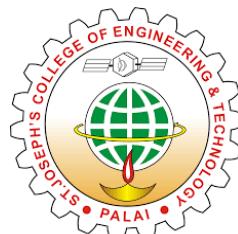


# ST. JOSEPH'S COLLEGE OF ENGINEERING AND TECHNOLOGY, PALAI

CHOONDACHERRY P.O, PALAI, KOTTAYAM 686 579, KERALA,INDIA.

PH: 04822239700



## COURSE DIARY

Subject ECT301 - LINEAR INTEGRATED CIRCUITS

Batch ECE 2020-2024 A (S5)

Academic Year 2022-23

Total hours taken 62

Name of Teacher NITHA M BIJU

Designation Assistant Professor

Department Electronics and Communication Engineering

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2	VISION & MISION OF COLLEGE
3	PROGRAM OUTCOME
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**General Instructions**

Student's performance should be evaluated solely on an academic basis  
Student's evaluation should be fair, consistent, transparent and accountable.  
Evaluation of student's performance should be disclosed to the students.

1. Keep the Course Diary up to date by clearly indicating the subject coverage and students attendance on the relevant pages.
2. Paste the syllabus in the relevant page.
3. Write / paste the Course plan in the relevant page.
4. Events in a semester such as Series Test days, Cultural / Celebration days, days for extra / co-curricular activities etc. may be indicated in the Year Calendar.
5. Assignment details may be written in the Course Diary or may be filed in the Course File.
  - (i) Minimum 2 no. of assignments should be given.
  - (ii) Different sets of questions may be given in an assignment (atleast three) to a class.
  - (iii) Assignments may be in the form of written - closed / open book, individual / group, home assignment, or in the form of oral presentation, quiz, seminar etc.
6. Show complete split up of sessional marks in the page "Particulars of Marks". Final sessional mark for each student should be equal to the sum of marks awarded for Assignments (10) and Series Tests (40).
7. All the entries in the course diary must be, legibly written without overwriting and free of errors.
8. Do not count marks of class tests along with the series test for computing sessional mark.
9. The staff member will be responsible for the safe custody of the Course Diary and (s)he should return it to the HOD at the end of semester or earlier if (s)he leaves the department or discontinue the subject.
10. Follow KTU regulations for computing sessional marks.

**PRINCIPAL**

**VISION OF THE COLLEGE**

"

Developing into a world-class, pace-setting Institute of Engineering and Technology with distinct identity and character, meeting the goals and aspirations of the society.

"

**MISSION OF THE COLLEGE**

"

1.To maintain a conducive infrastructure and learning environment for world class education. 2.To nurture a team of dedicated, competent and research oriented faculty. 3.To develop students with moral & ethical values, for their successful career by offering variety of programmes and services.

"

Heading	Content
PO1	<b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
PO2	<b>Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	<b>Design/development of solutions:</b> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
PO4	<b>Conduct investigations of complex problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	<b>Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
PO6	<b>The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
PO7	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
PO9	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	<b>Project management and finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
PO12	<b>Life-long learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

**VISION OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT**

"Develop into a center of excellence in Electronics and Communication Engineering contributing to socio-economic progress."

**MISSION OF ELECTRONICS AND COMMUNICATION ENGINEERING DEPARTMENT**

"To develop and maintain adequate infrastructure for a pace-setting Electronics and Communication engineering. To bring up a team of committed, proficient and research oriented electronics and communication engineering faculty. To nurture students into ethical, emotionally strong and technically competent graduates to meet the dynamic challenges of the society."

**PROGRAM EDUCATIONAL OBJECTIVES**

<b>Heading</b>	<b>Content</b>
1	PEO Graduates will have a promising professional career in the area of electronics & communication or will pursue higher education/research.
2	PEO Graduates will provide suitable solutions to the problems in various areas of electronics and communication engineering.
3	PEO Graduates will work successfully in collaborative and multidisciplinary teams upholding professional and ethical values.

**PROGRAM SPECIFIC OUTCOMES**

<b>Heading</b>	<b>Content</b>
1	PSO Apply fundamental knowledge of Electronics and Communication Engineering in the design, analysis and development of various electronic systems
2	PSO Use modern software and hardware tools in electronics engineering for the analysis of complex electronic systems

SINo.	Topic
1	Understand Op-amp fundamentals and differential amplifier configurations
2	Design operational amplifier circuits for various applications
3	Design oscillators and active filters using op-amps
4	Explain the working and applications of timer, VCO and PLL ICs
5	Outline the working of voltage regulator ICs and Data converters

Sep 2022				Oct 2022			
Days	Date	Description	Class	Days	Date	Description	Class
				Sat	01		
				Sun	02		
				Mon	03	Declared Holiday (Pooja)- Government	
				Tue	04	Mahanavami	
				Wed	05	Vijayadhashami	
				Thu	06		7
				Fri	07		
				Sat	08		
				Sun	09		
				Mon	10		
				Tue	11		
				Wed	12		
				Thu	13		
				Fri	14		9
				Sat	15		
				Sun	16		
				Mon	17		10
				Tue	18		11
Mon	19		1	Wed	19		
Tue	20		2	Thu	20		12
Wed	21	Sree Narayana guru samadhi		Fri	21		14
Thu	22			Sat	22		
Fri	23		3	Sun	23		
Sat	24			Mon	24	Deepavali	
Sun	25			Tue	25		
Mon	26			Wed	26		
Tue	27			Thu	27		
Wed	28			Fri	28		17
Thu	29		5	Sat	29		
Fri	30		6	Sun	30		
				Mon	31		

Nov 2022				Dec 2022			
Days	Date	Description	Class	Days	Date	Description	Class
Tue	01	Kerala Piravi- Internal Holiday		Thu	01		
Wed	02			Fri	02		
Thu	03		18	Sat	03		
Fri	04		20	Sun	04		
Sat	05			Mon	05		31
Sun	06			Tue	06		33
Mon	07		21	Wed	07		
Tue	08		22	Thu	08		34
Wed	09			Fri	09		36
Thu	10			Sat	10		
Fri	11			Sun	11		
Sat	12			Mon	12		37
Sun	13			Tue	13		
Mon	14	Series Exam 1		Wed	14	Series Exam 2	
Tue	15		23	Thu	15		
Wed	16			Fri	16		
Thu	17			Sat	17		
Fri	18	College- Declared holiday		Sun	18		
Sat	19			Mon	19		
Sun	20			Tue	20		
Mon	21		24	Wed	21		
Tue	22			Thu	22		38
Wed	23			Fri	23		
Thu	24		25	Sat	24	Christmas Holiday	
Fri	25		27	Sun	25	Christmas Holiday	
Sat	26		28	Mon	26	Christmas Holiday	
Sun	27			Tue	27	Christmas Holiday	
Mon	28		29	Wed	28	Christmas Holiday	
Tue	29		30	Thu	29	Christmas Holiday	
Wed	30			Fri	30	Christmas Holiday	
				Sat	31	Christmas Holiday	



Sl.No	Student Name	Class Roll Number	University Roll Number	Admission Number
1	AARYA SARA ALEX	1	SJC20EC001	20/EC/001
2	ABHISREE B	2	SJC20EC003	20/EC/003
3	ADITHYAN S PHILIP	3	SJC20EC005	20/EC/005
4	AISWARYA JOSE	4	SJC20EC007	20/EC/007
5	AJIL PAVITHRAN	5	SJC20EC008	20/EC/008
6	AKSHAI P S	6	SJC20EC010	20/EC/010
7	ALAN GEORGE	7	SJC20EC011	20/EC/011
8	ALAN THOMAS	8	SJC20EC013	20/EC/013
9	ALBIN JOSE	9	SJC20EC015	20/EC/015
10	ALEENA MARGARET	10	SJC20EC017	20/EC/018
11	ALEX BABU JOSEPH	11	SJC20EC019	20/EC/020
12	ANET SUNNY	12	SJC20EC022	20/EC/023
13	ANISIA S PULICKAN	13	SJC20EC024	20/EC/025
14	ANJALI RACHEL ANISH	14	SJC20EC025	20/EC/026
15	ANN MARIA JOHNEY	15	SJC20EC026	20/EC/027
16	ANN MARIYA SHAJI	16	SJC20EC027	20/EC/028
17	ANU SOMARAJAN K	17	SJC20EC029	20/EC/030
18	ARJUN KRISHNA C V	18	SJC20EC031	20/EC/032
19	ARJUN T S	19	SJC20EC032	20/EC/033
20	ASHLEY ELIZABETH	20	SJC20EC033	20/EC/034
21	ATHUL KRISHNA SURESH	21	SJC20EC034	20/EC/035
22	DIYA SEBASTIAN	22	SJC20EC042	20/EC/043
23	ELVIN ALOSIUS	23	SJC20EC044	20/EC/045
24	GLADWIN BIJU	24	SJC20EC046	20/EC/047
25	ISAAC GEORGE	25	SJC20EC049	20/EC/050
26	GOKUL V	25	SJC20EC047	20/EC/048
27	JACOB MONCY	26	SJC20EC050	20/EC/051
28	JEEVANJOSEPH P B	27	SJC20EC052	20/EC/053
29	JISS JOSEPH	28	SJC20EC054	20/EC/055
30	JOEL MATHEW	29	SJC20EC056	20/EC/057
31	JOHNS PATTARA	30	SJC20EC057	20/EC/058
32	JOSE ABRAHAM	31	SJC20EC058	20/EC/059
33	JOSIL N D	32	SJC20EC060	20/EC/061
34	JOYAL SIBY	33	SJC20EC062	20/EC/063
35	JULIT SHAJI	34	SJC20EC063	20/EC/064
36	KARTHIKA N	35	SJC20EC064	20/EC/065
37	MELWIN SHAJU	36	SJC20EC071	20/EC/072
38	NAYANA MANOJ	37	SJC20EC072	20/EC/073
39	NAYANA MOL JOSEPH	38	SJC20EC073	20/EC/074
40	PRITHVIN A NAIR	39	SJC20EC075	20/EC/076
41	SACHIN JOSHY	40	SJC20EC080	20/EC/081
42	SARATH P V	41	SJC20EC081	20/EC/082
43	SHARON JUDY	42	SJC20EC083	20/EC/084
44	SHARON MERIN SABU	43	SJC20EC084	20/EC/085
45	SONU JACOB	44	SJC20EC089	20/EC/090
46	THEJAS KRISHNA.J	45	SJC20EC092	20/EC/093

**Prepared By :**

**NITHA M BIJU**

**Approved By :**

**ARUN P**

**TIMETABLE**

Day	Period 1	Period 2	Period 3	Period 4	Period 5	Period 6	Period 7	Period 8
Monday	--	--	--	--	--	--	ECT301 - LINEAR INTEGRATED CIRCUITS	--
Tuesday	ECT301 - LINEAR INTEGRATED CIRCUITS	--	--	--	--	--	--	--
Wednesday	--	--	--	--	--	--	--	--
Thursday	--	--	--	ECT301 - LINEAR INTEGRATED CIRCUITS	--	--	--	--
Friday	--	--	--	--	--	ECT301 - LINEAR INTEGRATED CIRCUITS	--	--
Saturday	--	--	--	--	--	--	--	--

