

GOVERNMENT OF ODISHA
HIGHER EDUCATION DEPARTMENT

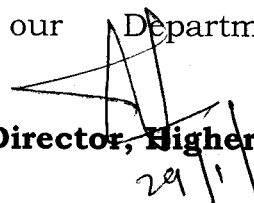
No.HE-NCNE-PLAN-0003-2024/4750 /Dt. 29.01.2025

TENDER CALL NOTICE

(For Science Laboratory Equipment)

Sealed quotations are invited from Manufacturers/Authorized Dealers or Registered Firms of laboratory equipment manufactured in India having valid GST Registration and Income Tax PAN for supply of Science Laboratory Equipment of different items used in Physics, Chemistry, Botany & Zoology laboratories of Non-Government Aided Degree Colleges situated in different places in Odisha. The last date and time for submission of the quotation is **on or before dt. 03.03.2025 (5.00 pm).**

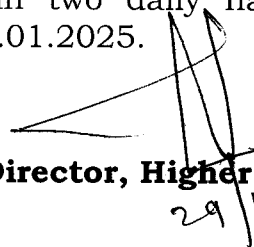
For more details, please visit our Department website:
www.dhe.odisha.gov.in


Director, Higher Education
29/1/25

Memo No. 4751 /HE, dt. 29.01.2025

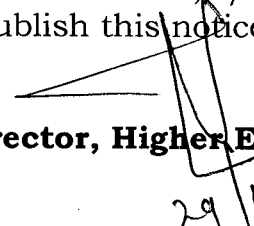
Copy forwarded to the Joint Director, (Advertisement), Information and Public Relation Department for information and necessary action.

He is requested to publish this notice in two daily national English newspapers and two daily Odia newspapers on 30.01.2025.


Director, Higher Education
29/1/25

Memo No. 4752 /HE, dt. 29.01.2025

Copy forwarded to Additional Secretary to Government, I/C of IT Section, Higher Education Department with a request to publish this notice in the website of Higher Education Department on 30.01.2025.


Director, Higher Education
29/1/25

Government of Odisha

Higher Education Department

Tender No. HE-NCNE-PLAN-0003-2024/5022 /dt. 30.01.2025

Tender Call Notice

TENDER DOCUMENT

1. Invitation for Bids:

The Government of Odisha, Higher Education Department invites sealed tenders from intending Manufacturers or Authorized Dealers or Registered Firms of Laboratory equipment manufactured in India for the supply of Laboratory Equipment for the Laboratories of Non-Government Aided Degree Colleges in Odisha. The items are to be supplied for various departments including Physics, Chemistry, Botany, and Zoology as per the specifications detailed in **Annexure 1.**

2. Eligibility Criteria:

• **Manufacturer/Authorized Dealer:**

The bidder must be a Manufacturer or Authorized Dealer or Registered Firm manufacturing laboratory equipment in India. The bidder should have at least five years of experience in the sale of Laboratory Equipment.

• **Debarred/Blacklisted Status:**

Any bidder who has been debarred, blacklisted, or found guilty within the last five years is not eligible. The bidder is required to submit a certificate to this effect in the form of affidavit from an Executive Magistrate in prescribed format as per **Annexure-2.**

• **EMD and Performance Security:**

The bidder is required to submit an Earnest Money Deposit (EMD) of Rs. 3,00,000/- in the form of a bank draft or banker's cheque payable to The Drawing and Disbursing Officer, Higher Education Department, Bhubaneswar. MSME manufacturers from Odisha are exempted from EMD payment as per MSME policy.

• **Annual Turnover:**

The bidder must have an average annual turnover of at least Rs. 10 Crores for the last three financial years (2021-22, 2022-23, and 2023-24).

• **Service Centre:**

The Manufacturer/Authorized Dealer/ Registered firm should have a service center at Bhubaneswar or any place in Odisha for post-sale

services. If the service centre is not available in Bhubaneswar, the vendor will give an undertaking that it will set up the service centre on or 03.03.2025.

3. Important Dates:

Event	Date & Time
Date & Time of Publication of Bid	30.01.2025
Date & Time of Pre-bid Meeting	04.02.2025, 3:30 PM (in the office chamber of Director, Higher Education, 5 th Floor, HoD Building, Bhubaneswar)
Publication of Pre-bid Meeting Minutes	07.02.2025
Start Date & Time of Bidding	10.02.2025, 11.00 AM
End of Bidding Date & Time	03.03.2025, 5:00 PM
Place, Date & Time of Opening of Technical Bid	(in the office chamber of Director, Higher Education, 5 th Floor, HOD Building, Bhubaneswar) 06.03.2025, 3:30 PM
Date of Opening of Price Bid	To be informed to qualified bidders

The last date of submission of bid may be changed in case the date mentioned above is declared a holiday for some official reasons.

4. Terms & Conditions:

- **EMD Submission:**

The EMD of Rs. 3 lacs must be submitted along with the bid documents.

Forfeiture of EMD:

The EMD will be forfeited if the bidder:

- - Misrepresents facts or submits fabricated/forged documents.
 - Withdraws the bid after opening of the technical bid.
 - Fails to submit performance security or to deliver the items within the specified timeline and specified place.
- **Performance Security:**

The successful bidder will be required to submit a performance security of 5% of the purchase order value within 7 days of the order date. This should be in the form of an account payee bank draft /bankers cheque issued by a scheduled commercial bank in favor of The Drawing and Disbursing Officer, Higher Education Department, Bhubaneswar.

- **Delivery and Installation:**

The successful bidder will be responsible for the safe delivery and installation of all equipment at the respective Non-Government Aided Degree Colleges. Installation and functioning must be ensured at the respective labs. The delivery points will be intimated on the day of pre bid meeting.

The Successful bidder will give an undertaking to supply and install Laboratory Equipment within one month of issue of purchase order at the respective destinations as per the list provided by this office.

- **Payment Terms:**

No advance payments will be made. The full payment will be made after the successful delivery and installation of the equipment and after receiving a certificate from the concerned college within 15 days of delivery.

- **Warranty:**

The laboratory equipment must have an warranty certificate as per company norms. The bidder must agree to replace any defective equipment during the warranty period at no additional cost.

5. Documents Required for Submission:

The following documents must be submitted along with the

1. Technical Bid form at Annexure-3
2. Earnest Money Deposit (EMD)
3. Detail list of items quoted in Financial Bid at Annexure-4
4. Declaration that the Manufacturer/Authorized Dealer/ Registered firm is not blacklisted (as per Annexure 2)
5. Photocopy of the Valid PAN card
6. Photocopy of the GST registration certificate
7. Authorization letter from the manufacturers (dealership certificate)
8. Photocopy of the CA certificate on Annual Turnover (for the last three years).
9. Performance certificates for the past 5 years along with copies of purchase orders. (sample copy)
10. Income Tax Returns for the last 3 years (2021-22, 2022-23 & 2023-24)
11. Tender acceptance letter (at Annexure-5)
12. Product catalogues (where required).
13. Undertaking of having service centre in Odisha.

