

DEPT. OF BOTANY
KAPTIPADA COLLEGE, KAPTIPADA, MAYURBHANJ

Apparatus, Glassware's & Chemicals List

SL. NO	ITEMS NAME
	INSTRUMENTS
01	Visible Spectrophotometer (Microprocessor Based) <u>Technical Specification</u> Micro controller based visible spectrophotometer with 10mm 2 pair glass cuvette, Wavelength Range: 320-1020nm, Spectral Bandwidth: 2nm, Wavelength Interval: 1nm, Wavelength Accuracy: ± 2 nm, Wavelength Repeatability: ≤ 1 nm, Photometric Accuracy: $\pm 1\%$ T, Photometric Repeatability: 0.5%T, Photometric Range: 0 -1.999A, 0-199.9%T, Stray Light: $\leq 0.3\%$ T @340nm, Stability: ± 0.004 A/h @500nm, Display: 4digit LCD Screen, Measuring Mode: Auto Abs,%T,Conc., Detector: Si Photodiode, Light Source: Tungsten lamp, Power Requirement: AC(220V/50Hz), Dimensions: (W x D x H) 450 x 520 x 320mm, Weight: 10kg, Output: RS-232C Port, Software CD: 01no, RS 232 Cable: 01no, Power cable: 01no Make: Biolinkk/Br-Biochem/Spectronics/Igene
02	Centrifuge <u>Technical Specification</u> Speed: 6000rpm, Centrifugal Force: 3000g, Sample Capacity: 8 x 2.0ml/1.5ml/0.5ml/0.2ml tube (additional 0.5ml and 0.2ml tube carriers) 2 x 8 x 0.2ml PCR tube strip, Time Range: 1s - 99min59s, Noise: ≤ 45 Db, Dimension: 176x156x121 (mm), Net Weight: ≤ 1.5 kg, Power: 220V/110V 50-60HZ, Display: LED display the rolling speed and timing, Practice silent and stable. Free-maintenance motor, long life and safe, Delicate appearance. Multi-purpose to meet different experiments demands, The cover switch is outward designed and superstructure automatically bounces 95 degrees which is convenient for one-hand operation, The rotor is clip-on fixed. It is very convenient for rotors exchanging and pick-and-place Large radius rotor with 8 tube holes, centrifugal force is 1.5 times bigger than ordinary 6-hole rotor at the same rolling speed Make: Biolinkk/Br-Biochem/Spectronics/Igene
03	Research Binocular Microscope <u>Technical Specification</u> Head: Binocular, 360°rotating, 30° inclined, Observation mode: Brightfield, polarization, Eyepieces: Wide Field 10x/18mm, Objectives: Achromatic 4x,10x,40x,100x and with an anti-fungus treatment , Stage: Mechanical stage, 125x116mm with specimen holder, X-Y movement range, Vernier scale on the two axes, accuracy: 0.1mm, Focusing: Coaxial coarse and fine focusing mechanism with limit stop, Condenser: N.A. 1.2 with diaphragm adjustable height, Interpupillary distance: Adjustable between 48 and 75 mm, Illuminator: 1W white LED and external power Supply with light intensity control and Color temperature: 6.300K, Dioptric adjustment: On the left eyepiece, Nosepiece: Quadruple revolving nosepiece, rotation on ball bearings Make: Optika Italy/Novel/Omega India/Biolinkk
04	Soil with Water Analysis (Microprocessor Base) <u>Technical Specification</u> pH Range: 0 to 14 pH, pH Resolution: 0.01 pH, pH Accuracy: ± 0.01 pH, pH Calibration: Auto & Manual, pH Temperature /Compensation: , 0-100 °C/ (Auto/Manual), pH Auto Buffer Recognition: 4.00, 7.00 & 9.20, Conductivity Range: 0.00 μ S/cm to 1000 mS/cm in 6 Auto Ranges, Conductivity Resolution: 0.01, 0.1, 1 μ S/cm or mS/cm as per range, Conductivity Accuracy: $\pm 0.5\%$, Conductivity Range Selection: Automatic, Conductivity Cell Constant, Adjustment: 0.05 to 2.0 (Auto / Manual), Conductivity Temperature Coefficient: 0-4% adjustable, TDS Range: 0.00 ppm to 200 ppt in 5 Auto ranges, TDS Resolution: 0.01, 0.1, 1 ppm or ppt as per range, TDS Accuracy: $\pm 0.5\%$, TDS Range Selection: Automatic, TDS Cell Constant Adjustment: 0.05 to 2.0, (Auto/Manual), TDS Factor: adjustable(0.5 by default) , DO Range: 0 to 20 ppm, DO Resolution: 0.1 ppm, DO Accuracy: ± 0.2 ppm ± 1 digit, DO Calibration: Auto & Manual, DO Temperature/ Compensation: 0-100 °C, /(Auto/Manual), DO Salinity Correction: 0 to 20 mg/L, mV/ORP Range: -1999 to +1999 mV, mV/ORP Resolution: 1 mV, mV/ORP Accuracy: ± 0.2 ppm ± 1 digit, mV/ORP Calibration: Auto & Manual, mV/ORP Temperature/ Compensation: 0-100 °C/ (Auto/Manual), Salinity Range: 0- 50 ppt, Salinity Resolution: 0.2 ppt, Salinity Accuracy: $\pm 0.5\%$, Temperature Range: -20 °C to 200°C, Temperature Resolution: 0.1 °C, Temperature Accuracy: $\pm 0.2\%$ ± 1 digit, Temperature Calibration: Manual Make: Spectronics/Biolinkk/Omega India/Br-Biochem

