

2/4 B.Tech - FOURTH SEMESTER

EC4L3

Pulse & Digital Circuits Lab

Credits: 2

Lecture: -

Internal assessment: 25 marks

Lab : 3 period /week

Semester end examination: 50 marks

Course Objectives

- To observe the output waveforms of linear wave shaping circuits for different inputs and different circuit time constants.
- To obtain the responses of clipping and clamping circuits for a given input.
- To design Multivibrator circuits and verify their operation.
- To verify the operation of voltage regulators.

Course Learning Outcomes

Student will be able to

- Analyze the working of linear and nonlinear wave shaping circuits.
- Design multivibrators and voltage regulators as per the specifications.

NOTE: Minimum of 10 experiments has to be performed and recorded by the candidate to attain eligibility for External Practical Examination.

List of Experiments: (Both Hardware & Software using Multisim)

1. High pass & Low pass RC circuits
2. Clippers & Clampers
3. Bistable Multivibrator
4. Monostable Multivibrator
5. Astable Multivibrator
6. Schmitt Trigger
7. Logic gates with discrete components (Diodes, Transistors)
8. UJT Relaxation Oscillator
9. Bootstrap sweep circuit
10. Sampling Gates
11. Series Voltage Regulator
12. Shunt Voltage Regulator