

**UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA**

**Department of ELECTRICAL ENGINEERING**

**Academic Lesson Plan for 5<sup>TH</sup> Semester - 2022 (Winter)**

**Subject: Pr.2 POWER ELECTRONICS & PLC LAB**

**Name of the teaching faculty- Sri Kishore prusty (PTGF)**

<b>SEMESTER FROM DATE:25/10/2022 TO DATE:22/12/2022</b>	<b>No. of periods per week: 3 NO.OF WEEKS:15 Total periods: 45</b>	<b>Sessional Exam : 25 Marks End Semester Exam.: 50 Marks Total Marks: 75 Marks</b>
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WEEK	CLASS DAY	UNIT	THEORY/PRACTICAL TOPICS	REMARK
1ST	1ST	EXPERIMENT-1	Study of switching characteristics of a power transistor.	
	2ND			
	3RD			
2ND	1ST	EXPERIMENT-2	Study of V-I characteristics of SCR.	
	2ND			
	3RD			
3RD	1ST	EXPERIMENT-3	Study of V-I characteristics of TRIAC.	
	2ND			
	3RD			
4TH	1ST	EXPERIMENT-4	Study of V-I characteristics of DIAC	
	2ND			
	3RD			
5TH	1ST	EXPERIMENT-5	Study of drive circuit for SCR & TRIAC using DIAC.	
	2ND			
	3RD			
6TH	1ST	EXPERIMENT-6	Study of drive circuit for SCR & TRIAC using UJT.	
	2ND			
	3RD			
7TH	1ST	EXPERIMENT-7	To study phase controlled bridge rectifier using resistive load.	
	2ND			
	3RD			
8TH	1ST	EXPERIMENT-8	To study series Inverter.	
	2ND			
	3RD			
9TH	1ST	EXPERIMENT-9	Study of voltage source Inverter.	
	2ND			
	3RD			
10 <sup>TH</sup>	1ST	EXPERIMENT-10	<i>To perform the speed control of DC motor using Chopper.</i>	
	2ND			
	3RD			
11TH	1ST	EXPERIMENT-11	<i>To study single-phase Cyclo-converter</i>	
	2ND			
	3RD			
12TH	1ST	EXPERIMENT-12	PLC Programming 1. Introduction/Familiarization PLC Trainer & its Installation with PC	
	2ND			
	3RD			
13TH	1ST	EXPERIMENT-13	<i>Execute the different Ladder Diagrams</i>	
	2ND			

	<i>3RD</i>			
<i>14TH</i>	<i>1ST</i>	EXPERIMENT-14	<i>Execute the Ladder Diagrams with model applications</i>	
	<i>2ND</i>			
	<i>3RD</i>			
<i>15TH</i>	<i>1ST</i>	EXPERIMENT-15	<i>Execute Ladder diagrams with model applications (i) Stair case lighting (ii) Traffic light controller</i>	
	<i>2ND</i>			
	<i>3RD</i>			