

Lesson Plan			
	Discipline:Electrical Engineering	Semester-3rd Winter 2023	Name of the Teaching Faculty: Sri Sarada Prasanna Behera
Sl. No.	Subject-Circuit and Network Theory SEC-A	No. Of Days/Week Class allotted: 05	Semester From date: 07/08/2023 to date: 30/11/2023. No of weeks: 16
	Weeks/Months	Class Day	Topic
1	1st Week	1st (07/08/2023)	1 . 1 Introduction
		2nd (09/08/2023)	1 . 2 Magnetizing force, Intensity, MMF, flux and their
		3rd (11/08/2023)	1 . 3 Permeability, reluctance and permeance
		4th (11/08/2023)	1 . 4 Analogy between electric and Magnetic Circuits
		5th (12/08/2023)	1 . 5 B-H Curve
2	2nd Week	1st (14/08/2023)	1 . 6 Series & parallel magnetic circuit.
		2nd (16/08/2023)	1 . 7 Hysteresis loop
		3rd (18/08/2023)	2 . 1 Self Inductance and Mutual Inductance
		4th (18/08/2023)	2 . 2 Conductively coupled circuit and mutual impedance
		5th (19/08/2023)	2 . 3 Dot convention
3	3rd Week	1st (21/08/2023)	2 . 4 Coefficient of coupling
		2nd (23/08/2023)	2 . 5 Series and parallel connection of coupled inductors.
		3rd (25/08/2023)	2 . 6 Solve numerical problems
		4th (25/08/2023)	3 . 1 Active, Passive, Unilateral & bilateral, Linear & Non
		5th (26/08/2023)	3 . 2 Mesh Analysis, Mesh Equations by inspection
4	4th Week	1st (28/08/2023)	3 . 3 Super mesh Analysis
		2nd (01/09/2023)	3 . 4 Nodal Analysis, Nodal Equations by inspection
		3rd (01/09/2023)	3 . 5 Super node Analysis.
		4th (02/09/2023)	3 . 6 Source Transformation Technique
5	5th Week	1st (04/09/2023)	3 . 7 Solve numerical problems (With Independent
		2nd (08/09/2023)	4.1 Star to delta and delta to star transformation
		3rd (08/09/2023)	4.2 Super position Theorem
		4th (09/09/2023)	4.3 Thevenin's Theorem
6	6th Week	1st (11/09/2023)	4.4 Norton's Theorem
		2nd (13/09/2023)	4.5 Maximum power Transfer Theorem.
		3rd (15/09/2023)	4.6 Solve numerical problems (With Independent Sources
		4th (15/09/2023)	4.6 Solve numerical problems (With Independent Sources
		5th (16/09/2023)	4.6 Solve numerical problems (With Independent Sources
7	7th Week	1st (18/09/2023)	5.1 A.C. through R-L, R-C & R-L-C Circuit
		2nd (22/09/2023)	5.2 Solution of problems of A.C. through R-L, R-C & R-L-C
		3rd (22/09/2023)	5.2 Solution of problems of A.C. through R-L, R-C & R-L-C
		4th (23/09/2023)	5.3 Solution of problems of A.C. through R-L, R-C & R-L-C
8	8th Week	1st (25/09/2023)	5.4 Power factor & power triangle
		2nd (27/09/2023)	5.5 Deduce expression for active, reactive, apparent

		3rd (30/09/2023)	5.6 Derive the resonant frequency of series resonance and parallel resonance circuit
9	9th Week	1st (04/10/2023)	5.6 Derive the resonant frequency of series resonance
		2nd (06/10/2023)	5.7 Define Bandwidth, Selectivity & Q-factor in series circuit.
		3rd (06/10/2023)	5.8 Solve numerical problems
		4th (07/10/2023)	6.1 Concept of poly-phase system and phase sequence
10	10th Week	1st (09/10/2023)	6.2 Relation between phase and line quantities in star & delta connection
		2nd (11/10/2023)	6.2 Relation between phase and line quantities in star & delta connection
		3rd (13/10/2023)	6.3 Power equation in 3-phase balanced circuit.
		4th (13/10/2023)	6.4 Solve numerical problems
		5th (14/10/2023)	6.4 Solve numerical problems
11	11th Week	1st (16/10/2023)	6.5 Measurement of 3-phase power by two wattmeter
		2nd (18/10/2023)	6.6 Solve numerical problems.
		3rd (20/10/2023)	7.1 Steady state & transient state response.
		4th (20/10/2023)	7.2 Response to R-L, R-C & RLC circuit under DC
12	12th Week	1st (30/10/2023)	7.2 Response to R-L, R-C & RLC circuit under DC
		2nd (01/11/2023)	7.2 Response to R-L, R-C & RLC circuit under DC
		3rd (03/11/2023)	7.3 Solve numerical problems
		4th (03/11/2023)	8.1 Open circuit impedance (z) parameters
		5th (04/11/2023)	8.2 Short circuit admittance (y) parameters
13	13th Week	1st (06/11/2023)	8.3 Transmission (ABCD) parameters
		2nd (08/11/2023)	8.4 Hybrid (h) parameters.
		3rd (10/11/2023)	8.5 Inter relationships of different parameters.
		4th (10/11/2023)	8.5 Inter relationships of different parameters.
		5th (11/11/2023)	8.6 T and p representation.
14	14th Week	1st (13/11/2023)	8.7 Solve numerical problems
		2nd (15/11/2023)	9.1 Define filter
		3rd (17/11/2023)	9.2 Classification of stop Band and cut-off frequency.
		4th (17/11/2023)	9.3 Classification of filters.
		5th (18/11/2023)	9.4 Constant – K low pass filter.
15	15th Week	1st (20/11/2023)	9.5 Constant – K high pass filter.
		2nd (22/11/2023)	9.6 Constant – K Band pass filter.
		3rd (24/11/2023)	9.7 Constant – K Band elimination filter.
		4th (24/11/2023)	9.8 Solve Numerical problems
		5th (25/11/2023)	9.8 Solve Numerical problems
16	16th Week	1st (29/11/2023)	9.8 Solve Numerical problems