Sri Indu Institute of Engineering and Technology (Autonomous)
(Formerly RVR Institute of Engineering & Technology)
An Autonomous Institution Under UGC
NAAC Accredited. Recognized Under 2(f) of UGC Act 1956
ESTD : 2007
EAMCET CODE: INDI
Approved by AICTE, New Delhi, & Affiliated to JNTUH, Hyderabad.
JNTUH CODE: X3

COURSE FILE

ON

BASIC ELECTRICAL ENGINEERING LAB

Course Code – EE102ES

I B. Tech Semester-I
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(V), Ibrahimpatnam (M), R.R. Dist-501 510

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

Academic Year	2022-2023
Course Title	Basic Electrical Engineering Lab
Course Code	EE102ES
Programme	B.Tech
Year & Semester	I & I
Branch & Section	CSE (CYBER SECURITY)
Regulation	BR22
Room No	D204 & A005
Name of the lab incharge	S.NISCHALA
Name of the Faculty incharge	S.NISCHALA

Index of Lab File

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 (CYBER SECURITY)
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.	CH103BS	Engineering Chemistry	3	1	0	4
3.	CS103ES	Programming for Problem Solving	3	0	0	3
4.	EE101ES	Basic Electrical Engineering	2	0	0	2
5.	ME101ES	Computer Aided Engineering Graphics	1	0	4	3
6.	CS106ES	Elements of Computer Science & Engineering	0	0	2	1
7.	CH106BS	Engineering Chemistry Laboratory	0	0	2	1
8.	CS107ES	Programming for Problem Solving Laboratory	0	0	2	1
9.	EE102ES	Basic Electrical Engineering Laboratory	0	0	2	1
		Induction Program				
		Total	**12**	**2**	**12**	**20**

I Year II Semester

S. No.	Course Code	Course	L	T	P	Credits
1.	MA201BS	Ordinary Differential Equations and Vector Calculus	3	1	0	4
2.	AP202BS	Applied Physics	3	1	0	4
3.	ME202ES	Engineering Workshop	0	1	3	2.5
4.	EN204HS	English for Skill Enhancement	2	0	0	2
5.	EC201ES	Electronic Devices and Circuits	2	0	0	2
6.	AP205BS	Applied Physics Laboratory	0	0	3	1.5
7.	CS201ES	Python Programming Laboratory	0	1	2	2
8.	EN207HS	English Language and Communication Skills Laboratory	0	0	2	1
9.	CS203ES	IT Workshop	0	0	2	1
10.	*MC201ES	Environmental Science	3	0	0	0
		Total	**13**	**4**	**12**	**20**

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BASIC ELECTRICAL ENGINEERING LABORATORY
(Course Code: EE102ES)

B.Tech. I Year I 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 Kamakshaiah, "Basic Electrical Engineering", Tata McGraw Hill, 2nd Edition,2008.

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COURSE OUTCOMES

Course Name: Basic Electrical Engineering Lab (C119)

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

CO No	DESCRIPTION
C119.1	Apply basic circuit laws and simplify the network using reduction techniques. (Application)
C119.2	Understand time domain analysis, resonance in RLC parameters and evaluate impedance in RLC circuit (Knowledge)
C119.3	Understand the working concept , Select range of apparatus based on the ratings of different machines like transformers and motors (Knowledge)
C119.4	Determine efficiency and regulation of transformers by various test (Evaluation)
C119.5	Determine the performance characteristics of dc shunt motor. (Evaluation)
C119.6	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
C119.1	3	3	2	1	-	-	-	-	2	1	-	2	-	-
C119.2	3	3	1	2	1	-	-	-	2	1	-	2	-	-
C119.3	3	-	-	-	1	-	-	-	2	-	-	3	-	-
C119.4	2	3	1	-	1	1	-	-	3	-	-	2	-	-
C119.5	2	3	1	-	1	1	-	-	3	-	-	2	-	-
C119.6	2	3	1	-	1	1	-	-	3	-	-	2	-	-
PO Avg	**2.5**	**3**	**1.2**	**1.5**	**1**	**1**	**-**	**-**	**2.5**	**1**	**-**	**2.16**	**-**	**-**

