

GOVERNMENT POLYTECHNIC ,BARGARH

Department Of Electrical AND ELECTRONICS Engineering

Semester: 5th. DIPLOMA

Subject: PE&PLC LAB

Branch: EEE

Session: WINTER

No of Period :45(3p/week)

Name of Faculty: Niranjana Nayak

WEEK	PERIOD	Topics to be Covered
1	1	Demonstration of Experiments of SCR, DIAC TRIAC and power transistor.
2	2	Study of switching characteristics of a power transistor.
3	3	Study of V-I characteristics of SCR.
4	4	Study of V-I characteristics of TRIAC.
5	5	Study of V-I characteristics of DIAC.
6	6	Study of drive circuit for SCR & TRIAC using DIAC.
7	7	Study of drive circuit for SCR & TRIAC using UJT.
8	8	To study phase controlled bridge rectifier using resistive load.
9	9	Demonstration of Experiments of inverter chopper cyclo-converter and plc.
10	10	To study series Inverter and voltage source Inverter.
11	11	To perform the speed control of DC motor using Chopper.
12	12	To study single-phase Cyclo-converter.
13	13	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.
14	14	Execute the Ladder Diagrams with model applications (i) DOL starter (ii) Star- Delta starter.
15	15	Execute Ladder diagrams with model applications (i) Stair case lighting (ii) Traffic light controller.