

and

Discipline – Electrical Engg	Semester 5th	NAME OF THE TEACHING FACULTY- JYOTIRMAYEE SETHY,SIBANI PANDA, BASUDEV BARICK, ASIT KUMAR SAHOO	
SUB-circuit simulation LAB	No Of Days Per Week Class Alloted- 6	SEMESTER FROM 15/09/2022 TO 22/12/2022	
WEEK	CLASS DAY	PRACTICALS	STATUS
1 st WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Safety training and introduction to equipments.	
2 nd WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Measurement of equivalent resistance in series and parallel circuit	
3 rd WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Measurement of power and power factor using series R-L-C Load.	
4 th WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Verification of KCL and KVL.	
5 th WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Verification of Super position theorem	
6 th WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Verification of Thevenin's Theorem	
7 th WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Verification of Norton's Theorem	

8 th WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Verification of Maximum power transfer Theorem	
9 th WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Determine resonant frequency of series R-L-C circuit	
10 th WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Study of Low pass filter & determination of cut-off frequency	
11 th WEEK	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Study of High pass filter & determination of cut-off frequency	
12 th week	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	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.	
13 th week	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. Superposition theorem	
14 th week	1 ST day 2 nd day 3 rd day 4 th day 5 th day 6 th day	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms Series Resonant Circuit	
15 th week	1 ST day 2 nd day 3 rd day 4 th day	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms Transient Response in R-L-C series circuit	

