ST. ANNE'S COLLEGE OF ENGINEERING AND TECHNOLOGY

(Approved by AICTE, New Delhi, Affilliated to Anna University, Chennai)

ANGUCHETTYPALAYAM, PANRUTI - 607 106.

ATTENDANCE AND ASSESSMENT RECORD

Name of the Staff : ARTHI. T

Department of the Staff : EEE

Semester / Subject : II / BE3271 - BASIC ELECTRICAL & ELECTRONICS ENGINEERING LAB

Period : FEB - JUNE 2025

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MECHANICAL ENGINEERING

BE3271	**BASIC ELECTRICAL AND ELECTRONICS ENGINEERING LABORATORY**	**L T P C** **0 0 4 2**

COURSE OBJECTIVES:

- To train the students in conducting load tests on electrical machines
- To gain practical experience in characterizing electronic devices
- To train the students to use DSO for measurements.

LIST OF EXPERIMENTS:

CYCLE 1

1. Load test on DC Shunt Motor.
2. Load test on Self Excited DC Generator.
3. Load test on Single phase Transformer.
4. Load Test on Induction Motor

CYCLE 2

1. Characteristics of PN junction Diode
2. Characteristics of Zener Diodes
3. Characteristics of BJT
4. Characteristics of SCR
5. Characteristics of MOSFET
6. Half wave and Full Wave rectifiers
7. Study of Logic Gates
8. Implementation of Binary Adder and Subtractor
9. Study of DSO
10. Verification of ohms
11. Verification of Kirchhoff's Laws

TOTAL: 60 PERIODS

Name of the Staff : ARTHI.T

Department of the Staff : EEE

Department of the Student : MECH

Semester : II Semester

Subject Code & Name : BE3271 & BASIC ELECTRICAL & ELECTRONICS ENGINEERING LAB

Period **From** : FEB to JUNE

To be Signed at the end of the each Assessment

Assessment Report	–	–	MODEL LAB
Assessment Date	–	–	19.05.25
Report Due on	–	–	20.05.25
Signature - HoD of Students with Date	–	–	K-S 20/5/25

To be Signed at the end of the Semester

Staff in - charge	HoD of Staff	HOD of Students	Principal
T.	V. 5/7/25		

ATTENDANCE

S No.	Reg. No. 422124114	Name	Date	10	10	10	10	17	17	17	17	24	24	24	24	30	30
			Month	3	3	3	3	3	3	3	3	3	3	3	3	3	3
			Period	4	5	6	7	4	5	6	7	4	5	6	7	1	2
1.	001	CHANDRU S		/	/	/	/	/	/	/	/	/	/	/	/	/	/
2.	002	DEVARAJ V		/	/	/	/	/	/	/	/	/	/	/	/	/	/
3.	003	DHANUSH P		/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	004	GANESH P		/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	005	GOWTHAM K		/	/	/	/	a	a	a	a	/	/	/	/	/	/
6	006	JEEVANANDHAM K		/	/	/	/	a	a	a	a	/	/	/	/	/	/
7	007	JOHN DANIAL J		/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	008	KEERTHANA L		/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	009	MURESH RAJ T		/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	010	SHAMEEM BASHA K		/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	011	SRIDHARAN S		a	a	a	a	a	a	a	a	a	a	a	a	/	/
12	012	SRIHARSHA K		/	/	/	/	/	/	/	/	/	/	/	/	/	/
13	013	THIRUKUMARAN B		/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	014	VINOTHKUMAR V		/	/	/	/	/	/	/	/	/	/	/	/	/	/
		No. of Absentees		01	1	1	1	2	2	2	2	1	1	1	1	—	—
		Initial															

2.4.25

ATTENDANCE

30	30	30	30	30	7	7	7	7	10	10	10	10	10	10	10
3	3	3	3	3	4	4	4	4	4	4	4	4	4	4	4
3	4	5	6	7	4	5	6	7	1	2	3	4	5	6	7
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	a	a	a	a	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	a	a	a	a	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	a	a	a	a	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	a	a	a	a	/	/	/	/	/	/	/
/	/	/	/	/	a	a	a	a	a	a	a	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
—	—	—	—	—	2	2	2	2	4	4	4	4	—	—	—
A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

	Assessment	
Total (40)	~~CIA-1~~ modul	CIA -2
	70	
	70	
	80	
	80	
	60	
	70	
	60	
	90	
	70	
	70	
	60	
	70	
	90	
	60	

S No.	Reg. No. 422124114	Name
1.	001	CHANDRU
2.	002	DEVARAJ
3.	003	DHANUSH
4	004	GANESH
5	005	GOWTHAM
6	006	JEEVANANDH
7	007	JOHN DANIA
8	008	KEERTHANA
9	009	MURESH RA
10	010	SHAMEEM BAS
11	011	SRIDHARAN
12	012	SRIHARSHA
13	013	THIRUKUMARA
14	014	VINOTHKUMA
No. of Absentees		
Initial		

ATTENDANCE

	19	19	19	19	19	19	19	21	21	21	26	26	26	26	28	28
	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	1	2	3	4	5	6	7	5	6	7	4	5	6	7	4	5
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
5	/	/	/	/	a	/	/	/	/	/	/	/	/	/	/	/
6	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
9	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
12	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
13	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
14	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
No. of Absentees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Initial	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A

