114302	GOPIKRISHNAN. S	B
120	813819114303	GURUPRASANTH. R	A
121	813819114304	HARIHARAN. M	B
122	813819114305	HARIHARAN. S	A+
123	813819114306	HARI HARAN. T	B+
124	813819114307	KHAJA MOINUDEEN. K	B+
125	813819114308	SAM WILLIAM. A	B+
126	813819114309	SANJAY. S	B
127	813819114310	SELVA MURALIDARAN S	B
No. of S/O Grade			0
No. of A/A+ Grade			6
No. of B/A Grade			28
No. of C/B+ Grade			62
No. of D/B Grade			31
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			96
CO-Attainment University			75.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C405.1	26.77	75.00	55.71	100.00	64.57	2
C405.2	18.11	75.00	52.24	100.00	61.80	2
C405.3	41.73	75.00	61.69	82.95	65.94	2
C405.4	11.02	75.00	49.41	82.95	56.12	1
C405.5	28.35	75.00	56.34	81.14	61.30	2
C405.6	27.56	75.00	56.02	100.00	64.82	2

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C405.1	3	2	1	1	1	1	1			1		1	2	1	1
C405.2	3	2	1	1	1		1			1		1	2	1	1
C405.3	3	3	1	1	1		1		2	1		1	2	1	1
C405.4	3	3	2	1	2		1		2	2	2	1	2	2	2
C405.5	3	3	2	3	2		1		2	2	2	1	2	2	2
C405.6	3	3	3	3	2		2	2	2	2	2	1	2	2	2
C405	3.00	2.67	1.67	1.67	1.50	0.17	1.17	0.33	1.33	1.50	1.00	1.00	2.00	1.50	1.50

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C405.1	2.00	1.33	0.67	0.67	0.67	0.67	0.67			0.67		0.67	1.33	0.67	0.67
C405.2	2.00	1.33	0.67	0.67	0.67		0.67			0.67		0.67	1.33	0.67	0.67
C405.3	2.00	2.00	0.67	0.67	0.67		0.67		1.33	0.67		0.67	1.33	0.67	0.67
C405.4	1.00	1.00	0.67	0.33	0.67		0.33		0.67	0.67	0.67	0.33	0.67	0.67	0.67
C405.5	2.00	2.00	1.33	2.00	1.33		0.67		1.33	1.33	1.33	0.67	1.33	1.33	1.33
C405.6	2.00	2.00	2.00	2.00	1.33		1.33	1.33	1.33	1.33	1.33	0.67	1.33	1.33	1.33
C405	1.83	1.61	1.00	1.06	0.89	0.11	0.72	0.22	0.78	0.89	0.56	0.61	1.22	0.89	0.89

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester

COURSE CODE/TITLE	MECHATRONICS	Batch	2019 - 2023
CLASS / SECTION	Sem 7 / MECH A & B		
COURSE COORDINATOR	Mr.P.Vigneshwar / Dr.R.Rekha		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			32	**32**	**36**						**36**	**60**							**60**	**40**	**32**	**32**	**72**	**60**	**60**	**40**
1	813819114001	ABDUL RAHMAN. M	12	12	16						26	24							30	26	12	12	42	24	30	26
2	813819114002	ABINAYA. R	8	18	24						20	30							30	28	8	18	44	30	30	28
3	813819114003	ABISHEIK. S	6	2	10						10	40							32	18	6	2	20	40	32	18
4	813819114004	ADHARSH NIJASTAN. M	0	0	0						10	30							28	22	0	0	10	30	28	22
5	813819114005	AJAYESHWAR. K	26	22	32						28	58							56	38	26	22	60	58	56	38
6	813819114006	AJAY KUMAR. K	24	12	26						18	22							42	22	24	12	44	22	42	22
7	813819114007	AKASH. K	18	14	18						14	18							34	26	18	14	32	18	34	26
8	813819114008	AKASH. R	16	16	24						20	44							44	22	16	16	44	44	44	22
9	813819114009	AKILAN. P	18	18	14						2	16							44	18	18	18	16	16	44	18
10	813819114010	AMALRAJ. C	22	14	16						22	38							44	26	22	14	38	38	44	26
11	813819114011	ANBARASU. P	20	20	10						22	42							50	24	20	20	32	42	50	24
12	813819114012	ARAVINDH. S	4	14	16						18	32							6	12	4	14	34	32	6	12
13	813819114013	ARAVINDHAN. R	26	16	8						22	42							44	26	26	16	30	42	44	26
14	813819114014	ARUL ARASU. T	20	16	14						20	32							44	20	20	16	34	32	44	20
15	813819114015	ARUMUGA VIGNESH. S R	22	16	14						8	26							0	0	22	16	22	26	0	0
16	813819114016	ARUN. P	14	0	14						0	24							30	8	14	0	14	24	30	8
17	813819114017	BABURAJ. K	16	20	18						10	22							32	24	16	20	28	22	32	24
18	813819114018	BALAGANGATHARAN. M	22	12	22						20	30							38	12	22	12	42	30	38	12
19	813819114019	BALAJI. S	18	18	24						22	40							44	24	18	18	46	40	44	24
20	813819114020	BALARAJASURYA. R	8	16	16						22	44							48	22	8	16	38	44	48	22
21	813819114021	BALAVINAYAK. V M	8	32	0						18	18							30	22	8	32	18	18	30	22
22	813819114022	BHAVAN. R B N	14	0	16						4	32							30	24	14	0	20	32	30	24
23	813819114023	BODHIRAM. M B	14	0	12						2	30							32	20	14	0	14	30	32	20
24	813819114024	CHANAKYA. M	24	20	18						22	36							30	4	24	20	40	36	30	4
25	813819114025	DEEPAK. M	24	18	32						26	46							36	32	24	18	58	46	36	32
26	813819114026	DEEPAMANI. R	18	24	24						20	32							24	26	18	24	44	32	24	26
27	813819114027	DESIGAN. M	20	20	18						24	34							42	24	20	20	42	34	42	24
28	813819114028	DHAMOTHARAN. M	18	18	14						26	36							42	24	18	18	40	36	42	24
29	813819114030	DINESH KUMAR. G	26	24	22						22	50							52	32	26	24	44	50	52	32
30	813819114031	DINESH KUMAR. G	22	16	12						16	38							0	0	22	16	28	38	0	0
31	813819114032	GIRIHARAN. B	20	0	20						14	42							38	16	20	0	34	42	38	16
32	813819114033	GIRISH KANNAH. M	24	26	0						18	34							0	0	24	26	18	34	0	0
33	813819114034	GOKUL. S	14	22	14						18	32							30	20	14	22	32	32	30	20
34	813819114035	GOPI. M	20	20	16						18	34							36	22	20	20	34	34	36	22
35	813819114037	HARIHARAN. V	16	12	12						6	30							22	18	16	12	18	30	22	18
36	813819114038	HARI KARAN. K	16	2	16						26	36							30	30	16	2	42	36	30	30
37	813819114039	HARISH. S	24	20	24						16	34							42	22	24	20	40	34	42	22
38	813819114040	HEMAPRIYA. P	24	18	28						18	32							42	16	24	18	46	32	42	16
39	813819114041	JAIRUS. S	16	16	18						18	38							20	8	16	16	36	38	20	8
40	813819114042	JAISRIRAM. R	18	12	12						18	22							18	24	18	12	30	22	18	24
41	813819114043	JOYAL. C	2	8	26						18	36							18	26	2	8	44	36	18	26
42	813819114044	KAARTHIKESH. U	22	16	14						6	32							34	18	22	16	20	32	34	18
43	813819114045	KANNAN. J	16	16	24						16	34							36	18	16	16	40	34	36	18
44	813819114046	KARTHI. M	24	0	26						18	36							38	16	24	0	44	36	38	16
45	813819114048	KIRTHIK. K	22	16	18						24	32							38	24	22	16	42	32	38	24

46	813819114049	KISHAN. R	18	24	24						10	40						42	34	18	24	34	40	42	34
47	813819114051	LOKESH. D	22	18	22						20	36						34	20	22	18	42	36	34	20
48	813819114052	LOKESHWARAN. B	24	2	28						28	34						28	24	24	2	56	34	28	24
49	813819114053	MARCELL FRANKLINE. V	24	2	30						22	32						52	36	24	2	52	32	52	36
50	813819114054	MARIMUTHU. R	16	16	18						14	36						40	12	16	16	32	36	40	12
51	813819114055	MITHUNKUMAR. K	20	2	28						20	34						42	20	20	2	48	34	42	20
52	813819114056	MOHAMED AJMAL. M I	28	20	16						0	0						50	24	28	20	16	0	50	24
53	813819114057	MOHAMED SHAHIR . S	26	20	4						26	16						36	28	26	20	30	16	36	28
54	813819114058	MOHAMMED FAZIL. N	30	20	30						12	48						48	36	30	20	42	48	48	36
55	813819114059	MOHITHKUMAR. A	22	14	20						0	0						34	24	22	14	20	0	34	24
56	813819114060	MUGUNDHAN. S	28	26	20						24	32						10	40	28	26	44	32	10	40
57	813819114061	MUKESH. M	18	0	24						4	46						38	20	18	0	28	46	38	20
58	813819114062	MURALI MANOHAR. K	0	0	0						8	42						0	0	0	0	8	42	0	0
59	813819114063	MUTHU SAI CHARAN. V R	20	20	20						0	0						0	0	20	20	20	0	0	0
60	813819114064	NAGARAJ. L	14	20	20						0	0						40	18	14	20	20	0	40	18
61	813819114065	NARESHKUMAR. R	10	16	24						0	0						14	10	10	16	24	0	14	10
62	813819114066	NAVEEN. M	25	25	30						0	0						50	20	25	25	30	0	50	20
63	813819114067	NAVEEN PRASATH. S	2	4	6						0	0						30	20	2	4	6	0	30	20
64	813819114068	NITHIS ANTRO. M	10	16	24						0	0						50	14	10	16	24	0	50	14
65	813819114069	NITHISKUMAR. P	14	20	20						0	0						40	14	14	20	20	0	40	14
66	813819114070	NIVAS. G	2	10	10						0	0						40	20	2	10	10	0	40	20
67	813819114071	PADMANAABHAN. S	0	0	0						0	0						30	20	0	0	0	0	30	20
68	813819114072	PRAGADEESH. N	14	24	30						0	0						55	35	14	24	30	0	55	35
69	813819114073	PRAGATHEESHWARAN. S	2	10	10						0	0						50	14	2	10	10	0	50	14
70	813819114074	PRASANNA. R	10	16	24						0	0						50	20	10	16	24	0	50	20
71	813819114075	PRAVEEN. K	8	10	10						0	0						50	22	8	10	10	0	50	22
72	813819114076	PRAVIN KUMAR. P	2	8	10						0	0						40	26	2	8	10	0	40	26
73	813819114077	PREETHAM RAJ. T	16	16	30						0	0						40	14	16	16	30	0	40	14
74	813819114078	RACKESH KUMARAN. K R	12	16	24						0	0						0	0	12	16	24	0	0	0
75	813819114079	RADHAKRISHNAN. S	10	16	24						0	0						50	14	10	16	24	0	50	14
76	813819114081	RAJPRABU. K	10	10	16						0	0						6	6	10	10	16	0	6	6
77	813819114082	RAMANESHWER. P	12	18	24						0	0						50	30	12	18	24	0	50	30
78	813819114083	ROSHAN. R	2	8	10						0	0						30	26	2	8	10	0	30	26
79	813819114084	SABARISHAN. S	2	8	0						0	0						20	14	2	8	0	0	20	14
80	813819114085	SABARIVASAN. K	10	16	24						0	0						50	34	10	16	24	0	50	34
81	813819114086	SALMAN FARIS. M	10	16	10						0	0						50	16	10	16	10	0	50	16
82	813819114087	SAMBUGESH. D	10	16	24						0	0						18	10	10	16	24	0	18	10
83	813819114088	SAM DANIEL. P	10	16	24						0	0						50	28	10	16	24	0	50	28
84	813819114089	SAM NITHIN. P	20	16	24						0	0						0	0	20	16	24	0	0	0
85	813819114090	SANJAI. M	10	18	26						0	0						30	26	10	18	26	0	30	26
86	813819114091	SANJAY. T	10	20	20						0	0						40	16	10	20	20	0	40	16
87	813819114092	SANJAY KUMAR. D	10	10	10						0	0						40	26	10	10	10	0	40	26
88	813819114093	SANJEEV PRAMESH. M	10	18	10						0	0						10	8	10	18	10	0	10	8
89	813819114094	SANTHANA KRISHNAN. M	26	26	28						0	0						56	34	26	26	28	0	56	34
90	813819114095	SANTHOSH. P	10	15	25						0	0						50	24	10	15	25	0	50	24
91	813819114096	SANTHOSH. P	15	15	20						0	0						56	34	15	15	20	0	56	34
92	813819114097	SANTHOSH KUMAR. P V	0	0	0						0	0						30	22	0	0	0	0	30	22
93	813819114098	SIDDARTH. S	12	16	24						0	0						20	16	12	16	24	0	20	16
94	813819114099	SIDDHARTH. T K	0	0	0						0	0						0	0	0	0	0	0	0	0
95	813819114100	SIVA SUBRAMANIAN. G	15	15	24						0	0						0	0	15	15	24	0	0	0
96	813819114101	SRIHARI. S	15	15	32						0	0						30	20	15	15	32	0	30	20
97	813819114102	SRI HARIHARAN. V	25	25	20						0	0						30	20	25	25	20	0	30	20
98	813819114103	SRIRAM. S	14	16	20						0	0						0	0	14	16	20	0	0	0
99	813819114104	SRI RANGARAJAN. N	15	15	30						0	0						0	0	15	15	30	0	0	0
100	813819114105	SRIVARDHAN. C	22	26	32						0	0						58	36	22	26	32	0	58	36
101	813819114106	SUDARSON. A	14	14	26						0	0						40	18	14	14	26	0	40	18
102	813819114107	SUDHAKAR. G	10	8	18						0	0						0	0	10	8	18	0	0	0
103	813819114108	SUHAIL. S	20	15	27						0	0						40	20	20	15	27	0	40	20
104	813819114109	SURYA. J	15	15	20						0	0						0	0	15	15	20	0	0	0
105	813819114110	SUTHARSH KRISHNA. K A	18	16	26						0	0						10	6	18	16	26	0	10	6

106	813819114111	TAMILMARAN. M	2	2	4						0	0							0	0	2	2	4	0	0	0
107	813819114112	TAMIL VANAN. J	6	6	20						0	0							30	12	6	6	20	0	30	12
108	813819114113	THILAK. K	18	10	10						0	0							10	6	18	10	10	0	10	6
109	813819114114	UTHAYA SANKAR. V S	20	20	30						0	0							56	34	20	20	30	0	56	34
110	813819114115	VASANTH. R	20	20	34						0	0							56	34	20	20	34	0	56	34
111	813819114116	VENKATACHALAM. P	4	4	6						0	0							0	0	4	4	6	0	0	0
112	813819114118	VENKATESH. M	10	18	22						0	0							40	10	10	18	22	0	40	10
113	813819114119	VIGNESH. M	6	10	10						0	0							0	0	6	10	10	0	0	0
114	813819114120	VIGNESH. N	10	18	22						0	0							48	30	10	18	22	0	48	30
115	813819114122	VISHAL. S	5	5	10						0	0							20	18	5	5	10	0	20	18
116	813819114123	VISHVATH. M	20	15	27						0	0							26	24	20	15	27	0	26	24
117	813819114124	VYDEESKUMAR. R	15	15	30						0	0							30	20	15	15	30	0	30	20
118	813819114301	AKASH. K	22	8	0						16	26							20	12	22	8	16	26	20	12
119	813819114302	GOPIKRISHNAN. S	12	18	20						0	0							34	30	12	18	20	0	34	30
120	813819114303	GURUPRASANTH. R	20	25	35						0	0							40	26	20	25	35	0	40	26
121	813819114304	HARIHARAN. M	0	18	16						16	34							20	18	0	18	32	34	20	18
122	813819114305	HARIHARAN. S	25	28	27						0	0							56	34	25	28	27	0	56	34
123	813819114306	HARI HARAN. T	16	19	15						0	0							40	22	16	19	15	0	40	22
124	813819114307	KHAJA MOINUDEEN. K	20	4	28						14	36							34	32	20	4	42	36	34	32
125	813819114308	SAM WILLIAM. A	2	10	20						22	32							28	22	2	10	42	32	28	22
126	813819114309	SANJAY. S	20	16	14						26	34							30	12	20	16	40	34	30	12
127	813819114310	SELVA MURALIDARAN S	14	17	21						0	0							16	10	14	17	21	0	16	10
																		CO's Target Value			20.80	20.80	46.80	39.00	39.00	26.00
																		No. of Student Secured above CO's Target value			30	15	5	14	52	23
																		Percentage of Student Secured above Target			23.62	11.81	3.94	11.02	40.94	18.11

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE ME8791 MECHATRONICS	Batch 2019 - 2023
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)	

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813819114001	ABDUL RAHMAN. M	B+
2	813819114002	ABINAYA. R	A+
3	813819114003	ABISHEIK. S	B
4	813819114004	ADHARSH NIJASTAN. M	B+
5	813819114005	AJAYESHWAR. K	A
6	813819114006	AJAY KUMAR. K	B+
7	813819114007	AKASH. K	B
8	813819114008	AKASH. R	A
9	813819114009	AKILAN. P	B+
10	813819114010	AMALRAJ. C	A
11	813819114011	ANBARASU. P	A
12	813819114012	ARAVINDH. S	B
13	813819114013	ARAVINDHAN. R	B+
14	813819114014	ARUL ARASU. T	B+
15	813819114015	ARUMUGA VIGNESH. S R	B+
16	813819114016	ARUN. P	B+
17	813819114017	BABURAJ. K	B+
18	813819114018	BALAGANGATHARAN. M	B+
19	813819114019	BALAJI. S	B+
20	813819114020	BALARAJASURYA. R	A+
21	813819114021	BALAVINAYAK. V M	B+
22	813819114022	BHAVAN. R B N	B
23	813819114023	BODHIRAM. M B	B
24	813819114024	CHANAKYA. M	B+
25	813819114025	DEEPAK. M	A
26	813819114026	DEEPAMANI. R	A
27	813819114027	DESIGAN. M	B
28	813819114028	DHAMOTHARAN. M	B+
29	813819114030	DINESH KUMAR. G	A
30	813819114031	DINESH KUMAR. G	A
31	813819114032	GIRIHARAN. B	A
32	813819114033	GIRISH KANNAH. M	A+
33	813819114034	GOKUL. S	B+
34	813819114035	GOPI. M	B+
35	813819114037	HARIHARAN. V	B+
36	813819114038	HARI KARAN. K	A+
37	813819114039	HARISH. S	A
38	813819114040	HEMAPRIYA. P	A
39	813819114041	JAIRUS. S	B+
40	813819114042	JAISRIRAM. R	B
41	813819114043	JOYAL. C	A
42	813819114044	KAARTHIKESH. U	B+
43	813819114045	KANNAN. J	B
44	813819114046	KARTHI. M	B+
45	813819114048	KIRTHIK. K	B+
46	813819114049	KISHAN. R	A
47	813819114051	LOKESH. D	A
48	813819114052	LOKESHWARAN. B	A+
49	813819114053	MARCELL FRANKLINE. V	A+
50	813819114054	MARIMUTHU. R	B
51	813819114055	MITHUNKUMAR. K	B
52	813819114056	MOHAMED AJMAL. M I	B+
53	813819114057	MOHAMED SHAHIR . S	B+

54	813819114058	MOHAMMED FAZIL. N	A
55	813819114059	MOHITHKUMAR. A	A
56	813819114060	MUGUNDHAN. S	B
57	813819114061	MUKESH. M	A
58	813819114062	MURALI MANOHAR. K	B+
59	813819114063	MUTHU SAI CHARAN. V R	B+
60	813819114064	NAGARAJ. L	B
61	813819114065	NARESHKUMAR. R	B
62	813819114066	NAVEEN. M	B+
63	813819114067	NAVEEN PRASATH. S	B
64	813819114068	NITHIS ANTRO. M	A
65	813819114069	NITHISKUMAR. P	B+
66	813819114070	NIVAS. G	B+
67	813819114071	PADMANAABHAN. S	B
68	813819114072	PRAGADEESH. N	A
69	813819114073	PRAGATHEESHWARAN. S	A
70	813819114074	PRASANNA. R	A+
71	813819114075	PRAVEEN. K	A+
72	813819114076	PRAVIN KUMAR. P	A+
73	813819114077	PREETHAM RAJ. T	A
74	813819114078	RACKESH KUMARAN. K R	A
75	813819114079	RADHAKRISHNAN. S	A
76	813819114081	RAJPRABU. K	B
77	813819114082	RAMANESHWER. P	B+
78	813819114083	ROSHAN. R	B
79	813819114084	SABARISHAN. S	B+
80	813819114085	SABARIVASAN. K	B+
81	813819114086	SALMAN FARIS. M	B+
82	813819114087	SAMBUGESH. D	B
83	813819114088	SAM DANIEL. P	B+
84	813819114089	SAM NITHIN. P	B+
85	813819114090	SANJAI. M	B+
86	813819114091	SANJAY. T	B+
87	813819114092	SANJAY KUMAR. D	B
88	813819114093	SANJEEV PRAMESH. M	B+
89	813819114094	SANTHANA KRISHNAN. M	B+
90	813819114095	SANTHOSH. P	B+
91	813819114096	SANTHOSH. P	A
92	813819114097	SANTHOSH KUMAR. P V	A
93	813819114098	SIDDARTH. S	B+
94	813819114099	SIDDHARTH. T K	B
95	813819114100	SIVA SUBRAMANIAN. G	A
96	813819114101	SRIHARI. S	A
97	813819114102	SRI HARIHARAN. V	A+
98	813819114103	SRIRAM. S	B+
99	813819114104	SRI RANGARAJAN. N	A+
100	813819114105	SRIVARDHAN. C	A
101	813819114106	SUDARSON. A	B+
102	813819114107	SUDHAKAR. G	B+
103	813819114108	SUHAIL. S	A
104	813819114109	SURYA. J	A
105	813819114110	SUTHARSH KRISHNA. K A	B+
106	813819114111	TAMILMARAN. M	B
107	813819114112	TAMIL VANAN. J	B
108	813819114113	THILAK. K	A
109	813819114114	UTHAYA SANKAR. V S	A
110	813819114115	VASANTH. R	A
111	813819114116	VENKATACHALAM. P	B+
112	813819114118	VENKATESH. M	B+
113	813819114119	VIGNESH. M	B+

114	813819114120	VIGNESH. N	B+
115	813819114122	VISHAL. S	B
116	813819114123	VISHVATH. M	B+
117	813819114124	VYDEESKUMAR. R	B+
118	813819114301	AKASH. K	B+
119	813819114302	GOPIKRISHNAN. S	A
120	813819114303	GURUPRASANTH. R	A+
121	813819114304	HARIHARAN. M	B+
122	813819114305	HARIHARAN. S	A
123	813819114306	HARI HARAN. T	B
124	813819114307	KHAJA MOINUDEEN. K	B+
125	813819114308	SAM WILLIAM. A	B+
126	813819114309	SANJAY. S	A
127	813819114310	SELVA MURALIDARAN S	B
No. of S/O Grade			0
No. of A/A+ Grade			12
No. of B/A Grade			36
No. of C/B+ Grade			54
No. of D/B Grade			25
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			102
CO-Attainment University			80.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C403.1	23.62	80.00	57.45	100.00	65.96	2
C403.2	11.81	80.00	52.72	100.00	62.18	2
C403.3	3.94	80.00	49.57	85.53	56.77	1
C403.4	11.02	80.00	52.41	82.43	58.41	1
C403.5	40.94	80.00	64.38	83.72	68.25	2
C403.6	18.11	80.00	55.24	100.00	64.20	2

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C403.1	3	3	3	3	3	2		3	2	1		1	1	1	
C403.2	3	3	3	3	3	2	1	2	2	2	1	1	2	1	1
C403.3	3	3	3	3	3	2	1	2	2	2	1	1	2	1	1
C403.4	3	3	3	2	2	2		3	2	3		2	3	2	3
C403.5	3	3	2	3	3	2		3	2	3		2	3	2	3
C403.6	3	3	3	3	3	2		3	2	2		1	3	1	1
C403	3.00	3.00	2.83	2.83	2.83	2.00	0.33	2.67	2.00	2.17	0.33	1.33	2.33	1.33	1.50

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C403.1	2.00	2.00	2.00	2.00	2.00	1.33		2.00	1.33	0.67		0.67	0.67	0.67	
C403.2	2.00	2.00	2.00	2.00	2.00	1.33	0.67	1.33	1.33	1.33	0.67	0.67	1.33	0.67	0.67
C403.3	1.00	1.00	1.00	1.00	1.00	0.67	0.33	0.67	0.67	0.67	0.33	0.33	0.67	0.33	0.33
C403.4	1.00	1.00	1.00	0.67	0.67	0.67		1.00	0.67	1.00		0.67	1.00	0.67	1.00
C403.5	2.00	2.00	1.33	2.00	2.00	1.33		2.00	1.33	2.00		1.33	2.00	1.33	2.00
C403.6	2.00	2.00	2.00	2.00	2.00	1.33		2.00	1.33	1.33		0.67	2.00	0.67	0.67
C403	1.67	1.67	1.56	1.61	1.61	1.11	0.17	1.50	1.11	1.17	0.17	0.72	1.28	0.72	0.78

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / ODD Semester

COURSE CODE/TITLE	POWER PLANT ENGINEERING	Batch	2019 - 2023
CLASS / SECTION	Sem 7 / MECH A & B		
COURSE COORDINATOR	Mr.S.Paramaguru / Mr.K.Amarnath		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	40							40	60							40	60	60	40	40	60	40	60
1	813819114001	ABDUL RAHMAN. M	16	16							28	26							22	34	16	16	28	26	22	34
2	813819114002	ABINAYA. R	14	28							34	36							36	40	14	28	34	36	36	40
3	813819114003	ABISHEIK. S	0	0							28	40							0	0	0	0	28	40	0	0
4	813819114004	ADHARSH NIJASTAN. M	16	24							20	54							36	48	16	24	20	54	36	48
5	813819114005	AJAYESHWAR. K	52	36							34	50							36	44	52	36	34	50	36	44
6	813819114006	AJAY KUMAR. K	38	20							16	52							30	34	38	20	16	52	30	34
7	813819114007	AKASH. K	20	32							30	36							20	48	20	32	30	36	20	48
8	813819114008	AKASH. R	36	28							34	48							34	44	36	28	34	48	34	44
9	813819114009	AKILAN. P	0	0							34	26							28	22	0	0	34	26	28	22
10	813819114010	AMALRAJ. C	24	10							34	50							32	52	24	10	34	50	32	52
11	813819114011	ANBARASU. P	34	32							36	52							24	48	34	32	36	52	24	48
12	813819114012	ARAVINDH. S	28	0							30	40							24	48	28	0	30	40	24	48
13	813819114013	ARAVINDHAN. R	28	22							30	46							36	52	28	22	30	46	36	52
14	813819114014	ARUL ARASU. T	34	26							36	36							36	40	34	26	36	36	36	40
15	813819114015	ARUMUGA VIGNESH. S R	12	4							34	32							26	26	12	4	34	32	26	26
16	813819114016	ARUN. P	8	4							10	12							20	24	8	4	10	12	20	24
17	813819114017	BABURAJ. K	12	22							18	46							30	42	12	22	18	46	30	42
18	813819114018	BALAGANGATHARAN. M	36	20							32	44							24	40	36	20	32	44	24	40
19	813819114019	BALAJI. S	44	32							32	44							32	30	44	32	32	44	32	30
20	813819114020	BALARAJASURYA. R	34	24							30	28							32	24	34	24	30	28	32	24
21	813819114021	BALAVINAYAK. V M	16	22							30	40							26	22	16	22	30	40	26	22
22	813819114022	BHAVAN. R B N	20	6							32	42							28	28	20	6	32	42	28	28
23	813819114023	BODHIRAM. M B	0	0							32	30							28	28	0	0	32	30	28	28
24	813819114024	CHANAKYA. M	40	18							34	42							20	28	40	18	34	42	20	28
25	813819114025	DEEPAK. M	48	18							32	48							34	34	48	18	32	48	34	34
26	813819114026	DEEPAMANI. R	14	28							34	44							36	52	14	28	34	44	36	52
27	813819114027	DESIGAN. M	44	10							36	52							34	46	44	10	36	52	34	46
28	813819114028	DHAMOTHARAN. M	48	18							34	52							36	48	48	18	34	52	36	48
29	813819114030	DINESH KUMAR. G	48	30							36	48							34	44	48	30	36	48	34	44
30	813819114031	DINESH KUMAR. G	42	28							22	46							14	38	42	28	22	46	14	38
31	813819114032	GIRIHARAN. B	14	20							36	38							36	36	14	20	36	38	36	36
32	813819114033	GIRISH KANNAH. M	30	24							32	50							32	40	30	24	32	50	32	40
33	813819114034	GOKUL. S	4	8							30	44							32	34	4	8	30	44	32	34
34	813819114035	GOPI. M	32	30							26	50							32	44	32	30	26	50	32	44
35	813819114037	HARIHARAN. V	18	4							20	22							26	26	18	4	20	22	26	26
36	813819114038	HARI KARAN. K	14	24							32	38							36	44	14	24	32	38	36	44
37	813819114039	HARISH. S	46	20							30	36							34	48	46	20	30	36	34	48
38	813819114040	HEMAPRIYA. P	36	36							36	48							36	44	36	36	36	48	36	44
39	813819114041	JAIRUS. S	34	22							32	38							32	44	34	22	32	38	32	44
40	813819114042	JAISRIRAM. R	50	22							32	36							30	36	50	22	32	36	30	36
41	813819114043	JOYAL. C	18	14							20	32							34	30	18	14	20	32	34	30
42	813819114044	KAARTHIKESH. U	22	0							12	28							16	36	22	0	12	28	16	36
43	813819114045	KANNAN. J	30	24							26	40							32	28	30	24	26	40	32	28
44	813819114046	KARTHI. M	14	14							18	46							20	40	14	14	18	46	20	40
45	813819114048	KIRTHIK. K	14	26							28	46							32	44	14	26	28	46	32	44