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: CYBER SECURITY **Semester: I** **W.E.F-14-11-2022** **LH:-D-207**

	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	PPS	BEE	EC	LUNCH	M&C	PPS	EC	BEE(T)/M&C(T)
TUE	EG PRACTICE				BEE	ECSE	PPS	EC(T)/PPS(T)
WED	BEE	M&C	PPS		BEE/EC LAB			PPS(T)/EC(T)
THU	M&C	BEE	M&C		PPS LAB			M&C(T)/BEE(T)
FRI	BEE/EC LAB				ECSE	PPS	EC	EG(T)
SAT	EC	M&C	BEE		EG PRACTICE			LIB

Course Code	Course Name	Name of the Faculty	Course Code	Course Name	Name of the Faculty
MA101BS	Matrices and Calculus	CH.SARITHA	ME101ES	ComputerAided Engineering Graphics	M.V.B.KALYAN
CH103BS	Engineering Chemistry	K.MOUNIKA	CH106BS	Engineering Chemistry Lab	K.MOUNIKA/V.MOUNIKA
CS103ES	Programming for Problem Solving	U.NARESH	CS107ES	Programming for Problem Solving Lab	U.NARESH/G.KALYANI
EE101ES	Basic Electrical Engineering	S.NISCHALA	EE102ES	Basic Electrical Engineering Lab	S.NISCHALA/G.BHARGAVI
CS106ES	Elements of Computer Science & Engineering	D.UMA			

K.Mounika
Class In-Charge

Ch. Saritha
Time Table Coordinator

Sri Indu Institute of Engineering & Technology SHERIGUDA 501 510

Head of The Department
Dr. R. YADAGIRI RAO
M.Sc.,B.Ed.,M.Tech(CSE).,Ph.D.
Head of the Department
Department of H&S
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Sheriguda(V), Ibrahimpatnam(M), R.R Dist., Telangana – 501 510

X3

BR22

Lab External Question paper

Year & Semester: I-I | Branch: CSE-CYBER SECURITY

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.	Calculation 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)
13.	Measurement of voltage, current and real power in primary and secondary circuits of a single phase transformer.

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BEE Lab External Time Table
Examination Branch

A.Y. : 2022-23 **SEM-I**

DATE	Day	Branch	Session	HT.No	Total No of Students
11-3-2023	SATURDAY	DS	FN	**22X31A6701 TO 22X31A6764**	64
13-3-2023	MONDAY	CSE-A	FN	**22X31A0501 TO 22X31A0565**	65
14-3-2023	TUESDAY	CSE-B	FN	**22X31A0566 TO 22X31A05D0**	65
14-3-2023	TUESDAY	CYBER SECURITY	AN	**22X31A6201 TO 22X31A6262**	62
15-3-2023	WEDNESDAY	CSE-C	FN	**22X31A05D1 TO 22X31A05J1**	61

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BEE Lab External Time Table with examiners

A.Y. : 2022-23 **SEM-I**

DATE	Day	Branch	Session	HT.No	Total No of Students	Internal Examiner	External Examiner
11-3-2023	SATURDAY	DS	FN	**22X31A6701 TO 22X31A6764**	64	M.NAGA RAJU (9640269828)	Mr.Suresh GNITC
13-3-2023	MONDAY	CSE-A	FN	**22X31A0501 TO 22X31A0565**	65	K.RAJASHEKHAR (8074465493)	Ms.Ch.Laxmi GNITC
14-3-2023	TUESDAY	CSE-B	FN	**22X31A0566 TO 22X31A05D0**	65	MP.REENA (9160504581)	Mr.Basav Reddy GNITC
14-3-2023	TUESDAY	CYBER SECURITY	AN	**22X31A6201 TO 22X31A6262**	62	S.NISCHALA (9912482689)	Mr.P.S.Reddy GNITC
15-3-2023	WEDNESDAY	CSE-C	FN	**22X31A05D1 TO 22X31A05J1**	61	MP.REENA (9160504581)	Ms.Ratna Kishori GNITC