ATTENDANCE

	28	28	28	1	1	1	5	5	5	5	12	12	19	19	19	
	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	
	6	7	1	1	2	3	4	5	6	7	6	7	1	2	3	
1	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
2	/	/	/	/	/	/	/	/	/	/	/	/	a	a	a	
3	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
4	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
5	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
6	/	/	/	/	/	/	/	/	/	/	/	/	a	a	a	
7	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
8	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
9	/	/	/	/	/	/	/	/	/	/	/	/	a	a	a	
10	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
11	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
12	/	/	/	/	/	/	/	/	/	/	/	/	a	a	a	
13	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
14	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	
No. of Absentees	-	-	-	-	-	-	-	-	-	-	-	-	4	4	4	
Initial	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	

	Assessment	
Total (40)	~~CIA-1~~ model	CIA-2
	70	
	70	
	80	
	80	
	60	
	70	
	60	
	90	
	70	
	70	
	60	
	70	
	90	
	60	

ATTENDANCE

S No.	Reg. No. 422124114	Name
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10	010	SHAMEEM
11	011	SRIDHARA
12	012	SRIHARSH
13	013	THIRUKUMA
14	014	VINOTHKU
No. of Absentees		
Initial		

	Attendance		
	23	38	
	1	2	3
1	23	38	
2	23	31	
3	23	38	
4	23	38	
5	19	38	
6	19	35	
7	23	38	
8	23	38	
9	23	31	
10	19	38	
11	07	38	
12	19	31	
13	23	38	
14	23	38	

Assessment

Internal Component												Assessment	
Report -1 (R2021)						Report -2 (R2021)						modul	
Assignment	Case study	Seminar	Mini Project		Total (40)	Assignment	Case study	Seminar	Mini Project		Total (40)	~~CIA-1~~	CIA-2
												70	
												70	
												80	
												80	
												60	
												70	
												60	
												90	
												70	
												70	
												60	
												70	
												90	
												60	

RECORD OF

S. No.	Class Planned		Topic Name	BT
	Date	Period		
			Cycle 1	
1.	03.3.25	4,5,6,7	Load test on DC shunt motor	K2
2.	10.3.25	4,5,6,7	Load test on self excited DC generator	K2
3.	17.3.25	4,5,6,7	Load test on single phase transformer.	K2
4.	24.3.25	4,5,6,7	Load test on Induction motor	K3

* BT- Bloom's Taxonomy, TA-Teaching Aids

CLASS WORK

Book Referred	Class Conducted		Reason for Deviation	TA	Staff Sign
	Date	Period			
	10.3.25	4,5,6,7	VAC	BB	A
	17.3.25	4,5,6,7	–	BB	A
	24.3.25	4,5,6,7	–	BB	A
	30.3.25	4,5,6,7	–	BB	A

5.6.25

RECORD OF

S. No.	Class Planned		Topic Name	BT
	Date	Period		
			cycle 2	
1.	7.4.25	4,5,6,7	verification of Ohms and Kirchhoff's law	
2.	14.4.25	4,5,6,7	characteristics of PN and Zener diode	
3.	21.4.25	4,5,6,7	characteristics BJT	
4.	28.4.25	4,5,6,7	characteristics of SCR and MOSFET	
5.	5.5.25	4,5,6,7	Half wave and Full wave rectifier	
6.	12.5.25	4,5,6,7	Study of logic gates	
7.	19.5.25	4,5	Implementation of adder	
8.	19.5.25	6,7	study of DSO	

* BT- Bloom's Taxonomy, TA-Teaching Aids

CLASS WORK

Book Referred	Class Conducted		Reason for Deviation	TA	Staff Sign
	Date	Period			
	7.4.25	4,5,6,7	–	BB	
	10.4.25	4,5,6,7	–	BB	
	19.4.25	1,2,3	–	BB	
	19.4.25	4,5,6,	–	BB	
	19.4.25	6,7	–	BB	
	26.4.25	4,5,6,7	–	BB	
	28.5.25	4,5	–	BB	
	28.5.25	6,7	–	BB	

Time Table

PERIOD / DAY	1	2	3	4	5	6	7	8
Monday				←	BEEE		→	
Tuesday								
Wednesday								
Thursday								
Friday								

Unit Completion Details

Unit No.	Unit Description	Start Date	Finish Date	No. of Hours
1				
2				
3				
4				
5				

Subject In-Charge HoD of Students Principal

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COURSE OUTCOME:

CO no.	COURSE OUTCOME	Knowledge level
CO 1	Use experimental methods to verify the Ohm's and Kirchhoff's Laws.	K3
CO 2	Analyze experimentally the load characteristics of electrical machines	K4
CO 3	Analyze the characteristics of basic electronic devices	K4
CO 4	Use DSO to measure the various parameters	K1

Bloom's TAXONOMY: k-Level [K1-Remember, K2-Understand, K3-Apply, K4-Analyze, K5 Evaluate,k6-Create]

MAPPING OF COs WITH POs AND PSOs:

Program Outcome	COURSE OUTCOMES				
	CO 1	CO 2	CO 3	CO 4	CO5
PO 1	3	3	3	3	3
PO 2	3	3	3	3	3
PO 3	2	2	2	2	2
PO 4	1	1	1	1	1
PO 5	1	1	1	1	1
PO 6					
PO 7					
PO 8	1.5	1.5	1.5	1.5	1.5
PO 9	2	2	2	2	2
PO 10					
PO 11					
PO 12					
PSO 1					
PSO 2					
PSO 3	1	1	1	1	1

Regulation 2021: 1 - Slight, 2 - moderate, 3 - Substantial

Teaching Aids

BB- Black Board	OHP- Over HeadProjector	PPT - Power Point	L1 - Lecture 1
T1 - Tutorial 1	A1- Assignment 1	Tx1 - Text Book 1	Rx1 - Reference Book 1
M - Model and Demo	V- Video Lecture	A- Animation	