46	813819114049	KISHAN. R	46	18							32	48						32	44	46	18	32	48	32	44
47	813819114051	LOKESH. D	22	8							34	44						32	36	22	8	34	44	32	36
48	813819114052	LOKESHWARAN. B	40	34							34	48						32	36	40	34	34	48	32	36
49	813819114053	MARCELL FRANKLINE. V	36	30							40	40						20	44	36	30	40	40	20	44
50	813819114054	MARIMUTHU. R	24	16							34	48						28	36	24	16	34	48	28	36
51	813819114055	MITHUNKUMAR. K	22	28							34	40						24	30	22	28	34	40	24	30
52	813819114056	MOHAMED AJMAL. M I	50	34							34	48						34	40	50	34	34	48	34	40
53	813819114057	MOHAMED SHAHIR . S	34	18							34	48						36	52	34	18	34	48	36	52
54	813819114058	MOHAMMED FAZIL. N	54	26							36	50						36	52	54	26	36	50	36	52
55	813819114059	MOHITHKUMAR. A	30	24							24	44						34	48	30	24	24	44	34	48
56	813819114060	MUGUNDHAN. S	40	34							36	44						36	52	40	34	36	44	36	52
57	813819114061	MUKESH. M	30	30							26	40						18	32	30	30	26	40	18	32
58	813819114062	MURALI MANOHAR. K	12	14							32	48						0	0	12	14	32	48	0	0
59	813819114063	MUTHU SAI CHARAN. V R	48	30							34	46						34	40	48	30	34	46	34	40
60	813819114064	NAGARAJ. L	34	36							32	38						24	46	34	36	32	38	24	46
61	813819114065	NARESHKUMAR. R	12	6							22	20						16	08	12	6	22	20	16	8
62	813819114066	NAVEEN. M	36	38							38	54						34	44	36	38	38	54	34	44
63	813819114067	NAVEEN PRASATH. S	0	0							18	20						10	22	0	0	18	20	10	22
64	813819114068	NITHIS ANTRO. M	42	36							32	46						30	30	42	36	32	46	30	30
65	813819114069	NITHISKUMAR. P	18	8							32	36						32	30	18	8	32	36	32	30
66	813819114070	NIVAS. G	26	6							14	32						26	24	26	6	14	32	26	24
67	813819114071	PADMANAABHAN. S	6	10							14	24						34	18	6	10	14	24	34	18
68	813819114072	PRAGADEESH. N	0	0							38	54						36	56	0	0	38	54	36	56
69	813819114073	PRAGATHEESHWARAN. S	14	14							26	24						28	24	14	14	26	24	28	24
70	813819114074	PRASANNA. R	0	0							22	28						34	36	0	0	22	28	34	36
71	813819114075	PRAVEEN. K	14	8							18	26						08	10	14	8	18	26	8	10
72	813819114076	PRAVIN KUMAR. P	26	24							26	32						20	26	26	24	26	32	20	26
73	813819114077	PREETHAM RAJ. T	32	34							24	32						22	26	32	34	24	32	22	26
74	813819114078	RACKESH KUMARAN. K R	46	32							32	48						36	44	46	32	32	48	36	44
75	813819114079	RADHAKRISHNAN. S	40	14							28	38						34	42	40	14	28	38	34	42
76	813819114081	RAJPRABU. K	30	22							16	48						04	10	30	22	16	48	4	10
77	813819114082	RAMANESHWER. P	34	28							28	50						28	36	34	28	28	50	28	36
78	813819114083	ROSHAN. R	10	10							34	28						28	24	10	10	34	28	28	24
79	813819114084	SABARISHAN. S	18	14							32	34						22	16	18	14	32	34	22	16
80	813819114085	SABARIVASAN. K	28	6							32	42						30	30	28	6	32	42	30	30
81	813819114086	SALMAN FARIS. M	28	8							30	50						30	34	28	8	30	50	30	34
82	813819114087	SAMBUGESH. D	26	26							22	24						30	24	26	26	22	24	30	24
83	813819114088	SAM DANIEL. P	12	12							30	44						32	40	12	12	30	44	32	40
84	813819114089	SAM NITHIN. P	34	18							22	42						34	42	34	18	22	42	34	42
85	813819114090	SANJAI. M	0	0							24	14						0	0	0	0	24	14	0	0
86	813819114091	SANJAY. T	26	32							16	44						32	30	26	32	16	44	32	30
87	813819114092	SANJAY KUMAR. D	10	2							0	0						18	14	10	2	0	0	18	14
88	813819114093	SANJEEV PRAMESH. M	20	10							16	34						28	22	20	10	16	34	28	22
89	813819114094	SANTHANA KRISHNAN. M	24	38							36	48						36	38	24	38	36	48	36	38
90	813819114095	SANTHOSH. P	10	12							24	32						22	26	10	12	24	32	22	26
91	813819114096	SANTHOSH. P	44	14							32	38						32	36	44	14	32	38	32	36
92	813819114097	SANTHOSH KUMAR. P V	0	0							32	20						26	32	0	0	32	20	26	32
93	813819114098	SIDDARTH. S	36	22							18	46						26	14	36	22	18	46	26	14
94	813819114099	SIDDHARTH. T K	0	0							0	0						0	0	0	0	0	0	0	0
95	813819114100	SIVA SUBRAMANIAN. G	12	12							34	22						34	20	12	12	34	22	34	20
96	813819114101	SRIHARI. S	8	6							30	30						14	04	8	6	30	30	14	4
97	813819114102	SRI HARIHARAN. V	34	16							36	44						30	36	34	16	36	44	30	36
98	813819114103	SRIRAM. S	44	24							30	32						22	04	44	24	30	32	22	4
99	813819114104	SRI RANGARAJAN. N	42	14							28	44						34	32	42	14	28	44	34	32
100	813819114105	SRIVARDHAN. C	50	32							38	56						0	0	50	32	38	56	0	0
101	813819114106	SUDARSON. A	42	10							34	12						22	30	42	10	34	12	22	30
102	813819114107	SUDHAKAR. G	6	0							24	36						24	18	6	0	24	36	24	18
103	813819114108	SUHAIL. S	0	0							36	34						34	24	0	0	36	34	34	24
104	813819114109	SURYA. J	18	38							32	38						28	16	18	38	32	38	28	16
105	813819114110	SUTHARSH KRISHNA. K A	22	28							26	42						26	22	22	28	26	42	26	22

106	813819114111	TAMILMARAN. M	0	8							0	0							04	0	0	8	0	0	4	0
107	813819114112	TAMIL VANAN. J	34	26							26	26							26	26	34	26	26	26	26	26
108	813819114113	THILAK. K	0	0							32	32							24	26	0	0	32	32	24	26
109	813819114114	UTHAYA SANKAR. V S	42	28							30	46							30	34	42	28	30	46	30	34
110	813819114115	VASANTH. R	38	22							34	48							30	38	38	22	34	48	30	38
111	813819114116	VENKATACHALAM. P	28	6							6	14							05	0	28	6	6	14	5	0
112	813819114118	VENKATESH. M	14	26							24	40							12	08	14	26	24	40	12	8
113	813819114119	VIGNESH. M	48	18							24	14							10	34	48	18	24	14	10	34
114	813819114120	VIGNESH. N	30	26							28	34							34	36	30	26	28	34	34	36
115	813819114122	VISHAL. S	32	18							28	34							30	18	32	18	28	34	30	18
116	813819114123	VISHVATH. M	38	22							34	42							06	03	38	22	34	42	6	3
117	813819114124	VYDEESKUMAR. R	20	30							28	32							28	28	20	30	28	32	28	28
118	813819114301	AKASH. K	0	0							14	14							30	36	0	0	14	14	30	36
119	813819114302	GOPIKRISHNAN. S	34	28							32	40							34	28	34	28	32	40	34	28
120	813819114303	GURUPRASANTH. R	52	38							36	48							38	38	52	38	36	48	38	38
121	813819114304	HARIHARAN. M	12	12							30	36							32	46	12	12	30	36	32	46
122	813819114305	HARIHARAN. S	38	20							32	48							36	38	38	20	32	48	36	38
123	813819114306	HARI HARAN. T	18	20							26	44							36	32	18	20	26	44	36	32
124	813819114307	KHAJA MOINUDEEN. K	24	26							32	32							24	48	24	26	32	32	24	48
125	813819114308	SAM WILLIAM. A	4	4							18	34							34	48	4	4	18	34	34	48
126	813819114309	SANJAY. S	0	0							30	40							32	32	0	0	30	40	32	32
127	813819114310	SELVA MURALIDARAN S	44	18							26	36							28	22	44	18	26	36	28	22
CO's Target Value																					39.00	26.00	26.00	39.00	26.00	39.00
No. of Student Secured above CO's Target value																					28	33	84	68	80	42
Percentage of Student Secured above Target																					22.05	25.98	66.14	53.54	62.99	33.07

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	ME8792 POWER PLANT ENGINEERING	Batch	2019 - 2023
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813819114001	ABDUL RAHMAN. M	B
2	813819114002	ABINAYA. R	A
3	813819114003	ABISHEIK. S	B+
4	813819114004	ADHARSH NIJASTAN. M	B+
5	813819114005	AJAYESHWAR. K	A
6	813819114006	AJAY KUMAR. K	B+
7	813819114007	AKASH. K	B
8	813819114008	AKASH. R	A
9	813819114009	AKILAN. P	B+
10	813819114010	AMALRAJ. C	A
11	813819114011	ANBARASU. P	B+
12	813819114012	ARAVINDH. S	B+
13	813819114013	ARAVINDHAN. R	B
14	813819114014	ARUL ARASU. T	A
15	813819114015	ARUMUGA VIGNESH. S R	A+
16	813819114016	ARUN. P	B+
17	813819114017	BABURAJ. K	B
18	813819114018	BALAGANGATHARAN. M	B+
19	813819114019	BALAJI. S	B+
20	813819114020	BALARAJASURYA. R	A
21	813819114021	BALAVINAYAK. V M	B+
22	813819114022	BHAVAN. R B N	B+
23	813819114023	BODHIRAM. M B	B
24	813819114024	CHANAKYA. M	A
25	813819114025	DEEPAK. M	A
26	813819114026	DEEPAMANI. R	A
27	813819114027	DESIGAN. M	A
28	813819114028	DHAMOTHARAN. M	B+
29	813819114030	DINESH KUMAR. G	A
30	813819114031	DINESH KUMAR. G	B+
31	813819114032	GIRIHARAN. B	B
32	813819114033	GIRISH KANNAH. M	A
33	813819114034	GOKUL. S	B
34	813819114035	GOPI. M	B
35	813819114037	HARIHARAN. V	B+
36	813819114038	HARI KARAN. K	A
37	813819114039	HARISH. S	B
38	813819114040	HEMAPRIYA. P	B
39	813819114041	JAIRUS. S	B+
40	813819114042	JAISRIRAM. R	B
41	813819114043	JOYAL. C	B+
42	813819114044	KAARTHIKESH. U	B
43	813819114045	KANNAN. J	B+
44	813819114046	KARTHI. M	B+
45	813819114048	KIRTHIK. K	B+
46	813819114049	KISHAN. R	A
47	813819114051	LOKESH. D	B+
48	813819114052	LOKESHWARAN. B	B+
49	813819114053	MARCELL FRANKLINE. V	A
50	813819114054	MARIMUTHU. R	B
51	813819114055	MITHUNKUMAR. K	A
52	813819114056	MOHAMED AJMAL. M I	A
53	813819114057	MOHAMED SHAHIR . S	B+

54	813819114058	MOHAMMED FAZIL. N	B+
55	813819114059	MOHITHKUMAR. A	B
56	813819114060	MUGUNDHAN. S	A
57	813819114061	MUKESH. M	B+
58	813819114062	MURALI MANOHAR. K	B
59	813819114063	MUTHU SAI CHARAN. V R	B
60	813819114064	NAGARAJ. L	B
61	813819114065	NARESHKUMAR. R	B
62	813819114066	NAVEEN. M	B+
63	813819114067	NAVEEN PRASATH. S	B
64	813819114068	NITHIS ANTRO. M	B
65	813819114069	NITHISKUMAR. P	B
66	813819114070	NIVAS. G	B+
67	813819114071	PADMANAABHAN. S	B
68	813819114072	PRAGADEESH. N	A+
69	813819114073	PRAGATHEESHWARAN. S	B+
70	813819114074	PRASANNA. R	A
71	813819114075	PRAVEEN. K	A
72	813819114076	PRAVIN KUMAR. P	B
73	813819114077	PREETHAM RAJ. T	B+
74	813819114078	RACKESH KUMARAN. K R	B
75	813819114079	RADHAKRISHNAN. S	B+
76	813819114081	RAJPRABU. K	B
77	813819114082	RAMANESHWER. P	B+
78	813819114083	ROSHAN. R	B
79	813819114084	SABARISHAN. S	B
80	813819114085	SABARIVASAN. K	B
81	813819114086	SALMAN FARIS. M	B+
82	813819114087	SAMBUGESH. D	B+
83	813819114088	SAM DANIEL. P	B+
84	813819114089	SAM NITHIN. P	A
85	813819114090	SANJAI. M	B
86	813819114091	SANJAY. T	B+
87	813819114092	SANJAY KUMAR. D	U
88	813819114093	SANJEEV PRAMESH. M	B+
89	813819114094	SANTHANA KRISHNAN. M	A
90	813819114095	SANTHOSH. P	B
91	813819114096	SANTHOSH. P	B
92	813819114097	SANTHOSH KUMAR. P V	B+
93	813819114098	SIDDARTH. S	B+
94	813819114099	SIDDHARTH. T K	A
95	813819114100	SIVA SUBRAMANIAN. G	B
96	813819114101	SRIHARI. S	B+
97	813819114102	SRI HARIHARAN. V	A
98	813819114103	SRIRAM. S	B+
99	813819114104	SRI RANGARAJAN. N	A+
100	813819114105	SRIVARDHAN. C	A
101	813819114106	SUDARSON. A	A
102	813819114107	SUDHAKAR. G	A
103	813819114108	SUHAIL. S	A
104	813819114109	SURYA. J	B+
105	813819114110	SUTHARSH KRISHNA. K A	A
106	813819114111	TAMILMARAN. M	U
107	813819114112	TAMIL VANAN. J	B
108	813819114113	THILAK. K	B+
109	813819114114	UTHAYA SANKAR. V S	B
110	813819114115	VASANTH. R	B
111	813819114116	VENKATACHALAM. P	U
112	813819114118	VENKATESH. M	B
113	813819114119	VIGNESH. M	B+

114	813819114120	VIGNESH. N	B+
115	813819114122	VISHAL. S	B
116	813819114123	VISHVATH. M	B
117	813819114124	VYDEESKUMAR. R	B
118	813819114301	AKASH. K	B+
119	813819114302	GOPIKRISHNAN. S	B+
120	813819114303	GURUPRASANTH. R	B+
121	813819114304	HARIHARAN. M	B+
122	813819114305	HARIHARAN. S	A+
123	813819114306	HARI HARAN. T	A
124	813819114307	KHAJA MOINUDEEN. K	B
125	813819114308	SAM WILLIAM. A	B+
126	813819114309	SANJAY. S	B
127	813819114310	SELVA MURALIDARAN S	B
No. of S/O Grade			0
No. of A/A+ Grade			4
No. of B/A Grade			30
No. of C/B+ Grade			48
No. of D/B Grade			42
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			82
CO-Attainment University			64.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
401.1	22.05	64.00	47.22	100.00	57.78	1
401.2	25.98	64.00	48.79	100.00	59.03	1
401.3	66.14	64.00	64.86	83.46	68.58	2
401.4	53.54	64.00	59.82	83.98	64.65	2
401.5	62.99	64.00	63.60	82.43	67.36	2
401.6	33.07	64.00	51.63	100.00	61.30	2

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
401.1	3	3	3	3					3	3	2	2	2		3
401.2	3	3	3	3						3	2	2	2		3
401.3	3		3			3			3	3		2	2		3
401.4	3	3				3	3	1	3	3		2	2		3
401.5	3	3		2		3	3	1		3		2	2	1	3
401.6	3					3	3	1	2	3		2	2	1	3
401	3.00	2.00	1.50	1.33		2.00	1.50	0.50	1.83	3.00	0.67	2.00	2.00	0.33	3.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
401.1	1.00	1.00	1.00	1.00					1.00	1.00	0.67	0.67	0.67		1.00
401.2	1.00	1.00	1.00	1.00						1.00	0.67	0.67	0.67		1.00
401.3	2.00		2.00			2.00			2.00	2.00		1.33	1.33		2.00
401.4	2.00	2.00				2.00	2.00	0.67	2.00	2.00		1.33	1.33		2.00
401.5	2.00	2.00		1.33		2.00	2.00	0.67		2.00		1.33	1.33	0.67	2.00
401.6	2.00					2.00	2.00	0.67	1.33	2.00		1.33	1.33	0.67	2.00
401	1.67	1.00	0.67	0.56		1.33	1.00	0.33	1.06	1.67	0.22	1.11	1.11	0.22	1.67

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	THEORY OF MACHINES	Batch	2021 - 2025
CLASS / SECTION	Sem 4 / MECH		
COURSE COORDINATOR	Mr.P.Vigneshwar		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			32	28			40				60			40				100			20	10			10		52	38	60	100	50	40
1	813821114001	ABINESH. R	4	14			14				16			34				40			20	10			10		24	24	16	40	24	34
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	0	16			6				6			4				34			20	10			10		20	26	6	34	16	4
3	813821114003	ARUN. M	14	24			28				38			22				50			20	10			10		34	34	38	50	38	22
4	813821114004	ASWIN. G	2	0			0				6			0				32			0	5			5		2	5	6	32	5	0
5	813821114005	ASWIN. S	0	2			0				16			6				20			20	10			10		20	12	16	20	10	6
6	813821114006	BALAJI. G	0	0			0				34			26				22			20	10			10		20	10	34	22	10	26
7	813821114007	BALAJI. M	4	2			0				24			2				20			20	10			10		24	12	24	20	10	2
8	813821114008	BARANIDARAN. R	0	8			0				8			6				32			20	10			10		20	18	8	32	10	6
9	813821114009	DHANUSH KUMAR. R	2	14			0				8			8				26			20	10			10		22	24	8	26	10	8
10	813821114010	DHINESHWARAN. R	8	22			10				32			18				42			20	10			10		28	32	32	42	20	18
11	813821114011	GAJENDRAN. G	8	26			22				46			38				92			20	10			10		28	36	46	92	32	38
12	813821114012	GOWSICK. S	10	16			0				18			6				50			20	10			10		30	26	18	50	10	6
13	813821114013	HARI BABU. A	2	14			16				6			22				30			18	8			9		20	22	6	30	25	22
14	813821114014	HARIHARAN. S	4	10			0				10			16				46			18	8			9		22	18	10	46	9	16
15	813821114015	IRFAN AHAMED. I	16	24			10				32			22				50			20	10			10		36	34	52	50	20	22
16	813821114016	JEFFREY MELWIN. J	0	8			0				4			24				20			20	10			10		20	18	4	20	10	24
17	813821114017	KAMALNATH. S	0	6			0				32			18				14			18	9			10		18	15	32	14	10	18
18	813821114018	KANAGAMUTHU. M	4	0			0				18			10				50			20	10			10		24	10	18	50	10	10

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			32	**28**			**40**				**60**			**40**				**100**			**20**	**10**			**10**		**52**	**38**	**60**	**100**	**50**	**40**
19	813821114019	KEERTHIVASAN. S	0	14			0				26			6				0			20	10			10		20	24	26	0	10	6
20	813821114020	KESAVAN. Y	12	20			26				52			20				40			20	10			10		32	30	52	40	36	20
21	813821114021	KIRAN DEVA. C N	26	20			12				56			20				80			20	10			10		46	30	56	80	22	20
22	813821114022	KISHOORE. G R	12	24			14				54			18				82			20	10			10		32	34	54	82	24	18
23	813821114023	KISHORE. A	2	20			2				20			18				52			20	10			10		22	30	20	52	12	18
24	813821114024	KRITHICK PRASADH. S	6	16			6				14			4				42			18	8			9		24	24	14	42	15	4
25	813821114025	LANESH. N	4	12			4				20			6				40			18	8			9		22	20	20	40	13	6
26	813821114026	LEO DHOBYAS. A	0	8			4				20			12				32			18	8			9		18	16	20	32	13	12
27	813821114027	MITHUL CHAVAN. R S	0	14			0				20			10				42			20	10			10		20	24	20	42	10	10
28	813821114028	MOHAMED FAISAL. S	4	6			0				0			0				18			18	8			9		22	14	0	18	9	0
29	813821114029	MOHAMED YAHAYA. A	6	20			2				16			14				32			20	10			10		26	30	16	32	12	14
30	813821114030	MOHAMMED ASLAM. S	22	24			10				50			14				64			20	10			10		42	34	50	64	20	14
31	813821114031	MUKESH K K																														
32	813821114032	NAVEEN. V	4	24			24				40			32				74			20	10			10		24	34	40	74	34	32
33	813821114033	PARAMESH. M	30	24			26				42			28				80			20	10			10		50	34	42	80	36	28
34	813821114034	PRAVEEN KUMAR.M	0	0			0				22			0				42			18	8			9		18	8	22	42	9	0
35	813821114035	RAGAVIGA. T	14	20			26				36			18				50			20	10			10		34	30	36	50	36	18
36	813821114036	RAHUL RAMESH BABU. B	0	0			0				20			18				40			18	9			10		18	9	20	40	10	18
37	813821114037	RAM PRASATH. R	2	14			6				40			20				30			18	9			10		20	23	40	30	16	20
38	813821114038	RAMSHANKAR. C	0	14			4				18			2				18			18	8			9		18	22	18	18	13	2
39	813821114039	SANTHOSH KUMAR. R	12	4			18				32			20				22			20	8			10		32	12	32	22	28	20
40	813821114040	SATHISH. S	14	22			30				48			24				80			20	10			10		34	32	48	80	40	24
41	813821114041	SHANMUGAPRIYAN. S	6	26			4				16			24				54			20	10			10		26	36	16	54	14	24
42	813821114042	SHERON. J																														
43	813821114043	SHUBHANKHAR. M	20	0			4				6			4				40			20	10			10		40	10	6	40	14	4
44	813821114044	SIVASHANKARAN. K	0	4			0				16			4				4			0	3			7		0	7	16	4	7	4
45	813821114045	SOWMYANARAYANAN. S	20	24			26				42			32				80			20	10			10		40	34	42	80	36	32

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			32	**28**			**40**				**60**			**40**				**100**			**20**	**10**			**10**		**52**	**38**	**60**	**100**	**50**	**40**
46	813821114046	SRIRAMKUMAR. R	4	16			6				28			8				42			20	10			10		24	26	28	42	16	8
47	813821114047	SUNDAR. V	10	24			6				4			10				50			20	10			10		30	34	4	50	16	10
48	813821114048	SURYA. S	8	12			14				36			18				32			20	10			10		28	22	36	32	24	18
49	813821114049	VENKATESHWARAN. B	10	18			8				30			22				46			20	10			10		30	28	30	46	18	22
50	813821114050	VETRIVEL. S	10	10			6				26			24				44			20	10			10		30	20	26	44	16	24
51	813821114051	VIGNESH. N S	8	16			10				26			26				34			20	10			10		28	26	26	34	20	26
52	813821114052	VISHAL. R B	0	24			0				42			28				68			20	10			10		20	34	42	68	10	28
53	813821114053	VISHANTH. M	10	24			6				16			18				50			20	10			10		30	34	16	50	16	18
54	813821114054	YUGA. M	6	20			8				18			18				54			18	9			10		24	29	18	54	18	18
55	813821114055	YUVARAJAN. T	0	0			0				8			14				8			6	6			8		6	6	8	8	8	14
56	813821114301	CHANDRU. S	12	14			8				36			24				40			20	10			10		32	24	36	40	18	24
57	813821114302	GOPINATH. P	6	22			22				46			22				56			20	10			10		26	32	46	56	32	22
58	813821114303	HARI HARA SUDHAN. G	0	24			4				48			28				50			20	10			10		20	34	48	50	14	28
59	813821114304	HARI KRISHNAN. R	2	18			8				56			34				62			20	10			10		22	28	56	62	18	34
60	813821114305	KATHIR. R	6	0			4				0			0				12			10	8			8		16	8	0	12	12	0
61	813821114307	ROHITH. R	16	14			6				24			38				64			20	10			10		36	24	24	64	16	38
62	813821114308	VARKEY PUNNOOSE SABU	0	0			0				0			0				0			6	7			7		6	7	0	0	7	0
63	813821114309	YOONIS NAVIN. G	0	20			16				20			12				56			20	10			10		20	30	20	56	26	12
64		PERVIN ANTONI. S																														
CO's Target Value																											33.80	24.70	39.00	65.00	32.50	26.0
No. of Student Secured above CO's Target value																											11	32	16	8	7	8
Percentage of Student Secured above Target																											17.19	50.00	25.00	12.50	10.94	12.5

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	THEORY OF MACHINES	Batch	2021 - 2025
CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813821114001	ABINESH. R	U
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	U
3	813821114003	ARUN. M	B+
4	813821114004	ASWIN. G	U
5	813821114005	ASWIN. S	U
6	813821114006	BALAJI. G	U
7	813821114007	BALAJI. M	U
8	813821114008	BARANIDARAN. R	U
9	813821114009	DHANUSH KUMAR. R	U
10	813821114010	DHINESHWARAN. R	U
11	813821114011	GAJENDRAN. G	B+
12	813821114012	GOWSICK. S	U
13	813821114013	HARI BABU. A	U
14	813821114014	HARIHARAN. S	U
15	813821114015	IRFAN AHAMED. I	B+
16	813821114016	JEFFREY MELWIN. J	U
17	813821114017	KAMALNATH. S	U
18	813821114018	KANAGAMUTHU. M	B
19	813821114019	KEERTHIVASAN. S	U
20	813821114020	KESAVAN. Y	A
21	813821114021	KIRAN DEVA. C N	A
22	813821114022	KISHOORE. G R	A
23	813821114023	KISHORE. A	B+
24	813821114024	KRITHICK PRASADH. S	U
25	813821114025	LANESH. N	U
26	813821114026	LEO DHOBYAS. A	U

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
27	813821114027	MITHUL CHAVAN. R S	B
28	813821114028	MOHAMED FAISAL. S	B
29	813821114029	MOHAMED YAHAYA. A	U
30	813821114030	MOHAMMED ASLAM. S	B+
31	813821114031	MUKESH K K	
32	813821114032	NAVEEN. V	B+
33	813821114033	PARAMESH. M	B+
34	813821114034	PRAVEEN KUMAR.M	B
35	813821114035	RAGAVIGA. T	A
36	813821114036	RAHUL RAMESH BABU. B	B
37	813821114037	RAM PRASATH. R	B
38	813821114038	RAMSHANKAR. C	U
39	813821114039	SANTHOSH KUMAR. R	U
40	813821114040	SATHISH. S	B+
41	813821114041	SHANMUGAPRIYAN. S	B+
42	813821114042	SHERON. J	
43	813821114043	SHUBHANKHAR. M	B+
44	813821114044	SIVASHANKARAN. K	U
45	813821114045	SOWMYANARAYANAN. S	B+
46	813821114046	SRIRAMKUMAR. R	B
47	813821114047	SUNDAR. V	U
48	813821114048	SURYA. S	U
49	813821114049	VENKATESHWARAN. B	B
50	813821114050	VETRIVEL. S	B
51	813821114051	VIGNESH. N S	U
52	813821114052	VISHAL. R B	B+
53	813821114053	VISHANTH. M	B+

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
54	813821114054	YUGA. M	B
55	813821114055	YUVARAJAN. T	U
56	813821114301	CHANDRU. S	B+
57	813821114302	GOPINATH. P	B+
58	813821114303	HARI HARA SUDHAN. G	B+
59	813821114304	HARI KRISHNAN. R	B+
60	813821114305	KATHIR. R	U
61	813821114307	ROHITH. R	B
62	813821114308	VARKEY PUNNOOSE SABU	
63	813821114309	YOONIS NAVIN. G	B
64		PERVIN ANTONI. S	
No. of S/O Grade			0
No. of A/A+ Grade			4
No. of B/A Grade			12
No. of C/B+ Grade			0
No. of D/B Grade			0
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			16
CO-Attainment University			25.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012
Programme: **B.E. Mechanical Engineering**
Overall Attainment Sheet – POs & PSOs attainment calculation
AcademicYear : 2022-23EVEN

COURSE CODE/TITLE:ME3491 THEORY OF MACHINES|COURSE COORDINATOR:Mr.P.Vigneshwer Batch:2021 - 2025 Sem:4 CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C210.1	17.19	25.00	21.88	0.00	17.50	1
C210.2	30.00	25.00	35.00	0.00	28.00	1
C210.3	25.00	25.00	25.00	0.00	20.00	1
C210.4	12.50	25.00	20.00	0.00	16.00	1
C210.5	10.94	25.00	19.38	0.00	15.50	1
C210.6	12.50	25.00	20.00	0.00	16.00	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C210.1	3	2	2	1	2	1		3	1	1		1	3	1	1
C210.2	3	2	2	1	2	1	1	2	1	1	1	1	3	1	1
C210.3	3	2	2	1	2	1	1	2	1	1	1	1	3	1	1
C210.4	3	2	2	1	2	1		3	1	1		1	3	2	1
C210.5	3	2	2	1	2	1		3	1	1		1	3	2	1
C210.6	3	2	2	1	2	1		3	1	1		1	3	1	1
C210	3.00	2.00	2.00	1.00	2.00	1.00	0.33	2.67	1.00	1.00	0.33	1.00	3.00	1.33	1.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C210.1	1.00	0.67	0.67	0.33	0.67	0.33		1.00	0.33	0.33		0.33	1.00	0.33	0.33
C210.2	1.00	0.67	0.67	0.33	0.67	0.33	0.33	0.67	0.33	0.33	0.33	0.33	1.00	0.33	0.33
C210.3	1.00	0.67	0.67	0.33	0.67	0.33	0.33	0.67	0.33	0.33	0.33	0.33	1.00	0.33	0.33
C210.4	1.00	0.67	0.67	0.33	0.67	0.33		1.00	0.33	0.33		0.33	1.00	0.67	0.33
C210.5	1.00	0.67	0.67	0.33	0.67	0.33		1.00	0.33	0.33		0.33	1.00	0.67	0.33
C210.6	1.00	0.67	0.67	0.33	0.67	0.33		1.00	0.33	0.33		0.33	1.00	0.33	0.33
C210	1.00	0.67	0.67	0.33	0.67	0.33	0.11	0.89	0.33	0.33	0.11	0.33	1.00	0.44	0.33

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	HYDRALICS AND PNEUMATICS	Batch	2021 - 2025
CLASS / SECTION	Sem 4 / MECH	COURSE OUTCOME	1 2 3 4 5 6
COURSE COORDINATOR	Mr.S.Vinoth Kumar	TARGET	65 65 65 65 65 65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			64	**36**						**44**	**56**							**64**	**28**	**8**	**20**	**20**					**84**	**100**	**56**	**64**	**28**	**8**
1	813821114001	ABINESH. R	18	18						26	26							044	4	8	20	19					38	63	26	44	4	8
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	26	8						24	26							36	12	8	18	18					44	50	26	36	12	8
3	813821114003	ARUN. M	36	22						24	24							44	16	8	20	20					56	66	24	44	16	8
4	813821114004	ASWIN. G	16	14						8	0							36	8	0	0	0					16	22	0	36	8	0
5	813821114005	ASWIN. S	14	16						18	16							10	2	0	16	16					30	50	16	10	2	0
6	813821114006	BALAJI. G	18	14						25	25							21	12	3	18	19					36	58	25	21	12	3
7	813821114007	BALAJI. M	10	24						28	24							36	4	8	18	19					28	71	24	36	4	8
8	813821114008	BARANIDARAN. R	40	16						18	18							42	14	4	20	20					60	54	18	42	14	4
9	813821114009	DHANUSH KUMAR. R	14	6						12	12							20	4	2	0	0					14	18	12	20	4	2
10	813821114010	DHINESHWARAN. R	38	14						24	10							34	14	4	20	20					58	58	10	34	14	4
11	813821114011	GAJENDRAN. G	52	32						39	41							56	16	8	20	20					72	91	41	56	16	8
12	813821114012	GOWSICK. S	22	18						4	0							20	0	4	19	19					41	41	0	20	0	4
13	813821114013	HARI BABU. A	29	21						12	12							32	8	8	20	20					49	53	12	32	8	8
14	813821114014	HARIHARAN. S	18	10						28	8							30	0	4	17	17					35	55	8	30	0	4
15	813821114015	IRFAN AHAMED. I	36	20						34	16							32	4	8	20	20					76	74	16	32	4	8
16	813821114016	JEFFREY MELWIN. J	34	18						16	4							24	8	8	20	20					54	54	4	24	8	8
17	813821114017	KAMALNATH. S	14	18						16	18							22	8	8	16	16					30	50	18	22	8	8
18	813821114018	KANAGAMUTHU. M	16	6						14	22							30	6	8	18	18					34	38	22	30	6	8

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			64	**36**						**44**	**56**						**64**	**28**	**8**	**20**	**20**					**84**	**100**	**56**	**64**	**28**	**8**
19	813821114019	KEERTHIVASAN. S	8	4						26	26							24	6	2	0	0					8	30	26	24	6	2
20	813821114020	KESAVAN. Y	51	31						36	32							40	6	8	20	20					71	87	32	40	6	8
21	813821114021	KIRAN DEVA. C N	45	31						38	30							48	14	8	20	20					65	89	30	48	14	8
22	813821114022	KISHOORE. G R	60	28						26	40							51	17	8	20	20					80	74	40	51	17	8
23	813821114023	KISHORE. A	46	26						21	21							46	8	8	20	20					66	67	21	46	8	8
24	813821114024	KRITHICK PRASADH. S	23	15						18	6							8	8	6	17	17					40	50	6	8	8	6
25	813821114025	LANESH. N	6	6						18	22							24	2	8	16	16					22	40	22	24	2	8
26	813821114026	LEO DHOBYAS. A	20	20						24	12							12	0	6	17	17					37	61	12	12	0	6
27	813821114027	MITHUL CHAVAN. R S	40	14						22	26							38	8	6	20	20					60	56	26	38	8	6
28	813821114028	MOHAMED FAISAL. S	22	6						23	27							44	6	4	18	18					40	47	27	44	6	4
29	813821114029	MOHAMED YAHAYA. A	29	27						25	15							37	8	5	20	20					49	72	15	37	8	5
30	813821114030	MOHAMMED ASLAM. S	28	26						27	27							40	8	8	20	20					48	73	27	40	8	8
31	813821114031	MUKESH K K																														
32	813821114032	NAVEEN. V	34	26						30	34							48	8	8	20	20					54	76	34	48	8	8
33	813821114033	PARAMESH. M	51	29						32	36							50	23	7	20	20					71	81	36	50	23	7
34	813821114034	PRAVEEN KUMAR.M	0	0						4	4							30	6	0	18	18					18	22	4	30	6	0
35	813821114035	RAGAVIGA. T	32	22						21	7							22	16	8	20	20					52	63	7	22	16	8
36	813821114036	RAHUL RAMESH BABU. B	12	4						26	4							24	12	8	18	19					30	49	4	24	12	8
37	813821114037	RAM PRASATH. R	52	24						0	0							38	6	8	20	20					72	44	0	38	6	8
38	813821114038	RAMSHANKAR. C	36	2						7	7							38	8	6	18	19					54	28	7	38	8	6
39	813821114039	SANTHOSH KUMAR. R	32	22						28	10							44	2	8	20	20					52	70	10	44	2	8
40	813821114040	SATHISH. S	40	26						36	40							38	5	7	20	20					60	82	40	38	5	7
41	813821114041	SHANMUGAPRIYAN. S	34	32						34	32							38	8	8	20	20					54	86	32	38	8	8
42	813821114042	SHERON. J																														
43	813821114043	SHUBHANKHAR. M	38	24						16	26							34	4	8	20	20					58	60	26	34	4	8
44	813821114044	SIVASHANKARAN. K	0	2						0	0							16	2	4	0	0					0	2	0	16	2	4
45	813821114045	SOWMYANARAYANAN. S	54	30						38	38							42	8	8	20	20					74	88	38	42	8	8

