



ESTD : 2007

Sri Indu Institute of Engineering and Technology (Autonomous)

(Formerly RVR Institute of Engineering & Technology)

An Autonomous Institution Under UGC

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EAMCET CODE: INDI

Approved by AICTE, New Delhi, & Affiliated to JNTUH, Hyderabad.

JNTUH CODE: X3



COURSE FILE

ON

BASIC ELECTRICAL ENGINEERING LAB

Course Code – EE202ES

**I B. Tech Semester-II
A.Y. 2022-2023**

**Prepared by
S.NISCHALA
Asst. Professor**

Head of the Department
Department of H&S
SRI INDU INSTITUTE OF ENGG & TECH
Sheriguda(VIII) Ibrahimpatnam (M) R.R. Dist-501 510

PRINCIPAL
Sri Indu Institute of Engineering & Tech.
Sheriguda(VIII), Ibrahimpatnam
R.R. Dist. Telangana-501 510.



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Academic Year	2022-2023
Course Title	Basic Electrical Engineering Lab
Course Code	EE202ES
Programme	B.Tech
Year & Semester	I & II
Branch & Section	CSE-(IOT)
Regulation	BR22
Room No	D204 & A005
Name of the Lab Incharge	S.NISCHALA
Name of the Faculty Incharge	S.NISCHALA

Index of Lab File

S. No.	Name of the content
1	Institute vision and mission
2	Programme outcomes
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INSTITUTE VISION & MISSION

Vision:

To become a premier institute of academic excellence by providing the world class education that transforms individuals into high intellectuals, by evolving them as empathetic and responsible citizens through continuous improvement.

Mission:

- **IM1:** To offer outcome-based education and enhancement of technical and practical skills.
- **IM2:** To Continuous assess of teaching-learning process through institute-industry collaboration.
- **IM3:** To be a centre of excellence for innovative and emerging fields in technology development with state-of-art facilities to faculty and students' fraternity.
- **IM4:** To Create an enterprising environment to ensure culture, ethics and social responsibility among the stakeholders.


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Website: <https://siiet.ac.in/>

PROGRAMME OUTCOMES

PO1: Engineering Knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem Analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: Design / Development of Solutions: 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: Conduct Investigations of Complex Problems: 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: Modern Tool Usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

PO6: The Engineer & Society: 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: Environment & Sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual & Team Work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: Communication: 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, give and receive clear instructions.

PO11: Project Management & Finance: 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: Life-Long Learning: 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.

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B.Tech. in COMPUTER SCIENCE AND ENGINEERING (IOT) COURSE STRUCTURE, I YEAR SYLLABUS (BR22 Regulations)

Applicable from Academic Year: 2022-23 Batch

I Year I Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA101BS	Matrices and Calculus	3	1	0	4
2.	AP102BS	Applied Physics	3	1	0	4
3.	CS103ES	Programming for Problem Solving	3	0	0	3
4.	ME102ES	Engineering Workshop	0	1	3	2.5
5.	EN104HS	English for Skill Enhancement	2	0	0	2
6.	CS106ES	Elements of Computer Science & Engineering	0	0	2	1
7.	AP105BS	Applied Physics Laboratory	0	0	3	1.5
8.	CS107ES	Programming for Problem Solving Laboratory	0	0	2	1
9.	EN107HS	English Language and Communication Skills Laboratory	0	0	2	1
10.	*MC101ES	Environmental Science	3	0	0	0
11.		Induction Programme				
Total			14	3	12	20

I Year II Semester

S. No.	Course Code	Course Title	L	T	P	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	CH203BS	Engineering Chemistry	3	1	0	4
3.	ME201ES	Computer Aided Engineering Graphics	1	0	4	3
4.	EE201ES	Basic Electrical Engineering	2	0	0	2
5.	EC201ES	Electronic Devices and Circuits	2	0	0	2
6.	CH206BS	Engineering Chemistry Laboratory	0	0	2	1
7.	EE202ES	Basic Electrical Engineering Laboratory	0	0	2	1
8.	CS201ES	Python Programming Laboratory	0	1	2	2
9.	CS203ES	IT Workshop	0	0	2	1
Total			11	3	12	20



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BASIC ELECTRICAL ENGINEERING LABORATORY (Course Code: EE202ES)

B.Tech. I Year II Sem.

L T P C
0 0 2 1

Prerequisites: Basic Electrical Engineering

Course Objectives:

- To measure the electrical parameters for different types of DC and AC circuits using conventional and theorems approach.
- To study the transient response of various R, L and C circuits using different excitations.
- To determine the performance of different types of DC, AC machines and Transformers.

