

**Ponda Education Society's
Ravi S. Naik College of Arts and Science,**

**Farmagudi, Ponda Goa - India 403401
Reaccredited by NAAC with A+ Grade and CGPA of 3.47**

OPEN TENDER DOCUMENT

For procurement of equipment and Consumables under
Star College Scheme of Department of Biotechnology
Ministry of Science & Technology, Govt. of India.

INSTRUCTIONS TO THE TENDERERS

Section 1:

- 1. Tender Reference:** DBT Star College Scheme
- 2. Date, Time, and Place of Submission:** The tender form should be downloaded from www.pesrscncollege.edu.in or obtain the document from the office of the College at Farmagudi, Ponda Goa, on payment of a non-refundable tender fee of Rs. 500/- by cash or cheque drawn in favour of "Ponda Education Society's Ravi S. Naik College of Arts and Science" payable at Farmagudi, Ponda Goa, in person or through an authorized representative only. The filled Tender is to be submitted at the office of the Principal, Ponda Education Society's Ravi S. Naik College of Arts and Science, Farmagudi, on or before 12.00 p.m. on 06-09-2025 along with the Earnest Money Deposit.
- 3. Bid Type:** Two Bid System: (Technical and Financial bid)
- 4. Mode of Submission:**
Tender should be submitted with duly signed covering letter. Documents must be submitted in two sealed envelopes Technical Bid and Commercial Bid/Financial Bid subscribing on both the envelopes the Tender Reference. The tender envelope shall clearly specify the

Category and Code of equipment for which the tender is submitted Both these sealed envelopes are to be put in a bigger cover which should also be sealed and duly subscribed with our Tender reference & Date.

5. The tender shall be submitted in a sealed envelope, and shall contain the original Tender Document duly filled in, with quoted rates, details of warranty, etc.
6. Only those tenderers who qualify for the Technical Bid will be invited for commercial /financial bid
7. The Tender envelope should be superscribed by the **Category, Serial Number** and **Code Number** of the equipment. Details of the specification provided in **Annexure 2**.
8. Tenders without above details on the envelope will be rejected without assigning any reason.
9. The leaflets, catalogues, etc. should be sent invariably so that a proper evaluation of the equipment/Consumables offered is possible. Tenders without these details will be rejected.
10. Quoting of Price (s): Price quoted should be in Indian Rupees, free delivery at P.E.S.'s Ravi S. Naik College of Arts and Science, Farmagudi at site.
11. Communication with bidders will be carried out electronically and /or in hard copy. All bidders must provide their current email address and contact number.
12. The purchaser shall not be responsible for any postal delay and delay in receipt of the offer. Any bids received by the purchaser which does not fulfil the desired terms and conditions shall be rejected outrightly and no communication in this regard shall be sent. Delayed /Late Bids will not be accepted, at any circumstances
13. All the equipment should be supplied with minimum three years warranty
14. Price bid must be submitted in enclosed price bid format only. If Price bid is not quoted in PRICE BID as provided in Appendix 1 then, the bid will be rejected.
15. Quoting of Price (s): Price quoted should be in Indian Rupees, free delivery shall be given at Ponda Education Society's Ravi S. Naik College of Arts and Science, Farmagudi, Ponda Goa 403401.
16. Any bidder currently engaged in litigation with other Organizations, must inform their status in writing.

- 17.** The college shall not be responsible for any postal delay and delay in receipt of the offer. Any bids received by the college which does not fulfil the desired terms and conditions shall be rejected out rightly and no communication in this regard shall be sent. Delayed /Late Bids will not be accepted, at any circumstances.
- 18. Opening of Tenders:** The tenders will be opened in the presence of the tenderers or their duly authorized representatives, if any as per schedule to be communicated to the tenderers, as per the category of the equipment.
- 19. Validity of the Tender:** The tenders submitted shall remain valid for a period of 90 days from the date of opening. Tenders once submitted shall not be withdrawn.
- 20. General Instructions:** The tenderers shall carefully examine the list of equipment and the technical specifications provided in the **Annexure 2** and strictly adhere to the technical specifications' detail provided therein.
- 21. Certificate of Authorization:** Only those vendors who are authorized suppliers of the equipment shall be permitted to submit their bid, and the certificate of authorization issued by the company shall be submitted along with the tender document. Bids received without the certificate/s shall be considered invalid.
- 22. Time for supply of Equipment:** 30 days from the date of issue of Purchase Order.
- 23. Advance: NOT ADMISSIBLE**
- 24. Taxes:** The rates quoted by the tenderers shall be **inclusive of GST. No other charges, including packing, delivery and installation shall be admissible.**
- 25. Earnest Money Deposit (EMD):** The tenderer shall submit Earnest Money Deposit equivalent of 2% of the amount quoted. Tenders received without EMD shall be considered as invalid. The EMD of unsuccessful bidders shall be returned within two weeks of opening of the tenders.
- 26.** The successful bidder shall submit 5% of the cost of equipment as security deposit. Security deposit will be returned on the completion of the warranty period.

27. Terms of Payment: Full and final payment shall be effected within 30 days from the completion of installation and successful commissioning of the equipment. All payments shall be effected through the Public Finance Management System (PFMS).

28. Cancellation of the tender

Notwithstanding anything specified in this Tender. document, P.E.S.'s Ravi S. Naik College of Arts and Science in his sole discretion, unconditionally and without having to assigned any reasons, reserves the rights:

- To accept OR reject lowest bidders or any other bidder or all the bidders.
- To accept any bid in full or in part.
- To reject the bid not confirming to the TENDER terms.

29. TRANSFER AND SUBLETTING: The seller shall not sublet, transfer, assign or otherwise part with the acceptance to the TENDER or any part thereof, either directly or indirectly, without the prior written permission of the P.E.S.'s Ravi S. Naik College of Arts and Science.

Section 2: EVALUATION OF OFFER

1. P.E.S.'s Ravi S. Naik College of Arts and Science evaluates technical and commercial acceptable offers on landed net Price basis.
2. Offer which deviates from the vital conditions (as illustrates below) of the TENDER shall be rejected:
 - Non submission of complete offers.
 - Receipt of offers after due date and time and or by email / fax (unless specified otherwise).
 - Receipt of offers in open conditions.
3. In case any BIDDER is silent on any clauses mentioned in this TENDER document, P.E.S.'s Ravi S. Naik College of Arts and Science shall construe that the BIDDER had accepted the clauses as per the invitation to TENDER no further claim will be entertained.
4. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of TENDER.
5. **Right on Acceptance of Tender:** The College reserves the right to reject or accept any of the tenders without assigning any reason

SECTION 2 – ELIGIBILITY CRITERIA

- The Bidder's firm should have existence for minimum period of 3 years – (Copy of Certificate of Incorporation / Registration Certificate of the firm).
- Copy of the PAN CARD of the firm.
- Copy of GST registration certificate.
- Copy of MSME certificate (if registered).
- The Bidder must not be blacklisted /suspended or any service-related dispute with any Organization /Govt. Organizations / Bank in or outside India or any litigation pending. **Annexure 3.**
- Client Details – The bidders must submit at least 3 successfully completion certificates of rate contracts or completed orders. Copies of such rate contracts or purchase orders must be enclosed with the offer. **Annexure 4.**
- Undertaking **Annexure 5.**
- If bidder is Local dealer/distributor/stockiest, it is mandatory to attach Authorization Certificate along with bid.

SECTION 3 Model Clauses for Tenders:

- I. Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority. Further, any bidder (including bidder from India) having specified Transfer of Technology (TOT) arrangement with an entity from a country which shares a land border with India, shall also require to be registered with the same Competent Authority
- II. “Bidder” (including the term ‘tenderer’ ‘consultant’ or ‘service provider’ in certain contexts) means any person or firm or company including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a procurement process.
- III. ‘Bidder (or entity) from a country which shares a land border with India” for the purpose of this Order means: -
 - A) An entity incorporated, established, or registered in such a country; or
 - B) A subsidiary of an entity incorporated, established, or registered in such a country; or
 - C) An entity substantially controlled through entities incorporated, established, or registered in such a country, or
 - D) An entity whose beneficial owner is situated in such a country; or
 - E) An Indian (or other) agent of such an entity, or
 - F) A natural person who is a citizen of such a country; or
 - G) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above
- IV. The beneficial owner for the purpose of (iii) above will be as under:

In case of a company or Limited Liability Partnership, the beneficial owner is the natural persons(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.

SECTION 4– TERMS AND CONDITIONS

A. AWARD OF CONTRACT :

1. A committee will select the bidders/suppliers for award of contract.
2. The empanelled suppliers will be abiding by all the Terms & Conditions of the TENDER document.
3. All the discounts quoted should be valid for at least two months.

DELIVERY SCHEDULE :

1. Materials should be door delivered at P.E.S.'s Ravi S. Naik College of Arts and Science.
2. Delivery must be made within specified schedule from the issue of the order either directly or through their dealer network unless otherwise specified.
3. If the suppliers fail to deliver the material within the allotted delivery period as specified above, the purchaser may procure goods or services similar to those undelivered upon such terms and in such manner as it deems appropriate from any other firm and the supplier will be liable to the purchaser for any excess cost.
4. Part Supply is normally not acceptable. But may be allowed on genuine cases, on written request only.