Module	Topic
1	<b>1.1. Operational amplifiers</b> <ul style="list-style-type: none"> <li>1.1.1. The 741 Op Amp, Block diagram, Ideal op-amp parameters, typical parameter values for 741</li> <li>1.1.2. Equivalent circuit, Open loop configurations, Voltage transfer curve, Frequency response curve.</li> <li>1.1.3. Differential amplifier configurations using BJT, DC Analysis- transfer characteristics</li> <li>1.1.4. AC analysis- differential and common mode gains, CMRR, input and output resistance, Voltage gain</li> <li>1.1.5. Constant current bias and constant current source</li> <li>1.1.6. Concept of current mirror, the two transistor current mirror Wilson and Widlar current mirrors.</li> <li>1.1.7. Tutorial on Differential Amplifiers</li> <li>1.1.8. Tutorial on Operational Amplifiers</li> </ul>
2	<b>2.1. Op-amp with negative feedback and Op-amp applications</b> <ul style="list-style-type: none"> <li>2.1.1. General concept of Voltage Series, Voltage Shunt, current series and current shunt negative feedback</li> <li>2.1.2. Op Amp circuits with voltage series and voltage shunt feedback, Virtual ground Concept</li> <li>2.1.3. Analysis of practical inverting and non-inverting amplifier</li> <li>2.1.4. Summer, Voltage Follower-loading effect</li> <li>2.1.5. Differential and Instrumentation Amplifiers</li> <li>2.1.6. Voltage to current and Current to voltage converters</li> <li>2.1.7. Integrator, Differentiator</li> <li>2.1.8. Precision rectifiers-half wave and full wave</li> <li>2.1.9. Comparators, Schmitt Triggers</li> <li>2.1.10. Log and antilog amplifier</li> <li>2.1.11. Problems based on op-amp circuits</li> </ul>
3	<b>3.1. Op-amp Oscillators and Multivibrators</b> <ul style="list-style-type: none"> <li>3.1.1. Phase Shift and Wien-bridge Oscillators,</li> <li>3.1.2. Triangular and Sawtooth waveform generators, Astable and monostable multivibrators</li> <li>3.1.3. Comparison, design of First and second order low pass and High pass active filters</li> <li>3.1.4. Design of Second Order Band pass and band reject filters</li> <li>3.1.5. State variable filters</li> <li>3.1.6. Tutorial on Op-amp Oscillators and Multivibrators</li> <li>3.1.7. Tutorial on filters</li> </ul>
4	<b>4.1. Timer, VCO and PLL</b> <ul style="list-style-type: none"> <li>4.1.1. Timer IC 555- Functional diagram, Astable and monostable operations.</li> <li>4.1.2. Basic concepts of Voltage Controlled Oscillator</li> <li>4.1.3. Application of VCO IC LM566</li> <li>4.1.4. PLL Operation, Closed loop analysis Lock and capture range</li> <li>4.1.5. Basic building blocks, PLL IC 565, Applications of PLL</li> <li>4.1.6. Tutorial on 555 timer,VCO &amp; PLL</li> </ul>
5	<b>5.1. Voltage regulators and Data converters</b> <ul style="list-style-type: none"> <li>5.1.1. Fixed and Adjustable voltage regulators</li> <li>5.1.2. IC 723 – Low voltage and high voltage configurations,</li> <li>5.1.3. Current boosting, Current limiting, Short circuit and Fold-back protection.</li> <li>5.1.4. Digital to Analog converters, Specifications, Weighted resistor type and R-2R Ladder type.</li> <li>5.1.5. Analog to Digital Converters: Specifications, Flash type and Successive approximation type.</li> <li>5.1.6. Tutorial on ADC &amp; DAC</li> </ul>

<b>Sl No</b>	<b>Date</b>	<b>Hour</b>	<b>Topic</b>	<b>Module</b>	<b>Method Of Delivery</b>
1	2022-09-19	Hour 7	The 741 Op Amp, Block diagram, Ideal op-amp parameters, typical parameter values for 741	1	Lecture
2	2022-09-20	Hour 1	The 741 Op Amp, Block diagram, Ideal op-amp parameters, typical parameter values for 741	1	Lecture
3	2022-09-23	Hour 6	Equivalent circuit, Open loop configurations, Voltage transfer curve, Frequency response curve.	1	Lecture
4	2022-09-24	Hour 1	Differential amplifier configurations using BJT, DC Analysis- transfer characteristics	1	Lecture
5	2022-09-29	Hour 4	Differential amplifier configurations using BJT, DC Analysis- transfer characteristics	1	Lecture
		Hour 7	Tutorial on Operational Amplifiers	1	Tutorial
6	2022-09-30	Hour 6	AC analysis- differential and common mode gains, CMRR, input and output resistance, Voltage gain	1	Lecture
7	2022-10-06	Hour 4	Constant current bias and constant current source	1	Lecture
8	2022-10-07	Hour 6	Concept of current mirror, the two transistor current mirror Wilson and Widlar current mirrors.	1	Lecture
9	2022-10-10	Hour 7	Concept of current mirror, the two transistor current mirror Wilson and Widlar current mirrors.	1	Lecture
10	2022-10-11	Hour 1	Tutorial on Differential Amplifiers	1	Tutorial
11	2022-10-13	Hour 4	Tutorial on Operational Amplifiers	1	Tutorial
12	2022-10-14	Hour 3	General concept of Voltage Series, Voltage Shunt, current series and current shunt negative feedback	2	Lecture
		Hour 6	Op Amp circuits with voltage series and voltage shunt feedback, Virtual ground Concept	2	Lecture
13	2022-10-17	Hour 7	Analysis of practical inverting and non-inverting amplifier	2	Lecture
14	2022-10-18	Hour 1	Analysis of practical inverting and non-inverting amplifier	2	Lecture
15	2022-10-20	Hour 4	Analysis of practical inverting and non-inverting amplifier	2	Tutorial
16	2022-10-21	Hour 1	Summer, Voltage Follower-loading effect	2	Lecture
		Hour 6	Differential and Instrumentation Amplifiers	2	Lecture
17	2022-10-22	Hour 6	Voltage to current and Current to voltage converters	2	Lecture
18	2022-10-25	Hour 1	Integrator, Differentiator	2	Lecture
19	2022-10-28	Hour 2	Precision rectifiers-half wave and full wave	2	Lecture
		Hour 4	Comparators, Schmitt Triggers	2	Lecture
		Hour 6	Log and antilog amplifier	2	Lecture
20	2022-10-29	Hour 7	Problems based on op-amp circuits	2	Tutorial
21	2022-11-03	Hour 4	Problems based on op-amp circuits	2	Tutorial
22	2022-11-04	Hour 1	Phase Shift and Wien-bridge Oscillators,	3	Lecture
		Hour 6	Phase Shift and Wien-bridge Oscillators,	3	Lecture
23	2022-11-05	Hour 1	Triangular and Sawtooth waveform generators, Astable and monostable multivibrators	3	Lecture
24	2022-11-07	Hour 7	Triangular and Sawtooth waveform generators, Astable and monostable multivibrators	3	Lecture
25	2022-11-08	Hour 1	Tutorial on Op-amp Oscillators and Multivibrators	3	Tutorial
26	2022-11-10	Hour 4	Tutorial on Op-amp Oscillators and Multivibrators	3	Tutorial
27	2022-11-11	Hour 6	Comparison, design of First and second order low pass and High pass active filters	3	Lecture
28	2022-11-14	Hour 7	Comparison, design of First and second order low pass and High pass active filters	3	Lecture
29	2022-11-15	Hour 1	Design of Second Order Band pass and band reject filters	3	Lecture
		Hour 7	Design of Second Order Band pass and band reject filters	3	Lecture
30	2022-11-19	Hour 1	State variable filters	3	Lecture
		Hour 4	Tutorial on filters	3	Tutorial
31	2022-11-21	Hour 7	Timer IC 555- Functional diagram, Astable and monostable operations.	4	Lecture
32	2022-11-22	Hour 1	Timer IC 555- Functional diagram, Astable and monostable operations.	4	Lecture
33	2022-11-24	Hour 4	Basic concepts of Voltage Controlled Oscillator	4	Lecture
34	2022-11-25	Hour 4	Application of VCO IC LM566	4	Lecture
		Hour 6	PLL Operation, Closed loop analysis Lock and capture range	4	Lecture
35	2022-11-26	Hour 3	Basic building blocks, PLL IC 565, Applications of PLL	4	Lecture
		Hour 4	Basic building blocks, PLL IC 565, Applications of PLL	4	Lecture
36	2022-11-28	Hour 7	Tutorial on 555 timer,VCO & PLL	4	Tutorial

Sl No	Date	Hour	Topic	Module	Method Of Delivery
37	2022-11-29	Hour 1	Tutorial on 555 timer,VCO & PLL	4	Tutorial
38	2022-12-01	Hour 4	Fixed and Adjustable voltage regulators	5	Lecture
39	2022-12-02	Hour 6	IC 723 – Low voltage and high voltage configurations,	5	Lecture
40	2022-12-03	Hour 6	IC 723 – Low voltage and high voltage configurations,	5	Lecture
41	2022-12-05	Hour 7	Current boosting, Current limiting, Short circuit and Fold-back protection.	5	Lecture
42	2022-12-06	Hour 1	Current boosting, Current limiting, Short circuit and Fold-back protection.	5	Lecture
		Hour 6	Digital to Analog converters, Specifications, Weighted resistor type and R-2R Ladder type.	5	Lecture
43	2022-12-08	Hour 4	Digital to Analog converters, Specifications, Weighted resistor type and R-2R Ladder type.	5	Lecture
44	2022-12-09	Hour 2	Analog to Digital Converters: Specifications, Flash type and Successive approximation type.	5	Lecture
		Hour 3	Analog to Digital Converters: Specifications, Flash type and Successive approximation type.	5	Lecture
45	2022-12-12	Hour 7	Tutorial on ADC & DAC	5	Tutorial

<b>Sl No</b>	<b>Date</b>	<b>Hour</b>	<b>Topic</b>	<b>Module</b>	<b>Remarks</b>
1	2022-09-19	Hour 7	The 741 Op Amp, Block diagram, Ideal op-amp parameters, typical parameter values for 741	1	
2	2022-09-20	Hour 1	The 741 Op Amp, Block diagram, Ideal op-amp parameters, typical parameter values for 741	1	
3	2022-09-23	Hour 6	Equivalent circuit, Open loop configurations, Voltage transfer curve, Frequency response curve.	1	
4	2022-09-24	Hour 1	Differential amplifier configurations using BJT, DC Analysis- transfer characteristics	1	
5	2022-09-29	Hour 4	Differential amplifier configurations using BJT, DC Analysis- transfer characteristics	1	
		Hour 7	Tutorial on Differential Amplifiers	1	
6	2022-09-30	Hour 6	AC analysis- differential and common mode gains, CMRR, input and output resistance, Voltage gain	1	
7	2022-10-06	Hour 4	Constant current bias and constant current source	1	
8	2022-10-14	Hour 3	Concept of current mirror, the two transistor current mirror Wilson and Widlar current mirrors.	1	
		Hour 6	Concept of current mirror, the two transistor current mirror Wilson and Widlar current mirrors.	1	
9	2022-10-15	Hour 4	Tutorial on Operational Amplifiers	1	
10	2022-10-17	Hour 7	Tutorial on Operational Amplifiers	1	
11	2022-10-18	Hour 1	General concept of Voltage Series, Voltage Shunt, current series and current shunt negative feedback	2	
12	2022-10-20	Hour 4	Op Amp circuits with voltage series and voltage shunt feedback, Virtual ground Concept	2	
13	2022-10-21	Hour 1	Analysis of practical inverting and non-inverting amplifier	2	
			Problems based on op-amp circuits	2	
		Hour 6	Analysis of practical inverting and non-inverting amplifier	2	
			Problems based on op-amp circuits	2	
14	2022-10-22	Hour 6	Analysis of practical inverting and non-inverting amplifier	2	
15	2022-10-28	Hour 2	Summer, Voltage Follower-loading effect	2	
		Hour 4	Problems based on op-amp circuits	2	
		Hour 6	Differential and Instrumentation Amplifiers	2	
16	2022-11-03	Hour 4	Voltage to current and Current to voltage converters	2	
17	2022-11-04	Hour 1	Integrator, Differentiator	2	
		Hour 6	Problems based on op-amp circuits	2	
18	2022-11-05	Hour 1	Precision rectifiers-half wave and full wave	2	
19	2022-11-07	Hour 7	Comparators, Schmitt Triggers	2	
20	2022-11-08	Hour 1	Log and antilog amplifier	2	
21	2022-11-14	Hour 1	Problems based on op-amp circuits	2	
		Hour 2	Problems based on op-amp circuits	2	
		Hour 3	Problems based on op-amp circuits	2	
22	2022-11-15	Hour 7	Phase Shift and Wien-bridge Oscillators,	3	
23	2022-11-19	Hour 1	Phase Shift and Wien-bridge Oscillators,	3	
		Hour 4	Triangular and Sawtooth waveform generators, Astable and monostable multivibrators	3	
24	2022-11-21	Hour 7	Triangular and Sawtooth waveform generators, Astable and monostable multivibrators	3	
25	2022-11-24	Hour 4	Triangular and Sawtooth waveform generators, Astable and monostable multivibrators	3	
26	2022-11-25	Hour 4	Comparison, design of First and second order low pass and High pass active filters	3	
		Hour 6	Design of Second Order Band pass and band reject filters	3	
		Hour 3	Design of Second Order Band pass and band reject filters	3	

