LESSON PLAN-2021-22 (WINTER-2021) SWAMI VIVEKANANDA SCHOOL OF ENGG & TECH, BBSR		
Discipline-ETC	**Semester-5TH**	**Name of teaching faculty-SONALISUSMITATRIPATHY**
SUBJECT-POWER ELECTRONICS AND PLC	**No of days/ per week class alloted-5**	**SEM From date- 01/10/2021** **No of weeks-18**
Week	**Class day**	**Theory Topics**
1st	1.10.2021	construction,operation& VI characteristics of power diode
	4.10.2021	construction,operation& VI characteristics of SCR
	5.10.2021	construction,operation& VI characteristics of DIAC
2nd	6.10.2021	construction,operation& VI characteristics of TRIAC
	07.10.2021	construction,operation& VI characteristics of Power MOSFET
	08.10.2021	construction,operation& VI characteristics of GTO
	09.10.2021	construction,operation& VI characteristics of IGBT
3rd	11.10.2021	Two transistor theory of SCR
	19.10.2021	Switching characteristics of SCR
	20.10.2021	Gate characteristics of SCR
4th	21.10.2021	TURN ON METHODS OF SCR
	22.10.2021	turn off method of scr
	25.10.2021	DO Turn of method of scr
	26.10.2021	Voltage current rating
	28.10.2021	protection of SCR
	29.10.2021	FIRING CKT
1st	30.10.2021	DO FIRING CKT
2nd	01.11.2021	SNUBBER CIRCUIT
	02.11.2021	Class test
	03.11.2021	controlled rectifire technique
	05.11.2021	controlled DO- rectifire technique
3rd	06.11.2021	single phase half wave controlled converter with R load and RL load
	08.11.2021	-DO- Single phase half wave controlled.
	09.11.2021	free wheeling diode,single phase fully controlled converter with R and RL load
	10.11.2021	three phase half wave controlled converter with R load
4th	11.11.2021	three phase fully controlled converter with R load
	13.11.2021	working of single phase AC regulator
	15.11.2021	Principle of step of step down chopper
5th	16.11.2021	IST INTERNAL

	17.11.2021	IST INTERNAL
	18.11.2021	IST INTERNAL
1st	19.11.2021	control mode of chopper
	22.11.2021	operation of chopper in all 4 quadrant
	23.11.2021	DO operation of chopper in all 4 quadrant
	24.11.2021	Classify inverters
2nd	26.11.2021	working of series inverter
	27.11.2021	working of parallel inverter
	29.11.2021	1ST INTERNAL
3rd	30.11.2021	1ST INTERNAL
	01.12.2021	1ST INTERNAL
	02.12.2021	working of single phase bridge inverter
	03.12.2021	explain basic principle of cyclo converter
4th	04.12.2021	working of step up step down cyclo converter
	06.12.2021	DO Working of step up step down cyclo
	07.12.2021	Application of cyclo converter
	08.12.2021	Class test
	10.12.2021	List application of power electronics circuit
1st	11.12.2021	list the factor affecting the speed of DC motor
	13.12.2021	speed control of DC motor using converter
	14.12.2021	speed control of DC motor using chopper
2nd	15.12.2021	List the factor affecting the speed of AC motor
	17.12.2021	Speed control of induction motor by using AC voltage regulator
	18.12.2021	Speed control of induction motor by using converter and inverter
	20.12.2021	class test
3rd	21.12.2021	working of UPS with block diagram
	22.12.2021	Battery charger circuit using SCR
	24.12.2021	Working and application of SMPS
	27.12.2021	Introduction to PLC
4th	28.12.2021	Advantages and Application of PLC
	29.12.2021	Different parts of PLC with block diagram and its working
	30.12.2021	ladder diagram
	03.01.2022	Description of contacts and coils
5th	04.01.2022	PLC instruction set
	05.01.2022	Ladder diagram for AND OR and NOT gate
	07.01.2022	Ladder diagram for combination circuit using NAND NOR AND OR gate
	08.01.2022	Timers T-ON T-OF RTO
	10.01.2022	Counter CTU,CTD
	11.01.2022	LADDER DIAGRAM USING TIMER AND COUNTER

	12.01.2022	ladder diagram for star delta and DOL starter,staircase lighting,traffic light control,temperature control
	13.01.2022	basics DCS and SCADA system
	14.01.2022	Computer control Data Acquisition, Direct digital control system
HOD		

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