	GLASS WARE (Pragati/Labsun/Omega India)
01	Beaker 50ml
	Beaker 100ml
	Beaker 250ml
	Beaker 500ml
	Beaker 1000ml
02	Conical Flask 100ml
	Conical Flask 250ml
	Conical Flask 500ml
03	Measuring Flask 50ml
	Measuring Flask 100ml
	Measuring Flask 250ml
	Measuring Flask 500ml
	Measuring Flask 1000ml
04	Measuring Cylinder 10ml
	Measuring Cylinder 100ml
	Measuring Cylinder 250ml
	Measuring Cylinder 500ml
	Measuring Cylinder 1000ml
05	Reagent Bottle 125ml
	Reagent Bottle 250ml
	Reagent Bottle 500ml
06	Test Tube 15x125 (100 unit)
07	Pipette 1ml (M)
	Pipette 2ml (M)
	Pipette 5ml (M)
	Pipette 10ml (M)
08	Burette 50ml
09	Plane Slide
10	Funnel 3"
11	Cover Slip
12	Blotting Paper
13	Dropper
14	Bell Jar
	CHEMICALS
01	Molisch Reagent, Dextrose, Maltose, Copper Oxide, Barfoed's Reagent (Br-Biochem/Biolinkk), Sodium Citrate, Orcinol, Resorcinol, LB Broth Lennox (Br-Biochem/Biolinkk), Tryptone (Br-Biochem/Biolinkk), Yeast Extract, Sodium Chloride, Sodium Hydroxide pellets, Tris Base (Br-Biochem/Biolinkk), Proteinase K (Br-Biochem/Biolinkk), Phenol, Chloroform, Ethanol, Ribonucleic acid (RNA) (Br-Biochem/Biolinkk), SDS (Br-Biochem/Biolinkk), EDTA, Tris Buffer (Br-Biochem/Biolinkk), Tris Hydrochloride (Br-Biochem/Biolinkk), Perchloric Acid, Ferric Chloride, Agarose LE (Br-Biochem/Biolinkk), Ph Paper, Malachit Green, Polyacrylamide (Otto), Acrylamide (Br-Biochem/Biolinkk), Ammonium Persulphate (APS) (Br-Biochem/Biolinkk), TEMED (Br-Biochem/Biolinkk), Agar Agar, RNAase (Br-Biochem/Biolinkk), LB Medium (Br-Biochem/Biolinkk), TE Buffer (Br-Biochem/Biolinkk), Lysis Buffer (Br-Biochem/Biolinkk), TAE (Br-Biochem/Biolinkk), TBE (Br-Biochem/Biolinkk)

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