

**List of Equipment's to be Procured in the
Department of Physics, Hotilal Ramnath College, Amnour**

Sl. No	Equipment's	Qty	Technical Specifications and Scope of the experiment
01	Michelson Interferometer (Compact Model)	01	<p>Complete equipment including user manual for carrying out an experiment at undergraduate level.</p> <p>The setup must include: Platform for experimental set up, Laser mount, Laser with power supply (5m W), beam splitter mount, , Beam splitter, mirror mount with translation, mirror, glass slide, rotation stage, Allen keys.</p> <p>Using the experiment students should be able</p> <ol style="list-style-type: none"> 1. Measure the refractive index of transparent material. 2. To determine the wavelength of laser beam.
02	Apparatus for characteristics study of diode Laser	01	<p>Complete equipment including user manual to perform the experiment at undergraduate level.</p> <p>The setup must include: Optical rail (45 cm); Laser Mount, Polarizer rotator with mount, XYZ translation stage with mount, Diode laser with power supply (5 mW), Detector output measurement unit.</p> <p>Using the experiment students should be able:</p> <ol style="list-style-type: none"> 1. To study gaussian nature of laser beam. 2. To determine the divergence of the laser beam. 3. To find the diameter of the laser beam. 4. To study polarization nature of laser beam.
03	Experimental set to study the diffraction from Reflection Grating	01	<p>Complete equipment including user manual for carrying out an experiment at undergraduate level.</p> <p>The setup must include: Optical Rail (30 cm); Laser Mount; Specimen holder; reflecting grating, Laser with power supply.</p> <p>Using the experiment students should be able:</p> <ol style="list-style-type: none"> 1. To determine the groove spacing of CD. 2. To Measure the wavelength of the laser light using grating.