

UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA
Department of Electrical engineering

Academic Lesson Plan for 3RD Semester - 2022 (Winter)

Subject: Pr2. CIRCUIT AND SIMULATION LAB

Name of the teaching faculty- Dharitree Behera , PTGF(ELECTRICAL)

SEMESTER FROM DATE:15/09/2022 TO DATE:22/12/2022	No. of periods per week: 6 NO.OF WEEKS:15 Total periods: 90	SESSIONAL EXAM: 50 Marks End Semester Exam.: 50 Marks Total Marks: 100 Marks
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WEEK	CLASS DAY	UNIT	THEORY/PRACTICAL TOPICS	REMARK
1ST	1ST	EXPERIMENT-1	Measurement of equivalent resistance in series and parallel circuit	
	2ND			
	3RD			
	4TH			
1ST	5TH	EXPERIMENT-2	Verification of KCL and KVL.	
	6TH			
2ND	1ST	EXPERIMENT-3	Verification of Super position theorem	
	2ND			
	3RD			
2ND	4TH	EXPERIMENT-4	Verification OF The venin's Theorem	
	5TH			
	6TH			
3RD	1ST	EXPERIMENT-5	Verification of Norton's Theorem	
	2ND			
	3RD			
3RD	4TH	EXPERIMENT-6	Verification of Maximum power transfer Theorem	
	5 TH			
	6TH			
4TH	1ST	EXPERIMENT-6	Verification of Maximum power transfer Theorem	
	2ND			
	3RD			
4TH	4TH	EXPERIMENT-7	Determine resonant frequency of series R-L-C circuit.	
	5TH			
	6TH			
5TH	1ST	EXPERIMENT-7	Determine resonant frequency of series R-L-C circuit.	
	2ND			
	3RD			
5TH	4TH	EXPERIMENT-8	Study of Low pass filter & determination of cut-off frequency	
	5TH			
	6TH			
6TH	1ST	EXPERIMENT-9	. Study of High pass filter & determination of cut-off frequency	
	2ND			
	3RD			
6TH	4TH	EXPERIMENT-10	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	
	5TH			
	6TH			

			rise time graphically.	
7TH	1ST	EXPERIMENT-10	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			
	3RD			
	4TH	EXPERIMENT-11	Measurement of power and power factor using series R-L-C Load.	
	5TH			
	6TH			
8TH	1ST	EXPERIMENT-12	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms.	
	2ND			
	3RD			
	4TH	EXPERIMENT-12	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms.	
	5TH			
	6TH			
9TH	1ST	EXPERIMENT-12	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms.	
	2ND			
	3RD			
	4TH	EXPERIMENT-12(A)	Superposition theorem	
	5TH			
	6TH			
10TH	1ST	EXPERIMENT-12(A)	Superposition theorem	
	2ND			
	3RD			
	4TH	EXPERIMENT-12(B)	Series Resonant Circuit	
	5TH			
	6TH			
11TH	1ST	EXPERIMENT-12(B)	Series Resonant Circuit	
	2ND			
	3RD			
	4TH	EXPERIMENT-12(C)	Transient Response in R-L-C series circuit	
	5TH			
	6TH			
12TH	1ST	EXPERIMENT-12©	Transient Response in R-L-C series circuit	
	2ND			
	3RD			
	4TH	EXPERIMENT	Verification of Maximum power transfer Theorem(practice)	
	5TH			
	6TH			
13TH	1ST	EXPERIMENT	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms.(practice)	
	2ND			
	3RD			
	4TH	EXPERIMENT	Superposition theorem	
	5TH			
	6TH			
14th	1ST	EXPERIMENT	Series Resonant Circuit	
	2ND			
	3RD			
	6TH	EXPERIMENT	Transient Response in R-L-C series circuit	

15TH	1ST	EXPERIMENT	SESSIONAL	
	2ND			
	3RD			
	4TH	EXPERIMENT	SESSIONAL	
	5TH			
	6TH			