DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY
DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING

NETWORK ANALYSIS & SIMULATION LAB

LIST OF EQUIPMENTS

SI.	Equipment	Amount-Rs.
1	Verification of KCL and KVL.	7500
2	Perform Mesh and Nodal Analysis of a given circuit	7500
3	Determination of frequency response of current in RLC circuit with sinusoidal AC I/P	8500
4	Verification of principle of Superposition and Maximum power transfer theorems	8500
5	Verification of Thevenin and Norton theorems	10500
6	Verification of Tellegen's theorem for two networks of the same topology	8500
7	Find the Q Factor and Bandwidth of a Series and Parallel Resonance circuit	13500
8	Verification of Z and Y Parameters of a two-port network	9500
9	Verification of Transmission and Hybrid parameters of a two-port network	10500
10	Verification of ABCD Parameters for a two-port network.	9500
11	CRO 30MHz	30500
12	Function Generator	9500
Total		**1,34,000**

LIST OF EXPERIMENTS

S No	Name of the Experiment
1	Verification of KCL and KVL.
2	Perform Mesh and Nodal Analysis of a given circuit
3	Determination of frequency response of current in RLC circuit with sinusoidal AC input
4	Verification of principle of Superposition and Maximum power transfer theorems
5	Verification of Thevenin and Norton theorems
6	Verification of Tellegen's theorem for two networks of the same topology
7	Find the Q Factor and Bandwidth of a Series and Parallel Resonance circuit
8	Verification of Z and Y Parameters of a two-port network
9	Verification of Transmission and Hybrid parameters of a two-port network
10	Verification of ABCD Parameters for a two-port network
Simulation Experiments	

11	Determination of transient response of current in RLC circuit with step voltage input for under damp, critically damp and over damp cases.
12	Determination of transient response of current in RL and RC circuits with step voltage input.
13	Verification of principle of Superposition and Maximum power transfer theorems.
14	Verification of Thevenin and Norton theorems.

Signature of Lab Incharge

Signature of HOD