

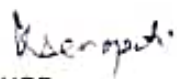


LESSON PLAN-2023(WINTER 2023)
SWAMI VIVEKANANDA SCHOOL OF ENGG & TECH, BBSR

Discipline- ELECTRICAL	Semester- 5TH	Name of teaching faculty- ACHYUTANANDA PANDA
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
3RD	16.08.2023	turn off method of scr
	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
4TH	23.08.2023	SNUBBER CIRCUIT
	24.08.2023	Class test
	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
5TH	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 of stepdown 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
	09.09.2023	CLASS TEST
2ND	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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 V.J. E.T., Madanpur


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