6. Price Quotation:

- The price quotations should be submitted item-wise, as per the specifications provided in **Annexure-1**.

- The quotation should have unit price. The GST should be quoted separately. The unit price should include delivery and installation charges.

7. Submission Instructions:

- The sealed tenders must be submitted in the prescribed format to be dropped in the Tender Box kept in the office chamber of Director, Higher Education, 5th Floor, Heads of Department Building, Bhubaneswar-751001 on or before the last date within office hour.
- The technical and financial bids must be submitted in separate sealed envelopes superscribing as "Technical Bid" and "Financial Bid" respectively. Both the sealed envelopes must be kept inside one large superscribing "Tender Call Notice No. & dt".
- Bids received after the stipulated date and time will be rejected.
- Incomplete or conditional bids will not be entertained.

8. Tender Validity:

- The tender will remain valid for a period of one year from the date of acceptance or as decided by the competent authority.

9. Legal Jurisdiction:

- In case of any legal disputes, the matter shall be subject to the jurisdiction of the civil courts located in Bhubaneswar, Odisha.

10. Miscellaneous: Director

- The undersigned reserves the right to accept or reject any or all quotations without assigning any reason thereof.
- The Department may procure the equipment phase-wise or increase/decrease the quantity as per requirement.
- In case of defective equipment during the warranty period, the successful bidder will be required to replace the equipment immediately without any additional cost.

11. Contact Information:

For any queries or further information regarding the tender, kindly contact:

Director, Higher Education Department
Government of Odisha
[0674-2393529] E-mail-dheodisha@gmail.com


30/1/25
Director, Higher Education

List of Laboratory Equipment
PHYSICS

S L NO.	NAME OF THE EQUIPMENT	TECHNICAL SPECIFICATION	Numbe r
1	Zeeman Effect Apparatus	Optical bench, Transverse Slider, Lens holders, Polarizer fitter, Quarter wave fitter, Electromagnet coil, Power supply for electromagnet Mercury lamp with power supply, Fabry-Perot etalon, CMOS Camera, Digital Gauss meter, Green fitter with holder, Micrometer Eyepiece with Compatible computer system and software to record data of the apparatus.	150
2	Quinke's Tube Method	Electromagnet Assembly, DC Regulated power supply, U-Tube Travelling Microscope, Digital Gauss Meter, Electronic Balance and necessary accessories.	150
3	Millikan oil drop Apparatus	Built in DC variable power supply, Millikan's Apparatus, oil Atomizer, USB Camera, Digital stopwatch with Compatible computer system and software to record data of the apparatus.	150
4	BH Curve Apparatus	BH Curve power supply core, Pair of coils, U core (Ferromagnetic), BNC Cable, power cord, Digital Multimeter.	150
5	Advanced Polarimeter	Quartz Polarimeter, Polarimeter tubes built in sodium lamp, Power supply built in magnifier to read scale	150
6	Magnetic Susceptibility of solids (Gouy's method)	Electromagnet, Digital power supply for Electromagnet, Digital Gauss Meter, Digital Balance	150
7	He-Ne Laser kit	He-Ne Laser, Optical bench, Screen with cylindrical base, Slit holder Lens, Transversal Slider, Fixed Slider	150
8	Transistors as Amplifiers total kit for CE amplifier & RC Coupled amplifier	Bread board or Circuit Board, Capacitors 6 nos, Digital multimeter Resistor modules Signal Generator Transistor modules Power supply Variable power supply	150
9	Transistor as oscillators	Circuit board Capacitor module Choke module Inductor module Resistor module UJT Module Variable power supply	150
10	Combinational and Sequential circuits to study Half Adder, Full Adder, RS Flip flop, D Flip flop, JK Flip flop	Circuit board, AND Gate module, EX-OR Module Full Adder module, Half Adder module, Half subtractor module, OR Gate module, RS Flip flop, D flip flop	150
11	PE Hysteresis Loop	Field 1KV, XY Probes output for oscilloscope, Standard PZT Sample, Sample holder, SILICON OIL with essential accessories	150
12	OP-Amp as oscillators RC Phase shift oscillator And Wien Bridge oscillator	Circuit board, Power supply, OP-Amp module, Resistor modules, Capacitor modules, variable resistors	150
13	Stefan's Constant	Stefan's Constant Radiation Apparatus on stand with	150

	Radiation Apparatus	black and silver Disc.Cu-Cn-Cu thermocouples,oil bath, water bath,spirit lamp, super sensitive microammeter,steam boiler,Hot plate	
14	Study of Thermo-Emf of thermocouple with temperature	Cu-Fe thermocouple,Potentiometer,Heating arrangement,Voltmeter,Ammeter, Resistances,Stand for Thermocouple	150
15	Boltzmann constant using PN Junction diode	PN Junction diode,voltmeter and current display,Temperature display,oven,oven connector,Temperature sensor,Switch V-I & V-T	150
16	Dielectric constant of Dielectric material with frequency	Frequency Dependent set up, Sample capacitor,Test Capacitor without dielectric,Dielectric plates,High frequency oscillator up to 100 Khz,Gang condensor	150
17	e/m by (a) Magnetic focusing	DC Power Supply for CRT, Display for Deflection , Focusing adjustment Knob, Intensity adjustment Knob	150
18	Babinet's compensator	Babinet Compensator Quarter wave plate Polariser Analyser Eye piece White light lamp source	150
19	e/m by (b)Bar magnet	DC Power Supply for CRT , Cathode Ray Tube , Deflection magnetometer	150
20	Malus for plane polarized light with Diode Laser	Optical Bench Polarizer/Analyzer Diode Laser Detector , Digital Ammeter ,Digit LCD Display,	150
21	Determine the wavelength of laser source using diffraction of single slit and double slit	Optical Bench ,Diode laser, pin hole photo detector, silicon photo cell, screen	150
22	DESAUTY'S BRIDGE	Decade Resistance, Standard Capacitors, Unknown Capacitor , A.C supply of frequency, Null Detector	150
23	LOW RESISTANCE USING POTENTIOMETER	DC Regulated Fixed Power Supply , DC Regulated Variable Power Supply, Standard Cell, Unknown Resistors , Galvanometer , Ammeter, Potentiometer	150
24	THEVENIN AND NORTON THEOREM TRAINER	DC Regulated Variable Power Supply, Fixed Resistors, Variable Resistor, Voltmeter	150
25	ANDERSON BRIDGE TRAINER	DC Regulated Fixed Power Supply, Standard Capacitor, Standard Resistance, Digital Null Detector,	150
26	Biasing configurations of BJT for normal class A	DC Supply Transistor Digital Voltmeter Digital Ammeter Digital Ammeter Resistor	150
27	PLATINUM RESISTANCE THERMOMETER APPARATUS	Trainer Kit, Platinum Resistance Thermometer, Steam Boiler with Heating Arrangement, DC Power Supply: 2V/100mA, Callender and Griffith bridge with Jockey, Galvanometer,	150
28	ASTABLE & MONOSTABLE MULTIVIBRATOR USING 555 TIMER	DC Supply (Inbuilt), Led Indicator , Variable Resistor, Circuit & Symbol diagram printed on front panel,	150
29	OP-Amp as inverting and non inverting ,Integrator,Differentiator	Circuit board, Digital multimeter, OP-Amp modules,Resistor modules,Capacitor Modules,Power supply, Signal Generators, variable power supply	150