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			64	**36**						**44**	**56**						**64**	**28**	**8**	**20**	**20**					**84**	**100**	**56**	**64**	**28**	**8**
46	813821114046	SRIRAMKUMAR. R	32	28						22	32						42	4	8	20	20					52	70	32	42	4	8
47	813821114047	SUNDAR. V	32	8						18	32						30	6	8	18	19					50	45	32	30	6	8
48	813821114048	SURYA. S	33	11						0	6						32	4	6	17	17					50	28	6	32	4	6
49	813821114049	VENKATESHWARAN. B	35	15						22	18						38	7	7	20	20					55	57	18	38	7	7
50	813821114050	VETRIVEL. S	26	28						26	32						40	4	6	20	20					46	74	32	40	4	6
51	813821114051	VIGNESH. N S	28	26						36	30						40	4	6	20	20					48	82	30	40	4	6
52	813821114052	VISHAL. R B	44	26						10	26						35	4	7	20	20					64	56	26	35	4	7
53	813821114053	VISHANTH. M	40	20						14	24						46	12	6	20	20					60	54	24	46	12	6
54	813821114054	YUGA. M	18	6						27	27						34	6	8	20	20					38	53	27	34	6	8
55	813821114055	YUVARAJAN. T	24	14						8	0						2	0	0	0	0					24	22	0	2	0	0
56	813821114301	CHANDRU. S	28	18						28	26						40	2	0	20	20					48	66	26	40	2	0
57	813821114302	GOPINATH. P	43	21						31	33						36	6	4	20	20					63	72	33	36	6	4
58	813821114303	HARI HARA SUDHAN. G	41	29						22	27						28	8	8	20	20					61	71	27	28	8	8
59	813821114304	HARI KRISHNAN. R	50	22						30	40						36	16	8	18	19					68	71	40	36	16	8
60	813821114305	KATHIR. R	2	2						0	0						4	0	0	16	16					18	18	0	4	0	0
61	813821114307	ROHITH. R	31	21						31	19						0	0	0	20	20					51	72	19	0	0	0
62	813821114308	VARKEY PUNNOOSE SABU	20	2						0	0						4	0	0	0	0					20	2	0	4	0	0
63	813821114309	YOONIS NAVIN. G	24	28						22	28						28	0	0	20	20					44	70	28	28	0	0
64		PERVIN ANTONI. S																														
CO's Target Value																										54.60	65.00	36.40	41.60	18.20	9.20
No. of Student Secured above CO's Target value																										21	28	5	14	1	43
Percentage of Student Secured above Target																										32.81	43.75	7.81	21.88	1.56	67.19

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	HYDRALICS AND PNEUMATICS	Batch	2021 - 2025
CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813821114001	ABINESH. R	B+
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	B
3	813821114003	ARUN. M	B+
4	813821114004	ASWIN. G	U
5	813821114005	ASWIN. S	B
6	813821114006	BALAJI. G	B
7	813821114007	BALAJI. M	B
8	813821114008	BARANIDARAN. R	B+
9	813821114009	DHANUSH KUMAR. R	B
10	813821114010	DHINESHWARAN. R	B
11	813821114011	GAJENDRAN. G	B+
12	813821114012	GOWSICK. S	B+
13	813821114013	HARI BABU. A	U
14	813821114014	HARIHARAN. S	B
15	813821114015	IRFAN AHAMED. I	A
16	813821114016	JEFFREY MELWIN. J	C
17	813821114017	KAMALNATH. S	U
18	813821114018	KANAGAMUTHU. M	B
19	813821114019	KEERTHIVASAN. S	B
20	813821114020	KESAVAN. Y	B+
21	813821114021	KIRAN DEVA. C N	A
22	813821114022	KISHOORE. G R	B+
23	813821114023	KISHORE. A	B+
24	813821114024	KRITHICK PRASADH. S	U
25	813821114025	LANESH. N	U
26	813821114026	LEO DHOBYAS. A	U

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
27	813821114027	MITHUL CHAVAN. R S	B
28	813821114028	MOHAMED FAISAL. S	U
29	813821114029	MOHAMED YAHAYA. A	B+
30	813821114030	MOHAMMED ASLAM. S	B+
31	813821114031	MUKESH.K.K	
32	813821114032	NAVEEN. V	A
33	813821114033	PARAMESH. M	B+
34	813821114034	PRAVEEN KUMAR.M	B
35	813821114035	RAGAVIGA. T	B+
36	813821114036	RAHUL RAMESH BABU. B	B
37	813821114037	RAM PRASATH. R	U
38	813821114038	RAMSHANKAR. C	U
39	813821114039	SANTHOSH KUMAR. R	B
40	813821114040	SATHISH. S	B+
41	813821114041	SHANMUGAPRIYAN. S	B+
42	813821114042	SHERON. J	
43	813821114043	SHUBHANKHAR. M	B
44	813821114044	SIVASHANKARAN. K	U
45	813821114045	SOWMYANARAYANAN. S	B+
46	813821114046	SRIRAMKUMAR. R	B+
47	813821114047	SUNDAR. V	B
48	813821114048	SURYA. S	B
49	813821114049	VENKATESHWARAN. B	B
50	813821114050	VETRIVEL. S	B
51	813821114051	VIGNESH. N S	B+
52	813821114052	VISHAL. R B	A
53	813821114053	VISHANTH. M	A

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
54	813821114054	YUGA. M	C
55	813821114055	YUVARAJAN. T	B
56	813821114301	CHANDRU. S	B+
57	813821114302	GOPINATH. P	A
58	813821114303	HARI HARA SUDHAN. G	B+
59	813821114304	HARI KRISHNAN. R	A
60	813821114305	KATHIR. R	U
61	813821114307	ROHITH. R	B
62	813821114308	VARKEY PUNNOOSE SABU	
63	813821114309	YOONIS NAVIN. G	B+
64		PERVIN ANTONI. S	
No. of S/O Grade			0
No. of A/A+ Grade			7
No. of B/A Grade			20
No. of C/B+ Grade			2
No. of D/B Grade			0
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			29
CO-Attainment University			45.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012
Programme: **B.E. Mechanical Engineering**
Overall Attainment Sheet – POs & PSOs attainment calculation
AcademicYear : 2022-23EVEN

COURSE CODE/TITLE:ME5492 HYDRALICS AND PNEUMATICS;COURSE COORDINATOR:Mr.S.Vinoth Kumar Batch:2021 - 2025 Sem:4 CO Attainment Level: 1 - (0% - 60%) 2- (61%-69%) 3-(90% and Above)

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C212.1	32.81	45.00	40.12	0.00	32.10	1
C212.2	43.75	45.00	44.50	0.00	35.60	1
C212.3	7.81	45.00	30.12	0.00	24.10	1
C212.4	21.88	45.00	35.75	0.00	28.60	1
C212.5	1.56	45.00	27.62	0.00	22.10	1
C212.6	67.19	45.00	53.87	0.00	43.10	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C212.1	2	1	1	1								1	2	1	1
C212.2	2	1	1	1								1	2	1	1
C212.3	2	1	1	1								1	2	1	1
C212.4	2	1	1	1								1	2	1	1
C212.5	2	1	1	1								1	2	1	1
C212.6	2	1	1	1								1	2	1	1
C212	2.00	1.00	1.00	1.00								1.00	2.00	1.00	1.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C212.1	0.67	0.33	0.33	0.33								0.33	0.67	0.33	0.33
C212.2	0.67	0.33	0.33	0.33								0.33	0.67	0.33	0.33
C212.3	0.67	0.33	0.33	0.33								0.33	0.67	0.33	0.33
C212.4	0.67	0.33	0.33	0.33								0.33	0.67	0.33	0.33
C212.5	0.67	0.33	0.33	0.33								0.33	0.67	0.33	0.33
C212.6	0.67	0.33	0.33	0.33								0.33	0.67	0.33	0.33
C212	0.67	0.33	0.33	0.33								0.33	0.67	0.33	0.33

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	MANUFACTURING TECHNOLOGY	Batch	2021 - 2025
CLASS / SECTION	Sem 4 / MECH	COURSE OUTCOME	1 2 3 4 5 6
COURSE COORDINATOR	Dr.M.R.Anantha Padmanaban	TARGET	65 65 65 65 65 65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	40							40	60							40	60	40						100	40	40	60	40	60
1	813821114001	ABINESH. R	42	20							20	30							0	0	40						82	20	20	30	0	0
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	36	14							12	22							0	0	40						76	14	12	22	0	0
3	813821114003	ARUN. M	50	32							28	40							0	0	40						90	32	28	40	0	0
4	813821114004	ASWIN. G	2	0							24	26							0	0	40						42	0	24	26	0	0
5	813821114005	ASWIN. S	44	26							16	34							0	0	40						84	26	16	34	0	0
6	813821114006	BALAJI. G	44	30							26	32							0	0	40						84	30	26	32	0	0
7	813821114007	BALAJI. M	48	24							18	40							0	0	40						88	24	18	40	0	0
8	813821114008	BARANIDARAN. R	24	10							20	36							0	0	40						64	10	20	36	0	0
9	813821114009	DHANUSH KUMAR. R	26	10							6	0							0	0	40						66	10	6	0	0	0
10	813821114010	DHINESHWARAN. R	44	26							20	34							0	0	40						84	26	20	34	0	0
11	813821114011	GAJENDRAN. G	46	30							34	52							0	0	40						86	30	34	52	0	0
12	813821114012	GOWSICK. S	32	22							22	20							0	0	40						72	22	22	20	0	0
13	813821114013	HARI BABU. A	24	12							20	20							0	0	40						64	12	20	20	0	0
14	813821114014	HARIHARAN. S	34	18							30	36							0	0	40						74	18	30	36	0	0
15	813821114015	IRFAN AHAMED. I	30	20							16	34							0	0	40						70	20	16	34	0	0
16	813821114016	JEFFREY MELWIN. J	34	8							6	16							0	0	40						74	8	6	16	0	0
17	813821114017	KAMALNATH. S	24	2							22	10							0	0	40						64	2	22	10	0	0
18	813821114018	KANAGAMUTHU. M	20	20							18	22							0	0	40						60	20	18	22	0	0

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	40							40	60							40	60	40						100	40	40	60	40	60
19	813821114019	KEERTHIVASAN. S	4	4							6	4							0	0	40						44	4	6	4	0	0
20	813821114020	KESAVAN. Y	40	18							32	26							0	0	40						80	18	32	26	0	0
21	813821114021	KIRAN DEVA. C N	44	26							32	42							0	0	40						84	26	32	42	0	0
22	813821114022	KISHOORE. G R	34	16							32	26							0	0	40						74	16	32	26	0	0
23	813821114023	KISHORE. A	38	12							30	40							0	0	40						78	12	30	40	0	0
24	813821114024	KRITHICK PRASADH. S	30	4							14	20							0	0	40						70	4	14	20	0	0
25	813821114025	LANESH. N	8	6							2	16							0	0	40						48	6	2	16	0	0
26	813821114026	LEO DHOBYAS. A	8	0							20	30							0	0	40						48	0	20	30	0	0
27	813821114027	MITHUL CHAVAN. R S	36	14							20	40							0	0	40						76	14	20	40	0	0
28	813821114028	MOHAMED FAISAL. S	24	6							18	22							0	0	40						64	6	18	22	0	0
29	813821114029	MOHAMED YAHAYA. A	34	16							20	30							0	0	40						74	16	20	30	0	0
30	813821114030	MOHAMMED ASLAM. S	34	18							20	34							0	0	40						74	18	20	34	0	0
31	813821114031	MUKESH K K																														
32	813821114032	NAVEEN. V	46	18							30	40							0	0	40						86	18	30	40	0	0
33	813821114033	PARAMESH. M	38	20							30	42							0	0	40						78	20	30	42	0	0
34	813821114034	PRAVEEN KUMAR.M	12	0							20	22							0	0	40						52	0	20	22	0	0
35	813821114035	RAGAVIGA. T	32	18							20	38							0	0	40						72	18	20	38	0	0
36	813821114036	RAHUL RAMESH BABU. B	30	10							20	22							0	0	40						70	10	20	22	0	0
37	813821114037	RAM PRASATH. R	24	6							20	32							0	0	40						64	6	20	32	0	0
38	813821114038	RAMSHANKAR. C	36	14							22	18							0	0	40						76	14	22	18	0	0
39	813821114039	SANTHOSH KUMAR. R	38	26							20	30							0	0	40						78	26	20	30	0	0
40	813821114040	SATHISH. S	52	30							30	40							0	0	40						92	30	30	40	0	0
41	813821114041	SHANMUGAPRIYAN. S	44	34							20	38							0	0	40						84	34	20	38	0	0
42	813821114042	SHERON. J																														
43	813821114043	SHUBHANKHAR. M	46	20							20	40							0	0	40						86	20	20	40	0	0
44	813821114044	SIVASHANKARAN. K	0	0							6	0							0	0	40						40	0	6	0	0	0
45	813821114045	SOWMYANARAYANAN. S	44	32							32	42							0	0	40						84	32	32	42	0	0

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						ASSIGNMENT						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**							**40**	**60**							**40**	**60**	**40**						**100**	**40**	**40**	**60**	**40**	**60**
46	813821114046	SRIRAMKUMAR. R	40	22							32	28							0	0	40						80	22	32	28	0	0
47	813821114047	SUNDAR. V	34	20							8	38							0	0	40						74	20	8	38	0	0
48	813821114048	SURYA. S	44	18							30	28							0	0	40						84	18	30	28	0	0
49	813821114049	VENKATESHWARAN. B	36	20							23	28							0	0	40						78	20	23	28	0	0
50	813821114050	VETRIVEL. S	32	20							24	40							0	0	40						72	20	24	40	0	0
51	813821114051	VIGNESH. N S	44	24							28	34							0	0	40						84	24	28	34	0	0
52	813821114052	VISHAL. R B	36	20							14	10							0	0	40						76	20	14	10	0	0
53	813821114053	VISHANTH. M	46	24							28	40							0	0	40						86	24	28	40	0	0
54	813821114054	YUGA. M	8	12							8	22							0	0	40						48	12	8	22	0	0
55	813821114055	YUVARAJAN. T	32	26							12	16							0	0	40						72	26	12	16	0	0
56	813821114301	CHANDRU. S	44	24							26	40							0	0	40						84	24	26	40	0	0
57	813821114302	GOPINATH. P	42	30							38	40							0	0	40						82	30	38	40	0	0
58	813821114303	HARI HARA SUDHAN. G	34	22							28	24							0	0	40						74	22	28	24	0	0
59	813821114304	HARI KRISHNAN. R	38	16							22	40							0	0	40						78	16	22	40	0	0
60	813821114305	KATHIR. R	6	0							4	0							0	0	40						46	0	4	0	0	0
61	813821114307	ROHITH. R	26	12							20	30							0	0	40						66	12	20	30	0	0
62	813821114308	VARKEY PUNNOOSE SABU	0	0							0	0							0	0	0						0	0	0	0	0	0
63	813821114309	YOONIS NAVIN. G	34	16							18	40							0	0	40						74	16	18	40	0	0
64		PERVIN ANTONI. S																														
CO's Target Value																											65.00	26.00	26.00	39.00	26.00	39.00
No. of Student Secured above CO's Target value																											49	8	17	18	0	0
Percentage of Student Secured above Target																											76.56	12.50	26.56	28.12	0.00	0.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	MANUFACTURING TECHNOLOGY	Batch	2021 - 2025
CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813821114001	ABINESH. R	B+
2	813821114002	ADEL MOHAMMED ABBAS MOHAMED	B
3	813821114003	ARUN. M	B+
4	813821114004	ASWIN. G	B
5	813821114005	ASWIN. S	B+
6	813821114006	BALAJI. G	B+
7	813821114007	BALAJI. M	B+
8	813821114008	BARANIDARAN. R	B+
9	813821114009	DHANUSH KUMAR. R	U
10	813821114010	DHINESHWARAN. R	B+
11	813821114011	GAJENDRAN. G	A+
12	813821114012	GOWSICK. S	A
13	813821114013	HARI BABU. A	U
14	813821114014	HARIHARAN. S	B+
15	813821114015	IRFAN AHAMED. I	A
16	813821114016	JEFFREY MELWIN. J	B
17	813821114017	KAMALNATH. S	U
18	813821114018	KANAGAMUTHU. M	B
19	813821114019	KEERTHIVASAN. S	B
20	813821114020	KESAVAN. Y	B+
21	813821114021	KIRAN DEVA. C N	A+
22	813821114022	KISHOORE. G R	A
23	813821114023	KISHORE. A	B+
24	813821114024	KRITHICK PRASADH. S	B
25	813821114025	LANESH. N	B
26	813821114026	LEO DHOBYAS. A	B+

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
27	813821114027	MITHUL CHAVAN. R S	B
28	813821114028	MOHAMED FAISAL. S	B
29	813821114029	MOHAMED YAHAYA. A	U
30	813821114030	MOHAMMED ASLAM. S	A
31	813821114031	MUKESH K K	
32	813821114032	NAVEEN. V	A
33	813821114033	PARAMESH. M	A+
34	813821114034	PRAVEEN KUMAR.M	B+
35	813821114035	RAGAVIGA. T	A
36	813821114036	RAHUL RAMESH BABU. B	B
37	813821114037	RAM PRASATH. R	B+
38	813821114038	RAMSHANKAR. C	B+
39	813821114039	SANTHOSH KUMAR. R	B+
40	813821114040	SATHISH. S	A
41	813821114041	SHANMUGAPRIYAN. S	A
42	813821114042	SHERON. J	
43	813821114043	SHUBHANKHAR. M	A
44	813821114044	SIVASHANKARAN. K	B+
45	813821114045	SOWMYANARAYANAN. S	B+
46	813821114046	SRIRAMKUMAR. R	B+
47	813821114047	SUNDAR. V	B+
48	813821114048	SURYA. S	U
49	813821114049	VENKATESHWARAN. B	B+
50	813821114050	VETRIVEL. S	A
51	813821114051	VIGNESH. N S	B+
52	813821114052	VISHAL. R B	B+
53	813821114053	VISHANTH. M	A

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
54	813821114054	YUGA. M	B+
55	813821114055	YUVARAJAN. T	B+
56	813821114301	CHANDRU. S	A
57	813821114302	GOPINATH. P	A
58	813821114303	HARI HARA SUDHAN. G	A
59	813821114304	HARI KRISHNAN. R	A
60	813821114305	KATHIR. R	U
61	813821114307	ROHITH. R	B+
62	813821114308	VARKEY PUNNOOSE SABU	
63	813821114309	YOONIS NAVIN. G	A
64		PERVIN ANTONI. S	
No. of S/O Grade			0
No. of A/A+ Grade			16
No. of B/A Grade			10
No. of C/B+ Grade			0
No. of D/B Grade			0
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			26
CO-Attainment University			40.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012
Programme: **B.E. Mechanical Engineering**
Overall Attainment Sheet – POs & PSOs attainment calculation
AcademicYear : 2022-23EVEN

COURSE CODE/TITLE:ME3493 MANUFACTURING TECHNOLOGY:COURSE COORDINATOR:Dr.M.R.Anantha Padmanaban Batch: 2021 - 2025 Sem:4 CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C212.1	76.56	40.00	54.62	0.00	43.70	1
C212.2	12.50	40.00	29.00	0.00	23.20	1
C212.3	26.56	40.00	34.62	0.00	27.70	1
C212.4	28.12	40.00	35.25	0.00	28.20	1
C212.5	0.00	40.00	24.00	0.00	19.20	1
C212.6	0.00	40.00	24.00	0.00	19.20	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C212.1	3	2	3	3	3	2	1			2		2	3	2	2
C212.2	3	2	2	2	3	1	1			2		2	3	2	2
C212.3	3	2	3	3	3	1	2			2		2	3	1	2
C212.4	3	2	3	3	3	2	1			2		2	3	1	2
C212.5	3	3	2	2	3	2	3			3	3	3	3	2	2
C212.6	3	3	3	3	3	1	1			2		2	3	2	2
C212	3.00	2.33	2.67	2.67	3.00	1.50	1.50			2.17	0.50	2.17	3.00	1.67	2.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C212.1	1.00	0.67	1.00	1.00	1.00	0.67	0.33			0.67		0.67	1.00	0.67	0.67
C212.2	1.00	0.67	0.67	0.67	1.00	0.33	0.33			0.67		0.67	1.00	0.67	0.67
C212.3	1.00	0.67	1.00	1.00	1.00	0.33	0.67			0.67		0.67	1.00	0.33	0.67
C212.4	1.00	0.67	1.00	1.00	1.00	0.67	0.33			0.67		0.67	1.00	0.33	0.67
C212.5	1.00	1.00	0.67	0.67	1.00	0.67	1.00			1.00	1.00	1.00	1.00	0.67	0.67
C212.6	1.00	1.00	1.00	1.00	1.00	0.33	0.33			0.67		0.67	1.00	0.67	0.67
C212	1.00	0.78	0.89	0.89	1.00	0.50	0.50			0.72	0.17	0.72	1.00	0.56	0.67

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	DESIGN OF TRANSMISSION SYSTEMS	Batch	2019 - 2023
CLASS / SECTION	Sem 6 / MECH	COURSE OUTCOME	1 2 3 4 5 6
COURSE COORDINATOR	Mr.R.Suresh Babu	TARGET	65 65 65 65 65 65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
					60	**40**						**46**	**54**		**20**	**40**				**40**	**20**	**40**	**60**	**86**	**54**	**40**
1	813819114047	KESORE KUMAR. S																								
2	813820114001	ABDUL AZIZ. M			24	16						28	22		0	20				4	0	20	24	44	22	4
3	813820114002	ADHITHYA. V			50	16						44	36		20	18				30	20	18	50	60	36	30
4	813820114003	AJAY. M			52	18						34	32		0	26				2	0	26	52	52	32	2
5	813820114004	ANNAMALAI. S			20	18						28	16		8	12				12	8	12	20	46	16	12
6	813820114005	ANTONY ROSARIO. S			32	34						14	32		8	20				14	8	20	32	48	32	14
7	813820114006	ARUN KUMAR. S			50	0						38	18		0	14				0	0	14	50	38	18	0
8	813820114007	ASHVIN. J			42	40						42	32		18	28				10	18	28	42	82	32	10
9	813820114008	ASHWANTH KRISHNA. K			52	32						40	34		16	38				12	16	38	52	72	34	12
10	813820114009	BALRAJ. E			52	20						28	28		8	22				14	8	22	52	48	28	14
11	813820114010	EVANGELINE SHEEBA. M			34	16						38	30		4	30				16	4	30	34	54	30	16
12	813820114011	EZHUMALAI. M			26	12						24	28		0	14				0	0	14	26	36	28	0
13	813820114012	GANISHKAR. S B			30	26						36	28		4	26				10	4	26	30	62	28	10
14	813820114013	HARAN. K P			8	4						0	0		0	6				10	0	6	8	4	0	10
15	813820114014	HARI BALAJI. R			52	32						42	32		6	34				10	6	34	52	74	32	10
16	813820114015	HARI HARAN. R			50	16						16	26		4	22				8	4	22	50	32	26	8
17	813820114016	HARISH. M			56	24						42	34		6	20				12	6	20	56	66	34	12
18	813820114018	HEWIN ARMSTRONG. J			50	8						24	12		12	18				6	12	18	50	32	12	6

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
					60	**40**						**46**	**54**		**20**	**40**				**40**	**20**	**40**	**60**	**86**	**54**	**40**
19	813820114019	HUMAID KHALIFA. A Y			30	28						38	38		10	18				10	10	18	30	66	38	10
20	813820114020	JAMES ANTONY GODWIN. L			34	28						24	26		0	36				4	0	36	34	52	26	4
21	813820114021	JAVITH AHAMED. A			48	14						30	40		4	16				24	4	16	48	44	40	24
22	813820114022	JEGADEESWARAN. B			54	18						40	32		20	18				34	20	18	54	58	32	34
23	813820114023	JITHENDIRAN. J			38	8						34	12		0	20				0	0	20	38	42	12	0
24	813820114024	JOSHUA. M			16	14						38	18		8	18				6	8	18	16	52	18	6
25	813820114025	JUDORDHITH. S			40	16						4	28		14	18				18	14	18	40	20	28	18
26	813820114026	KARTHIKEYAN. R			36	38						30	32		14	16				12	14	16	36	68	32	12
27	813820114027	KAVIN. A			24	12						30	22		12	24				6	12	24	24	42	22	6
28	813820114028	KISHORE. A			20	10						4	8		0	0				0	0	0	20	14	8	0
29	813820114029	KISHORE. G			54	20						40	20		20	28				16	20	28	54	60	20	16
30	813820114030	MICHAEL SANTHOSH. Y			56	20						34	44		16	34				14	16	34	56	54	44	14
31	813820114031	MOHAMED KHUTBUDDIN. S			50	8						34	42		20	34				22	20	34	50	42	42	22
32	813820114032	MOHAMED MANSOOR. N			42	28						18	32		10	26				18	10	26	42	46	32	18
33	813820114033	MOHAMED NURUL ISLAM. A			22	8						24	30		2	16				6	2	16	22	32	30	6
34	813820114034	MOHAN BHABU. S			46	16						30	26		18	20				12	18	20	46	46	26	12
35	813820114035	MONIKA. B			38	38						36	32		10	38				6	10	38	38	74	32	6
36	813820114036	NAGARAJAN. M			22	8						10	4		0	24				0	0	24	22	18	4	0
37	813820114037	NIKIL SANKAR. S S			50	30						32	24		10	32				30	10	32	50	62	24	30
38	813820114038	PAINTHAMIL CHEZHIAN. K			44	10						36	28		12	32				14	12	32	44	46	28	14
39	813820114039	POOJA. R			28	30						0	0		12	18				20	12	18	28	30	0	20
40	813820114040	PRABHAKARAN. K A			30	24						28	28		20	20				24	20	20	30	52	28	24
41	813820114041	PRAVEEN RAJ. P			22	30						22	30		8	16				10	8	16	22	52	30	10
42	813820114042	RAAJ BHARATH. R			34	16						32	18		14	24				4	14	24	34	48	18	4
43	813820114043	RANJITH BALAJI. S			20	4						6	10		0	10				0	0	10	20	10	10	0
44	813820114044	RIYAZ AHAMED MUSTAFFA			50	12						32	18		8	20				6	8	20	50	44	18	6
45	813820114045	ROHAN. B V			34	16						34	20		6	28				8	6	28	34	50	20	8

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
					60	**40**						**46**	**54**		**20**	**40**				**40**	**20**	**40**	**60**	**86**	**54**	**40**
46	813820114046	RUFUS. J			48	20						14	20		16	34				30	16	34	48	34	20	30
47	813820114047	SAM JESUDOSS. P			40	12						28	22		0	20				0	0	20	40	40	22	0
48	813820114048	SANTHOSH. B			60	28						36	42		2	38				14	2	38	60	64	42	14
49	813820114049	SATHYA JOTHI. K			0	0						6	0		0	0				0	0	0	0	6	0	0
50	813820114050	SESHAAN ALLIESTER. I			46	10						34	12		10	16				10	10	16	46	44	12	10
51	813820114051	SHAM. I			14	4						12	8		8	10				8	8	10	14	16	8	8
52	813820114052	SHANMUGHA PANDIAN. I			50	32						36	38		14	20				18	14	20	50	68	38	18
53	813820114053	SHIYAM. V			20	4						24	28		4	30				8	4	30	20	28	28	8
54	813820114054	SIBIRAJ. K			22	8						34	4		0	4				0	0	4	22	42	4	0
55	813820114055	SIRANJEEVI. S			0	0						0	0		0	0				0	0	0	0	0	0	0
56	813820114056	SRI KRISHNA PRASATH. K			56	12						32	34		4	36				10	4	36	56	44	34	10
57	813820114057	SRINIVASAN. M			60	36						32	46		8	40				34	8	40	60	68	46	34
58	813820114058	SRINIVASA PERUMAL. R			44	8						36	26		12	20				28	12	20	44	44	26	28
59	813820114059	SRISOORYA. S			52	12						28	14		12	34				14	12	34	52	40	14	14
60	813820114060	THARVIN. S			56	28						40	42		0	40				14	0	40	56	68	42	14
61	813820114061	TILAKAN. S			44	14						34	16		0	20				0	0	20	44	48	16	0
62	813820114062	VASANTHAKUMAR. C			44	32						36	36		4	18				30	4	18	44	68	36	30
63	813820114063	VIGNESHWARAN. R			50	12						38	22		6	34				30	6	34	50	50	22	30
64	813820114064	VIGNESHWER. K			42	30						36	42		14	38				30	14	38	42	66	42	30
65	813820114065	VIJAY. S			8	22						36	14		4	20				12	4	20	8	58	14	12
66	813820114066	YOGESH. S			38	26						30	14		12	24				6	12	24	38	56	14	6
67	813820114067	YOGESWARAN. S			38	12						26	28		4	36				10	4	36	38	38	28	10
68	813820114301	ARUNACHALAM. M			36	26						32	30		4	18				12	4	18	36	58	30	12
69	813820114302	ASWIN. R			38	8						42	26		2	20				16	2	20	38	50	26	16
70	813820114303	BALA. U			10	10						22	10		2	20				0	2	20	10	32	10	0
71	813820114304	JAWAHAR FAROOK. S			36	8						2	20		4	6				10	4	6	36	10	20	10
72	813820114305	KISHORE V			22	20						26	10		8	16				6	8	16	22	46	10	6

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
					60	**40**						**46**	**54**		**20**	**40**				**40**	**20**	**40**	**60**	**86**	**54**	**40**
73	813820114306	NIDHEESH. S			0	6						8	0		0	0				4	0	0	0	14	0	4
74	813820114307	NOORUL ARSHADH. A			34	16						34	12		0	0				0	0	0	34	50	12	0
75	813820114308	SAI PRASANNA. R			4	0						0	0		4	0				0	4	0	4	0	0	0
76	813820114309	SANJAI. S			26	8						24	20		12	16				12	12	16	26	32	20	12
77	813820114310	SANTHOSH KUMAR. V			0	0						0	0		0	0				0	0	0	0	0	0	0
78	813820114311	YOGESH. R			24	18						30	22		4	36				6	4	36	24	48	22	6
																				CO's Target Value	13.00	26.00	39.00	55.90	35.10	26.00
																				No. of Student Secured above CO's Target value	16	23	35	21	12	9
																				Percentage of Student Secured above Target	20.51	29.49	44.87	26.92	15.38	11.54

