

## **COURSE PLAN**

### **22EES510 CONTROL SYSTEMS AND SIMULATION LABORATORY**

#### **List of Experiments**

##### **I Cycle - 31.07.24 to 20.09.24**

1. Transfer function of Armature Controlled DC Motor.
2. Transfer function of Field Controlled DC Motor.
3. Transfer function of separately excited DC Generator
4. Design and Simulation of PID controller for II order system.
5. Simulation of Digital Position Control System.
6. Study of frequency response of a Linear Time invariant System.

##### **II Cycle - 21.09.24 to 22.11.24**

7. Simulation of Closed Loop control of DC Motor using Simulink
8. Study of Lead – Lag Compensators
9. Time domain Analysis of a System using Root Locus.
10. Study of Smart sensors and Actuators.
11. Open Loop Voltage control using DC-DC Converter.
12. Simulation of PLC Based controllers.

##### **Model Exam - 25.11.24 & 28.11.24**

**Faculty Incharge**