Sl No	Date	Hour	Topic	Module	Remarks
		Hour 4	State variable filters	3	
28	2022-11-28	Hour 7	Tutorial on Op-amp Oscillators and Multivibrators	3	
29	2022-11-29	Hour 1	Tutorial on Op-amp Oscillators and Multivibrators	3	
30	2022-12-05	Hour 7	Tutorial on filters	3	
31	2022-12-06	Hour 1	Timer IC 555- Functional diagram, Astable and monostable operations.	4	
		Hour 6	Timer IC 555- Functional diagram, Astable and monostable operations.	4	
32	2022-12-08	Hour 4	Timer IC 555- Functional diagram, Astable and monostable operations.	4	
33	2022-12-09	Hour 2	Basic concepts of Voltage Controlled Oscillator	4	
		Hour 3	Application of VCO IC LM566	4	
34	2022-12-12	Hour 7	PLL Operation, Closed loop analysis Lock and capture range	4	
35	2022-12-14	Hour 5	Basic building blocks, PLL IC 565, Applications of PLL	4	
		Hour 6	Basic building blocks, PLL IC 565, Applications of PLL	4	
		Hour 7	Tutorial on 555 timer,VCO & PLL	4	
36	2022-12-22	Hour 3	Tutorial on 555 timer,VCO & PLL	4	
		Hour 4	Fixed and Adjustable voltage regulators	5	
37	2023-01-04	Hour 3	IC 723 – Low voltage and high voltage configurations,	5	
		Hour 4	Current boosting, Current limiting, Short circuit and Fold-back protection.	5	
		Hour 7	Digital to Analog converters, Specifications, Weighted resistor type and R-2R Ladder type.	5	
38	2023-01-05	Hour 1	Digital to Analog converters, Specifications, Weighted resistor type and R-2R Ladder type.	5	
		Hour 2	Digital to Analog converters, Specifications, Weighted resistor type and R-2R Ladder type.	5	
39	2023-01-08	Hour 3	Analog to Digital Converters: Specifications, Flash type and Successive approximation type.	5	
		Hour 4	Analog to Digital Converters: Specifications, Flash type and Successive approximation type.	5	
40	2023-01-10	Hour 5	Analog to Digital Converters: Specifications, Flash type and Successive approximation type.	5	
		Hour 6	Tutorial on ADC & DAC	5	
		Hour 7	Tutorial on ADC & DAC	5	

S.No	Title	Details	Issued On	Last Date	Max Mark	Question
1	Assignment 1	Assignment 1	26/09/2022	05/10/2022	15	
2	Assignment 2	Assignment 2	22/12/2022	03/01/2023	15	

Roll No	Name	Assignment 1 (15)	Assignment 2 (15)
1	AARYA SARA ALEX	15	12
2	ABHISREE B	15	14
3	ADITHYAN S PHILIP	15	15
4	AISWARYA JOSE	15	14.5
5	AJIL PAVITHRAN	15	15
6	AKSHAI P S	15	15
7	ALAN GEORGE	15	14.5
8	ALAN THOMAS	15	15
9	ALBIN JOSE	15	15
10	ALEENA MARGARET	15	15
11	ALEX BABU JOSEPH	15	15
12	ANET SUNNY	15	15
13	ANISIA S PULICKAN	15	14.5
14	ANJALI RACHEL ANISH	15	14.5
15	ANN MARIA JOHNEY	15	15
16	ANN MARIYA SHAJI	15	15
17	ANU SOMARAJAN K	15	15
18	ARJUN KRISHNA C V	15	14.5
19	ARJUN T S	15	14.5
20	ASHLEY ELIZABETH	15	15
21	ATHUL KRISHNA SURESH	15	14.5
22	DIYA SEBASTIAN	15	15
23	ELVIN ALOSIOS	15	14.5
24	GLADWIN BIJU	15	14.5
25	ISAAC GEORGE	15	15
25	GOKUL V	15	12
26	JACOB MONCY	15	15
27	JEEVANJOSEPH P B	15	15
28	JISS JOSEPH	15	14.5
29	JOEL MATHEW	15	15
30	JOHNS PATTARA	15	15
31	JOSE ABRAHAM	15	14.5
32	JOSIL N D	15	15
33	JOYAL SIBY	15	15
34	JULIT SHAJI	15	15
35	KARTHIKA N	15	15
36	MELWIN SHAJU	15	15
37	NAYANA MANOJ	15	15
38	NAYANA MOL JOSEPH	15	15
39	PRITHVIN A NAIR	15	10
40	SACHIN JOSHY	15	13
41	SARATH P V	15	15
42	SHARON JUDY	15	15
43	SHARON MERIN SABU	15	15
44	SONU JACOB	15	15
45	THEJAS KRISHNA.J	15	14.5

**ASSIGNMENT CO SPLIT-UP MARKS**

Name of evaluation: Assignment Assignment 1		Total Mark: 15		Assignment name: Assignment 1
Roll No	Name	1 (7.50) CO1	2 (7.50) CO2	Total
1	AARYA SARA ALEX	7.5	7.5	15
2	ABHISREE B	7.5	7.5	15
3	ADITHYAN S PHILIP	7.5	7.5	15
4	AISWARYA JOSE	7.5	7.5	15
5	AJIL PAVITHRAN	7.5	7.5	15
6	AKSHAI P S	7.5	7.5	15
7	ALAN GEORGE	7.5	7.5	15
8	ALAN THOMAS	7.5	7.5	15
9	ALBIN JOSE	7.5	7.5	15
10	ALEENA MARGARET	7.5	7.5	15
11	ALEX BABU JOSEPH	7.5	7.5	15
12	ANET SUNNY	7.5	7.5	15
13	ANISIA S PULICKAN	7.5	7.5	15
14	ANJALI RACHEL ANISH	7.5	7.5	15
15	ANN MARIA JOHNEY	7.5	7.5	15
16	ANN MARIYA SHAJI	7.5	7.5	15
17	ANU SOMARAJAN K	7.5	7.5	15
18	ARJUN KRISHNA C V	7.5	7.5	15
19	ARJUN T S	7.5	7.5	15
20	ASHLEY ELIZABETH	7.5	7.5	15
21	ATHUL KRISHNA SURESH	7.5	7.5	15
22	DIYA SEBASTIAN	7.5	7.5	15
23	ELVIN ALOSIUS	7.5	7.5	15
24	GLADWIN BIJU	7.5	7.5	15
25	ISAAC GEORGE	7.5	7.5	15
25	GOKUL V	7.5	7.5	15
26	JACOB MONCY	7.5	7.5	15
27	JEEVANJOSEPH P B	7.5	7.5	15
28	JISS JOSEPH	7.5	7.5	15
29	JOEL MATHEW	7.5	7.5	15
30	JOHNS PATTARA	7.5	7.5	15
31	JOSE ABRAHAM	7.5	7.5	15
32	JOSIL N D	7.5	7.5	15
33	JOYAL SIBY	7.5	7.5	15
34	JULIT SHAJI	7.5	7.5	15
35	KARTHIKA N	7.5	7.5	15
36	MELWIN SHAJU	7.5	7.5	15
37	NAYANA MANOJ	7.5	7.5	15
38	NAYANA MOL JOSEPH	7.5	7.5	15
39	PRITHVIN A NAIR	7.5	7.5	15
40	SACHIN JOSHY	7.5	7.5	15
41	SARATH P V	7.5	7.5	15
42	SHARON JUDY	7.5	7.5	15
43	SHARON MERIN SABU	7.5	7.5	15
44	SONU JACOB	7.5	7.5	15
45	THEJAS KRISHNA.J	7.5	7.5	15

Name of evaluation: Assignment Assignment 2			Total Mark: 15				Assignment name: Assignment 2					
Roll No	Name	1 (1.50) CO2	2 (1.50) CO2	3 (1.50) CO2	4 (1.50) CO3	5 (1.50) CO3	6 (1.50) CO5	7 (1.50) CO5	8 (1.50) CO4	9 (1.50) CO4	10 (1.50) CO2	Total
1	AARYA SARA ALEX	1	1	1	1.5	1	1.5	1	1.5	1	1.5	12
2	ABHISREE B	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1.5	1.5	14
3	ADITHYAN S PHILIP	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
4	AISWARYA JOSE	1.5	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	14.5
5	AJIL PAVITHRAN	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
6	AKSHAI P S	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
7	ALAN GEORGE	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	14.5
8	ALAN THOMAS	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
9	ALBIN JOSE	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
10	ALEENA MARGARET	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
11	ALEX BABU JOSEPH	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
12	ANET SUNNY	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
13	ANISIA S PULICKAN	1.5	1.5	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	14.5
14	ANJALI RACHEL ANISH	1.5	1.5	1.5	1	1.5	1.5	1.5	1.5	1.5	1.5	14.5
15	ANN MARIA JOHNEY	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
16	ANN MARIYA SHAJI	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
17	ANU SOMARAJAN K	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
18	ARJUN KRISHNA C V	1.5	1.5	1.5	1.5	1	1.5	1.5	1.5	1.5	1.5	14.5
19	ARJUN T S	1.5	1.5	1.5	1.5	1.5	1.5	1	1.5	1.5	1.5	14.5
20	ASHLEY ELIZABETH	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
21	ATHUL KRISHNA SURESH	1.5	1.5	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	14.5
22	DIYA SEBASTIAN	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
23	ELVIN ALOSIUS	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1.5	1.5	14.5
24	GLADWIN BIJU	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1	1.5	14.5
25	ISAAC GEORGE	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
25	GOKUL V	1.5	1	1	1	1.5	1.5	1	1	1.5	1	12
26	JACOB MONCY	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
27	JEEVANJOSEPH P B	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
28	JISS JOSEPH	1	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	14.5
29	JOEL MATHEW	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
30	JOHNS PATTARA	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
31	JOSE ABRAHAM	1.5	1.5	1.5	1.5	1	1.5	1.5	1.5	1.5	1.5	14.5
32	JOSIL N D	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
33	JOYAL SIBY	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
34	JULIT SHAJI	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
35	KARTHIKA N	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
36	MELWIN SHAJU	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
37	NAYANA MANOJ	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
38	NAYANA MOL JOSEPH	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
39	PRITHVIN A NAIR	1	1	1	1	1	1	1	1	1	1	10
40	SACHIN JOSHY	1.5	1.5	1	1	1.5	1.5	1	1	1.5	1.5	13
41	SARATH P V	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
42	SHARON JUDY	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
43	SHARON MERIN SABU	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
44	SONU JACOB	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	15
45	THEJAS KRISHNA.J	1.5	1.5	1.5	1.5	1.5	1	1.5	1.5	1.5	1.5	14.5



