

B.Sc. Physics Practicals for Semesters I & II (Mechanics, Waves & Oscillations)			
For one batch of 25-30 Students			
S.No.	Name of the Equipment (with specifications)	Company	Quantity
1	Bar Pendulum (with equidistant hole, two knife edge & wall clamp)	With equivalent specifications from any firm	5
2	Battery eliminator (2, 4, 6, 8,10, 12 V and 2 amps dc with rotary switch)		6
3	Beaker (plastic)		10
4	Brass circular metal disc with wall clamp (torsional pendulum)		5
5	Brass metal bob with hook (radius 2.5 cm)		10
6	Capillary tube of uniform bore with rubber cork		20
7	Coupled Oscillator, wall fixing type with pendulum bobs		5
8	Recr Digital Stop Watch		40
9	Analogue weighing machine (upto 5 kg)		2
10	Electrical tuning fork, bench clamp with pulley and pan		3
11	Fly-wheel moving in new ball bearings with counter		5
12	Funnel with rubber tube and Pinch cork		5
13	Wooden Half meter scales superior quality		10
14	Lamp and scale arrangement		5
15	Large trough and Circular mirror		5
16	Measuring Jar (plastic)		10
17	Wooden Meter Scale : superior quality		20
18	Retort stand with clamp and boss head		15
19	Rubber Cork with hole at the center		15
20	Rubber tipped hammer		15
21	Cathode Ray Oscilloscope (Dual trace with 20 MHz)		2
22	Screw Gauge 20 mm steel screw superior		5
23	Signal/ function generators(1 MHz, Digital Display)		4
24	Slotted Weights 2.5 kg		10 sets
25	Sonometer (Teak wood with bridges and wires)		5
26	Spiral springs of different spring constants		10

S.No.	Name of the Equipment (with specifications)	Company	Quantity
27	Spirit level		3
28	Split rubber cork		20
29	Steel, Brass and Copper wires per coil		1 set
30	Thin strong cotton string (thread)		1
31	Travelling Microscope Horizontal, Vertical scale, cross motion		10
32	Tuning forks of different frequencies (set of 8 welch type large)		10 boxes
33	Vernier Calliper student grade with wheel		5
34	Volume Resonator (2 Ltr.)		10
35	Wax		1
36	Physical Weight boxes (1, 2, 5, 10, 20, 50, 100, 200 gms)		3
37	Weight hangers (5x50 gms, slotted weights)		20 sets
38	Aluminum with hooks in all planes (weight 800 gm - Al)		3
39	Young's modulus of bending of beam heavy metal strip, table clamp with knife edges & weight carrier for uniform & nonuniform bending		5

Abstract -B.Sc. Physics Practicals Paper-III (Thermal Physics)**For one batch of 25-30 Students**

S.No.	Name of the Equipment (with specifications)	Company	Quantity
1	Lees disc apparatus including 3 bad conductor discs	With Equivalent specifications from any firm	3
2	Steam generator (boiler) 1 Litr.		6
3	Thermometers (0.1 degree least count)		15
4	Pressure rubber tube (20 mts)		1
5	Stefan's Constant Apparatus		3
6	Newton's law of cooling apparatus		3
7	Heating Efficiency of an Electrical Kettle with varying voltages set		3
8	Potentiometer 10 wires 1 mt. long fully laminated $\frac{3}{4}$ " wooden board stretched, over pulleys. Total resistance 10 ohms with pencil jockey		3
9	Daniel cell		3
10	Rheostat (2.3 A, 100 ohms)		3
11	Resistance box 10000 ohms		6
12	High resistance Box 5 kilo ohms		
13	Galvanometer		3
14	Borosil Beakers (500 ml)		6
15	Thermo couple (copper - iron)		6
16	4 way commutator		3
17	Hot plate with thermostat		5
18	Connecting wires multi stand		2 Bundles

