

LESSON PLAN

DEPARTMENT OF ELECTRICAL ENGINEERING, ITT, CHOUDWAR

SUBJECT: PE and PLC LAB

Periods: 3per week

SEMESTER: 5TH

NAME OF FACULTY: B B Pradhan & G.P.PATTANAIK

No. of weeks: 15

Week	Class Day	Theory / Practical Topics
1 st	1 st	Study of switching characteristics of a power transistor.
2 nd	1 st	Study of V-I characteristics of SCR.
3 rd	1 st	Study of V-I characteristics of TRIAC.
4 th	1 st	Study of V-I characteristics of DIAC.
5 th	1 st	Study of drive circuit for SCR & TRIAC using DIAC.
6 th	1 st	Study of drive circuit for SCR & TRIAC using UJT.
7 th	1 st	To study phase controlled bridge rectifier using resistive load.
8 th	1 st	To study series Inverter. 9. Study of voltage source Inverter.
9 th	1 st	To perform the speed control of DC motor using Chopper.
10 th	1 st	To study single-phase Cyclo-converter
11 th	1 st	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
12 th	1 st	. 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
13 th	1 st	Execute the Ladder Diagrams with model applications (i) DOL starter (ii)Star- Delta starter
14 th	1 st	Execute Ladder diagrams with model applications (i) Stair case lighting (ii) Traffic light controller
15 th	1 st	Sessional