S.No	Name	Type	Date	Max Mark	Result Status	Question
1	Series Exam 1	OFFLINE EXAM	14/11/2022	50	Results published	
2	Series Exam 2	OFFLINE EXAM	14/12/2022	50	Results not published	

Roll No	Name	Series Exam 1 (50)
1	AARYA SARA ALEX	49
2	ABHISREE B	28
3	ADITHYAN S PHILIP	19
4	AISWARYA JOSE	22
5	AJIL PAVITHRAN	37
6	AKSHAI P S	29
7	ALAN GEORGE	38
8	ALAN THOMAS	44
9	ALBIN JOSE	8.5
10	ALEENA MARGARET	46
11	ALEX BABU JOSEPH	32
12	ANET SUNNY	19
13	ANISIA S PULICKAN	47
14	ANJALI RACHEL ANISH	32
15	ANN MARIA JOHNEY	24
16	ANN MARIYA SHAJI	41
17	ANU SOMARAJAN K	37
18	ARJUN KRISHNA C V	15
19	ARJUN T S	18
20	ASHLEY ELIZABETH	43
21	ATHUL KRISHNA SURESH	34
22	DIYA SEBASTIAN	45
23	ELVIN ALOSIOS	29
24	GLADWIN BIJU	37
25	ISAAC GEORGE	36
25	GOKUL V	20
26	JACOB MONCY	36
27	JEEVANJOSEPH P B	44
28	JISS JOSEPH	26
29	JOEL MATHEW	50
30	JOHNS PATTARA	29
31	JOSE ABRAHAM	35
32	JOSIL N D	48
33	JOYAL SIBY	26
34	JULIT SHAJI	45
35	KARTHIKA N	44
36	MELWIN SHAJU	25
37	NAYANA MANOJ	49
38	NAYANA MOL JOSEPH	48
39	PRITHVIN A NAIR	18
40	SACHIN JOSHY	39.5
41	SARATH P V	48
42	SHARON JUDY	41
43	SHARON MERIN SABU	44
44	SONU JACOB	14
45	THEJAS KRISHNA.J	11

## SERIES EXAM CO SPLIT-UP MARKS

Name of evaluation: Series Exam 1				Total Mark: 50				Series exam name: Series Exam 1							
Roll No	Name	1 (3.00) CO1	2 (3.00) CO1	3 (3.00) CO2	4 (3.00) CO2	5 (3.00) CO3	6 (7.00) CO1	7 (7.00) CO1	8 (7.00) CO1	9 (7.00) CO2	10 (7.00) CO2	11 (7.00) CO2	12 (7.00) CO3	Total	
1	AARYA SARA ALEX	3	3	3	3	2.5	7	7		7	7		6.5	49	
2	ABHISREE B	0	2	0	3	0	5		6		7	2.5	2.5	28	
3	ADITHYAN S PHILIP	2	2	0	0	2.5	3.5		4	0	2		3	19	
4	AISWARYA JOSE	3	2.5	0	2.5	1.5	2		2.5		3	2.5	2.5	22	
5	AJIL PAVITHRAN	1.5	2.5	2	3	3	3.5		4.5	6	6		5	37	
6	AKSHAI P S	2	1.5	2	2.5	2	3		4		4.5	2.5	5	29	
7	ALAN GEORGE	3	2	2	3	2	7	2		5	7		5	38	
8	ALAN THOMAS	1.5	2.5	2	2	2	6		7	7	7		7	44	
9	ALBIN JOSE	0	1.5	0	1	0.5	0	0		1		3.5	1	8.5	
10	ALEENA MARGARET	3	3	3	3	3	7	4		7	7		6	46	
11	ALEX BABU JOSEPH	3	2	2.5	1.5	2	4.5	2.5		4	5		5	32	
12	ANET SUNNY	0	3	0	1.5	0	6.5		7	0	1		0	19	
13	ANISIA S PULICKAN	2.5	2	3	3	3	7		5.5	7	7		7	47	
14	ANJALI RACHEL ANISH	3	2.5	3	0.5	3	6		5	7	2		0	32	
15	ANN MARIA JOHNEY	0.5	2	2	1.5	0	6		5	2		3	2	24	
16	ANN MARIYA SHAJI	0	3	3	3	2	6		5	6	7		6	41	
17	ANU SOMARAJAN K	3	2.5	3	2	2	5		6.5	5	2		6	37	
18	ARJUN KRISHNA C V	0	2	3	1.5	2	2.5	0		0	0		4	15	
19	ARJUN T S	0	1.5	3	1.5	0	2		3	0	7		0	18	
20	ASHLEY ELIZABETH	3	3	3	3	2	7		6		7	4	5	43	
21	ATHUL KRISHNA SURESH	0	2.5	2.5	3	2	7		4	6	7		0	34	
22	DIYA SEBASTIAN	3	3	3	3	2.5	7	5		5.5	7		6	45	
23	ELVIN ALOSIOUS	0.5	1	1	3	2.5	5	2			6.5	3	4.5	29	
24	GLADWIN BIJU	0.5	1	3	3	3	7	1.5			6	7	5	37	
25	ISAAC GEORGE	3	2	0	2	3	6.5	3.5			5	4	7	36	
25	GOKUL V	0.5	2	0	0	0	6		5.5	0	0		6	20	
26	JACOB MONCY	3	3	3	0	2	7		3		7	3	5	36	
27	JEEVANJOSEPH P B	3	3	3	2.5	1.5	7		5.5	7	5.5		6	44	
28	JISS JOSEPH	2.5	0	2.5	3	0	1.5	1.5		5.5		5.5	4	26	
29	JOEL MATHEW	3	3	3	3	3	7		7		7	7	7	50	
30	JOHNS PATTARA	1	2	3	3	3	2		5	4	0		6	29	
31	JOSE ABRAHAM	0.5	2	3	3	2	6		4		6	4.5	4	35	
32	JOSIL N D	3	3	3	3	2.5	7	6.5			7	6.5	6.5	48	
33	JOYAL SIBY	3	3	0			6	4			5	5		26	
34	JULIT SHAJI	3	3	3	3	2.5	7		5.5		7	4.5	6.5	45	
35	KARTHIKA N	3	2.5	2.5	1.5	3	7		6	7	6		5.5	44	
36	MELWIN SHAJU	0	1	3	1	2.5	6.5		3	3	0		5	25	
37	NAYANA MANOJ	3	3	3	3	3	7		6	7	7		7	49	
38	NAYANA MOL JOSEPH	3	3	3	3	2.5	7		6		7	7	6.5	48	
39	PRITHVIN A NAIR	0	0	3	2	1.5	0	0		5	4.5		2	18	
40	SACHIN JOSHY	1.5	2	3	2.5	2	5		5.5	7	6		5	39.5	
41	SARATH P V	2.5	2.5	3	3	3	7		6.5	7	7		6.5	48	
42	SHARON JUDY	3	1	3	3	3	7		3	7	4		7	41	
43	SHARON MERIN SABU	1	3	3	2.5	3	7	4			7	6.5	7	44	
44	SONU JACOB	0	2	0	0	3	1	2		0	0		6	14	

Roll No	Name	1 (3.00) CO1	2 (3.00) CO1	3 (3.00) CO2	4 (3.00) CO2	5 (3.00) CO3	6 (7.00) CO1	7 (7.00) CO1	8 (7.00) CO1	9 (7.00) CO2	10 (7.00) CO2	11 (7.00) CO2	12 (7.00) CO3	Total
45	THEJAS KRISHNA.J	0	0	3	0	0	1	2		1		4	0	11

Name of evaluation: SERIES EXAM 2				Total Mark: 50				Series exam name: Series Exam 2							
Roll No	Name	1 (3.00) CO4	2 (3.00) CO4	3 (3.00) CO5	4 (3.00) CO5	5 (3.00) CO3	6 (7.00) CO4	7 (7.00) CO4	8 (7.00) CO4	9 (7.00) CO5	10 (7.00) CO5	11 (7.00) CO5	12 (7.00) CO3	Total	
1	AARYA SARA ALEX	3	1	3	3	2	7	6		3	6		3	37	
2	ABHISREE B	1	1	2	0	3		5	3	5	4		2	26	
3	ADITHYAN S PHILIP	0	0	2	1	0		5	5		6	5	1	25	
4	AISWARYA JOSE	1	0.5	0	0	0	4		4		2	4	5	20.5	
5	AJIL PAVITHRAN	0	0	2.5	0	2.5	3.5		5	4.5	5		4	27	
6	AKSHAI P S	1	0	2	0	2	1	0			5	2	1	14	
7	ALAN GEORGE	1.5	0	3	1	3	5	7		2	5		2	29.5	
8	ALAN THOMAS	3	1.5	3	3	3	5	7		7	6		7	45.5	
9	ALBIN JOSE	3	0	1	0	2	4		3	3	2		6	24	
10	ALEENA MARGARET	3	1	3	0.5	2	4	6		7	5		6	37.5	
11	ALEX BABU JOSEPH	3	1	3	1	1.5		6	3	6	4		7	35.5	
12	ANET SUNNY	3	0	3	3	2	7	7		4	0		7	36	
13	ANISIA S PULICKAN	3	1	3	3	3		7	5.5	6	6.5		5	43	
14	ANJALI RACHEL ANISH	0	0	0	0	2	3		3	3	0		5	16	
15	ANN MARIA JOHNEY	0	0	1.5	0.5	0	0		5		2	4	5	18	
16	ANN MARIYA SHAJI	1	0	3	1.5	2	6.5		5	7		6	2	34	
17	ANU SOMARAJAN K	3	1	1	1	2.5	6	7		4	6.5		6	38	
18	ARJUN KRISHNA C V	2	3	1	0	3	0		2	3	0		0	14	
19	ARJUN T S	0	0.5	1	1.5	3	2	3			4	3	4	22	
20	ASHLEY ELIZABETH	3	0	3	1	3	5.5	5.5		6	5		4	36	
21	ATHUL KRISHNA SURESH	0	0	2	2.5	3	5.5	0		4		5	2	24	
22	DIYA SEBASTIAN	3	1	1.5	3	2	7	5.5		6		5.5	6.5	41	
23	ELVIN ALOSIUS	2.5	0.5	2.5	0	0	5	5		3		3	3	24.5	
24	GLADWIN BIJU	2	0	2	3	3	0		4		5	7	7	33	
25	ISAAC GEORGE	3	1.5	0	2	0	5.5	7		3	1		5.5	28.5	
25	GOKUL V	2	0	3	3	0	0	6		0	7		0	21	
26	JACOB MONCY	0.5	0	0	0	0	0	0		0	0		0	0.5	
27	JEEVANJOSEPH P B	3	1.5	2	2	2		6	6	2	5		2	31.5	
28	JISS JOSEPH	2	2.5	1	1	0	4.5	5.5		3	1		0	20.5	
29	JOEL MATHEW	3	1.5	3	0.5	3		7	6		7	7	7	45	
30	JOHNS PATTARA	0	0	2	0	2	4	7		0	2		4	21	
31	JOSE ABRAHAM	0.5	0	3	1	2		5.5	5.5		4	5	2.5	29	
32	JOSIL N D	0	3	3	2	3	3		2	3	6		0	25	
33	JOYAL SIBY	2	1.5	2	1	0	0	0		0	5.5		0	12	
34	JULIT SHAJI	3	1.5	2	1.5	2		6	3.5	6.5	4.5		7	37.5	
35	KARTHIKA N	0	1.5	3	1	2	7		5.5	7	7		5.5	39.5	
36	MELWIN SHAJU	0	0	0	0	2	4	4		0	0		4	14	
37	NAYANA MANOJ	3	1.5	2.5	3	2	7	7			7	7	7	47	
38	NAYANA MOL JOSEPH	3	1	3	3	3	4.5	7		7		5.5	5	42	
39	PRITHVIN A NAIR	0	0	2.5	0	0	5	5.5		0	5		4	22	
40	SACHIN JOSHY	0	0	3	2.5	2	1		4	1.5	4		0	18	
41	SARATH P V	3	2	3	3	2.5	5	7		7	7	4		43.5	

