

TENDER-6: PHYSICS, CHEMISTRY & WORKSHOP

Tender Ref. No.: SJVPM/NEC/LAB/BASIC/2026/06

A. Physics Laboratory

Sr. No	Item Description	Specifications	Qty	Unit Price (₹)	Total Price (₹)
1	Optical Bench with Accessories	1.5m Length, Lens Holders, Light Source	10 Sets		
2	Spectrometer	Vernier Type, 20" Telescope	5 Nos.		
3	Traveling Microscope	150mm Travel, Vernier Scale	5 Nos.		
4	Newton's Ring Apparatus	Complete with Plano-Convex Lens	5 Sets		
5	Diffraction Grating	15000 LPI, Transmission	10 Sets		
6	Laser Source	He-Ne, 5mW, 632.8nm	5 Nos.		
7	Semiconductor Laser	5mW, 650nm, Diode	10 Nos.		
8	Polarimeter	Laurent Half Shade, 200mm Tube	3 Nos.		
9	Refractometer	Abbe Type, Digital	3 Nos.		
10	Interferometer (Michelson)	Complete with Micrometer	2 Sets		
11	Solar Cell Characteristics Setup	10W Panel, Load, Meters	10 Sets		
12	Hall Effect Setup	Electromagnet, Probe, Gauss Meter	5 Sets		
13	Four Probe Method Setup	Semiconductor Resistivity	5 Sets		
14	Thermocouple Calibration Setup	0-500°C, Digital Indicator	3 Sets		
15	Thermal Conductivity Apparatus	Lee's Disc, Complete	3 Sets		
16	Specific Heat Capacity Setup	Mixture Method, Calorimeter	5 Sets		
17	Viscosity Apparatus	Ostwald's Viscometer	5 Sets		
18	Surface Tension Apparatus	Jaeger's Method	5 Sets		
19	Elastic Constants Setup	Bending of Beam, Torsion	5 Sets		
20	Sonometer	With Tuning Forks, Bridges	5 Sets		
21	Tuning Forks Set	10 Forks (256-512 Hz)	5 Sets		
22	Melde's Apparatus	String Vibrations, Electric	3 Sets		
23	Cathode Ray Tube (CRT)	Educational, Deflection Plates	5 Nos.		
24	e/m by Thomson Method	CRT, Helmholtz Coils	3 Sets		
25	Frank-Hertz Experiment Setup	Mercury Vapor Tube, High Voltage	2 Sets		
26	Photoelectric Effect Setup	Photocell, Filters, Voltage	3 Sets		
27	Stefan-Boltzmann Apparatus	Black Body, Pyrometer	2 Sets		
28	Geiger-Muller Counter	With Ratemeter, Source	2 Sets		

29	Gamma Ray Spectroscopy	Nal(Tl) Detector, MCA	1 Set		
30	Beta Ray Absorption Setup	GM Counter, Absorbers	2 Sets		
31	Ultrasonic Interferometer	2 MHz, Digital Display	3 Sets		
32	Pyrometer (Optical)	700-2000°C	2 Nos.		
33	Thermistor Characteristics Setup	NTC, PTC, Digital	5 Sets		
34	Diode & Transistor Tester	Digital, Curve Tracer	5 Nos.		
35	Zener Diode Characteristics	Power Supply, Meters	10 Sets		
36	B-H Curve Tracer	Transformer Core, CRO	3 Sets		
37	Dielectric Constant Setup	Parallel Plate, Capacitance Bridge	5 Sets		
Total					

B. Chemistry Laboratory

Sr. No	Item Description	Specifications	Qty	Unit Price (₹)	Total Price (₹)
1	pH Meter (Digital)	0-14 pH, Temperature Compensation	10 Nos.		
2	Conductivity Meter	0-200 mS, Digital	5 Nos.		
3	Potentiometer (Digital)	0-2V, Auto Range	5 Nos.		
4	Spectrophotometer (UV-Vis)	190-1100 nm, Double Beam	2 Nos.		
5	Flame Photometer	Na, K, Li, Ca Detection	2 Nos.		
6	Colorimeter	Digital, LED Based	5 Nos.		
7	Polarimeter	Digital, 589nm	2 Nos.		
8	Refractometer	Abbe Type, Digital	3 Nos.		
9	Viscometer	Ostwald's, Ubbelohde	10 Sets		
10	Melting Point Apparatus	Digital, 0-300°C	3 Nos.		
11	Boiling Point Apparatus	Siwoloboff's Method	5 Sets		
12	Distillation Setup	Simple, Fractional, Steam	10 Sets		
13	Reflux Condenser Setup	500ml, 1000ml Round Bottom	10 Sets		
14	Soxhlet Extraction Apparatus	500ml, Complete	5 Sets		
15	Kjeldahl Nitrogen Estimation	Digestion, Distillation, Titration	2 Sets		
16	BOD Incubator	27±1°C, 5 Days, 10 Bottles	1 No.		
17	COD Digester	150°C, 12 Samples	1 No.		
18	Muffle Furnace	0-1100°C, Digital	1 No.		
19	Hot Air Oven	0-250°C, Digital, 100L	1 No.		
20	Desiccator	Vacuum, 300mm Dia			
Total (Rs.)					

EMD: ₹25,000

Tender Fee: ₹5,000