

**SREENIVASA INSTITUTE OF TECHNOLOGY AND MANAGEMENT STUDIES,
CHITTOOR -517127
(AUTONOMOUS)
DEPARTMENT OF ELECTRICAL AND ELECTRONIC ENGINEERING**

B.TECH II-II SEM (E.E.E)

L	T	P	C
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SUB CODE: 16EEE224

**CIRCUITS AND SIMULATION LAB
(ANY FIVE OF THE FOLLOWING)**

OBJECTIVES :

- To apply transients response of first order RL and RC circuits
- To provide practical experience for the determination of two port network Parameters
- To provide practical experience for measuring active and reactive power
- To provide practical experience with simulation of electrical circuits and verifying circuit theorems.

1. TIME RESPONSE OF FIRST ORDER RL AND RC CIRCUITS
2. Z AND Y PARAMETERS.
3. TRANSMISSION AND HYBRID PARAMETERS.
4. MEASUREMENT OF ACTIVE POWER FOR STAR AND DELTA CONNECTED BALANCED LOADS
5. MEASUREMENT OF REACTIVE POWER BY SINGLE WATT METER FOR STAR AND DELTA CONNECTED BALANCED LOADS
6. MEASUREMENT OF THREE PHASE POWER BY TWOWATTMEWTER METHOD FOR UNBALANCED LOADS

EXPERIMENTS CONDUCTED USING MULTISIM / MAT LAB

(ANY FIVE OF THE FOLLOWING)

1. SIMUALTION OF DC TRANSIENT RESPONSE.
2. SIMULATION OF THEVENIN'S THEOREM.
3. SIMULATION OF NORTON'S THEOREM.
4. SIMULATION OF SUPERPOSITION THEOREM.
5. SIMULATION OF MAXIMUM POWER TRANSFER THEOREM.
6. SIMULATION OF RECIPROCITYTHEOREM.

Course Outcomes:

At the end of the course, students will able to

- Understand transient response of first order system
- Determine two port network parameters
- Understand practical experience with simulation of electrical circuits
- Understand and apply circuit theorems and concepts in engineering applications.

University Nominee

Dr.G.V.Marutheswar
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Subject Expert

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