

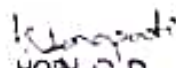


**LESSON PLAN-2023(WINTER 2023)**  
**SWAMI VIVEKANANDA SCHOOL OF ENGINEERING & TECHNOLOGY, BBSR**

Discipline- ELECTRICAL	Semester- 5TH	Name of teaching faculty- ANIL KU. BISWAL
SUBJECT- POWER ELECTRONICS AND PLC	No of days/ per week class allotted- 5	SEM From date-01/08/2023 No of weeks-17
Week	Class day	Theory Topics
1ST	01.08.2023	construction, operation & V characteristics of power diode
	02.08.2023	construction, operation & V characteristics of SCR
	03.08.2023	construction, operation & V characteristics of DIAC
	04.08.2023	construction, operation & V characteristics of TRIAC
2ND	07.08.2023	construction, operation & V characteristics of Power MOSFET
	08.08.2023	construction, operation & V characteristics of GTO
	09.08.2023	construction, operation & V characteristics of IGBT
	10.08.2023	Two transistor theory of SCR
	11.08.2023	Switching characteristics of SCR
	12.08.2023	Gate characteristics of SCR
	14.08.2023	TURN ON METHODS OF SCR
	16.08.2023	turn off method of scr
3RD	17.08.2023	DO
	18.08.2023	Voltage current rating
	19.08.2023	protection of SCR
	21.08.2023	FIRING CKT
	22.08.2023	DO
	23.08.2023	SNUBBER CIRCUIT
	24.08.2023	Class test
4TH	25.08.2023	controlled rectifier technique
	26.08.2023	-DO-
	28.08.2023	single phase half wave controlled converter with R load and RL load
	29.08.2023	-DO-
	30.08.2023	freewheeling diode, single phase fully controlled converter with R and RL load
	31.08.2023	three phase half wave controlled converter with R load
	01.09.2023	three phase fully controlled converter with R load
02.09.2023	working of single phase AC regulator	

1ST	04.09.2023	Principle of step up/step down chopper	
	05.09.2023	control mode of chopper	
	06.09.2023	operation of chopper in all 4 quadrant	
	07.09.2023	DO	
	08.09.2023	DO	
2ND	09.09.2023	CLASS TEST	
	11.09.2023	Classify inverters	
	12.09.2023	working of series inverter	
	13.09.2023	working of parallel inverter	
	14.09.2023	working of single phase bridge inverter	
	15.09.2023	explain basic principle of cycloconverter	
	16.09.2023	working of step up/step down cycloconverter	
3RD	18.09.2023	DO	
	20.09.2023	Application of cycloconverter	
	21.09.2023	Class test	
	22.09.2023	List application of power electronics circuit	
	23.09.2023	List the factor affecting the speed of DC motor	
4TH	25.09.2023	speed control of DC motor using converter	
	26.09.2023	speed control of DC motor using chopper	
	27.09.2023	List the factor affecting the speed of AC motor	
	28.09.2023	Speed control of induction motor by using AC voltage regulator	
	30.09.2023	DO	
1ST	03.10.2023	Speed control of induction motor by using converter and inverter	
	04.10.2023	DO	
	05.10.2023	working of UPS with block diagram	
	06.10.2023	Battery charger circuit using SCR	
	07.10.2023	Working and application of SMPS	
	2ND	09.10.2023	CLASS TEST
		10.10.2023	INTERNAL
11.10.2023		INTERNAL	
12.10.2023		INTERNAL	
13.10.2023		INTERNAL	
14.10.2023		INTERNAL	
3RD		16.10.2023	Introduction to PLC
	17.10.2023	Advantages and Application of PLC	
	18.10.2023	Different parts of PLC with block diagram and its working	
	19.10.2023	Ladder diagram	
	20.10.2023	Ladder diagram for AND OR and NOT gate	
	30.10.2023	Ladder diagram for combination circuit using NAND NOR AND OR gate	

	31.10.2023	TimersT-ONT-OFFRTO
1ST	01.11.2023	CounterCTU,CTD
	02.11.2023	LADDERDIAGRAMUSINGTIMERAND COUNTER
	03.11.2023	ladderdiagramforstardeltaandDOLstarter, staircaselighting,trafficlight control, temperature control
	04.11.2023	BasicsDCSandSCADA system
2ND	06.11.2023	DO
	07.11.2023	ComputercontrolDataAcquisition,Directdigitalcontrolsystem
	08.11.2023	Revision
	09.11.2023	ClassTest
	10.11.2023	Chapter1Revision
	11.11.2023	DO
3RD	13.11.2023	DO
	14.11.2023	Previousyearquestiondiscussion
	15.11.2023	Chapter2Revision
	16.11.2023	DO
	17.11.2023	DO
	18.11.2023	Previousyearquestiondiscussion
	20.11.2023	Chapter3Revision
	21.11.2023	DO
	22.11.2023	Previousyearquestiondiscussion
	23.11.2023	Chapter4& 5Revision
	24.11.2023	DO
	25.11.2023	Do
	27.11.2023	Previousyearquestiondiscussion
	28.11.2023	2mark&5 markselectivequestionDiscussion
	29.11.2023	2mark&5 markselectivequestionDiscussion
	30.11.2023	2mark&5 markselectivequestionDiscussion

  
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