

DISCIPLINE: Electrical & Electronics Engg.	SEMESTER: 5TH Semester	NAME OF THE TEACHING FACULTY: MS .Majji Lalitha/Sriya panda
SUBJECT: PE&PLCLab(PR1)	NO OF DAYS/PER WEEK CLASSES ALLOTTED:3	SEMESTER FROM DATE: 14.07.2025 TO DATE: 15.11.2025 NO OF WEEKS:15

Week	Class Day	PRACTICAL Topics
1st	1st	Study of switching characteristics of a power transistor.
2nd	2nd	Study of V-I characteristics of SCR.
3rd	3rd	Study of V-I characteristics of TRIAC.
4th	4th	Study of V-I characteristics of DIAC.
5th	5th	Study of drive circuit for SCR & TRIAC using DIAC.
6th	6th	Study of drive circuit for SCR & TRIAC using UJT.
7th	7th	To study phase controlled bridge rectifier using resistive load.
8th	8th	To study series Inverter.
9th	9th	Study of voltage source Inverter.
10th	10th	To perform the speed control of DC motor using Chopper.
11th	11th	To study single-phase Cyclo-converter.
12th	12th	Introduction/Familiarization PLC Trainer & its Installation with PC (a) Learn the basics and hardware components of PLC (b) Understand configuration of PLC system (c) Study various building blocks of PLC (d) Determine the No. of digital I/O & Analog I/O
13th	13th	Execute the different Ladder Diagrams (a) Demonstrate PLC and Ladder diagram-Preparation downloading and running (b) Execute Ladder diagrams for different Logical Gates (c) Execute Ladder diagrams using timers & counters
14th	14th	Execute the Ladder Diagrams with model applications (i) DOL starter (ii) (ii)Star- Delta starter

15th	15th	Execute Ladder diagrams with model applications (i) Stair case lighting (ii) Traffic light controller
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M. Abdul Wahid
Signature of Lecturer
10/09/25

D. M. R.
Signature of HOD
10.09.25