Course Outcomes: After learning the contents of this paper the student must be able to

- Verify the basic Electrical circuits through different experiments.
- Evaluate the performance calculations of Electrical Machines and Transformers through various testing methods.
- Analyze the transient responses of R, L and C circuits for different input conditions.

List of experiments/demonstrations:

PART- A (compulsory)

1. Verification of KVL and KCL
2. Verification of Thevenin's and Norton's theorem
3. Transient Response of Series RL and RC circuits for DC excitation
4. Resonance in series RLC circuit
5. Calculations and Verification of Impedance and Current of RL, RC and RLC series circuits
6. Measurement of Voltage, Current and Real Power in primary and Secondary Circuits of a Single-Phase Transformer
7. Performance Characteristics of a DC Shunt Motor
8. Torque-Speed Characteristics of a Three-phase Induction Motor.

PART-B (any two experiments from the given list)

1. Verification of Superposition theorem.
2. Three Phase Transformer: Verification of Relationship between Voltages and Currents(Star-Delta, Delta-Delta, Delta-star, Star-Star)
3. Load Test on Single Phase Transformer (Calculate Efficiency and Regulation)
4. Measurement of Active and Reactive Power in a balanced Three-phase circuit
5. No-Load Characteristics of a Three-phase Alternator

TEXT BOOKS:

1. D.P. Kothari and I. J. Nagrath, "Basic Electrical Engineering", Tata McGraw Hill, 4th Edition, 2019.
2. MS Naidu and S Kamakshiah, "Basic Electrical Engineering", Tata McGraw Hill, 2nd Edition, 2008.



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COURSE OUTCOMES

Course Name: Basic Electrical Engineering Lab (C127)

At the End of the course, student will be able to

CO No	DESCRIPTION
C127.1	Apply basic circuit laws and simplify the network using reduction techniques. (Application)
C127.2	Understand time domain analysis, resonance in RLC parameters and evaluate impedance in RLC circuit (Knowledge)
C127.3	Understand the working concept , Select range of apparatus based on the ratings of different machines like transformers and motors (Knowledge)
C127.4	Determine efficiency and regulation of transformers by various test (Evaluation)
C127.5	Determine the performance characteristics of dc shunt motor. (Evaluation)
C127.6	Determine 3 phase power, torque speed characteristics of 3 phase induction motor. (Evaluation)

COs and POs & PSOs Mapping

Course Outcome	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
C127.1	3	3	2	1	-	-	-	-	2	1	-	2	-	-
C127.2	3	3	1	2	1	-	-	-	2	1	-	2	-	-
C127.3	3	-	-	-	1	-	-	-	2	-	-	3	-	-
C127.4	2	3	1	-	1	1	-	-	3	-	-	2	-	-
C127.5	2	3	1	-	1	1	-	-	3	-	-	2	-	-
C127.6	2	3	1	-	1	1	-	-	3	-	-	2	-	-
PO Avg	2.5	3	1.2	1.5	1	1	-	-	2.5	1	-	2.17	-	-

3-High

2-Medium

1-Low



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LIST OF EXPERIMENTS AND THEIR CO, PO MAPPING

S.No	Name of The Experiment	CO	PO
1	Verification of KVL and KCL	1	1,2,3,4,9,10,12
2	Verification of Thevenin's and Norton's theorem	1	1,2,3,4,9,10,12
3	Transient Response of Series RL and RC circuits for DC excitation	2	1,2,3,4,5,9,10,12
4	Resonance in series RLC circuit	2	1,2,3,4,5,9,10,12
5	Calculations and Verification of Impedance and Current of RL, RC and RLC series circuits	2	1,2,3,4,5,9,10,12
6	Measurement of Voltage, Current and Real Power in primary and Secondary Circuits of a Single-Phase Transformer	3	1,5,9,12
7	Performance Characteristics of a DC Shunt Motor	5	1,2,3,5,6,9,12
8	Torque-Speed Characteristics of a Three-phase Induction Motor.	6	1,2,3,5,6,9,12
9	Verification of Superposition theorem	1	1,2,3,4,9,10,12
10	Load Test on Single Phase Transformer (Calculate Efficiency and Regulation)	4	1,2,3,5,6,9,12



