LESSON PLAN FOR CIRCUIT AND SIMULATION LAB [Pr2]

Discipline: Electrical Engineering	Semester:3rd	Name of the Teaching Faculty: PRADOSH KUMAR PANDA (LECT. IN ELECTRICAL ENGINEERING)
Subject: CIRCUIT AND SIMULATION LAB	Numbers of classes per week: 6	Semester from date: 01/07/2024 to date:08/11/2024 No. of weeks: 15
week	3 Classes per day	Practical Topics
1st	1st	1. Measurement of equivalent resistance in series and parallel circuit
	2nd	1. Measurement of equivalent resistance in series and parallel circuit(contd.)
2nd	1st	2. Measurement of power and power factor using series R-L-C Load.
	2nd	2. Measurement of power and power factor using series R-L-C Load.(contd.)
3rd	1st	3. Verification of KCL and KVL.
	2nd	3. Verification of KCL and KVL.(contd.)
4th	1st	4. Verification of Super position theorem
	2nd	4. Verification of Super position theorem(contd.)
5th	1st	5. Verification of Thevenin's Theorem
	2nd	5. Verification of Thevenin's Theorem(contd.)
6th	1st	6. Verification of Norton's Theorem
	2nd	6. Verification of Norton's Theorem(contd.)
5th	1st	7. Verification of Maximum power transfer Theorem
	2nd	7. Verification of Maximum power transfer Theorem(contd.)
6th	1st	8. Determine resonant frequency of series R-L-C circuit.
	2nd	8. Determine resonant frequency of series R-L-C circuit.(contd.)
7th	1st	9. Study of Low pass filter & determination of cut-off frequency
	2nd	9. Study of Low pass filter & determination of cut-off frequency(contd.)
8th	1st	10. Study of High pass filter & determination of cut-off frequency
	2nd	10. Study of High pass filter & determination of cut-off frequency(contd.)
9th	1st	11. Analyze the charging and discharging of an R-C & R-L circuit with oscilloscope and Compute the time constant from the tabulated data and determine the rise time graphically
	2nd	11. Analyze the charging and discharging of an R-C & R-L circuit with oscilloscope and Compute the time constant from the tabulated data and determine the rise time graphically(contd.)
10th	1st	12. Introduction to P-Spice/MATLAB software
	2nd	12. Introduction to P-Spice/MATLAB software(contd.)
11th	1st	12. Introduction to P-Spice/MATLAB software(contd.)
	2nd	12. Introduction to P-Spice/MATLAB software(contd.)
12th	1st	12. Introduction to P-Spice/MATLAB software(contd.)
	2nd	12. Introduction to P-Spice/MATLAB software(contd.)
13th	1st	12.i Superposition theorem using P-Spice/MATLAB software
	2nd	12.i Superposition theorem using P-Spice/MATLAB software(contd.)
14th	1st	12.ii Series Resonant Circuit using P-Spice/MATLAB software
	2nd	12.ii Series Resonant Circuit using P-Spice/MATLAB software(contd.)
15th	1st	12.iii Transient Response in R-L-C series circuit
	2nd	12.iii Transient Response in R-L-C series circuit(contd.)

29/06/24
HOD, Electrical Engg.

24/6/24
Academic Co-ordinator

29/06/24
signature of faculty