30	To determine the Hall coefficient of a semiconductor sample	Electromagnet digital power supply for electromagnet digital gauss meter constant current power supply	150
31	Function Generator	Function Generator 2Mhz Digital ,Sine square & triangle signals	150
32	Sodium Lamp	Sodium Lamp	150
33	Sodium Lamp Transformer	Sodium lamp Transformer (35 w)	150
34	Copper Steam Boiler With heating arrangement	Copper Steam Boiler With heating arrangement	150
35	Battery Eliminator	2-12V,3Amp current	150
36	Resistance Box (1 -10000 ohm)	Resistance Box (1 -10000 ohm)	150
37	Travelling Microscope	Travelling Microscope	150
38	Digital Timmer	Digital Timmer	150
39	Newton's Ring Apparatus with Sodium lamp	Newton's Ring Apparatus set up, Spherometer, Sodium Lamp, Microscope, Transformer for Na lamp,	150
40	V-I characteristics of a Zener diode and its use as voltage regulator	Variable DC supply Voltmeter Range Ammeter Resistance Zener Diode	150
41	SPRING CONSTANT APPARATUS	Adjustable scale on a stand with Helical Spring , Heavy Metal Base Plate, Metal Rod	150
42	V-I & power curves of solar cells, and find maximum power point & efficiency	DC Ammeter DC Voltmeter Solar Cell , Light Source, Intensity Control Switch	150
43	Mercury Lamp	Mercury Lamp	150
44	Resistance Box (1 -50 ohm)	Resistance Box (1 -50 ohm)	150
45	Resistance Box (1 -10 ohm)	Resistance Box (1 -10 ohm)	150
46	Spherometer	Spherometer	150
47	Stop Clock	Stop Clock	150
48	Voltmeter (0-1V)	Voltmeter (0-1V)	150
49	Voltmeter (0-2V)	Voltmeter (0-2V)	150
50	Resistance Box(0-10000 ohm)	Manganin coils	150
51	Semiconductor (Ge) crystal with temperature by four-probe method	FOUR PROBE ARRANGEMENT Thermocouple Sensor Sample: Ge Crystal mounted Thermometer (0-200°C) Four Probe Setup Constant Current Power Supply	150
52	Sextant with stand	Graduated on the arc, Micrometer: L.C- 12" on brass drum, Index Mirror: Rectangular, aluminium spattered, Horizon mirror: Circular, one half transparent, other reflecting half aluminium separated, Shade glasses: Three different densities for direct rays and four Reflected rays, Star Telescope: Galilean monacle, Case: Hard wood, Base: Tripod cast iron material with levelling screw, sextant with Tripod Stand: Material-MS, Telescope: Terrestrial	150
53	Desktop Computer with	Processor :13 th Gen Intel core TM i5 OS: Windows 11	150

	UPS	Memory: 8 GB Storage: 512 GB SSD Display: 20 inch Microsoft office 2021 With Mouse and Keyboard 3 Years Warranty 1 KVA line interactive 2 YEAR WARRANTY	
BOTANY EQUIPMENTS			
Sl No	Item and Brand	Specifications	Number
1	MONOCULAR COMPOUND MICROSCOPE: BRAND-OLYMPUS/LYNX / EQUIVALENT p	- Total Magnification: 40X -1000X. - Viewing Head: Monocular head with 45° inclined and 360° rotatable. - Nose Piece: Quadruple. - Eye pieces: 10X / 18mm. - Achromatic Objectives: 4X, 10X, 40X, 100X (oil, SL). - Focusing Range: Co-axial coarse & Fine adjustment. 13mm fine division 0.002mm with tension control and locking stage. - Stage: Double layer Mechanical Stage 140mm X 140mm; moving Range: 60mm X 30mm. - Condenser: Abbe type N.A.1.25 with IRIS Diaphragm and filter. Illumination System: LED with brightness adjustable.	300
	DISSECTING MICROSCOPE: ALMICRO/OLYMPUS /MAGNUS /LABO/EQUIVALENT	- Heavy round base, Metal fitting, Jointed arm - Optics:10X, 20X Eyepiece Stage Dimension : 85mm ×75 mm with spring stage clip	300
3.	OCULAR MICROMETER (Erma/ Good Quality)	- Scale-10mm - Least count:0.1mm Dimension:19mm × 1.5mm	300
	STAGE MICROMETER (Erma/ Good Quality)	Stage micrometer with horizontal Glass Slide- 1mm to 100 divisions	300
4.	MICRO-CENTRIFUGE (Rotor, Tubes must be quoted)	Maximum Speed: 16000 RPM Maximum RCF: 16600g Maximum Capacity: 40 ml Dimension: 280x350x290 mm Angle head rotor: Capacity: 24x1.5 ml Digital Speed Indicator, Stepless speed regulator, 0-99 minutes digital countdown timer, Imbalance detector with cut off, Safety Lid interlock to prevent cover opening during centrifugation.	50

