EE8711 POWER SYSTEM SIMULATION LABORATORY

DETAILED SYLLABUS

OBJECTIVES:

•   To provide better understanding of power system analysis through digital simulation.

LIST OF EXPERIMENTS

1 Computation of Transmission Line Parameters

2 Formation of Bus Admittance and Impedance Matrices and Solution of Networks

3 Power Flow Analysis using Gauss-Seidel Method

4 Power Flow Analysis using Newton Raphson Method

5 Symmetric and unsymmetrical fault analysis

6 Transient stability analysis of SMIB System

7 Economic Dispatch in Power Systems

8 Load – Frequency Dynamics of Single- Area and Two-Area Power Systems

9 State estimation: Weighted least square estimation

10 Electromagnetic Transients in Power Systems: Transmission Line Energization