LESSON PLAN FOR POWER ELECTRONICS & PLC LAB(Pr.2)		
Discipline: Electrical Engineering	Semester: 5th	Name of the Teaching Faculty: Pradosh ku. Panda (Lect. In EE)
Subject: Pr.2 POWER ELECTRONICS & PLC LAB	No. of days per week class allotted: 3	Semester From Date : 15/09/2022 to Date: 22/12/2022 No. of Weeks: 13
Week	Class Day	Theory/Practical Topic
1st	1st	1. Study of switching characteristics of a power transistor.
2nd	2nd	2. Study of V-I characteristics of SCR.
3rd	3rd	3. Study of V-I characteristics of TRIAC. 4. Study of V-I characteristics of DIAC.
4th	4th	5. Study of drive circuit for SCR & TRIAC using DIAC.
5th	5th	6. Study of drive circuit for SCR & TRIAC using UJT.
6th	6th	7. To study phase controlled bridge rectifier using resistive load.
7th	7th	8. To study series Inverter.9. Study of voltage source Inverter.
8th	8th	10. To perform the speed control of DC motor using Chopper.
9th	9th	11. To study single-phase Cyclo-converter
10th	10th	1. 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
11th	11th	2. 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
12th	12th	3. Execute the Ladder Diagrams with model applications (i) DOL starter (ii)Star- Delta starter
13th	13th	4. Execute Ladder diagrams with model applications (i) Stair case lighting (ii) Traffic light controller

14/09/2022
Hod
Electrical Engg.

Academic co-ordinator 14/09/22

Principal
Govt. polytechnic Nabarangpur 14/9/22