5.	BOD INCUBATOR	Capacity: 6.1 cu. Ft. (171 litres.) Size (W X D X H): 505 x 415 x 830 mm Temp. Range: 5°C to 50°C; Temp. Accuracy: $\pm 0.5^{\circ}\text{C}$; Uniformity: $\pm 1^{\circ}$ Power Supply: Refrigeration 210-240V/50 Hz. Shelves: 3 nos. of removable perforated shelves; Inner air circulation system is to achieve uniform temperature Double walled construction: Inner wall must be stainless steel, Double wall door-magnetic gasket, lock and key arrangement. Inner door transparent, sheet for in section of material in the chamber without disturbing the temp. Heating arrangement within the chamber for higher temperature working. A control panel with various indicators, on-off switch, supplied with cord and plug etc. Temperature control-microprocessor based digital temperature. CFC free Copeland compressor, Door alarm: High low temp. Alarm	100
6.	TISSUE HOMOGENIZER REMI/EQUIVALENT	Suitable for homogenizing of plant tissues at high speed available. Chuck to hold shaft up to 10 mm dia. fitted with Teflon grinding pestle (50 ml). Glass homogenizing cup with rod supplied as standard, Stirring Shaft: 8 x 275. Cups of 5ml/10/15/25/50/100 ml capacity	500
7.	<u>VERTICAL ELECTRO PHORESIS APPARATUS</u> (BIORAD/TARSON/Genei/Equivalent)	Material: Acrylic Dimensions: 13x16x17cm Gel size: 8 X 7 cm Sample Capacity: 7 Combs: 7 Well Teflon Comb 0.5, 1, 1.5mm – 1 No Each Spacers: 0.5, 1, 1.5mm – 2 No Each Electrode: 1 Set – Detachable Glass Plate : 2 Full Set with gaskets Clamps & Screws : 1 Set , Connecting Cord : 1 Pair Water Circulation : No Sprit Level : Yes	50
8.	HORIZONTAL ELECTROPHORESIS (BIORAD/TARSON/ Genei/Equivalent)	Material: Acrylic Inner Dimensions: 27x16x8cm Buffer Capacity: 600ml Sample Capacity: 26 Gel Size: 13x13cm Gel Running Tray: 1 No Combs: 8 Well – 4 No Gel Casting Tray: 1 No Platinum Electrode: 1 Set – Fixed Connecting Cord: 1 Pair	50
9.	ELECTRIC ELECTROPHORESIS POWER SUPPLY (BIORAD/TARSON/ Genei/Equivalent)	Material: MS Power Coated Inner Dimensions: 25x27x12cm Display: LED Output Voltage: 0-300V Increment by 1V Output Current: 0-300mA Increment by 1Ma Output Terminal: 3 Output Timer: 0-9.59 Hours Power Cord: Yes Input Rating: 200-260 Vac/50hz:	50
10.	Autoclave	Double walled construction. Inner body is made of stainless steel and outer body made of mild steel with powder coated. Lid made of thick stainless steel. Wing knot type, Pressure of 10 to 20 psi. Complete with pressure gauge, safety valve, steam release valve. Temp. control by digital. Capacity: 40 litres. Inner Chamber Size: Height: 300 x 500mm, 3.0 kw	100
11.	Magnetic Stirrer	Top Plate Size-18x18cm	50

	with Hot Plate	Top Plate material-Ceramic Heating Range-50-500 °C Max Load-11KG Speed Range-100-1200rpm Max Capacity-5L	
12.	Analytical Balance	Maximum capacity [Max]-220 g Readability [d]-0.1 mg Max repeatability (5% Max)*-0.07mg Linearity- ± 0.2 mg Display-LCD (backlit) Weighing pan dimensions- 100 mm Max repeatability-0.1mg	50
13.	Hot air oven	Microprocessor PID controller (with timing function), Capacity-80L Interior (mm)-450x400x450 Heater Wattage "W"-1.5 KW. Shelves-2 Temperature Range-Ambient to 250°C Temperature Stability- $\pm 0.5^{\circ}\text{C}$ Power Consumption-220/230V, AC $\pm 10\%$, AC Supply Single Phase 50 Hz	100
14.	UV-Vis Spectrophotometer	Micro controller based, stand alone unit Single Beam, Deuterium lamp and tungsten halogen lamp Alphanumeric LCD display Automatic source optimisation 200 – 1100 nm range 1 nm bandwidth %T, ABS, CONC measuring modes Single / Multi wavelength and Spectrum / Time Scan operating modes	50
15.	Digital Water Bath	Capacity: Up to 6 L Heating Mode: Bottom heating, water temperature natural convection Temperature Range: RT+5°C to 100°C Temperature Resolution: 0.1°C Temperature Motion: $\pm 0.5^{\circ}\text{C}$	50
16.	Colorimeter	With 8 filter Wavelength-400 nm to 700nm Light Source-6.3v 0.3A Lamp Display-2½ Digit Digital Panel Meter (DPM) Calibrated Directly in % Transmission & Optional Density Resolution-1% Transmission mode & 0.01 in optical density mode Power Consumption-220/230V AC $\pm 10\%$, AC Supply Single Phase 50 Hz Power Supply-230 $\pm 10\%$ 50 HZ	
17.	CENTRIFUGE (Rotors- 8 tubes, 12 tubes)	Maximum Speed: 5250 RPM Maximum RCF: 300g Maximum Capacity: 300 ml Dimension: 365 x 415 x 350 mm, Stainless steel centrifuge chamber, microprocessor controller with a digital display, current overheating safety cutoff circuit with soft and smooth start button	100
18.	Desktop Computer (3 years warranty) UPS	i5, 12th Generation. 8GB RAM. 512 x 2 GB SSD, windows 11, MS Office, Monitor, 23.8 inch; 1 KVA line interactive	
19.			
20.	pH meter (range: 0 to 14. 00) (Buffer tablet- 4.0, 7.0, 9.0 included)	pH range: 0 to 14. 00 MV range: 0 to +1999. 9, +1 mv Resolution: 0. 01 pH, in pH range 0. 1 mv in mv range	

		Repeatability; 0. 01 pH 1 digit 1 mv1 digit Standardization range: 3 point (7. 00 pH, 4. 02 pH, 9. 20 pH) Temp compensation: 0- 100 °C automatic compensation with temp probe (pt 100) Display; 20 x 4 alpha numeric LCD	
21	Micro-auto-pipette 2-20 microL (Eppendorf, Thermo Fischer, Finpipette and equivalent)	Can pipette volumes ranging form 02-20 microliter, Mechanical piston stroke pipette using the air-cushion principal, Volume identification supported by colour codes, 120-degree adjustable finger rest, Silent and light volume adjustment, with volume setting ring, with volume display window, separate ejector button, white separate marks the decimal place, two button operation, minimum force associated with attaching and ejecting pipette tips, High chemical resistance, Fully autoclavable.	100
22	Micro-auto-pipette 20-200 microL (Eppendorf, Thermo Fischer, Finpipette and equivalent)	Can pipette volumes ranging from 20-200 micro-liter, Mechanical piston stroke pipette using the air-cushion principal, Volume identification supported by colour codes, 120-degree adjustable finger rest, Silent and light volume adjustment, with volume setting ring, with volume display window, separate ejector button, white separate marks the decimal place, two button operation, minimum force associated with attaching and ejecting pipette tips, High chemical resistance, Fully autoclavable.	100
23.	Tips, holder for micro-auto-pipette		100 each
24	Ganong's Potometer/	BOROSIL/JSGW/ any make with heavy glass	300
25	Farmer's Potometer	BOROSIL/JSGW/ any make with heavy glass	300
26	Wilmott's Bubbler	BOROSIL/JSGW/ any make with heavy glass	300
27	Double distillation Quartz Unit/ good quality borosilicate unit	Quartz boiler : Quartz condenser • Distilled water output in 2-3 minutes. • Pyrogen free, free of heavy metals. • Powder coated stand for rust free operation. • Safety cut off device is included. Distillate Quality • Conductivity: < 1.0 μ S/cm • Distillate Temperature: 65 to 75°C • Distilled Water Quality: Pyrogen Free	50
28	Chromatography Paper (Whatman No 1)	Pack of 100 sheets (Size 20x20 cm)	150
29.	REFRIGERATOR	Single door, 180L/200L capacity	
30.			

