LESSON PLAN FOR ACADEMIC SESSION 2024-25(WINTER-2024)

Discipline: Electrical Engineering				Semester:3rd	Name of Teaching faculty:Pratima Bhoi
Subject-Circuit and Network Theory				Semester From Date:01.07.2024 to 08.11.2024	
SI NO.	WEEK	DATE	CHAPTER	THEORY TOPIC NAME	NO. OF PERIODS
1	1st	1.07.24	CHAPTER-01 MAGNETIC CIRCUITS	1 . 1 Introduction	1
2		2.07.24		1 . 2 Magnetizing force, Intensity, MMF, flux and their relations 1 . 3 Permeability, reluctance and permeance	2
3		3.07.24		1 . 4 Analogy between electric and Magnetic Circuits 1 . 5 B-H Curve	1
4		5.07.24		Continue.....	1
5	2nd	8.07.24		1 . 6 Series & parallel magnetic circuit.	1
6		9.07.24		1 . 7 Hysteresis loop	2
7		10.07.24	CHAPTER-02 COUPLED CIRCUITS	2 . 1 Self Inductance and Mutual Inductance 2 . 2 Conductively coupled circuit and mutual impedance	1
8		12.07.24		2 . 3 Dot convention 2 . 4 Coefficient of coupling	1
9	3rd	15.07.24		2 . 5 Series and parallel connection of coupled inductors.	1
10		16.07.24		2 . 6 Solve numerical problems	2
12		19.07.24	CHAPTER-03 CIRCUIT ELEMENTS AND ANALYSIS	3 . 1 Active, Passive, Unilateral & bilateral, Linear & Non linear elements	1
13	4th	22.07.24		3 . 2 Mesh Analysis, Mesh Equations by inspection	1
14		23.07.24		Solve numerical problems	2
15		24.07.24		Solve numerical problems	1
16		26.07.24		3 . 3 Super mesh Analysis	1
17	5th	29.07.24		Solve numerical problems	1
18		30.07.24		Solve numerical problems	2
19		31.07.24		3 . 4 Nodal Analysis, Nodal Equations by inspection	1
20		2.08.24		Solve numerical problems	1
21	6th	4.08.24		Solve numerical problems	1
22		6.08.24		3 . 5 Super node Analysis.	2
23		7.08.24		Solve numerical problems	1
24		9.08.24		Solve numerical problems	1
25	7th	12.08.24		3 . 6 Source Transformation Technique	1
26		13.08.24	CHAPTER-04	4.1 Star to delta and delta to star transformation	2
		14.08.24		Solve numerical problems	1
27		16.08.24		4.2 Super position Theorem	1
28	8th	20.08.24		Solve numerical problems	2
29		21.08.24		Solve numerical problems	1

30		23.08.24	NETWORK THEOREMS	4.3 Thevenin's Theorem	1
31	9th	27.08.24		Solve numerical problems	2
32		28.08.24		4.4 Norton's Theorem	1
33		30.08.24		Solve numerical problems	1
34	10th	2.09.24		Solve numerical problems	1
35		3.09.24		4.5 Maximum power Transfer Theorem.	2
36		4.09.24	CHAPTER-05 AC CIRCUIT AND RESONANCE	5.1 A.C. through R-L, R-C & R-L-C Circuit	1
37		6.09.24		5.2 Solution of problems of A.C. through R-L, R-C & R-L-C series Circuit by complex algebra method.	1
38	11th	9.09.24		Continue.....	1
39		10.09.24		5.3 Solution of problems of A.C. through R-L, & R-C Circuits	2
40		11.09.24		5.3 Solution of problems of A.C. through R-L-C parallel & Composite Circuits	1
41		13.09.24		5.4 Power factor & power triangle. 5.5 Deduce expression for active, reactive, apparent	1
42	12th	17.09.24		5.6 Derive the resonant frequency of series resonance and parallel resonance	2
43		18.09.24		5.7 Define Bandwidth, Selectivity & Q-factor in series circuit.	1
44		20.09.24		5.8 Solve numerical problems	1
45	13th	23.09.24	CHAPTER-06 POLYPHASE CIRCUIT	6.1 Concept of poly-phase system and phase sequence	1
46		24.09.24		6.2 Relation between phase and line quantities in star & delta connection	2
47		25.09.24		6.3 Power equation in 3-phase balanced circuit.	1
48		27.09.24		6.4 Solve numerical problems	1
49	14th	30.09.24		6.5 Measurement of 3-phase power by two wattmeter method.	1
50		1.10.24		6.6 Solve numerical problems.	2
52		4.10.24	CHAPTER-07 TRANSIENTS	7.1 Steady state & transient state response.	1
53	15th	14.10.24		7.2 Response to R-L, R-C & RLC circuit under DC condition	1
54		15.10.24		7.3 Solve numerical problems	2
56		18.10.24	CHAPTER-08 TWO-PORT NETWORK	8.1 Open circuit impedance (z) parameters 8.2 Short circuit admittance (y) parameters	1
57	16th	21.10.24		8.3 Transmission (ABCD) parameters	1
58		22.10.24		8.4 Hybrid (h) parameters. 8.5 Inter relationships of different parameters.	2
59		23.10.24		8.6 T and π representation.	1
60		25.10.24		8.7 Solve numerical problems	1

61	17th	28.10.24	CHAPTER-09 FILTERS	9.1 Define filter	1
62		29.10.24		9.2 Classification of pass Band, stop Band and cut-off frequency. 9.3 Classification of filters.	2
63		30.10.24		9.4 Constant – K low pass filter. 9.5 Constant – K high pass filter.	1
64		01.11.24		9.6 Constant – K Band pass filter. 9.7 Constant – K Band elimination filter	1
65	18th	04.11.24		9.8 Solve numerical problems.	1
66		05.11.24	LAST YEAR QUESTION DISCUSSION	Previous year question discussion.....	2
67		06.11.24			1
68		08.11.24			1
				TOTAL CLASSS	84

29.06.24

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29.06.24

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