DEPARTMENT OF PHYSICS AND MATERIALS SCIENCE AND ENGINEERING

UG Laboratories: (PL01, PL02, PL06, and PL07)

Equipments/facilities available

S. No.	Experiment Detail	Photograph
1	Newton's ring setup	
2	Fresnel's Bi-prism setup	
3	Polarimeter setup	
4	Stefan's law setup	
5	Malus Law setup	
6	Carey foster bridge setup	

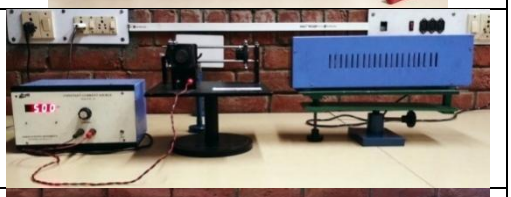
7	Spectrometer with prism setup	
8	Spectrometer with grating setup	
9	Planck’s constant setup by photo cell	
10	Helmholtz galvanometer setup	
11	Planck’s constant setup by solar cell	
12	Cauchy's Constant Setup	
13	Single, double and N slit Diffraction using Laser	

14	Resolving Power of telescope	
15	*p-n* junction diode setup	
16	Four probe setup	
17	Hall effect setup	
18	Magnetostriction setup	
19	Dielectric setup	
20	Magnetoresistance setup	
21	Susceptibility setup	

22	Optical Fiber setup	
23	e/m by Thomson setup	
24	e/m by Magnetron setup	
25	Solar cell characteristics setup	
26	Ultrasonic Interferometer setup	
27	Planck’s constant setup using LED	
28	Inverse square law setup	

PG Laboratories: (PL03: MSE I and PL04: MSE II)

Equipments/facilities available

S. No.	Experiment Detail	Photograph
1	Four probe setup	
2	Magnetostriction setup	
3	Magnetoresistance setup	
4	Dielectric setup	
5	Hall effect setup	
6	Optical Fiber setup	

Materials Characterization Laboratory: (PL05)

Equipments/facilities available

S. No.	Experiment Detail	Photograph
1	X-ray diffractometer	
2	UV/Visible spectrophotometer	
3	LS-55 Luminescence spectrometer	
4	Spectrum BX-II Spectrophotometer (FTIR)	
5	Vacuum coating unit	
6	Spin coating unit	

7	Novocontrol alpha A high performance frequency analyzer	
8	PE-loop tracer with furnace	
9	Impedance analyzer with micro processor based temperature controlled furnace	
10	LCR meter	
11	Millipore water Purification System	
12	Electromagnet with power supply and Gaussmeter	

13	Keithley Digital multimeter	
14	Keithley nanovoltmeter and AC/DC current source	
15	High temperature muffle furnace up to 1500^{o}C, PID controlled	
16	Tubular muffle furnace up to 1500^{o}C, PID controlled	
17	High temperature furnace up to 1200^{o}C, PID controlled	
18	Two zone split type furnace: zone-1 1200^{o}C, zone-2 800^{o}C	
19	Oven with heating up to 350^{o}C	

20	Oven with heating up to 300°C, PID controlled	
21	Trinocular microscope with magnification up to 100x	
22	Hardness testing machine