CHEMISTRY

1.	Ostwald's viscometer	General	600
2.	Stalagmometer	General	600
3.	Beckman Thermometer	-10 to 250°C.	300
4.	Potentiometer	MV range- $\pm$ 1999 MV resolution-1 MV Repeatability-1MV $\pm$ 1 Digit. Display-3½ Digit LED With Auto Polarity & Decimal	150
5.	Copper Calorimeter	<u>General</u>	150
6.	pH meter	pH range: 0 to 14. 00 MV range: 0 to +1999. 9,+1 mv Resolution : 0.01 pH, in pH range 0. 1 mv in mv range Repeatability; 0. 01 pH 1 digit 1 mv1 digit Standardization range : 3 point (7. 00 pH, 4. 02 pH, 9. 20 pH)	150

		Temp compensation:0- 100°C automatic compensation with temp probe (pt 100) Display; 20 * 4 alpha numeric LCD	
7.	Colorimeter	With 8 filter Wavelength-400 nm to 700nm Light Source-6.3v 0.3A Lamp Display-2½ Digit Digital Panel Meter (DPM) Calibrated Directly in % Transmission & Optional Density Resolution-1% Transmission mode & 0.01 in optical density mode Power Consumption-220/230V AC ± 10%, AC Supply Single Phase 50 Hz Power Supply-230± 10% 50 HZ	150
8.	Digital Water Bath	Capacity: Up to 6 L Heating Mode: Bottom heating, water temperature natural convection Temperature Range: RT+ 5°C to 100°C Temperature Resolution: 0.1°C Temperature Motion: ±0.5°C	100
9.	Melting Point Apparatus	Accuracy: up to 0.8 deg C Temperature Resolution: 0.1 deg C	150
10.	Conductivity Meter	Conductivity Range-0.1µ MHO or µS to 100m MHO or MS Measuring Accuracy-±1% of FS ±1 count Display-20*4 Digit LCD Conductivity Cell-0.1C.C & 1.0C.C Cell constant-Acceptable from 0.1 to 5.0 Temperature-0 to 100°C Auto temp Controller	150
11.	Balance- Analytical	Maximum capacity [Max]-220 g, Readability [d]-0.1 mg Max repeatability (5% Max)-0.07mg Linearity- ± 0.2 mg Display-LCD (backlit) Weighing pan dimensions- 100 mm Max repeatability-0.1mg	50
12.	Single Distillation Unit	Borosilicate	50

ZOOLOGY			
Sl. No.	Item	Specification	Number
1	BOD Incubator (Of Thermo, Remi, Genei, BD Biosciences and equivalent)	Temperature range 0°C to 60°C, Unique design of thermal barrier for better energy efficiency · Machine filled PUF insulation to eliminate void pockets · Powerful fan motor for forced air circulation to maintain uniform conditions inside chamber Heating by long life SS tubular heaters · Chamber calibration port on side · Adjustable trays · Hermetically sealed Compressor with CFC · free refrigerant High temperature safety cut off & alarms for high / low set parameters · Sensor failure alarm · Electrical circuit breaker · Time delay for compressor switch on · Overload cut off relay for compressor Rounded inner chamber for easy cleaning · Attractive door profile · Microprocessor controller with LED display of · Temperature with set, process value & audio visual alarm (standard) · CLS (Custom Logical Safe) control	150

		system with logical safety devices. Internal Volume (Litres): 280 Number of tray: 3 Internal Dimensions : 660w x 655d x 650h mm External Dimensions: 800wx 1095dx1220h mm Temperature Range & Accuracy: 0°C to 60°C, $\pm 0.1^{\circ}\text{C}$ Temperature control: Microprocessor with PT100 sensor Display: 1" – 7 Segment, Big Size LED Power Failure Alarm: Visual Alarm Door Open Alarm: Audio Visual Alarm in case door open for over one minute Temperature Variation Alarm: Set Temperature $\pm 2^{\circ}\text{C}$, Audio Visual Alarm Illumination: 8 Watts Fluorescent Tube Internal Body Material: Stainless Steel – 304 grade External Body Material: Powder Coated CRCA Steel Insulation: 70 mm minimum for Body & 80 mm for Door, CFC free polyurethane foam Noise Level: Less than 65 db(A) with 3 kva voltage stabilizer	
2	Orbital incubator shaker (Of Thermo, Remi, Genei, BD Biosciences, Tarson and equivalent)	Brushless induction Motor with variable frequency drive suitable for continuous operations, Step less variable frequency drive ensures gentle shaking start and maintains set speed, Counter balanced mechanism for high stability in uneven load of different sized flasks, Universal Shaking Platform to accommodate different sized assorted flasks, Maximum shaking capacity " 9 Flasks x 2000 ml, Powerful fan motor for forced air circulation to maintain uniform conditions inside chamber, Machine filled PUF insulation to eliminate void pockets Unique design of thermal barrier for better energy efficiency Heating by long SS tubular heaters, Additional tray to store samples, Chamber calibration port on side, Microprocessor controller with 4 LCD display for display of shaking speed & temperature, 9 programs memory, Power failure and resumption recorded with data and time. High temperature safety cut off & alarms for high / low., set temperature, Electrical circuit breaker, Rounded inner chamber for easy cleaning, Attractive door profile Temperature Range & Accuracy: 5°C to 60°C, $\pm 0.5^{\circ}\text{C}$, Internal Volume (Liters): 215, Platform Size: 580mm x 600mm, Shaking Speed range (RPM): 20 to 250 Shaking Amplitude: 25 mm, Internal Dimensions : 660w x 765d x 650h mm, External Dimensions : 800w x 1150d x 1300h mm Temperature control: Microprocessor with P, 100 sensor. Display: 4" LCD Screen, Large size Display for ease of Reading., Power Failure Alarm : Audio Visual Alarm, Door Open Alarm : Audio Alarm in case door open for over one minute Temperature Variation Alarm : Set Temperature $\pm 2^{\circ}\text{C}$, Audio Visual Alarm, Illumination: 8 Watts Fluorescent Tube, Internal Body Material: Stainless Steel – 316 grade, External Body Material: Stainless Steel – 304 grade, Insulation (CFC free polyurethane foam): 70 mm, minimum for Body & 80 mm for Door Noise Level : Less Than 65 db (A), 3 kva voltage stabilizer Clamps: for: 1. 50/100 ml conical flask- 5 2. 150/250 ml conical flask -5 3. 500 ml conical flask -5 4. 1000 ml conical flask -2	150
3	Research weighing machine (Mettler	Complete with glass wind shield and one Touch. Function key having sliding door Opening/closing	150

