PNS SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF ELECTRICAL ENGINEERING

Branch: Electrical Engg.	Semester: 3rd	Name of the Demonstrator: **Sushree Sangita Prusty.**
Subject: CS lab	Classes Alloted in a Week: 2	Duration of Semester: 01.07.2024 - 08.11.2024
Week	Class Day	Theory / Practical Topic
1st	1	Measurement of equivalent resistance in series and parallel circuit
	2	Measurement of equivalent resistance in series and parallel circuit
2nd	1	Measurement of power and power factor using series R-L-C Load.
	2	Measurement of power and power factor using series R-L-C Load.
3rd	1	Verification of KCL and KVL
	2	Verification of KCL and KVL
4th	1	Verification of Super position theorem
	2	Verification of Super position theorem
5th	1	Verification of Thevenin's Theorem
	2	Verification of Thevenin's Theorem
6th	1	Verification of Norton's Theorem
	2	Verification of Norton's Theorem
7th	1	Verification of Maximum power transfer Theorem
	2	Verification of Maximum power transfer Theorem
8th	1	Determine resonant frequency of series R-L-C circuit.
	2	Determine resonant frequency of series R-L-C circuit.
9th	1	Study of Low pass filter & determination of cut-off frequency
	2	Study of Low pass filter & determination of cut-off frequency
10th	1	Study of High pass filter & determination of cut-off frequency
	2	Study of High pass filter & determination of cut-off frequency
11th	1	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
	2	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	1	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. i. Superposition theorem, Series Resonant Circuit & Transient Response in R-L-C series circuit
	2	Construct the following circuits using P-Spice/MATLAB software and compare the measurements and waveforms. i. Superposition theorem, Series Resonant Circuit & Transient Response in R-L-C series circuit

Signature of the Lecturer

Signature of the H.O.D.