B. PENALTY: Timely delivery is essence of the contract and hence if any consignment be delayed, liquidated damages at the rate 0.5% of the price of the delayed consignment, for each week or part whereof shall be levied and recovered subject to maximum of 5% of total purchase order value.

C. FORCE MAJEURE: Force Majeure will be accepted on adequate proof thereof.

D. DISCOUNT: Special Discount should be allowed on your printed Catalogue Price.

E. APPOINTMENT OF LOCAL DEALER/STOCKIEST :

1. The Manufacturers (OEMs) / principals offering for the TENDER may furnish the name and address of their local distributor / dealers, so that the copies can be endorsed them for expeditious supply. In such cases where local dealers / stockiest has been nominated by the principle, the bill raised by them against our purchase order will be accepted.
2. Any addition and deletion of dealership/ distributorship shall be intimated to the undersigned immediately on authorization of a new party.

F. TAXES & DUTIES :

1. GST will be charged as applicable. Any statutory variation will be paid to documentary evidence. Kindly clearly indicate the percentage of GST applicable.

G. LOSS, DAMAGE & SHORTAGE: P.E.S.'s Ravi S. Naik College of Arts and Science shall not be responsible for any loss, damages and shortage during transit. Payment shall be made for materials received in GOOD CONDITION only.

H. GENERAL :

1. The material so supplied will have to be of high quality & grade and in the event if equipment's are found to be of inferior quality, the supplier is liable to be banned or suspended from doing business in P.E.S.'s Ravi S. Naik College of Arts and Science.
2. The acceptance of the offer will rest with the P.E.S.'s Ravi S. Naik College of Arts and Science, who does not bind himself to accept the lowest bid and reserves the right to reject/accept partially or wholly the TENDER received, without assigning any reason.
3. Mere submission of applicable/ proposal does not imply acceptance of the same at this end and the firms will be enlisted only after meeting the laid down qualifying parameters for which decision of P.E.S.'s Ravi S. Naik College of Arts and Science shall be final and binding on the parties.
4. Printed terms and conditions of the applicant on their quotation Form/ Literature/ Letter etc. If any, will not be binding on us.

I. ACCEPTANCE / REJECTION: P.E.S.'s Ravi S. Naik College of Arts and Science reserves the right to accept a quotation in part or in full or to reject all quotations or any of the quotation received, for noncompliance of any of the above items, conditions or instructions or for any other reason without assigning any reason thereof.

J. LEGAL MATTER: All disputes are subject to Goa jurisdiction only.

Annexure 1 BIDDER'S INFORMATION

- | | |
|------------|------------------|
| Sr.
No. | Vendor's Details |
|------------|------------------|
- NAME & ADDRESS OF THE
1. FIRM/VENDOR
(with Tel./Mobile/email address)

NAME & ADDRESS OF THE LOCAL AUTHORISED
DEALER/DISTRIBUTERS, if applicable

Phone with STD code
 2. Fax

Email

Contact Person

Mobile No.
 3. GST NO. OF THE FIRM / DEALER (Copy to be attached)
 4. PAN NO. OF THE DEALER (copy to be attached)
 5. Type of Bidder –
Manufacturer (Please mention)

Authorised Dealer/Stockiest of Chemical / Glasswares/
Labwares (Attach Authorisation Certificate)

Bank Details :

Account Number

6. Bank Name

Bank Address

IFSC Code

7. MSME Details (If registered)

Annexure 2

A. Specification of the equipment and consumables for Technical Bid

Category: Equipment's

Sr. No.	Code No	Department	Name of the equipment	Specifications	Quantity	Specification provided by the Tenderer
1.	B1	Botany	Water bath with digital temperature control (15L)	Size: 400 x 300 x 100 mm Rating watts: 1500 No. of holes : 6 holes		
2.	B2	Botany	Monocular microscope with LED	All metal rugged Stand with individual Coarse Fine Focus drive with focus stop Maintenance Free ECO LED illumination including Battery backup with regulating intensity control for 220V/50Hz Movable Achromatic Condenser 0.90 NA with aperture iris diaphragm 115 X 125 mm double plate Mechanical Stage with coaxial XY Drive knobs, Quadruple revolving nosepiece A revolving nose piece chromatic objectives 4x, 10x, 40x(spring),100x (spring, Oil imm.), 360° rotatable 45° inclined Monocular head with Widefield Eyepiece 10x/18		

				lockable, dust cover complete set packed in thermocole		
3.	B3	Botany	Binocular microscope	Standard set complete with built-in 6V20W halogen light illuminator, quadruple ball bearing nosepiece, focusing by co-axial coarse and fine focusing controls, high resolution long barrel achromatic objectives 4x, 10x, 40x (spring) and 100x (spring, oil immersion), with an inclined Binocular observation tube rotatable through 360 degree fitted with fungus resistant, anti-reflection coated prism, compensating Wide field eyepiece WF10x (F.N.18) and with right hand co-axial low drive mechanical stage, substage Abbe condenser 1.25 N.A with iris diaphragm focusable with rack and pinion (complete set in thermocole packing)		
4.	B4	Botany	Compound microscopes	Student Compound Microscope Objective : 4X, 10X, 40X & 100X Metal body Product Dimensions: 19L x 40W x 26H Centimeters		

5.	B5	Botany	Refrigerator (260L)	Gross Refrigerator Capacity :260 Its Energy Efficiency (Star Rating) :2 star Stabilizer Free Operation, Smart Diagnosis, Anti- Bacterial Gasket, Multi Air Flow System Technology		
6.	B6	Botany	Compact Bench Top Cooling Centrifuge	Stable speed output High Speed (CM-12 Plus) Wide variety of rotors & reduction adaptors Precise temperature control up to - 8°C Pre-cooling feature Fast spin feature Calibration window on lid for speed (rpm) Max. Speed (rpm) – 6000 Max. RCF (g) - 5070 Max. Tube Size (ml) - 100 Max. Capacity (ml) - 400 Min. Temperature (°C) - -8 Dimensions WxDxH (mm) - 480 x 585 x 530		
7.	B7	Botany	Microwave oven	28 L		
8.	B8	Botany	Tissue homogenizer	Handheld, Capacity: 5ml-250ml, 5500mpas Maximum viscosity:		

9.	B9	Botany	Hot plate	500ml beaker X 12 pc Temperature range upto 320° C LED Display		
10.	B10	Botany	Cooling universal lab centrifuge	6000RPM Temperature range upto -4°C LED Display		
11.	B11	Botany	Visible spectrophotometer	Microprocesor controlled, LMSP-V320 can realize auto Zero and auto 100% T adjustment with one push – Botton 12000 lines grating, equipped with USB port which can be connected to PC to Edit data through Specific Software,display absorption, transmittance, Concentration and coefficient directly by different mode switching		
12.	B12	Botany	Soxhlet heating mantle	250ml flask capacity, exterior dimension - (310 x 330 x 160) mm, temperature range - Ambient +5°C to 420°C, LED Display with energy setting from 0-9, Power Consumption -15W		
13.	M13	Microbiology	Digital pH meter	pH/mV/temperature meter with – 2.00–16.00 pH range (± 0.01),	1	

				±1999 mV range, 0–100 °C temperature (±0.5 °C), 3-point auto calibration with ATC, LCD display, and BNC electrode connector.		
14.	M14	Microbiology	Analytical balance	220 g capacity with 0.1 mg readability (0.0001 g), repeatability ~±0.1 mg, linearity ~±0.3 mg, LCD display, internal calibration, pan Ø 90 mm, RS-232 interface, density/counting/underhook modes, response time 4-5 s, AC 220 V; dimensions ~220×360×345 mm, weight ~9.5 kg	1	
15.	M15	Microbiology	Double distillation unit	Distilled water with conductivity ~0.8–1 µS/cm and pH 6.0–7.0	1	
16.	M16	Microbiology	Centrifuge	400 ml capacity (8×15 ml swing-out head), brushless induction motor, max 6,000 rpm (~5,070 g), 0–59 min digital timer, safety lid-lock, imbalance detection, dynamic brake, stainless-steel chamber, dimensions ≈380×470×300 mm, AC 220–240 V, weight ~29 kg	1	

17.	M17	Microbiology	UV lamp	Compact fluorescent 8 W T5 black-light UV-A lamp (12" length, G5 miniature bi-pin base), emitting at ~350–365 nm with a rated life of ~7,500 hours	1	
18.	M18	Microbiology	Cooling universal lab centrifuge	Universal centrifuge with 6,000 rpm max ($\approx 4,910\text{--}4,427 \times g$ depending on rotor), fixed-angle or swing-out rotors (e.g. 4×100 ml or 12×15 ml), cooling to $\sim -10^\circ\text{C}$, brushless/induction motor, auto rotor detection, imbalance cut-off, lid-lock, timer (up to 999 min or continuous), digital speed/time display, airflow or CFC-free refrigeration, stainless-steel chamber, dimensions $\sim 560\text{--}705 \times 480\text{--}330$ mm, weight $\sim 16\text{--}57$ kg	1	
19.	M19	Microbiology	Compound Microscopes	10x, 40x and 100x lens	7	
20.	C20	Chemistry	Potentiometer $\pm 1.999\text{V}$ Single with built in Magnetic stirrer and STD Cell	POTENTIOMETER with built-in magnetic stirrer & standard cell One Button Calibration. μP based	6	
21.	C21	Chemistry	Conductivity meter with battery or mains operated	AUTO RANGING CONDUCTIVITY METER with inbuilt magnetic stirrer & standard conductance (useful for titration) and battery backup	4	

