

## **Facilities –**

### **1. Laboratory facilities – These equipment is available in the department.**

- **B.SC I YEAR**

- Study of laws of parallel and perpendicular axes for moment of inertia.
- Moment of inertia of Fly wheel.
- Moment of inertia of irregular bodies by inertia table.
- Study of a compound pendulum.
- Study of oscillations under a bifilar suspension.
- Study of modulus of rigidity by Maxwell's needle.
- Study of oscillation of a mass under different combinations of springs.
- Study of torsion of wire (static and dynamic method).
- Poisson's ratio of rubber tube.
- Study of bending of a cantilever or a beam.
- Study of flow of liquids through capillaries.
- Determination of surface tension of a liquid.
- Study of viscosity of a fluid by different methods.
- Use of a vibration magnetometer to study a field.
- Study of magnetic field B due to a current.
- Measurement of low resistance by Carey-Foster Bridge.
- Study of decay of currents in LR and RC circuits.
- Response curve for LCR circuit and response frequency and quality factor.
- Study of waveforms using cathode-ray oscilloscope.
- Characteristics of a choke and Measurement of Inductance.
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- **B.SC II YEAR**

- Study of adiabatic expansion of a gas.
- Study of conversion of mechanical energy into heat.
- Heating efficiency of electrical kettle with varying voltages.
- Study of temperature dependence of total radiation.
- Characteristics of a microphone-loudspeaker system.
- Determining the principal points of a combination of lenses.
- Use of Diffraction grating and its resolving limit.
- Resolving limit of a telescope system.
- Study of Optical rotation for any systems.
- Study of laser as a monochromator coherent source.
- Study of a divergence of a Laser beam.
- To find the refractive index of prism with the help of spectrometer.

- **B.SC III YEAR**

- Determination of  $e$  by Millikan's method.
- Hysteresis curve of transformer core.
- Hall-probe method for measurement of magnetic field.
- Specific resistance and energy gap of a semiconductor.
- Characteristics of transistor.
- Characteristics of a tunnel diode.
- Study of voltage regulation system.
- Study of a regulated power supply.
- Study of lissajous figures using a CRO.
- Study of VTVM.
- Study of RC and TC coupled amplifiers.
- Study of AF and RF oscillators.
- To study the Zener Diode.
- To study the P-N Junction diode.
- To study Hartley Oscillator.

2. **Community Room/collaborative work space** - when not in use for physics courses , physics labs serves as a collaborative work space and physics community room , where :

Student Meet to work together, homework assignments and special projects.

3. **Departmental Library :-**

Faculty personal library has been converted in departmental library where reference books and spiritual books are available. This small but convenient Library is always available to all students.



4. **Demonstrative Apparatus:-**

Different type of demonstrative apparatus are available in physics lab like continuity Tester, Mosquito Repealer, Light

Operating switch, Battery Eliminator , Transistor Tester ,  
Electric Motor, Fire Alarm, water Turbine, Dynamo etc.

