

LESSON PLAN (WINTER- 2022)				
Subject- CIRCUIT & NETWORK THEORY				
NAME OF FACULTY-LIP SARANI BAGH		Semester-3RD		Branch- Electrical Engineering
Sl. No.	Date	Chapter	Topic Name	No. of periods
WEEK NO-1	15-09-2022 to 17-09-2022	MAGNETIC CIRCUITS	1. 1 Introduction 1. 2 Magnetizing force, Intensity, MMF, flux and their relations	1
			1. 3 Permeability, reluctance and permeance 1. 4 Analogy between electric and Magnetic Circuits	1
			1. 5 B-H Curve	1
WEEK NO-2	19-09-2022 to 24-09-2022	MAGNETIC CIRCUITS	cont.....	1
			1. 6 Series & parallel magnetic circuit.	1
			1. 7 Hysteresis loop	1
			cont.....	1
WEEK NO-3	26-09-2022 to 01-10-22	COUPLED CIRCUITS	2. 1 Self Inductance and Mutual Inductance 2. 2 Conductively coupled circuit and mutual impedance	1
			2. 3 Dot convention 2. 4 Coefficient of coupling	1
			2. 5 Series and parallel connection of coupled inductors.	1
WEEK NO-4	03-10-22 to 08-10-22	CIRCUIT ELEMENTS AND ANALYSIS	2. 6 Solve numerical problems	1
			HOLIDAYS	
WEEK NO-5	10-10-22 to 15-10-22	CIRCUIT ELEMENTS AND ANALYSIS	3. 1 Active, Passive, Unilateral & bilateral, Linear & Non linear elements	1
			3. 2 Mesh Analysis, Mesh Equations by inspection	1
			3. 3 Super mesh Analysis	1
			Solve Numerical	1
			3. 4 Nodal Analysis, Nodal Equations by inspection	1
WEEK NO-6	17-10-22 to 22-10-22	NETWORK THEOREMS	3. 5 Super node Analysis.	1
			3. 6 Solve numerical problems (With Independent Sources Only)	1
			3. 6 Source Transformation Technique 3. 7 Solve numerical problems (With Independent Sources Only)	1
			4.1 Star to delta and delta to star transformation	1
			4.2 Super position Theorem	1
			Solve Numerical	1
			4.3 Thevenin's Theorem	1
WEEK NO-7	24-10-22 to 29-10-22	NETWORK THEOREMS	4.4 Norton's Theorem	1
			Solve Numerical	1
			4.5 Maximum power Transfer Theorem.	1
			4.6 Solve numerical problems (With Independent Sources Only)	1
			Solve Numerical	1
WEEK NO-8	31-10-22 to 05-11-22	AC CIRCUIT AND RESONANCE	5.1 A.C. through R-L, R-C & R-L-C Circuit	1
			5.2 Solution of problems of A.C. through R-L, R-C & R-L-C series Circuit by complex algebra method.	1
			cont.....	1
			5.3 Solution of problems of A.C. through R-L, R-C & R-L-C parallel & Composite Circuits	1
WEEK NO-9	07-11-22 to 12-11-22	AC CIRCUIT AND RESONANCE	Solve Numerical	1
			Solve Numerical	1
			5.4 Power factor & power triangle 5.5 Deduce expression for active, reactive, apparent power.	1
			5.6 Derive the resonant frequency of series resonance and parallel resonance circuit	1
			5.7 Define Bandwidth, Selectivity & Q-factor in series circuit.	1
WEEK NO-10	14-11-22 to 19-11-22	POLYPHASE CIRCUIT	5.8 Solve numerical problems	1
			6.1 Concept of poly-phase system and phase sequence	1
			6.2 Relation between phase and line quantities in star & delta connection	1
			6.3 Power equation in 3-phase balanced circuit.	1
			6.4 Solve numerical problems	1
WEEK NO-11	22-11-22 to 26-11-22	POLYPHASE CIRCUIT	6.5 Measurement of 3-phase power by two wattmeter method.	1

WEEK NO-12	28-11-22 to 03-12-22	TRANSIENTS	6.6 Solve numerical problems	1
			7.1 Steady state & transient state response	1
			7.2 Response to R-L, R-C & RLC circuit under DC condition.	1
			cont.....	1
WEEK NO-13	05-12-22 to 10-11-22	TWO-PORT NETWORK	7.3 Solve numerical problems	1
			8.1 Open circuit impedance (z) parameters	1
			8.2 Short circuit admittance (y) parameters	1
			Solve Numerical	1
			8.3 Transmission (ABCD) parameters	1
			8.4 Hybrid (h) parameters.	1
WEEK NO-14	12-12-22 to 17-12-22	FILTERS	8.5 Inter relationships of different parameters	1
			8.6 T and π representation.	1
			8.7 Solve numerical problems	1
			9.1 Define filter 9.2 Classification of pass Band, stop Band and cut-off frequency	1
WEEK NO-15	19-12-22 to 22-12-22	FILTERS	9.3 Classification of filters 9.4 Constant - K low pass filter.	1
			9.5 Constant - K high pass filter	1
			9.6 Constant - K Band pass filter.9.7 Constant - K Band elimination filter.	1
			9.8 Solve Numerical problems	1

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15/09/22