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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				**LUNCH**	I BTECH I SEM DATA SCIENCE			
TUE	I BTECH I SEM CSE-B				I BTECH I SEM CSE-A			
WED	I BTECH I SEM CSE-C				I BTECH I SEM CYBER SECURITY			
THU	I BTECH I SEM CSE-B				I BTECH I SEM DATA SCIENCE			
FRI	I BTECH I SEM CYBER SECURITY							
SAT	I BTECH I SEM CSE-A				I BTECH I SEM CSE-C			

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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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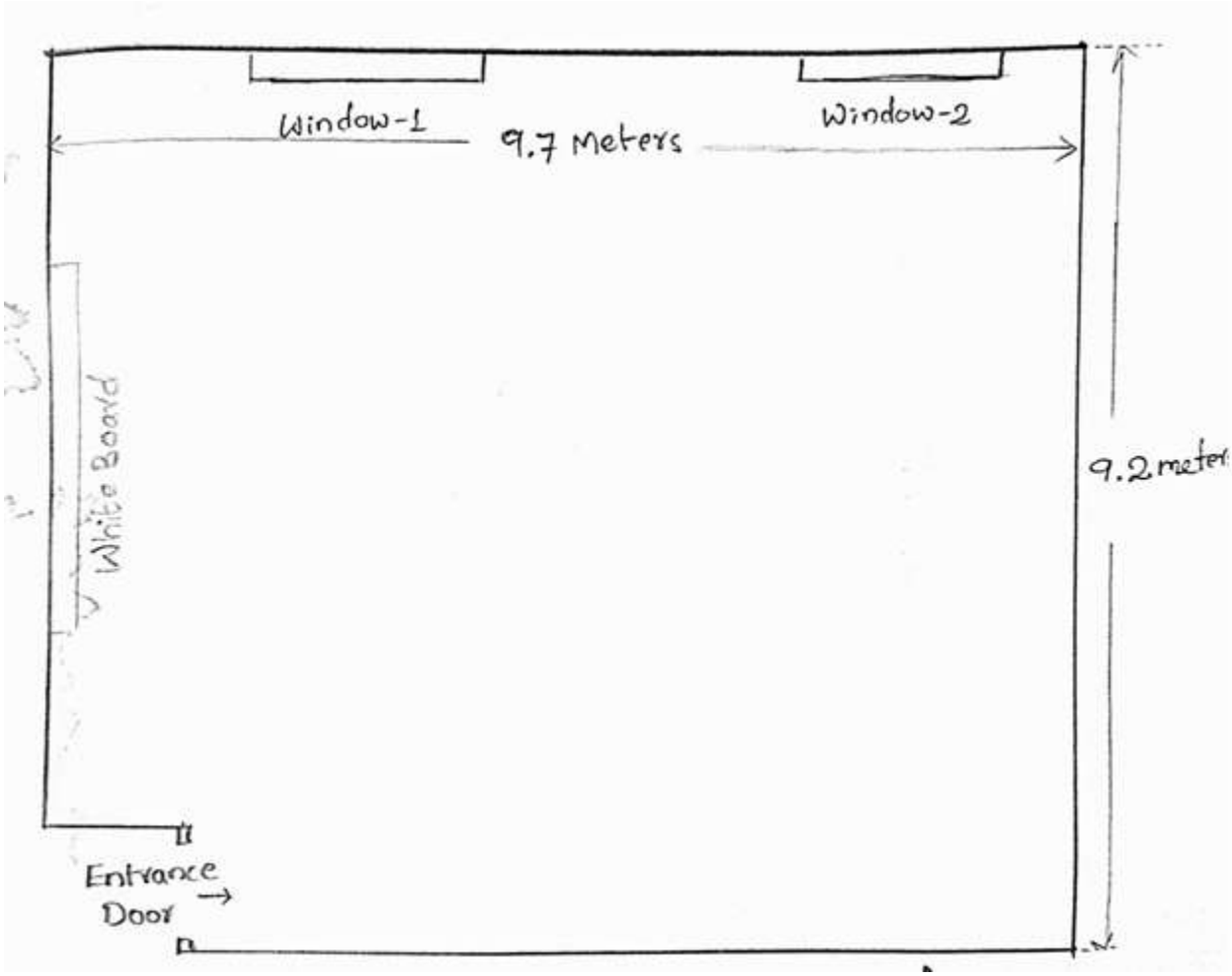
BASIC ELECTRICAL ENGINEERING LAB

