

Name of Department: Applied Physics

Semester: I & II

Laboratory Name: Applied Physics Laboratory

List of Experiments

List of Experiments in Engineering Physics: For B.E. First Semester

1. Elementary analytical techniques: Method of linear least squares fit to the experimental data, error estimation, calculations involving idea of significant figures.
2. Determination of band gap (A thermistor or p-n junction diode may be used.)
3. V-I characteristics of Semiconductor diodes.
4. V-I characteristics of Zener diodes.
5. Input, output and current transfer characteristics of PNP/NPN transistor in CB and CE mode.
6. Study of Hall Effect.
7. Variation of Hall coefficient (RH) with temperature.
8. Study of Diode as a rectifier.

Note: Performance of at least six experiments is compulsory i

List of Experiments in Advance Physics: For B.E. Second Semester

1. Study of Cathode Ray Oscilloscope.
2. Determination of phase difference and frequency of electrical signals using C.R.O.
3. Interference in thin films: Newton's ring experiment.
4. Laser source: Determination of Wavelength by Diffraction Grating
5. Study of Double Refraction.
6. Interference in thin films: Study of wedge shaped thin film.
7. Determination of Refractive Index of Prism.
8. Determination of wavelength of sodium light using diffraction grating.

9. Determination of e/m of an electron.

Note: Performance of at least six experiments is compulsory in a semester.

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Head

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