Roll No	Name	1 (3.00) CO4	2 (3.00) CO4	3 (3.00) CO5	4 (3.00) CO5	5 (3.00) CO3	6 (7.00) CO4	7 (7.00) CO4	8 (7.00) CO4	9 (7.00) CO5	10 (7.00) CO5	11 (7.00) CO5	12 (7.00) CO3	Total
42	SHARON JUDY	2.5	0.5	3	2	2	4.5	6.5		2.5		5.5	2	31
43	SHARON MERIN SABU	3	2	3	3	0	4.5	7		5.5	6		7	41
44	SONU JACOB	2	0	1	1	1.5	4.5	4.5		2.5	4		4	25
45	THEJAS KRISHNA.J	1	0	2	0	3	6	0		5	0		0	17

## INTERNAL MARK

		Attendance (20.00 %)		series (50.00 %) Method: Average of Selected			assignment (30.00 %) Method: Average of Selected			Total	
Roll No	Name		(out of 10)	Series Exam 1(out of 50)	Series Exam 2(out of 50)	(out of 25)	Assignment 1(out of 15)	Assignment 2(out of 15)	(out of 15)	Grace Marks	Final Score (out of 50)
1	AARYA SARA ALEX	47/62 ( 76)	7.6	49	0	12.3	15	12	13.5	0	43
2	ABHISREE B	56/62 ( 90)	10	28	0	7	15	14	14.5	0	38
3	ADITHYA N S PHILIP	56/62 ( 90)	10	19	0	4.8	15	15	15	0	36
4	AISWARY A JOSE	52/62 ( 84)	8.4	22	0	5.5	15	14.5	14.8	1	35
5	AJIL PAVITHRA N	54/62 ( 87)	8.7	37	0	9.3	15	15	15	0	40
6	AKSHAI P S	61/62 ( 98)	10	29	0	7.3	15	15	15	0	36
7	ALAN GEORGE	55/62 ( 89)	8.9	38	0	9.5	15	14.5	14.8	0	41
8	ALAN THOMAS	55/62 ( 89)	8.9	44	0	11	15	15	15	0	47
9	ALBIN JOSE	60/62 ( 97)	10	8.5	0	2.1	15	15	15	1	35
10	ALEENA MARGARET	59/62 ( 95)	10	46	0	11.5	15	15	15	0	46
11	ALEX BABU JOSEPH	59/62 ( 95)	10	32	0	8	15	15	15	0	42
12	ANET SUNNY	53/62 ( 85)	8.5	19	0	4.8	15	15	15	0	38
13	ANISIA S PULICKAN	59/62 ( 95)	10	47	0	11.8	15	14.5	14.8	0	48
14	ANJALI RACHEL ANISH	47/62 ( 76)	7.6	32	0	8	15	14.5	14.8	0	35
15	ANN MARIA JOHNEY	55/62 ( 89)	8.9	24	0	6	15	15	15	0	35
16	ANN MARIYA SHAJI	58/62 ( 94)	10	41	0	10.3	15	15	15	0	44
17	ANU SOMARAJANK	55/62 ( 89)	8.9	37	0	9.3	15	15	15	0	43
18	ARJUN KRISHNA C V	50/62 ( 81)	8.1	15	0	3.8	15	14.5	14.8	0	31
19	ARJUN T S	53/62 ( 85)	8.5	18	0	4.5	15	14.5	14.8	1	35
20	ASHLEY ELIZABETH	59/62 ( 95)	10	43	0	10.8	15	15	15	0	45
21	ATHUL KRISHNA SURESH	55/62 ( 89)	8.9	34	0	8.5	15	14.5	14.8	0	39
22	DIYA SEBASTIAN	56/62 ( 90)	10	45	0	11.3	15	15	15	0	47
23	ELVIN ALOSIUS	55/62 ( 89)	8.9	29	0	7.3	15	14.5	14.8	0	38
24	GLADWIN BIJU	57/62 ( 92)	10	37	0	9.3	15	14.5	14.8	0	43
25	ISAAC GEORGE	61/62 ( 98)	10	36	0	9	15	15	15	0	42
25	GOKUL V	44/62 ( 71)	7.1	20	0	5	15	12	13.5	0	31
26	JACOB MONCY	49/62 ( 79)	7.9	36	0	9	15	15	15	0	32
27	JEEVANJOSEPH P B	59/62 ( 95)	10	44	0	11	15	15	15	0	44
28	JISS JOSEPH	53/62 ( 85)	8.5	26	0	6.5	15	14.5	14.8	0	35
29	JOEL MATHEW	58/62 ( 94)	10	50	0	12.5	15	15	15	0	49
30	JOHNS PATTARA	55/62 ( 89)	8.9	29	0	7.3	15	15	15	0	37
31	JOSE ABRAHAM	51/62 ( 82)	8.2	35	0	8.8	15	14.5	14.8	0	39
32	JOSIL N D	55/62 ( 89)	8.9	48	0	12	15	15	15	0	43
33	JOYAL SIBY	47/62 ( 76)	7.6	26	0	6.5	15	15	15	0	33
34	JULIT SHAJI	60/62 ( 97)	10	45	0	11.3	15	15	15	0	46
35	KARTHIK AN	62/62 ( 100)	10	44	0	11	15	15	15	0	46
36	MELWIN SHAJU	56/62 ( 90)	10	25	0	6.3	15	15	15	0	35

		Attendance (20.00 %)		series (50.00 %) Method: Average of Selected			assignment (30.00 %) Method: Average of Selected			Total	
Roll No	Name		(out of 10)	Series Exam 1(out of 50)	Series Exam 2(out of 50)	(out of 25)	Assignment 1(out of 15)	Assignment 2(out of 15)	(out of 15)	Grace Marks	Final Score (out of 50)
37	NAYANA MANOJ	56/62 ( 90)	10	49	0	12.3	15	15	15	0	49
38	NAYANA MOL JOSEPH	61/62 ( 98)	10	48	0	12	15	15	15	0	48
39	PRITHVIN A NAIR	50/62 ( 81)	8.1	18	0	4.5	15	10	12.5	0	31
40	SACHIN JOSHY	57/62 ( 92)	10	39.5	0	9.9	15	13	14	0	39
41	SARATH P V	57/62 ( 92)	10	48	0	12	15	15	15	0	48
42	SHARON JUDY	55/62 ( 89)	8.9	41	0	10.3	15	15	15	0	42
43	SHARON MERIN SABU	61/62 ( 98)	10	44	0	11	15	15	15	0	47
44	SONU JACOB	55/62 ( 89)	8.9	14	0	3.5	15	15	15	1	35
45	THEJAS KRISHNA.J	54/62 ( 87)	8.7	11	0	2.8	15	14.5	14.8	0	31

Exam Name	Exam Type	Total Mark	Total Time
Series Exam 1	Series Exam	50	3 Hrs
Assignment Assignment 1	Assignments	15	
SERIES EXAM 2	Series Exam	50	2 HRS
Assignment Assignment 2	Assignments	15	

	<b>CO1</b>	<b>CO2</b>	<b>CO3</b>	<b>CO4</b>	<b>CO5</b>
CO attainment- Series Exam 1	3	3	3	-	-
Weightage	50	33.33	33.33	-	-
CO attainment- Assignment Assignment 1	3	3	-	-	-
Weightage	50	33.33	-	-	-
CO attainment- SERIES EXAM 2	-	-	1	1	-
Weightage	-	-	33.33	50	50
CO attainment- Assignment Assignment 2	-	3	3	3	3
Weightage	-	33.33	33.33	50	50

**CO - ATTAINMENT**

<b>CO</b>	<b>Internal(70.00%)</b>	<b>External(30.00%)</b>	<b>Direct Attainment(80.00%)</b>	<b>Indirect Assessment(20.00%)</b>	<b>Overall Attainment</b>
CO1	3	0.00	2.10	3.00	2.28
CO2	2.9997	0.00	2.10	3.00	2.28
CO3	2.3331	0.00	1.63	3.00	1.91
CO4	2	0.00	1.40	3.00	1.72
CO5	1.5	0.00	1.05	3.00	1.44
Overall CO			1.926		

**CO - PO MAPPING**

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	1	2								1	3	2
CO2	3	3	2	2	2							1	3	2
CO3	3	3	2	2	2							1	3	2
CO4	3	3	1	2	2							1	3	2
CO5	3	3	2	2	2							1	3	2
Direct Attainment	1.93	1.93	1.02	1.28	1.22							0.64	1.93	1.28

## INDIVIDUAL ATTAINMENTS

Sl.No	Roll No	Name	Series Exam 1			
			Marks Awarded	CO-Attainment		
			Max(50)	CO1	CO2	CO3
1	1	AARYA SARA ALEX	49	100	100	90
2	2	ABHISREE B	28	65	62.5	25
3	3	ADITHYAN S PHILIP	19	57.5	10	55
4	4	AISWARYA JOSE	22	50	40	40
5	5	AJIL PAVITHRAN	37	60	85	80
6	6	AKSHAI P S	29	52.5	57.5	70
7	7	ALAN GEORGE	38	70	85	70
8	8	ALAN THOMAS	44	85	90	90
9	9	ALBIN JOSE	8.5	7.5	27.5	15
10	10	ALEENA MARGARET	46	85	100	90
11	11	ALEX BABU JOSEPH	32	60	65	70
12	12	ANET SUNNY	19	82.5	12.5	-
13	13	ANISIA S PULICKAN	47	85	100	100
14	14	ANJALI RACHEL ANISH	32	82.5	62.5	30
15	15	ANN MARIA JOHNEY	24	67.5	42.5	20
16	16	ANN MARIYA SHAJI	41	70	95	80
17	17	ANU SOMARAJAN K	37	85	60	80
18	18	ARJUN KRISHNA C V	15	22.5	22.5	60
19	19	ARJUN T S	18	32.5	57.5	-
20	20	ASHLEY ELIZABETH	43	95	85	70
21	21	ATHUL KRISHNA SURESH	34	67.5	92.5	20
22	22	DIYA SEBASTIAN	45	90	92.5	85
23	23	ELVIN ALOSIOUS	29	42.5	67.5	70
24	24	GLADWIN BIJU	37	50	95	80
25	25	ISAAC GEORGE	36	75	55	100
26	25	GOKUL V	20	70	-	60
27	26	JACOB MONCY	36	80	65	70
28	27	JEEVANJOSEPH P B	44	92.5	90	75
29	28	JISS JOSEPH	26	27.5	82.5	40
30	29	JOEL MATHEW	50	100	100	100
31	30	JOHNS PATTARA	29	50	50	90
32	31	JOSE ABRAHAM	35	62.5	82.5	60
33	32	JOSIL N D	48	97.5	97.5	90
34	33	JOYAL SIBY	26	80	58.82	-
35	34	JULIT SHAJI	45	92.5	87.5	90
36	35	KARTHIKA N	44	92.5	85	85
37	36	MELWIN SHAJU	25	52.5	35	75
38	37	NAYANA MANOJ	49	95	100	100
39	38	NAYANA MOL JOSEPH	48	95	100	90
40	39	PRITHVIN A NAIR	18	-	72.5	35
41	40	SACHIN JOSHY	39.5	70	92.5	70
42	41	SARATH P V	48	92.5	100	95
43	42	SHARON JUDY	41	70	85	100
44	43	SHARON MERIN SABU	44	75	95	100
45	44	SONU JACOB	14	25	-	90
46	45	THEJAS KRISHNA.J	11	15	40	-