PHYSICAL LAB-1 FLOOR PLAN

ROOM NO: D-204



Lab Area (in sq.m) = 89.24

Lab In-Charge

Head of the Department

Head of the Department
Department of H&S
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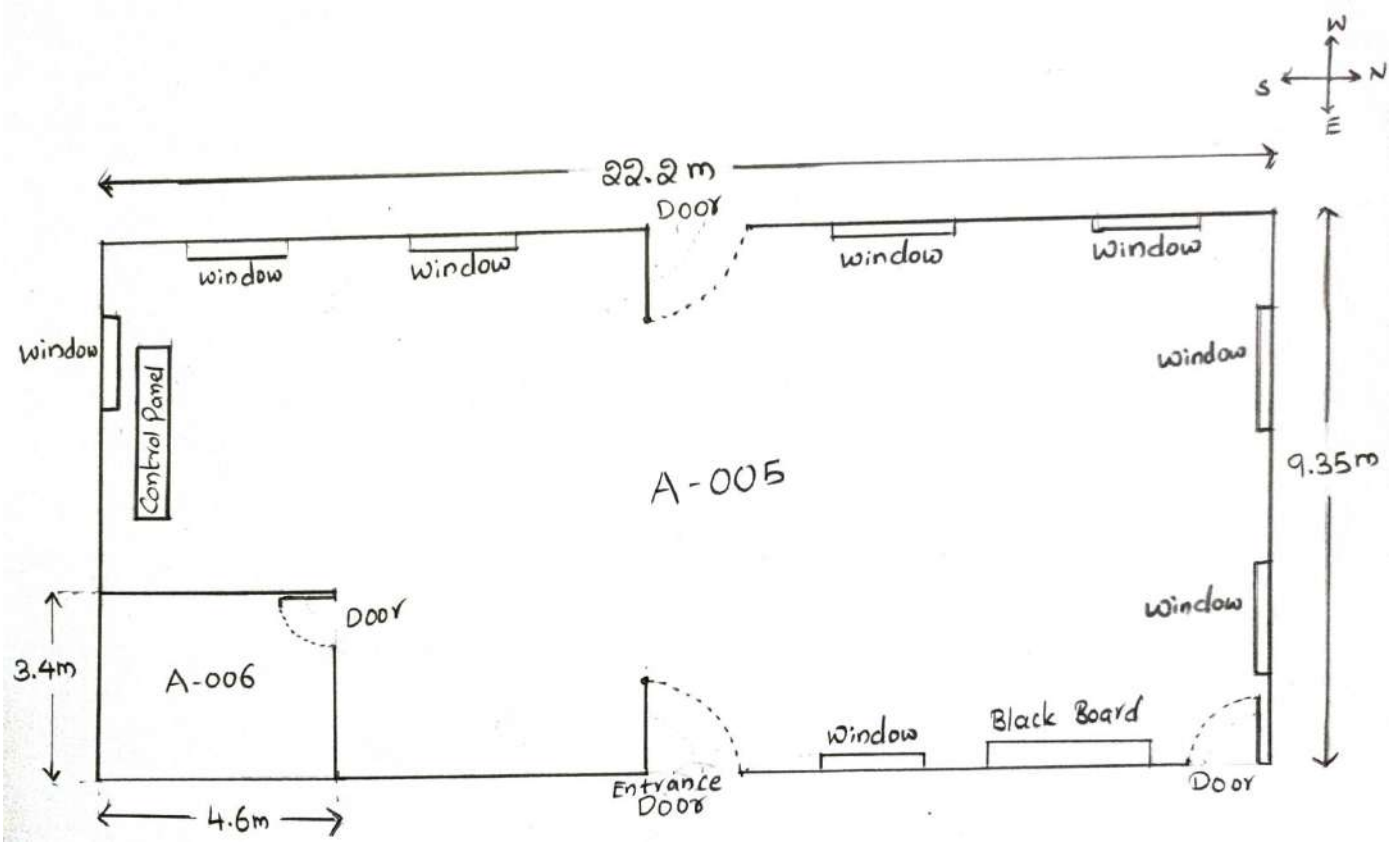
BASIC ELECTRICAL ENGINEERING LAB

