

Tender Document

for

“Supply of Laboratory Equipments in

Departments of Botany, Zoology, Physics, Chemistry, Mathematics and Education

at

Government College, Koraput & Govt. HSS, Koraput”

Tender Document No- **254/GC(K)/2024**

Dated: **08.02.2024**

Issued By:

**Principal,
Government College, Koraput**

OFFICE OF THE PRINCIPAL GOVT.COLLEGE, KORAPUT

QUOTATION CALL NOTICE

No. 254/GC(K)/2024

Date :- 08.02.2024

Sealed tenders in prescribed format are invited under Two-bid system from original manufacturer/ registered firms / dealers/ suppliers having valid GST registration, PAN, IT Clearance and manufacturer's authorization certificate for the supply, installation and commissioning of laboratory equipments to the different departments of the College so as to reach the undersigned on or before 17.02.2024 , 5.00 PM through registered or speed post only. The undersigned reserves the right to accept or reject any or all quotations without assigning any reason thereof. The details of terms, conditions, application form, technical bid form, financial bid form and department wise list of equipments are available in the website of the College: www.govtcollegekoraput.ac.in .

Sd/-
PRINCIPAL
Govt. College, Koraput

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SCHEDULE OF TENDER :

Tender No & Date	254/GC(K)/2024
Name of the tender issuer	Principal, Government College, Koraput
Scope of Work	Supply of Laboratory equipment to the Departments of Botany, Zoology, Chemistry, Physics, Maths, Education
Details	Items to be supplied As per Annexure I
Performance Bank Guarantee (PBG)	5% of Bid Value
Date of issue of tender document	08.02.2024
Last Date & Time for Submission of Bids	17.02.2024; 5.00 PM
Date & Time of Opening of Bids	19.02.2024; 11.30 AM
Address for Communication	Principal, Government College, Koraput 764021, Odisha

ELIGIBILITY CRITERIA

The bidders who are desirous for above work require fulfilling the following conditions:

- 1) Must be registered under GST Act.
- 2) Must have average annual turnover for the last three years i.e. 2020-21,2021-22, 2022-23 not less than Rs. 20 Lakhs. The bidder must submit copy of audited balance sheet and profit & loss account certified by the Chartered Accountant along with the acknowledgement of Income tax return as a proof in the Technical bid.
- 3) Should not have been blacklisted by any State Govt. / Central Govt. / PSU in India. A self-declaration is required as per Annexure IV.
- 4) Must have a valid PAN.
- 5) Must have valid authorisation from the manufacturer(s)

BID SUBMISSION

Steps to be followed for submission of bid:

The bid shall be submitted in two parts: Technical Bid & the Financial Bid.

I. The Technical bid sealed in one envelope marked as “Technical Bid” and shall contain the followings:

- The bidder should supply the items strictly as per technical specification mentioned in **Annexure I**.
- The tenderer should comply about the general information of the firm in **Annexure-IV**
- The bidder should submit the details in **Annexure II**, duly filled in, signed and complete in all respects. (*No alteration / modification in the format shall be permitted.*)
- A self-declaration that the tenderer has not been blacklisted by any State Government/ Central Govt. / PSU in India in **Annexure V**.
- Audited balance sheet and profit & loss account along with copy of acknowledgement of Income Tax return of last three financial years i.e. 2020-21, 2021-22, 2022-23.
- A declaration from the Tenderer to supply, install and commission the items along with the Vouchers to the undersigned for the payment within two weeks from the date of issue of the work order in **Annexure-VI**.

II. The Financial bid shall be sealed in another envelope marked as “Financial Bid”. This shall contain the price bid in **Annexure III** duly completed in all respects.

- Rate quoted should be inclusive of GST.
- No extra cost will be borne by the college towards transportation, installation and commissioning of supplied items.
- No price increase on account of change in tax structure, duties, levies, charges etc shall be permitted.

