

2/4 B.Tech - SECOND SEMESTER

EC4L2

Analog Electronic Circuits Lab

Credits: 2

Lecture: -
LAB: 3 period /week

Internal assessment: 25 marks
Semester end examination: 50 marks

Course Objectives

- To design and simulate amplifier & oscillator circuits
- To measure the parameters of an amplifier & an oscillator from a circuit based on discrete components

Learning Outcomes

Student will be able to

- Design, simulate and verify the amplifier & oscillator circuits as per the specifications

List of Experiments

Part-A: Design and Simulation using Multisim or Pspice or Equivalent Simulation

Software (Any six)

1. Common Emitter and Common collector amplifier-Frequency response, Impedances measurement
2. Current shunt and Voltage shunt Feedback Amplifier-Frequency response, Impedances measurement (with and without feedback)
3. Common source and Common drain amplifier-Frequency response, Impedances measurement
4. Two Stage RC Coupled Amplifier
5. Cascode Amplifier
6. RC Phase Shift Oscillator using Transistors
7. Wien Bridge Oscillator using Transistors
8. Class A Power Amplifier
9. Class B Complementary Symmetry Amplifier

Part-B: Hardware (Any six)

1. Common Emitter and Common collector amplifier-Frequency response, Impedances measurement
2. Current shunt and Voltage shunt Feedback Amplifier- Frequency response, Impedances measurement (with and without feedback)
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