

## **34034 - ELECTRONIC DEVICES AND CIRCUITS PRACTICAL**

### DETAILED SYLLABUS

#### **STUDY EXPERIMENT (Not for Examination)**

Identify and check the working condition of passive & active components and switches.

#### **List of experiments to be conducted**

1. Construct and plot the VI characteristics of PN junction diode and find the cut-in voltage.
2. Construct and plot the VI characteristics of Zener diode and find the break down voltage.
3. Construct and plot the regulation characteristics (by varying either load or line voltage) of Half wave rectifier with and without filters.
4. Construct and plot the regulation characteristics (by varying either load or line voltage) of Full wave rectifier with and without filters.
5. Construct and plot the regulation characteristics (by varying either load or line voltage) of Bridge rectifier with filters.
6. Construct and draw the Input and output characteristics of CE Transistor configuration and find its input & output resistance.
7. Construct and draw the frequency response of RC coupled amplifier and determine the 3-db bandwidth.
8. Construct and plot the drain characteristics of JFET and find its pinch off voltage.
9. Construct and plot UJT characteristics and find its  $I_p$  and  $V_v$ .
10. Construct and draw SCR characteristics and find its break over voltage.
11. Construct and plot the DIAC and TRIAC characteristics.
12. Construct and draw the waveforms of positive clipper and clamper.
13. Construct and draw the characteristics of LDR and a photo transistor.
14. Simulate the half wave, full wave and bridge rectifier using the simulation tool like PSPICE/ multisim/orcad/tina
15. Simulate the astable and mono stable multi vibrator using the simulation tool like PSPICE/ multisim/orcad/tina