



STANLEY
COLLEGE OF ENGINEERING & TECHNOLOGY FOR WOMEN
(Approved by AICTE , New Delhi | Affiliated to Osmania University ,Hyderabad)
Address : Chapel Road, Abids ,Hyderabad

EC 242

BASIC ELECTRONICS LAB
(For Mech., Prod. & CSE)

Course objectives:

1. Demonstrate the characteristics of Semiconductor diodes
2. Realize the filters and Rectifiers.
3. Verify the characteristics of different transistor Configurations.
4. Design of Biasing Circuits for BJT and FET Amplifiers.
5. Design different circuits using Operational Amplifiers.

List of Experiments:

1. CRO-Applications, Measurements of R, L and C using LCR meter, Color code methods soldering practice.
2. Characteristics of Semiconductors diode (Ge, Si and Zener).
3. Static characteristics of BJT-Common Emitter.
4. Static characteristics of BJT-Common Base.
5. Static characteristics of FET.
6. RC-Phase Shift Oscillator.
7. Hartley and Colpitt's Oscillators.
8. Common Emitter Amplifier.
9. A stable Multivibrator.
10. Full-wave rectifier with and without filters using BJT.
11. Operational Amplifier applications.
12. Strain Gauge Measurement.
13. Analog-to-Digital and Digital to Analog Converters.

Suggested Reading :

1. David Bell A., Operational Amplifiers and Linear ICS, Prentice Hall of India, 2005.
2. David Bell A., *Laboratory for Electronic Devices and Circuits*, Prentice Hall of India, 2007.
3. Boylested R.L. and Nashelsky, *Electronics Devices and Circuit Theory*, Prentice Hall India, 2006.