

Department of Electrical and Electronics Engineering

Control System and Simulation Lab List of Experiments

S. No.	Name of the Experiment
1	Time response of Second order system.
2	Characteristics of Synchros.
3	Programmable logic controller – Study and verification of truth tables of logic gates, simple Boolean expressions, and application of speed control of motor.
4	Effect of feedback on DC servo motor.
5	Transfer function of DC motor.
6	Transfer function of DC generator.
7	Temperature controller using PID.
8	Characteristics of AC servo motor.
9	Effect of P, PD, PI, PID Controller on a second order systems.
10	Lag and lead compensation – Magnitude and phase plot.
11	Characteristics of Magnetic Amplifier.
12	(a) Simulation of P, PI, PID Controller. (b) Linear system analysis (Time domain analysis, Error analysis) using suitable software 12.
13	Stability analysis (Bode, Root Locus, Nyquist) of Linear Time Invariant system using suitable software.
14	State space model for classical transfer function using suitable software -Verification.
15	Design of Lead-Lag compensator for the given system and with specification using suitable software.
Additional Experiments	
1	Step Response Analysis of a plant .