Discipline:	Semester:	Name of the Teaching Faculty :SUSHANTA KUMAR NAYAK		
Subject: Pr2. CIRCUIT AND SIMULATION LAB	No. of Days/per week class allotted: 06	Semesterfromdate:15-09-2022 To Date: 22-12-2022 No. of Weeks:15		
Week	Class Day	Theory/ 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		
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.		
3rd	1st	3. Verification of KCL and KVL.		
	2nd	3. Verification of KCL and KVL.		
4th	1st	4. Verification of Super position theorem		
	2nd	4. Verification of Super position theorem		
5th	1st	5. Verification of Thevenin's Theorem,		
	2nd	5. Verification of Thevenin's Theorem		
6th	1st	6. Verification of Norton's Theorem		
	2nd	6. Verification of Norton's Theorem		
7th	1st	7. Verification of Maximum power transfer Theorem		
	2nd	7. Verification of Maximum power transfer Theorem		
8th	1st	8. Determine resonant frequency of series R-L-C circuit		
	2nd	8. Determine resonant frequency of series R-L-C circuit		
9th	1st	9. Study of Low pass filter & determination of cut-off frequency		
	2nd	9. Study of Low pass filter & determination of cut-off frequency		
10th	1st	10. Study of High pass filter & determination of cut		
	2nd	10. Study of High pass filter & determination of cut		
11th	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.		
12th	1st	12. discussion about P-Spice/MATLAB software and compare the measurements and waveforms.		
	2nd	12. discussion about P-Spice/MATLAB software and compare the measurements and waveforms.		
13th	1st	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. i. Superposition theorem		
	2nd	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. i. Superposition theorem		
14th	1st	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. ii. Series Resonant Circuit		
	2nd	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. ii. Series Resonant Circuit		
15th	1st	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. iii. Transient Response in R-L-C series circuit		
	2nd	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. iii. Transient Response in R-L-C series circuit		