22.	C22	Chemistry	Colorimeter with built in set of 8 imported filters disc mounted reads OD & %T, feather touch	Disc Mounted Filters, Reads %T & OD, square cuvette Battery backup	4	
23.	C23	Chemistry	Conductivity cell	Conductivity cell	4	
24.	C24	Chemistry	Combined glass electrode (pH electrode)	Combined glass electrode (pH electrode)	4	
25.	C25	Chemistry	Calomel electrode	Calomel electrode	4	
26.	C26	Chemistry	Platinum electrode	Platinum electrode	2	
27.	C27	Chemistry	Silver electrode	Silver electrode	5	
28.	C28	Chemistry	Copper electrode	Copper electrode	4	
29.	C29	Chemistry	Zinc electrode	Zinc electrode	4	
30.	C30	Chemistry	Reference electrode Hg/HgO	Reference electrode Hg/HgO	5	
31.	C31	Chemistry	Melting point apparatus	For laboratory purpose	10	
32.	C32	Chemistry	Thermostatic water bath with 6 holes	Capacity – 8 L, Material Stainless Steel	4	
33.	C33	Chemistry	Centrifuge machine	Centrifuge machine (8x15 ml Capacity, 3500rpm)	4	
34.	C34	Chemistry	Weighing balance	Analytical balance with 0.001g readability, Max. capacity – 220 gm	3	

35.	C35	Chemistry	Hot plate cum stirrer (REMI)	5 - MLH Magnetic Stirrers (With Hotplate)	4	
36.	C36	Chemistry	Vacuum pump	Dimension – 16 x 24 inch Size – 32 mm Power – 0.25 HP	2	
37.	C37	Chemistry	UV chamber		1	
38.	C38	Chemistry	Muffle furnace	(Rectangular chamber, totally enclosed ceramic muffle furnace with maximum temperature 1200 ⁰ C Size: 12 X 6 X 6, 1.5 KW)	1	
39.	C39	Chemistry	Digital k-type thermometer (Equivalent to the Beckmann thermometer)	2 channel k-type digital thermometer(-200 ⁰ C to 1370 ⁰ C)	04	
40.	C40	Chemistry	Beckmann Thermometer	With a magnifier, possible to estimate temperature changes to 0.001 °C.	04	
41.	MI41	Mathematics & Information Technology	IOT Kit	Arduino Uno Raspberry Pi	07 02	
42.	P42	Physics		DC, 4Hz to 8MHz, LCR (Measurement with single condition), Continuous testing (Continuous measurement under saved conditions)	1	

			LCR Q Meter	<p>Measurement parameters Z, Y, θ, X, G, B, Q, Rdc (DC resistance), Rs (ESR), Rp, Ls, Lp, Cs, Cp, D ($\tan\delta$), σ, ϵ</p> <p>Measurement range 100 mΩ to 100 MΩ, 10 ranges (All parameters are determined according to Z)</p>		
43.	P43	Physics	Transformer Coil Winding Machine	Single Phase, Automatic, 2 HP, 500-800 rpm, 230 V	1	
44.	P44	Physics	Dual Trace CRO	30 MHz Dual Trace CT Oscilloscope,	8	
45.	P45	Physics	Power supply DC	Dual output DC regulated power supply 0+/- 15 V , 1A	5	
46.	P46	Physics	Power supply DC	<p>Dual Channel 0-30V, 3A, dual display tracking power supply, with protection against overload and short circuit,</p> <p>DC output: 0 – 30 V, continuously variable by means of coarse & fine controls,</p> <p>setting resolution: Voltage- 10 mV, Current-5 mA,</p> <p>Display : Dual display, 3 digit 7 segment LED for voltage & current for A, B</p>	5	

				Accuracy +- (1% + 1digit)		
47.	P47	Physics	Power supply AC	Stabilised Dual AC Voltage power supply, 0-100 V ; 0-230 V, upto 100mA	2	
48.	P48	Physics	Laboratory Prism Spectrometer	7" dia circle Spectrometer with least count 1 arc second, dimensions: 17 x 17 x 12 inches, diffraction grating and prism holder, illuminated magnifier, auto-collimation mirror	5	
49.	P49	Physics	Function Generator with digital display	3MHz Function -Pulse Generator with 50MHz Frequency Counter, Direct Digital Synthesis technique, Frequency Resolution 1mHz, 20Vpp Output (O.C.), TFT Color LCD Display	8	
50.	P50	Physics	Digital box type multimeter (voltage,. current, ohmmeter)	Digital AC/DC meter box type, dimensions ~ 8cm x 15cm x 30cm, with current meter range (200 μ A to 10 A), voltmeter range (200 mV to 10kV), ohmmeter range (200 Ω to 20 M Ω)	6	
51.	P51	Physics	Crystal Oscillator set up	Set up with built in circuit using quartz crystal for laboratory experiment	2	
52.	P52	Physics	Digital IC trainer Kit	5V/1A, \pm 12V/1A	1	

				Ripple Less than 1mV Regulation Less than 0.1%, Protection against load & short circuit 2 Digit BCD to Decimal Display TTL Clocks: 1Hz to 1MHz Indication of Outputs: Single/Dual Color High Intensity LED Monopulse High & Low, IC Sockets 4 nos 16 pin ZIF sockets 680 pin bread board Logic I/P and O/P: 12 Nos. Dimension of Terminals: 2mm Sockets		
53.	P53	Physics	Hot plate with magnetic stirrer	Digital PID temperature controller Temperature sensor PT100 Heater type Mica heater Dimensions (W*D*H) 170 * 240* 190 mm Material SS & MS Power supply Volt 230 V AC Frequency (Hz) 50 Hz single phase Speed range (min) 100 rpm Speed range (max) 1500 rpm Digital speed indicator	1	

				Yes Motor PMDC Dimension of Top plate 160 mm Top plate material Stainless steel Weight 5.3 kg, with magnetic stirring beads 2 cm, 3cm 5cm (each 10 in number)		
54.	P54	Physics	Hot plate with magnetic stirrer	Hot Plate Magnetic Stirrer Digital 5 Litres - Aluminium Box/ceramic coated, temperature range (room temperature to 300°C) with temperature controller and display	1	
55.	P55	Physics	BH curve using solenoid set up	$\pm 12\text{V D.C. at } 100\text{mA}$, IC Regulated Power Supply 02 10, 22, 35, 50, 65, 75, 90, 105 & 120V A.C. Power Supply at 1.5Amp. 3½ digits digital panel meter to read magnetic field in Gauss. 04A solenoid with former fitted on the platform for producing magnetic field.	2	
56.	P56	Physics	PE hysteresis loop tracer	To measure and trace PE hysteresis loop of ferroelectric material with variable a/c power supply 3kw, Digital volt meter, digital temp indicator	1	

				Maximum 5000 Volt in sample Test		
57.	P57	Physics	Two probe resistivity set up	(i) Two Probe Arrangement with built-in thermocouple sensor, TPA-TPX-200 (ii) Test Sample: 1G resistance, TPX-S1G (iii) Oven Unit (upto 200°C), TPO-TPX-200 (iv) High Performance PID Controller, PID-TZN (v) High Voltage Power Supply, EHT-11P-C1 (vi) Digital Picoammeter, DPM-111-C2	1	
58.	P58	Physics	e/m by helical method set up	Input : 230 volts AC 50c/s E.H.T. : 1000 volts DC Output for Solenoid : 60 volts DC at 1.5 Amps Solenoid : Dia 4"-5", Length : 20"	1	
59.	P59	Physics	Millikan oil drop experiment	Millikan's apparatus with Digital stopwatch, oil atomizer and USB camera	1	

				specs- Input voltage : AC 220V, 50Hz Plate voltage : 0~500V DC Change over switch : Between +ve, -ve and 0 field Plate distance : 5 ± 0.2 mm. Total Magnification : 30X Linear field of vision : ≥ 3 mm Scale division : 2 ± 0.01 mm. Objective lens : 100 lines/mm		
60.	P60	Physics	Astronomical telescope	Optical Tube Single Fork computerized Computerized Altitude-Azimuth Single Fork ArmArm Mount & Tripod Accessory Tray Hand Control 20 mm & 9 mm eyepiece red dot finderscope Star Diagonal, 650 mm focal length with manual focus, zoom ratio-20, objective lens diameter - 130mm, exit pupil diameter - 5mm	1	
61.	P61	Physics	Digital IC tester	Electronic Component IC Tester Module, Universal IC Tester Module, Item Type: IC Tester Material: PCB	1	

				Working Voltage: DC7-12 V Working Current: <30 mA		
62.	P62	Physics	Experimental SET Up to find dielectric constant of parallel plate capacitor	Set up containing set of parallel plate capacitors (Diameter = 26 cm) , High voltage power supply (0-10kV) , A 10 M Ω resistor , Reference capacitor (220nF), Universal measuring amplifier, Voltmeter, Dielectric materials (Plastic and glass plates), Connecting cables, adapters, T-connectors	2	
63.	P63	Physics	Experimental SET Up to find dielectric constant of a liquid using coaxial metal tubes	set up with a glass jar with two coaxial metal (aluminium tubes) of 20-30 cm length and outer cylinder diameter about 2 cm. with holes every 3 cm . tubes soldered to connecting wires. capacitance calibration device with different value capacitors. and a digital multimeter	2	
64.	P64	Physics	Experimental SET Up to find hysteresis of a ferromagnetic rod using magnetometer.	magnetometer, two iron rods, of 1 cm dia and 30 cm length , power supply AC (0-100V) and DC (0-30V), upto 3 A current to magnetise and demagnetise the rod, two solenoids for the rod, connecting wires	1	