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	DESIGN OF TRANSMISSION SYSTEMS	Batch	2019 - 2023
CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813819114047	KESORE KUMAR. S	UA
2	813820114001	ABDUL AZIZ. M	U
3	813820114002	ADHITHYA. V	B+
4	813820114003	AJAY. M	B
5	813820114004	ANNAMALAI. S	B+
6	813820114005	ANTONY ROSARIO. S	U
7	813820114006	ARUN KUMAR. S	B
8	813820114007	ASHVIN. J	B+
9	813820114008	ASHWANTH KRISHNA. K	A
10	813820114009	BALRAJ. E	B+
11	813820114010	EVANGELINE SHEEBA. M	B
12	813820114011	EZHUMALAI. M	B
13	813820114012	GANISHKAR. S B	B+
14	813820114013	HARAN. K P	U
15	813820114014	HARI BALAJI. R	A
16	813820114015	HARI HARAN. R	B+
17	813820114016	HARISH. M	A+
18	813820114018	HEWIN ARMSTRONG. J	B
19	813820114019	HUMAID KHALIFA. A Y	B+
20	813820114020	JAMES ANTONY GODWIN. L	B+
21	813820114021	JAVITH AHAMED. A	A
22	813820114022	JEGADEESWARAN. B	A
23	813820114023	JITHENDIRAN. J	B
24	813820114024	JOSHUA. M	B
25	813820114025	JUDOROHITH. S	B
26	813820114026	KARTHIKEYAN. R	B

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
27	813820114027	KAVIN. A	B
28	813820114028	KISHORE. A	B
29	813820114029	KISHORE. G	B+
30	813820114030	MICHAEL SANTHOSH. Y	B+
31	813820114031	MOHAMED KHUTBUDDIN. S	B+
32	813820114032	MOHAMED MANSOOR. N	B+
33	813820114033	MOHAMED NURUL ISLAM. A	B
34	813820114034	MOHAN BHABU. S	B+
35	813820114035	MONIKA. B	B+
36	813820114036	NAGARAJAN. M	B
37	813820114037	NIKIL SANKAR. S S	B+
38	813820114038	PAINTHAMIL CHEZHIAN. K	B+
39	813820114039	POOJA. R	B
40	813820114040	PRABHAKARAN. K A	B+
41	813820114041	PRAVEEN RAJ. P	B
42	813820114042	RAAJ BHARATH. R	B+
43	813820114043	RANJITH BALAJI. S	B+
44	813820114044	RIYAZ AHAMED MUSTAFFA	B
45	813820114045	ROHAN. B V	B
46	813820114046	RUFUS. J	B
47	813820114047	SAM JESUDOSS. P	B
48	813820114048	SANTHOSH. B	B+
49	813820114049	SATHYA JOTHI. K	B
50	813820114050	SESHAAN ALLIESTER. I	B
51	813820114051	SHAM. I	B
52	813820114052	SHANMUGHA PANDIAN. I	B+
53	813820114053	SHIYAM. V	B

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
54	813820114054	SIBIRAJ. K	B
55	813820114055	SIRANJEEVI. S	
56	813820114056	SRI KRISHNA PRASATH. K	B+
57	813820114057	SRINIVASAN. M	B+
58	813820114058	SRINIVASA PERUMAL. R	B+
59	813820114059	SRISOORYA. S	B
60	813820114060	THARVIN. S	B+
61	813820114061	TILAKAN. S	B
62	813820114062	VASANTHAKUMAR. C	B+
63	813820114063	VIGNESHWARAN. R	A
64	813820114064	VIGNESHWER. K	B+
65	813820114065	VIJAY. S	B
66	813820114066	YOGESH. S	B+
67	813820114067	YOGESWARAN. S	U
68	813820114301	ARUNACHALAM. M	B+
69	813820114302	ASWIN. R	B+
70	813820114303	BALA. U	U
71	813820114304	JAWAHAR FAROOK. S	B
72	813820114305	KISHORE V	B
73	813820114306	NIDHEESH. S	U
74	813820114307	NOORUL ARSHADH. A	B
75	813820114308	SAI PRASANNA. R	U
76	813820114309	SANJAI. S	B
77	813820114310	SANTHOSH KUMAR. V	U
78	813820114311	YOGESH. R	B
No. of S/O Grade			0
No. of A/A+ Grade			1
No. of B/A Grade			5
No. of C/B+ Grade			30
No. of D/B Grade			32
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			36
CO-Attainment University			46.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012
Programme: **B.E. Mechanical Engineering**
Overall Attainment Sheet - POs & PSOs attainment calculation
AcademicYear : 2022-23EVEN

COURSE CODE/TITLE:ME8651 DESIGN OF TRANSMISSION SYSTEMS;COURSE COORDINATOR:Mr.R.Suresh Babu Sch:2019 - 2023 Sem:6 CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C309.1	20.51	46.00	35.81	0.00	28.64	1
C309.2	29.49	46.00	39.39	0.00	31.52	1
C309.3	44.87	46.00	45.55	0.00	36.44	1
C309.4	26.92	46.00	38.37	0.00	30.70	1
C309.5	15.38	46.00	33.75	0.00	27.00	1
C309.6	11.54	46.00	32.22	0.00	25.77	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C309.1	3	3	2	2		1	1						3	2	1
C309.2	3	3	2	2		1	1						3	2	1
C309.3	3	3	2	2		1	1						3	2	1
C309.4	3	3	2	2		1	1						3	2	1
C309.5	3	3	2	2		1	1						3	2	1
C309.6	3	3	2	2		1	1						3	2	1
C309	3.00	3.00	2.00	2.00		1.00	1.00						3.00	2.00	1.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C309.1	1.00	1.00	0.67	0.67		0.33	0.33						1.00	0.67	0.33
C309.2	1.00	1.00	0.67	0.67		0.33	0.33						1.00	0.67	0.33
C309.3	1.00	1.00	0.67	0.67		0.33	0.33						1.00	0.67	0.33
C309.4	1.00	1.00	0.67	0.67		0.33	0.33						1.00	0.67	0.33
C309.5	1.00	1.00	0.67	0.67		0.33	0.33						1.00	0.67	0.33
C309.6	1.00	1.00	0.67	0.67		0.33	0.33						1.00	0.67	0.33
C309	1.00	1.00	0.67	0.67		0.33	0.33						1.00	0.67	0.33

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	FINITE ELEMENT ANALYSIS	Batch	2019 - 2023
CLASS / SECTION	Sem 6 / MECH	COURSE OUTCOME	1 2 3 4 5 6
COURSE COORDINATOR	Dr.N.Baskar	TARGET	65 65 65 65 65 65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			72	**28**						**68**	**32**							**32**	**32**	**36**	**72**	**96**	**32**	**32**	**32**	**36**
1	813819114047	KESORE KUMAR. S																								
2	813820114001	ABDUL AZIZ. M	14	0						20	6							1	4	8	14	20	6	1	4	8
3	813820114002	ADHITHYA. V	62	24						26	28							32	32	20	62	50	28	32	32	20
4	813820114003	AJAY. M	48	12						18	22							20	20	8	48	30	22	20	20	8
5	813820114004	ANNAMALAI. S	38	4						14	18							4	0	0	38	18	18	4	0	0
6	813820114005	ANTONY ROSARIO. S	24	0						12	16							0	0	4	24	12	16	0	0	4
7	813820114006	ARUN KUMAR. S	44	8						0	0							0	20	12	44	8	0	0	20	12
8	813820114007	ASHVIN. J	56	10						28	30							0	16	16	56	38	30	0	16	16
9	813820114008	ASHWANTH KRISHNA. K	66	24						50	24							0	0	0	66	74	24	0	0	0
10	813820114009	BALRAJ. E	60	4						0	0							4	2	20	60	4	0	4	2	20
11	813820114010	EVANGELINE SHEEBA. M	50	6						28	22							0	0	0	50	34	22	0	0	0
12	813820114011	EZHUMALAI. M	0	0						4	8							0	0	4	0	4	8	0	0	4
13	813820114012	GANISHKAR. S B	52	2						20	14							0	4	4	52	22	14	0	4	4
14	813820114013	HARAN. K P	0	0						0	0							0	0	0	0	0	0	0	0	0
15	813820114014	HARI BALAJI. R	44	26						0	0							0	0	0	44	26	0	0	0	0
16	813820114015	HARI HARAN. R	28	22						14	12							8	0	4	28	36	12	8	0	4
17	813820114016	HARISH. M	58	16						26	26							4	8	4	58	42	26	4	8	4
18	813820114018	HEWIN ARMSTRONG. J	32	2						0	0							0	4	4	32	2	0	0	4	4

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			72	**28**						**68**	**32**							**32**	**32**	**36**	**72**	**96**	**32**	**32**	**32**	**36**
19	813820114019	HUMAID KHALIFA. A Y	30	26						28	22							18	10	22	30	54	22	18	10	22
20	813820114020	JAMES ANTONY GODWIN. L	46	22						20	4							4	0	4	46	42	4	4	0	4
21	813820114021	JAVITH AHAMED. A	36	6						20	8							0	0	8	36	26	8	0	0	8
22	813820114022	JEGADEESWARAN. B	40	2						30	26							12	28	10	40	32	26	12	28	10
23	813820114023	JITHENDIRAN. J	6	2						2	4							2	10	6	6	4	4	2	10	6
24	813820114024	JOSHUA. M	12	2						24	10							22	14	18	12	26	10	22	14	18
25	813820114025	JUDORDHITH. S	38	20						12	24							0	4	10	38	32	24	0	4	10
26	813820114026	KARTHIKEYAN. R	40	28						24	4							6	12	6	40	52	4	6	12	6
27	813820114027	KAVIN. A	28	22						10	8							6	8	6	28	32	8	6	8	6
28	813820114028	KISHORE. A	10	0						2	4							0	0	0	10	2	4	0	0	0
29	813820114029	KISHORE. G	48	26						28	26							14	18	6	48	54	26	14	18	6
30	813820114030	MICHAEL SANTHOSH. Y	60	26						46	26							22	14	22	60	72	26	22	14	22
31	813820114031	MOHAMED KHUTBUDDIN. S	62	18						44	32							12	30	24	62	62	32	12	30	24
32	813820114032	MOHAMED MANSOOR. N	50	4						24	6							12	6	18	50	28	6	12	6	18
33	813820114033	MOHAMED NURUL ISLAM. A	16	6						22	8							0	0	4	16	28	8	0	0	4
34	813820114034	MOHAN BHABU. S	20	22						16	24							0	4	6	20	38	24	0	4	6
35	813820114035	MONIKA. B	66	22						20	8							32	22	22	66	42	8	32	22	22
36	813820114036	NAGARAJAN. M	2	0						4	0							4	0	4	2	4	0	4	0	4
37	813820114037	NIKIL SANKAR. S S	38	2						12	16							6	20	12	38	14	16	6	20	12
38	813820114038	PAINTHAMIL CHEZHIAN. K	62	2						32	0							6	10	8	62	34	0	6	10	8
39	813820114039	POOJA. R	26	24						8	20							6	8	4	26	32	20	6	8	4
40	813820114040	PRABHAKARAN. K A	28	22						16	8							0	12	24	28	38	8	0	12	24
41	813820114041	PRAVEEN RAJ. P	22	0						0	0							10	2	4	22	0	0	10	2	4
42	813820114042	RAAJ BHARATH. R	24	2						8	8							0	4	10	24	10	8	0	4	10
43	813820114043	RANJITH BALAJI. S	6	0						6	0							0	0	0	6	6	0	0	0	0
44	813820114044	RIYAZ AHAMED MUSTAFFA	48	24						12	22							0	6	2	48	36	22	0	6	2
45	813820114045	ROHAN. B V	24	2						2	10							0	4	6	24	4	10	0	4	6

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			72	**28**						**68**	**32**							**32**	**32**	**36**	**72**	**96**	**32**	**32**	**32**	**36**
46	813820114046	RUFUS. J	26	4						16	4							24	6	4	26	20	4	24	6	4
47	813820114047	SAM JESUDOSS. P	34	24						16	8							10	0	6	34	40	8	10	0	6
48	813820114048	SANTHOSH. B	54	22						26	28							24	24	20	54	48	28	24	24	20
49	813820114049	SATHYA JOTHI. K	2	0						0	0							0	0	0	2	0	0	0	0	0
50	813820114050	SESHAAN ALLIESTER. I	44	24						0	0							4	2	20	44	24	0	4	2	20
51	813820114051	SHAM. I	6	4						2	0							0	4	2	6	6	0	0	4	2
52	813820114052	SHANMUGHA PANDIAN. I	50	22						34	16							14	6	8	50	56	16	14	6	8
53	813820114053	SHIYAM. V	50	0						10	20							20	2	12	50	10	20	20	2	12
54	813820114054	SIBIRAJ. K	0	0						0	0							0	0	0	0	0	0	0	0	0
55	813820114055	SIRANJEEVI. S	0	0						0	0							0	0	0	0	0	0	0	0	0
56	813820114056	SRI KRISHNA PRASATH. K	50	24						20	0							0	12	12	50	44	0	0	12	12
57	813820114057	SRINIVASAN. M	58	22						28	22							16	12	36	58	50	22	16	12	36
58	813820114058	SRINIVASA PERUMAL. R	36	26						52	4							14	20	22	36	78	4	14	20	22
59	813820114059	SRISOORYA. S	24	2						22	14							14	6	8	24	24	14	14	6	8
60	813820114060	THARVIN. S	54	26						48	24							18	0	4	54	74	24	18	0	4
61	813820114061	TILAKAN. S	44	22						10	0							0	12	10	44	32	0	0	12	10
62	813820114062	VASANTHAKUMAR. C	34	22						28	10							14	10	14	34	50	10	14	10	14
63	813820114063	VIGNESHWARAN. R	30	22						6	18							12	28	20	30	28	18	12	28	20
64	813820114064	VIGNESHWER. K	40	22						42	14							32	24	32	40	64	14	32	24	32
65	813820114065	VIJAY. S	32	22						8	26							6	0	0	32	30	26	6	0	0
66	813820114066	YOGESH. S	40	18						16	26							8	20	14	40	34	26	8	20	14
67	813820114067	YOGESWARAN. S	54	16						14	12							6	18	12	54	30	12	6	18	12
68	813820114301	ARUNACHALAM. M	56	22						28	24							8	4	14	56	50	24	8	4	14
69	813820114302	ASWIN. R	18	6						4	4							0	4	6	18	10	4	0	4	6
70	813820114303	BALA. U	12	2						2	12							4	0	4	12	4	12	4	0	4
71	813820114304	JAWAHAR FAROOK. S	24	0						0	4							4	0	4	24	0	4	4	0	4
72	813820114305	KISHORE V	0	0						8	2							0	0	0	0	8	2	0	0	0

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			72	**28**						**68**	**32**							**32**	**32**	**36**	**72**	**96**	**32**	**32**	**32**	**36**
73	813820114306	NIDHEESH. S	6	2						4	0							0	0	6	6	6	0	0	0	6
74	813820114307	NOORUL ARSHADH. A	28	24						12	6							2	8	20	28	36	6	2	8	20
75	813820114308	SAI PRASANNA. R	0	0						0	22							0	0	4	0	0	22	0	0	4
76	813820114309	SANJAI. S	0	0						0	0							14	10	8	0	0	0	14	10	8
77	813820114310	SANTHOSH KUMAR. V	0	0						0	4							0	0	0	0	0	-4	0	0	0
78	813820114311	YOGESH. R	4	0						0	0							20	20	10	4	0	0	20	20	10
CO's Target Value																					46.80	62.40	20.80	20.80	20.80	23.40
No. of Student Secured above CO's Target value																					23	5	21	7	7	4
Percentage of Student Secured above Target																					29.49	6.41	26.92	8.97	8.97	5.13

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	FINITE ELEMENT ANALYSIS	Batch	2019 - 2023
CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813819114047	KESORE KUMAR. S	B
2	813820114001	ABDUL AZIZ. M	U
3	813820114002	ADHITHYA. V	B
4	813820114003	AJAY. M	B
5	813820114004	ANNAMALAI. S	B
6	813820114005	ANTONY ROSARIO. S	U
7	813820114006	ARUN KUMAR. S	U
8	813820114007	ASHVIN. J	B
9	813820114008	ASHWANTH KRISHNA. K	A
10	813820114009	BALRAJ. E	B
11	813820114010	EVANGELINE SHEEBA. M	B
12	813820114011	EZHUMALAI. M	B+
13	813820114012	GANISHKAR. S B	B
14	813820114013	HARAN. K P	U
15	813820114014	HARI BALAJI. R	B+
16	813820114015	HARI HARAN. R	B
17	813820114016	HARISH. M	B
18	813820114018	HEWIN ARMSTRONG. J	B
19	813820114019	HUMAID KHALIFA. A Y	B
20	813820114020	JAMES ANTONY GODWIN. L	B
21	813820114021	JAVITH AHAMED. A	B
22	813820114022	JEGADEESWARAN. B	B
23	813820114023	JITHENDIRAN. J	B
24	813820114024	JOSHUA. M	B
25	813820114025	JUDOROHITH. S	A
26	813820114026	KARTHIKEYAN. R	B

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
27	813820114027	KAVIN. A	B
28	813820114028	KISHORE. A	B
29	813820114029	KISHORE. G	B
30	813820114030	MICHAEL SANTHOSH. Y	A
31	813820114031	MOHAMED KHUTBUDDIN. S	B
32	813820114032	MOHAMED MANSOOR. N	B+
33	813820114033	MOHAMED NURUL ISLAM. A	B
34	813820114034	MOHAN BHABU. S	B
35	813820114035	MONIKA. B	B+
36	813820114036	NAGARAJAN. M	U
37	813820114037	NIKIL SANKAR. S S	B+
38	813820114038	PAINTHAMIL CHEZHIAN. K	B
39	813820114039	POOJA. R	B
40	813820114040	PRABHAKARAN. K A	B
41	813820114041	PRAVEEN RAJ. P	U
42	813820114042	RAAJ BHARATH. R	B
43	813820114043	RANJITH BALAJI. S	B+
44	813820114044	RIYAZ AHAMED MUSTAFFA	B
45	813820114045	ROHAN. B V	U
46	813820114046	RUFUS. J	B
47	813820114047	SAM JESUDOSS. P	B
48	813820114048	SANTHOSH. B	B
49	813820114049	SATHYA JOTHI. K	U
50	813820114050	SESHAAN ALLIESTER. I	B
51	813820114051	SHAM. I	B
52	813820114052	SHANMUGHA PANDIAN. I	B
53	813820114053	SHIYAM. V	U

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
54	813820114054	SIBIRAJ. K	U
55	813820114055	SIRANJEEVI. S	
56	813820114056	SRI KRISHNA PRASATH. K	B
57	813820114057	SRINIVASAN. M	B+
58	813820114058	SRINIVASA PERUMAL. R	A
59	813820114059	SRISOORYA. S	B+
60	813820114060	THARVIN. S	B
61	813820114061	TILAKAN. S	U
62	813820114062	VASANTHAKUMAR. C	B+
63	813820114063	VIGNESHWARAN. R	B
64	813820114064	VIGNESHWER. K	B
65	813820114065	VIJAY. S	U
66	813820114066	YOGESH. S	U
67	813820114067	YOGESWARAN. S	B
68	813820114301	ARUNACHALAM. M	B+
69	813820114302	ASWIN. R	B
70	813820114303	BALA. U	B
71	813820114304	JAWAHAR FAROOK. S	U
72	813820114305	KISHORE V	A
73	813820114306	NIDHEESH. S	U
74	813820114307	NOORUL ARSHADH. A	B
75	813820114308	SAI PRASANNA. R	U
76	813820114309	SANJAI. S	B
77	813820114310	SANTHOSH KUMAR. V	U
78	813820114311	YOGESH. R	B
No. of S/O Grade			0
No. of A/A+ Grade			0
No. of B/A Grade			5
No. of C/B+ Grade			10
No. of D/B Grade			45
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			15
CO-Attainment University			19.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012
Programme: **B.E. Mechanical Engineering**
Overall Attainment Sheet – POs & PSOs attainment calculation
AcademicYear : 2022-23EVEN

COURSE CODE/TITLE:ME8692 FINITE ELEMENT ANALYSIS COURSE COORDINATOR:Dr.N.Baskar Batch:2019 - 2023 Sem:8 CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C312.1	29.49	19.00	23.19	0.00	18.56	1
C312.2	6.41	19.00	13.96	0.00	11.17	1
C312.3	26.92	19.00	22.17	0.00	17.74	1
C312.4	8.97	19.00	14.99	0.00	11.99	1
C312.5	8.97	19.00	14.99	0.00	11.99	1
C312.6	5.13	19.00	13.45	0.00	10.76	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C312.1	3	3	2	2	1								3	2	1
C312.2	3	3	2	2	1	1					1	1	3	2	1
C312.3	3	3	2	2	1								3	2	1
C312.4	3	3	2	2									3	2	1
C312.5	3	3	2	2	1		1			1			3	2	1
C312.6	3	3	2	2	1								3	2	1
C312	3.00	3.00	2.00	2.00	0.83	0.17	0.17			0.17	0.17	0.17	3.00	2.00	1.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C312.1	1.00	1.00	0.67	0.67	0.33								1.00	0.67	0.33
C312.2	1.00	1.00	0.67	0.67	0.33	0.33					0.33	0.33	1.00	0.67	0.33
C312.3	1.00	1.00	0.67	0.67	0.33								1.00	0.67	0.33
C312.4	1.00	1.00	0.67	0.67									1.00	0.67	0.33
C312.5	1.00	1.00	0.67	0.67	0.33		0.33			0.33			1.00	0.67	0.33
C312.6	1.00	1.00	0.67	0.67	0.33								1.00	0.67	0.33
C312	1.00	1.00	0.67	0.67	0.28	0.06	0.06			0.06	0.06	0.06	1.00	0.67	0.33

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	HYDRAULICS AND PNEUMATICS	Batch	2019 - 2023
CLASS / SECTION	Sem 6 / MECH	COURSE OUTCOME	1 2 3 4 5 6
COURSE COORDINATOR	Mr.P.Jothi Palavasam	TARGET	65 65 65 65 65 65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**						**48**	**52**							**36**	**36**	**28**	**60**	**88**	**52**	**36**	**36**	**28**
1	813819114047	KESORE KUMAR. S																								
2	813820114001	ABDUL AZIZ. M	16	14						22	22							0	0	0	16	36	22	0	0	0
3	813820114002	ADHITHYA. V	30	30						30	32							16	28	24	30	60	32	16	28	24
4	813820114003	AJAY. M	24	14						20	18							12	6	4	24	34	18	12	6	4
5	813820114004	ANNAMALAI. S	16	4						22	34							6	14	4	16	26	34	6	14	4
6	813820114005	ANTONY ROSARIO. S	36	14						20	14							10	22	8	36	34	14	10	22	8
7	813820114006	ARUN KUMAR. S	10	8						0	0							2	2	0	10	8	0	2	2	0
8	813820114007	ASHVIN. J	54	28						38	38							26	22	14	54	66	38	26	22	14
9	813820114008	ASHWANTH KRISHNA. K	30	22						30	40							0	0	0	30	52	40	0	0	0
10	813820114009	BALRAJ. E	22	28						42	12							14	30	20	22	70	12	14	30	20
11	813820114010	EVANGELINE SHEEBA. M	38	28						40	40							22	14	22	38	68	40	22	14	22
12	813820114011	EZHUMALAI. M	10	8						8	4							4	12	0	10	16	4	4	12	0
13	813820114012	GANISHKAR. S B	28	26						34	34							6	20	18	28	60	34	6	20	18
14	813820114013	HARAN. K P	0	0						0	0							0	2	0	0	0	0	0	2	0
15	813820114014	HARI BALAJI. R	16	16						30	8							12	20	12	16	46	8	12	20	12
16	813820114015	HARI HARAN. R	40	10						22	28							4	10	4	40	32	28	4	10	4
17	813820114016	HARISH. M	22	36						26	40							12	12	4	22	62	40	12	12	4
18	813820114018	HEWIN ARMSTRONG. J	10	18						30	8							8	4	4	10	48	8	8	4	4

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**						**48**	**52**							**36**	**36**	**28**	**60**	**88**	**52**	**36**	**36**	**28**
19	813820114019	HUMAID KHALIFA. A Y	36	14						38	22							10	10	2	36	52	22	10	10	2
20	813820114020	JAMES ANTONY GODWIN. L	24	20						28	24							14	4	2	24	48	24	14	4	2
21	813820114021	JAVITH AHAMED. A	12	10						30	8							4	6	4	12	40	8	4	6	4
22	813820114022	JEGADEESWARAN. B	28	32						36	32							16	26	20	28	68	32	16	26	20
23	813820114023	JITHENDIRAN. J	16	18						10	30							6	0	0	16	28	30	6	0	0
24	813820114024	JOSHUA. M	10	4						20	20							0	2	0	10	24	20	0	2	0
25	813820114025	JUDORDHITH. S	44	26						40	20							10	10	8	44	66	20	10	10	8
26	813820114026	KARTHIKEYAN. R	34	20						32	12							12	24	10	34	52	12	12	24	10
27	813820114027	KAVIN. A	16	12						26	6							2	6	0	16	38	6	2	6	0
28	813820114028	KISHORE. A	16	14						18	16							12	8	6	16	32	16	12	8	6
29	813820114029	KISHORE. G	30	34						30	44							12	8	18	30	64	44	12	8	18
30	813820114030	MICHAEL SANTHOSH. Y	36	32						42	38							0	0	0	36	74	38	0	0	0
31	813820114031	MOHAMED KHUTBUDDIN. S	18	18						30	22							20	16	22	18	48	22	20	16	22
32	813820114032	MOHAMED MANSOOR. N	25	25						38	30							0	0	0	25	63	30	0	0	0
33	813820114033	MOHAMED NURUL ISLAM. A	26	20						32	14							6	16	18	26	52	14	6	16	18
34	813820114034	MOHAN BHABU. S	34	28						30	20							10	18	0	34	58	20	10	18	0
35	813820114035	MONIKA. B	28	32						38	32							0	2	4	28	70	32	0	2	4
36	813820114036	NAGARAJAN. M	28	22						20	20							12	8	14	28	42	20	12	8	14
37	813820114037	NIKIL SANKAR. S S	30	22						28	14							12	16	16	30	50	14	12	16	16
38	813820114038	PAINTHAMIL CHEZHIAN. K	44	16						30	24							4	10	10	44	46	24	4	10	10
39	813820114039	POOJA. R	36	22						28	20							26	18	14	36	50	20	26	18	14
40	813820114040	PRABHAKARAN. K A	44	32						38	32							6	8	0	44	70	32	6	8	0
41	813820114041	PRAVEEN RAJ. P	44	16						24	32							10	14	8	44	40	32	10	14	8
42	813820114042	RAAJ BHARATH. R	22	36						4	26							14	16	20	22	40	26	14	16	20
43	813820114043	RANJITH BALAJI. S	18	4						18	16							10	2	0	18	22	16	10	2	0
44	813820114044	RIYAZ AHAMED MUSTAFFA	46	16						32	10							16	10	18	46	48	10	16	10	18
45	813820114045	ROHAN. B V	32	30						26	20							4	16	0	32	56	20	4	16	0

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**						**48**	**52**							**36**	**36**	**28**	**60**	**88**	**52**	**36**	**36**	**28**
46	813820114046	RUFUS. J	24	30						38	26							16	14	4	24	68	26	16	14	4
47	813820114047	SAM JESUDOSS. P	28	14						24	32							12	16	12	28	38	32	12	16	12
48	813820114048	SANTHOSH. B	36	20						32	32							18	8	18	36	52	32	18	8	18
49	813820114049	SATHYA JOTHI. K	8	4						12	0							0	0	4	8	16	0	0	0	4
50	813820114050	SESHAAN ALLIESTER. I	20	16						22	0							6	2	12	20	38	0	6	2	12
51	813820114051	SHAM. I	12	10						20	30							0	0	0	12	30	30	0	0	0
52	813820114052	SHANMUGHA PANDIAN. I	44	26						22	26							2	10	10	44	48	26	2	10	10
53	813820114053	SHIYAM. V	24	18						26	20							26	10	18	24	44	20	26	10	18
54	813820114054	SIBIRAJ. K	6	10						16	4							0	0	2	6	26	4	0	0	2
55	813820114055	SIRANJEEVI. S	0	0						0	0							0	0	0	0	0	0	0	0	0
56	813820114056	SRI KRISHNA PRASATH. K	36	30						30	26							12	8	14	36	60	26	12	8	14
57	813820114057	SRINIVASAN. M	40	34						32	18							12	20	18	40	66	18	12	20	18
58	813820114058	SRINIVASA PERUMAL. R	28	22						38	18							14	6	16	28	60	18	14	6	16
59	813820114059	SRISOORYA. S	36	22						40	34							16	28	20	36	62	34	16	28	20
60	813820114060	THARVIN. S	40	30						36	32							0	0	10	40	66	32	0	0	10
61	813820114061	TILAKAN. S	4	4						12	12							4	0	6	4	16	12	4	0	6
62	813820114062	VASANTHAKUMAR. C	56	20						26	30							12	6	10	56	46	30	12	6	10
63	813820114063	VIGNESHWARAN. R	38	26						24	40							8	26	18	38	50	40	8	26	18
64	813820114064	VIGNESHWER. K	30	32						42	30							22	26	12	30	74	30	22	26	12
65	813820114065	VIJAY. S	34	16						22	28							10	12	12	34	38	28	10	12	12
66	813820114066	YOGESH. S	32	34						40	36							12	28	20	32	74	36	12	28	20
67	813820114067	YOGESWARAN. S	16	16						20	30							0	4	6	16	36	30	0	4	6
68	813820114301	ARUNACHALAM. M	24	26						38	24							6	12	6	24	64	24	6	12	6
69	813820114302	ASWIN. R	26	24						40	24							8	14	18	26	64	24	8	14	18
70	813820114303	BALA. U	8	10						30	20							2	6	12	8	40	20	2	6	12
71	813820114304	JAWAHAR FAROOK. S	14	20						6	4							2	5	2	14	26	4	2	5	2
72	813820114305	KISHORE V	28	24						30	28							6	8	2	28	54	28	6	8	2

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED						TOTAL COURSE OUTCOME					
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6
			60	**40**						**48**	**52**							**36**	**36**	**28**	**60**	**88**	**52**	**36**	**36**	**28**
73	813820114306	NIDHEESH. S	12	24						14	12							0	0	10	12	38	12	0	0	10
74	813820114307	NOORUL ARSHADH. A	32	32						30	36							10	26	18	32	62	36	10	26	18
75	813820114308	SAI PRASANNA. R	10	6						8	4							0	6	6	10	14	4	0	6	6
76	813820114309	SANJAI. S	12	10						10	4							0	8	12	12	20	4	0	8	12
77	813820114310	SANTHOSH KUMAR. V	6	4						4	4							0	0	4	6	8	4	0	0	4
78	813820114311	YOGESH. R	24	32						30	18							16	12	14	24	62	18	16	12	14
																				CO's Target Value	39.00	57.20	33.80	23.40	23.40	18.20
																				No. of Student Secured above CO's Target value	11	26	13	3	9	8
																				Percentage of Student Secured above Target	14.10	33.33	16.67	3.85	11.54	10.26

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	HYDRAULICS AND PNEUMATICS	Batch	2019 - 2023
CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813819114047	KESORE KUMAR. S	B+
2	813820114001	ABDUL AZIZ. M	B
3	813820114002	ADHITHYA. V	B+
4	813820114003	AJAY. M	B
5	813820114004	ANNAMALAI. S	B+
6	813820114005	ANTONY ROSARIO. S	B+
7	813820114006	ARUN KUMAR. S	U
8	813820114007	ASHVIN. J	A
9	813820114008	ASHWANTH KRISHNA. K	A
10	813820114009	BALRAJ. E	A
11	813820114010	EVANGELINE SHEEBA. M	A
12	813820114011	EZHUMALAI. M	B
13	813820114012	GANISHKAR. S B	B+
14	813820114013	HARAN. K P	U
15	813820114014	HARI BALAJI. R	A
16	813820114015	HARI HARAN. R	B
17	813820114016	HARISH. M	B+
18	813820114018	HEWIN ARMSTRONG. J	B
19	813820114019	HUMAID KHALIFA. A Y	B
20	813820114020	JAMES ANTONY GODWIN. L	B
21	813820114021	JAVITH AHAMED. A	U
22	813820114022	JEGADEESWARAN. B	B
23	813820114023	JITHENDIRAN. J	U
24	813820114024	JOSHUA. M	U
25	813820114025	JUDOROHITH. S	B+
26	813820114026	KARTHIKEYAN. R	B+

