

2/4 B.Tech. FOURTH SEMESTER

EM4L1

PULSE AND DIGITAL CIRCUITS LAB

Credits: 2

Lab/Practice: 3 periods/week

Internal assessment: 25 marks

Semester end examination: 50 marks

Course Objectives:

- To study characteristics wave shaping, design of multivibrators and Sweep circuits.

Course Outcomes:

The student will be able to

- Understanding the operation of circuits.
- Design the multivibrator and sweep circuits.

List of Experiments: By designing the Circuit

1. Linear wave shaping (Diff. Time Constants, Differentiator, Integrator)
2. Non Linear wave shaping – Clippers.,Clampers
3. Logic gates with discrete components (Diodes, Transistors)
4. Bistable Multivibrator
5. Astable Multivibrator. (Voltage- Frequency convertor)
6. Monostable Multivibrator.
7. Schmitt Trigger.
8. UJT Relaxation Oscillator.
9. Bootstrap sweep circuit.
10. Sampling Gates