	Toledo, Sartorius and equivalent)	System. Internal Calibration. Overload Protection, Levelling feet and Level indicator Ant- theft device Unit conversion facilities. Brilliant Back lit display Maximum Capacity: 220 gm. Readability: 0.1 mg. Repeatability: 0.1 mg. Linearity: 0.2 mg. Response time: 2 sec. AC Adapter 230 Volts. Tare range full Platform dimension: 90 mm. Balance dimension: 347x204x345mm (L X W X H) Diagnostics: Easy running of balance diagnostics test e.g. key pad test & repeatability test Other inbuilt application: Piece counting Percentage weighing, Dynamic weighing, Statistics weighing, totalling, free factors, recall, High performance mono Block weighing cell for fast and accurate result. Cal Int : At a key stroke with and internal weight Protective Covers: Encloses the entire housing protecting the balances from stains and scratches. Protecting the balances from stains and scratches.	
4	Microwave (Samsung, IFB, Haier, Panasonic, LG, Godrej and equivalent)	32 L SlimFry™ Convection Microwave Oven. The durable CERAMIC INSIDE™ is easy to keep clean and scratch-free. Its smooth surface can be cleaned without scrubbing and won't discolour over time. It's also highly rust and scratch-resistant, so it last longer. Type- Convection, Power Consumption (Microwave)-1400 W, Wide Grill enables to gels more evenly by improving coverage up to 99% compared to conventional grill heaters. Dimensions (W x H x D) Outside (Include Handle) 523 x 309 x 506 mm, Oven cavity 373 x 233 x 363 mm. Colour: Metallic black.	150
5	pH Metre (Mettler Toledo, Thermo Fisher and equivalent)	Parameter: pH; ORP Ready-to-measure kit pH measuring range: 2–16 pH resolution: 0.01; 0.1 pH accuracy (±):0.01 mV measuring range: 0 mV resolution: 1 mV accuracy (±):1 Temperature Range: -5 °C – 105 °C Temperature Resolution: 0.1 °C Temperature accuracy (±):0.3 °C Memory: 200 measurements	150
6	Magnetic stirrer (Tarson, Remi, Genei and equivalent)	Rugged Aluminium die cast housing. Acid & Alkali resistant glass ceramic top. Reflective bright white colour enhances solution visibility. An energy regulator supplies power to the heating element a certain percentage of the time depending upon the dial setting. Electronic speed control from 100-1000 RPM. Temp Range 150-500 C. Stirring max capacity – 5L. Ceramic plate dimension 18x18. Dimension: 19 x11 x21 cm. Power: Vac 240, Hz 50, Amps 4.7, Watts: 1115	150
7	Ice flaker machine	Air cool, Control board display, Stainless steel, corrosion free exterior and interior Adjustable feet, Capacity: 100 kg for 24 hours. Voltage: 220 V, Compressor:Danfoss, Evaporator Fan: EBM, Ice Type: Flake, External Dimension: 520x550x960mm (WxDxH), Refrigerant: R134a	150
8	Micro centrifuge (Tarson, Remi, Borosil and equivalent)	a) A Quiet and Efficient unit, with a small footprint. b) RPM and run-time can be set on the digital display, using the membrane key pad. c) Pulse option also provided. Standard fixed angle rotor for 6x1.5ml micro tubes. d) Optional extra rotor for 12x0.5ml micro tubes. e) Speed upto 10,000 RPM, RCF: 5585g.	150
9	Homogenizer with 5ml, 10ml, 15ml,25ml and 100 ml compatible cups	Suitable for homogenizing of tissues at high speed available. Chuck to hold shaft up to 10 mm dia. fitted with Teflon grinding pestle (50ml).cup supplied as standard. Glass homogenizing cup with rod supplied as standard, Stirring Shaft: 8 x 275 MaxVolume:Upto100ml.	150

10	Gel Rocker (Remi, Genei, Tarson, BD Bioscience and equivalent)	Metal platform with non-slip rubber mats moving in gentle see-saw motion, movement precisely controlled with a DC motor, cushion and rubber feet to prevent unit from slipping, Time set or continuous, both options should be available.	150
11	UV, VIS spectrophotometer (Thermo Fisher, Antech, Systronics and equivalent)	OPTICS DOUBLE BEAM WITH HOLOGRAPHIC DIFFRACTION concave grating (grating -1200mm lines/mm), 10.1 inch multi-touch lcd with 1200x800 resolution support windows 10 or higher version, inbuilt smart station with windows 10 operating system, separate login for administrator and user, support up to five different user login, audit trail function, standalone and pc operating mode, bluetooth and wifi connectivity, inbuilt 128 gb memory and expandable, special provision for nitrate and fluoride analysis, two cuvette holders, one for reference other for samples, support all printers supporting windows 10 or higher version, 1 nm bandwidth,, wavelength range 190 nm to 1100 nm, %t, abs, concentration (by k-factor, by standard, or by saved standard), dna and protein analysis, multicomponent analysis, fluoride analysis, nitrate analysis, and time scan, automatic baseline correction, automatic lamp selection, automatic sample position (optional), automatic stray light correction, automatic dark correction, automatic wavelength selection and order cut-off filter selection, support 20mm/40mm/50mm/100mm pathlengths (OPTIONAL), Perfect calibration system Technical Specification Optical System: Double Beam (1200 Lines/mm Grating) Wavelength Range: 190-1100 nm Wavelength Accuracy : ± 0.1 nm (D2 656.1) ,± 0.3 nm @all Wavelength Repeatability : ≤ 0.1 nm Photometric Accuracy : ± 0.005 Abs Photometric Repeatability :± 0.002 Abs Photometric Range:-0.3-3 A,-0-200% T,-0-9999 C Stability: ± 0.0003 A/h @ 500 nm Baseline Flatness: ± 0.0015 Abs Noise: ± 0.0005 Abs Stray Light: $\leq 0.03\%$ @ 220 nm,360 nm Lamps: D2 Lamp &W Lamp Detector : Silicon Photodiode Power Requirements: AC 220V/50Hz	150
12	Micro-auto-pipette 0.2-2 microL (Eppendorf, Thermo Fischer, Finpipette and equivalent)	Can pipette volumes ranging form 0.2-2 microliter, Mechanical piston stroke pipette using the air-cushion principal, Volume identification supported by colour codes, 120-degree adjustable finger rest, Silent and light volume adjustment, with volume setting ring, with volume display window, separate ejector button, white separate marks the decimal place, two button operation, minimum force associated with attaching and ejecting pipette tips, High chemical resistance, Fully autoclavable.	150
13	Micro-auto-pipette 2-20 microL (Eppendorf, Thermo Fischer, Finpipette and equivalent)	Can pipette volumes ranging form 0.2-20 microliter, Mechanical piston stroke pipette using the air-cushion principal, Volume identification supported by colour codes, 120-degree adjustable finger rest, Silent and light volume adjustment, with volume setting ring, with volume display window, separate ejector button, white separate marks the decimal place, two button operation, minimum force associated with attaching and ejecting	150

