

Department of Chemistry, Barasat Govt. College		
List of Instruments to be purchased; FY: 2022-23		
Instruments/Chemicals to be supplied by the ISO 9001:2008, 2015 certified Companies only		
Sl. No	Instrument	Specification
1	pH meter	pH range: 0-14 (0.01 pH resolution, Display: 3½ digit LED, mV range: 0-±1999 (1 mV resolution) with electrode
2	Conductivity Bridge	Display: 3 digit LED; Temperature: 0 – 100 ⁰ C; Resolution: 0.1 µS; Frequency: 100 Hz or 1 k Hz
3	Potentiometer	Display: 4 digit LED; Range: ± 1.999 V, Accuracy: 0.001 V, Inbuilt standard cell: 1.018 V; Stirrer speed: 500 rpm; Power: 230 V AC ± 10% 50 Hz
4	Polarimeter	Range of measurement: 0 – 360 ⁰ ; Improved rotating half-shade; System suitable on Sodium light & 200 mm tube
5	Calomel Electrode	Standard quality from any reputed Company
6	Platinum Electrode	Standard quality from any reputed Company
7	Glass combined Electrode	Standard quality from any reputed Company
8	Silver Electrode	Standard quality from any reputed Company
9	Quartz Cuvette for Spectrophotometer	Standard quality from any reputed Company
10	Hot air oven	Small size/ Big size - Stainless Steel Inner Chamber, 2/3 (Adjustable Shelves) stainless steel, Timer - 5- 120 minutes with Digital indicator cum controller (electronic), Temperature range and accuracy : 25°C to 250°C, + 1°C, Temperature control knob – graduated in centigrade, Operable at 220 Volts and 50 Hz, Supplied with original manufacturers service manual
11	Suction Pump	High vacuum
12	Ultracentrifuge	Capacity: 400; Rotor capacity (ml): 6 x 50 ml; Angle rotor head; Max.speed: 5250 rpm; Max RCF: 3600; Digital timer range: 0 – 60 min; Supply: 220 – 240 V, 50Hz single phase; Dimensions (mm): 365 x 415 x 350
13	Spectrophotometer	i) double beam; 340-999 nm range; % of T; Absorbance; concentration; single/multi wavelength scan; auto wavelength and baseline correction; save/recall facility for data; ii) double beam, automatic source optimization, base line calibration & cell optimization, 200-1100 nm range, 2 nm bandwidth, % of T; Absorbance; concentration, (K factor), multi component measuring modes; single/multi wavelength, time scan; kinetic scan etc.
14	Spectrophotometer	High accuracy and reliability, 4 Digit Seven Segment LED, 340 – 960 nm Range, %T, Abs, Conc. measuring modes, 10 nm Bandwidth, Single Position 20/50 mm Cuvette Holder (Optional)
15	Microwave oven	Ordinary
16	Refrigerator	Single door, Capacity 190 L or more
17	Heating Mantle	Capacity: 250 ml - 1 L, Temperature: upto 400 deg C, Power: 230 V AC
18	Hot Plate with Magnetic Stirrer	Stainless steel, Temperature: upto 350 deg C, Speed range: 50 - 1500 RPM
19	Water distillation plant	Stainless steel, Output: 5 -10L/hr, Power supply: 230 V AC,
20	Sonicator (ultrasonic Cleaner)	Stainless steel, Capacity: 3 - 5 L, Power supply: 230 V AC,
21	Melting point Apparatus	Standard quality from any reputed Company
22	Digital Weighing Machine	Accuracy Upto 3 rd place of decimal
23	Rotary Evaporator (Eyla), Model No. N 1200 AV	Spare: Only Receiver and Container
24	Burette Stand (Iron)	Standard quality from any reputed Company
25	Bunsen Burner for LP gas	13 mm Brass N.P. pipe with screw type air regulator
26	Chemicals	Merck, BDH, SRL, Nice
27	Glass Wares	Borosil
28	Plastic Materials	Tarsons



[Signature]
Associate Prof. & Head
Department of Chemistry

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