Course Code: EIPS - 110

Course Title: Analog Electronics Lab

Number of Credits: 03 Total Hours: 84 Total Marks: 75

Prerequisites for the course

Working knowledge of analog electronics devices

Objectives of Course

This course is intended to provide laboratory training and designing electronics circuits such as transistor amplifiers, power supply and operational amplifiers. Identify different sections and components in the circuit diagram.

Course Content 84 Hours

- **Expt. 1:**Identifying and testing of diode, NPN and PNP transistors.
- Expt. 2:Study of bridge rectifier
- Expt. 3:Study of Zener diode and its characteristics
- Expt. 4:Unregulated and regulated power supply
- Expt. 5:Load regulation of regulated and unregulated power supply
- Expt. 6:Line regulation
- **Expt. 7:**Study of Wien's bridge oscillator
- Expt. 8: Phase shift oscillator
- Expt. 9: Hartley oscillator and Colpitts oscillator
- Expt. 10:Non-inverting and inverting amplifier
- Expt. 11:Integrator and differentiator using OP-AMP
- Expt. 12:Adder and subtractor using OP-AMP
- Expt. 13: Design of class A amplifiers

Pedagogy

Lab experiments/Assignment

Course Outcome

Should be able to design and construct electronic circuits by identifying different components. Plot the graph and analyse the results. Students are expected to learn how to maintain lab record.