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Class: IOT

Semester: II

W.E.F-03-04-2023

LH:-D-110

	I 9:40- 10:30	II 10:30 - 11:20	III 11:20- 12:10	12:10- 12:45	IV 12.45- 1.35	V 1.35- 2.25	VI 2.25- 3.15	VII 3.15-4.00
MON	ITWS LAB			L U N C H	ODE	EDC	EC	ODE(T)/EC(T)
TUE	CAEG PRACTICE				BEE	BEE	ODE	EDC(T)/ BEE(T)
WED	EC	ODE	EDC		EC/BEE LAB			EC(T)/ODE(T)
THU	BEE	EC	ODE		CAEG PRACTICE			LIBRARY
FRI	BEE	EDC	EC		PYTHON LAB			BEE(T)/EDC(T)
SAT	EC/BEE LAB				ODE	EDC	BEE	PYTHON(T)

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
MA201BS	OrdinaryDifferentialEquation sandVectorCalculus	V.SUJATHA	CH206BS	Engineering Chemistry Laboratory	V.MOUNIKA/O.SUBHASHINI
CH203BS	Engineering Chemistry	V.MOUNIKA	EE202ES	BasicElectricalEngineeringLaboratory	S.NISCHALA/M.NAGARAJU
ME201ES	ComputerAidedEngineeringGraphics	M.YADHAGIRI	CS201ES	PythonProgrammingLaboratory	P.BALU/M.TEJASWI
EE201ES	BasicElectrical Engineering	S.NISCHALA	CS203ES	ITWorkshop	B.RAJITHA/N.KEERTHICHANDANA
EC201ES	ElectronicDevicesand Circuits	P.SRILATHA			

V. Sujatha
Class In-Charge

P. Saiitha
Time Table Coordinator
SHERIGUDA
SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY
501 510

[Signature]
Head of The Department
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X3

BR22

Lab External Question paper

Year & Semester: I-II

Branch: CSE-(IOT)

Subject Name: Basic Electrical Engineering Lab

Faculty Name: S.NISCHALA

S. No. QUESTIONS

1. Verification of KVL.
2. Verification of KCL.
3. Verification of Thevenins theorem.
4. Verification of Nortons theorem.
5. Transient Response of Series RL circuit using DC excitation.
6. Transient Response of Series RC circuit using DC excitation.
7. Resonance in series RLC circuit.
8. Calculations and Verification of Impedance and Current of RL, RC and RLC series circuits.
9. Verification of Superposition theorem.
10. Torque-Speed Characteristics of a Three-phase Induction Motor.
11. Performance Characteristics of a DC Shunt Motor.
12. Load Test on Single Phase Transformer (Calculate Efficiency and Regulation)



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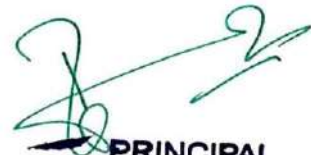
BEE Lab External Time Table Examination Branch

A.Y. : 2022-23

SEM-II

DATE	Day	Branch	Session	H T. No	Total No of Students
21-8-2023	MONDAY	AIML-B	FN	22X31A6651 TO 22X31A6697	47
22-8-2023	TUESDAY	AIML-A	FN	22X31A6601 TO 22X31A6650	50
23-8-2023	WEDNESDAY	IOT	FN	22X31A6901 TO 22X31A6963	63
24-8-2023	THURSDAY	AI&DS	FN	22X31A7201 TO 22X31A7264	64
25-8-2023	FRIDAY	ECE	FN	22X31A0401 TO 22X31A0464	64


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BEE Lab External Time Table with examiners

A.Y. : 2022-23

SEM-II

DATE	Day	Branch	Session	HT.No	Total No of Students	Internal Examiner	External Examiner
21-8-2023	MONDAY	AIML-B	FN	22X31A6651 TO 22X31A6697	47	K.RAJASHEKAR	RAJESH BABU
22-8-2023	TUESDAY	AIML-A	FN	22X31A6601 TO 22X31A6650	50	K.RAJASHEKAR	BALU NAIK
23-8-2023	WEDNESDAY	IOT	FN	22X31A6901 TO 22X31A6963	63	S.NISCHALA	RATNA KISHORI
24-8-2023	THURSDAY	AI&DS	FN	22X31A7201 TO 22X31A7264	64	G.BHARGAVI	G.GANESH WAR
25-3-2023	FRIDAY	ECE	FN	22X31A0401 TO 22X31A0464	64	M.P.REENA	LAXMI



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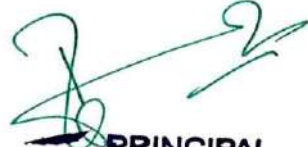
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LAB OCCUPANCY CHART