PHYSICAL LAB-2 FLOOR PLAN

ROOM NO: A-005



Lab Area (in sq.m) = 191.93

Lab In-Charge

Head of the Department

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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:	CYBER SECURITY	Examination:	I Internal
Lab Course Name:	Basic Electrical Engineering Lab	Year/semester	I/I

S.No	HT No.	R+O+A	V+V	E+E+R
Max. Marks ==>		**10**	**10**	**10**
1	22X31A6201	10	6	10
2	22X31A6202	10	8	3
3	22X31A6203	10	9	10
4	22X31A6204	10	7	10
5	22X31A6205	10	5	10
6	22X31A6206	10	5	10
7	22X31A6207	10	6	10
8	22X31A6208	10	6	10
9	22X31A6209	10	0	5
10	22X31A6210	10	7	10
11	22X31A6211	10	4	10
12	22X31A6212	10	8	10
13	22X31A6213	10	6	10
14	22X31A6214	10	7	10
15	22X31A6215	10	6	8
16	22X31A6216	10	6	9
17	22X31A6217	10	10	10
18	22X31A6218	10	6	6
19	22X31A6219	10	3	10
20	22X31A6220	10	6	6
21	22X31A6221	10	7	4
22	22X31A6222	10	5	8
23	22X31A6223	10	9	10
24	22X31A6224	10	6	6
25	22X31A6225	10	5	6
26	22X31A6226	10	8	8
27	22X31A6227	10	6	10
28	22X31A6228	10	4	7
29	22X31A6229	10	6	5
30	22X31A6230	10	4	7
31	22X31A6231	10	4	7
32	22X31A6232	10	4	9
33	22X31A6233	10	5	10
34	22X31A6234	10	4	10
35	22X31A6235	10	6	8
36	22X31A6236	10	6	10
37	22X31A6237	10	6	10
38	22X31A6238	10	6	5
39	22X31A6239	10	4	8
40	22X31A6240	10	4	8
41	22X31A6241	10	10	10
42	22X31A6242	10	5	6
43	22X31A6243	10	8	10
44	22X31A6244	10	5	6
45	22X31A6245	10	6	10
46	22X31A6246	10	4	10

47	22X31A6247	10	6	10
48	22X31A6248	10	6	10
49	22X31A6249	10	10	10
50	22X31A6250	A	A	A
51	22X31A6251	10	5	10
52	22X31A6252	10	5	10
53	22X31A6253	10	10	10
54	22X31A6254	10	6	8
55	22X31A6255	10	9	9
56	22X31A6256	10	6	8
57	22X31A6257	10	8	10
58	22X31A6258	10	10	10
59	22X31A6259	10	5	7
60	22X31A6260	10	10	10
61	22X31A6261	10	8	10
62	22X31A6262	10	7	10
63				
Target set by the faculty / HoD		6.00	6.00	6.00
Number of students performed above the target		61	40	56
Number of students attempted		62	62	62
Percentage of students scored more than target		98%	65%	90%