The two separate envelopes containing technical bid and financial bid and other documents should be sealed in one envelope super-scribed as “**Supply of Laboratory equipments in Departments of Physics, Chemistry, Botany, Zoology, Mathematics and Education.**”

GENERAL TERMS AND CONDITIONS OF THE BID

Note: Bidders must read these conditions carefully and comply strictly while submitting their bids.

1. Bidder shall prepare the bid and submit it in a sealed envelope addressed to Principal, Government College, Koraput and send it through Speed Post/Registered Post only (no hand delivery will be entertained). Each envelope should bear the name of bidder, along with the tender number. The authorities shall not be responsible for postal and other delays in receipt of the bids.
2. Bidders are requested to check for any notice /amendment/ clarification etc. to the Tender Document through the website www.govtcollegekoraput.ac.in/ Notice board of the office of Government College, Koraput.
3. The Bidders should note that Prices should not be indicated in the Technical bid and should be quoted only in the Financial Bid as per Annexure III. In case the prices are indicated in the Technical bid, the bid shall stand rejected.
4. **OPENING OF TECHNICAL BID:** The Technical Bids will be opened on 19.02.2024 at 11:30 A.M in presence of the Tender Committee of the college and representative of the bidders. No separate intimation will be given to the bidders in this regard.
5. **EVALUATION PROCESS:** Technical proposals will be evaluated on the basis of compliance to eligibility criteria, technical specification, and other terms & conditions stipulated in the tender document by the Tender Committee.
6. Financial Bids will be opened of those bidders who qualify in the technical evaluation. The Committee reserves the right to reject any or all the tenders without assigning any reason thereof.
7. **Award of Contract:** Financial bids with lowest price quotation for the assignment as per **Annexure-III** will be considered for negotiations and award of contract. However where there is tie between bidders in lowest evaluated package price, the person having highest financial turnover in the preceding 3 financial year will be given preference. **The supply, installation and commissioning of items must be completed strictly within two weeks from the date of issue of work order.**
8. **PERFORMANCE BANK GUARANTEE:** The selected bidder shall deposit performance security of 5% of bid Value in the form of a demand draft/ fixed deposit receipt from a commercial bank / bank guarantee from a commercial bank within a week of notice of award of the tender. The performance security deposit will be retained till completion of supply, installation and commissioning of the items.

9. The bids not submitted in prescribed format or in prescribed manner, shall be rejected by the Tender Committee at the risk and responsibility of the bidder.
10. All the information as called for in the tender document should be submitted truly, clearly, legibly, transparently, unambiguously and without using abbreviations.
11. In the financial bid the total figures should be written in figures followed by words
12. Each page of the tender document should be signed by the bidder with seal, in token of having understood and accepted the terms and conditions of the contract and serially numbered and page marked.
13. A bid submitted cannot be withdrawn. The bidder or his authorized representative (one person only) will be allowed to be present at the time of opening of tenders.
14. The Tendering Authority reserves the right to accept any bid, and to annul the bid process and reject all bids at any time prior to award of contract, without assigning reasons & without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the action.
15. All the transit risks shall be the responsibility of the supplier.
16. All the disputes shall be subjected to the jurisdiction of Civil Courts situated in Koraput
17. Any matter which has not been covered under these provisions shall be governed as per the provisions of Odisha State Government Rules.
18. If the work is found un-satisfactory or, if the firm dishonours the contract, the Performance Security Deposit may be forfeited and the job may be entrusted to another firm. In this regard the decision of the tender Committee is final and binding on the supplier.
19. Any notice given by one party to the other pursuant to this contract shall be sent in writing to Principal, Government College, Koraput
20. **Payment Terms:** All payments will be made within 30 days of submission of Invoice, based on completion of respective terms & conditions. TDS will be deducted as per the rules. The invoice will be raised in favour of Principal, Government College, Koraput
21. **Completion Period:** The work shall be completed in all respect within two weeks from the date of issue of work order.
22. **A firm can apply for any Part(s) or whole of the tender.**

