GYAN SAGAR COLLEGE OF ENGINEERING
New Scheme Based On AICTE Flexible Curricula
Electrical & Electronics Engineering, IV-Semester

Control System Lab.

LIST OF EXPERIMENTS

1. Time response of second order system.
2. Characteristics of Synchros.
3. Effect of feedback on servomotors.
4. Determination of transfer function of A-C servomotor
5. Determination of transfer function of D-C motor.
6. Formulation of PI & PD controller and study of closed loop responses of 1st and 2nd order dynamic systems.
7. State space model for classical transfer function using MATLAB.
8. Simulation of transfer function using operational amplifier.
9. Design problem: Compensating Networks of lead and lag.
10. Temperature controller using PID.
11. Transfer function of a DC generator.
12. Characteristics of AC servomotor.
13. Use of MATLAB for root loci and Bode plots of type-1, type-2 systems.
14. Study of analog computer and simulation of 1st orderand 2nd order dynamic equations.
15. Formulation of proportional control on 1st order and 2nd order dynamic systems.
16. Feedback control of 3rd order dynamic Systems
17. Study of lead and lag compensating networks.
18. Effect of adding poles & zeros on root loci and bode plots of type-1, type-2 systems through MATLAB.