		pipette tips, High chemical resistance, Fully autoclavable.	
14	Micro-auto-pipette 20-200 microL (Eppendorf, Thermo Fischer, Finpipette and equivalent)	Can pipette volumes ranging from 20-200 micro-liter, Mechanical piston stroke pipette using the air-cushion principal, Volume identification supported by colour codes, 120-degree adjustable finger rest, Silent and light volume adjustment, with volume setting ring, with volume display window, separate ejector button, white separate marks the decimal place, two button operation, minimum force associated with attaching and ejecting pipette tips, High chemical resistance, Fully autoclavable.	150
15	Micro-auto-pipette 200-1000 microL (Tarson, HiMedia, Eppendorf, Thermo Fischer, Finpipette and equivalent)	Can pipette volumes ranging from 200-1000 microliter, Mechanical piston stroke pipette using the air-cushion principal, Volume identification supported by colour codes, 120-degree adjustable finger rest, Silent and light volume adjustment, with volume setting ring, with volume display window, separate ejector button, white separate marks the decimal place, two button operation, minimum force associated with attaching and ejecting pipette tips, High chemical resistance, Fully autoclavable.	150
16	Vortex mixer (Tarson, BD Bioscience, Genei and equivalent)	Heavy metal base & rubber feet prevent movement of the shaker during use. Choice of Continuous and touch mode, Variable speed control, Includes three attachments one hand insert, micro tube insert & cup attachment, Maximum speed 3000 RPM	150
17	Trinocular Microscope (Olympus, Lawrence and Mayo, Leica and equivalent)	Head: Binocular, 30 degree inclined and rotatable 360 degree, Eye peace 10X/20mm FOV, Nosepiece: Reversed, quadruple, Objective: Plane achromatic 4X, 10X, 40X and 100X oil immersion. Condenser 1.25 NA Condenser, Stage-rack less and mechanical, Coarse and fine focussing, LED illumination, Dust cover, immersion oil and instruction manual included. 5years mechanical and 1-year electrical warranty.	150
18	Simple Dissecting Microscope	Brass simple dissecting microscope. 10X, 20X eye-piece, Focus via rack and pinion, Plano concave mirror, Bottom type-Heavy round base	150
19	Turbidity Meter	IP67 Waterproof and Dustproof - Cleaning and maintenance is simple. Automatic Push-Button Calibration (4 points) for unprecedented full-range accuracy. Sturdy Carrying Kit complete with 4 calibration standards, 3 empty cuvettes, batteries and comprehensive instruction manual. Power-saving feature allows over 1200 measurements to be taken with a single set of AAA alkaline batteries. Large Easy-to-Read Display for optimum viewing of measurements with user-friendly message codes for easy troubleshooting. Meets Performance Criteria as specified by ISO 7027 (DIN EN 27027) method Measuring Parameter: Turbidity, Highlights: Light weight, IP67 waterproof meter. Principle: Nephelometric non-ratio/ ISO 7027 and DIN 27027 compliant. Range: 0 to 2000 NTU. Automatic Range Selection: 0.01 to 19.99 NTU; 20.0 to 99.9 NTU; 100 to 2000 NTU. Resolution: 0.01 NTU (0 to 19.99 NTU); 0.1 NTU (20.0 to 99.9 NTU); 1 NTU (100 to 2000 NTU), Accuracy: < 0.1 NTU for 0.02 NTU standard; $\pm 2\%$ of reading ± 1 digit for 0 to 500 NTU; $\pm 3\%$ of reading ± 1 digit for 501 to 2000 NTU Repeatability: < $\pm 1\%$ of reading, Calibration: Up to 4 points, Calibration Standards: 0.02 NTU, 20.0 NTU, 100	150

		NTU, 800 NTU, Response Time: < 6 secs for full step change, Sample Volume: 10 mL, Light Source: Infrared-emitting diode (850 nm wavelength), Operating Temperature Range: 0 to 50 °C, Sample Temperature Range : 0 to 50 °C, Enclosure Type & Rating: ABS plastic & IP67 rated, Power: 4 x 1.5 V 'AAA' alkaline batteries (> 1200 readings), Dimensions (LxWxH): Meter: 15.5 x 6.8 x 4.6 cm; Boxed: 35.5 x 16.5 x 10.5 cm, Weight: Meter: 200 g; Boxed: 1,160 g.	
20	LAMINAR AIR FLOW (HORIZONTAL)	SIZE OF THE WORKING TABLE: 4 X 2 X 2 FT. Horizontal Laminar Air Flow Microprocessor based switches and speed control. CONSTRUCTION: Anti microbial powder coated (60 to 80 µ) galvanized iron sheet with epoxy polyester thermosetting sheet. SIDE GLASS: 6 mm float glass encased in stainless steel channels TABLE TOP: 1.2mm stainless steel 304 sheet with impeccable finishing without any gaps. FRONT DOOR: Frameless gas spring loaded swinging type made of polycarbonate 6mm thickness. MOTOR BLOWER ASSEMBLY: Variable speed motor mounted on PU coated FRP blower with aluminium powder coated impellers. CLEANLESS CLASS: ISO Standard 14644.1 Class 5(class 100) VELOCITY: 100 FPM at 6" from face of the filter. NOISE LEVEL: 60 db at 1 meter from face of the equipment along with anti vibrator. PRESSURE GAUGE : Digital Mini-helic gauge for monitoring the condition of all HEPA filters as well as work space with audio visual alarm. WHEELS AND LEVELLING LUGS: PU solid wheels with S.S. 304 brackets and 304 S.S. lugs. DESIGN CLASSIFICATION: Angle front slope of 10° to reduce operator fatigue while working, as per IEST RP CC002.2. STAGE FILTRATION: I) Pre-filter-10µm with efficiency of 90% washable HDPE media PU coated with 304 S.S. frame. II) Mini Pleat HEPA filter of 0.3 micron with an efficiency of 99.995% (anti microbial treated media) Fluorescence Light : 36 watt 2 nos. UV Light : 3 feet length 30 watt I no Work Area Dimension : 1180 x 610 x 572 mm External dimension : 1315 x 780 x 1440 mm Power supply: 230 Volt, 50 Hz, single phase	150
21	SEMI AUTOMATIC MICROTOME	Section Thickness Range: 0.5-100µm Section Thickness Setting: 0.5-5µm, in 0.5µm increment 5-20µm, in 1µm increment 20-60µm in 5µm increment 60-100µm in 10µm increment Trimming thickness setting: 1-600µm Setting Values: 1-10µm in 1µm increment 10-20µm in 2µm increment 20-50µm in 5µm increments 50-100µm in 10µm increment	150

