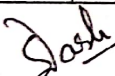



LESSON PLAN

Name of the Institute:		C. V. RAMAN POLYTECHNIC
Department:		ELECTRICAL ENGINEERING
Semester/Division/Branch:		3 rd SEM/EE
Subject Name with code:		CIRCUIT AND NETWORK THEORY(TH-2)
Total No. of Class (Required):		60
Faculty Name:		SUBHANKAR DASH
Class No.	Brief description of the Topic/Chapter to be taught	Remarks
1	Introduction	
2	Magnetizing force, Intensity, MMF, flux and their relations	
3	Permeability, reluctance and permeance	
4	Analogy between electric and Magnetic Circuits	
5	B-H Curve	
6	Series & parallel magnetic circuit.	
7	Hysteresis loop	
8	Self Inductance and Mutual Inductance	
9	Conductively coupled circuit and mutual impedance, Dot convention	
10	Coefficient of coupling	
11	Series and parallel connection of coupled inductors.	
12	Solve numerical problems	
13	Active, Passive, Unilateral & bilateral, Linear & Non linear elements	
14	Mesh Analysis, Mesh Equations by inspection	
15	Super mesh Analysis	
16	Nodal Analysis, Nodal Equations by inspection	
17	Super node Analysis.	
18	Source Transformation Technique	

19	Star to delta and delta to star transformation	
20	Super position Theorem	
21	Thevenin's Theorem	
22	Norton's Theorem	
23	Norton's Theorem	
24	Maximum power Transfer Theorem.	
25	Maximum power Transfer Theorem.	
26	Solve numerical problems (With Independent Sources Only)	
27	A.C. through R-L, R-C & R-L-C Circuit	
28	Solution of problems of A.C. through R-L, R-C & R-L-C series Circuit by	
29	complex algebra method.	
30	Solution of problems of A.C. through R-L, R-C & R-L-C parallel	
31	Power factor & power triangle.	
32	Deduce expression for active, reactive, apparent power.	
33	Derive the resonant frequency of series resonance and parallel resonance	
34	Solve numerical problems	
35	Concept of poly-phase system and phase sequence	
36	Relation between phase and line quantities in star & delta connection	
37	Power equation in 3-phase balanced circuit.	
38	Solve numerical problems	
39	Measurement of 3-phase power by two wattmeter method.	
40	Solve numerical problems.	
41	Steady state & transient state response.	
42	Steady state & transient state response.	
43	Response to R-L, R-C & RLC circuit under DC condition.	
44	Response to R-L, R-C & RLC circuit under DC condition.	

45	Response to R-L, R-C & RLC circuit under DC condition.	
46	Solve numerical problems	
47	Open circuit impedance (z) parameters	
48	Short circuit admittance (y) parameters	
49	Transmission (ABCD) parameters	
50	Hybrid (h) parameters.	
51	Inter relationships of different parameters.	
52	T and p representation.	
53	Solve numerical problems	
54	Solve numerical problems	
55	Define filter	
56	Classification of pass Band, stop Band and cut-off frequency.	
57	Classification of filters.	
58	Constant – K low pass filter.	
59	Constant – K high pass filter.	
60	Constant – K Band pass filter, K Band elimination filter.	


Signature of the Faculty


Signature of the H.O.D