



KDK College of Engineering and Technology
Department Of Electrical Engineering
Odd Semester

Subject:- Control System
List of Experiment

1. To study the torque-speed characteristics and determine the transfer function of a d.c. motor
2. To study the performance characteristics of an angular position error detector using two potentiometers
3. To study the characteristics of a Synchro Transmitter Receiver pair and use these as torque-synchro and angular error detector.
4. To study the performance characteristics of a D.C. motor speed control system with options for (a) PWM type and (b) SCR type power driver.
5. To study the transient and frequency response of a second order network.
6. To study the characteristics of a small a.c servomotor and determine its transfer function.
7. To study the D.C. servo motor angular position control system.
8. To study an A.C. servo motor angular position control system, also referred to as a carrier control system.
9. To measure basic step angle of stepper motor.
10. To study PID controller in different modes.
11. To study performance of various types of controllers used to control the temperature of the oven.
12. To demonstrate the use of PLC for various industrial applications.
13. To study the time response of a variety of simulated linear systems and to correlate the studies with theoretical results.
14. To design, implement and study the effects of different cascade compensation networks for a given system.
15. Theoretical and experimental study of magnetic levitation system.

- 16.**Simulation and analysis of time response of a first order system using MATLAB.
- 17.**Simulation and analysis of time response of second order system using MATLAB.
- 18.**Simulation and analysis of frequency response of first order system using MATLAB.
- 19.**Simulation and analysis of frequency response of second order system using MATLAB.