

## **POWER ELECTRONICS LAB**

### **LIST OF EXPERIMENTS**

1. Characteristics of SCR, IGBT & Power MOSFET.
2. Analysis of Single phase AC voltage controller with R & RL Loads.
3. Analysis of Single phase fully controlled bridge converter With R & RL Loads.
4. Analysis of Single phase IGBT inverter with R and R-L Loads.
5. Analysis of Three phase fully controlled bridge converter with R Load.
6. Analysis of Single phase dual converter with RL load.
7. Analysis of Four quadrant operation of chopper with R-load.
8. Analysis of PWM control of Boost converter with R and R-L loads.
9. Simulation of Single Phase ac to dc converter with LC filter in MATLAB.
10. Simulation of Single phase inverter with current controlled PWM technique in MATLAB.

### **ADDITIONAL EXPERIMENTS**

11. Analysis of single phase cyclo converter with R and R-L load.
12. Simulation of Single phase fully controlled PWM rectifier with R & RL loads using PSCAD.
13. Generation of PWM pulses using micro controller kit.