65.	P65	Physics	Digital Multimeter	Measurement of AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Diode and transistor hfe testing, high resolution, 2000 counts, Voltage range 200mV to 1000V, Resistance range 200Ω to 200MΩ	10	
66.	P66	Physics	Industrial toolkit	110 piece set with Screw driver set, corded electric 550W drill machine 2700 rpm and drill bit set , spanners and Pliers, pipe range upto 3 inch.	1	
67.	Z67	Zoology	pH meter	Benchtop PH Meter, Type Of Ph Meter: Table-Top, Usage/Application: Laboratory, Resolution: 0.01 pH, Automatic Shutdown: Yes	1	
68.	Z68	Zoology	Conductivity Meter	Usage/Application: Laboratory; Material: MILD STEEL; Display Type: LCD; Accuracy: +- 0.5 DegreeC; Dimension: 210 x 205 x 75mm; Voltage: 220VAC/50Hz, Color: WHITE; Weight: 1.75 kg; Temperature Compensation: 0 to 50oC, Manual or Automatic; Cell Constant:0.1, 1.0, 10 adjustable; Calibration Solution: 10 to 17MicroSecond, 100 to 170Microsecond, 1000 to 1700microsecond, 10 to 17 mS; Conductivity Range: 1999 microsecond, 0.00 to 1.999, 19.99, 199.9, 200.0 ms; Calibration Points: 1 point per range; Temperature	1	

				Coefficient: 0 to 3.9% per oC; Temperature Accuracy: +1oC; Temperature Range: 0 to100oC, Conductivity Accuracy: +/-1% F.S; Dimensions LxWxH (mm): 300 x 250 x 175, Power Supply: DC 9V, using AC Adapter 220VAC, 50Hz		
69.	Z69	Zoology	Spectrophotometer	Wavelength Range 325-1000nm; Optical System Single Beam Spectral Bandwidth 4 nm; Mobility Benchtop ; Lamp Type Tungsten Halogen Lamp; Usage / Application LMSPV320 can display absorption, transmittance, concentration and coefficient directly by different; Voltage AC 220V,50/60Hz; Type Vis. Spectrophotometer ; Wavelength 325-1000nm	1	
70.	Z70	Zoology	Egg Incubator	"Capacity: 100 eggs, Temperature Range: 20°C to 40°C, accuracy ±0.1°C, digital display Humidity Range: 40% to 75%, accuracy ±3%, digital display Egg Turning: Automatic every 2 hours Air Circulation: Built-in fan Material: ABS plastic and aluminum Power Supply: 220V, 80W Alarm: Temperature and humidity alarms Additional Features: LED display, built-in water channels, backup battery option"	1	

71.	Z71	Zoology	Oven	<p>Capacity: Suitable for small to medium-sized dishes</p> <p>Temperature Range: Adjustable, typically up to 250°C</p> <p>Controls: Manual knobs or digital control panel</p> <p>Cooking Modes: Bake, toast, broil, and possibly other functions</p> <p>Timer: Built-in timer for cooking duration</p> <p>Safety Features: Heat-resistant handle, insulated walls</p> <p>Power: Suitable for standard home electrical outlets</p>	1	
72.	Z72	Zoology	Kitchen knives set and scissor	<p>Knife Set: Includes chef's knife, utility knife, paring knife</p> <p>Blade Material: Stainless steel</p> <p>Handle Material: Ergonomic non-slip grip</p> <p>Includes: Knife block or storage case</p> <p>Scissors:</p> <p>Scissor: Material: Stainless steel blades</p> <p>Handle: Comfortable grip handles</p> <p>Usage: Multi-purpose kitchen scissors</p>	1	
73.	Z73	Zoology	Hot plate	<p>Material: Mild Steel;</p> <p>Usage/Application: For Laboratory Purpose</p> <p>Shape: Square, Rectangular;</p> <p>Temperature Range: Ambient to 350 deg.C; Power: 220V AC 50Hz</p>	1	

74.	Z74	Zoology	Induction Cooktop	Power: Typically around 2000 watts Control: Touch or knob controls for temperature and timer settings Cooking Modes: Multiple power levels for versatile cooking Safety Features: Auto shut-off, overheat protection Display: Digital display for temperature and timer Size: Compact design suitable for small kitchens	1	
75.	Z75	Zoology	Binoculars 8-16X40 ZOOM DPS I	Magnification: 8-16x variable zoom; Objective Lens Diameter: 40 mm Prism Type: Porro prism; Field of View: Approximately 5.6 to 3.5 degrees; Exit Pupil Diameter: 2.5 - 5 mm; Eye Relief: 10 - 12 mm; Close Focus Distance: Approximately 7 meters; Optical Coatings: Multi-coated lenses for enhanced image brightness and clarity; Weight: Approximately 790 grams; Dimensions: 182 x 163 x 58 mm; Features: Foldable rubber eyecups, central focus knob, durable rubber armored housing	10	
76.	Z76	Zoology	Spotting Scope	Product Dimensions : 30 x 15 x 10 cm; 1 kg Mounting Hardware Spotting Scope; Maximum magnification: 2060; Optical zoom : 60 x; Min Focal Length : 5000 Millimeters; Lens type Objective; Item Weight : 1 kg	1	

77.	Z77	Zoology	Microscope Cell Phone Camera Adapter	<p>Compatibility: Universal fit for most smartphones and microscope eyepieces (23-30 mm diameter)</p> <p>Material: Durable aluminum alloy and plastic construction</p> <p>Adjustment Mechanism: Adjustable clamps to secure the phone and align the camera</p> <p>Lens: High-quality optical glass lens for clear imaging</p> <p>Mounting: Easy installation with a secure grip on the microscope eyepiece</p> <p>Usage: Suitable for capturing and sharing microscope images and videos</p> <p>Weight: Lightweight and portable design</p>	2	
78.	Z78	Zoology	Water and Soil Testing Kit	<p>Display 3 ½ digit LCD Display, I Power Supply 6 dry cells of 1.5V OR 230±10PHz</p> <p>pH: I Range 0 to 14 pH, Temp. Comp 0-100°C, Resolution 0.01pH, I Accuracy ±0.01pH ± 1 digit</p> <p>Conductivity: Range 0-20ms, 0-200, Resolution 0.1 mhos I Accuracy ±05% FS ± 1 digit</p> <p>Temperature: Range 0-100°C, I Cell Constant Pre-Adjustable, I Resolution 0.1 Accuracy ±0.1°C ± 1 digit</p> <p>TDS: I Cell Constant Pre-Adjustable I Accuracy ±5% FDS ±1 digit</p> <p>D.O.: I Range 0-20ppt, 0-200ppt, Accuracy ±0.01C ±1digit I Resolution 0.1ppm</p>		

				mV (ORP): I Range 0 to ± 1999 mV, I Accuracy ± 1 mV, I Calibration MANUAL I Resolution 1 mV, I Range 0-20ppm, I Resolution 0.1ppm Temp. Comp 05°-50°C (Manual) STANDARD ACCESSORIES I Standard Solution 7.0 pH & 4.0 pH I Temperature Probe I pH Electrode I ORP Electrode (On Demand) I Instruction Manual I Conductivity/TDS/		
79.	Z79	Zoology	Camera and accessories	Nikon Z50 Mirrorless Camera , 20.9 MP with Z DX 16-50Mm F/3.5-6.3 VR & Z DX 50-250Mm F/4.5-6.3 VR Lens with Additional Battery & 64 GB SD Card. Tripod: DIGITEK® (DTR 520 BH) 152CM Foldable Aluminum Tripod Cum Monopod with Swivel Pan Head, 4 Section Adjustment, 7kg Max Load, Max Operating Height: 4.95Ft, Compatible with DSLR Camera, Dv Video Camcorder		
80.	Z80	Zoology	Autoclave Double Drum Size 12X22 fully stainless steel	Capacity: 22 Litre; Size 250 mm x 450 mm, Material: Stainless Steel; Automation Grade: Semi Automatic; Pressure Range: 0-25psi	1	
81.	Z81	Zoology	Dehumidifying Dry Cabinet	Special Feature Quiet Operation; Capacity 195 litres; Tank Volume 195 Litres; Product Dimensions 61D x 40W x 48H Centimeters, Recommended Uses For Product Camera and other electronic items; Included	1	