Class Strength	46		
Distinct COs	CO1 CO2 CO3		

<b>No. of Students Attended</b>	87	87	86
<b>No. of Students with marks greater than or equal to cut off marks</b>	64	71	68
<b>% of Students with marks greater than or equal to cut off marks</b>	73.56	81.61	79.07
<b>Attainment Level</b>	73.56	81.61	79.07

<b>Attainment</b>	1	2	3
<b>Benchmark (%)</b>	50	60	70

### CO attainment in Series Exam 1

<b>CO</b>	CO1	CO2	CO3
<b>Attainment</b>	3	3	3

## INDIVIDUAL ATTAINMENTS

Sl.No	Roll No	Name	Assignment	Assignment 1	
			Marks Awarded	CO-Attainment	
			Max(15)	CO1	CO2
1	1	AARYA SARA ALEX	15	100	100
2	2	ABHISREE B	15	100	100
3	3	ADITHYAN S PHILIP	15	100	100
4	4	AISWARYA JOSE	15	100	100
5	5	AJIL PAVITHRAN	15	100	100
6	6	AKSHAI P S	15	100	100
7	7	ALAN GEORGE	15	100	100
8	8	ALAN THOMAS	15	100	100
9	9	ALBIN JOSE	15	100	100
10	10	ALEENA MARGARET	15	100	100
11	11	ALEX BABU JOSEPH	15	100	100
12	12	ANET SUNNY	15	100	100
13	13	ANISIA S PULICKAN	15	100	100
14	14	ANJALI RACHEL ANISH	15	100	100
15	15	ANN MARIA JOHNEY	15	100	100
16	16	ANN MARIYA SHAJI	15	100	100
17	17	ANU SOMARAJAN K	15	100	100
18	18	ARJUN KRISHNA C V	15	100	100
19	19	ARJUN T S	15	100	100
20	20	ASHLEY ELIZABETH	15	100	100
21	21	ATHUL KRISHNA SURESH	15	100	100
22	22	DIYA SEBASTIAN	15	100	100
23	23	ELVIN ALOSIOUS	15	100	100
24	24	GLADWIN BIJU	15	100	100
25	25	ISAAC GEORGE	15	100	100
26	25	GOKUL V	15	100	100
27	26	JACOB MONCY	15	100	100
28	27	JEEVANJOSEPH P B	15	100	100
29	28	JISS JOSEPH	15	100	100
30	29	JOEL MATHEW	15	100	100
31	30	JOHNS PATTARA	15	100	100
32	31	JOSE ABRAHAM	15	100	100
33	32	JOSIL N D	15	100	100
34	33	JOYAL SIBY	15	100	100
35	34	JULIT SHAJI	15	100	100
36	35	KARTHIKA N	15	100	100
37	36	MELWIN SHAJU	15	100	100
38	37	NAYANA MANOJ	15	100	100
39	38	NAYANA MOL JOSEPH	15	100	100
40	39	PRITHVIN A NAIR	15	100	100
41	40	SACHIN JOSHY	15	100	100
42	41	SARATH P V	15	100	100
43	42	SHARON JUDY	15	100	100
44	43	SHARON MERIN SABU	15	100	100
45	44	SONU JACOB	15	100	100
46	45	THEJAS KRISHNA.J	15	100	100

Class Strength	46
Distinct COs	CO1 CO2

<b>No. of Students Attended</b>	87	87
<b>No. of Students with marks greater than or equal to cut off marks</b>	84	87
<b>% of Students with marks greater than or equal to cut off marks</b>	96.55	100
<b>Attainment Level</b>	96.55	100

<b>Attainment</b>	1	2	3
<b>Benchmark (%)</b>	50	60	70

### CO attainment in Assignment Assignment 1

<b>CO</b>	CO1	CO2
<b>Attainment</b>	3	3

## INDIVIDUAL ATTAINMENTS

Sl.No	Roll No	Name	SERIES EXAM 2			
			Marks Awarded	CO-Attainment		
			Max(50)	CO4	CO5	
1	1	AARYA SARA ALEX	37	85	75	50
2	2	ABHISREE B	26	50	55	50
3	3	ADITHYAN S PHILIP	25	50	70	10
4	4	AISWARYA JOSE	20.5	47.5	30	50
5	5	AJIL PAVITHRAN	27	42.5	60	65
6	6	AKSHAI P S	14	10	45	30
7	7	ALAN GEORGE	29.5	67.5	55	50
8	8	ALAN THOMAS	45.5	82.5	95	100
9	9	ALBIN JOSE	24	50	30	80
10	10	ALEENA MARGARET	37.5	70	77.5	80
11	11	ALEX BABU JOSEPH	35.5	65	70	85
12	12	ANET SUNNY	36	85	50	90
13	13	ANISIA S PULICKAN	43	82.5	92.5	80
14	14	ANJALI RACHEL ANISH	16	30	15	70
15	15	ANN MARIA JOHNEY	18	25	40	50
16	16	ANN MARIYA SHAJI	34	62.5	87.5	40
17	17	ANU SOMARAJAN K	38	85	62.5	85
18	18	ARJUN KRISHNA C V	14	35	20	30
19	19	ARJUN T S	22	27.5	47.5	70
20	20	ASHLEY ELIZABETH	36	70	75	70
21	21	ATHUL KRISHNA SURESH	24	27.5	67.5	50
22	22	DIYA SEBASTIAN	41	82.5	80	85
23	23	ELVIN ALOSIUS	24.5	65	42.5	30
24	24	GLADWIN BIJU	33	30	85	100
25	25	ISAAC GEORGE	28.5	85	30	55
26	25	GOKUL V	21	40	65	-
27	26	JACOB MONCY	0.5	2.5	-	-
28	27	JEEVANJOSEPH P B	31.5	82.5	55	40
29	28	JISS JOSEPH	20.5	72.5	30	-
30	29	JOEL MATHEW	45	87.5	87.5	100
31	30	JOHNS PATTARA	21	55	20	60
32	31	JOSE ABRAHAM	29	57.5	65	45
33	32	JOSIL N D	25	40	70	30
34	33	JOYAL SIBY	12	17.5	42.5	-
35	34	JULIT SHAJI	37.5	70	72.5	90
36	35	KARTHIKA N	39.5	70	90	75
37	36	MELWIN SHAJU	14	40	-	60
38	37	NAYANA MANOJ	47	92.5	97.5	90
39	38	NAYANA MOL JOSEPH	42	77.5	92.5	80
40	39	PRITHVIN A NAIR	22	52.5	37.5	40
41	40	SACHIN JOSHY	18	25	55	20
42	41	SARATH P V	43.5	85	100	65
43	42	SHARON JUDY	31	70	65	40
44	43	SHARON MERIN SABU	41	82.5	87.5	70
45	44	SONU JACOB	25	55	42.5	55
46	45	THEJAS KRISHNA.J	17	35	35	30

Class Strength	46		
Distinct COs	CO4 CO5 CO3		

<b>No. of Students Attended</b>	86	85	86
<b>No. of Students with marks greater than or equal to cut off marks</b>	46	41	51
<b>% of Students with marks greater than or equal to cut off marks</b>	53.49	48.24	59.3
<b>Attainment Level</b>	53.49	48.24	59.3

<b>Attainment</b>	1	2	3
<b>Benchmark (%)</b>	50	60	70

### **CO attainment in SERIES EXAM 2**

<b>CO</b>	CO4	CO5	CO3
<b>Attainment</b>	1	0	1

Sl.No	Roll No	Name	Assignment		Assignment 2			
			Marks Awarded		CO-Attainment			
			Max(15)	CO2	CO3	CO5	CO4	
1	1	AARYA SARA ALEX	12	75	83.33	83.33	83.33	
2	2	ABHISREE B	14	100	100	83.33	83.33	
3	3	ADITHYAN S PHILIP	15	100	100	100	100	
4	4	AISWARYA JOSE	14.5	91.67	100	100	100	
5	5	AJIL PAVITHRAN	15	100	100	100	100	
6	6	AKSHAI P S	15	100	100	100	100	
7	7	ALAN GEORGE	14.5	91.67	100	100	100	
8	8	ALAN THOMAS	15	100	100	100	100	
9	9	ALBIN JOSE	15	100	100	100	100	
10	10	ALEENA MARGARET	15	100	100	100	100	
11	11	ALEX BABU JOSEPH	15	100	100	100	100	
12	12	ANET SUNNY	15	100	100	100	100	
13	13	ANISIA S PULICKAN	14.5	91.67	100	100	100	
14	14	ANJALI RACHEL ANISH	14.5	100	83.33	100	100	
15	15	ANN MARIA JOHNEY	15	100	100	100	100	
16	16	ANN MARIYA SHAJI	15	100	100	100	100	
17	17	ANU SOMARAJAN K	15	100	100	100	100	
18	18	ARJUN KRISHNA C V	14.5	100	83.33	100	100	
19	19	ARJUN T S	14.5	100	100	83.33	100	
20	20	ASHLEY ELIZABETH	15	100	100	100	100	
21	21	ATHUL KRISHNA SURESH	14.5	91.67	100	100	100	
22	22	DIYA SEBASTIAN	15	100	100	100	100	
23	23	ELVIN ALOSIOUS	14.5	100	100	100	83.33	
24	24	GLADWIN BIJU	14.5	100	100	100	83.33	
25	25	ISAAC GEORGE	15	100	100	100	100	
26	25	GOKUL V	12	75	83.33	83.33	83.33	
27	26	JACOB MONCY	15	100	100	100	100	
28	27	JEEVANJOSEPH P B	15	100	100	100	100	
29	28	JISS JOSEPH	14.5	91.67	100	100	100	
30	29	JOEL MATHEW	15	100	100	100	100	
31	30	JOHNS PATTARA	15	100	100	100	100	
32	31	JOSE ABRAHAM	14.5	100	83.33	100	100	
33	32	JOSIL N D	15	100	100	100	100	
34	33	JOYAL SIBY	15	100	100	100	100	
35	34	JULIT SHAJI	15	100	100	100	100	
36	35	KARTHIKA N	15	100	100	100	100	
37	36	MELWIN SHAJU	15	100	100	100	100	
38	37	NAYANA MANOJ	15	100	100	100	100	
39	38	NAYANA MOL JOSEPH	15	100	100	100	100	
40	39	PRITHVIN A NAIR	10	66.67	66.67	66.67	66.67	
41	40	SACHIN JOSHY	13	91.67	83.33	83.33	83.33	
42	41	SARATH P V	15	100	100	100	100	
43	42	SHARON JUDY	15	100	100	100	100	
44	43	SHARON MERIN SABU	15	100	100	100	100	
45	44	SONU JACOB	15	100	100	100	100	
46	45	THEJAS KRISHNA.J	14.5	100	100	83.33	100	

