Lesson Plan

2023 (W)

Subject :- CNT (Code) TH-2 Name of faculty:- Sujata Samal

Semester :-3rd Class allotted 4p/w Branch :- Electrical Engineering

Discipline	Semester:-3rd	From date:-01/08/23 To date:30/11/23	Teaching Aid
Subject:	No. of days/ per week 4p/w:	Theory/ Practical –Topics/Lesson	
Week	Date/Period		
1	01/08/23to 05/08/23	1. MAGNETIC CIRCUITS 1 . 1 Introduction 1 . 2 Magnetizing force, Intensity, MMF, flux and their relations 1 . 3 Permeability, reluctance and permeance 1 . 4 Analogy between electric and Magnetic Circuits	White board & marker
2	07/08/23 to 12/08/23	1 . 5 B-H Curve 1 . 6 Series & parallel magnetic circuit. 1 . 7 Hysteresis loop	White board & marker
3	14/08/23 to 9/08/23	2. COUPLED CIRCUITS: 2 . 1 Self Inductance and Mutual Inductance 2 . 2 Conductively coupled circuit and mutual impedance 2 . 3 Dot convention	White board & marker
4	21/08/23 to 6/08/23	2 . 4 Coefficient of coupling 2 . 5 Series and parallel connection of coupled inductors. 2 . 6 Solve numerical problems	White board & marker
5	28/08/23 2/09/23	3. CIRCUIT ELEMENTS AND ANALYSIS: 3 . 1 Active, Passive, Unilateral & bilateral, Linear & Non linear elements 3 . 2 Mesh Analysis, Mesh Equations by inspection 3 . 3 Super mesh Analysis 3 . 4 Nodal Analysis, Nodal Equations by inspection	White board & marker
6	04/09/23 to 09/09/23	3 . 5 Super node Analysis. 3 . 6 Source Transformation Technique 3 . 7 Solve numerical problems (With Independent Sources Only	White board & marker
7	11/09/23 to 16/09/23	4. NETWORK THEOREMS: 4.1 Star to delta and delta to star transformation 4.2 Super position Theorem	White board & marker

		4.3 Thevenin's Theorem	
8	18/09/23 to 23/09/23	4.4 Norton's Theorem 4.5 Maximum power Transfer Theorem. 4.6 Solve numerical problems (With Independent Sources Only	White board & marker
9	25/09/23 to 30/09/23	AC CIRCUIT AND RESONANCE: 5.1 A.C. through R-L, R-C & R-L-C Circuit 5.2 Solution of problems of A.C. through R-L, R-C & R-L-C series Circuit by complex algebra method. 5.3 Solution of problems of A.C. through R-L, R-C & R-L-C parallel & Composite Circuits	White board & marker
10	03/10/23 to 07/10/23	5.4 Power factor & power triangle. 5.5 Deduce expression for active, reactive, apparent power. 5.6 Derive the resonant frequency of series resonance and parallel resonance circuit 5.7 Define Bandwidth, Selectivity & Q-factor in series circuit. 5.8 Solve numerical problems	White board & marker
11	09/10/23 to 14/10/23	6. POLYPHASE CIRCUIT 6.1 Concept of poly-phase system and phase sequence 6.2 Relation between phase and line quantities in star & delta connection 6.3 Power equation in 3-phase balanced circuit.	White board & marker
12	16/10/23 to 20/10/23	6.4 Solve numerical problems 6.5 Measurement of 3-phase power by two wattmeter method. 6.6 Solve numerical problems.	White board & marker & smart board
13	30/10/23 to 04/11/23	7. TRANSIENTS: 7.1 Steady state & transient state response. 7.2 Response to R-L, R-C & RLC circuit under DC condition. 7.3 Solve numerical problems	White board & marker
14	06/11/23 to 11/11/23	8. TWO-PORT NETWORK: 8.1 Open circuit impedance (z) parameters 8.2 Short circuit admittance (y) parameters 8.3 Transmission (ABCD) parameters	White board & marker
15	13/11/23 to 18/11/23	8.4 Hybrid (h) parameters. 8.5 Inter relationships of different parameters. 8.6 T and π representation. 8.7 Solve numerical problems	White board & marker& smart board

16	20/11/23 to 25/11/23	9. FILTERS: 9.1 Define filter 9.2 Classification of pass Band, stop Band and cut-off frequency. 9.3 Classification of filters. 9.4 Constant – K low pass filter	White board & marker
17	28/11/23 to 30/11/23	9.5 Constant – K high pass filter. 9.6 Constant – K Band pass filter. 9.7 Constant – K Band elimination filter. 9.8 Solve Numerical problems	White board & marker

Signature of HOD

Signature of faculty