S.No.	Name of the Equipment (with specifications)	Company	Quantity
19	Copper Calorimeter with a wooden lid having two holes for inserting thermometer for cooling curve of metallic body		3
20	Rubber stoppers with holes (2)		6
21	Thermister characteristics setup with builtin calorimeter, variable resistance, power supply, Galvanometer and thermometer		3
22	Specific heat of solid rod (Graphite) sample in cylindrical shape		3
23	study mechanical energy to heat setup		3

Abstract - B.Sc. Physics Practicals Paper-IV (Optics)**For one batch of 25-30 Students**

S.No.	Name of the Equipment (with specifications)	Company	Required Quantity
1	Frenel's Biprism setup	With equivalent specifications from any firm	3
2	Sodium Vapor lamp setup		4
3	Spirit level		3
4	Magnifying glass (Reading lens)		12
5	Newton's Rings Apparatus (All in built)		3
6	Spherometer (to know the radius of convex lens)		1
7	Plane transmission grating		3
8	Mercury vapour lamp setup		2
9	Magnifying Torch light		6
10	Diode laser setup with builtin power supply		3
11	Diffraction Grating 2500 lpi		3
12	Polarimeter Apparatus with bi-quartz system		3
13	Pulfrich refractometer Apparatus setup		3
14	Wedge method-thickness of wire setup		3
15	Crown Prism (Dispersive power of prism)		3
16	Spectrometer (60' and 175 mm scale with round adjustable slit)		5
17	Telescope for resolving power		3
18	Slit for resolving power with micrometer head		3
19	Wiremesh		
20	Mercury (250 Bottle)		1
21	Watch glass pack of 12		6

Abstract - B.Sc. Physics Practicals Paper V (Electromagnetism)**For one batch of 25-30 Students**

S.No.	Name of the Equipment (with specifications)	Company	Required Quantity
1	Thevenin's and Norton's Theorem circuit Board with 2 digital meters	With equivalent specifications from any firm	3
2	Super Position Theorem circuit board with 2 digital meters		3
3	Maximum Power Transfer Theorem circuit Board		3
4	Carey Foster Bridge		3
5	Battery Eliminator		6
6	Variable Resistance Box (1000 ohms)		3
7	Galvanometer		3
8	High Resistance Box (15000 ohm)		3
9	Unknown resistance coil		3
10	A Dry Cell		3
11	A Plug Key		3
12	Function Generator/Signal Generator 1 MHz digital display		3
13	Anderson's Bridge circuit Board with oscillator & Head phone		3
14	Ballistic Galvanometer		6
15	Lamp & Scale Arrangement		3
16	Fixed condenser		12
17	Digital multi meter		3
18	Commutator round four plugs		3
19	High resistance coil 10K ohms		3
20	Rheostat 2.3A 60 ohms		3
21	Desauty's bridge set-up with oscillator & Head phone		3
22	Rayleigh's Bridge set-up with oscillator & Head phone		3

Abstract - B.Sc. Physics Practicals Paper VI (Modern Physics)**For one batch of 25-30 Students**

S.No.	Name of the Equipment (with specifications)	Company	Quantity
1	Mercury Valve Board	With equivalent specifications from any firm	3
2	Stabilized Power Supply for Mercury Valve		3
3	Helium - Neon laser light (5 mw)		3
4	Plane diffraction grating		3
5	Determination of work function by photoelectric effect: Power supply with two digital meters, optical bench, five glass filters, Built in Mercury vapour lamp, Photo Cell inbox		3
6	Hall Effect Experiment-Electro Magnets coils (10000 Gauss), Digital Gauss Meter (20 KGauss) & Hall Probe setup, Electro Magnet Power supply (5 amp.),		1
7	Plane Transmission Grating		3
8	hydrogen gas discharge tube with transformer		3
9	Energy Gap of Intrinsic Semiconductor Circuit Board-Apparatus		3
10	Single slit (with stand)		3
11	Double slit (with stand)		3
12	Plank's constant using LEDs-Power supply with digital voltmeter , Digital Ammeter, Digital Temperature Indicator with sensor & Oven, and four different calibrated LEDs		3
13	G.M.Counter experimental setup with single source		2

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