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
27	813820114027	KAVIN. A	A
28	813820114028	KISHORE. A	U
29	813820114029	KISHORE. G	B
30	813820114030	MICHAEL SANTHOSH. Y	B
31	813820114031	MOHAMED KHUTBUDDIN. S	B
32	813820114032	MOHAMED MANSOOR. N	B
33	813820114033	MOHAMED NURUL ISLAM. A	A
34	813820114034	MOHAN BHABU. S	A+
35	813820114035	MONIKA. B	A+
36	813820114036	NAGARAJAN. M	B+
37	813820114037	NIKIL SANKAR. S S	B+
38	813820114038	PAINTHAMIL CHEZHIAN. K	B+
39	813820114039	POOJA. R	B+
40	813820114040	PRABHAKARAN. K A	B+
41	813820114041	PRAVEEN RAJ. P	B+
42	813820114042	RAAJ BHARATH. R	B+
43	813820114043	RANJITH BALAJI. S	B
44	813820114044	RIYAZ AHAMED MUSTAFFA	B
45	813820114045	ROHAN. B V	B+
46	813820114046	RUFUS. J	A
47	813820114047	SAM JESUDOSS. P	B+
48	813820114048	SANTHOSH. B	A+
49	813820114049	SATHYA JOTHI. K	B
50	813820114050	SESHAAN ALLIESTER. I	U
51	813820114051	SHAM. I	B+
52	813820114052	SHANMUGHA PANDIAN. I	A
53	813820114053	SHIYAM. V	B+

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
54	813820114054	SIBIRAJ. K	B
55	813820114055	SIRANJEEVI. S	
56	813820114056	SRI KRISHNA PRASATH. K	B
57	813820114057	SRINIVASAN. M	B
58	813820114058	SRINIVASA PERUMAL. R	A
59	813820114059	SRISOORYA. S	B
60	813820114060	THARVIN. S	B
61	813820114061	TILAKAN. S	B
62	813820114062	VASANTHAKUMAR. C	A
63	813820114063	VIGNESHWARAN. R	A
64	813820114064	VIGNESHWER. K	B+
65	813820114065	VIJAY. S	B
66	813820114066	YOGESH. S	U
67	813820114067	YOGESWARAN. S	B+
68	813820114301	ARUNACHALAM. M	A
69	813820114302	ASWIN. R	A
70	813820114303	BALA. U	B+
71	813820114304	JAWAHAR FAROOK. S	B+
72	813820114305	KISHORE V	A
73	813820114306	NIDHEESH. S	B
74	813820114307	NOORUL ARSHADH. A	B
75	813820114308	SAI PRASANNA. R	U
76	813820114309	SANJAI. S	B
77	813820114310	SANTHOSH KUMAR. V	U
78	813820114311	YOGESH. R	A
No. of S/O Grade			0
No. of A/A+ Grade			3
No. of B/A Grade			16
No. of C/B+ Grade			23
No. of D/B Grade			25
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			42
CO-Attainment University			53.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012
Programme: **B.E. Mechanical Engineering**
Overall Attainment Sheet - POs & PSOs attainment calculation
AcademicYear : 2022-23EVEN

COURSE CODE/TITLE:ME8694 HYDRAULICS AND PNEUMATICS COURSE COORDINATOR:Mr.P.Jothi Palaveesm Batch:2019 - 2023 Sem:6 CO Attainment Level: 1 - (0% - 60%) 2- (61%-89%) 3-(90% and Above)

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C313.1	14.10	53.00	37.44	0.00	29.95	1
C313.2	33.33	53.00	45.13	0.00	36.11	1
C313.3	16.67	53.00	38.47	0.00	30.77	1
C313.4	3.85	53.00	33.34	0.00	26.67	1
C313.5	11.54	53.00	36.42	0.00	29.13	1
C313.6	10.26	53.00	35.90	0.00	28.72	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C313.1	3	2	2	1	1	1	1			1			2	1	2
C313.2	3	3	3	3	2	2	1	1		1			3	1	3
C313.3	3	3	3	3	2	2	1	1		1			3	1	3
C313.4	3	3	3	3	2	2	1	1		1			3	1	3
C313.5	3	3	3	3	2	2	1	1		1			3	1	3
C313.6	3	3	3	3	2	2	1	2	3	1	2	1	3	2	3
C313	3.00	2.83	2.83	2.67	1.83	1.83	1.00	1.00	0.50	1.00	0.33	0.17	2.83	1.17	2.83

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C313.1	1.00	0.67	0.67	0.33	0.33	0.33	0.33			0.33			0.67	0.33	0.67
C313.2	1.00	1.00	1.00	1.00	0.67	0.67	0.33	0.33		0.33			1.00	0.33	1.00
C313.3	1.00	1.00	1.00	1.00	0.67	0.67	0.33	0.33		0.33			1.00	0.33	1.00
C313.4	1.00	1.00	1.00	1.00	0.67	0.67	0.33	0.33		0.33			1.00	0.33	1.00
C313.5	1.00	1.00	1.00	1.00	0.67	0.67	0.33	0.33		0.33			1.00	0.33	1.00
C313.6	1.00	1.00	1.00	1.00	0.67	0.67	0.33	0.67	1.00	0.33	0.67	0.33	1.00	0.67	1.00
C313	1.00	0.94	0.94	0.89	0.61	0.61	0.33	0.33	0.17	0.33	0.11	0.06	0.94	0.39	0.94

Print Report

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	PRODUCTION PLANNING AND CONTROL	Batch	2019 - 2023
CLASS / SECTION	Sem 8 / MECH A & B		
COURSE COORDINATOR	Dr.M.Ganesan / Dr.M.Ganesan		

COURSE OUTCOME	1	2	3	4	5	6
TARGET	65	65	65	65	65	65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED	TOTAL COURSE OUTCOME
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6		
			64	**36**					**64**	**36**	**0**	**0**	**0**	**0**		
1	813819114001	ABDUL RAHMAN. M	0	0					0	0						
2	813819114002	ABINAYA. R	0	0					0	0						
3	813819114003	ABISHEIK. S	0	0					0	0						
4	813819114004	ADHARSH NIJASTAN. M	34	26					34	26						
5	813819114005	AJAYESHWAR. K	44	30					44	30						
6	813819114006	AJAY KUMAR. K	0	0					0	0						
7	813819114007	AKASH. K	16	4					16	4						
8	813819114008	AKASH. R	0	0					0	0						
9	813819114009	AKILAN. P	22	0					22	0						
10	813819114010	AMALRAJ. C	50	32					50	32						
11	813819114011	ANBARASU. P	0	0					0	0						
12	813819114012	ARAVINDH. S	30	4					30	4						
13	813819114013	ARAVINDHAN. R	46	24					46	24						
14	813819114014	ARUL ARASU. T	52	26					52	26						
15	813819114015	ARUMUGA VIGNESH. S R	0	0					0	0						
16	813819114016	ARUN. P	4	0					4	0						
17	813819114017	BABURAJ. K	48	8					48	8						
18	813819114018	BALAGANGATHARAN. M	0	0					0	0						
19	813819114019	BALAJI. S	30	0					30	0						
20	813819114020	BALARAJASURYA. R	0	0					0	0						
21	813819114021	BALAVINAYAK. V M	0	0					0	0						
22	813819114022	BHAVAN. R B N	12	2					12	2						
23	813819114023	BODHIRAM. M B	0	0					0	0						
24	813819114024	CHANAKYA. M	0	0					0	0						
25	813819114025	DEEPAK. M	58	32					58	32						
26	813819114026	DEEPAMANI. R	0	0					0	0						
27	813819114027	DESIGAN. M	0	0					0	0						
28	813819114028	DHAMOTHARAN. M	0	0					0	0						
29	813819114030	DINESH KUMAR. G	44	16					44	16						
30	813819114031	DINESH KUMAR. G	32	8					32	8						
31	813819114032	GIRIHARAN. B	0	0					0	0						
32	813819114033	GIRISH KANNAH. M	0	0					0	0						
33	813819114034	GOKUL. S	50	14					50	14						
34	813819114035	GOPI. M	0	0					0	0						
35	813819114037	HARIHARAN. V	18	8					18	8						
36	813819114038	HARI KARAN. K	0	0					0	0						
37	813819114039	HARISH. S	0	0					0	0						
38	813819114040	HEMAPRIYA. P	0	0					0	0						
39	813819114041	JAIRUS. S	42	10					42	10						
40	813819114042	JAISRIRAM. R	0	0					0	0						
41	813819114043	JOYAL. C	0	0					0	0						
42	813819114044	KAARTHIKESH. U	6	0					6	0						
43	813819114045	KANNAN. J	0	0					0	0						
44	813819114046	KARTHI. M	0	0					0	0						
45	813819114048	KIRTHIK. K	0	0					0	0						

46	813819114049	KISHAN. R	0	0					0	0					
47	813819114051	LOKESH. D	0	0					0	0					
48	813819114052	LOKESHWARAN. B	34	8					34	8					
49	813819114053	MARCELL FRANKLINE. V	56	24					56	24					
50	813819114054	MARIMUTHU. R	28	0					28	0					
51	813819114055	MITHUNKUMAR. K	46	22					46	22					
52	813819114056	MOHAMED AJMAL. M I	0	0					0	0					
53	813819114057	MOHAMED SHAHIR . S	0	0					0	0					
54	813819114058	MOHAMMED FAZIL. N	0	0					0	0					
55	813819114059	MOHITHKUMAR. A	40	22					40	22					
56	813819114060	MUGUNDHAN. S	0	0					0	0					
57	813819114061	MUKESH. M	0	0					0	0					
58	813819114062	MURALI MANOHAR. K	30	24					30	24					
59	813819114063	MUTHU SAI CHARAN. V R	0	0					0	0					
60	813819114064	NAGARAJ. L	0	0					0	0					
61	813819114065	NARESHKUMAR. R	0	0					0	0					
62	813819114066	NAVEEN. M	0	0					0	0					
63	813819114067	NAVEEN PRASATH. S	4	0					4	0					
64	813819114068	NITHIS ANTRO. M	0	0					0	0					
65	813819114069	NITHISKUMAR. P	20	6					20	6					
66	813819114070	NIVAS. G	10	0					10	0					
67	813819114071	PADMANAABHAN. S	8	0					8	0					
68	813819114072	PRAGADEESH. N	0	0					0	0					
69	813819114073	PRAGATHEESHWARAN. S	0	0					0	0					
70	813819114074	PRASANNA. R	0	0					0	0					
71	813819114075	PRAVEEN. K	4	4					4	4					
72	813819114076	PRAVIN KUMAR. P	0	0					0	0					
73	813819114077	PREETHAM RAJ. T	0	0					0	0					
74	813819114078	RACKESH KUMARAN. K R	0	0					0	0					
75	813819114079	RADHAKRISHNAN. S	0	0					0	0					
76	813819114081	RAJPRABU. K	16	8					16	8					
77	813819114082	RAMANESHWER. P	26	10					26	10					
78	813819114083	ROSHAN. R	6	2					6	2					
79	813819114084	SABARISHAN. S	18	2					18	2					
80	813819114085	SABARIVASAN. K	0	0					0	0					
81	813819114086	SALMAN FARIS. M	16	2					16	2					
82	813819114087	SAMBUGESH. D	0	0					0	0					
83	813819114088	SAM DANIEL. P	40	16					40	16					
84	813819114089	SAM NITHIN. P	0	0					0	0					
85	813819114090	SANJAI. M	0	0					0	0					
86	813819114091	SANJAY. T	0	0					0	0					
87	813819114092	SANJAY KUMAR. D	0	0					0	0					
88	813819114093	SANJEEV PRAMESH. M	0	0					0	0					
89	813819114094	SANTHANA KRISHNAN. M	0	0					0	0					
90	813819114095	SANTHOSH. P	48	4					48	4					
91	813819114096	SANTHOSH. P	24	4					24	4					
92	813819114097	SANTHOSH KUMAR. P V	0	0					0	0					
93	813819114098	SIDDARTH. S	22	0					22	0					
94	813819114099	SIDDHARTH. T K	0	0					0	0					
95	813819114100	SIVA SUBRAMANIAN. G	0	0					0	0					
96	813819114101	SRIHARI. S	16	0					16	0					
97	813819114102	SRI HARIHARAN. V	0	0					0	0					
98	813819114103	SRIRAM. S	0	0					0	0					
99	813819114104	SRI RANGARAJAN. N	0	0					0	0					
100	813819114105	SRIVARDHAN. C	0	0					0	0					
101	813819114106	SUDARSON. A	0	0					0	0					
102	813819114107	SUDHAKAR. G	40	12					40	12					
103	813819114108	SUHAIL. S	0	0					0	0					
104	813819114109	SURYA. J	0	0					0	0					
105	813819114110	SUTHARSH KRISHNA. K A	0	0					0	0					

106	813819114111	TAMILMARAN. M	0	0					0	0					
107	813819114112	TAMIL VANAN. J	24	4					24	4					
108	813819114113	THILAK. K	4	0					4	0					
109	813819114114	UTHAYA SANKAR. V S	0	0					0	0					
110	813819114115	VASANTH. R	0	0					0	0					
111	813819114116	VENKATACHALAM. P	0	0					0	0					
112	813819114118	VENKATESH. M	12	0					12	0					
113	813819114119	VIGNESH. M	0	0					0	0					
114	813819114120	VIGNESH. N	0	0					0	0					
115	813819114122	VISHAL. S	22	8					22	8					
116	813819114123	VISHVATH. M	16	0					16	0					
117	813819114124	VYDEESKUMAR. R	50	6					50	6					
118	813819114301	AKASH. K	0	0					0	0					
119	813819114302	GOPIKRISHNAN. S	12	0					12	0					
120	813819114303	GURUPRASANTH. R	0	0					0	0					
121	813819114304	HARIHARAN. M	0	0					0	0					
122	813819114305	HARIHARAN. S	0	0					0	0					
123	813819114306	HARI HARAN. T	0	0					0	0					
124	813819114307	KHAJA MOINUDEEN. K	0	0					0	0					
125	813819114308	SAM WILLIAM. A	12	2					12	2					
126	813819114309	SANJAY. S	0	0					0	0					
127	813819114310	SELVA MURALIDARAN S	0	0					0	0					

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	IE8693 PRODUCTION PLANNING AND CONTROL	Batch	2019 - 2023
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813819114001	ABDUL RAHMAN. M	A
2	813819114002	ABINAYA. R	A
3	813819114003	ABISHEIK. S	B+
4	813819114004	ADHARSH NIJASTAN. M	B
5	813819114005	AJAYESHWAR. K	B+
6	813819114006	AJAY KUMAR. K	B+
7	813819114007	AKASH. K	B
8	813819114008	AKASH. R	A
9	813819114009	AKILAN. P	B
10	813819114010	AMALRAJ. C	A
11	813819114011	ANBARASU. P	B+
12	813819114012	ARAVINDH. S	B
13	813819114013	ARAVINDHAN. R	B
14	813819114014	ARUL ARASU. T	A
15	813819114015	ARUMUGA VIGNESH. S R	A+
16	813819114016	ARUN. P	B
17	813819114017	BABURAJ. K	B+
18	813819114018	BALAGANGATHARAN. M	B+
19	813819114019	BALAJI. S	B+
20	813819114020	BALARAJASURYA. R	A
21	813819114021	BALAVINAYAK. V M	A
22	813819114022	BHAVAN. R B N	B
23	813819114023	BODHIRAM. M B	B
24	813819114024	CHANAKYA. M	B
25	813819114025	DEEPAK. M	A
26	813819114026	DEEPAMANI. R	A+
27	813819114027	DESIGAN. M	B+
28	813819114028	DHAMOTHARAN. M	A+
29	813819114030	DINESH KUMAR. G	A+
30	813819114031	DINESH KUMAR. G	U
31	813819114032	GIRIHARAN. B	A
32	813819114033	GIRISH KANNAH. M	B+
33	813819114034	GOKUL. S	B+
34	813819114035	GOPI. M	B+
35	813819114037	HARIHARAN. V	B
36	813819114038	HARI KARAN. K	A
37	813819114039	HARISH. S	B+
38	813819114040	HEMAPRIYA. P	B+
39	813819114041	JAIRUS. S	B
40	813819114042	JAISRIRAM. R	B+
41	813819114043	JOYAL. C	B+
42	813819114044	KAARTHIKESH. U	B+
43	813819114045	KANNAN. J	B
44	813819114046	KARTHI. M	B+
45	813819114048	KIRTHIK. K	B
46	813819114049	KISHAN. R	B+
47	813819114051	LOKESH. D	B+
48	813819114052	LOKESHWARAN. B	A
49	813819114053	MARCELL FRANKLINE. V	A
50	813819114054	MARIMUTHU. R	UA
51	813819114055	MITHUNKUMAR. K	A
52	813819114056	MOHAMED AJMAL. M I	A
53	813819114057	MOHAMED SHAHIR . S	A

54	813819114058	MOHAMMED FAZIL. N	A
55	813819114059	MOHITHKUMAR. A	B
56	813819114060	MUGUNDHAN. S	A
57	813819114061	MUKESH. M	B+
58	813819114062	MURALI MANOHAR. K	A
59	813819114063	MUTHU SAI CHARAN. V R	A
60	813819114064	NAGARAJ. L	A
61	813819114065	NARESHKUMAR. R	B
62	813819114066	NAVEEN. M	B
63	813819114067	NAVEEN PRASATH. S	B
64	813819114068	NITHIS ANTRO. M	B
65	813819114069	NITHISKUMAR. P	B+
66	813819114070	NIVAS. G	B+
67	813819114071	PADMANAABHAN. S	B
68	813819114072	PRAGADEESH. N	B+
69	813819114073	PRAGATHEESHWARAN. S	B+
70	813819114074	PRASANNA. R	A
71	813819114075	PRAVEEN. K	A
72	813819114076	PRAVIN KUMAR. P	A
73	813819114077	PREETHAM RAJ. T	A
74	813819114078	RACKESH KUMARAN. K R	A
75	813819114079	RADHAKRISHNAN. S	A
76	813819114081	RAJPRABU. K	B+
77	813819114082	RAMANESHWER. P	A
78	813819114083	ROSHAN. R	A
79	813819114084	SABARISHAN. S	A
80	813819114085	SABARIVASAN. K	A
81	813819114086	SALMAN FARIS. M	A
82	813819114087	SAMBUGESH. D	B+
83	813819114088	SAM DANIEL. P	B+
84	813819114089	SAM NITHIN. P	A
85	813819114090	SANJAI. M	B+
86	813819114091	SANJAY. T	A
87	813819114092	SANJAY KUMAR. D	B+
88	813819114093	SANJEEV PRAMESH. M	B+
89	813819114094	SANTHANA KRISHNAN. M	A
90	813819114095	SANTHOSH. P	B
91	813819114096	SANTHOSH. P	A
92	813819114097	SANTHOSH KUMAR. P V	B
93	813819114098	SIDDARTH. S	A
94	813819114099	SIDDHARTH. T K	B
95	813819114100	SIVA SUBRAMANIAN. G	A
96	813819114101	SRIHARI. S	B+
97	813819114102	SRI HARIHARAN. V	A
98	813819114103	SRIRAM. S	A+
99	813819114104	SRI RANGARAJAN. N	A
100	813819114105	SRIVARDHAN. C	A+
101	813819114106	SUDARSON. A	A
102	813819114107	SUDHAKAR. G	B
103	813819114108	SUHAIL. S	A
104	813819114109	SURYA. J	B+
105	813819114110	SUTHARSH KRISHNA. K A	B+
106	813819114111	TAMILMARAN. M	B+
107	813819114112	TAMIL VANAN. J	B
108	813819114113	THILAK. K	B+
109	813819114114	UTHAYA SANKAR. V S	B+
110	813819114115	VASANTH. R	B
111	813819114116	VENKATACHALAM. P	B
112	813819114118	VENKATESH. M	B
113	813819114119	VIGNESH. M	B

114	813819114120	VIGNESH. N	A
115	813819114122	VISHAL. S	B
116	813819114123	VISHVATH. M	B+
117	813819114124	VYDEESKUMAR. R	B
118	813819114301	AKASH. K	A
119	813819114302	GOPIKRISHNAN. S	B
120	813819114303	GURUPRASANTH. R	A+
121	813819114304	HARIHARAN. M	A
122	813819114305	HARIHARAN. S	A+
123	813819114306	HARI HARAN. T	A+
124	813819114307	KHAJA MOINUDEEN. K	B+
125	813819114308	SAM WILLIAM. A	A
126	813819114309	SANJAY. S	A
127	813819114310	SELVA MURALIDARAN S	B+
No. of S/O Grade			0
No. of A/A+ Grade			9
No. of B/A Grade			46
No. of C/B+ Grade			39
No. of D/B Grade			31
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			94
CO-Attainment University			74.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C411.1	10.24	74.00	48.49	86.05	56.01	1
C411.2	6.30	74.00	46.92	81.91	53.92	1
C411.3	0.00	74.00	44.40	81.40	51.80	1
C411.4	0.00	74.00	44.40	82.69	52.06	1
C411.5	0.00	74.00	44.40	80.10	51.54	1
C411.6	0.00	74.00	44.40	82.69	52.06	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C411.1	3	3	2	1						1	1	1	3	2	1
C411.2	3	3	2	1						1	1	1	3	2	1
C411.3	3	3	2	1						1	1	1	3	2	1
C411.4	3	3	2	1						1	1	1	3	2	1
C411.5	3	3	2	1						1	1	1	3	2	1
C411.6	3	3	2	1						1	1	1	3	2	1
C411	3.00	3.00	2.00	1.00						1.00	1.00	1.00	3.00	2.00	1.00

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C411.1	1.00	1.00	0.67	0.33						0.33	0.33	0.33	1.00	0.67	0.33
C411.2	1.00	1.00	0.67	0.33						0.33	0.33	0.33	1.00	0.67	0.33
C411.3	1.00	1.00	0.67	0.33						0.33	0.33	0.33	1.00	0.67	0.33
C411.4	1.00	1.00	0.67	0.33						0.33	0.33	0.33	1.00	0.67	0.33
C411.5	1.00	1.00	0.67	0.33						0.33	0.33	0.33	1.00	0.67	0.33
C411.6	1.00	1.00	0.67	0.33						0.33	0.33	0.33	1.00	0.67	0.33
C411	1.00	1.00	0.67	0.33						0.33	0.33	0.33	1.00	0.67	0.33

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

Internal Assessment - Attainment of Courses Outcomes (Through Direct Assessment)

Academic Period 2022 - 2023 / EVEN Semester			
COURSE CODE/TITLE	PRINCIPLES OF MANAGEMENT	Batch	2019 - 2023
CLASS / SECTION	Sem 8 / MECH A & B	COURSE OUTCOME	1 2 3 4 5 6
COURSE COORDINATOR	Mr.P.V.Rajesh / Mr.P.V.Rajesh	TARGET	65 65 65 65 65 65

ATTAINMENT LEVEL

Level	Range
1	0-60% of the Students scored more than target
2	61-90% of the Students scored more than target
3	90% of the Students scored more than target

S.NO	REG NO	NAME OF THE STUDENT	IAT-1 MARKS ALLOTED						IAT-2 MARKS ALLOTED						IAT-3 MARKS ALLOTED	TOTAL COURSE OUTCOME
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6		
			56	24				20	56	24	0	0	0	20		
1	813819114001	ABDUL RAHMAN. M	0	0				0	0	0				0		
2	813819114002	ABINAYA. R	0	0				0	0	0				0		
3	813819114003	ABISHEIK. S	0	0				0	0	0				0		
4	813819114004	ADHARSH NIJASTAN. M	0	0				0	0	0				0		
5	813819114005	AJAYESHWAR. K	43	16				04	43	16				4		
6	813819114006	AJAY KUMAR. K	0	0				0	0	0				0		
7	813819114007	AKASH. K	0	0				0	0	0				0		
8	813819114008	AKASH. R	0	0				0	0	0				0		
9	813819114009	AKILAN. P	0	0				0	0	0				0		
10	813819114010	AMALRAJ. C	50	15				0	50	15				0		
11	813819114011	ANBARASU. P	0	0				0	0	0				0		
12	813819114012	ARAVINDH. S	0	0				0	0	0				0		
13	813819114013	ARAVINDHAN. R	33	16				0	33	16				0		
14	813819114014	ARUL ARASU. T	39	16				0	39	16				0		
15	813819114015	ARUMUGA VIGNESH. S R	0	0				0	0	0				0		
16	813819114016	ARUN. P	0	0				0	0	0				0		
17	813819114017	BABURAJ. K	0	0				0	0	0				0		
18	813819114018	BALAGANGATHARAN. M	0	0				0	0	0				0		
19	813819114019	BALAJI. S	26	13				10	26	13				10		
20	813819114020	BALARAJASURYA. R	0	0				0	0	0				0		
21	813819114021	BALAVINAYAK. V M	0	0				0	0	0				0		
22	813819114022	BHAVAN. R B N	0	0				0	0	0				0		
23	813819114023	BODHIRAM. M B	0	0				0	0	0				0		
24	813819114024	CHANAKYA. M	37	16				04	37	16				4		
25	813819114025	DEEPAK. M	36	15				06	36	15				6		
26	813819114026	DEEPAMANI. R	0	0				0	0	0				0		
27	813819114027	DESIGAN. M	0	0				0	0	0				0		
28	813819114028	DHAMOTHARAN. M	0	0				0	0	0				0		
29	813819114030	DINESH KUMAR. G	31	18				12	31	18				12		
30	813819114031	DINESH KUMAR. G	14	06				10	14	6				10		
31	813819114032	GIRIHARAN. B	0	0				0	0	0				0		
32	813819114033	GIRISH KANNAH. M	0	0				0	0	0				0		
33	813819114034	GOKUL. S	33	14				08	33	14				8		
34	813819114035	GOPI. M	0	0				0	0	0				0		
35	813819114037	HARIHARAN. V	0	0				0	0	0				0		
36	813819114038	HARI KARAN. K	0	0				0	0	0				0		
37	813819114039	HARISH. S	0	0				0	0	0				0		
38	813819114040	HEMAPRIYA. P	0	0				0	0	0				0		
39	813819114041	JAIRUS. S	22	13				06	22	13				6		
40	813819114042	JAISRIRAM. R	0	0				0	0	0				0		
41	813819114043	JOYAL. C	0	0				0	0	0				0		
42	813819114044	KAARTHIKESH. U	0	0				0	0	0				0		
43	813819114045	KANNAN. J	0	0				0	0	0				0		
44	813819114046	KARTHI. M	0	0				0	0	0				0		
45	813819114048	KIRTHIK. K	0	0				0	0	0				0		

46	813819114049	KISHAN. R	0	0				0	0	0				0
47	813819114051	LOKESH. D	0	0				0	0	0				0
48	813819114052	LOKESHWARAN. B	48	15				06	48	15				6
49	813819114053	MARCELL FRANKLINE. V	48	14				04	48	14				4
50	813819114054	MARIMUTHU. R	39	13				10	39	13				10
51	813819114055	MITHUNKUMAR. K	32	10				0	32	10				0
52	813819114056	MOHAMED AJMAL. M I	0	0				0	0	0				0
53	813819114057	MOHAMED SHAHIR . S	0	0				0	0	0				0
54	813819114058	MOHAMMED FAZIL. N	0	0				0	0	0				0
55	813819114059	MOHITHKUMAR. A	34	14				12	34	14				12
56	813819114060	MUGUNDHAN. S	0	0				0	0	0				0
57	813819114061	MUKESH. M	0	0				0	0	0				0
58	813819114062	MURALI MANOHAR. K	0	0				0	0	0				0
59	813819114063	MUTHU SAI CHARAN. V R	0	0				0	0	0				0
60	813819114064	NAGARAJ. L	0	0				0	0	0				0
61	813819114065	NARESHKUMAR. R	0	0				0	0	0				0
62	813819114066	NAVEEN. M	0	0				0	0	0				0
63	813819114067	NAVEEN PRASATH. S	0	0				0	0	0				0
64	813819114068	NITHIS ANTRO. M	0	0				0	0	0				0
65	813819114069	NITHISKUMAR. P	0	0				0	0	0				0
66	813819114070	NIVAS. G	0	0				0	0	0				0
67	813819114071	PADMANAABHAN. S	0	0				0	0	0				0
68	813819114072	PRAGADEESH. N	0	0				0	0	0				0
69	813819114073	PRAGATHEESHWARAN. S	0	0				0	0	0				0
70	813819114074	PRASANNA. R	0	0				0	0	0				0
71	813819114075	PRAVEEN. K	12	11				11	12	11				11
72	813819114076	PRAVIN KUMAR. P	0	0				0	0	0				0
73	813819114077	PREETHAM RAJ. T	0	0				0	0	0				0
74	813819114078	RACKESH KUMARAN. K R	0	0				0	0	0				0
75	813819114079	RADHAKRISHNAN. S	0	0				0	0	0				0
76	813819114081	RAJPRABU. K	0	0				0	0	0				0
77	813819114082	RAMANESHWER. P	41	16				11	41	16				11
78	813819114083	ROSHAN. R	0	0				0	0	0				0
79	813819114084	SABARISHAN. S	0	0				0	0	0				0
80	813819114085	SABARIVASAN. K	0	0				0	0	0				0
81	813819114086	SALMAN FARIS. M	0	0				0	0	0				0
82	813819114087	SAMBUGESH. D	0	0				0	0	0				0
83	813819114088	SAM DANIEL. P	0	0				0	0	0				0
84	813819114089	SAM NITHIN. P	0	0				0	0	0				0
85	813819114090	SANJAI. M	0	0				0	0	0				0
86	813819114091	SANJAY. T	0	0				0	0	0				0
87	813819114092	SANJAY KUMAR. D	0	0				0	0	0				0
88	813819114093	SANJEEV PRAMESH. M	0	0				0	0	0				0
89	813819114094	SANTHANA KRISHNAN. M	0	0				0	0	0				0
90	813819114095	SANTHOSH. P	0	0				0	0	0				0
91	813819114096	SANTHOSH. P	0	0				0	0	0				0
92	813819114097	SANTHOSH KUMAR. P V	0	0				0	0	0				0
93	813819114098	SIDDARTH. S	35	3				0	35	3				0
94	813819114099	SIDDHARTH. T K	0	0				0	0	0				0
95	813819114100	SIVA SUBRAMANIAN. G	0	0				0	0	0				0
96	813819114101	SRIHARI. S	0	0				0	0	0				0
97	813819114102	SRI HARIHARAN. V	0	0				0	0	0				0
98	813819114103	SRIRAM. S	0	0				0	0	0				0
99	813819114104	SRI RANGARAJAN. N	0	0				0	0	0				0
100	813819114105	SRIVARDHAN. C	0	0				0	0	0				0
101	813819114106	SUDARSON. A	0	0				0	0	0				0
102	813819114107	SUDHAKAR. G	0	0				0	0	0				0
103	813819114108	SUHAIL. S	0	0				0	0	0				0
104	813819114109	SURYA. J	0	0				0	0	0				0
105	813819114110	SUTHARSH KRISHNA. K A	0	0				0	0	0				0

106	813819114111	TAMILMARAN. M	0	0				0	0	0				0
107	813819114112	TAMIL VANAN. J	14	02				0	14	2				0
108	813819114113	THILAK. K	0	0				0	0	0				0
109	813819114114	UTHAYA SANKAR. V S	0	0				0	0	0				0
110	813819114115	VASANTH. R	0	0				0	0	0				0
111	813819114116	VENKATACHALAM. P	0	0				0	0	0				0
112	813819114118	VENKATESH. M	0	0				0	0	0				0
113	813819114119	VIGNESH. M	0	0				0	0	0				0
114	813819114120	VIGNESH. N	0	0				0	0	0				0
115	813819114122	VISHAL. S	0	0				0	0	0				0
116	813819114123	VISHVATH. M	0	0				0	0	0				0
117	813819114124	VYDEESKUMAR. R	0	0				0	0	0				0
118	813819114301	AKASH. K	0	0				0	0	0				0
119	813819114302	GOPIKRISHNAN. S	0	0				0	0	0				0
120	813819114303	GURUPRASANTH. R	0	0				0	0	0				0
121	813819114304	HARIHARAN. M	0	0				0	0	0				0
122	813819114305	HARIHARAN. S	0	0				0	0	0				0
123	813819114306	HARI HARAN. T	0	0				0	0	0				0
124	813819114307	KHAJA MOINUDEEN. K	0	0				0	0	0				0
125	813819114308	SAM WILLIAM. A	0	0				0	0	0				0
126	813819114309	SANJAY. S	0	0				0	0	0				0
127	813819114310	SELVA MURALIDARAN S	0	0				0	0	0				0

CO's Target Value	36.40	15.60	0.00	0.00	0.00	13.00
No. of Student Secured above CO's Target value	8	6	0	0	0	0
Percentage of Student Secured above Target	6.30	4.72	0.00	0.00	0.00	0.00

SARANATHAN COLLEGE OF ENGINEERING, Tiruchirappalli - 620012

Department of B.E. Mechanical Engineering

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

COURSE CODE/TITLE	MG8591 PRINCIPLES OF MANAGEMENT	Batch	2019 - 2023
CO Attainment Level: 1 - (0% - 60%) 2- (61%-90%) 3-(91% and Above)			

