1/4 B.Tech SECOND SEMESTER

IT2L1 ELECTRONIC DEVICES & CIRCUITS LAB Credits: 2

Lecture: -- Internal assessment: 25 marks
Lab : 3 periods/week Semester end examination: 50 marks

Course Objectives:

- To study basic electronic components.
- To observe characteristics of electronic devices.

Course Outcomes:

The student will be able

- To apply the concepts and analytical principles to analyze electronic (diodes, transistors) circuits.
- To Understanding of the operation diodes and transistors in order to build circuits.
- To learn to the characteristics of Transistor.
- To learn the basics of Amplifiers.

Exercises:

- I. The identification & Testing of Electronic component like R,L,C, Diodes, Transistors etc.
- II. Study of CRO.
 - 1. Diode Characteristics(Ge, Si) a) Forward Bias b) Reverse Bias
 - 2. Zener Diode Characteristics
 - 3. Half Wave rectifier with & without filter
 - 4. Full Wave rectifier with & without filter
 - 5. Transistor CB Characteristics(I/P & O/P)
 - 6. Transistor CE Characteristics(I/P & O/P)
 - 7. CB Amplifier
 - 8. CC Amplifier
 - 9. CE Amplifier
 - 10. Voltage Divider bias
 - 11. FET Characteristics
 - 12. SCR Characteristics

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REFERENCE BOOKS:

- 1. Electronic devices & circuits by Kumar, Jain EEE publications
- 2. Electronic devices & circuits by B.L.Theraja,R.S.Sedha,S.Chand publications
- 3. Electronic devices & circuits by Robert L.Boylested