

LESSON PALN 2022(WINTER)

Discipline: Electrical Engg.	semester: 3rd sem	Name of the Teaching Faculty: Mrs. Jayashree Mohanty, Sr. Lect. Electrical Engg
Subject: Circuit and Network Theory	Theory Periods: 5P/Week	Semester From Date:-15.09.22 to Date:- 22.12.22 No. of Weeks:18
1st Week	1st	MAGNETIC CIRCUITS, Introduction
	2nd	Magnetizing force, Intensity, MMF, flux and their relations
2nd Week	1st	Permeability, reluctance and permeance
	2nd	Analogy between electric and Magnetic Circuits
	3rd	B-H Curve
	4th	Series & parallel magnetic circuit
	5th	Hysteresis loop
3rd Week	1st	COUPLED CIRCUITS, Self Inductance and Mutual Inductance, Conductively coupled circuit and mutual impedance
	2nd	Dot convention, Coefficient of coupling, Series and parallel connection of coupled inductors.
	3rd	Solve numerical problems.
	4th	Solve numerical problems
	5th	Class Test 1
4th Week	1st	Circuit Elements And Analysis: Active, Passive, Unilateral & bilateral, Linear & Non linear element, Mesh Analysis, Mesh Equations by inspection
6th Week	1st	Super mesh Analysis, Solve numerical problems (With Independent Sources Only)
	2nd	Nodal Analysis, Nodal Equations by inspection, Solve numerical problems
	3rd	Super node Analysis, Solve numerical problems
	4th	Source Transformation Technique,
	5th	Solve numerical problems
7th Week	1st	Network Theorems: Star to delta and delta to star transformation
	2nd	Solve numerical problems
	3rd	Super position Theorem, Solve numerical problems
	4th	Thevenin's Theorem, Solve numerical problems
	5th	Norton's Theorem, Solve numerical problems
8th Week	1st	Maximum power Transfer Theorem, Solve numerical problems
	2nd	Solve numerical problems
	3rd	Solve numerical problems
	4th	Ac Circuit And Resonance: A.C. through R-L, R-C & R-L-C Circuit
9th Week	1st	Solution of problems of A.C. through R-L, R-C & R-L-C series Circuit by complex algebra method

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