

## Physics Lab Equipments & Experimental Setups

**ME 853 - To verify the expression for the focal length of a combination of two lenses.**

**Setup comprises of:**

- Convex lens : Focal length 10cm and 20cm (One Each)
- Optical bench : 1 Meter (Full Shaper)
- Lamp of narrow opening
- Cross slit screen
- Nodal slide assembly
- Plane mirror in holder



**ME 854 - To find the specific rotation of sugar solution by using a polarimeter**



**Setup comprises of:**

- Polarimeter with polarimeter tube : 30cm
- Beaker & measuring cylinder : 100ml (1 Each)
- Light Source : 35 Watt Sodium vapour lamp housed in powder coated Steel cabinet with Transformer & Stand

**Optional Accessories :** Cane sugar, Glass funnel, Glass rod

**ME 855 - To find the wavelength of white light with the help of a plane transmission diffraction Grating**



**Setup comprises of:**

- Diffraction Grating : 15000 lines/inch
- Spectrometer : 6 Inch, Least Count - 30 Sec.
- Light Source : 80 Watt Mercury vapour lamp housed in powder coated Steel cabinet with Transformer & Stand

**ME 855A - To determine the Rydberg's constant with help of diffraction grating and the hydrogen discharge tube**



**Setup Consist of :**

- Spectrometer : 6 Inch, Least Count - 30 Sec.
- Hydrogen discharge tube with supply
- Diffraction grating : 15000 lines/inch

**ME 855B - To study the absorption spectrum of iodine vapours and hence to calculate electronic energy gap, vibrational energy and force constant for its excited state.**



**Setup Consist of :**

- Iodine vapour glass tube in wooden box with stand arrangement with iodine pallets (1m)
- 100 W straight filament lamp arrangement
- Spectrometer : 6 Inch, Least Count - 30 Sec.
- Diffraction grating : 15000 lines/inch