LESSON PLAN-2021-22 (WINTER - 2021) SWAMI VIVEKANANDA SCHOOL OF ENGG & TECH, BBSR		
Discipline-ETC	**Semester-3RD**	**Name of teaching faculty- SASMITA KUMARI DAS**
SUBJECT-Circuit and Network Theory	**No of days/ per week class alloted-5**	**SEM From date- 01.10.21** **No of weeks-17**
Week	**Class day**	**Theory Topics**
1st	1.10.2021	1. CIRCUIT ELEMENTS AND LAWS: 1.1 Voltage, current, power and energy
	4.10.2021	solving problem related to v,I,p and E
	5.10.2021	1.2 Resistance, Inductance & capacitance as parameters
	6.10.2021	1.3 Active, Passive, Unilateral & bilateral, Linear &Non linear elements
2ND	07.10.2021	DO 1.3 Active, passive, unilateral & bilateral, Linear & Non linea
	08.10.2021	1.4 KVL and KCL, Voltage division & current division.
	09.10.2021	2. MAGNETIC CIRCUITS 2 . 1 Introduction
	11.10.2021	2 . 2 Magnetizing force, Intensity, MMF, flux and their relations
3RD	19.10.2021	DO 2.2 Magnetizing force, Intensity, MMF, Flux and their relati
	20.10.2021	2 . 3 Permeability, reluctance and permeance
	21.10.2021	class Test
	22.10.2021	2 . 4 Analogy between electric and Magnetic Circuits
4TH	25.10.2021	2 . 5 B-H Curve,2 . 7 Hysteresis loop
	26.10.2021	2 . 6 Series & parallel magnetic circuit
	28.10.2021	solving poblem
	29.10.2021	NETWORK ANALYSIS: 3.1 Mesh Analysis
	30.10.2021	3.2 Mesh Equations by inspection 3.2.1 Super mesh Analysis
5TH	01.11.2021	solving problem related to mesh analysis
	02.11.2021	3.2.2 Nodal Analysis 3.2.3 Nodal Equations by inspection
	03.11.2021	3.2.4 Super node Analysis
1ST	05.11.2021	solving problem related to node analysis
	06.11.2021	3.2.5 Source Transformation Technique
2ND	08.11.2021	DO 3.2.5 Source Transformation Technique.
	09.11.2021	4.1 Star – delta transformation
	10.11.2021	4.2 Super position Theorem

	11.11.2021	4.3 Thevenin's Theorem
3RD	13.11.2021	4.4 Norton's Theorem
	15.11.2021	solving problem
	16.11.2021	4.5 Reciprocity Theorem
	17.11.2021	4.6 Compensation Theorem
4TH	18.11.2021	4.7 Maximum power Transfer theorem
	19.11.2021	4.8 Milliman's Theorem
	22.11.2021	doubt clear class
	23.11.2021	5.1 Review of A.C. through R-L, R-C & R-L-C Circuit
	24.11.2021	5.2 Solution of problems of A.C. through R-L, R-C & R-L-C series Circuit by complex algebra method.
5TH	26.11.2021	INTERNAL
	27.11.2021	INTERNAL
	29.11.2021	INTERNAL
	30.11.2021	5.3 Solution of problems of A.C. through R-L, R-C & R-L-C parallel &Composite Circuits
1ST	01.12.2021	5.4 Power factor & power triangle. 5.5 Deduce expression for active, reactive, apparent power.
	02.12.2021	5.6 Series resonance & band width in RLC Circuit
	03.12.2021	solving problem related to RL,RC,RLC circuit
	04.12.2021	do Solving Problem related to RL, RC, RLC CKt
	06.12.2021	do Solving Problem related to RL, RC, RLC Circuit
2ND	07.12.2021	5.7 Resonant frequency for a tank circuit
	08.12.2021	5.8 Q factor & selectivity in series circuit.
	10.12.2021	5.9 Poly phase Circuit
	11.12.2021	5.10 Voltage, current & power in star & delta connection
	13.12.2021	5.11 Three phase balanced circuit
3RD	14.12.2021	6.1 Self Inductance and Mutual Inductance
	15.12.2021	2 Conductively coupled circuit and mutual impedance
	17.12.2021	do 2 Conductively Coupled Circuit and Mutual impedance
	18.12.2021	6.3 Dot convention
	20.12.2021	6.4 Coefficient of coupling
4TH	21.12.2021	6.5 Series and parallel connection of coupled inductors
	22.12.2021	7.1 Steady state & transient state response
	24.12.2021	do 7.1 Steady state & transient State response
	27.12.2021	7.2 Response to R-L, R-C & RLC circuit under DC condition
	28.12.2021	do 7.2 Response to R-L, R-C & RLC CKt under DC Cond?
	29.12.2021	8. introducion to wo pot network theory
1ST	30.12.2021	Class Test
	03.01.2022	8.1 Open circuit impedance (z) parameters
	04.01.2022	8.2 Short circuit admittance (y) parameters

	05.01.2022	8.3 Transmission (ABCD) parameters
2ND	07.01.2022	8.4 Hybrid (h) parameters
	08.01.2022	assignment
	10.01.2022	numericals
4 th	11.01.2022	numericals
	12.01.2022	8.5 Inter relationships of different parameters.
	1/13/1900	do 8.5 Inter relationships of different parameters
	14.01.2022	8.6 T and π representation.
	15.01.2022	Class Test
1st	17.01.2022	9.1 Classification of filters. 9.2 Filter networks.
	18.01.2022	9.3 Equations of filter networks. 9.4 Classification of pass Band, stop Band and cut-off frequency.
	19.01.2022	9.5 Characteristic impedance in the pass and stop bands 9.6 Constant – K low pass filter
	20.01.2022	9.7 Constant – K high pass filter
2nd	21.01.2022	9.9 Constant – K Band elimination filler
	22.01.2022	Class Test
	24.01.2022	9.9 Constant – K Band pass filter
		assainment class

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