

**EC-255****ELECTRONIC CIRCUITS LAB****L T P C****- - 3 2****COURSE OBJECTIVES:**

1. To obtain the frequency responses of amplifier configurations like CE (Common Emitter), CS (Common Source), a cascaded RC coupled amplifier
2. To Design RC phase shift oscillator, Colpitts oscillator
3. To design a class A power amplifier.

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

1. demonstrate BJT and FET amplifiers, Feedback and Power amplifiers, and Oscillators.
2. Analyze the characteristics of BJT amplifiers, FET amplifiers, Feedback amplifiers and Power amplifiers.
3. Implement BJT and FET amplifiers, feedback amplifiers, oscillators and power amplifiers.
4. Implement current mirror circuit.

**List of Experiments:**

1. Frequency Response of Common Emitter Amplifier.
2. Frequency Response of Common Source Amplifier.
3. Measurement of Parameters of Emitter Follower :  $R_i$ ,  $A_V$ ,  $A_I$  &  $R_O$ .
4. Cascode Amplifier (CE-CB).
5. Darlington Pair amplifier.
6. Two Stage RC-Coupled Amplifier.
7. Voltage Shunt Feedback Amplifier.
8. Current Series Feedback Amplifier.
9. RC Phase Shift Oscillator.
10. Hartley Oscillator.
11. Colpitts Oscillator.
12. Wien bridge Oscillator.
13. Complementary Symmetry Class-B Push-pull Amplifier.
14. Class-A Power Amplifier.
15. Current mirror circuit.

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