

EC-251**ELECTRONIC DEVICES LAB****L T P C****- - 3 2****COURSE OBJECTIVES:**

1. To observe the dc and ac waveforms on CRO
2. To plot the characteristics of basic electronic devices like p-n junction diode, zener diode, BJT characteristics in various configurations, JFET etc..
3. To design the basic biasing circuits for BJT and JFET
4. To design and verify the collector base bias circuit.

COURSE OUTCOMES:**After successful completion of the course, the students are able to**

1. differentiate characteristics of p-n Junction diode, zener diode, BJT in CE, CB configurations, JFET.
2. calculate parameters from the characteristics of static, dynamic and reverse resistances of p-n junction diode, h-parameters of BJT.
3. design circuits to achieve the specified operating point.
4. measure the amplitude and frequency of given waveform using CRO.

List of Experiments:

1. Study of C.R.O.
2. Characteristics of Silicon and Germanium diodes.
3. Characteristics of Zener diode.
4. Characteristics of Common Base configuration.
5. Characteristics of Common Emitter configuration.
6. Characteristics of Emitter follower circuit.
7. Characteristics of JFET.
8. Design and verification of collector to base bias circuit.
9. Design and verification of Self bias circuit using BJT.
10. Design and verification of Self bias circuit using MOSFET.
11. Characteristics of MOSFET.
12. Study of Full wave Rectifier without Filter.
13. Study of Full wave Rectifier with Filter.
14. Characteristics of source follower circuit.

Note: A minimum of 10(Ten) experiments have to be performed and recorded by the candidate to attain eligibility for Semester End Practical Examination.