				Components Power Cord; Item Weight 20 Kilograms; Material Alloy Steel; Wattage 5 Watts; Operation Mode Comfort		
82.	Z82	Zoology	Magnetic stirrer with hot plate	MaterialStainless Steel; Weight [kg] 5 Kg; Hotplate Surface with hotplate	1	
83.	Z83	Zoology	Vortex Mixture 2000 RPM	Voltage 220 240 V; Material CRC/MS sheet duly Painted; Dimensions (W X D X H) 150x150 mm; Vibration type variable speed genie short rapid electronic stroke motor drives; Neoprene cup in parts vigorous agitation to tube or small flask; Shaking starts when vessel is pressed against cup; Fitted with Vacuum Rubber at the bottom to prevent walking; Outer casing made of MS/CRC sheet duly to painted / Powder coated.	1	
84.	Z84	Zoology	Colorimeter	Display Type 3 1/2 Digit LED; Range (nm) 400-700 nm;Light Source 6.8V, 250mA Lamp; Weight (kg) 3-4 kg; Color Off White / Light Grey; Mini Volume 1 ml; Accessories Test Tubes 5 Nos., Spare Lamp & Instruction Manual; Accuracy 0.5% F.S. +- 1 digit; Output O.D. 0 to 1.99; Resolution O.D. 0.01 Power Source 230V +- 10%, 50 Hz AC; Detector Photo diode	2	
85.	Z85	Zoology	Stainlees steel hot air oven, size 12"X12"X12"	Display Type 3 1/2 Digit LED; Range (nm) 400-700 nm; Model	1	

				NumberVSI-08; Light Source 6.8V, 250mA Lamp Weight (kg) 3-4 kg; Color Off White / Light Grey		
86.	Z86	Zoology	Frying pan with Spatula	Ceraglide Ceramic Coated 18 cm Non-Stick Fry Pan Consumes Less Oil Preferred for High Heating & Even Heating Stain-Resistant Gas & Induction Compatible. 2 Pack Wooden Spatula, Acacia Wood Long Handle Flat Frying Turner, Handmade Wooden Spoons For Cooking, Kitchen Utensil Set, Non-Stick Cooking Spurtle Utensils For Kitchen Use	1	
87.	Z87	Zoology	Food Dryer Machine with five tiers	Weight (kg) 5.1 Kilograms (kg); Capacity 3kg per batch Kg/hr Voltage 220 Volt (v); Product Type DRYER; Power 500 Watt (w) Automatic Yes; Dimension (L*W*H) 32.9*30.2*27.0 Centimeter (cm); Type Food Dryer; Computerized Yes Product Shape Block; General Use MULTIPURPOSE DRYER Installation Type Free Stand; Material Stainless Steel; Control System PLC Control	1	
88.	Z88	Zoology	Hand palletizer	Special Feature Removable Surface; Colour gold; Material Brass; Brand Konquer TimeS; Wattage 1000 Watts; Item Weight 400 Grams; Included Components one pcs; Style casual	1	

				Voltage 230 Volts; Material Type Free BPA Free; Number of settings 6		
89.	Z89	Zoology	Sahils Heamoglobinometer	Type Optical hemoglobin meters; Automation Manual; Differential Type 2 Part; Number Of Chambers 1	10	
90.	Z90	Zoology	Hemocytometer	Usage/Application Glass Neubeur Blood Counting Chamber Brightlined, German Complete Haemocytometer Treatment HBG Haemocytometer Complete set in a plastic case consisting of: HBG Brightline counting chamber wit Model Name/Number Haemocytometer Set Prescription/Non prescription Prescription Type HBG Haemocytometer Complete set in a plastic case consisting of: HBG Brightline counting chamber wit Type Of Equipment Double improved Neubauer counting chamber designed for accurate counting of blood cells, platelets Form Injection	15	
91.	Z91	Zoology	Mini Rotary shakers 1000 ml	Power Requirements 220 Volts; Single phase 50 Hz; Power Source AC supply; Type Rotary; Flasks 9-49	1	
92.	Z92	Zoology	Westergrens tube and ESR Stand	ESR WESTERN GREEN STAND Material Plastic; Tube Holding Capacity 6 Tubes	8	

				Usage/Application Chemical Laboratory		
93.	Z93	Zoology	8x15 ml capacity laboratory centrifuge	Material SS; Max. Capacity 15ml; Max. Speed Range (RPM) 5000 RPM Voltage Supply 120 V; Frequency 50 Hz	1	
94.	Z94	Zoology	Sphygomanometer with stethoscope	Accuracy: 0.03 (pressure); Cuff Type: VELCRO ADULT; Weight: 300 GMS APPROX; Cuff Circumference: AROUND 40 CMS MAX; Aneroid Sphygmomanometer; 60 mm Large easy to read scale; Two-tube system With zip case; he model fixed to the cuff; With velcro cuff; Noncorrosive mechanism; Safe against overpressure	10	
95.	Z95	Zoology	Gerber centrifuge machine	Electric Gerber Centrifuge 24 test; Material SS; Max. Capacity: 15ml; Max. Speed Range (RPM): 5000 RPM; Voltage Supply: 120 V; Frequency: 50 Hz.	1	
96.	Z96	Zoology	Mixer cum Grinder	Colour: Black; Product Dimensions: 35D x 21.5W x 25H Centimeters; Blade Material: Stainless Steel; Special Feature: Adjustable Speed Control Controls Type: Knob Control; Item Weight: 2850 Grams	01	

Specification of the equipment and consumables for Financial Bid

Category: Equipment's

Sr. No.	Code No	Department	Name of the equipment	Specifications	Quantity	Rate per unit In Rupees	Amount inclusive of GST in Rupees
1.	B1	Botany	Water bath with digital temperature control (15L)	Size: 400 x 300 x 100 mm Rating watts: 1500 No. of holes : 6 holes			
2.	B2	Botany	Monocular microscope with LED	All metal rugged Stand with individual Coarse Fine Focus drive with focus stop Maintenance Free ECO LED illumination including Battery backup with regulating intensity control for 220V/50Hz Movable Achromatic Condenser 0.90 NA with aperture iris diaphragm 115 X 125 mm double plate Mechanical Stage with coaxial XY Drive knobs, Quadruple revolving nosepiece A revolving nose piece chromatic objectives 4x, 10x, 40x(spring),100x (spring, Oil imm.), 360° rotatable 45° inclined Monocular head with Widefield Eyepiece 10x/18			

				lockable, dust cover complete set packed in thermocole			
3.	B3	Botany	Binocular microscope	Standard set complete with built-in 6V20W halogen light illuminator, quadruple ball bearing nosepiece, focusing by co-axial coarse and fine focusing controls, high resolution long barrel achromatic objectives 4x, 10x, 40x (spring) and 100x (spring, oil immersion), with an inclined Binocular observation tube rotatable through 360 degree fitted with fungus resistant, anti-reflection coated prism, compensating Wide field eyepiece WF10x (F.N.18) and with right hand co-axial low drive mechanical stage, substage Abbe condenser 1.25 N.A with iris diaphragm focusable with rack and pinion (complete set in thermocole packing)			
4.	B4	Botany	Compound microscopes	Student Compound Microscope Objective : 4X, 10X, 40X & 100X Metal body Product Dimensions: 19L x 40W x 26H Centimeters			

5.	B5	Botany	Refrigerator (260L)	Gross Refrigerator Capacity :260 lts Energy Efficiency (Star Rating) :2 star Stabilizer Free Operation, Smart Diagnosis, Anti- Bacterial Gasket, Multi Air Flow System Technology			
6.	B6	Botany	Compact Bench Top Cooling Centrifuge	Stable speed output High Speed (CM-12 Plus) Wide variety of rotors & reduction adaptors Precise temperature control up to - 8°C Pre-cooling feature Fast spin feature Calibration window on lid for speed (rpm) Max. Speed (rpm) – 6000 Max. RCF (g) - 5070 Max. Tube Size (ml) - 100 Max. Capacity (ml) - 400 Min. Temperature (°C) - -8 Dimensions WxDxH (mm) - 480 x 585 x 530			
7.	B7	Botany	Microwave oven	28 L			
8.	B8	Botany	Tissue homogenizer	Handheld, Capacity: 5ml-250ml, 5500mpas Maximum viscosity:			

9.	B9	Botany	Hot plate	500ml beaker X 12 pc Temperature range upto 320° C LED Display			
10.	B10	Botany	Cooling universal lab centrifuge	6000RPM Temperature range upto -4°C LED Display			
11.	B11	Botany	Visible spectrophotometer	Microprocesor controlled, LMSP-V320 can realize auto Zero and auto 100% T adjustment with one push – Botton 12000 lines grating, equipped with USB port which can be connected to PC to Edit data through Specific Software,display absorption, transmittance, Concentration and coefficient directly by different mode switching			
12.	B12	Botany	Soxhlet heating mantle	250ml flask capacity, exterior dimension - (310 x 330 x 160) mm, temperature range - Ambient +5°C to 420°C, LED Display with energy setting from 0-9, Power Consumption -15W			
13.	M13	Microbiology	Digital pH meter	pH/mV/temperature meter with – 2.00–16.00 pH range (± 0.01),	1		

				±1999 mV range, 0–100 °C temperature (±0.5 °C), 3-point auto calibration with ATC, LCD display, and BNC electrode connector.			
14.	M14	Microbiology	Analytical balance	220 g capacity with 0.1 mg readability (0.0001 g), repeatability ~±0.1 mg, linearity ~±0.3 mg, LCD display, internal calibration, pan Ø 90 mm, RS-232 interface, density/counting/underhook modes, response time 4-5 s, AC 220 V; dimensions ~220×360×345 mm, weight ~9.5 kg	1		
15.	M15	Microbiology	Double distillation unit	Distilled water with conductivity ~0.8–1 µS/cm and pH 6.0–7.0	1		
16.	M16	Microbiology	Centrifuge	400 ml capacity (8×15 ml swing-out head), brushless induction motor, max 6,000 rpm (~5,070 g), 0–59 min digital timer, safety lid-lock, imbalance detection, dynamic brake, stainless-steel chamber, dimensions ≈380×470×300 mm, AC 220–240 V, weight ~29 kg	1		