BASIC ELECTRICAL ENGINEERING LAB

	I 9:40-10:30	II 10:30 -11:20	III 11:20-12:10	12:10- 12.45	IV 12.45-1.35	V 1.35-2.25	VI 2.25-3.15	VII 3.15- 4.00
MON	I BTECH II SEM AI&ML-A			L U N C H				
TUE	I BTECH II SEM AI&DS				I BTECH II SEM AI&ML-B			
WED	I BTECH II SEM ECE				I BTECH II SEM IOT			
THU					I BTECH II SEM AI&DS			
FRI	I BTECH II SEM AI&ML-A				I BTECH II SEM ECE			
SAT	I BTECH II SEM IOT				I BTECH II SEM AI&ML-B			


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BASIC ELECTRICAL ENGINEERING LAB

Do's

1. Pull the plug itself, not the cord attached to it
2. Disconnect any appliances that spark and have it repaired immediately
3. Always disconnect appliances before cleaning them
4. Turn of appliance when you leave home
5. Clean appliance and free of dust, lint grease,
6. Use moisture resistant cards when outside.
7. Wear rubber solid shoes when operating power tools
8. Follow manufacturer's instructions when operating electrical devices. All electrical devices should carry an underwriter's laboratory approval tag
9. Make sure outdoor electrical out lets are covered with weather proof covers
10. Use extension cards only for temporary applications
11. Use heavy duty cards when using power tools
12. Keep work areas clean and dry. Sparks can ignite wood scraps, saw dust and solvents
13. Make sure your power tools are grounded or certified double insulated.
14. When utilizing adapters, make sure to screw in the wire for grounding.

Don'ts

1. Never turn on an appliance when standing or sitting in water. Shocks can be fatal.
2. Never overload a circuit by plugging into many appliances
3. Plug three way grounded plugs into appropriate outlets. Never tamper with the third prong
4. Never install cords under rugs where they will become warn by foot traffic



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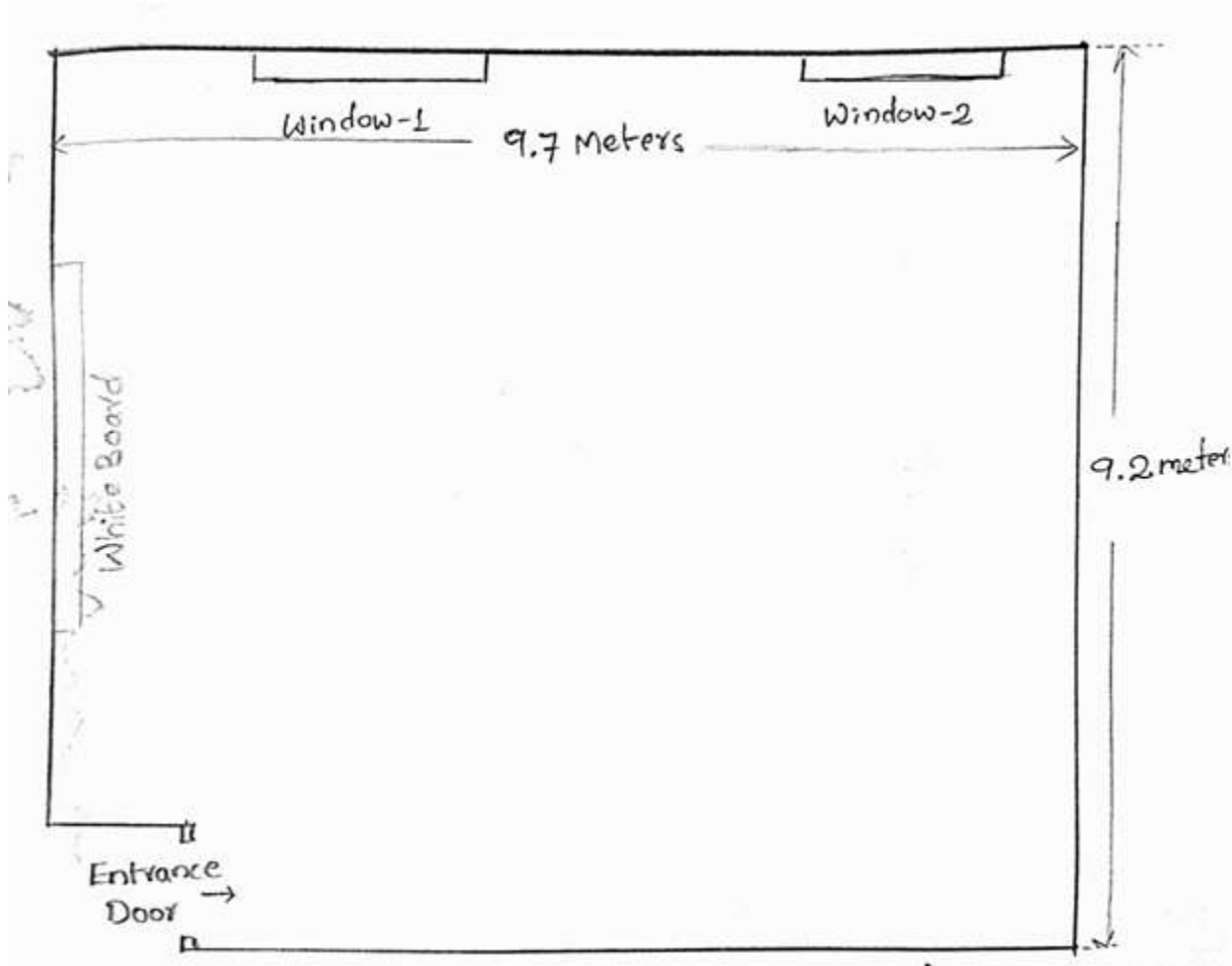
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Website: <https://siiet.ac.in/>