Class Strength	46			
Distinct COs	CO2 CO3 CO5 CO4			

<b>No. of Students Attended</b>	87	87	87	87
<b>No. of Students with marks greater than or equal to cut off marks</b>	87	87	87	87
<b>% of Students with marks greater than or equal to cut off marks</b>	100	100	100	100
<b>Attainment Level</b>	100	100	100	100

<b>Attainment</b>	1	2	3
<b>Benchmark (%)</b>	50	60	70

### CO attainment in Assignment Assignment 2

CO	CO2	CO3	CO5	CO4
<b>Attainment</b>	3	3	3	3

## OVERALL INDIVIDUAL ATTAINMENT

Sl.No	Roll No	Name	CO1	CO2	CO3	CO4	CO5
1	1	AARYA SARA ALEX	100	91.67	74.44	84.17	79.17
2	2	ABHISREE B	82.5	87.5	58.33	66.67	69.17
3	3	ADITHYAN S PHILIP	78.75	70	55	75	85
4	4	AISWARYA JOSE	75	77.22	63.33	73.75	65
5	5	AJIL PAVITHRAN	80	95	81.67	71.25	80
6	6	AKSHAI P S	76.25	85.83	66.67	55	72.5
7	7	ALAN GEORGE	85	92.22	73.33	83.75	77.5
8	8	ALAN THOMAS	92.5	96.67	96.67	91.25	97.5
9	9	ALBIN JOSE	53.75	75.83	65	75	65
10	10	ALEENA MARGARET	92.5	100	90	85	88.75
11	11	ALEX BABU JOSEPH	80	88.33	85	82.5	85
12	12	ANET SUNNY	91.25	70.83	95	92.5	75
13	13	ANISIA S PULICKAN	92.5	97.22	93.33	91.25	96.25
14	14	ANJALI RACHEL ANISH	91.25	87.5	61.11	65	57.5
15	15	ANN MARIA JOHNEY	83.75	80.83	56.67	62.5	70
16	16	ANN MARIYA SHAJI	85	98.33	73.33	81.25	93.75
17	17	ANU SOMARAJAN K	92.5	86.67	88.33	92.5	81.25
18	18	ARJUN KRISHNA C V	61.25	74.17	57.78	67.5	60
19	19	ARJUN T S	66.25	85.83	85	63.75	65.42
20	20	ASHLEY ELIZABETH	97.5	95	80	85	87.5
21	21	ATHUL KRISHNA SURESH	83.75	94.72	56.67	63.75	83.75
22	22	DIYA SEBASTIAN	95	97.5	90	91.25	90
23	23	ELVIN ALOSIOUS	71.25	89.17	66.67	74.17	71.25
24	24	GLADWIN BIJU	75	98.33	93.33	56.67	92.5
25	25	ISAAC GEORGE	87.5	85	85	92.5	65
26	25	GOKUL V	85	87.5	71.67	61.67	74.17
27	26	JACOB MONCY	90	88.33	85	51.25	100
28	27	JEEVANJOSEPH P B	96.25	96.67	71.67	91.25	77.5
29	28	JISS JOSEPH	63.75	91.39	70	86.25	65
30	29	JOEL MATHEW	100	100	100	93.75	93.75
31	30	JOHNS PATTARA	75	83.33	83.33	77.5	60
32	31	JOSE ABRAHAM	81.25	94.17	62.78	78.75	82.5
33	32	JOSIL N D	98.75	99.17	73.33	70	85
34	33	JOYAL SIBY	90	86.27	100	58.75	71.25
35	34	JULIT SHAJI	96.25	95.83	93.33	85	86.25
36	35	KARTHIKA N	96.25	95	86.67	85	95
37	36	MELWIN SHAJU	76.25	78.33	78.33	70	100
38	37	NAYANA MANOJ	97.5	100	96.67	96.25	98.75
39	38	NAYANA MOL JOSEPH	97.5	100	90	88.75	96.25
40	39	PRITHVIN A NAIR	100	79.72	47.22	59.59	52.09
41	40	SACHIN JOSHY	85	94.72	57.78	54.17	69.17
42	41	SARATH P V	96.25	100	86.67	92.5	100
43	42	SHARON JUDY	85	95	80	85	82.5
44	43	SHARON MERIN SABU	87.5	98.33	90	91.25	93.75
45	44	SONU JACOB	62.5	100	81.67	77.5	71.25
46	45	THEJAS KRISHNA.J	57.5	80	65	67.5	59.17

## Attainment

CO1	CO2	CO3	CO4	CO5
3	3	2.33	2	1.5

Survey Session: CE-ECT301-ECE 2020-2024 A (S5)		Users Completed: 46			
Section	Question	Option	Mark	Users Opted	Opted %
1	1. Understand Op-amp fundamentals and differential amplifier configurations	excellent	5.00	22	47.83 %
		very good	4.00	16	34.78 %
		good	3.00	7	15.22 %
		fair	2.00	1	2.17 %
		poor	1.00	0	0 %
	2. Design operational amplifier circuits for various applications	excellent	5.00	24	52.17 %
		very good	4.00	15	32.61 %
		good	3.00	6	13.04 %
		fair	2.00	1	2.17 %
		poor	1.00	0	0 %
	3. Design oscillators and active filters using op-amps	excellent	5.00	20	43.48 %
		very good	4.00	15	32.61 %
		good	3.00	10	21.74 %
		fair	2.00	1	2.17 %
		poor	1.00	0	0 %
	4. Explain the working and applications of timer, VCO and PLL ICs	excellent	5.00	22	47.83 %
		very good	4.00	14	30.43 %
		good	3.00	9	19.57 %
		fair	2.00	1	2.17 %
		poor	1.00	0	0 %
	5. Outline the working of voltage regulator ICs and Data converters	excellent	5.00	24	52.17 %
		very good	4.00	12	26.09 %
		good	3.00	8	17.39 %
		fair	2.00	2	4.35 %
		poor	1.00	0	0 %

Remarks: No remarks found.

CO-Wise Result				
CO.1	CO.2	CO.3	CO.4	CO.5
3.00	3.00	3.00	3.00	3.00

## ATTENDANCE SUMMARY

Roll No	Student	19/09	20/09	23/09	24/09	29/09	30/09	06/10	14/10	15/10	17/10	18/10	20/10	21/10	22/10	28/10	03/11	Total				
		7	1	6	1	4	7	6	4	3	6	4	7	1	4	1	6	6	2	4	6	4
1	AARYA SARA ALEX	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	47/62 (76)
2	ABHISREE B	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	56/62 (90)
3	ADITHYAN S PHILIP	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	56/62 (90)
4	AISWARYA JOSE	P	P	P	P	A	A	P	P	P	P	A	P	P	P	P	P	P	P	P	P	52/62 (84)
5	AJIL PAVITHRAN	P	P	P	P	P	P	P	P	P	P	A	P	D	P	P	P	P	P	P	P	54/62 (87)
6	AKSHAI P S	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	61/62 (98)
7	ALAN GEORGE	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	55/62 (89)
8	ALAN THOMAS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	55/62 (89)
9	ALBIN JOSE	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	60/62 (97)
10	ALEENA MARGARET	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	59/62 (95)
11	ALEX BABU JOSEPH	P	P	P	P	P	P	P	P	P	P	P	P	D	P	P	P	P	P	P	P	59/62 (95)
12	ANET SUNNY	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	53/62 (85)
13	ANISIA S PULICKAN	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	59/62 (95)
14	ANJALI RACHEL ANISH	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	47/62 (76)
15	ANN MARIA JOHNNEY	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	55/62 (89)
16	ANN MARIYA SHAJI	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	58/62 (94)
17	ANU SOMARAJAN K	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	55/62 (89)
18	ARJUN KRISHNA C V	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	50/62 (81)
19	ARJUN T S	P	P	P	A	A	P	P	P	P	P	A	A	P	P	P	P	P	P	A	P	53/62 (85)
20	ASHLEY ELIZABETH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	59/62 (95)
21	ATHUL KRISHNA SURESH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	55/62 (89)
22	DIYA SEBASTIAN	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	56/62 (90)
23	ELVIN ALOSIUS	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	55/62 (89)
24	GLADWIN BIJU	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	57/62 (92)
25	ISAAC GEORGE	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	61/62 (98)
25	GOKUL V	A	P	P	P	A	A	P	P	P	P	A	P	A	P	P	A	A	A	P	A	44/62 (71)
26	JACOB MONCY	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	49/62 (79)
27	JEEVANOSEPH P B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	59/62 (95)
28	JISS JOSEPH	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	53/62 (85)
29	JOEL MATHEW	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	58/62 (94)
30	JOHNS PATTARA	P	P	P	P	P	P	P	P	P	P	P	D	P	P	P	P	P	P	P	P	55/62 (89)
31	JOSE ABRAHAM	P	P	P	P	A	P	P	P	P	P	A	A	A	P	P	P	P	P	P	P	51/62 (82)
32	JOSIL N D	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	55/62 (89)
33	JOYAL SIBY	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	47/62 (76)
34	JULIT SHAJI	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	60/62 (97)
35	KARTHIKA N	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	62/62 (100)
36	MELWIN SHAJU	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	56/62 (90)
37	NAYANA MANOJ	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	56/62 (90)
38	NAYANA MOL JOSEPH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	61/62 (98)
39	PRITHVIN A NAIR	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	50/62 (81)
40	SACHIN JOSHY	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	57/62 (92)
41	SARATH P V	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	57/62 (92)
42	SHARON JUDY	A	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	55/62 (89)
43	SHARON MERIN SABU	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	61/62 (98)
44	SONU JACOB	P	P	P	P	P	P	P	P	P	P	P	P	D	P	P	P	P	P	P	P	55/62 (89)
45	THEJAS KRISHNAJ	P	P	P	P	A	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	54/62 (87)

