BHUBANANANDA ORISSA SCHOOL OF ENGINEERING, CUTTACK

ELECTRICAL ENGG.DEPARTMENT

LESSON PLAN

SEMESTER:3RD (A)

SESSION – winter-(2021-22)

SUBJECT: CNT

NAME OF FACULTY: JIBAN JYOTI PANDA

Discipline: Electrical Engg.	Semester:3rd (A)	Name of the teaching faculty:JIBAN JYOTI PANDA
Subject-CNT	No. of Days/per week class allotted.05PERIODS /WEEK (MON-1 PERIOD) TUE, FRI-2PERIODS EACH	Semester: From Date: 1/10/2021 To Date:08/01/2022 No. of weeks: 15 WEEKS
Week	Class Day	Theory/Practical Topics
1st (1/10/2021-2/10/2021)	1/10/2021(2PERIOD)	1.1 Introduction
2nd (4/10/2021-9/10/2021)	4/10/2021	1.2 Magnetizing force, Intensity, MMF, flux and theirrelations
	05/10/2021(2PERIOD)	1.3 Permeability, reluctance andpermeance.
3rd (11/10/2021-16/10/2021)		PUJA HOLIDAY
4th (18/10/2021-23/10/2021)	22/10/2021(2PERIOD)	1.4 Analogy between electric and Magnetic Circuits 1.5 B-H Curve
5th (25/10/2021-30/10/2021)	25/10/2021	1.6 Series & parallel magnetic circuit.
	26/10/2021(2PERIOD)	1.7 Hysteresisloop 2.1 Self Inductance and Mutual Inductance
	29/10/2021(2PERIOD)	2.2 Conductively coupled circuit and mutual impedance 2.3 Dotconvention2.4 Coefficient ofcoupling
6th (01/11/2021-06/11/2021)	01/11/2021	Class test 1
	02/11/2021(2PERIOD)	2.5 Series and parallel connection of coupled inductors.
	05/11/2021(2PERIOD)	2.5 Series and parallel connection of coupled inductors. 2.6 Solve numerical problems

7th (08/11/2021-13/11/2021)	08/11/2021	3.1 Active, Passive, Unilateral & bilateral, Linear &Non linear elements
	09/11/2021(2PERIOD)	3.2 Mesh Analysis, Mesh Equations by inspection 3.3 Super meshAnalysis
	12/11/2021(2PERIOD)	3.4 Nodal Analysis, Nodal Equations by inspection 3.5 Super nodeAnalysis.
8th (15/11/2021-20/11/2021)	15/11/2021	3.6 Source TransformationTechnique
	16/11/2021(2PERIOD)	3.7Solve numerical problems (With Independent SourcesOnly) 4.1 Star to delta and delta to startransformation
9th (22/11/2021-27/11/2021)	22/11/2021	**Class test 2**
	23/11/2021(2PERIOD)	4.2 Super positionTheorem 4.3 Thevenin's Theorem
	26/11/2021(2PERIOD)	4.4 Thevenin's Theorem 4.5 Norton'sTheorem 4.6 Maximum power TransferTheorem.
10th (29/11/2021-04/12/2021)	29/11/2021	4.6 Solve numerical problems (With Independent SourcesOnly)
	30/11/2021(2PERIOD)	5.1 A.C. through R-L, R-C & R-L-CCircuit 5.2 Solution of problems of A.C. through R-L, R-C & R-L-C series Circuit by complex algebramethod
	03/12/2021(2PERIOD)	SolutionofproblemsofA.C.throughR-L,R-C&R-L-Cparallel&Composite Circuits Power factor & powertriangle.
11th (06/12/2021-11/12/2021)	06/12/2021	**1st internal Assessment**
	07/12/2021(2PERIOD)	5.1 Deduce expression for active, reactive, apparent power. 5.2 Derive the resonant frequency of series resonance and parallel resonance circuit

	10/12/2021(2PERIOD)	6.1 Define Bandwidth, Selectivity & Q factor in seriescircuit. 6.2 Solve numericalproblems 6.3 Concept of poly-phase system and phasesequence
12th (13/12/2021-18/12/2021)	13/12/2021	6.4 Relation between phase and line quantities in star & deltaconnection
	14/12/2021(2PERIOD)	6.3 Power equation in 3-phase balanced circuit Solve numericalproblems
	17/12/2021(2PERIOD)	Measurement of 3-phase powerby two wattmetermethod. 6.6Solve numericalproblems
13th (20/12/2021-25/12/2021)	20/12/2021	**Class Test-3**
	21/12/2021(2PERIOD)	Steady state & transient stateresponse. Response to R-L, R-C & RLC circuit under DCcondition.
	24/12/2021(2PERIOD)	7.2 Response to R-L, R-C & RLC circuit under DCcondition 7.3Solve numericalproblems
14th (27/12/2021-01/01/2022)	27/12/2021	7.3Solve numericalproblems
	28/12/2021(2PERIOD)	8.1Open circuit impedance (z)parameters 8.2Short circuit admittance (y)parameters
	31/12/2022(2PERIOD)	8.3Transmission (ABCD)parameters 8.4Hybrid (h) parameters. 8.5Inter relationships of differentparameters.
15th (03/1/2022-08/01/2022)	03/01/2022	**Class Test-4**
	04/01/2022(2PERIOD)	8.6T and πrepresentation. 8.7Solve numericalproblems9.1Definefilter 9.2Classification of pass Band, stop Band and cut-offfrequency. 9.3Classification offilters.
	07/01/2022(2PERIOD)	9.6Constant – K low passfilter. 9.4 Constant – K high passfilter. 9.6Constant – K Band passfilter. Constant – K Band eliminationfilter. 9.5 Solve Numericalproblems