

Engineering Physics Lab	
Course code	EPHY151
Category	Basic science Course
Course title	Engineering Physics Lab (Lab)
Scheme and Credits	Credits: 0+1
Pre-requisites (if any)	-

Group A:

- **EXP-1** To determine the wavelength of monochromatic light by Newton's ring.
- **EXP-2** To determine the wavelength of monochromatic light with the help of Fresnel's biprism.
- **EXP-3** To determine the focal length of two lenses by nodal slide and locate the position of cardinal points.
- **EXP-4** To determine the specific rotation of cane sugar solution using polarimeter.
- **EXP-5** To determine the wavelength of spectral lines using plane transmission grating.
- **EXP-6** To study the polarization of light by simple reflection using laser.
- **EXP-7** Measurement of Wavelength of a laser (He- Ne) light using single slit diffraction.

Group B:

- **EXP-8** To determine the specific resistance of a given wire using Carey Foster's bridge.
- **EXP-9** To study the variation of magnetic field along the axis of current carrying circular coil and then to estimate the radius of the coil.
- **EXP-10** To verify Stefan's law by electrical method.
- **EXP-11** To calibrate the given ammeter and voltmeter by potentiometer.
- EXP-12 To study the Hall effect and determine Hall coefficient, carrier density and mobility of a given semiconductor.
- **EXP-13** To determine the energy band gap of a given semiconductor material.
- **EXP-14** To determine electro chemical equivalent of copper using Tangent or Helmholtz galvanometer.
- **EXP-15** To study hysteresis curve of ferromagnetic material and to determine magnetic susceptibility and permeability of the given specimen.
- **EXP-16** To determine the ballistic constant of a ballistic galvanometer.
- **EXP-17** To determine the coefficient of viscosity of a liquid.
- **EXP-18** To measure the attenuation and aperture of fiber.
- **EXP-19** To determine resistance by leakage method.
- **EXP-20** To determine magnetic susceptibility of paramagnetic solution.