IV Year – I SEMESTER

T P C 0 3 2

POWER SYSTEMS LAB

Learning Objectives:

To impart the practical knowledge of functioning of various power system components and determination of various parameters and simulation of load flows, transient stability, LFC and Economic dispatch.

Any 10 of the Following experiments are to be conducted:

- 1. Sequence impedances of 3 phase Transformer.
- 2. Sequence impedances of 3 phase Alternator by Fault Analysis.
- 3. Sequence impedances of 3 phase Alternator by Direct method.
- 4. ABCD parameters of Transmission network.
- Power Angle Characteristics of 3phase Alternator with infinite bus bars.
- 6. Dielectric strength of Transformer oil.
- 7. Calibration of Tong Tester.
- 8&9. Load flow studies any two methods.
- 10. Transient Stability Analysis
- 11. Load frequency control without control
- 12. Load frequency control with control
- 13. Economic load dispatch without losses
- 14. Economic load dispatch with losses.

Learning Outcomes:

The student is able to determine the parameters of various power system components which are frequently occur in power system studies and he can execute energy management systems functions at load dispatch centre.