

## GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

<b>Discipline : ELECTRICAL ENGG.</b>		<b>Semester: 3rd Sem</b>		<b>Name of the Teaching Faculty :Hemanta Kumar Sethi</b>
<b>Subject : Circuit and Simulation lab</b>		<b>No. of Days / per week class</b>		<b>Semester From date : 01.08.2023 To Date : 30.11.2023</b>
<b>MONTH</b>	<b>Week</b>	<b>Day</b>		<b>Topics</b>
<b>AUGUST</b>	<b>1st</b>	2nd	G-I	Measurement of equivalent resistance in series and parallel circuit
		3rd	G-II	Measurement of equivalent resistance in series and parallel circuit
		4th	G-I	Measurement of power and power factor using series R-L-C Load.
	<b>2nd</b>	1st	G-II	Measurement of power and power factor using series R-L-C Load.
		2nd	G-I	Verification of KCL and KVL
		3rd	G-II	Verification of KCL and KVL
		4th	G-I	Verification of Super position theorem
	<b>3rd</b>	1st	G-II	Verification of Super position theorem
		3rd	G-I	Verification of Thevenin's Theorem
		4th	G-II	Verification of Thevenin's Theorem
	<b>4th</b>	1st	G-I	Verification of Norton's Theorem
		2nd	G-II	Verification of Norton's Theorem
		3rd	G-I	Verification of Maximum power transfer Theorem
		4th	G-II	Verification of Maximum power transfer Theorem
	<b>5th</b>	1st	G-I	Determine resonant frequency of series R-L-C circuit.
		2nd	G-II	Determine resonant frequency of series R-L-C circuit.
		4th	G-I	Study of Low pass filter & determination of cut-off frequency
	<b>2nd</b>	1st	G-II	Study of Low pass filter & determination of cut-off frequency
		2nd	G-I	Study of High pass filter & determination of cut-off frequency
		4th	G-II	Study of High pass filter & determination of cut-off frequency
	<b>3rd</b>	1st	G-I	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	G-II	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

SEPTEMBER		3rd	G-I	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. i. Superposition theorem
		4th	G-II	<b>Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. i. Superposition theorem</b>
	5th	1st	G-I	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms Series Resonant Circuit
		2nd	G-II	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms Series Resonant Circuit
		3rd	G-I	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. Transient Response in R-L-C series circuit
		4th	G-I	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. Transient Response in R-L-C series circuit
OCTOBER	1st	2nd	G-II	Virtual Lab and Viva
		3rd	G-I	Virtual Lab and Viva
		4th	G-II	Virtual Lab and Viva
	2nd	1st	G-I	Virtual Lab and Viva
		2nd	G-II	Virtual Lab and Viva
		3rd	G-I	Virtual Lab and Viva
		4th	G-II	Virtual Lab and Viva
	3rd	1st	G-I	Virtual Lab and Viva
		2nd	G-II	Virtual Lab and Viva
		3rd	G-I	Virtual Lab and Viva
		4th	G-II	Virtual Lab and Viva
	5th	1st	G-I	Virtual Lab and Viva
		2nd	G-II	Virtual Lab and Viva
	1st	3rd	G-I	Virtual Lab and Viva
		4th	G-II	Virtual Lab and Viva
NOVEMBER	2nd	1st	G-I	Virtual Lab and Viva
		2nd	G-II	Virtual Lab and Viva
		3rd	G-I	Virtual Lab and Viva
		4th	G-II	Virtual Lab and Viva
	3rd	1st	G-I	Virtual Lab and Viva
		2nd	G-II	Virtual Lab and Viva
		3rd	G-I	Virtual Lab and Viva
		4th	G-II	Virtual Lab and Viva
	4th	1st	G-I	Virtual Lab and Viva
		2nd	G-II	Virtual Lab and Viva
		3rd	G-I	Virtual Lab and Viva
		4th	G-II	Virtual Lab and Viva

		3rd	G-I	Virtual Lab and Viva
		4th	G-II	Virtual Lab and Viva
	5th	2nd	G-I	Virtual Lab and Viva
		3rd	G-II	Virtual Lab and Viva
		4th	G-I	Virtual Lab and Viva