

DISCIPLINE		SEMESTER	NAME OF THE TEACHING FACULTY	
ELECTRICAL		5TH	MISS.SINDHUJA PANIGRAHI(PTGF)	
SUBJECT: Power Electronics & PLC Lab		NO. OF DAYS PER WEEK CLASS ALLOTTED : 03	SEMESTER FROM 01/07/2024 TO16/12/24	
			NO. OF WEEKS : 15 NOS.	
WEEKS	CLASS DAYS	THEORY TOPICS		
1ST WEEK	1ST	Study of V-I characteristics of SCR		
	2ND	Study of V-I characteristics of SCR		
	3RD	Study of V-I characteristics of SCR		
2ND WEEK	1ST	To study phase controlled bridge rectifier using resistive load.		
	2ND	To study phase controlled bridge rectifier using resistive load.		
	3RD	To study phase controlled bridge rectifier using resistive load.		
3RD WEEK	1ST	To study single-phase Cyclo-converter		
	2ND	To study single-phase Cyclo-converter		
	3RD	To study single-phase Cyclo-converter		
4TH WEEK	1ST	To perform the speed control of DC motor using Chopper.		
	2ND	To perform the speed control of DC motor using Chopper.		
	3RD	To perform the speed control of DC motor using Chopper.		
5TH WEEK	1ST	To study series Inverter.		
	2ND	To study series Inverter.		
	3RD	To study series Inverter.		
6TH WEEK	1ST	Study of drive circuit for SCR & TRIAC using DIAC.		
	2ND	Study of drive circuit for SCR & TRIAC using DIAC.		
	3RD	Study of drive circuit for SCR & TRIAC using DIAC.		
7TH WEEK	1ST	Introduction/Familiarization PLC Trainer & its Installation with PC		
	2ND	Learn the basics and hardware components of PLC		
	3RD	Understand configuration of PLC system,		
8TH WEEK	1ST	Study various building blocks of PLC		
	2ND	Determine the No. of digital I/O & Analog I/O		
	3RD	Demonstrate PLC and Ladder diagram-Preparation downloading and running		
9TH WEEK	1ST	Execute Ladder diagrams for different Logical Gates		
	2ND	Execute Ladder diagrams for different Logical Gates		
	3RD	Execute Ladder diagrams for different Logical Gates		
10TH WEEK	1ST	Execute Ladder diagrams for different Logical Gates		
	2ND	Execute Ladder diagrams for different Logical Gates		
	3RD	Execute Ladder diagrams for different Logical Gates		
11TH WEEK	1ST	Execute Ladder diagrams using timers		
	2ND	Execute Ladder diagrams using timers		
	3RD	Execute Ladder diagrams using timers		
12TH WEEK	1ST	Execute Ladder diagrams using counters		
	2ND	Execute Ladder diagrams using counters		
	3RD	Execute Ladder diagrams using counters		
13TH WEEK	1ST	Execute the Ladder Diagrams with model applications with DOL starter		
	2ND	Execute the Ladder Diagrams with model applications with DOL starter		

	3RD	Execute the Ladder Diagrams with model applications with DOL starter
14TH WEEK	1ST	Execute Ladder diagrams with model applications (i) Stair case lighting
	2ND	Execute Ladder diagrams with model applications (i) Stair case lighting
	3RD	Execute Ladder diagrams with model applications (i) Stair case lighting
15TH WEEK	1ST	Repetition of Missing experiments
	2ND	Repetition of Missing experiments
	3RD	Repetition of Missing experiments

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