17.	M17	Microbiology	UV lamp	Compact fluorescent 8 W T5 black-light UV-A lamp (12" length, G5 miniature bi-pin base), emitting at ~350–365 nm with a rated life of ~7,500 hours	1		
18.	M18	Microbiology	Cooling universal lab centrifuge	Universal centrifuge with 6,000 rpm max ($\approx 4,910\text{--}4,427 \times g$ depending on rotor), fixed-angle or swing-out rotors (e.g. 4×100 ml or 12×15 ml), cooling to $\sim -10^\circ\text{C}$, brushless/induction motor, auto rotor detection, imbalance cut-off, lid-lock, timer (up to 999 min or continuous), digital speed/time display, airflow or CFC-free refrigeration, stainless-steel chamber, dimensions $\sim 560\text{--}705 \times 480\text{--}330$ mm, weight $\sim 16\text{--}57$ kg	1		
19.	M19	Microbiology	Compound Microscopes	10x, 40x and 100x lens	7		
20.	C20	Chemistry	Potentiometer $\pm 1.999\text{V}$ Single with built in Magnetic stirrer and STD Cell	POTENTIOMETER with built-in magnetic stirrer & standard cell One Button Calibration. μP based	6		
21.	C21	Chemistry	Conductivity meter with battery or mains operated	AUTO RANGING CONDUCTIVITY METER with inbuilt magnetic stirrer & standard conductance (useful for titration) and battery backup	4		

22.	C22	Chemistry	Colorimeter with built in set of 8 imported filters disc mounted reads OD & %T, feather touch	Disc Mounted Filters, Reads %T & OD, square cuvette Battery backup	4		
23.	C23	Chemistry	Conductivity cell	Conductivity cell	4		
24.	C24	Chemistry	Combined glass electrode (pH electrode)	Combined glass electrode (pH electrode)	4		
25.	C25	Chemistry	Calomel electrode	Calomel electrode	4		
26.	C26	Chemistry	Platinum electrode	Platinum electrode	2		
27.	C27	Chemistry	Silver electrode	Silver electrode	5		
28.	C28	Chemistry	Copper electrode	Copper electrode	4		
29.	C29	Chemistry	Zinc electrode	Zinc electrode	4		
30.	C30	Chemistry	Reference electrode Hg/HgO	Reference electrode Hg/HgO	5		
31.	C31	Chemistry	Melting point apparatus	For laboratory purpose	10		
32.	C32	Chemistry	Thermostatic water bath with 6 holes	Capacity – 8 L, Material Stainless Steel	4		
33.	C33	Chemistry	Centrifuge machine	Centrifuge machine (8x15 ml Capacity, 3500rpm)	4		
34.	C34	Chemistry	Weighing balance	Analytical balance with 0.001g readability, Max. capacity – 220 gm	3		

35.	C35	Chemistry	Hot plate cum stirrer (REMI)	5 - MLH Magnetic Stirrers (With Hotplate)	4		
36.	C36	Chemistry	Vacuum pump	Dimension – 16 x 24 inch Size – 32 mm Power – 0.25 HP	2		
37.	C37	Chemistry	UV chamber		1		
38.	C38	Chemistry	Muffle furnace	(Rectangular chamber, totally enclosed ceramic muffle furnace with maximum temperature 1200 ⁰ C Size: 12 X 6 X 6, 1.5 KW)	1		
39.	C39	Chemistry	Digital k-type thermometer (Equivalent to the Beckmann thermometer)	2 channel k-type digital thermometer(-200 ⁰ C to 1370 ⁰ C)	04		
40.	C40	Chemistry	Beckmann Thermometer	With a magnifier, possible to estimate temperature changes to 0.001 °C.	04		
41.	MI41	Mathematics & Information Technology	IOT Kit	Arduino Uno Raspberry Pi	07 02		
42.	P42	Physics	LCR Q Meter	DC, 4Hz to 8MHz, LCR (Measurement with single condition), Continuous testing (Continuous measurement under saved conditions)	1		

				<p>Measurement parameters Z, Y, θ, X, G, B, Q, R_{dc} (DC resistance), R_s (ESR), R_p, L_s, L_p, C_s, C_p, D ($\tan\delta$), σ, ϵ</p> <p>Measurement range 100 mΩ to 100 MΩ, 10 ranges (All parameters are determined according to Z)</p>			
43.	P43	Physics	Transformer Coil Winding Machine	Single Phase, Automatic, 2 HP, 500-800 rpm, 230 V	1		
44.	P44	Physics	Dual Trace CRO	30 MHz Dual Trace CT Oscilloscope,	8		
45.	P45	Physics	Power supply DC	Dual output DC regulated power supply 0+/- 15 V , 1A	5		
46.	P46	Physics	Power supply DC	<p>Dual Channel 0-30V, 3A, dual display tracking power supply, with protection against overload and short circuit,</p> <p>DC output: 0 – 30 V, continuously variable by means of coarse & fine controls,</p> <p>setting resolution: Voltage- 10 mV, Current-5 mA,</p> <p>Display : Dual display, 3 digit 7 segment LED for voltage & current for A, B</p>	5		

				Accuracy +- (1% + 1digit)			
47.	P47	Physics	Power supply AC	Stabilised Dual AC Voltage power supply, 0-100 V ; 0-230 V, upto 100mA	2		
48.	P48	Physics	Laboratory Prism Spectrometer	7" dia circle Spectrometer with least count 1 arc second, dimensions: 17 x 17 x 12 inches, diffraction grating and prism holder, illuminated magnifier, auto-collimation mirror	5		
49.	P49	Physics	Function Generator with digital display	3MHz Function -Pulse Generator with 50MHz Frequency Counter, Direct Digital Synthesis technique, Frequency Resolution 1mHz, 20Vpp Output (O.C.), TFT Color LCD Display	8		
50.	P50	Physics	Digital box type multimeter (voltage,. current, ohmmeter)	Digital AC/DC meter box type, dimensions ~ 8cm x 15cm x 30cm, with current meter range (200 μ A to 10 A), voltmeter range (200 mV to 10kV), ohmmeter range (200 Ω to 20 M Ω)	6		
51.	P51	Physics	Crystal Oscillator set up	Set up with built in circuit using quartz crystal for laboratory experiment	2		
52.	P52	Physics	Digital IC trainer Kit	5V/1A, \pm 12V/1A	1		

				Ripple Less than 1mV Regulation Less than 0.1%, Protection against load & short circuit 2 Digit BCD to Decimal Display TTL Clocks: 1Hz to 1MHz Indication of Outputs: Single/Dual Color High Intensity LED Monopulse High & Low, IC Sockets 4 nos 16 pin ZIF sockets 680 pin bread board Logic I/P and O/P: 12 Nos. Dimension of Terminals: 2mm Sockets			
53.	P53	Physics	Hot plate with magnetic stirrer	Digital PID temperature controller Temperature sensor PT100 Heater type Mica heater Dimensions (W*D*H) 170 * 240* 190 mm Material SS & MS Power supply Volt 230 V AC Frequency (Hz) 50 Hz single phase Speed range (min) 100 rpm Speed range (max) 1500 rpm Digital speed indicator	1		

				Yes Motor PMDC Dimension of Top plate 160 mm Top plate material Stainless steel Weight 5.3 kg, with magnetic stirring beads 2 cm, 3cm 5cm (each 10 in number)			
54.	P54	Physics	Hot plate with magnetic stirrer	Hot Plate Magnetic Stirrer Digital 5 Litres - Aluminium Box/ceramic coated, temperature range (room temperature to 300°C) with temperature controller and display	1		
55.	P55	Physics	BH curve using solenoid set up	$\pm 12V$ D.C. at 100mA, IC Regulated Power Supply 02 10, 22, 35, 50, 65, 75, 90, 105 & 120V A.C. Power Supply at 1.5Amp. 3½ digits digital panel meter to read magnetic field in Gauss. 04A solenoid with former fitted on the platform for producing magnetic field.	2		
56.	P56	Physics	PE hysteresis loop tracer	To measure and trace PE hysteresis loop of ferroelectric material with variable a/c power supply 3kw, Digital volt meter, digital temp indicator	1		

				Maximum 5000 Volt in sample Test			
57.	P57	Physics	Two probe resistivity set up	(i) Two Probe Arrangement with built-in thermocouple sensor, TPA-TPX-200 (ii) Test Sample: 1G resistance, TPX-S1G (iii) Oven Unit (upto 200°C), TPO-TPX-200 (iv) High Performance PID Controller, PID-TZN (v) High Voltage Power Supply, EHT-11P-C1 (vi) Digital Picoammeter, DPM-111-C2	1		
58.	P58	Physics	e/m by helical method set up	Input : 230 volts AC 50c/s E.H.T. : 1000 volts DC Output for Solenoid : 60 volts DC at 1.5 Amps Solenoid : Dia 4"-5", Length : 20"	1		
59.	P59	Physics	Millikan oil drop experiment	Millikan's apparatus with Digital stopwatch, oil atomizer and USB camera	1		

				specs- Input voltage : AC 220V, 50Hz Plate voltage : 0~500V DC Change over switch : Between +ve, -ve and 0 field Plate distance : 5 ± 0.2 mm. Total Magnification : 30X Linear field of vision : ≥ 3 mm Scale division : 2 ± 0.01 mm. Objective lens : 100 lines/mm			
60.	P60	Physics	Astronomical telescope	Optical Tube Single Fork computerized Computerized Altitude-Azimuth Single Fork Arm Arm Mount & Tripod Accessory Tray Hand Control 20 mm & 9 mm eyepiece red dot finderscope Star Diagonal, 650 mm focal length with manual focus, zoom ratio-20, objective lens diameter - 130mm, exit pupil diameter - 5mm	1		
61.	P61	Physics	Digital IC tester	Electronic Component IC Tester Module, Universal IC Tester Module, Item Type: IC Tester Material: PCB	1		

