

Aid

Lesson Plan

Subject Circuits & Network Theory (Code) Ph-2 Name of faculty Smruti Rekha Mohanty
 Semester 3rd Class allotted UP/OP Branch Electrical Engg

Discipline	Semester	From date:	To date:	Teaching Aid
Subject:	No. of days/ per week	Theory/ Practical - Topics/Lesson		
Week	Date/Period			
1	15/9/22	Introduction magnetizing force		white board & Marker
	to	Intensity, MMF, Flux and their relations, permeability, reluctance and permeance. Analogy bet ⁿ electric and magnetic circuit.		
	16/9/22	B-H curve, series and parallel magnetic circuit. Hysteresis loop, self inductance and mutual inductance, conductivity coupled circuit and mutual impedance. Dot convention, coefficient of coupling, series and parallel connection of coupled inductors.		
2	19/10/22	Solve numerical problems, Active passive, unilateral & bilateral, linear and non linear element, Super mesh analysis, Nodal analysis, Nodal equations by inspection, Supernode analysis, Source transformation technique. Solve numerical problems (with independent sources only)		white board & Marker
	to	Star delta and delta to star transformation, Super position theorem, Thevenin's theorem, Max ^m power transfer theorem.		
3	26/10/22	Solve numerical problems: AC through R-L, R-C & R-L-C circuit. Solution of problem of AC through R-L, R-C, R-L-C series circuit by complex algebra method		white board & Marker
	to	Solution of problems of AC through R-L, R-C & R-L-C Parallel & composite circuits. Power factor & power triangle. Deduce expression for active,		
4	10/10/22			white board & Marker
	to			
5	17/10/22			white board & Marker
	to			
6	25/10/22			white board & Marker
	to			
7	31/10/22			white board & Marker
	to			
	05/11/22			

for
Signature of HOD
Smruti Rekha Mohanty

Signature of faculty
Smruti Rekha Mohanty

Week	Date/Period	Theory/ Practical - Topics/Lesson	Teaching Aid
8	7/11/22	Reactive, apparent Power, Derive	White board & Markers
	to	the resonant frequency of series	
	12/11/22	resonance and parallel resonance. Define Bandwidth, selectivity & Q-factor in series circuit.	
9	14/11/22	Solve numerical problems, con-	White board & Markers
	to	cept of poly-phase system and	
	19/11/22	Phase sequence Relation bet ⁿ Phase system and line quantities in star & delta connection.	
10	21/11/22	Solve numerical problems, Me-	White board & Markers
	to	asurement of 3-phase by two	
	26/11/22	wattmeter method. Solve nu- merical problem. Steady state & transient state response.	
11	28/11/22	Response to R-L, R-C & RLC	White board & Markers
	to	circuit under DC conditions.	
	03/12/22	Solve numerical problems. open circuit impedance (Z) Parameters.	
12	5/12/22	Short circuit admittance	White board & Markers
	to	(y) Parameters, Trans-	
	10/12/22	mission (ABCD) Parameters. Hybrid (h) Parameters. Inter- relationships of different parameters.	
13	12/12/22	T and π representation. Solve nu-	White board & Markers
	to	merical problems. Define filter.	
	17/12/22	Classification of Pass Band, Stop Band and cut-off frequency, Classification of filters.	
14	19/12/22	constant K low pass filter, constant	White board & Markers
	to	K high pass filter, constant K Band	
	22/12/22	Pass filters constant K Band eli- mination filter, solve numerical problem.	
15			

For
Smrutirekha Mohanty
Signature of HOD

Smrutirekha Mohanty
Signature of faculty