S.NO	REG. NO.	NAME OF THE STUDENT	GRADE
1	813819114001	ABDUL RAHMAN. M	A
2	813819114002	ABINAYA. R	A+
3	813819114003	ABISHEIK. S	A
4	813819114004	ADHARSH NIJASTAN. M	A
5	813819114005	AJAYESHWAR. K	B+
6	813819114006	AJAY KUMAR. K	B+
7	813819114007	AKASH. K	B+
8	813819114008	AKASH. R	A
9	813819114009	AKILAN. P	A
10	813819114010	AMALRAJ. C	A
11	813819114011	ANBARASU. P	B+
12	813819114012	ARAVINDH. S	B+
13	813819114013	ARAVINDHAN. R	B+
14	813819114014	ARUL ARASU. T	A
15	813819114015	ARUMUGA VIGNESH. S R	A
16	813819114016	ARUN. P	B+
17	813819114017	BABURAJ. K	B+
18	813819114018	BALAGANGATHARAN. M	B
19	813819114019	BALAJI. S	B+
20	813819114020	BALARAJASURYA. R	B+
21	813819114021	BALAVINAYAK. V M	B+
22	813819114022	BHAVAN. R B N	A
23	813819114023	BODHIRAM. M B	B
24	813819114024	CHANAKYA. M	B+
25	813819114025	DEEPAK. M	A
26	813819114026	DEEPAMANI. R	A
27	813819114027	DESIGAN. M	A
28	813819114028	DHAMOTHARAN. M	A
29	813819114030	DINESH KUMAR. G	A
30	813819114031	DINESH KUMAR. G	B+
31	813819114032	GIRIHARAN. B	A
32	813819114033	GIRISH KANNAH. M	A
33	813819114034	GOKUL. S	A
34	813819114035	GOPI. M	A
35	813819114037	HARIHARAN. V	B+
36	813819114038	HARI KARAN. K	A+
37	813819114039	HARISH. S	A
38	813819114040	HEMAPRIYA. P	A
39	813819114041	JAIRUS. S	B+
40	813819114042	JAISRIRAM. R	A+
41	813819114043	JOYAL. C	A
42	813819114044	KAARTHIKESH. U	A
43	813819114045	KANNAN. J	A
44	813819114046	KARTHI. M	B+
45	813819114048	KIRTHIK. K	A
46	813819114049	KISHAN. R	A
47	813819114051	LOKESH. D	A+
48	813819114052	LOKESHWARAN. B	B+
49	813819114053	MARCELL FRANKLINE. V	A+
50	813819114054	MARIMUTHU. R	B+
51	813819114055	MITHUNKUMAR. K	B+
52	813819114056	MOHAMED AJMAL. M I	A
53	813819114057	MOHAMED SHAHIR . S	A

54	813819114058	MOHAMMED FAZIL. N	A
55	813819114059	MOHITHKUMAR. A	B+
56	813819114060	MUGUNDHAN. S	A
57	813819114061	MUKESH. M	A
58	813819114062	MURALI MANOHAR. K	A+
59	813819114063	MUTHU SAI CHARAN. V R	B+
60	813819114064	NAGARAJ. L	A+
61	813819114065	NARESHKUMAR. R	A
62	813819114066	NAVEEN. M	A+
63	813819114067	NAVEEN PRASATH. S	B
64	813819114068	NITHIS ANTRO. M	B+
65	813819114069	NITHISKUMAR. P	B
66	813819114070	NIVAS. G	B+
67	813819114071	PADMANAABHAN. S	B+
68	813819114072	PRAGADEESH. N	A
69	813819114073	PRAGATHEESHWARAN. S	A+
70	813819114074	PRASANNA. R	B+
71	813819114075	PRAVEEN. K	B
72	813819114076	PRAVIN KUMAR. P	A
73	813819114077	PREETHAM RAJ. T	A+
74	813819114078	RACKESH KUMARAN. K R	A
75	813819114079	RADHAKRISHNAN. S	A
76	813819114081	RAJPRABU. K	A
77	813819114082	RAMANESHWER. P	B
78	813819114083	ROSHAN. R	B
79	813819114084	SABARISHAN. S	B+
80	813819114085	SABARIVASAN. K	A+
81	813819114086	SALMAN FARIS. M	B+
82	813819114087	SAMBUGESH. D	B+
83	813819114088	SAM DANIEL. P	B+
84	813819114089	SAM NITHIN. P	A+
85	813819114090	SANJAI. M	B+
86	813819114091	SANJAY. T	A+
87	813819114092	SANJAY KUMAR. D	B+
88	813819114093	SANJEEV PRAMESH. M	B+
89	813819114094	SANTHANA KRISHNAN. M	A+
90	813819114095	SANTHOSH. P	A
91	813819114096	SANTHOSH. P	A
92	813819114097	SANTHOSH KUMAR. P V	B+
93	813819114098	SIDDARTH. S	B+
94	813819114099	SIDDHARTH. T K	A
95	813819114100	SIVA SUBRAMANIAN. G	A
96	813819114101	SRIHARI. S	A
97	813819114102	SRI HARIHARAN. V	A+
98	813819114103	SRIRAM. S	A
99	813819114104	SRI RANGARAJAN. N	A+
100	813819114105	SRIVARDHAN. C	A+
101	813819114106	SUDARSON. A	A
102	813819114107	SUDHAKAR. G	B+
103	813819114108	SUHAIL. S	A
104	813819114109	SURYA. J	B+
105	813819114110	SUTHARSH KRISHNA. K A	B+
106	813819114111	TAMILMARAN. M	B
107	813819114112	TAMIL VANAN. J	B
108	813819114113	THILAK. K	A
109	813819114114	UTHAYA SANKAR. V S	A
110	813819114115	VASANTH. R	B+
111	813819114116	VENKATACHALAM. P	B+
112	813819114118	VENKATESH. M	B+
113	813819114119	VIGNESH. M	B

114	813819114120	VIGNESH. N	A
115	813819114122	VISHAL. S	B
116	813819114123	VISHVATH. M	B
117	813819114124	VYDEESKUMAR. R	A
118	813819114301	AKASH. K	B+
119	813819114302	GOPIKRISHNAN. S	B+
120	813819114303	GURUPRASANTH. R	A
121	813819114304	HARIHARAN. M	A
122	813819114305	HARIHARAN. S	A+
123	813819114306	HARI HARAN. T	A
124	813819114307	KHAJA MOINUDEEN. K	B+
125	813819114308	SAM WILLIAM. A	B+
126	813819114309	SANJAY. S	B+
127	813819114310	SELVA MURALIDARAN S	B+
No. of S/O Grade			0
No. of A/A+ Grade			18
No. of B/A Grade			51
No. of C/B+ Grade			46
No. of D/B Grade			12
No. of E/B Grade			0
Target for course outcome Attainment			65
No of students above the target			115
CO-Attainment University			90.00

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.40xCO-INT + 0.60xCO-UNI) (%)	Indirect CO Attainment (Course End Survey)	Over all CO Attainment (0.8xDirect + 0.2xIndirect) (%)	Over all CO Attainment Level
C410.1	6.30	90.00	56.52	83.72	61.96	2
C410.2	4.72	90.00	55.89	83.72	61.46	2
C410.3	0.00	90.00	54.00	83.46	59.89	1
C410.4	0.00	90.00	54.00	82.69	59.74	1
C410.5	0.00	90.00	54.00	83.46	59.89	1
C410.6	0.00	90.00	54.00	82.95	59.79	1

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C410.1	3	2	2			2		2			2	3	2		
C410.2	3	2	2			2		2			2	3	2		
C410.3	3	2	2			2		2			2	3	2		
C410.4	3	2	2			2		2			2	3	2		
C410.5	3	2	2			2		2			2	3	2		
C410.6	3	2	2			2		2			2	3	2		
C410	3.00	2.00	2.00			2.00		2.00			2.00	3.00	2.00		

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PS02	PS03
C410.1	2.00	1.33	1.33			1.33		1.33			1.33	2.00	1.33		
C410.2	2.00	1.33	1.33			1.33		1.33			1.33	2.00	1.33		
C410.3	1.00	0.67	0.67			0.67		0.67			0.67	1.00	0.67		
C410.4	1.00	0.67	0.67			0.67		0.67			0.67	1.00	0.67		
C410.5	1.00	0.67	0.67			0.67		0.67			0.67	1.00	0.67		
C410.6	1.00	0.67	0.67			0.67		0.67			0.67	1.00	0.67		
C410	1.33	0.89	0.89			0.89		0.89			0.89	1.33	0.89		

Saranathan College of Engineering

QAC - Audit Report

Academic Year :2022-2023

Sem: ODD

Dept: MECHANICAL

Year/ Sem/Sec: II / 3 / A

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
ME3391	VINOTHKUMAR.S	IA Test	57	56	01	34	39	61	59	02	24	57	61	61	–	38	38
		Make up Test	36	35	01	14	58	26	23	03	14	35					
		Remarks	Core concepts simplified. Assignments given.					Improvement observed - Guideline for solutions provided.					Guidelines given to concentrate on gray areas.				
ME3392	DR. R. REKHA	IA Test	62	58	04	32	42	61	61	–	24	57	61	61	–	27	56
		Make up Test	36	28	08	09	53	20	19	01	02	85					
		Remarks	Content writing to be improved. Assignments given.					Improvement observed Advised to improve content writing					Better presentation of answers required.				
MA3393	DR. BASKAR. N.	IA Test	56	54	02	30	43	61	61	–	31	49	61	60	01	26	56
		Make up Test	32	27	05	14	41	31	31	–	27	13					
		Remarks	Assignments given Performance requires improvement.					Neat and concise presentation required Progress observed					Progress observed. Tips given for content writing				
Signature of QAC members with name			1. [signature] 19/10/22 (C. KESAVA RAJA) 2. [signature] 21/10/22 (A. Mary Jovan)					1. [signature] 02/11/22 C. KESAVA RAJA 2. [signature] 2/11/22 (A. Mary Jovan)					1. [signature] 02/11/23 C. KESAVA RAJA 2. [signature] 3/11/23 (A. Mary Jovan)				
Signature of HOD			[signature] 21/10/22					[signature]					[signature]				
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year :2022-2023

Sem: ODD

Dept: MECHANICAL

Year/ Sem/Sec	II / 3 / A		Test I					Test II					Test III				
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
CE3391	mr. P. VIGHNESHWAR	IA Test	62	60	02	48	19	60	60	01	32	46	61	61	–	38	38
		Make up Test	50	48	02	29	38	33	32	01	18	42					
		Remarks	Finding difficulty in grasping new concepts. Guidelines & material given					Slight Improvement in overall performance Guidelines given					Improvement required. Problem solving exercise given everyday.				
MA3351	RAVICHANDRAN	IA Test	62	55	07	45	16	62	58	04	23	56	61	61	–	43	30
		Make up Test	52	52	–	18	65	26	25	01	12	50					
		Remarks	Strengthening of fundamentals required. Improvement in retest.					Improvement in performance observed. Regular practice required					Regular practising required. Regular practice given				
ME3351	DR. G. JEYAPRAKASH.	IA Test	62	57	05	33	39	62	58	04	32	42	61	61	–	33	46
		Make up Test	38	34	04	–	89	35	31	04	10	60					
		Remarks	Material & guidelines given. Improvement observed in slip test					Regular solving of problems needed. Guidelines given					Problem solving and knowledge on bare concepts to be improved.				
Signature of QAC members with name			1. 19/10/22 (C. KESAVA RAJA) 2. A. Kelly 19/10/22 (A. Kelly Vasan)					1. 09/11/22 (C. KESAVA RAJA) 2. A. Kelly 9/11/22 (A. Kelly Vasan)					1. 02/11/22 (C. KESAVA RAJA) 2. A. Kelly (A. Kelly Vasan)				
Signature of HOD			5/10/2022					16/11/2022									
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year :2022-2023

Sem: ODD

Dept: MECH

Year/ Sem/Sec	III / V / A		Test I					Test II					Test III				
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
ME8501	Mr. S. KARTHIKEYAN	IA Test	77	75	02	16	77	77	74	03	6	88	77	74	03	12	81
		Make up Test	18	14	4	0	78	09	06	03	6	0	—	—	—	—	—
		Remarks	Performance Satisfactoly Study material given.					—					—				
ME8593	Mr. R. SURESH BABU	IA Test	77	74	03	46	36	77	74	03	30	57	77	75	02	20	71
		Make up Test	43	39	04	11	65	33	29	04	09	61	—	—	—	—	—
		Remarks	Regular practice required, Improvement Observed in slip test					Improvement in performance observed. Regular tests given.					—				
ME8594	Dr. G. JEYAPRAKASH	IA Test	77	74	03	46	36	77	72	05	21	66	77	74	03	26	62
		Make up Test	49	46	03	11	74	26	20	06	13	27	—	—	—	—	—
		Remarks	Consistent practice required in problem Solving.					—					—				
Signature of QAC members with name			1. 19/10/22 (C. KESAVA RAJA) 2. 19/10/22 (A. Mercy Vasan)					1. 19/10/22 C. KESAVA RAJA 2. 19/10/22 A. Mercy Vasan					1. (C. KESAVA RAJA) 2. (A. Mercy Vasan)				
Signature of HOD			26/10/2022 Dr. G. JEYAPRAKASH														
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering
QAC - Audit Report
Academic Year :2022-2023

Year/ Sem/Sec	III / 5 / A														Sem: ODD				
					Test I					Test II					Dept	MECHANICAL			
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	Test III				
													No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
ME5595	Dr. A. MERCYVASAN	IA Test	77	74	03	41	43	77	75	02	07	88	77	76	01	07	90
		Make up Test	44	40	04	02	86	09	06	03	04	22	—	—	—	-	—
		Remarks	Presentation needs to be improve. Better performance in slip test					—					—				
OAT552	PARTHAGURU	IA Test	22	21	01	10	50	22	19	03	03	73	22	21	01	05	73
		Make up Test	11	07	04	02	45	06	03	03	03	0	—	-	—	—	—
		Remarks	Impressive Content writing Needed" Guidelines given'					—					—				
OR0551	Mr.M. SRIRAM PRASATH	IA Test	55	54	01	03	93	55	54	01	01	98	55	54	01	03	93
		Make up Test	09	09	-	03	25	01	01	-	-	100	—	—	—	—	-
		Remarks	Good performance, Guidelines given.					—					—				
Signature of QAC members with name			1. C.KESAVA RAJA 2. A. Mercy Vasan 29/10/22					C.KESAVA RAJA A. Mercy Vasan 9/11/22					1. (C.KESAVA RAJA) 2. (A. Mercy Vasan)				
Signature of HOD			29/10/2022 Dr. C. Jayabalan														
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering
QAC - Audit Report
Academic Year :2022-2023

Sem: ODD

Year/ Sem/Sec	IV / VII / A													Dept	Mechanical			
			Test I					Test II					Test III					
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
ME8791	mr.P. VIGNYESHWAR	IA Test	64	61	03	17	69	64	46	3	16	72	64	59	05	10	77
		Make up Test	20	16	04	01	75	18	14	4	5	50	-	-	-	-	-
		Remarks	Performance satisfactory.					-					-				
ME8792	PARAMAGURU	IA Test	64	58	06	24	53	64	63	1	14	92	64	61	03	03	91
		Make up Test	30	24	06	03	70	14	1	4	0	0	-	-	-	-	-
		Remarks	Better presentation of answers required					-					-				
ME8793	Dr.R. BASKAR	IA Test	64	61	03	14	73	64	62	2	26	56	64	46	18	35	17
		Make up Test	17	10	07	09	06	28	24	4	6	64	-	-	-	-	-
		Remarks	Performance Satisfactory Guidelines given for slow learner.					Lacking in good presentation. Content writing to be improved					Lack of seriousness & inadequate preparation				
OMF751	mr.P.V. RAJESH	IA Test	64	61	03	8	83	64	57	7	13	69	64	62	02	13	77
		Test	11	07	04	02	45						-	-	-	-	-
		Remarks	Performance good.					-					-				
Signature of QAC members with name																		
Signature of HOD																		
QAC In-Charge																		
IQAC Co-ordinator																		
Principal																		

Saranathan College of Engineering

QAC - Audit Report

Academic Year :2022-2023

Sem: ODD

Dept: Mechanical

Year/ Sem/Sec	IV / VII / A		Test I					Test II					Test III				
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
GE8077	Dr.G. MAHESH	IA Test	69	62	02	33	45	33	32	1	~~2~~	82	64	64	–	34	47
		Make up Test	7	7	0	0	100	5	4	1	1	80	–	–	–	–	–
		Remarks	Better content writing required.					–					Improved presentation skills insisted				
ME8072	Mr.M. SRIRAM PARTH	IA Test	97	91	06	2	70	64	62	35	42		29	26	03	–	90
		Make up Test	08	03	05	2	13	37	36	1	1	3	–	–	–	–	–
		Remarks	Performance Satisfactory. Study material given for Slow learners.					Inadequate preparation advised to write test seriously					–				
ME8099	Mr.K AMARNATH	IA Test	64	58	06	11	73	64	58	6	5	83	64	60	04	23	58
		Make up Test	17	06	11	02	24	11	8	3	1	9	–	–	–	–	–
		Remarks	Performance Satisfactory, Guidelines & material given.					–					Guidelines given to improve performance in portions covered.				
Signature of QAC members with name			1. (C.KESAVA RAJA) 2. 19/10/22 (A. Mary Jaya)					1. (C.KESAVA RAJA) 2. 19/10/22 (A. Mary Jaya)					1. (C.KESAVA RAJA) 2. (A. Mary Jaya)				
Signature of HOD			20/10/2022														
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year :2022-2023

Sem: ODD

Dept: MECHANICAL

Year/ Sem/Sec: IV / 7 / B

Subject Code	Name of faculty		Test I					Test II					Test III				
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
ME8791	Dr.R. REKHA	IA Test	65	62	03	19	66	65	64	1	35	45	65	53	12	12	63
		Make up Test	22	19	03	–	86	36	27	9	16	36	–	–	–	–	–
		Remarks	Performance Satisfactory, Improvement observed in retest					finding difficult to grasp electronics principles					—				
ME8792	Mr. K. AMARNATH	IA Test	65	6	57	20	65	65	62	3	11	78	65	61	04	21	62
		Make up Test	30	23	07	02	70	14	0	4	10	0	–	–	–	–	–
		Remarks	Better prevention expected. Guidelines given					–					—				
ME8793	Dr. M. GANESAN	IA Test	65	61	04	20	63	65	61	4	17	68	65	45	20	19	40
		Make up Test	24	18	06	04	58	21	9	1	11	43	–	–	–	–	–
		Remarks	Study material & guidelines given					–					Assignments and guidelines given				
OMF751	Dr. Arathband Mahapatra.MR	IA Test	65	59	06	11	74	65	63	2	5	89	65	55	10	16	60
		Test	17	04	13	–	68	7	5	2	1	57	–	–	–	–	–
		Remarks	Guidelines given					–					–				
Signature of QAC members with name																	
Signature of HOD																	
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering

QAC - Audit Report

Academic Year :2022-2023

Sem: ODD

Dept: Mechanical

Year/ Sem/Sec	IV / 7 / B																			
			Test I					Test II					Test III				
Subject Code	Name of faculty		No of Stuulents registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
GE8077	Dr. G. MAHESH	IA Test	65	61	04	39	34	30	28	2	1	93	65	65	-	41	37
		Make up Test	30	30	0	0	100%	2	2	-	-	100%	-	-	-	-	-
		Remarks	Guidelines & Study material given					-					Better content writing insisted				
ME8072	Mr. M. SRIRAM PRASATH	IA Test	65	-	65	16	29	36	35	1	0	91	36	28	08	01	75
		Make up Test	46	46	-	42	04	1	0	1	0	0	-	-	-	-	-
		Remarks	Performance board, Study material & Guidelines given.					-					-				
ME8099	Mr. P. JOTHI PALANIAPPAN	IA Test	65	52	13	29	35	65	60	5	8	80	65	53	12	24	45
		Make up Test	42	36	06	11	60	13	6	7	3	23	-	-	-	-	-
		Remarks	Lacking in good presentation Guidelines and Study material given					-					Better presentation and content writing insisted				
Signature of QAC members with name			1. 19/10/22 (C. KESAVA RAJA) 2. 19/10/22 (A. Mercy Bapan)					1. 27/10/22 2. 27/10/22 (A. Mercy Bapan)					1. 06/12/22 (C. KESAVA RAJA) 2. 7/12/22 (A. Mercy Bapan)				
Signature of HOD			28/10/2022														
QAC In-Charge																	
IQAC Co-ordinator																	
Principal																	

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT	MECHANICAL	DETAILS OF EXAMINATION	IA TEST : I	Makeup Test : I

Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : II / 03 / A					
		IA Test – I	Makeup Test -I		
1	CE3391	246002, 53	246012, 36	Y	Y	–
2	MA3351	246022, 46	246004, 29	Y	Y	–
3	ME3351	246006, 32	246001, 49	Y	Y	–
4	ME3391	246046, 23	246003, 45	Y	Y	–
5	ME3392	246017, 48	246001, 35	Y	Y	–
6	ME3393	246034, 246010	246018, 57	Y	Y	–

VERIFIED BY

1 19/10/22

2 19/10/22

SIGNATURE WITH DATE OF THE QAC MEMBERS

24/10/2022

HOD/Mech

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT	MECHANICAL	DETAILS OF EXAMINATION	IA TEST : I	Makeup Test : I

Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC :	III / 05 / A				
		IA Test – I	Makeup Test – I		
1	ME8501	236019, 45	236073, 78	Y	Y	–
2	ME8593	236027, 58	236011, 23	Y	Y	–
3	ME8594	236010, 57	236001, 21	Y	Y	–
4	ME8595	236020, 74	236004, 27	Y	Y	–
5	OAT552	236010, 15	236050, 78	Y	Y	
6	OAO551	236001, 236077	236070, 23	Y	Y	–

VERIFIED BY

1 19/10/22

2 19/10/22

SIGNATURE WITH DATE OF THE QAC MEMBERS

28/10/22

Dr. E. Jayakumar
HOD/Mech

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT	MECHANICAL	DETAILS OF EXAMINATION	IA TEST : I	Makeup Test : I

Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : IV / 07 / A					
		IA Test – I	Makeup Test –I	I		–
1	GE6077	226008, 46	226016, 67	Y	Y	–
2	ME6072	226005, 09	226023, 61	Y	Y	–
3	ME6099	226009, 32	226005, 12	Y	Y	–
4	ME8791	226051, 15	226101, 23	Y	Y	–
5	ME6792	226005, 15	226005, 12	Y	Y	–
6	ME6793	226098, 226110	226072, 104	Y	Y	–
7	OMF751	226067, 93	226123, 226072	Y	Y	–

VERIFIED BY

1 19/10/22

2 19/10/22

SIGNATURE WITH DATE OF THE QAC MEMBERS

28/10/2022

HOD/Mech

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT	MECHANICAL	DETAILS OF EXAMINATION	IA TEST : I	Makeup Test : I

Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : IV / 07 / B					
		IA Test	Makeup Test		
1	GE8077	226066, 100	226067	Y	Y	–
2	ME8072	226123, 29	226095, 226114	Y	Y	–
3	ME8099	226070, 226132	226066, 89	Y	Y	–
4	ME8791	226074, 90	226071, 226123	Y	Y	–
5	ME8792	226063, 103	226067, 70	Y	Y	–
6	ME8793	226050, 226110	226072, 104	Y	Y	–
7	OMF751	236066, 90	226060, 124	Y	Y	–

VERIFIED BY

1 19/10/22

2 20/10/22

SIGNATURE WITH DATE OF THE QAC MEMBERS

28/10/2022

HOD/MECH

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT MECHANICAL			DETAILS OF EXAMINATION IA TEST : II		Makeup Test : II	
Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks	
YEAR/SEM/SEC : III / V / A						
		IA Test – II	Makeup Test – II			
1	CE 3391	246005, 20	246006, 25	Y	Y	–
2	MA3351	246016, 33	246013, 28	Y	Y	–
3	ME3351	246015, 37	246002, 12	Y	Y	–
4	ME 3391	246020, 22	246008, 62	Y	Y	–
5	ME3392	246012, 49	246005, 07	Y	Y	–
6	ME3393	246001, 12	246002, 17	Y	Y	–

VERIFIED BY

1 [signature] (C. KESAVA RAJA)

2 [signature] 9/11/22 (A. KELLY MARY)

SIGNATURE WITH DATE OF THE QAC MEMBERS

16/11/2022
Dr. G. JAYAPRAKASH

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT	MECHANICAL	DETAILS OF EXAMINATION	IA TEST : II	Makeup Test : II

Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC: III / V / A					
		IA Test – II	Makeup Test–II		
1	ME8501	236002, 43	236046, 72	Y	Y	-
2	ME8593	236007, 33	236001, 05	Y	Y	-
3	ME8594	236007, 28	236005, 18	Y	Y	-
4	ME8595	236063, 77	236005, 72	Y	Y	-
5	OA7552	236010, 13	236013, 72	Y	Y	-
6	OE0551	236001, 08	236023	Y	Y	-

VERIFIED BY

1 (C.KESAVA RAJA)

2 9/11/22 (A.Kelly Navan)

SIGNATURE WITH DATE OF THE QAC MEMBERS

10/11/22

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT	MECHANICAL	DETAILS OF EXAMINATION	IA TEST : II	Makeup Test : II

Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : IV / VII / A					
		IA Test - II	Makeup Test - II		
1	ME8791	226032, 226016	226056, 57	Y	Y	226036 – Long absend
2	ME8792	226007, 06	226130	Y	Y	226036 – Long absent
3	ME8793	226015, 226130	226059, 128	Y	Y	226036 – Long absent
4	OMF751	226017, 25	226007, 14	Y	Y	226036 – Long absent
5	GE8077	226017, 49	226053, 45	Y	Y	226036 - Long absent
6	ME8072	226004, 07	226041	Y	Y	226036 – Long absent
7	ME8099	226002, 21	226004, 09	Y	Y	226036 – long absent

VERIFIED BY

1 09/11/22

2 9/11/22

SIGNATURE WITH DATE OF THE QAC MEMBERS

16/11/2022

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT	MECHANICAL	DETAILS OF EXAMINATION	IA TEST : II	Makeup Test : II

Sl.No	Subject Code	List of Batch Nos Verified		Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : IV / VII / B						
		IA Test – II	Makeup Test – II			
1	ME8791	226090, 71	226123, 125	Y	Y	226113 – Frequently absent for long spells – Assignments not submitted 117, 66, 92
2	ME8792	226063, 80	226092, 120	Y	Y	226112 – long absent
3	ME8793	226097, 69	226066, 105	Y	Y	226122 – long absent
4	OMF751	226087, 226077	226117, 067	Y	Y	226122 – long absent
5	GE8077	226091, 74	—	Y	Y	226113 – long absent
6	ME8072	226063, 64	—	Y	Y	226113 – long absent
7	ME8099	226070, 106	226117, 226067	✓	✓	226113, 100 Frequently absent for long spells – 92 Assignments not collected

VERIFIED BY

1 [signature]

2 [signature] 9/11/22

SIGNATURE WITH DATE OF THE QAC MEMBERS

16/11/2022

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT MECHANICAL			DETAILS OF EXAMINATION IA TEST : MODEL Makeup Test : –			
Sl.No	Subject Code	List of Batch Nos Verified		Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : II / 03 / A						
		MODEL/Test Exam	Makeup Test			
1	CE3391	246044, 53	–	Y	–	–
2	MA3351	246012, 22	–	Y	–	
3	ME3351	246022, 45	–	Y	–	–
4	ME3391	246045, 27	–	Y	–	–
5	ME3392	246001, 03	–	Y	–	–
6	ME3393	246027, 246057	–	Y	–	–

VERIFIED BY

1 03/01/23

2 3/01/23

SIGNATURE WITH DATE OF THE QAC MEMBERS

20/1/2023

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT MECHANICAL			DETAILS OF EXAMINATION IA TEST : III		Makeup Test : -
Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : III / V / A					
		IA Test	Makeup Test		
1	ME6501	236011, 46	–	Y	–	–
2	ME8593	236017, 35	–	Y	–	–
3	ME6594	236024, 236005	–	Y	–	–
4	ME8595	236055, 75	–	Y	–	–
5	OAT552	236010, 44	–	Y	–	–
6	OPO551	236001, 17	–	Y	–	–

VERIFIED BY

1 (C. KESAVA RAJA)

2 (A. Mary Valan)

SIGNATURE WITH DATE OF THE QAC MEMBERS

20/01/2023

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT MECHANICAL			DETAILS OF EXAMINATION IA TEST : III		Makeup Test :
Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : IV / VII / A					
		IA Test	Makeup Test		
1	ME6791	226011, 24	—	Y	—	—
2	ME6792	226085, 226022	—	Y	—	—
3	ME6793	226035, 56	—	Y	—	—
4	OMF751	226035, 56	—	Y	—	—
5	GE8077	226067, 226002	—	Y	—	—
6	ME8072	226007, 22	—	Y	—	—
7	ME8099	226025, 39	—	Y	—	—

VERIFIED BY

1 (C. KESAVA RAJA)

2 7/12/22 (A. Hary Varan)

SIGNATURE WITH DATE OF THE QAC MEMBERS

30/6/2023

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 ODD SEMESTER

NAME OF THE DEPARTMENT MECHANICAL		DETAILS OF EXAMINATION IA TEST : III		Makeup Test : –	
Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : IV / VII / B					
		IA Test	Makeup Test		
1	ME8791	226072, 83	–	Y	–	–
2	ME8792	226107, 226082	–	Y	–	–
3	ME8793	226091, 226121	–	Y	–	–
4	OMF751	226083, 226106	–	Y	–	–
5	GE8077	226073, 226106	–	Y	–	–
6	GE8072	226115, 226068	–	Y	–	–
7	ME8099	226068, 226106	–	Y	–	–

VERIFIED BY

1 06/12/22 (C. KESAVA ROJA)

2 7/12/22 (A. Mary Varan)

SIGNATURE WITH DATE OF THE QAC MEMBERS

Saranathan College of Engineering
QAC - Audit Report
Academic Year : 2022-23

Sem: ~~ODD~~/ EVEN

Year/ Sem/Sec	II / IV / A																			
			Test I					Test II					Dept	MECHANICAL						
Subject Code	Name of faculty												Test III							
			No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %			
CE3491	Dr.R. REKHA	IA Test	61	59	02	21	62	61	59	02	14	74	61	60	01	18	69			
		Make up Test	23	20	03	04	70	16	14	02	11	21	–	–	–	–	–			
		Remarks	–					–					–							
GE3451	MR.A. LAKSHMA ~~CHAT~~	IA Test	61	60	01	41	31	61	59	02	21	62	61	60	01	58	03			
		Make up Test	42	39	03	34	12	23	17	06	16	04	–	–	–	–	–			
		Remarks	Students found to be weak, advised					lack of motivation motivated suitably					Did not do serious preparation							
ME3451	MR. K. AMARNATH	IA Test	61	60	01	47	21	61	59	02	23	59	61	57	4	29	54			
		Make up Test	48	43	05	30	27	25	21	04	18	12	–	–	–	–	–			
		Remarks	Poor performance. Suggestions given for improvement					Improvement observed.					Better performance possible with sincere effort							
Signature of QAC members with name			1. 15/5/23 (C. Keerthana Raja) 2. 15/5/23 (A. Mercy Vasan)					1. 15/5/23 (C. Keerthana Raja) 2. 15/5/23 (A. Mercy Vasan)					1. 8/6/23 (C. Keerthana Raja) 2. 8/6/23 (A. Mercy Vasan)							
Signature of HOD			Dr. C. JAYAPRAKASH S.A.A					Dr. C. JAYAPRAKASH S.A.A					Dr. C. Jayaprakash S.A.A							
QAC In-Charge																				
IQAC Co-ordinator																				
Principal																				