BASIC ELECTRICAL ENGINEERING LAB

PHYSICAL LAB-1 FLOOR PLAN

ROOM NO: D-204



Lab Area (in sq.m) = 89.24

[Signature]
Lab In-Charge

[Signature]
Head of the Department
Head of the Department
Department of H&S
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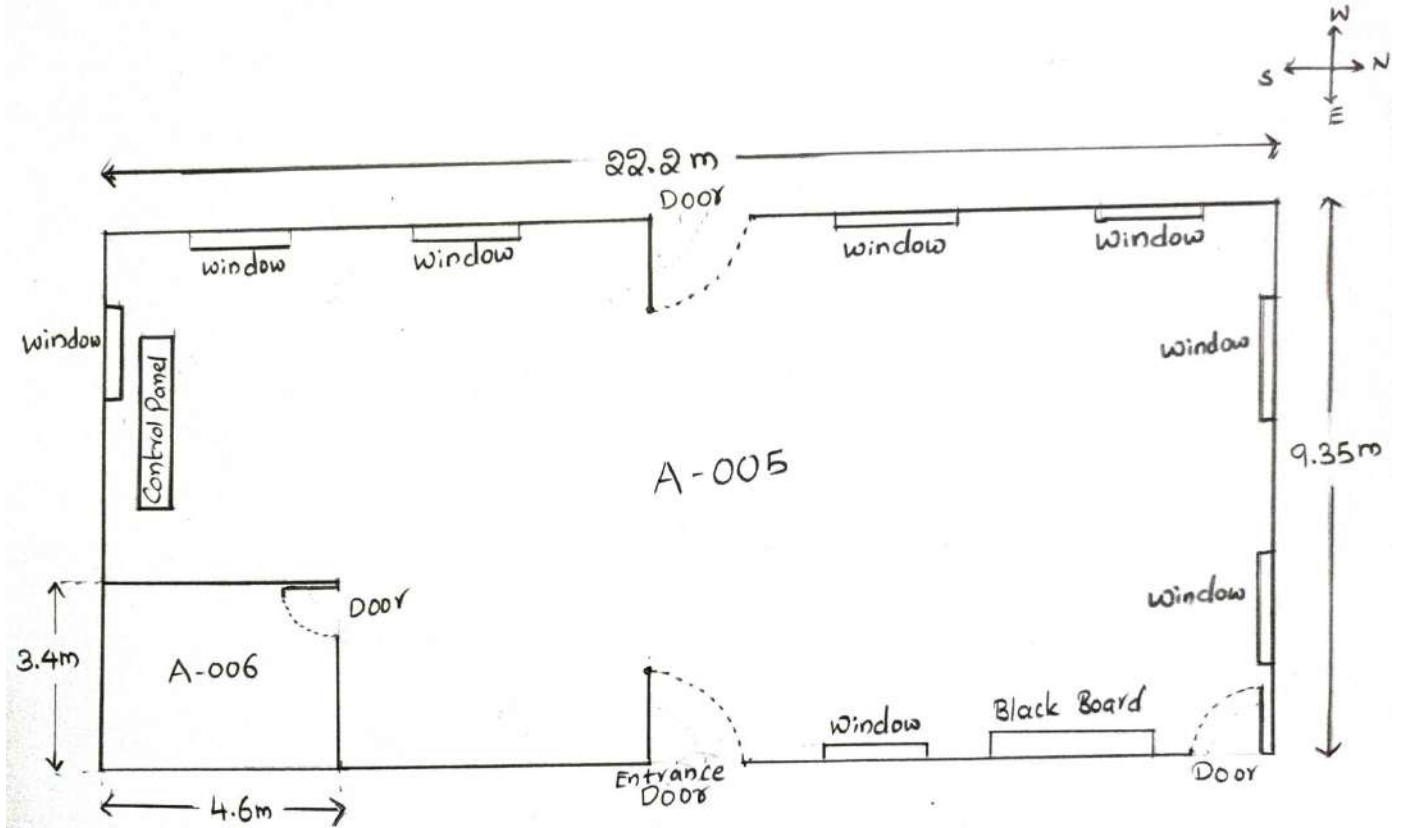
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Website: <https://siiet.ac.in/>

