# Practical related instrument Department of Physics Prasanta Chandra Mahalanabish Mahavidyalaya

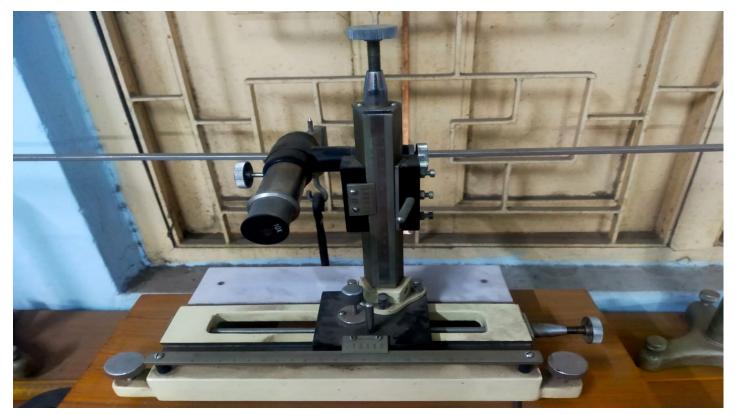
Bon-Hooghly, 131

# • For 1<sup>st</sup> Semester:

1. Young's modulus apparatus



This instrument is use to determine the Young's modulus of a material of the beam by flexture method.



This is known as Travelling microscope. It is use to measure the depression of the beam by applying load on the mid-point of the beam.



This instrument is use to determine the rigidity modulus of the material of a wire by dynamical method.

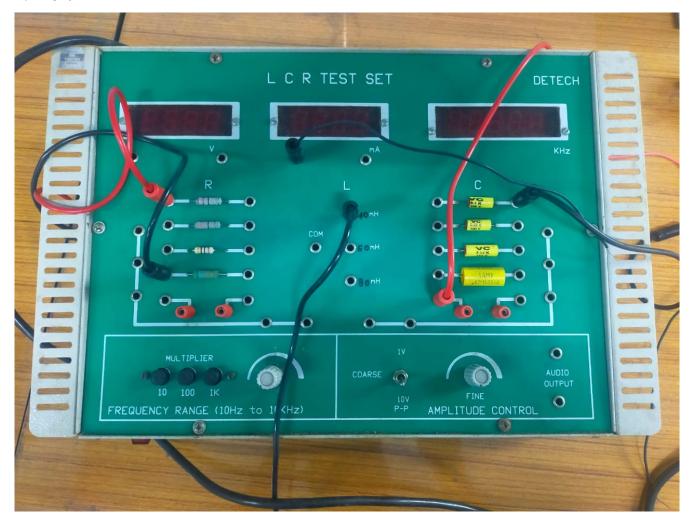
#### 3. Moment of inertia



We can calculate the Moment of Inertia of a body about its axis passing through its centre of gravity by using the above instrument.

# • For 2<sup>nd</sup> Semester:

#### 1. LCR



This is the L-C-R box. L-C-R means Inductor-Capacitor-Resistor. It is use to study the series and parallel connection of LCR and determine resonance frequency.

### 2. DC Power supply & DC Voltmeter



The above instrument is use to measure the dc voltage.

For 4<sup>th</sup> Semester:

# 1. Newton's ring



This is help us to calculate the wavelength of a sodium light by Newton's ring method.

# 2. Spectrometer





The above instrument is known as Spectrometer. This is help us to determine the angle of prism, refractive index of the material of a prism. Also we can do light related experiment including grating.

## • For 5<sup>th</sup> Semester:

#### 1. PN junction diode



To study the forward and reverse characteristic curve of a semiconductor diode, we use the above instrument.

#### 2. Logic gate



This instrument is use to varify various gates i.e. OR, AND, NOT, NAND, NOR, XOR, XNOR.