List of experiments
ECE
3rd Sem

Paper: Analog Electronics – I Lab

Instructions:

1. The course objectives and course outcomes are identical to that of (Analog Electronics - I) as this is the practical component of the corresponding theory paper.
2. The practical list shall be notified by the teacher in the first week of the class commencement under intimation to the office of the Head of Department / Institution in which the paper is being offered from the list of practicals below. Atleast 10 experiments must be performed by the students, they may be asked to do more. Atleast 5 experiments must be from the given list.

1. To plot V-I characteristics of a semiconductor diode & Calculate Static & Dynamic Resistance.
2. To Study the Reverse characteristics of Zener diode
3. To Study the Rectifier circuit (With and Without Filter).
    a. Half Wave Rectifier
    b. Centre Tapped Rectifier.
    c. Bridge Rectifier.
4. Plotting input and output characteristics and calculation of parameters of a transistor in com mon emitter configuration.
5. Transistor biasing circuit. Measurement of operating point (Ic and Vce) for a :-
    a. fixed bias circuit
    b. potential divider biasing circuit.
6. Plot the FET characteristics & MOSFET characteristics.
7. To measure the overall gain of two stages at 1 KHz and compare it with gain of Ist stage, Also to observe the loading effect of second stage on the first stage
8. To plot the frequency response curve of two stage amplifier.
9. To study Emitter follower circuit & measurement of voltage gain and plotting of frequency response Curve.
10. Feedback in Amplifier. Single stage amplifier with and without bypass capacitor, measurement of voltage gain and plotting the frequency response in both cases.

11. To determine and plot firing characteristics of SCR by varying anode to cathode voltage, and varying gate current.
12. To note the wave shapes and voltages at various points of a UJT relaxation oscillator circuit.
13. For Transistorized push pull amplifier Measurement of optimum load, maximum undistorted power (by giving maximum allowable signal) Efficiency and percentage distortion factor.
14. To study the characteristics of single tuned & double tuned amplifier.