BASIC ELECTRICAL ENGINEERING LAB

PHYSICAL LAB-2 FLOOR PLAN

ROOM NO: A-005



Lab Area (in sq.m) = 191.93

[Signature]
Lab In-Charge

[Signature]
Head of the Department
Head of the Department
Department of H&S
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Lab manual link

<https://drive.google.com/file/d/1CezhXs40s30tKHGvSy8DOi0bg0xJMB-Z/view>



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities and Sciences

Course Outcome Attainment (Internal Examination-1)

Name of the faculty : S.NISCHALA Academic Year: 2022-2023
Branch & Section: CSE-IOT Examination: I Internal
Lab Course Name: Basic Electrical Engineering Lab Year/semester I/II

S.No	HT No.	R+O+A	V+V	E+E+R
Max. Marks ==>		10	10	10
1	22X31A6901	10	10	10
2	22X31A6902	6	4	7
3	22X31A6903	10	10	10
4	22X31A6904	9	4	10
5	22X31A6905	7	5	8
6	22X31A6906	10	9	10
7	22X31A6907	7	5	8
8	22X31A6908	9	6	5
9	22X31A6909	10	9	9
10	22X31A6910	10	9	10
11	22X31A6911	10	10	10
12	22X31A6912	9	6	8
13	22X31A6913	9	7	8
14	22X31A6914	9	6	5
15	22X31A6915	10	10	5
16	22X31A6916	9	6	7
17	22X31A6917	10	5	6
18	22X31A6918	0	0	0
19	22X31A6919	10	4	10
20	22X31A6920	10	7	10
21	22X31A6921	10	7	8
22	22X31A6922	9	6	5
23	22X31A6923	10	10	10
24	22X31A6924	9	6	7
25	22X31A6925	10	10	10
26	22X31A6926	10	6	8
27	22X31A6927	10	5	8
28	22X31A6928	10	10	10
29	22X31A6929	10	10	10
30	22X31A6930	10	6	6
31	22X31A6931	10	10	10
32	22X31A6932	9	5	6
33	22X31A6933	9	5	6
34	22X31A6934	10	10	10
35	22X31A6935	10	8	10
36	22X31A6936	10	10	10
37	22X31A6937	10	6	7
38	22X31A6938	10	6	6
39	22X31A6939	10	8	10
40	22X31A6940	10	8	6
41	22X31A6941	8	6	6
42	22X31A6942	10	9	10
43	22X31A6943	10	7	6
44	22X31A6944	10	8	9
45	22X31A6945	10	6	7

46	22X31A6946	10	4	8
47	22X31A6947	10	5	7
48	22X31A6948	10	6	7
49	22X31A6949	10	5	10
50	22X31A6950	10	5	5
51	22X31A6951	10	5	5
52	22X31A6952	10	9	10
53	22X31A6953	10	10	10
54	22X31A6954	10	9	10
55	22X31A6955	10	5	8
56	22X31A6956	10	6	8
57	22X31A6957	10	6	7
58	22X31A6958	10	8	8
59	22X31A6959	9	5	7
60	22X31A6960	10	6	7
61	22X31A6961	10	10	10
62	22X31A6962	10	6	6
63	22X31A6963	10	6	8
64				
65				
Target set by the faculty / HoD		6.00	6.00	6.00
Number of students performed above the target		62	46	56
Number of students attempted		63	63	63
Percentage of students scored more than target		98%	73%	89%

CO Mapping with Exam Questions:

CO - 1	y	y	Y
CO - 2	y	y	Y
CO - 3	y	y	Y
CO - 4			
CO - 5			
CO - 6			

% Students Scored >Target %	98%	73%	89%
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CO Attainment based on Exam Questions:

CO - 1	98%	73%	89%
CO - 2	98%	73%	89%
CO - 3	98%	73%	89%
CO - 4			
CO - 5			
CO - 6			

CO	Intrnal practical	E+E+R	Overall	Level
CO-1	86%	89%	87%	3
CO-2	86%	89%	87%	3
CO-3	86%	89%	87%	3
CO-4				
CO-5				
CO-6				

