

II B.Tech II Sem

15AEC17-PULSE & DIGITAL CIRCUITS LAB

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Objectives:

1. To generate Different types of non-sinusoidal signals.
2. To generate and processing of non-sinusoidal signals.
3. To learn about Limiting and storage circuits and their applications.
4. To learn about Different synchronization techniques, basics of different sampling gates and their uses.
5. To obtain Basics of digital logic families.

Outcomes:

- a. Student understands the various design and analysis to generate various types of signals.
- b. Student can design various digital circuits based on the application and specifications.

Minimum Twelve experiments to be conducted:

1. Linear wave shaping.
2. Non Linear wave shaping – Clippers.
3. Non Linear wave shaping – Clampers.
4. Transistor as a switch.
5. Study of Logic Gates & Some applications.
6. Study of Flip-Flops & some applications.
7. Sampling Gates.
8. Astable Multivibrator.
9. Monostable Multivibrator.
10. Bistable Multivibrator.
11. Schmitt Trigger.
12. UJT Relaxation Oscillator.
13. Bootstrap sweep circuit.
14. Constant Current Sweep Generator using BJT.

Equipment required for Laboratories:

- | | | |
|------------------------|---|--------------|
| 1. RPS | - | 0 – 30 V |
| 2. CRO | - | 0 – 20 M Hz. |
| 3. Function Generators | - | 0 – 1 M Hz |
| 4. Components | | |
| 5. Multi Meters | | |