Saranathan College of Engineering
QAC - Audit Report
Academic Year : 2022-23

Year/ Sem/Sec	II / IV / A															Sem: ODD/ EVEN				
																Dept		MECHANICAL		
			Test I					Test II					Test III							
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
ME3491	MR. P. VIGNESHWAR	IA Test	61	59	02	46	21	61	58	03	30	46	61	60	01	36	39
		Make up Test	48	46	02	21	52	33	31	02	26	15	61	60	01	32	46
		Remarks	Vast syllabus combining two subjects, continuous inputs given					Assignments and continuous tests given					Study material, assignments given for continuous practice.				
ME3492	MR. S. VINOTH KUMAR	IA Test	61	60	01	26	56	61	58	03	30	46	61	60	01	32	46
		Make up Test	27	26	01	17	33	33	30	03	19	33	-	-	-	-	-
		Remarks	Motivated to improve performance					Assignments and tests given					Study material and important topics given for tests.				
ME3493	DR. M.R. ARVINTHA PADMANABHAN	IA Test	61	60	01	19	67	61	59	02	18	67	61	56	05	25	51
		Make up Test	20	18	02	08	50	20	18	02	16	10	-	-	-	-	-
		Remarks	-					-					Slight decrease in performance, Study material given				
Signature of QAC members with name			1. (C. KESAVA RAJA) 2. 15/5/23 (A. Kelly Vasan)					1. (C. KESAVA RAJA) 2. 15/5/23 (A. Kelly Vasan)					1. (C. KESAVA RAJA) 2. 16/5/23 (A. Kelly Vasan)				
Signature of HOD			Dr. C. JAYAPRAKASH					Dr. C. JAYAPRAKASH					Dr. C. Jayaprakash				
QAC In-Charge			S.A.					S.A.					S.A.				
IQAC Co-ordinator																	
Principal																	

Saranathan College of Engineering
QAC - Audit Report
Academic Year : 2022-23

Sem: ~~ODD~~/ EVEN

Year/ Sem/Sec	III / VI / A													Dept	MECHANICAL			
			Test I					Test II						Test III				
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %
ME8651	Mr.R. SURESH BABU	IA Test	77	75	02	24	66	77	74	03	24	65		77	73	04	44	38
		Make up Test	26	23	03	14	35	27	23	04	10	48		—	—	—	—	—
		Remarks	—					—						Inadequate preparation, Better practice required				
ME8691	Mr.S. KARTHI KEYAN	IA Test	77	75	02	16	77	77	74	03	30	57		77	74	03	34	52
		Make up Test	18	16	02	14	11	33	28	05	21	21		—	—	—	—	—
		Remarks	—					Important questions given & assignments given						Slight diff in performance, Continuous tests given				
ME8692	Dr. M. BASKAR	IA Test	77	73	04	30	56	77	69	08	52	22		77	77	—	64	17
		Make up Test	35	30	05	23	20	59	51	08	30	36		—	—	—	—	—
		Remarks	assignments and Coachery given					Poor performance, motivated to study well						Lack of serious preparation, advised to study sincerely				
Signature of QAC members with name			1. 15/5/23 (C. KESAVA RAJA) 2. A. Kelly 15/5/23 (A. Kelly Vasan)					1. 15/5/23 (C. KESAVA RAJA) 2. A. Kelly 15/5/23 (A. Kelly Vasan)						1. 8/6/23 C. KESAVA RAJA 2. A. Kelly 8/6/23 (A. Kelly Vasan)				
Signature of HOD			Dr. C. Jayaprakash					Dr. C. Jayaprakash						Dr. C. Jayaprakash				
QAC In-Charge																		
IQAC Co-ordinator																		
Principal																		

Saranathan College of Engineering

QAC - Audit Report

Academic Year : 2022-23

Sem: ODD/ EVEN

Dept: MECHANICAL

Year/ Sem/Sec	III / VI / A																	
			Test I					Test II					Test III					
Subject Code	Name of faculty		No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	No of Students registered	No of students Attended	No of Absentees	No of Failures	Pass %	
ME6693	Mr. M. SAIRAM PRASANTH	IA Test	77	74	03	36	49	77	75	02	31	57	77	72	05	57	19	
		Make up Test	49	30	10	19	20	33	27	06	21	18	~~75~~	-	-	-	-	
		Remarks	Vast Syllabus, so Continuous tests given					Study material given,					Inadequate performance, assignments given					
ME6694	MR. P. JOTHI PALAYESAM	IA Test	77	76	01	31	58	77	75	02	33	55	77	72	05	57	19	
		Make up Test	32	26	06	09	53	35	30	05	14	46	-	-	-	-	-	
		Remarks	Better understanding of concepts & circuits required.					Better performance possible with good efforts					Lack of serious preparation motivated to do better					
MG8591	MR. P.V. RAJESH	IA Test	77	71	06	20	66	77	74	04	21	68	77	72	05	27	58	
		Make up Test	26	18	08	10	31	25	17	08	13	16	~~08~~	-	-	-	-	
		Remarks	—					—					Lack of sincere preparation, material given					
Signature of QAC members with name			1. [signature] (C. KESAVA RAJA) 2. [signature] 7/9/23 (A. Henry Vasan)					1. [signature] (C. KESAVA RAJA) 2. [signature] (A. Henry Vasan)					1. [signature] (C. KESAVA RAJA) 2. [signature] 8/9/23 (A. Henry Vasan)					
Signature of HOD			[signature]					[signature]					[signature]					
QAC In-Charge			[signature]					[signature]					[signature]					
IQAC Co-ordinator																		
Principal																		

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 EVEN SEMESTER

NAME OF THE DEPARTMENT : MECHANICAL			DETAILS OF EXAMINATION IA TEST : I		Makeup Test : I	
Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks	
YEAR/SEM/SEC : II / IV / A						
		IA Test –I	Makeup Test –I			
1	CE3491	246027, 50	246010, 18	Y	Y	–
2	GE3451	246021, 59	246007, 30	Y	Y	–
3	ME3451	246024, 60	246044, 52	Y	Y	–
4	ME3491	246015, 246050	246004, 18	Y	Y	–
5	ME3492	246003, 15	246001, 55	Y	Y	–
6	ME3493	246005, 28	246009, 18	X	Y	–

VERIFIED BY

1 15/5/23

2 15/5/23

SIGNATURE WITH DATE OF THE QAC MEMBERS

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 EVEN SEMESTER

NAME OF THE DEPARTMENT : MECHANICAL			DETAILS OF EXAMINATION IA TEST : I Makeup Test : I			
Sl.No	Subject Code	List of Batch Nos Verified		Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : III / VI /A						
		IA Test – I	Makeup Test –I			
1	ME8651	236017, 57	236001, 55	Y	Y	—
2	ME8691	236008, 13	236001, 06	Y	Y	—
3	ME8692	236011, 25	236004, 13	Y	Y	—
4	ME8693	236001, 02	236065, 70	Y	Y	—
5	ME8694	236012, 32	236014, 31	Y	Y	—
6	MG8591	236046, 52	236079, 36	Y	Y	—

VERIFIED BY

1

2 15/5/23

SIGNATURE WITH DATE OF THE QAC MEMBERS

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 EVEN SEMESTER

NAME OF THE DEPARTMENT : MECHANICAL		DETAILS OF EXAMINATION IA TEST : II Makeup Test : II			
Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : II / IV / A					
		IA Test – II	Makeup Test – II		
1	CE 3491	246002, 19	246010, 18	Y	Y	—
2	GE 3451	246007, 36	246005, 51	Y	Y	—
3	ME 3451	246022, 50	246005, 34	Y	Y	—
4	ME3491	246018, 30	246012, 34	Y	Y	—
5	ME 3492	246033, 41	246003, 44	Y	Y	—
6	ME 3493	246004, 44	246002, 34	Y	Y	—

VERIFIED BY

1 15/5/23

2 15/5/23

SIGNATURE WITH DATE OF THE QAC MEMBERS

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 EVEN SEMESTER

NAME OF THE DEPARTMENT : MECHANICAL			DETAILS OF EXAMINATION IA TEST : II Makeup Test : II			
Sl.No	Subject Code	List of Batch Nos Verified		Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : III / VI / A						
		IA Test – II	Makeup Test – II			
1	ME8651	236006, 54	236018, 71	Y	Y	–
2	ME8691	236047, 60	236025, 34	Y	Y	–
3	ME8692	236006, 14	236004, 15	Y	Y	–
4	ME8693	236001, 49	236054, 59	Y	Y	–
5	ME8694	236009, 22	236006, 26	Y	Y	–
6	MG8591	236003, 26	236043, 47	Y	Y	–

VERIFIED BY

1 [signature] 15/5/23

2 [signature] 15/5/23

SIGNATURE WITH DATE OF THE QAC MEMBERS

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 EVEN SEMESTER

NAME OF THE DEPARTMENT : MECHANICAL			DETAILS OF EXAMINATION IA TEST : III		Makeup Test : –
Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : II / IV / A					
		IA Test – III	Makeup Test		
1	CE 3491	246011, 21	–	Y	Y	–
2	GE3451	246011, 23	–	Y	Y	–
3	ME3451	246001, 06	–	Y	Y	–
4	ME3491	246011, 13	–	Y	Y	–
5	ME 3492	246022, 23	–	Y	Y	–
6	ME 3493	246010, 24	–	Y	Y	–

VERIFIED BY

1 08/06/23

2 8/6/23

SIGNATURE WITH DATE OF THE QAC MEMBERS

SARANATHAN COLLEGE OF ENGINEERING
TIRUCHIRAPPALLI – 12
QAC – QUALITY ASSESSMENT CELL
ACADEMIC YEAR: 2022-2023 EVEN SEMESTER

NAME OF THE DEPARTMENT : MECHANICAL			DETAILS OF EXAMINATION IA TEST : III		Makeup Test : –
Sl.No	Subject Code	List of Batch Nos Verified	Subject Log book Verified [Y/N]	Assignments Verified [Y/N]	Remarks
YEAR/SEM/SEC : III / VI / A					
		IA Test – III	Makeup Test		
1	ME8651	236012, 57	–	Y	Y	–
2	ME8691	236002, 04	–	Y	Y	–
3	ME8692	236021, 56	–	Y	Y	–
4	ME8693	236033, 58	–	Y	Y	–
5	ME8694	236002, 13	–	Y	Y	–
6	MG8591	236012, 29	–	Y	Y	–

VERIFIED BY

1 08/6/23

2 8/6/23

SIGNATURE WITH DATE OF THE QAC MEMBERS

1 & 2 IA Test Circular

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF MANAGEMENT STUDIES

TIME TABLE FOR INTERNAL ASSESSMENT TEST – I

II MBA (2021 – 2023) / SEMESTER - III

S. No	DATE	SUBJECT CODE	SUBJECT
1.	19.09.22	BA4301	Strategic Management
2.	20.09.22	BA4302	International Business
3.	21.09.22	BA4008	Retail Marketing
4.	22.09.22	BA4010	Integrated Marketing Communication
5.	23.09.22	BA4011	Services Marketing
6.	24.09.22	BA4001	Security Analysis and Portfolio Management
7.	26.09.22	BA4002	Financial Markets
8.	27.09.22	BA4003	Banking and Financial Services
9.	28.09.22	BA4015/BA4026	Strategic Human Resource Management / Project Management
10.	29.09.22	BA4016/BA4021	Industrial relations and labour legislations / Supply Chain Management
11.	30.09.22	BA4019/BA4022	Reward and Compensation Management / Quality Management

HOD/MBA

DURATION: 1 Hrs 30 Min

FN: 9.30 AM to 11.00 AM

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SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF MANAGEMENT STUDIES

TIME TABLE FOR INTERNAL ASSESSMENT TEST – II

II MBA (2021 – 2023) / SEMESTER - III

S. No	DATE	SUBJECT CODE	SUBJECT
1.	04.11.22	BA4301	Strategic Management
2.	07.11.22	BA4302	International Business
3.	08.11.22	BA4008	Retail Marketing
4.	09.11.22	BA4010	Integrated Marketing Communication
5.	10.11.22	BA4011	Services Marketing
6.	11.11.22	BA4001	Security Analysis and Portfolio Management
7.	12.11.22	BA4002	Financial Markets
8.	14.11.22	BA4003	Banking and Financial Services
9.	15.11.22	BA4015/BA4026	Strategic Human Resource Management / Project Management
10.	16.11.22	BA4016/BA4021	Industrial relations and labour legislations / Supply Chain Management
11.	17.11.22	BA4019/BA4022	Reward and Compensation Management / Quality Management

HOD/MBA

DURATION: 1 Hrs 30 Min

FN: 9.30 AM to 11.00 AM

Scanned with CamScanner

SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF MANAGEMENT STUDIES

TIME TABLE FOR INTERNAL ASSESSMENT TEST – III

II MBA (2021 – 2023) / SEMESTER - III

S. No	DATE	SESSION	SUBJECT CODE	SUBJECT
1.	05.12.22	FN	BA4301	Strategic Management
2.	05.12.22	AN	BA4302	International Business
3.	06.12.22	FN	BA4008	Retail Marketing
4.	06.12.22	AN	BA4010	Integrated Marketing Communication
5.	07.12.22	FN	BA4011	Services Marketing
6.	07.12.22	AN	BA4001	Security Analysis and Portfolio Management
7.	08.12.22	FN	BA4002	Financial Markets
8.	08.12.22	AN	BA4003	Banking and Financial Services
9.	09.12.22	FN	BA4015/BA4026	Strategic Human Resource Management / Project Management
10.	09.12.22	AN	BA4016/BA4021	Industrial relations and labour legislations / Supply Chain Management
11.	12.12.22	FN	BA4019/BA4022	Reward and Compensation Management / Quality Management

HOD/MBA

DURATION: 1 Hrs 30 Min

FN : 9.30 AM to 11.00 AM

AN : 03.00 PM to 04.30 PM

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SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF MANAGEMENT STUDIES

TIME TABLE FOR INTERNAL ASSESSMENT TEST - I

I MBA (2022 – 2024) / SEMESTER - I

S. No	DATE	SUBJECT CODE	SUBJECT
01	08.11.22	BA4101	Statistics for Management
02	09.11.22	BA4102	Management Concepts and Organizational Behavior
03	10.11.22	BA4103	Managerial Economics
04	11.11.22	BA4104	Accounting for Decision Making
05	12.11.22	BA4105	Legal Aspects of Business
06	14.11.22	BA4106	Information Management
07	15.11.22	BA4032	Entrepreneurship Development

HOD/MBA

DURATION: 1 Hrs & 30 Min

FN: 9.30 AM to 11.00 AM

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SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF MANAGEMENT STUDIES

TIME TABLE FOR INTERNAL ASSESSMENT TEST - II

I MBA (2022 – 2024) / SEMESTER - I

S. No	DATE	SUBJECT CODE	SUBJECT
01	15.12.22	BA4101	Statistics for Management
02	16.12.22	BA4102	Management Concepts and Organizational Behavior
03	19.12.22	BA4103	Managerial Economics
04	20.12.22	BA4104	Accounting for Decision Making
05	21.12.22	BA4105	Legal Aspects of Business
06	22.12.22	BA4106	Information Management
07	23.12.22	BA4032	Entrepreneurship Development

HOD/MBA

DURATION: 1 Hrs & 30 Min

FN: 9.30 AM to 11.00 AM

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SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF MANAGEMENT STUDIES

TIME TABLE FOR MODEL EXAMINATION

I MBA (2022 – 2024) / SEMESTER - I

S. No	DATE	SUBJECT CODE	SUBJECT
01	12.01.2023	BA4101	Statistics for Management
02	13.01.2023	BA4102	Management Concepts and Organizational Behavior
03	18.01.2023	BA4103	Managerial Economics
04	19.01.2023	BA4104	Accounting for Decision Making
05	20.01.2023	BA4105	Legal Aspects of Business
06	24.01.2023	BA4106	Information Management
07	25.01.2023	BA4032	Entrepreneurship Development

HOD/MBA

DURATION: 3 Hrs

FN: 9.30 AM to 12.30 PM

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SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF MANAGEMENT STUDIES

TIME TABLE FOR INTERNAL ASSESSMENT TEST - I

I MBA (2022 – 2024) / SEMESTER - II

S. No	DATE	SUBJECT CODE	SUBJECT
01	17.04.23	BA4201	Quantitative Techniques for Decision Making
02	18.04.23	BA4202	Financial Management
03	19.04.23	BA4203	Human Resource Management
04	20.04.23	BA4204	Operations Management
05	21.04.23	BA4205	Business Research Methods
06	24.04.23	BA4206	Business Analytics
07	25.04.23	BA4207	Marketing Management

HOD/MBA

DURATION: 01 Hr & 30 Mts

FN: 9.30 AM to 11.00 AM

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SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF MANAGEMENT STUDIES

TIME TABLE FOR INTERNAL ASSESSMENT TEST - II

I MBA (2022 – 2024) / SEMESTER - II

S. No	DATE	SUBJECT CODE	SUBJECT
01	24.05.2023	BA4201	Quantitative Techniques for Decision Making
02	25.05.2023	BA4202	Financial Management
03	26.05.2023	BA4203	Human Resource Management
04	27.05.2023	BA4204	Operations Management
05	29.05.2023	BA4205	Business Research Methods
06	30.05.2023	BA4206	Business Analytics
07	31.05.2023	BA4207	Marketing Management

HOD/MBA

DURATION: 01 Hr & 30 Mts

FN: 9.30 AM to 11.00 AM

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SARANATHAN COLLEGE OF ENGINEERING

DEPARTMENT OF MANAGEMENT STUDIES

TIME TABLE FOR MODEL EXAMINATION

I MBA (2022 – 2024) / SEMESTER - II

S. No	DATE	SUBJECT CODE	SUBJECT
01	26.06.2023	BA4201	Quantitative Techniques for Decision Making
02	27.06.2023	BA4202	Financial Management
03	28.06.2023	BA4203	Human Resource Management
04	30.06.2023	BA4204	Operations Management
05	01.07.2023	BA4205	Business Research Methods
06	03.07.2023	BA4206	Business Analytics
07	04.07.2023	BA4207	Marketing Management

HOD/MBA

DURATION: 03 Hrs

FN: 1.30 PM to 04.30 PM

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Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/Session	30/09/22 / FN	Marks	50
Course code	BA4022	Course Title	Quality Management			
Batch No		Duration	90 mins	Academic Year	2021 - 2022	
Year	M.B.A II	Semester	III	Department	M.B.A	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	What do you mean by Juran's trilogy?	C404.1	R
2	Define Quality Policy Statement?	C404.1	R
3	List the dimensions of quality	C404.1	U
4	What are the types of customer?	C404.1	U
5	Name some benefits of TQM.	C404.1	R
6	Define cost of quality.	C404.1	U
7	List our various Quality Guru's.	C404.2	U
8	Draw Deming Wheel.	C404.2	R
9	Concepts of Quality circle.	C404.2	U
10	Japanese 5S principles	C404.2	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	Describe the various dimensions of quality?	C404.1	R
or			
12	Illustrate the various steps involved in Quality Cost?	C404.1	U
13	Discuss the contribution of crosby for quality for the improvement of quality management?	C404.2	U
or			
14	List out various step involved in the customer satisfaction.	C404.2	U
	Part – C **(Answer all the questions 1 x 10 = 10marks)**		
15	Discuss Deming's 14 principles on quality with suitable examples.	C404.2	U
16	If want implement TQM in a new service sector what are all the barriers you are to face it. Example Education Institutes.	C404.2	R

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	27.09.2020/FN	Marks	50
Course code	BA4003	Course Title	BANKING AND FINANCIAL SERVICES			
Batch No.		Duration	90 mins	Academic Year		2022-23
Year	II MBA	Semester/ Section	III/A	Department		MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define banking.	1	U&C
2	What is Cash Reserve Ratio?	1	U&C
3	What do you mean by Statutory Liquidity Ratio?	1	U&C
4	What is Negotiable Instrument?	1	U&C
5	Define Repo rate and Reverse Repo rate.	1	U&C
6	List the tools of monetary policy.	1	U&C
7	What are the acts that govern the Indian banking system?	1	U&C
8	What is Cash Credit?	1	U&C
9	What are cooperative banks?	1	U&C
10	Define a cheque.	1	U&C

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Discuss the functions of commercial banks.	1	U&C
	(Or)		
12	Explain the role of commercial banks in the economic development of our country.	1	U&C
13	What are the functions of Reserve Bank of India?	1	U&C
	(Or)		
14	Explain the tools of Monetary Policy.	1	U&C

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Draw a proforma Balance Sheet of a commercial bank and explain its contents.	6	A

Faculty : Prof. B.S.Chandramouli

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	26.09.22	Marks	50
Course code	BA 4002	Course Title	FINANCIAL MARKETS			
Batch No.		Duration	90 mins	Academic Year	2022-23	
Year	II MBA	Semester	III	Department	MBA	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is Financial System?	1	U&C
2	Define Financial Market.	1	U&C
3	State the functions of financial Markets.	1	U&C
4	Define the term OTCEI.	1	U&C
5	What is Derivatives Markets?	1	U&C
6	What are the functions of Capital Market?	1	U&C
7	State the Role of RBI in Financial market.	1	U&C
8	What is CCIL?	1	U&C
9	State the classifications of Financial Markets.	2	U&C
10	What are the other types of financial markets?	2	U&C

Part – B

(Answer all the questions 2 x 10 = 20 marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Differentiate between Capital Market and Money market.	1	U&C
	OR		
12	State the functions and importance of Capital Market.	1	U&C
13	Explain the major Participants and Players in Financial Market.	2	U&C
	OR		
14	What are the instruments used in Financial Markets?	2	U&C

Part – C

(Answer all the questions 1 x 10 = 10 marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	Briefly explain the structure of Financial Markets.	**6**	**U**

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	22.09.22	Marks	50
Course code	BA4010	Course Title	Integrated Marketing Communication			
Batch No.		Duration	90 mins		Academic Year	2022-23
Year	II MBA	Semester/ Section	III/A		Department	MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Integrated Marketing Communication.	C1	U&A
2	Write any two objectives of IMC?	C1	U&A
3	Explain Advertisement Campaigns?	C1	U&A
4	What is sales promotion?	C1	U&A
5	Explain reach and frequency in advertisement?	C1	U&A
6	Explain Public Relation.	C1	U&A
7	What is Publicity?	C1	U&A
8	Explain Market Segmentation?	C2	U&A
9	Explain various forms of sales promotion?	C2	U&A
10	Define Advertisement.	C2	U&A

Part – B

(Answer all the questions 2 x 10 = 20 marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Explain the various forms of setting the Advertisement objectives	C1	U&A
12	State the need and importance of IMC?	C1	U&A
13	Explain the reasons for growth and importance of Integrated Marketing Communications. How does it differ from traditional advertising and promotion?	C2	U&A
14	Discuss the role of advertising in modern business world	C2	U&A

Part – C

(Answer all the questions 1 x 10 = 10 marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	Develop a media strategy for advertising a photo copier machine	**C6**	**A**

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	20/09/2022(FN)	Marks	50
Course code	BA4302	Course Title	International Business			
Batch No.		Duration	90 mins	Academic Year		2022-23
Year	II MBA	Semester/ Section	III/A	Department		MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	What is globalization?	1	U
2	State some reasons for a firm to go global.	1	R
3	What is country attractiveness?	1	U
4	What do you mean by economic environment of international business?	1	U
5	What are the political risks in international business?	1	U
6	What are the effects of globalization?	2	U
7	Is China conducive for doing business? Elucidate.	2	R
8	What is multi-domestic strategy? Give examples.	2	R
9	What do you mean by global strategy?	2	R
10	What is transnational strategy?	2	U

Part – B

(Answer all the questions 2 x 10 = 20 marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	What are the pros and cons of globalization?	1	R
12	Discuss strategic options for global business.	1	R
13	What are the drivers of globalization?	1	R
14	Discuss the decisions to be taken by a company before going global.	2	U

Part – C

(Answer all the questions 1 x 10 = 10 marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	Doing business ranking is based on quantitative indicators on regulation for starting a business, dealing with construction permits, getting electricity, registering property, getting credit, protecting minority investors, paying taxes, trading across borders, enforcing contracts and resolving insolvency. How do you assess India in terms of the specified criteria and do you think India has done enough to attract foreign businesses?	6	AZ

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	29.09.22 (FN)	Marks	50
Course code	BA4016	Course Title	Industrial relations and labour legislations			
Batch No.		Duration	90 mins		Academic Year	2022-23
Year	II MBA	Semester/ Section	III/A		Department	MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Industrial relations.	C1	U&A
2	Write about the various features of Industrial Relations?	C1	U&A
3	List some importance of IR.	C1	U&A
4	Define Trade Union.	C1	U&A
5	What are the various functions of Trade Union?	C1	U&A
6	What is meant by Code of Conduct?	C1	U&A
7	Why do people join in Union?	C1	U&A
8	What are the objectives of IR?	C1	U&A
9	What are the objectives of labor welfare?	C1	U&A
10	Write some difference between industrial relation and human relations	C1	U&A

Part – B

(Answer all the questions 2 x 10 = 20 marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Explain in detail about Labour Welfare Measures.	C1	U&A
12	Explain Industrial Disputes Act of 1947.	C1	U&A
13	Explain the functions of Trade Unions in India	C1	U&A
14	Differentiate Labour union and trade union	C1	U&A

Part – C

(Answer all the questions 1 x 10 = 10 marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	PepsiCo India was facing a major attrition problem with senior executives. It was believed that the executives were exiting the company as they were unable to reconcile with its 'Power of One' (PO1) strategy. The strategy was about merging the beverages wing with the foods division. It was aimed at leveraging the synergetic benefits of selling food and beverages together since consumers tended to buy beverages and snacks together. Five senior executives of PepsiCo India resigned from the company in 2015, joining a stream of colleagues who had left the company following a change in corporate strategy. Even though PepsiCo India had leadership development initiatives in place and had created a talent pool, industry observers felt that the company would have to resolve the attrition issue at the top level with effective people strategies as well as change management initiatives Issues: 1) Understand the issues and challenges involved in dealing with the employee attrition at PepsiCo 2) Analyze how PepsiCo can deal with the resistance of employees toward change in its corporate strategy	C6	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/Session	28/09/22 / FN	Marks	50
Course code	BA4026	Course Title	Project Management			
Batch No		Duration	90 mins	Academic Year	2022 - 2023	
Year	II	Semester/Section	III / A	Department	MBA	

Part – A

(Answer all the questions 10 x 2 = 20marks)

Q. No.	Questions	CO	Skills
1	Define Project Management	1	R
2	Explain Project Manager Selection	1	R
3	What are the goals of Project Management	1	U
4	Explain Project Management Life Cycle	1	U
5	What are the phases of Project Life Cycle?	1	R
6	What are the responsibilities of Project Manager?	1	U
7	What are the steps involved in planning process?	2	U
8	What the various types of Plans?	2	R
9	What is Work Breakdown Structure	2	U
10	What is a Multidisciplinary Team?	2	U

Part – B

(Answer all the questions 2 x 10 = 20marks)

Q. No.	Questions	CO	Skills
11	What is Project Management? Explain the role of Project Management?	1	R
	or		
12	Explain Project Management Life Cycle and the various phases in a Project Life Cycle.	1	U
13	Describe Work Breakdown structure with suitable examples	2	U
	or		
14	Describe budget uncertainty and Risk Management	2	U
	Part – C **(Answer all the questions 1 x 10 = 10marks)**		
15	List out the project manager responsibilities to start a new metal making industries in Tiruchirappalli zone.	1	U

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	21.09.22(FN)	Marks	50
Course code	BA4008	Course Title	RETAIL MARKETING			
Batch No.		Duration	90 mins	Academic Year		2022-23
Year	II MBA	Semester/ Section	III/A	Department		MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Retail Management	C1	U&A
2	Write down the functions of retailer	C1	U&A
3	Write any two challenges faced by retailer in India?	C1	U&A
4	What are the major factors which influence Retail Management?	C1	U&A
5	What is meant by global retailing?	C1	U&A
6	Define the wheel of Retailing?	C1	U&A
7	What is FDI?	C1	U&A
8	What is unorganized Retail	C2	U&A
9	What is Hatts and Mandies	C2	U&A
10	What is internationalization of Retailing?	C2	U&A

Part – B

(Answer all the questions 2 x 10 = 20 marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Explain in detail about the evolution of retail in India	C1	U&A
12	Explain in detail about the challenges and opportunities faced by Retailers in India?	C1	U&A
13	What are the factors to be considered in global retailing? Explain the strategic planning process in global retailing?	C1	U&A
14	Explain in detail about the various characteristics of organized retail format?	C2	U&A

Part – C

(Answer all the questions 1 x 10 = 10 marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	This case study's primary objective is to analyse all the facts responsible for the downfall of an Indian fledging retail chain, Subhiksha. Having been started by the alumnus of the prestigious B-school, Indian Institute of Management Ahmedabad (IIM-A), the long-term success, survival and profitability of Subhiksha was expected. In the light of India's promising retail potential, huge investments were made by several big corporate houses of India, jacking up the prices of all the related parts of the industry. Being a pioneer in the organised retailing in India, Subhiksha became India's largest retail chain with 1,665 stores across the country. In the process it succeeded in building a sound brand name over years with its no-frill, discount format. With Indian organised retail industry blooming under the economic liberalisations and attention from the global players, Subhiksha was expected to grow bigger, but as global recession set in, credit markets froze and Subhiksha stumbled as its capital structure could not support the requirement. Lack of liquidity and over expansion troubled Subhiksha as it failed to pay rent to the landlords and salary to its employees. Operations came to a standstill. However, Ramaswamy Subramanian, the managing director of Subhiksha expressed confidence that the chain will emerge from the crisis. Questions: 1. What was the major problem faced by Subhiksha? 2. If you are in the place of Ramaswamy Subramanian what steps would you take to recover Subhiksha from this crisis?	C6	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	30.09.22 (FN)	Marks	50
Course code	BA 4019	Course Title	REWARD AND COMPENSATION MANAGEMENT			
Batch No.		Duration	90 mins	Academic Year		2022-23
Year	II MBA	Semester/ Section	III/A	Department		MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define compensation.	C1	U&A
2	What are the characteristics of compensation?	C1	U&A
3	Define reward.	C1	U&A
4	What are the objectives of compensation?	C1	U&A
5	State the difference between reward and compensation.	C1	U&A
6	What are the types of compensation?	C1	U&A
7	What are the advantages of compensation?	C1	U&A
8	State the difference between wage and salary.	C1	U&A
9	What is Labour market?	C2	U&A
10	Define unemployment.	C2	U&A

Part – B

(Answer all the questions 2 x 10 = 20 marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Explain the Principles of Compensation Formulation.	C1	U&A
	or		
12	Explain the various theories of wages.	C1	U&A
13	Explain the recent trends in compensation and rewards in India.	C2	U&A
	or		
14	Briefly explain about the labour markets in Macroeconomics.	C2	U&A

Part – C

(Answer all the questions 1 x 10 = 10 marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	What is unemployment? Explain various factors influencing unemployment. What are the steps to be taken to reduce unemployment rate?	**C6**	**A**

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	23.09.2020/FN	Marks	50
Course code	BA4001	Course Title	SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT			
Batch No.		Duration	90 mins	Academic Year		2022-23
Year	II MBA	Semester/ Section	III/A	Department		MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define investment.	1	U&C
2	Define liquidity.	1	U&C
3	What are mutual funds?	1	U&C
4	Define return and risk.	1	U&C
5	What are equity shares?	1	U&C
6	What do you mean by portfolio?	1	U&C
7	What is speculation?	1	U&C
8	What are bonds?	1	U&C
9	What is YTM?	1	U&C
10	What do you mean by Fundamental Analysis?	2	U&C

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Distinguish between speculation and investment.	1	U&C
	(Or)		
12	What are the various investment attributes? Explain them.	1	U&C
13	Explain briefly the various investment avenues.	1	U&C
	(Or)		
14	A Rs. 100 par value bond bearing a coupon rate of 11% matures after 5 years. The expected yield to maturity is 15%. The present market price is Rs. 82. Can the investor buy the bond?	1	A

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Securities X and Y have the following characteristics: Security X: Return 30%, 20%, 10%, 5%, -10%; Probability 0.10, 0.20, 0.40, 0.20, 0.10 Security Y: Return -20%, 10%, 20%, 30%, 40%; Probability 0.05, 0.25, 0.30, 0.30, 0.10 You are required to calculate the expected return and standard deviation of return for each security. Which security would you select for investment and why?	6	A

Faculty : Prof. B.S.Chandramouli

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	23.09.22 (FN)	Marks	50
Course code	BA 4011	Course Title	SERVICES MARKETING			
Batch No.		Duration	90 mins	Academic Year		2022-23
Year	II MBA	Semester/ Section	III/A	Department		MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Services.	C1	U&A
2	Define Services marketing.	C1	U&A
3	State any 2 difference between goods and services.	C1	U&A
4	What are the unique characteristics of service?	C1	U&A
5	What do you understand by service economy?	C1	U&A
6	List down the challenges faced by service industry.	C1	U&A
7	Briefly explain the concept of perishability.	C1	U&A
8	What are the components of service marketing mix?	C2	U&A
9	What is Market segmentation in service?	C2	U&A
10	What is market potential?	C2	U&A

Part – B

(Answer all the questions 2 x 10 = 20 marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Explain in detail about the evolution and growth of service marketing	C1	U&A
	Or		
12	Explain in detail about the characteristics of service?	C1	U&A
13	List out and explain in detail about the various classifications of services?	C2	U&A
	Or		
14	Explain in detail about the service marketing Mix?	C2	U&A

Part – C

(Answer all the questions 1 x 10 = 10 marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	In 2004, ICICI Bank was the second largest private commercial Bank in India with about 470 branches and 1800 ATMs. It provided a multitude of banking and financial services, namely banking, credit cards, loans, investments, NRI services and so on. In the same period, its credit card division was ranked second, having about 2.4 million customers. The bank offered various categories of credit cards such as Premium (Solid Gold, Amex Gold), Classic (Sterling Silver, American Express Green, Mini, Easy Deposit-Gold and Silver). They also introduced value for money cards, affinity cards and co-branded cards as part of their customer relationship strategy. **Questions for Discussion** 1. By concentrating the numbers game, ICICI lost out on quality of customer service. Highlight the various measures taken by the bank to retain its customers. 2. Increased usage leads to more spending on credit cards. Do you think ICICI bank was able to leverage this factor and build customer relationship and loyalties?	C6	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	28.09.22 (FN)	Marks	50
Course code	Ba 4015	Course Title	STRATEGIC HUMAN RESOURCE MANEGEMENT			
Batch No.		Duration	90 mins	Academic Year	2022-23	
Year	II MBA	Semester	III	Department	MBA	

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define SHRM.	1	U&C
2	State the Role of SHRM.	1	U&C
3	What are HR metrics?	1	U&C
4	List the importance of Corporate strategies.	1	U&C
5	What is Design of work system?	1	U&C
6	Explain outsourcing and offshoring.	1	U&C
7	Discuss strategic work design.	1	U&C
8	State the components of Strategic Capability.	1	U&C
9	Define the term Benchmarking.	2	U&C
10	Explain strategic HRM vs Traditional HRM.	2	U&C

Part – B

(Answer all the questions 2 x 10 = 20 marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Discuss the barriers to SHRM. Also give techniques to overcome it.	1	U&C
	OR		
12	Explain various SHRM Models.	1	U&C
13	Elaborate the investment perspective of Human Resource Management.	2	U&C
	OR		
14	Define strategic capability. What are the components of strategic capability? Explain the recent trends in strategic capability building for HR.	2	U&C

Part – C

(Answer all the questions 1 x 10 = 10 marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	Performance-based Incentive Systems of Modern Bank of India The CEO of a national-level private sector bank, Modern Bank of India, which is growing very fast, always nurtures the view that HR people themselves are poor in managing behavior of people in his organization. He feels that over the years, his HR is instrumental in demotivating people, as they failed to retain the result-oriented employees, causing huge manpower-replacement cost to the organization. Besides, employees feel that the performance management system is too complicated, and focuses only on achievement of quantitative targets, rather than on the other positive aspects of employees, who largely feel that they are instrumental in taking their organization to a new height, with focus of customer satisfaction and developing organizational loyalty. Business target achievement, fixing a stretch goal and forcing employees to accept the KRAs, without listening to them, may have	**6**	**U**

helped in achieving the short-term goals, but such achievements far outweighed the losses when good performers left the organization in less than two years. As per policy, immediately after recruitment the organization is to train the new recruits through a month-long induction programme, and allow them to understand the jobs for the next two months, without setting for them any specific targets for achievement. All these add to the costs for the company.