		100-600µm in 50µm increment Horizontal feed: 28mm Vertical Specimen Stroke: 60mm Sectioning Speed: Adjustable, 3 different speeds Specimen Retraction; 5-100µm in 5µm increments, can be turned off Minimum Setting Value: 0.5µm Remote Control : Optional Max Specimen Size: 50x50 mm Specimen Orientation: Horizontal 8°, Vertical 8° Nominal Supply Voltages: 110/220 V AC ± 10% Nominal Frequency: 50/60 Hz Power Draw: 200 VA Dimensions basic instrument: 480 x 620 x 340 mm (W x D x H)	
22	AUTOCLAVE	Double walled construction. Inner body is made of stainless steel and outer body made of mild steel with powder coated. Lid made of thick stainless steel. Wing knot type, Pressure of 10 to 20 psi. Complete with pressure gauge, safety valve, steam release valve. Temp. control by digital. Capacity: 40 ltrs. Inner Chamber Size: Height: 300 x 500mm, 3.0 kw	150
23	Double distillation Quartz unit	Quartz boiler : Quartz condenser • Distilled water output in 2-3 minutes. • Pyrogen free, free of heavy metals. • Powder coated stand for rust free operation. • Safety cut off device is included. Distillate Quality • Conductivity: < 1.0 µS/cm • Distillate Temperature: 65 to 75°C • Distilled Water Quality: Pyrogen Free	150
24	Refrigerator	419 L, 3 Star, Convertible 5-in-1, Digital Inverter, Frost Free Double Door Refrigerator, Black Matte, Frost Free Refrigerator with Bespoke AI: Premium Auto Defrost with powerful cooling and long lasting freshness. Powered with AI, get additional 10% Energy Savings with AI Energy Mode. Manage your flexible storage needs with Convertible 5in1 technology: Normal Mode, Extra Fridge Mode, Seasonal Mode, Vacation Mode, Home Alone Mode Capacity 419 liters: Energy Rating : 3 Star Energy Efficiency, Manufacturer Warranty : The product comes with a 1 year comprehensive warranty and a 20 years warranty on the digital inverter compressor, Digital Inverter Compressor provides greater energy efficiency, less noise and long-lasting performance while consuming 50% less power, backed up by 20 year warranty, Interior Description : Fresh Food Capacity : 324 Ltr, Freezer Capacity : 95 Ltr, Total no. of compartments : 2, Shelves : 3, Vegetable Drawers : 1, Shelf Type : Toughened Glass Shelves, Anti Bacterial Gasket, Special Features : AI Energy Mode, SmartThings, Convertible 5-in-1, Twin Cooling Plus, Active Fresh Filter Fresh Room Power Freeze Power Cool, Additional Features : Stabilizer Free Operation (100v - 300v), Multi Flow, Flat Door Design, Recess Handle, Easy Clean Back, Veg Box, Big Bottle Guard (Deep Door Guard) LED Light, Item Dimensions : (WxHxD)(cm): 70 x 179 x 74.7 cm Net Weight 67 kg, Included in the box : 1 Refrigerator unit, User Manual, Warranty Card, Egg Tray, Movable Ice Maker	150
25	Refrigerated Centrifuge (Bench top)	Programmable compensation for true sample temperature Pre Cooling Fast Spin Calibration window on lid for speed Self diagnostic of errors	150

		PC connectivity with software Brushless motor with frequency drive Inverter fault detection with auto shutdown Calibration window on lid for speed LCD display Digital control communication. Bidirectional encoder CFC free refrigeration System No of programs: 99 Last set parameters recall Digital countdown timer 0-99 min & continuous run User defined program name for 5 programmes Automatic door opening. Automatic rotor identification Motor over load protection Emergency lid lock release Imbalance detection with centrifugation cut off Gas hinge to prevent door opening Acceleration profiles: 9 Deceleration profile: 9 & Coasting Max. Speed: 20,000 rpm Max. rcf : 37,570 Max. Tube size: 100ml Max.capacity:400ml Temp.: -8°C to 40°C Noise: ≤60dB Dimension (wxdxh): 775x575x475 mm Power Supply: 220-240v 50Hz single phase. Safety feature as per international guideline Operate under tropical Indian room condition. ROTOR: 24 x 1.5 ml, 12 x 15 ml , 8 x 50	
26	Water Bath	Multipurpose water bath with adjustable double line six holes to hold different size samples for easy & hygienic heating. Must provides precise and constant temperature helps achieving uniform heating for the samples. Salient Features: Microprocessor control with timing function, Digital display, Audible and visual alarm for over temperature, Temperature range $RT \pm 5^{\circ}C$ ~ $99^{\circ}C$ Temperature stability $\pm 0.5^{\circ}C$, Tracking alarm $\pm 2^{\circ}C$, Chamber volume 15 Ltrs, Interior Dimension (WxDxH, mm) 450x300x110, Timing range 1~999min, Double lines six holes, Electrical requirements 220V, 50Hz, Single phase Power Consumption 1500W	150

Annexure 2

Declaration that Manufacturers or Authorized Dealers or Registered Firms is not blacklisted

To

The Director,
Higher Education Department, Campus-II, HoD Building, 5th Floor,
Bhubaneswar, Odisha, PIN- 751001.

We hereby confirm and declare that we, M/s -----, is not blacklisted/ De-registered/ debarred by any Government Department/ Public Sector Undertaking/ Private Sector/ or any other agency for which we have supplied laboratory equipment in the last 5 years.

For -----

Authorised Signatory Date:

Technical Bid

Sl. No.	Description	In details	Remarks
1	Name of the Manufacturers or Authorized Dealers or Registered Firms		
2	Complete Address & Telephone Address with E-mail		
3	Name of the Proprietor/Partners of the Agency/Firm		
4	Last 3 years balance sheet/profit and Loss statement		Document to be attached
5	Copy of Income Tax Return and PAN Number with Proof for last 3 financial years i.e. 2021-22, 2022-23 and 2023-24		-Do-
6	Copy of Registration of Company of Register, GST, etc		-Do-

Note :- all documentary proofs have to be attached for above items.

I do hereby agree to abide by all the terms and conditions of the tender documents.

Name & Signature of the
Authorised Signatory (with Seal of the agency
affixed)

date

Annexure-4**Financial Bid**

Sl. No.	Specification	Apprx. nos	Price per unit	GST	Total Price per unit including GST
01					

Yours faithfully,
Authorised Signature of the firm
Name
Designation

Annexure-5**Tender Acceptance Letter**

I/We _____ S/D/W/o
_____ in the capacity of M/s
_____ hereby declare that I/We will be
abided by the terms and conditions of the Tender Call Notice No. _____ Dt.
_____ issued by Director, Higher Education Department, Bhubaneswar and
will supply and install the Lab Equipment / Furniture, whenever necessary, within the
stipulated time, if selected and order is placed with us, failing which actions can be
initiated against me/us.

Signature with seal

Undertaking for having Service Centre in Odisha

I/We hereby confirm and declare that I/we, M/s _____,
has/have a service centre in Bhubaneswar, Odisha.

OR

I/We hereby confirm and declare that I/we, M/s _____,
will set up a service centre in Bhubaneswar, Odisha on or before 03.03.2025.

For _____

Authorised Signatory

Date: