

**NETWORK ANALYSIS AND SIMULATION LABORATORY**

S.NO.	NAME OF THE EXPERIMENT	NAME OF THE APPARATUS/EQUIPMENT	MAKE	Quantity
1	Study of components of a circuit and Verification of KCL and KVL	KCC and KVL – Kit with 2 meters	<b>M/S SCIENTIFIC ENTERPRISES</b> Hyderabad  INVOICE No:48 Date: 23.02.2024	3
2	Verification of mesh and nodal analysis for AC circuits	Mesh and Nodal analysis		3
3	Verification of Superposition, Thevenin's & Norton theorems for AC circuits	a) Verification of Thevenis kit with 2 meters b) Norton's theorems kit with 2 meters c) Super position theorem with 2 meters		3
4	Verification of maximum power transfer theorem for AC circuits	Max.powers theorems kit with 2 meters		3
5	Verification of Tellegen's theorem for two networks of the same topology	Tellegens theorem with 2 meters		3
6	Study of DC transients in RL, RC and RLC circuits	DC transients in RL,RC,RLC circuits		3
7	To study frequency response of various 1st order RL & RC networks	Frequency response of RC & RL Circuits		3
8	To study the transient and steady state response of a 2nd order circuit by varying its various parameters and studying their effects on responses	Transient response of 2 nd Order system		3
9	Find the Q Factor and Bandwidth of a Series and Parallel Resonance circuit	Series & parallel resonance		3
10	Determination of open circuit (Z) and short circuit (Y) parameters	Z and Y parameters of Two port network		3

11	Determination of hybrid (H) and transmission (ABCD) parameters	H and ABCD parameter of two port network		3
12	To measure two port parameters of a twin-T network and study its frequency response	Two port parameters of Twin T Network		3
13				3
		<b>Total Cost</b>		<b>Rs.94,579</b>