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%	65%	90%

CO Attainment based on Exam Questions:

CO - 1	98%	65%	90%
CO - 2	98%	65%	90%
CO - 3	98%	65%	90%
CO - 4			
CO - 5			
CO - 6			

CO	Intrnal practical	E+E+R	Overall	Level
CO-1	81%	90%	86%	3
CO-2	81%	90%	86%	3
CO-3	81%	90%	86%	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:	CYBER SECURITY	Examination:	II Internal
Lab Course Name:	Basic Electrical Engineering Lab	Year/semester	I/I

S.No	HT No.	R+O+A	V+V	E+E+R	ppt
Max. Marks ==>		**10**	**10**	**10**	**10**
1	22X31A6201	10	6	8	10
2	22X31A6202	9	1	5	10
3	22X31A6203	10	8	8	10
4	22X31A6204	10	9	8	10
5	22X31A6205	10	7	8	10
6	22X31A6206	10	8	8	10
7	22X31A6207	9	3	6	10
8	22X31A6208	10	8	9	10
9	22X31A6209	9	1	4	10
10	22X31A6210	10	5	6	10
11	22X31A6211	9	4	6	10
12	22X31A6212	10	8	9	10
13	22X31A6213	10	5	6	10
14	22X31A6214	10	5	6	10
15	22X31A6215	9	2	5	10
16	22X31A6216	10	5	6	10
17	22X31A6217	10	8	8	10
18	22X31A6218	9	4	5	10
19	22X31A6219	9	3	5	10
20	22X31A6220	10	4	7	10
21	22X31A6221	9	3	6	10
22	22X31A6222	9	3	6	10
23	22X31A6223	10	7	8	10
24	22X31A6224	9	3	6	10
25	22X31A6225	9	2	6	10
26	22X31A6226	9	4	6	10
27	22X31A6227	10	5	6	10
28	22X31A6228	9	3	6	10
29	22X31A6229	9	3	5	10
30	22X31A6230	9	3	6	10
31	22X31A6231	9	1	5	10
32	22X31A6232	9	3	6	10
33	22X31A6233	9	4	6	10
34	22X31A6234	9	1	5	10
35	22X31A6235	9	3	7	10
36	22X31A6236	10	5	7	10
37	22X31A6237	10	5	8	10
38	22X31A6238	9	1	5	10
39	22X31A6239	9	2	5	10
40	22X31A6240	9	2	6	10
41	22X31A6241	10	7	8	10
42	22X31A6242	9	3	7	10
43	22X31A6243	10	8	8	10
44	22X31A6244	9	3	5	10
45	22X31A6245	10	5	6	10
46	22X31A6246	10	6	6	10

47	22X31A6247	10	6	7	10
48	22X31A6248	10	5	6	10
49	22X31A6249	10	8	8	10
50	22X31A6250	10	A	A	10
51	22X31A6251	10	5	8	10
52	22X31A6252	10	5	7	10
53	22X31A6253	10	8	10	10
54	22X31A6254	10	8	9	10
55	22X31A6255	10	7	8	10
56	22X31A6256	10	6	7	10
57	22X31A6257	10	5	6	10
58	22X31A6258	10	8	10	10
59	22X31A6259	10	4	5	10
60	22X31A6260	10	8	10	10
61	22X31A6261	10	8	10	10
62	22X31A6262	10	7	8	10
63					
Target set by the faculty / HoD		6.00	6.00	6.00	6.00
Number of students performed above the target		62	22	49	62
Number of students attempted		62	62	62	62
Percentage of students scored more than target		100%	35%	79%	100%

