Power System & Simulation Lab-II

Course Code: 15EE2112 **L P C**
0 3 2

Pre requisites: Power System Analysis, Power System Operation & Control

Course Outcomes: At the end of this Course, the student will be able to

CO 1:Determine power flow study of a given power system.
CO 2: Analyze breakdown strength of transformer oil.
CO 3: Determine Transmission line parameters and estimate Ferranti effect.
CO 4: Measure Electrical parameters by using Power Quality Analyzer.
CO 5: Simulate two-area power system

LIST OF EXPERIMENTS

1. IDMT (Inverse Definite Minimum Time) Relay Characteristics
2. Study and testing of over current and over voltage relays in transformer protection module.
3. Conduct a power flow study on a given power system.
4. Conduct a power flow study on a given power system network Using Gauss-Seidel iterative method.
5. Determination of breakdown strength of oil by variable Distance electrodes.
6. Develop a Simulink model for a two-area load frequency problem and simulate the same.
7. Obseravation and analysis of Power Quality parameters at a given power input terminal.
8. Design a PID controller for two-area power system and simulate the same.
9. Simulate Transmission line and find :
    a. Transmission line parameter
    b. Surge Impedance loadings
10. Transient Stability analysis of a typical power system by using MiPower.