

II B.Tech I Semester

ELECTRONIC DEVICES AND CIRCUITS LABORATORY

PART A: (Only for Viva-voce Examination)

Electronic Workshop Practice (In 3 Lab Sessions):

1. Identification, Specifications, Testing of R, L, C Components (Color Codes), Potentiometers, Switches (SPDT, DPDT, and DIP), Coils, Gang Condensers, Relays, Bread Boards and PCBs
2. Identification, Specifications and Testing of Active Devices, Diodes, BJTs, Low power JFETs, MOSFETs, Power Transistors, LEDs, LCDs, SCR and UJT.
3. Study and operation of
 - a. Multimeters (Analog and Digital)
 - b. Function Generator
 - c. Regulated Power Supplies
 - d. CRO.

PART B: (For Laboratory Examination – Minimum of 12 experiments)

1. Forward & Reverse Bias Characteristics of PN Junction Diode.
2. Zener diode characteristics and Zener as voltage Regulator.
3. Half Wave Rectifier with & without filters.
4. Full Wave Rectifier with & without filters.
5. Input & Output Characteristics of Transistor in CB Configuration and h-parameter calculations.
6. Input & Output Characteristics of Transistor in CE Configuration and h-parameter calculations.
7. FET characteristics.
8. Lissajous patterns using CRO
9. Frequency Response of CC Amplifier.
10. Frequency Response of CE Amplifier.

11. Frequency Response of Common Source FET amplifier.

12. SCR characteristics.

13. UJT Characteristics

14. Clippers

15. Clampers