				Working Voltage: DC7-12 V Working Current: <30 mA			
62.	P62	Physics	Experimental SET Up to find dielectric constant of parallel plate capacitor	Set up containing set of parallel plate capacitors (Diameter = 26 cm) , High voltage power supply (0-10kV) , A 10 M Ω resistor , Reference capacitor (220nF), Universal measuring amplifier, Voltmeter, Dielectric materials (Plastic and glass plates), Connecting cables, adapters, T-connectors	2		
63.	P63	Physics	Experimental SET Up to find dielectric constant of a liquid using coaxial metal tubes	set up with a glass jar with two coaxial metal (aluminium tubes) of 20-30 cm length and outer cylinder diameter about 2 cm. with holes every 3 cm . tubes soldered to connecting wires. capacitance calibration device with different value capacitors. and a digital multimeter	2		
64.	P64	Physics	Experimental SET Up to find hysteresis of a ferromagnetic rod using magnetometer.	magnetometer, two iron rods, of 1 cm dia and 30 cm length , power supply AC (0-100V) and DC (0-30V), upto 3 A current to magnetise and demagnetise the rod, two solenoids for the rod, connecting wires	1		

65.	P65	Physics	Digital Multimeter	Measurement of AC/DC Voltage, AC/DC Current, Resistance, Capacitance, Diode and transistor hfe testing, high resolution, 2000 counts, Voltage range 200mV to 1000V, Resistance range 200Ω to 200MΩ	10		
66.	P66	Physics	Industrial toolkit	110 piece set with Screw driver set, corded electric 550W drill machine 2700 rpm and drill bit set , spanners and Pliers, pipe range upto 3 inch.	1		
67.	Z67	Zoology	pH meter	Benchtop PH Meter, Type Of Ph Meter: Table-Top, Usage/Application: Laboratory, Resolution: 0.01 pH, Automatic Shutdown: Yes	1		
68.	Z68	Zoology	Conductivity Meter	Usage/Application: Laboratory; Material: MILD STEEL; Display Type: LCD; Accuracy: +- 0.5 DegreeC; Dimension: 210 x 205 x 75mm; Voltage: 220VAC/50Hz, Color: WHITE; Weight: 1.75 kg; Temperature Compensation: 0 to 50oC, Manual or Automatic; Cell Constant:0.1, 1.0, 10 adjustable; Calibration Solution: 10 to 17MicroSecond, 100 to 170Microsecond, 1000 to 1700microsecond, 10 to 17 mS; Conductivity Range: 1999 microsecond, 0.00 to 1.999, 19.99, 199.9, 200.0 ms; Calibration Points: 1 point per range; Temperature	1		

				Coefficient: 0 to 3.9% per oC; Temperature Accuracy: +1oC; Temperature Range: 0 to100oC, Conductivity Accuracy: +/-1% F.S; Dimensions LxWxH (mm): 300 x 250 x 175, Power Supply: DC 9V, using AC Adapter 220VAC, 50Hz			
69.	Z69	Zoology	Spectrophotometer	Wavelength Range 325-1000nm; Optical System Single Beam Spectral Bandwidth 4 nm; Mobility Benchtop; Lamp Type Tungsten Halogen Lamp; Usage / Application LMSPV320 can display absorption, transmittance, concentration and coefficient directly by different; Voltage AC 220V,50/60Hz; Type Vis. Spectrophotometer; Wavelength 325-1000nm	1		
70.	Z70	Zoology	Egg Incubator	"Capacity: 100 eggs, Temperature Range: 20°C to 40°C, accuracy ±0.1°C, digital display Humidity Range: 40% to 75%, accuracy ±3%, digital display Egg Turning: Automatic every 2 hours Air Circulation: Built-in fan Material: ABS plastic and aluminum Power Supply: 220V, 80W Alarm: Temperature and humidity alarms Additional Features: LED display, built-in water channels, backup battery option"	1		

71.	Z71	Zoology	Oven	<p>Capacity: Suitable for small to medium-sized dishes</p> <p>Temperature Range: Adjustable, typically up to 250°C</p> <p>Controls: Manual knobs or digital control panel</p> <p>Cooking Modes: Bake, toast, broil, and possibly other functions</p> <p>Timer: Built-in timer for cooking duration</p> <p>Safety Features: Heat-resistant handle, insulated walls</p> <p>Power: Suitable for standard home electrical outlets</p>	1		
72.	Z72	Zoology	Kitchen knives set and scissor	<p>Knife Set: Includes chef's knife, utility knife, paring knife</p> <p>Blade Material: Stainless steel</p> <p>Handle Material: Ergonomic non-slip grip</p> <p>Includes: Knife block or storage case</p> <p>Scissors:</p> <p>Scissor: Material: Stainless steel blades</p> <p>Handle: Comfortable grip handles</p> <p>Usage: Multi-purpose kitchen scissors</p>	1		
73.	Z73	Zoology	Hot plate	<p>Material: Mild Steel;</p> <p>Usage/Application: For Laboratory Purpose</p> <p>Shape: Square, Rectangular;</p> <p>Temperature Range: Ambient to 350 deg.C; Power: 220V AC 50Hz</p>	1		

74.	Z74	Zoology	Induction Cooktop	Power: Typically around 2000 watts Control: Touch or knob controls for temperature and timer settings Cooking Modes: Multiple power levels for versatile cooking Safety Features: Auto shut-off, overheat protection Display: Digital display for temperature and timer Size: Compact design suitable for small kitchens	1		
75.	Z75	Zoology	Binoculars 8-16X40 ZOOM DPS I	Magnification: 8-16x variable zoom; Objective Lens Diameter: 40 mm Prism Type: Porro prism; Field of View: Approximately 5.6 to 3.5 degrees; Exit Pupil Diameter: 2.5 - 5 mm; Eye Relief: 10 - 12 mm; Close Focus Distance: Approximately 7 meters; Optical Coatings: Multi-coated lenses for enhanced image brightness and clarity; Weight: Approximately 790 grams; Dimensions: 182 x 163 x 58 mm; Features: Foldable rubber eyecups, central focus knob, durable rubber armored housing	10		
76.	Z76	Zoology	Spotting Scope	Product Dimensions : 30 x 15 x 10 cm; 1 kg Mounting Hardware Spotting Scope; Maximum magnification: 2060; Optical zoom : 60 x; Min Focal Length : 5000 Millimeters; Lens type Objective; Item Weight : 1 kg	1		

77.	Z77	Zoology	Microscope Cell Phone Camera Adapter	<p>Compatibility: Universal fit for most smartphones and microscope eyepieces (23-30 mm diameter)</p> <p>Material: Durable aluminum alloy and plastic construction</p> <p>Adjustment Mechanism: Adjustable clamps to secure the phone and align the camera</p> <p>Lens: High-quality optical glass lens for clear imaging</p> <p>Mounting: Easy installation with a secure grip on the microscope eyepiece</p> <p>Usage: Suitable for capturing and sharing microscope images and videos</p> <p>Weight: Lightweight and portable design</p>	2		
78.	Z78	Zoology	Water and Soil Testing Kit	<p>Display 3 ½ digit LCD Display, I Power Supply 6 dry cells of 1.5V OR 230±10PHz</p> <p>pH: I Range 0 to 14 pH, Temp. Comp 0-100°C, Resolution 0.01pH, I Accuracy ±0.01pH ± 1 digit</p> <p>Conductivity: Range 0-20ms, 0-200, Resolution 0.1 mhos I Accuracy ±05% FS ± 1 digit</p> <p>Temperature: Range 0-100°C, I Cell Constant Pre-Adjustable, I Resolution 0.1 Accuracy ±0.1°C ± 1 digit</p> <p>TDS: I Cell Constant Pre-Adjustable I Accuracy ±5% FDS ±1 digit</p> <p>D.O.: I Range 0-20ppt, 0-200ppt, Accuracy ±0.01C ±1digit I Resolution 0.1ppm</p>			

				mV (ORP): I Range 0 to ± 1999 mV, I Accuracy ± 1 mV, I Calibration MANUAL I Resolution 1 mV, I Range 0-20ppm, I Resolution 0.1ppm Temp. Comp 05°-50°C (Manual) STANDARD ACCESSORIES I Standard Solution 7.0 pH & 4.0 pH I Temperature Probe I pH Electrode I ORP Electrode (On Demand) I Instruction Manual I Conductivity/TDS/			
79.	Z79	Zoology	Camera and accessories	Nikon Z50 Mirrorless Camera , 20.9 MP with Z DX 16-50Mm F/3.5-6.3 VR & Z DX 50-250Mm F/4.5-6.3 VR Lens with Additional Battery & 64 GB SD Card. Tripod: DIGITEK® (DTR 520 BH) 152CM Foldable Aluminum Tripod Cum Monopod with Swivel Pan Head, 4 Section Adjustment, 7kg Max Load, Max Operating Height: 4.95Ft, Compatible with DSLR Camera, Dv Video Camcorder			
80.	Z80	Zoology	Autoclave Double Drum Size 12X22 fully stainless steel	Capacity: 22 Litre; Size 250 mm x 450 mm, Material: Stainless Steel; Automation Grade: Semi Automatic; Pressure Range: 0-25psi	1		
81.	Z81	Zoology	Dehumidifying Dry Cabinet	Special Feature Quiet Operation; Capacity 195 litres; Tank Volume 195 Litres; Product Dimensions 61D x 40W x 48H Centimeters, Recommended Uses For Product Camera and other electronic items; Included	1		

