

**M.Tech I Sem**  
**EEPC1L1 - POWER SYSTEMS LABORATORY**

1. Determination of Sub-Transient Reactance of a Salient Pole Machine.
2. Determination of Sequence Impedances of a Cylindrical Rotor Synchronous Machine.
3. Fault Analysis of
  - i) LG Fault
  - ii) LL Fault
  - iii) LLG Fault
  - iv) LLLG Fault
4. Power Angle Characteristics of a Salient Pole Synchronous Machine.
5. Equivalent Circuit of a Three Winding Transformer.
6. Characteristics of IDMT Over Current Relay (Electro Magnetic Type).
7. Characteristics of Static Negative Sequence Relay.
8. Characteristics of Over Voltage Relay.
  - i) Electromagnetic Type
  - ii) Microprocessor Type
9. Characteristics of Percentage Biased Differential Relay.
  - i) Electromagnetic Type
  - ii) Static Type
10. Simulation of 220KV Transmission line model.
  - i) Ferranti Effect
  - ii) Transmission line parameter
  - iii) Surge Impedance loadings
  - iv) Voltage control methods
11. Transformer Oil Testing.