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal 1 Examination) = 3

R+O+A : RECORD+OBSERVATION+ATTANDANCE

V+V: VIVA VOICE

E+E+R:EXPERIMENT WRITE UP+EXECUTION+RESULT

SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities and Sciences



Course Outcome Attainment (Internal Examination-2)

Name of the faculty : S.NISCHALA Academic Year: 2022-2023
Branch & Section: CSE-IOT Examination: II Internal
Lab Course Name: Basic Electrical Engineering Lab Year/semester I/II

S.No	HT No.	R+O+A	V+V	E+E+R	ppt
Max. Marks ==>		10	10	10	10
1	22X31A6901	10	10	10	10
2	22X31A6902	7	6	7	10
3	22X31A6903	10	9	10	10
4	22X31A6904	10	9	10	10
5	22X31A6905	9	5	7	10
6	22X31A6906	10	10	10	10
7	22X31A6907	7	5	6	10
8	22X31A6908	8	6	5	10
9	22X31A6909	10	8	9	10
10	22X31A6910	10	9	10	10
11	22X31A6911	10	10	10	10
12	22X31A6912	10	8	5	10
13	22X31A6913	10	9	10	10
14	22X31A6914	7	5	6	10
15	22X31A6915	10	7	8	10
16	22X31A6916	10	7	8	10
17	22X31A6917	7	6	5	10
18	22X31A6918	A	A	A	A
19	22X31A6919	7	6	7	10
20	22X31A6920	10	8	9	10
21	22X31A6921	9	7	9	10
22	22X31A6922	9	7	7	10
23	22X31A6923	10	10	10	10
24	22X31A6924	10	9	10	10
25	22X31A6925	10	8	10	10
26	22X31A6926	10	7	8	10
27	22X31A6927	10	6	8	10
28	22X31A6928	10	10	10	10
29	22X31A6929	10	10	10	10
30	22X31A6930	9	7	7	10
31	22X31A6931	10	10	10	10
32	22X31A6932	10	8	6	10
33	22X31A6933	6	6	7	10
34	22X31A6934	10	10	10	10
35	22X31A6935	10	9	10	10
36	22X31A6936	10	10	10	10
37	22X31A6937	10	6	6	10
38	22X31A6938	10	8	10	10
39	22X31A6939	10	9	10	10
40	22X31A6940	10	8	8	10
41	22X31A6941	6	5	7	10
42	22X31A6942	10	8	10	10
43	22X31A6943	10	9	10	10
44	22X31A6944	10	8	10	10
45	22X31A6945	10	5	3	10
46	22X31A6946	10	5	3	10
47	22X31A6947	8	8	7	10
48	22X31A6948	10	8	10	10

49	22X31A6949	10	6	7	10
50	22X31A6950	10	5	3	10
51	22X31A6951	10	5	3	10
52	22X31A6952	10	10	10	10
53	22X31A6953	10	10	10	10
54	22X31A6954	10	10	10	10
55	22X31A6955	10	5	3	10
56	22X31A6956	10	7	5	10
57	22X31A6957	10	6	7	10
58	22X31A6958	10	10	10	10
59	22X31A6959	10	5	3	10
60	22X31A6960	10	5	3	10
61	22X31A6961	10	8	10	10
62	22X31A6962	10	5	3	10
63	22X31A6963	10	9	10	10
64					
65					
Target set by the faculty / HoD		6.00	6.00	6.00	6.00
Number of students performed above the target		62	50	50	62
Number of students attempted		63	63	63	63
Percentage of students scored more than target		98%	79%	79%	98%

CO Mapping with Exam Questions:

CO - 1				
CO - 2				
CO - 3				
CO - 4	y	y	Y	y
CO - 5	y	y	Y	y
CO - 6	y	y	Y	y

% Students Scored >Target %	98%	79%	79%	98%
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CO Attainment based on Exam Questions:

CO - 1				
CO - 2				
CO - 3				
CO - 4	98%	79%	79%	98%
CO - 5	98%	79%	79%	98%
CO - 6	98%	79%	79%	98%

CO	Intrnal practical	E+E+R	ppt	Overall	Level
CO-1					
CO-2					
CO-3					
CO-4	89%	79%	98%	89%	3
CO-5	89%	79%	98%	89%	3
CO-6	89%	79%	98%	89%	3

Attainment Level	
1	40%
2	50%
3	60%

Attainment (Internal 2 Examination) = 3

R+O+A : RECORD+OBSERVATION+ATTANDANCE

V+V: VIVA VOICE

E+E+R:EXPERIMENT WRITE UP+EXECUTION+RESULT



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities and Sciences

Course Outcome Attainment (University Examinations)