				Components Power Cord; Item Weight 20 Kilograms; Material Alloy Steel; Wattage 5 Watts; Operation Mode Comfort			
82.	Z82	Zoology	Magnetic stirrer with hot plate	MaterialStainless Steel; Weight [kg] 5 Kg; Hotplate Surface with hotplate	1		
83.	Z83	Zoology	Vortex Mixture 2000 RPM	Voltage 220 240 V; Material CRC/MS sheet duly Painted; Dimensions (W X D X H) 150x150 mm; Vibration type variable speed genie short rapid electronic stroke motor drives; Neoprene cup in parts vigorous agitation to tube or small flask; Shaking starts when vessel is pressed against cup; Fitted with Vacuum Rubber at the bottom to prevent walking; Outer casing made of MS/CRC sheet duly to painted / Powder coated.	1		
84.	Z84	Zoology	Colorimeter	Display Type 3 1/2 Digit LED; Range (nm) 400-700 nm;Light Source 6.8V, 250mA Lamp; Weight (kg) 3-4 kg; Color Off White / Light Grey; Mini Volume 1 ml; Accessories Test Tubes 5 Nos., Spare Lamp & Instruction Manual; Accuracy 0.5% F.S. +- 1 digit; Output O.D. 0 to 1.99; Resolution O.D. 0.01 Power Source 230V +- 10%, 50 Hz AC; Detector Photo diode	2		
85.	Z85	Zoology	Stainlees steel hot air oven, size 12"X12"X12"	Display Type 3 1/2 Digit LED; Range (nm) 400-700 nm; Model	1		

				NumberVSI-08; Light Source 6.8V, 250mA Lamp Weight (kg) 3-4 kg; Color Off White / Light Grey			
86.	Z86	Zoology	Frying pan with Spatula	Ceraglide Ceramic Coated 18 cm Non-Stick Fry Pan Consumes Less Oil Preferred for High Heating & Even Heating Stain-Resistant Gas & Induction Compatible. 2 Pack Wooden Spatula, Acacia Wood Long Handle Flat Frying Turner, Handmade Wooden Spoons For Cooking, Kitchen Utensil Set, Non-Stick Cooking Spurtle Utensils For Kitchen Use	1		
87.	Z87	Zoology	Food Dryer Machine with five tiers	Weight (kg) 5.1 Kilograms (kg); Capacity 3kg per batch Kg/hr Voltage 220 Volt (v); Product Type DRYER; Power 500 Watt (w) Automatic Yes; Dimension (L*W*H) 32.9*30.2*27.0 Centimeter (cm); Type Food Dryer; Computerized Yes Product Shape Block; General Use MULTIPURPOSE DRYER Installation Type Free Stand; Material Stainless Steel; Control System PLC Control	1		
88.	Z88	Zoology	Hand palletizer	Special Feature Removable Surface; Colour gold; Material Brass; Brand Konquer TimeS; Wattage 1000 Watts; Item Weight 400 Grams; Included Components one pcs; Style casual	1		

				Voltage 230 Volts; Material Type Free BPA Free; Number of settings 6			
89.	Z89	Zoology	Sahils Heamoglobinometer	Type Optical hemoglobin meters; Automation Manual; Differential Type 2 Part; Number Of Chambers 1	10		
90.	Z90	Zoology	Hemocytometer	Usage/Application Glass Neubeur Blood Counting Chamber Brightlined, German Complete Haemocytometer Treatment HBG Haemocytometer Complete set in a plastic case consisting of: HBG Brightline counting chamber wit Model Name/Number Haemocytometer Set Prescription/Non prescription Prescription Type HBG Haemocytometer Complete set in a plastic case consisting of: HBG Brightline counting chamber wit Type Of Equipment Double improved Neubauer counting chamber designed for accurate counting of blood cells, platelets Form Injection	15		
91.	Z91	Zoology	Mini Rotary shakers 1000 ml	Power Requirements 220 Volts; Single phase 50 Hz; Power Source AC supply; Type Rotary; Flasks 9-49	1		
92.	Z92	Zoology	Westergrens tube and ESR Stand	ESR WESTERN GREEN STAND Material Plastic; Tube Holding Capacity 6 Tubes	8		

				Usage/Application Chemical Laboratory			
93.	Z93	Zoology	8x15 ml capacity laboratory centrifuge	Material SS; Max. Capacity 15ml; Max. Speed Range (RPM) 5000 RPM Voltage Supply 120 V; Frequency 50 Hz	1		
94.	Z94	Zoology	Sphygomanometer with stethoscope	Accuracy: 0.03 (pressure); Cuff Type: VELCRO ADULT; Weight: 300 GMS APPROX; Cuff Circumference: AROUND 40 CMS MAX; Aneroid Sphygmomanometer; 60 mm Large easy to read scale; Two-tube system With zip case; he model fixed to the cuff; With velcro cuff; Noncorrosive mechanism; Safe against overpressure	10		
95.	Z95	Zoology	Gerber centrifuge machine	Electric Gerber Centrifuge 24 test; Material SS; Max. Capacity: 15ml; Max. Speed Range (RPM): 5000 RPM; Voltage Supply: 120 V; Frequency: 50 Hz.	1		
96.	Z96	Zoology	Mixer cum Grinder	Colour: Black; Product Dimensions: 35D x 21.5W x 25H Centimeters; Blade Material: Stainless Steel; Special Feature: Adjustable Speed Control Controls Type: Knob Control; Item Weight: 2850 Grams	01		

(On Company / firm's Letterhead)

ANNEXURE 3 – DECLARATION REGARDING CLEAN TRACK

To,

Date :

The Principal
Ponda Education Society's
Ravi S. Naik College of Arts and Science
Farmagudi, Ponda-Goa
403401

Sir,

Ref : Tender for the Supply of Equipment's.

I/we carefully gone through the Terms & Conditions contained in the above referred Tender. I/we hereby declare that my company / firm is not currently debarred / black listed by any Government / Semi Government Organizations / Institutions in India or abroad. I/we further certify that I am competent officer in my company /firm to make this declaration.

Yours faithfully

(Signature of the Bidder)

Printed Name

Designation

Seal

(On Company / firm's Letterhead)

ANNEXURE 4: CLIENT DETAILS

To,

Date :

The Principal
Ponda Education Society's
Ravi S. Naik College of Arts and Science
Farmagudi, Ponda-Goa
403401

Sir,

Ref: Tender for the Supply equipment's

I/we hereby mention following list of our clients which mention 3 successfully completion certificates of rate contracts or completed orders. (Copies of such rate contracts or purchase orders must be enclosed with the offer).

Sr. No.	Name of Client	Purchase order / rate contract details	Amount of Order
1.			
2.			
3.			

Yours faithfully,

(Signature of the Bidder)

Printed Name

Designation

Seal

On Company / firm's Letterhead)

ANNEXURE 5 : UNDERTAKING

We hereby declare that all the particulars given in this TENDER are true and complete to the best of our knowledge and belief and we will produce all the relevant documents promptly, if necessary or as and when asked for by Ponda Education Society's Ravi S. Naik College of Arts and Science. We understand that information provided by us will serve as prequalification Criteria for enlistment on purchase order and in the event of any information being found false or incorrect or ineligibility being detected even after the approval of purchase order your order may be cancelled and all your claims may be forfeited by the Ponda Education Society's Ravi S. Naik College of Arts and Science. We have read and understood all the terms and conditions of TENDER and we fully agree to it. on.

(Signature of the Bidder)

Printed Name

Designation

Seal

Date :

Business Address :

SECTION 6 CHECKLIST

The following items must be checked before the TENDER is submitted:

1. Envelope “A”

- a. Eligibility Criteria Responses (each pages duly sealed and signed by the authorized signatory)
- b. Copy of this TENDER document duly sealed and signed by the authorized signatory on every pages.
- c. Technical bid
- d. Annexure A1: Declaration Regarding Clean Track by Bidder.
Annexure A2: Client's Details.
Annexure A3: Declaration of Annual Turnover and Income Tax Return.
Annexure A4: Undertaking.

2. Envelope “B”

- a. Commercial Bid

Your quotation must be submitted in two envelopes Technical Bid (Envelope A) and Commercial Bid (Envelope B) subscribing on both the envelopes the TENDER reference and the due date and both these sealed covers are to be put in a bigger cover which should also be sealed and duly subscribed with our TENDER reference & due date.