

GOVERNMENT POLYTECHNIC BARGARH
DEPARTMENT OF ELECTRICAL ENGINEERING

DISCIPLINE: EEE		SEMESTER: 3rd	NAME OF THE TEACHING FACULTY: DEEPAK PATRA, LECTURER (EEE)
SUBJECT: Circuit and Simulation Lab		Total Period-90 Lab Period/week- 6 Hrs	
WEEK	CLASS DAY	THEORY TOPICS	
1	1	Demonstration of Experiment 1,2 and 3	
	2	Demonstration of Experiment 4,5 and 6	
2	3	Measurement of equivalent resistance in series and parallel circuit	
	4	Verification of KCL and KVL	
3	5	Verification of Super position theorem	
	6	Verification of Thevenin's Theorem	
4	7	Verification of Norton's Theorem	
	8	Verification of Maximum power transfer Theorem	
5	9	Comprehensive Viva-Voce	
	10	Demonstration of Experiment 5 and 6	
6	11	Demonstration of Experiment 7	
	12	Demonstration of Experiment 8 and 9	
7	13	Measurement of power and power factor using series R-L-C Load.	
	14	Determine resonant frequency of series R-L-C circuit.	
8	15	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.	
	16	Study of Low pass filter & determination of cut-off frequency	
9	17	Study of High pass filter & determination of cut-off frequency	
	18	Comprehensive Viva-Voce	
10	19	Introduction to P-Spice/MATLAB software	
	20	Demonstration to design various circuit by using P-Spice/MATLAB software	
11	21	Construct the Superposition theorem circuits using P-Spice/MATLAB software and compare the measurements and waveforms.	
	22	Construct the Series Resonant circuits using P-Spice/MATLAB software and compare the measurements and waveforms.	
12	23	Construct the Transient Response in R-L-C series circuits using P-Spice/MATLAB software and compare the measurements and waveforms.	
	24	Remedial classes and Virtual Lab	
13	25	Remedial classes and Virtual Lab	
	26	Remedial classes and Virtual Lab	
14	27	Comprehensive Viva-Voce	
	28	Comprehensive Viva-Voce	
15	29	Comprehensive Viva-Voce	
	30	Sessional Exam & Record submission	