

EC-356**PULSE CIRCUITS & ICS LAB****L T P C****- - 3 2****COURSE OBJECTIVES:**

1. To design and obtain the responses of linear and nonlinear wave shaping circuits for standard inputs.
2. To design and analyze of multivibrators using BJT's.
3. To design a high voltage and a low voltage regulator using IC 723.
4. To design a PLL using IC 566 and a VCO using IC 565.

COURSE OUTCOMES:**After successful completion of the course, the students are able to**

1. compare the theoretical and practical values of adder and subtractor using op-amp.
2. design circuits using opamp to generate sine, square and triangular waveforms.
3. design regulator circuit using IC723.
4. Design D to A converter circuit using IC721.

List of Experiments:

1. Linear Wave-Shaping.
2. Non-linear Wave-Shaping.
3. Design and Verification of Astable Multivibrator.
4. Design and Verification of Monostable Multivibrator.
5. Design and Verification of Schmitt Trigger (using discrete components and IC741).
6. Measurement of Op-amp Parameters.
7. Applications of Op-amp (Adder, Subtractor, Integrator, Differentiator).
8. Instrumentation Amplifier using Op-Amp.
9. Waveform Generation using Op-amp (Square, Triangular).
10. Design of Active Filters (LPF & HPF- First Order).
11. Application of 555 Timer (Astable, Monostable).
12. PLL using 565.
13. Design of IC Regulator using 723.
14. Design of VCO using 566.
15. D-A Converter (R-2R Ladder).

Note: A minimum of 10(Ten) experiments have to be Performed and recorded by the candidate to attain eligibility for Semester End Practical Examination.