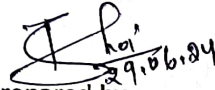


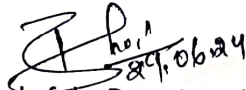
## LESSON PLAN FOR ACADEMIC SESSION 2024-25(WINTER-2024)


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	2
3		3.07.24		1 . 3 Permeability, reluctance and permeance	1
4		5.07.24		1 . 4 Analogy between electric and Magnetic Circuits 1 . 5 B-H Curve	
5	2nd	8.07.24		Continue.....	1
6		9.07.24		1 . 6 Series & parallel magnetic circuit.	1
7		10.07.24		1 . 7 Hysteresis loop	2
8	3rd	12.07.24	CHAPTER-02 COUPLED CIRCUITS	2 . 1 Self Inductance and Mutual Inductance	1
9		15.07.24		2 . 2 Conductively coupled circuit and mutual impedance	
10		16.07.24		2 . 3 Dot convention 2 . 4 Coefficient of coupling	1
12	3rd	19.07.24		2 . 5 Series and parallel connection of coupled inductors.	1
13		22.07.24		2 . 6 Solve numerical problems	2
14	4th	23.07.24		CHAPTER-03 CIRCUIT ELEMENTS AND ANALYSIS	3 . 1 Active, Passive, Unilateral & bilateral, Linear & Non linear elements
15		24.07.24	3 . 2 Mesh Analysis, Mesh Equations by inspection		1
16		26.07.24	Solve numerical problems .....		2
17		5th	29.07.24		Solve numerical problems .....
18	30.07.24		3 . 3 Super mesh Analysis		1
19	31.07.24		Solve numerical problems .....		2
20	6th	2.08.24	3 . 4 Nodal Analysis, Nodal Equations by inspection		1
21		4.08.24	Solve numerical problems .....		1
22		6.08.24	Solve numerical problems .....		1
23		7.08.24	3 . 5 Super node Analysis.		2
24	7th	9.08.24	Solve numerical problems .....		1
25		12.08.24	3 . 6 Source Transformation Technique		1
26		13.08.24	4.1 Star to delta and delta to star transformation	2	
27	8th	14.08.24	Solve numerical problems .....	1	
28		16.08.24	4.2 Super position Theorem	1	
29	8th	20.08.24	Solve numerical problems .....	2	
29		21.08.24	CHAPTER-04 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	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	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	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	16th	18.10.24	CHAPTER-08 TWO-PORT NETWORK	8.1 Open circuit impedance (z) parameters 8.2 Short circuit admittance (y) parameters	1
57		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 $\pi$ representation.	1	
60		25.10.24	8.7 Solve numerical problems	1	

61	17th	28.10.24	<b>CHAPTER-09 FILTERS</b>	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		04.11.24		9.8 Solve numerical problems.	1
66	18th	05.11.24	<b>LAST YEAR QUESTION DISCUSSION</b>	Previous year question discussion.....	2
67		06.11.24			1
68		08.11.24			1
<b>TOTAL CLASSS</b>					<b>84</b>

  
 Prepared by  
 Pratima Bhoi  
 Sr. Lect (Electrical)  
 G.P . Sonepur

  
 Head of the Department  
 Electrical Engg.  
 G.P.Sonepur

  
 Academic co-ordinator  
 G.P.Sonepur