

**I Year II Semester**

**Code: 20ES2107**

**L T P C**

**0 0 3 1.5**

## **SEMICONDUCTOR DIODES AND APPLICATIONS LAB**

### **List of Experiments:**

1. Identification, Specifications, Testing of R, L, C Components (Colour Codes), Potentiometers, Coils, Gang Condensers, Relays, Bread Boards.
2. Soldering Practice- Simple circuits using active and passive components.
3. Study and operation of Ammeters, Voltmeters, Transformers, Analog and Digital Multimeter, Function Generator, Regulated Power Supply
4. CRO Operation and its Measurements
5. P-N Junction Diode Characteristics  
Part A: Germanium Diode (Forward bias & Reverse bias)  
Part B: Silicon Diode (Forward Bias only)
6. Zener Diode Characteristics  
Part A: V-I Characteristics  
Part B: Zener Diode as Voltage Regulator
7. LED Characteristics
8. SCR Characteristics
9. Half-wave Rectifier (without and with C-filter)
10. Full-wave Rectifier (without and with C-filter)
11. Clippers–Positive and Negative
12. Clampers–Positive and Negative