The CEO laments that every employee replacement costs them directly two times the annual salary paid to an employee, and indirectly it costs even more, as value addition differs between existing individual employees and replacement employees. Average value-addition potentiality of marketing executives (at current discounted values), assessed by the organization, using the learning curve theory, taking the employment span to be of 10 years, five years before indicated a figure of Rs. 25 lakhs. Five years down the line, the figure is Rs. 15 lakhs. The CEO justifiably argues that what HR is doing is to recruit on a piece-meal basis, rather than considering the long-term effect. In one of the corporate level meetings, with all functional heads present, the CEO was blunt in accusing the HR department, telling 'lets accept that our HR department is an utter failure. Our HR department still considers employees just another input into the process. There is no effort to make our employees a partner in the organization.'

The CEO then asked the HR people to put up a detailed performance-driven compensation plan, which will help the organization to optimize the compensation cost and at the same time will reduce the attrition rate, thereby increasing the motivation level of employees. The HR manager accordingly prepared the plan which is as follows: Variable pay component in executive compensation in India has now been increased to almost 50 per cent from 20 to 30 per cent, only a few years back. Without linking it to company performance alone, a three-tiered structure has now emerged, that is, the variable pay is linked to company performance, team performance and individual performance. Our company's annual turnover today is Rs. 1000 crore. We have 900 marketing executives with the current rate of staff turnover at 15 per cent. The number of marketing executives with a tenure of more than five years with the company is 115.

The number of marketing executives over 40 years of age is only 60. The benchmarked annual salary data in comparable private sector banks in the country for marketing executives is Rs. 6 lakhs (considering the cost to the company), while our organization today pays Rs. 6.25 lakhs. Our organization believes in pay equity and follows broad banding while designing base pay. The calculated wage cost to annual sales is 20 per cent.

An employee-motivation survey carried out by the HR department of the organization indicated that 30 per cent of the marketing executives feel that they are underpaid, 50 per cent feel that they are getting the competitive benchmarked salary, while the rest 20 per cent feel that they are getting more than the market rate. In response to a questionnaire item, requiring executives to point out what should be theirperceived percentage of salary rise, which they feel will motivate them, the replies suggested that an incentive plan needs to be designed, which corroborates with the Scanlon

	Plan explained below. This plan relates compensation cost ratio to the total sales value to measure effectiveness of performance. As per this plan, an incentive bonus will be payable to marketing executives, based on the percentage reduction in the marketing executive to sales ratio, comparing the base period and assessment period. The HR manager believes that following this plan will not only ensure optimization of compensation cost of marketing executives (whose variable component of compensation is now linked with individual performance achievement) but also foster teamwork and develop a culture of togetherness, which will have enduring effect on marketing executives' motivation and retention **Question for Discussion** Imagine you are the CEO of the bank. Critically review the proposal of the HR manager and comment whether this proposed incentive plan would really ensure motivation and increased retention of marketing executives of the company. Give justifications in support of your answer.		

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	19.09.22(FN)	Marks	50
Course code	BA4301	Course Title	STRATEGIC MANAGEMENT			
Batch No.		Duration	90 mins	Academic Year		2022-23
Year	II MBA	Semester/ Section	III/A	Department		MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Strategic Management	C1	U&A
2	Classify the different types of strategies.	C1	U&A
3	What are goals and objectives?	C1	U&A
4	Define Stakeholder	C1	U&A
5	Discuss the concept of strategic intent	C1	U&A
6	Differentiate Mission and Purpose	C1	U&A
7	Define Corporate Social Responsibilities.	C1	U&A
8	What is industrial Analysis	C2	U&A
9	What is Strategic Group?	C2	U&A
10	Define Strategic Group.	C2	U&A

Part – B

(Answer all the questions 2 x 10 = 20 marks) Maximum 2 splits/Question

Q. No.	Questions	CO	Skills
11	Define Strategy formulation. Discuss the steps involved in the Strategy formulation Process	C1	U&A
12	Explain in detail about corporate governance	C1	U&A
13	Discuss in detail about the various Environments prevailing in Business	C2	U&A
14	Explain the different stages in Industry Life cycle	C2	U&A

Part – C

(Answer all the questions 1 x 10 = 10 marks) Case study or Analytical type

Q. No.	Questions	CO	Skills
15	Do a Porter's five forces analysis for an industry of your choice	C6	A

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

Saranathan College of Engineering

Tiruchirapalli

Internal Assessment Test - I			Date/ Session	29/09/2022(FN)	Marks	50
Course code	BA4021	Course Title	Supply Chain Management			
Batch No.		Duration	90 mins	Academic Year		2022-23
Year	II MBA	Semester/ Section	III/A	Department		MBA

Part – A

(Answer all the questions 10 x 2 = 20 marks)

Q. No.	Questions	CO	Skills
1	Define Supply Chain with suitable example.	1	U
2	What are the fundamentals of supply chain management?	1	R
3	What is supply chain strategy?	1	U
4	Who are Third party vendors? Give example	1	U
5	Define Demand Forecasting.	1	U
6	What are the objectives of supply chain management?	1	U
7	Make Vs Buy. Explain with suitable illustration.	2	R
8	What is outsourcing?	2	R
9	What is Worldwide sourcing?	2	R
10	What is supply chain profitability?	2	U

Part – B

(Answer all the questions 2 x 10 = 20 marks)

Q. No.	Questions	CO	Skills
11	Explain major drivers / enablers of supply chain performance.	1	A
12	Explain the decision phases in supply chain management.	1	R
13	Write the supply chain performance measures.	1	R
14	Write the evolution of supply chain in detail	1	U

Part – C

(Answer all the questions 1 x 10 = 10 marks)

Q. No.	Questions	CO	Skills
15	Choose a successful Indian company of your choice which has got a phenomenal reach in rural markets and explain its supply chain management and outbound logistics operation in a detailed manner.	**6**	**AZ**

Bloom's Skills: Remember (R), Understand (U), Apply (A), Analyze (AZ), Evaluate (E) and Create (C). Skill need to be mentioned against each question

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	K. Anu Priya			Year / Semester / Section	I/1/A
Batch No.	257504	Date / Session	16.11.22/FN	Department	MBA
Course Code	BA 4104	Course Title	ACCOUNTING FOR DECISION MAKING		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used : 17
Name and Signature of the Invigilator with date					

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✔	2	11	✔				8
2	✔	2	12					
3	✔	2	13	✔				7
4	✔	2	14					
5	✔	2	15	✔				10
6	✔	2	16					
7	✔	1					Total	25
8	✔	2						
9	✔	2						
10	✔	2						
Total		19	Grand Total		44/50			Name and Signature of the Examiner with date

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted							
Marks Obtained							

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	R. Divya Sri			Year / Semester / Section	I
Batch No.	257513	Date / Session	9/5/23	Department	MBA
Course Code	BA4202	Course Title	Financial Management		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date					

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✔	Marks	Q. NO.	✔	(a) Marks	✔	(b) Marks	
1	✓	2	11					
2	✓	2	12	✓	5	✓	3	8
3	✓	1	13					
4		0	14	✓	10			10
5	✓	1	15	✓	9			9
6	✓	2	16					
7	✓	2					Total	27
8	✓	1						
9	✓	2						
10	✓	0						
Total		13						

40/50

Grand Total

Name and Signature of the Examiner with date

10/5/23

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted							
Marks Obtained							

QAC Audit - Remarks

Name and Signature of the QAC member

SARANATHAN COLLEGE OF ENGINEERING

Tiruchirapalli - 620 012

ANSWER BOOK

Name	N. Monica Lobo			Year / Semester / Section	II yrd / 3 rd sem
Batch No.	247533	Date / Session	20/09/2022 / FN	Department	MBA
Course Code	BA4302	Course Title	International Business		
Internal Assessment Test	I ☑	II ☐	III ☐	Model ☐	No. of pages used :
Name and Signature of the Invigilator with date					

INSTRUCTIONS TO THE CANDIDATES :

1. Answers for Part-A must be written in pages 2-6. Answers for Part-B must be written from page 7 onwards.
2. Write your Batch Number in the Question Paper.
3. Use both sides of the paper for answering questions.
4. The answer book contains sufficient pages and no additional sheets will be given.
5. Possesion of any incriminating material and malpractice of any nature shall be punishable as per rules.
6. Answer must be legibly written in pen (blue or black colour)

Instruction to the student : Put tick mark to the question attended in the column against question.

Part A			Part B / C					Total Marks
Q. NO.	✓	Marks	Q. NO.	✓	(a) Marks	✓	(b) Marks	
1	✓	2	11	✓				8
2	✓	2	12					
3	✓	2	13					
4	✓	2	14	✓				8
5	✓	2	15	✓				8
6	✓	2	16					
7	✓	2					Total	24
8	✓	2						
9	✓	2						
10	✓	2						
Total		20	Grand Total	44/50			Name and Signature of the Examiner with date	22/09/22

To be filled by the examiner

Course Outcomes	1	2	3	4	5	6	Total
Marks allotted							
Marks Obtained							

QAC Audit - Remarks

Name and Signature of the QAC member

select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '1' and b.sec = 'A' and b.semperiod = '22-23ODD' and b.branch = 'MBA' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:MBA Semester:1 Section:A
Semester Period:22-23ODD

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	BA4032-chandramouli-mba					BA4101-lakshmidevi-mat					BA4102-karthikeyan-mba					BA4103-navaneethakrishnan-mba					BA4104-mahalakshmi-mba					BA4105-syed-mba					BA4106-arunprasad-mba				
							A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3
1	813822631001	257501	ABINAYA. R	GQ	2	*	76		74		51	56		58		16	52		64		12	56		82		A	60		64		A	88		84		9	72		86		45
2	813822631002	257502	AISHWARYA. C	MQ	NIL	8.0833	90		34	90	86	70		72		66	62		68		71	86		92		76	84		94		75	88		84		77	74		84		60
3	813822631003	257503	ANANDH. V	GQ	4	*	62		58		50	66		68		58	40	50	34	54	63	72		82		54	54		72		49	58		62		72	76		84		50
4	813822631004	257505	ANUBAMA. M	MQ	NIL	8.5833	90		90		80	90		82		54	80		86		80	92		92		79	77		94		66	88		88		88	90		94		84
5	813822631005	257504	ANU PRIYA. K	GQ	NIL	8.2083	86		88		88	90		84		68	66		76		76	88		92		73	88		100		80	88		88		88	82		90		82
6	813822631006	257506	ARJUN H.D	MQ	6	*	18	32	24	20	10	10	4	0	4	1	36	16	20	24	13	42	66	32	24	29	29	33	32	48	22	34	42	36	40	36	30	32	34	0	15
7	813822631007	257507	BELCIYA MARY. P	GQ	NIL	7.625	66		60		63	68		44	92	61	62		38	74	67	64		84		59	57		74		63	82		76		78	76		82		60
8	813822631008	257508	BHAGAVATHY. J	GQ	NIL	8.2083	62		74		60	92		50		43	58		54		65	60		86		60	70		50		40	88		76		75	78		94		55
9	813822631009	257509	CHANAKYA VYAS. G N	MQ	NIL	7.5	64		52		50	36	12	30	86	18	34	44	44	72	54	46	74	44	50	53	54		42	40	36	60		52		52	50		54		37
10	813822631010	257510	DHARANI. S	GQ	NIL	8.3333	90		84		93	88		72		74	60		70		78	92		86		78	70		86		64	88		84		84	94		94		84
11	813822631011	257511	DHARSHINI PRIYA. R	MQ	4	*	32	52	60		20	26	42	36	58	29	38	44	30	56	18	38	50	56		26	32	40	36	46	36	68		62		19	28	A	58		32
12	813822631012	257512	DHIVYA DHARSHINI. A	MQ	4	*	28	56	28	A	29	6	56	12	64	33	36	28	26	46	10	18	54	44	40	12	30	38	26	20	35	A	52	36	A	5	26	46	28	0	34
13	813822631013	257513	DIVYA SRI. R	GQ	1	*	54		52		53	32	60	22	72	31	54		50		24	32	64	66		53	61		52		33	50		66		30	46	62	80		30
14	813822631014	257514	GAYATHRI. R	GQ	1	*	56		84		43	74		72		44	62		76		44	68		84		59	64		52		47	88		88		38	78		90		48
15	813822631015	257515	KEREN DIVIYA. R	GQ	NIL	7.9583	82		86		79	74		94		50	60		80		66	80		92		72	66		66		70	82		84		A	82		90		76
16	813822631016	257516	KRISHNA KUMAR. S T	MQ	6	*	20	50	22	36	27	4	6	4	30	9	20	26	26	A	15	30	54	36	30	13	27	40	6	26	17	38	54	A	42	24	24	36	24	22	24
17	813822631017	257517	KRUTHI. M	GQ	NIL	8	56		80		A	68		78		87	56		80		78	82		88		77	58		60		69	88		86		70	68		82		80
18	813822631018	257518	MADHAN RAJ. A	MQ	2	*	26	58	52		22	16	68	16	78	25	24	54	56		22	34	66	56		24	43	52	58		23	12	64	68		40	32	50	56		44
19	813822631019	257519	MANICKAVASAGAM. M	GQ	3	*	44	50	60		43	74		20	62	4	42	52	54		19	64		72		23	43	55	54		20	66		52		25	40	36	58		40
20	813822631020	257520	NANDHINI. S S	MQ	1	*	14	34	A	20	17	10	46	16	38	16	34	A	36	50	16	50		38	62	8	31	54	36	40	26	38	60	A	38	13	32	64	26	24	22
21	813822631021	257521	NAREN. R S	GQ	2	*	16	54	56		35	10	54	0	38	10	14	46	58		11	24	62	50		6	27	45	44	60	23	22	54	68		38	20	44	50		32
22	813822631022	257522	NAVEEN RAJ. B	MQ	2	*	24	32	50		25	4	32	10	26	9	24	26	24	56	27	66		52		43	44	44	40	30	23	50		40	32	33	38	28	50		48
23	813822631023	257523	NIVETHA. M	MQ	6	*	8	50	20	24	28	0	26	16	56	8	42	46	28	50	33	24	50	36	46	14	18	50	20	42	39	4	32	12	44	15	26	36	22	66	40
24	813822631024	257524	PADMAPRIYA. V	MQ	1	*	60		62		56	38	60	44	90	48	50		50		36	86		56		41	41	62	58		47	54		36	60	22	52		52		50
25	813822631025	257525	PRAGADEESWARI. P	MQ	2	*	44	68	56		41	84		56		37	34	64	76		36	56		70		25	51		78		27	50		74		40	76		88		48
26	813822631026	257526	PRATHIBA. A V	MQ	1	*	66		52		55	20	60	26	62	31	42	60	40	62	54	42	62	78		56	49	56	56		30	52		44	76	64	68		72		50
27	813822631027	257527	PRITIKA KUMAR	MQ	NIL	8.7917	78		90		88	80		80		57	54		64		63	84		94		76	74		86		62	88		84		85	82		86		80
28	813822631028	257528	PRIYADHARSHINI. K	MQ	1	*	24	42	40	30	38	0	20	8	26	3	42	50	22	40	30	36	58	52		27	32	0	30	26	39	46	60	60		31	36	42	34	58	32
29	813822631029	257529	PRIYADHARSHINI. S	GQ	NIL	8	42	56	74		53	40	60	28	70	32	54		64		56	68		76		29	54		54		59	82		74		64	66		64		50
30	813822631030	257530	PRIYANKA KUMAR	MQ	NIL	8.0833	78		88		64	78		50		63	60		50		71	84		86		72	72		70		54	80		88		80	82		92		78
31	813822631031	257531	RAAGAVI. A	GQ	NIL	8.5833	A	80	80		84	82		88		72	54		74		71	90		84		A	65		72		A	80		88		73	82		84		80

| | | |

select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '3' and b.sec = 'A' and b.semperiod = '22-23ODD' and b.branch = 'MBA' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:MBA Semester:3 Section:A

Semester Period:22-23ODD

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	BA4001-chandramouli-mba							BA4002-mahalakshmi-mba							BA4003-chandramouli-mba							BA4008-syed-mba							BA4010-karthikeyan-mba							Bl
							A1	M1	A2	M2	A3	AS2	AS1	A1	M1	A2	M2	A3	AS2	AS1	A1	M1	A2	M2	A3	AS2	AS1	A1	M1	A2	M2	A3	AS2	AS1	A1	M1	A2	M2	A3	AS2	AS1	A
1	813821631001	247501	AAMINA HASRAT. S	MQ	NIL	8.5714	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	88		84		88	100	100	80		72		76	100	100	7
2	813821631002	247502	ABIRAMI. S	GQ	NIL	7.6883	62		76		54	100	100	60		60		62	100	100	80		84		66	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
3	813821631003	247503	ADHARSH. S	MQ	NIL	7.6883	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	60		56		66	100	100	64		68		64	100	100	6
4	813821631004	247504	AKILA. B	GQ	NIL	8.4545	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	72		82		88	100	100	NA		72		76	100	100	8
5	813821631005	247505	ANJANAA. T N	MQ	NIL	8.2597	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	66		74		82	100	100	76		80		76	100	100	8
6	813821631006	247506	ARVINDA SUBRAMANI. S R	MQ	NIL	8.1688	86		84		86	100	100	66		72		68	100	100	88		86		68	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
7	813821631007	247507	BARANIKUMAR. T	MQ	NIL	7.5065	20	60	38	50	36	100	100	50		52		54	100	100	14	54	50		50	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
8	813821631008	247508	CELASTIN LEO. I	MQ	NIL	7.8182	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	76		76		66	100	100	56		50		70	100	100	6
9	813821631009	247509	DEEPIKA. H	MQ	1	*	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	62		64		42	100	100	50		44	75	34	100	100	4
10	813821631010	247510	DEEPTHIKA REENA. S	MQ	NIL	7.7013	56		44	50	64	100	100	A	50	48	75	64	100	100	2	50	56		72	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
11	813821631011	247511	DEVI PRIYA. K	MQ	NIL	7.3766	A	50	50		32	100	100	28	51	42	63	35	100	100	A	50	40	56	50	100	100	NA		A	66	NA	100	100	NA		A	68	NA	100	100	N
12	813821631012	247512	DHARANI. M	MQ	NIL	8.1688	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	88		86		80	100	100	60		78		70	100	100	7
13	813821631013	247513	DHIVYASREE. S	MQ	2	*	68		A	72	76	100	100	A	50	NA		56	100	100	A	60	78		84	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
14	813821631014	247514	DINESH KUMAR. P	GQ	2	*	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	26	51	34	69	24	100	100	40	50	34	65	42	100	100	5
15	813821631015	247515	DINESH KUMAR. V	MQ	NIL	7.6104	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	20	50	30	70	36	100	100	50		50		50	100	100	6
16	813821631016	247516	EZHIL MATHI. M	MQ	1	*	72		44	64	64	100	100	60		58		64	100	100	68		54		60	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
17	813821631017	247517	GANGAI. J	MQ	NIL	8.1169	70		50		66	100	100	74		50		68	100	100	70		70		58	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
18	813821631018	247518	GAYATHRI. A	MQ	NIL	8.2857	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	84		76		68	100	100	72		76		68	100	100	8
19	813821631019	247520	GOKUL. M	MQ	NIL	7.5325	60		42	62	50	100	100	56		60		58	100	100	50		66		32	100	100	50		80		74	100	100	42	52	58		44	100	100	6
20	813821631020	247519	GOKUL RAJ. V	MQ	NIL	7.961	56		34	58	54	100	100	A	50	56		53	100	100	28	58	36	60	54	100	100	46	51	40	74	56	100	100	56		64		56	100	100	6
21	813821631021	247521	GUHAN. P	MQ	NIL	7.7273	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	60		66		54	100	100	50		56		52	100	100	7
22	813821631022	247522	HARIPRASATH. R	MQ	NIL	7.7143	NA		NA		NA	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	76		66		80	100	100	62		60		70	100	100	7
23	813821631023	247523	INDUJA. S	MQ	NIL	7.6753	A	50	32	66	42	100	100	36	51	46	76	44	100	100	A	50	40	62	50	100	100	70		62		68	100	100	A	50	50		46	100	100	A
24	813821631024	247524	JANANI. N	MQ	NIL	7.8571	38	68	A	56	A	100	100	62		NA		68	100	100	38	68	54		A	100	100	80		76		A	100	100	74		74		NA	100	100	7
25	813821631025	247525	KAARTHICRAJ. M	MQ	NIL	8.2727	84		80		90	100	100	A	50	78		64	100	100	68		84		88	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
26	813821631026	247526	KAMALI. P L	MQ	NIL	8.5325	78		66		72	100	100	70		72		74	100	100	80		A	90	94	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
27	813821631027	247527	KAVIPRIYA. V	GQ	NIL	8.5714	70		62		82	100	100	62		64		63	100	100	68		70		68	100	100	A	52	62		88	100	100	72		84		70	100	100	7
28	813821631028	247528	KEERTHANA. B	MQ	NIL	8.6623	78		50		78	100	100	80		74		78	100	100	74		86		86	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
29	813821631029	247529	KIRUTHIGA. V	MQ	NIL	8.4805	86		80		82	100	100	84		74		78	100	100	88		90		90	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
30	813821631030	247530	KRISHNA DOSS. A	MQ	NIL	8	84		56		64	100	100	58		52		57	100	100	70		60		70	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N
31	813821631031	247531	MADHURA. T	MQ	NIL	9.026	86		86		92	100	100	88		78		86	100	100	88		92		88	100	100	NA		NA		NA	100	100	NA		NA		NA	100	100	N

| | | |

select unique a.batchno,a.regno,a.name,a.adquota from all_students_view a,cycletest_marks b where a.batchno = b.batchno and b.sem = '2' and b.sec = 'A' and b.semperiod = '22-23EVEN' and b.branch = 'MBA' order by a.regno

Classwise ALL Cycletest Mark Summary Report

Class:MBA Semester:2 Section:A

Semester Period:22-23EVEN

S.no	Regno	Batchno	Name	Quota	Arrear Count	CGPA	BA4201-ravichandran-mat					BA4202-chandramouli-mba					BA4203-karthikeyan-mba					BA4204-arunprasad-mba					BA4205-mahalakshmi-mba					BA4206-kayal-aids					BA4207-syed-mba					BA4211-s mba	
							A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1	A2	M2	A3	A1	M1
1	813822631001	257501	ABINAYA. R	GQ	2	*	26	50	92		23	78		44	50	81	58		78		64	70		64		63	54		70		65	A	56	50		50	44	80	64		60		
2	813822631002	257502	AISHWARYA. C	MQ	NIL	8.0833	80		98		77	100		82		87	62		76		85	88		72		76	52		72		74	78		72		69	80		52		82		
3	813822631003	257503	ANANDH. V	GQ	4	*	40	78	66		50	64		60		75	52		58		68	80		68		56	32	46	52		54	58		44	42	53	72		66		60		
4	813822631004	257505	ANUBAMA. M	MQ	NIL	8.5833	68		96		75	100		68		95	86		82		88	82		A	86	84	82		72		84	80		82		78	88		88		83		
5	813822631005	257504	ANU PRIYA. K	GQ	NIL	8.2083	84		98		84	98		98		78	78		80		86	92		84		78	76		72		74	78		88		73	88		88		87		
6	813822631006	257506	ARJUN H.D	MQ	6	*	4	18	52		22	10	34	4	A	2	16	30	18	30	26	32	24	20	8	24	26	40	28	34	34	20	56	56		56	22	20	20	16	13		
7	813822631007	257507	BELCIYA MARY. P	GQ	NIL	7.625	62		96		64	76		A	70	72	50		A	66	73	58		88		77	58		66		68	68		60		61	78		80		81		
8	813822631008	257508	BHAGAVATHY. J	GQ	NIL	8.2083	66		88		59	62		32	52	52	68		66		61	74		88		A	66		66		70	88		74		65	88		50		A		
9	813822631009	257509	CHANAKYA VYAS. G N	MQ	NIL	7.5	32	62	78		13	82		34	60	41	58		64		32	50		64		32	34	68	68		68	36	58	50		45	60		50		40		
10	813822631010	257510	DHARANI. S	GQ	NIL	8.3333	56		94		67	86		70		61	80		60		71	94		90		76	66		76		72	80		80		75	84		82		87		
11	813822631011	257511	DHARSHINI PRIYA. R	MQ	4	*	A	50	50		33	44	78	22	56	56	58		40	50	52	42	64	50		50	A	52	38	46	45	56		40	30	47	46	32	62		41		
12	813822631012	257512	DHIVYA DHARSHINI. A	MQ	4	*	26	38	68		34	52		A	48	24	32	32	A	46	22	24	56	50		28	20	24	40	38	38	A	50	42	24	48	34	46	64		24		
13	813822631013	257513	DIVYA SRI. R	GQ	1	*	40	68	80		20	30	80	42	50	39	72		64		51	70		50		56	46	58	76		75	76		56		54	54		30	60	55		
14	813822631014	257514	GAYATHRI. R	GQ	1	*	68		100		79	58		32	44	65	70		64		73	60		82		71	56		62		60	88		60		72	80		66		86		
15	813822631015	257515	KEREN DIVYA. R	GQ	NIL	7.9583	70		98		68	100		82		75	78		74		78	90		88		70	50		66		67	80		78		64	80		80		81		
16	813822631016	257516	KRISHNA KUMAR. S T	MQ	6	*	12	12	18	58	5	36	40	8	2	19	52		40	52	11	34	68	42	38	A	38	24	32	46	40	34	40	24	28	41	24	58	34	34	A	
17	813822631017	257517	KRUTHI. M	GQ	NIL	8	86		90		86	98		94		85	66		72		88	76		90		63	64		70		68	72		70		58	80		A	82	85		
18	813822631018	257518	MADHAN RAJ. A	MQ	2	*	30	50	82		52	50		50		29	50		52		51	62		76		41	50		68		55	56		42	52	39	36	52	76		46		
19	813822631019	257519	MANICKAVASAGAM. M	GQ	3	*	20	50	66		25	50		50		38	52		64		33	54		52		10	34	44	56		52	54		6	26	50	28	62	66		46		
20	813822631020	257520	NANDHINI. S S	MQ	1	*	16	36	40	70	12	28	50	26	14	16	44	34	34	52	29	26	44	32	36	28	26	66	46	58	59	40	54	34	50	38	38	68	A	52	55		
21	813822631021	257521	NAREN. R S	GQ	2	*	6	26	52		26	70		56		38	62		60		34	50		56		A	44	56	66		58	68		46	50	46	64		74		A		
22	813822631022	257522	NAVEEN RAJ. B	MQ	2	*	12	26	56		10	50		34	36	50	58		60		27	66		62		18	20	22	A	20	34	A	52	46	10	26	30	10	60		18		
23	813822631023	257523	NIVETHA. M	MQ	6	*	10	50	50		23	54		60		50	32	50	32	52	32	28	68	60		44	10	18	42	A	38	44	50	A	64	51	14	34	56		46		
24	813822631024	257524	PADMAPRIYA. V	MQ	1	*	52		66		35	62		42	50	19	64		64		33	64		68		55	50		62		59	76		66		59	72		50		41		
25	813822631025	257525	PRAGADEESWARI. P	MQ	2	*	64		96		53	88		78		77	60		70		67	80		86		63	62		60		A	38	72	54		64	80		84		81		
26	813822631026	257526	PRATHIBA. A V	MQ	1	*	14	50	26	64	19	36	78	36	52	29	50		56		44	74		70		59	48	54	66		64	60		50		53	40	74	36	56	50		
27	813822631027	257527	PRITIKA KUMAR	MQ	NIL	8.7917	88		100		82	98		90		88	86		80		89	86		90		83	68		82		78	92		88		76	88		80		86		
28	813822631028	257528	PRIYADHARSHINI. K	MQ	1	*	A	24	50		8	20	44	20	14	32	50		32	50	22	26	34	42	44	51	42	38	44	46	48	A	32	52		46	A	46	32	14	31		
29	813822631029	257529	PRIYADHARSHINI. S	GQ	NIL	8	34	54	68		36	36	A	52		44	60		32	66	52	88		82		79	60		62		68	74		46	76	68	50		60		70		
30	813822631030	257530	PRIYANKA KUMAR	MQ	NIL	8.0833	78		100		78	100		96		82	80		80		88	84		88		79	66		76		74	90		92		82	88		88		83		
31	813822631031	257531	RAAGAVI. A	GQ	NIL	8.5833	88		100		69	100		90		91	80		78		89	94		86		61	68		80		A	88		A	80	52	88		A	84	88		
32	813822631032	257532	RADHA. M	MQ	NIL	8.375	56		100		75	68		60		61	86		76		81	94		90		76	72		68		65	90		72		77	88		84		80		
33	813822631033	257533	RIYAS MOHAMED. T	MQ	1	*	26	68	68		34	74		50		50	50		50		22	76		54		A	56		58		A	62		50		0	52		22	34	A		
34	813822631034	257534	ROOPAMANJARI. G	MQ	1	*	26	56	50		30	40	50	28	24	54	50		50		56	58		38	44	61	54		52		50	54		54		38	24	A	38	20	58		

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