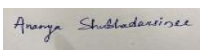
ACADEMIC LESSON PLAN OF WINTER 2023

Discipline Electrical	Semester: 3rd Sec-A(Gr-1)	Name of the Teaching Faculty: - Ananya Shubhadarsinee & Sangeeta Kumari Patro
Subject: -Pr-1 (Circuit Simulation Lab)	No of Days/per Week Class Allotted: 2d(3hr)/week	Semester From: -1st Aug 2023 to 30th Nov 2023 No. of Weeks: 17 weeks
Week	Class Day	Practical Topics
1st	1st	1. Measurement of equivalent resistance in series and parallel circuit
	2nd	1. Measurement of equivalent resistance in series and parallel circuit
2nd	1st	2. Measurement of power and power factor using series R-L-C Load.
	2nd	2. Measurement of power and power factor using series R-L-C Load.
3rd	1st	3. Verification of KCL and KVL
	2nd	3. Verification of KCL and KVL
4th	1st	4. Verification of Super position theorem
	2nd	4. Verification of Super position theorem
5th	1st	5. Verification of Thevenin's Theorem
	2nd	5. Verification of Thevenin's Theorem
6th	1st	6. Verification of Norton's Theorem
	2nd	6. Verification of Norton's Theorem
7th	1st	7. Verification of Maximum power transfer Theorem
	2nd	7. Verification of Maximum power transfer Theorem
8th	1st	8. Determine resonant frequency of series R-L-C circuit.
	2nd	8. Determine resonant frequency of series R-L-C circuit.
9th	1st	9. Study of Low pass filter & determination of cut-off frequency
	2nd	9. Study of Low pass filter & determination of cut-off frequency
10th	1st	10. Study of High pass filter & determination of cut-off frequency
	2nd	10. Study of High pass filter & determination of cut-off frequency
11th	1st	11. 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	11. 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.
12th	1st	12. Introduction to P-Spice/MATLAB software.
	2nd	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. i. Superposition theorem
13th	1st	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. ii. Series Resonant Circuit
	2nd	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. ii. Series Resonant Circuit
14th	1st	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms iii. Transient Response in R-L-C series circuit
	2nd	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. iii. Transient Response in R-L-C series circuit
15th	1st	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. iii. Transient Response in R-L-C series circuit
	2nd	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms iii. Transient Response in R-L-C series circuit
16th	1st	Revision Class.
	2nd	Revision Class.
17th	1st	Revision Class.
	2nd	Revision Class.



Signature of Faculty

ACADEMIC LESSON PLAN OF WINTER 2023

Discipline Electrical	Semester: 3rd Sec-A(Gr-2)	Name of the Teaching Faculty: - Ananya Shubhadarsinee & Sangeeta Kumari Patro
Subject: -Pr-1 (Circuit Simulation Lab)	No of Days/per Week Class Allotted: 2d(3hr)/week	Semester From: -1st Aug 2023 to 30th Nov 2023 No. of Weeks: 15 weeks
Week	Class Day	Practical Topics
1st	1st	1. Measurement of equivalent resistance in series and parallel circuit
	2nd	1. Measurement of equivalent resistance in series and parallel circuit
2nd	1st	2. Measurement of power and power factor using series R-L-C Load.
	2nd	2. Measurement of power and power factor using series R-L-C Load.
3rd	1st	3. Verification of KCL and KVL
	2nd	3. Verification of KCL and KVL
4th	1st	4. Verification of Super position theorem
	2nd	4. Verification of Super position theorem
5th	1st	5. Verification of Thevenin's Theorem
	2nd	5. Verification of Thevenin's Theorem
6th	1st	6. Verification of Norton's Theorem
	2nd	6. Verification of Norton's Theorem
7th	1st	7. Verification of Maximum power transfer Theorem
	2nd	7. Verification of Maximum power transfer Theorem
8th	1st	8. Determine resonant frequency of series R-L-C circuit.
	2nd	8. Determine resonant frequency of series R-L-C circuit.
9th	1st	9. Study of Low pass filter & determination of cut-off frequency
	2nd	9. Study of Low pass filter & determination of cut-off frequency
10th	1st	10. Study of High pass filter & determination of cut-off frequency
	2nd	10. Study of High pass filter & determination of cut-off frequency
11th	1st	11. 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	11. 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.
12th	1st	12. Introduction to P-Spice/MATLAB software.
	2nd	12. Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. i. Superposition theorem
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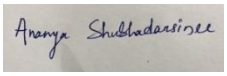
16th	1st	Revision Class.
	2nd	Revision Class.
17th	1st	Revision Class.
	2nd	Revision Class.



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