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 %	100%	35%	79%	100%

CO Attainment based on Exam Questions:

CO - 1				
CO - 2				
CO - 3				
CO - 4	100%	35%	79%	100%
CO - 5	100%	35%	79%	100%
CO - 6	100%	35%	79%	100%

CO	Intrnal practical	E+E+R	ppt	Overall	Level
CO-1					
CO-2					
CO-3					
CO-4	68%	79%	100%	82%	3
CO-5	68%	79%	100%	82%	3
CO-6	68%	79%	100%	82%	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: CYBER SECURITY Year / Semester: I/I

Lab Course Name: Basic Electrical Engineering Lab

S.No	Roll Number	Marks Secured
1	22X31A6201	51
2	22X31A6202	48
3	22X31A6203	58
4	22X31A6204	58
5	22X31A6205	56
6	22X31A6206	57
7	22X31A6207	47
8	22X31A6208	57
9	22X31A6209	45
10	22X31A6210	52
11	22X31A6211	47
12	22X31A6212	57
13	22X31A6213	53
14	22X31A6214	54
15	22X31A6215	49
16	22X31A6216	52
17	22X31A6217	58
18	22X31A6218	49
19	22X31A6219	48
20	22X31A6220	53
21	22X31A6221	49
22	22X31A6222	48
23	22X31A6223	57
24	22X31A6224	49
25	22X31A6225	48
26	22X31A6226	52
27	22X31A6227	56
28	22X31A6228	47
29	22X31A6229	51
30	22X31A6230	49
31	22X31A6231	47
32	22X31A6232	51
33	22X31A6233	53
34	22X31A6234	47

S.No	Roll Number	Marks Secured
35	22X31A6235	48
36	22X31A6236	53
37	22X31A6237	54
38	22X31A6238	45
39	22X31A6239	49
40	22X31A6240	48
41	22X31A6241	55
42	22X31A6242	51
43	22X31A6243	56
44	22X31A6244	48
45	22X31A6245	52
46	22X31A6246	55
47	22X31A6247	56
48	22X31A6248	51
49	22X31A6249	58
50	22X31A6250	A
51	22X31A6251	53
52	22X31A6252	52
53	22X31A6253	58
54	22X31A6254	58
55	22X31A6255	51
56	22X31A6256	53
57	22X31A6257	51
58	22X31A6258	58
59	22X31A6259	49
60	22X31A6260	58
61	22X31A6261	58
62	22X31A6262	57
63	0	
64		
65		

Class Average mark	52
Number of students performed above the target	28
Number of successful students	62
Percentage of students scored more than target	45%
Attainment level	**2**

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: CYBER SECURITY
Year / Semester: I/I
Lab Course Name: Basic Electrical Engineering Lab

Course Outcomes	1st Internal Exam	2nd Internal Exam	Internal Exam	University Exam	Attainment Level
CO1	3.00		3.00	2.00	2.40
CO2	3.00		3.00	2.00	2.40
CO3	3.00		3.00	2.00	2.40
CO4		3.00	3.00	2.00	2.40
CO5		3.00	3.00	2.00	2.40
CO6		3.00	3.00	2.00	2.40
Internal & University Attainment:			3.00	2.00	
Weightage			40%	60%	
CO Attainment for the course (Internal, University)			1.20	1.20	
CO Attainment for the course (Direct Method)			2.40		

Overall course attainment level **2.40**

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: CYBER SECURITY Year / Semester: I/I
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**
CO1	2.40
CO2	2.40
CO3	2.40
CO4	2.40
CO5	2.40
CO6	2.40
Overall course attainment level	**2.40**

PO-ATTAINMENT

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO Attainment	**2.00**	**2.40**	**0.96**	**1.20**	**0.80**	**0.80**			**2.00**	**0.80**		**1.73**

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