

**Department of Physics,
Dum Dum Motijheel College,
1-Motijheel College, Kolkata-700074**

Lab Requirement for SEM-VI

SL.NO.	Items
1.	To verify the law of Malus for plane polarized Light. Complete set. (a) Diode Laser 5mW (Red) (b) Pair of Polaroid's (c) Photo cell with digital meter (d) Optical bench 1meter.
2.	To Determine the wavelength and velocity of ultrasonic waves in a liquid (kerosene) by studying the diffraction through ultrasonic grating. Complete with (a) R.F Oscillator 3-8 MHz (b) Specially design spectrometer (c) Crystal bank (d) Sodium Lamp, Transformer & Housing
3.	To study the polarization of light by reflection and determine the polarizing angle for air-glass interface. Complete with (a) Open spectrometer w/o tubes. (b) Diode Laser 5mkl(red) (c) Glass plate (d) Pair of Polaroid's (e) Photo cell with digital meter
4.	To determine the Boltzmann constant using V-I characteristic of PN junction diode. Complete with Si, Ge, and LED & Zener diodes. Characteristics and Boltzmann Constant to measurement of voltage & Current (100 nA to 20 mA) SES made DCBC-01
5.	To determine the refractive index of liquid by total internal reflection using Wollaston's air film. Complete with (a) Spectrometer DEVCO 7 ¹¹ ×20 sec. VC. (b) Wollaston's air film (c) Sodium Lamp, Transformer & Housing set
6.	To study the reflection, refraction of microwaves. Complete Set with Microwave control unit, Microwave receiver, Microwave transmitter, Angle scale, Meter rule, Prism holder, Prism wooden Plate, Metal Plate & Grating.