

## M. Tech I Year I Semester

### 18EPSP201 POWER SYSTEM STEADY STATE ANALYSIS LABORATORY

<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>0</b>	<b>0</b>	<b>4</b>	<b>2</b>

**Course Prerequisite:** Power System Laboratory

#### **Course Objectives:**

1. To analyze various faults in power system.
2. To carry out the load flow analysis of a power system.
3. To carry out the transient Stability Studies.

#### **LIST OF EXPERIMENTS**

1. Fault Analysis-I
  - i) LG Fault
  - ii) LL Fault
2. Fault Analysis-II
  - i) LLG Fault
  - ii) LLLG Fault
3. Gauss Seidal load flow analysis using MATLAB Software
4. Newton Raphson method of load flow analysis using MATLAB Software.
5. Formation of Y bus matrix by inspection / analytical method using MATLAB Software.
6. Fast decoupled load flow analysis using MATLAB Software.
7. Load Forecasting and Unit Commitment.
8. Transient Stability Studies.

#### **Course Outcome:**

At the end of the course, students will able to

1. Analyze the various faults in power system.
2. Obtain the Y bus and Z bus matrix using MATLAB software.
3. Carryout the various load flow analysis using MATLAB software.

**Mode of Evaluation:** Practical, Written Examination