

GOVERNMENT POLYTECHNIC BARGARH
DEPARTMENT OF ELECTRICAL ENGINEERING

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