## ATTENDANCE SUMMARY

Roll No	Student	04/11		05/11	07/11	08/11	14/11			15/11	19/11	21/11	24/11	25/11	26/11	28/11	29/11	05/12	Total			
		1	6	1	7	1	1	2	3	7	1	4	7	4	4	6	3	4	7	1		
1	AARYA SARA ALEX	P	P	P	P	A	P	P	P	P	P	P	P	A	A	P	P	P	P	47/62 (76)		
2	ABHISREE B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	56/62 (90)		
3	ADITHYAN S PHILIP	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	P	56/62 (90)		
4	AISWARYA JOSE	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	52/62 (84)		
5	AJIL PAVITHRAN	P	P	P	P	P	P	P	P	P	P	P	P	A	D	D	P	P	D	P	54/62 (87)	
6	AKSHAI P S	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	61/62 (98)	
7	ALAN GEORGE	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	A	P	P	55/62 (89)
8	ALAN THOMAS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	55/62 (89)
9	ALBIN JOSE	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	60/62 (97)
10	ALEENA MARGARET	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	59/62 (95)
11	ALEX BABU JOSEPH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	P	P	A	59/62 (95)
12	ANET SUNNY	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	D	P	P	53/62 (85)
13	ANISIA S PULICKAN	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	59/62 (95)
14	ANJALI RACHEL ANISH	P	P	P	P	P	P	P	P	P	A	A	P	P	P	P	P	P	D	P	P	47/62 (76)
15	ANN MARIA JOHNEY	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	55/62 (89)
16	ANN MARIYA SHAJI	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	58/62 (94)
17	ANU SOMARAJAN K	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	55/62 (89)
18	ARJUN KRISHNA C V	A	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	D	P	A	50/62 (81)
19	ARJUN T S	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	A	P	P	P	53/62 (85)
20	ASHLEY ELIZABETH	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	59/62 (95)
21	ATHUL KRISHNA SURESH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	55/62 (89)
22	DIYA SEBASTIAN	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	56/62 (90)
23	ELVIN ALOSIUS	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	55/62 (89)
24	GLADWIN BIJU	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	57/62 (92)
25	ISAAC GEORGE	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	61/62 (98)
25	GOKUL V	P	P	P	P	P	P	P	P	P	A	A	A	P	P	P	P	A	A	P	P	44/62 (71)
26	JACOB MONCY	P	P	P	A	A	A	P	P	P	P	P	P	P	P	P	A	A	P	P	P	49/62 (79)
27	JEEVAN JOSEPH P B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	59/62 (95)
28	JISS JOSEPH	P	P	P	P	P	P	P	P	P	A	A	P	P	P	P	P	P	P	A	P	53/62 (85)
29	JOEL MATHEW	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	58/62 (94)
30	JOHNS PATTARA	P	P	P	P	P	P	P	P	P	P	P	P	A	D	D	P	P	D	P	P	55/62 (89)
31	JOSE ABRAHAM	P	P	P	P	P	P	P	P	P	A	A	P	A	P	P	P	P	A	P	P	51/62 (82)
32	JOSIL N D	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	A	P	55/62 (89)
33	JOYAL SIBY	P	P	P	A	A	P	P	P	P	P	P	P	A	A	A	P	P	A	A	P	47/62 (76)
34	JULIT SHAJI	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	60/62 (97)
35	KARTHIKA N	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	62/62 (100)
36	MELWIN SHAJU	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	D	P	56/62 (90)
37	NAYANA MANOJ	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	56/62 (90)
38	NAYANA MOL JOSEPH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	61/62 (98)
39	PRITHVINI A NAIR	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	D	50/62 (81)
40	SACHIN JOSHY	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	57/62 (92)
41	SARATH P V	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	57/62 (92)
42	SHARON JUDY	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	55/62 (89)
43	SHARON MERIN SABU	P	P	A	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	61/62 (98)
44	SONU JACOB	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	P	P	D	P	P	55/62 (89)
45	THEJAS KRISHNA.J	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	54/62 (87)

## ATTENDANCE SUMMARY

Roll No	Student	06/12		08/12		09/12		12/12		14/12		22/12		04/01		05/01		08/01		10/01			Total	
		1	6	4	2	3	7	5	6	7	3	4	3	4	7	1	2	3	4	5	6	7		
1	AARYA SARA ALEX	P	P	P	A	A	P	P	P	P	A	A	A	A	A	A	A	A	A	A	A	A	A	47/62 (76)
2	ABHISREE B	P	P	P	P	P	P	P	P	P	P	P	D	A	A	A	A	P	P	P	P	P	P	56/62 (90)
3	ADITHYAN S PHILIP	P	P	P	A	A	P	P	P	P	A	A	P	P	P	P	P	P	P	P	P	P	P	56/62 (90)
4	AISWARYA JOSE	P	P	P	P	P	P	P	P	P	P	P	A	A	A	P	P	P	P	A	A	A	A	52/62 (84)
5	AJIL PAVITHRAN	P	P	P	P	P	P	P	P	P	A	A	P	P	A	P	P	P	P	A	A	A	A	54/62 (87)
6	AKSHAI P S	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	P	61/62 (98)
7	ALAN GEORGE	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	A	A	A	A	55/62 (89)
8	ALAN THOMAS	P	P	P	P	P	P	P	P	P	A	A	P	P	A	P	P	P	P	A	A	A	A	55/62 (89)
9	ALBIN JOSE	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	P	P	60/62 (97)
10	ALEENA MARGARET	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	P	59/62 (95)
11	ALEX BABU JOSEPH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	59/62 (95)
12	ANET SUNNY	P	P	P	A	A	P	P	P	A	A	A	P	P	P	A	A	P	P	A	A	A	A	53/62 (85)
13	ANISIA S PULICKAN	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	A	A	P	P	P	P	P	59/62 (95)
14	ANJALI RACHEL ANISH	P	P	P	A	A	P	P	P	A	A	A	A	A	P	P	A	A	A	A	A	A	A	47/62 (76)
15	ANN MARIA JOHNEY	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	A	A	P	P	P	P	P	55/62 (89)
16	ANN MARIYA SHAJI	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	P	P	58/62 (94)
17	ANU SOMARAJAN K	P	P	P	A	A	P	P	P	P	P	P	P	A	P	P	A	A	P	P	P	P	P	55/62 (89)
18	ARJUN KRISHNA C V	P	P	P	A	A	P	P	P	A	A	P	P	P	P	P	A	A	A	A	A	A	A	50/62 (81)
19	ARJUN T S	A	A	P	P	P	P	P	P	P	P	P	D	P	P	P	P	P	P	P	P	P	P	53/62 (85)
20	ASHLEY ELIZABETH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	P	P	59/62 (95)
21	ATHUL KRISHNA SURESH	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	A	A	A	A	A	A	A	55/62 (89)
22	DIYA SEBASTIAN	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	A	A	A	A	56/62 (90)
23	ELVIN ALOSIOUS	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	P	A	A	P	P	P	P	55/62 (89)
24	GLADWIN BIJU	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	A	A	P	P	P	P	P	57/62 (92)
25	ISAAC GEORGE	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	61/62 (98)
25	GOKUL V	P	P	A	P	P	P	P	P	P	A	A	A	A	P	A	A	P	P	P	P	P	P	44/62 (71)
26	JACOB MONCY	P	P	P	P	P	P	P	P	P	P	A	A	P	P	A	A	A	P	P	A	A	A	49/62 (79)
27	JEEVANU JOSEPH P B	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	A	59/62 (95)
28	JISS JOSEPH	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	P	P	A	P	P	P	P	53/62 (85)
29	JOEL MATHEW	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	A	A	A	58/62 (94)
30	JOHNS PATTARA	P	P	P	A	A	P	P	P	P	P	P	P	P	A	P	P	P	A	A	A	A	A	55/62 (89)
31	JOSE ABRAHAM	P	P	P	P	P	A	P	P	P	P	P	P	P	A	P	P	P	P	P	P	P	A	51/62 (82)
32	JOSIL N D	P	P	P	P	P	A	P	P	P	A	A	P	P	A	P	P	P	P	P	P	P	A	55/62 (89)
33	JOYAL SIBY	A	A	P	P	A	P	P	P	P	P	P	A	A	A	P	P	P	P	P	P	P	P	47/62 (76)
34	JULIT SHAJI	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	60/62 (97)
35	KARTHIKA N	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	62/62 (100)
36	MELWIN SHAJU	P	P	P	P	A	P	P	P	P	P	P	P	P	A	P	P	P	P	A	A	A	A	56/62 (90)
37	NAYANA MANOJ	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	A	A	A	56/62 (90)
38	NAYANA MOL JOSEPH	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	61/62 (98)
39	PRITHVIN A NAIR	P	P	A	P	P	P	P	P	P	P	P	P	A	A	A	A	A	A	P	P	P	P	50/62 (81)
40	SACHIN JOSHY	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	P	P	P	P	P	P	57/62 (92)
41	SARATH P V	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	P	P	P	P	P	A	57/62 (92)
42	SHARON JUDY	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	A	P	P	P	P	P	A	55/62 (89)
43	SHARON MERIN SABU	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	61/62 (98)
44	SONU JACOB	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	A	55/62 (89)
45	THEJAS KRISHNA.J	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	A	P	P	A	A	P	P	54/62 (87)

## ATTENDANCE SUMMARY

Roll No	Student	Total
1	AARYA SARA ALEX	47/62 (76)
2	ABHISREE B	56/62 (90)
3	ADITHYAN S PHILIP	56/62 (90)
4	AISWARYA JOSE	52/62 (84)
5	AJIL PAVITHRAN	54/62 (87)
6	AKSHAI P S	61/62 (98)
7	ALAN GEORGE	55/62 (89)
8	ALAN THOMAS	55/62 (89)
9	ALBIN JOSE	60/62 (97)
10	ALEENA MARGARET	59/62 (95)
11	ALEX BABU JOSEPH	59/62 (95)
12	ANET SUNNY	53/62 (85)
13	ANISIA S PULICKAN	59/62 (95)
14	ANJALI RACHEL ANISH	47/62 (76)
15	ANN MARIA JOHNNEY	55/62 (89)
16	ANN MARIYA SHAJI	58/62 (94)
17	ANU SOMARAJAN K	55/62 (89)
18	ARJUN KRISHNA C V	50/62 (81)
19	ARJUN T S	53/62 (85)
20	ASHLEY ELIZABETH	59/62 (95)
21	ATHUL KRISHNA SURESH	55/62 (89)
22	DIYA SEBASTIAN	56/62 (90)
23	ELVIN ALOSIUS	55/62 (89)
24	GLADWIN BIJU	57/62 (92)
25	ISAAC GEORGE	61/62 (98)
25	GOKUL V	44/62 (71)
26	JACOB MONCY	49/62 (79)
27	JEEVANJOSEPH P B	59/62 (95)
28	JISS JOSEPH	53/62 (85)
29	JOEL MATTHEW	58/62 (94)
30	JOHNS PATTARA	55/62 (89)
31	JOSE ABRAHAM	51/62 (82)
32	JOSIL N D	55/62 (89)
33	JOYAL SIBY	47/62 (76)
34	JULIT SHAJI	60/62 (97)
35	KARTHIKA N	62/62 (100)
36	MELWIN SHAJU	56/62 (90)
37	NAYANA MANOJ	56/62 (90)
38	NAYANA MOL JOSEPH	61/62 (98)
39	PRITHVINI A NAIR	50/62 (81)
40	SACHIN JOSHY	57/62 (92)
41	SARATH P V	57/62 (92)
42	SHARON JUDY	55/62 (89)
43	SHARON MERIN SABU	61/62 (98)
44	SONU JACOB	55/62 (89)
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Roll No	Student	Total
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44	SONU JACOB	55/62 (89)
45	THEJAS KRISHNA.J	54/62 (87)

S.No	Date	Period	Topic Covered
1	Sat, 19th November 2022	1	Phase Shift and Wien-bridge Oscillators,
2	Sat, 19th November 2022	4	Triangular and Sawtooth waveform generators, Astable and monostable multivibrators
3	Thu, 22nd December 2022	3	Tutorial on 555 timer,VCO & PLL
4	Thu, 22nd December 2022	4	Fixed and Adjustable voltage regulators
5	Tue, 20th December 2022	8	Fixed and Adjustable voltage regulators
6	Mon, 19th December 2022	4	IC 723 – Low voltage and high voltage configurations
7	Wed, 4th January 2023	3	IC 723 – Low voltage and high voltage configurations
8	Wed, 4th January 2023	4	Current boosting, Current limiting, Short circuit and Fold-back protection.
9	Wed, 4th January 2023	7	Digital to Analog converters, Specifications, Weighted resistor type and R-2R Ladder type.
10	Thu, 5th January 2023	1	Digital to Analog converters, Specifications, Weighted resistor type and R-2R Ladder type.
11	Thu, 5th January 2023	2	Digital to Analog converters, Specifications, Weighted resistor type and R-2R Ladder type.
12	Sun, 8th January 2023	3	Analog to Digital Converters: Specifications, Flash type and Successive approximation type.
13	Sun, 8th January 2023	4	Analog to Digital Converters: Specifications, Flash type and Successive approximation type.
14	Tue, 10th January 2023	5	Analog to Digital Converters: Specifications, Flash type and Successive approximation type.
15	Tue, 10th January 2023	6	Tutorial on ADC & DAC
16	Tue, 10th January 2023	7	Tutorial on ADC & DAC