Name of the faculty : S.NISCHALA

Academic Year:

2022-2023

Branch & Section: CSE-IOT

Year / Semester:

I/II

Lab Course Name: Basic Electrical Engineering Lab

S.No	Roll Number	Marks Secured
1	22X31A6901	57
2	22X31A6902	38
3	22X31A6903	55
4	22X31A6904	56
5	22X31A6905	39
6	22X31A6906	54
7	22X31A6907	32
8	22X31A6908	32
9	22X31A6909	51
10	22X31A6910	52
11	22X31A6911	58
12	22X31A6912	43
13	22X31A6913	52
14	22X31A6914	28
15	22X31A6915	51
16	22X31A6916	51
17	22X31A6917	28
18	22X31A6918	AB
19	22X31A6919	28
20	22X31A6920	53
21	22X31A6921	35
22	22X31A6922	28
23	22X31A6923	58
24	22X31A6924	57
25	22X31A6925	49
26	22X31A6926	52
27	22X31A6927	47
28	22X31A6928	58
29	22X31A6929	58
30	22X31A6930	51
31	22X31A6931	58
32	22X31A6932	51
33	22X31A6933	41
34	22X31A6934	58
Class Average mark		48
Number of students performed above the target		39
Number of successful students		63
Percentage of students scored more than target		62%
Attainment level		3

S.No	Roll Number	Marks Secured
35	22X31A6935	56
36	22X31A6936	58
37	22X31A6937	46
38	22X31A6938	51
39	22X31A6939	52
40	22X31A6940	49
41	22X31A6941	41
42	22X31A6942	53
43	22X31A6943	57
44	22X31A6944	52
45	22X31A6945	36
46	22X31A6946	35
47	22X31A6947	41
48	22X31A6948	54
49	22X31A6949	47
50	22X31A6950	49
51	22X31A6951	51
52	22X31A6952	55
53	22X31A6953	56
54	22X31A6954	55
55	22X31A6955	36
56	22X31A6956	48
57	22X31A6957	41
58	22X31A6958	53
59	22X31A6959	35
60	22X31A6960	39
61	22X31A6961	56
62	22X31A6962	39
63	22X31A6963	56
64		
65		
Attainment Level		% students
1		40%
2		50%
3		60%



SRI INDU INSTITUTE OF ENGINEERING AND TECHNOLOGY

Department of Humanities and Sciences

Course Outcome Attainment

Name of the faculty : S.NISCHALA

Academic Year: 2022-2023

Branch & Section: CSE-IOT

Year / Semester: I/II

Lab Course Name: Basic Electrical Engineering Lab

Course Outcomes	Ist Internal Exam	2nd Internal Exam	Internal Exam	University Exam	Attainment Level
CO1	3.00		3.00	3.00	3.00
CO2	3.00		3.00	3.00	3.00
CO3	3.00		3.00	3.00	3.00
CO4		3.00	3.00	3.00	3.00
CO5		3.00	3.00	3.00	3.00
CO6		3.00	3.00	3.00	3.00
Internal & University Attainment:			3.00	3.00	
Weightage			40%	60%	
CO Attainment for the course (Internal, University)			1.20	1.80	
CO Attainment for the course (Direct Method)			3.00		

Overall course attainment level

3.00



SRI INDU INSTITUTE OF ENGINEERING & TECHNOLOGY

Department of Humanities and Sciences

Program Outcome Attainment (from Course)

Name of Faculty: S.NISCHALA

Academic Year: 2022-2023

Branch & Section: CSE-IOT

Year / Semester: I/II

Course Name: Basic Electrical Engineering Lab

CO-PO mapping

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	3	2	1	-	-	-	-	2	1	-	2	-	-
CO2	3	3	1	2	1	-	-	-	2	1	-	2	-	-
CO3	3	-	-	-	1	-	-	-	2	-	-	3	-	-
CO4	2	3	1	-	1	1	-	-	3	-	-	2	-	-
CO5	2	3	1	-	1	1	-	-	3	-	-	2	-	-
CO6	2	3	1	-	1	1	-	-	3	-	-	2	-	-
Course	2.50	3.00	1.20	1.50	1.00	1.00			2.50	1.00		2.17		

CO	Course Outcome Attainment
	3.00
CO1	3.00
CO2	3.00
CO3	3.00
CO4	3.00
CO5	3.00
CO6	3.00
Overall course attainment level	3.00

PO-ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	2.50	3.00	1.20	1.50	1.00	1.00			2.50	1.00		2.17

CO contribution to PO - 33%, 67%, 100% (Level 1/2/3)