LIST OF EQUIPMENTS WITH TECHNICAL SPECIFICATION**ANNEXURE-I**

DEPARTMENT OF BOTANY			
Sl. NO	Equipment	Specification	Quantity
1.	Trinocular microscope	Bright field, Dark field, Phase contrast, LED lamp, Tilting binocular, Camera 5mp, USB connection Plan Achromat 4X NA 0.1 W.D. 27.8 mm 10X NA 0.25 W.D. 8.0 mm 20X NA 0.4 W.D. 2.5 mm 40X NA 0.65 W.D. 0.6 mm 100X Oil NA 1.25 W.D. 0.13 mm	1
2.	PCR Machine (96 well)	96x0.2ml well, Peltier, heated lid, non-gradient, TFT screen, Ramp rate 4-5°C per sec Accuracy 0.1°C.	1
3.	Horizontal Gel Electrophoresis system	Complete Set - Including base gel running unit, safety lid, at least two casting trays and combs. Gel Casting Tray: Standard form; Combs sizes: 1.0 mm - 4 wells, 8 wells & 12 wells; 2.0 mm - 4 wells, 8 wells & 12 wells, Platinum electrodes	1
4.	Vertical Gel Electrophoresis system	Including base gel running unit, safety lid, connecting leads spacers etc. • Gel casting unit including glass plates, combs, casting frame etc. • Comb size includes 0.75mm, 1.0mm, 1.5mm, 2mm etc. • Number of wells 10/12/15 • Clamp based gel casting unit will be preferred	1
5.	Power supply for electrophoresis Constant voltage 50,100,150,200 volts	Number outputs 4, output voltage 2-300V, Output current 10-100mA, power 120W, display led screen, timer,	1
6.	Cooling Centrifuge with rotors (24x1.5 ml and 8x15 ml) max speed 16000rpm Rotors 24x1.5 ml, 8x5ml	Fast running, LED display, Brushless induction, digital countdown, CFC free refrigeration, precooling features, Motor overload protection, imbalance signal	1
7.	UV transilluminator	Dual wavelength 254, 365 nm wavelength, 34x30x10,	1
8.	Laminar Air flow	Working size (2'x2'x2') stainless steel, 99.9 % HEPA filter size 2'x2'x6', Laminate high quality wooden board, noise level less than 55db, white light, UV light and transparent front door.	1

9.	Micro-pipette variable	Variable (2-20 μ l, 20-200 μ l, 100-1000 μ l) PP body	1 each
10.	Automatic single distillation glass unit	Water output 2.5 litres/hr, power 4.4kw, Conductivity 1×10^{-6} , 23-250 volt, pyrogen free, Boiler and Condenser (Boro 3.3), Dimensions 650x255x440	1
11.	Water bath	15 litres, double walled, 355 x 405 x 100 mm, No. of holes 12, 75 mM diameter, temp up to 100 degree C, temp sensor, digital timer, stirrer and automatic cut off	1
12.	Rain Gauge with tripod	Orifice: 8" (200 mm) Capacity: 20" (500 mm) Resolution: 0.01" (0.2 mm) Material: Gauge: White powder-coated aluminum Funnel: Black anodized aluminum Support: Zinc-plated steel Size (with tripod support): 17.25" Dia x 27" H (438 mm x 686 mm) tripod: 8 lbs/10 lbs (3.6 kg/4.5 kg)	1
13.	Electronic precision balance	Weighing Range:220 gm, Resolution 0.001 g, Pan Size 85 mm, with glass covering	1
14.	Spirit Lamp	Stainless steel	6
15.	Cork Borer set up	Stainless steel	6
16.	Capillary tube	For paper chromatography	12
17.	Chromatography Chamber	Soda lime Glass 25x25x15 cm	2
18.	Wilmott's Bubbler	Made up of High quality glass	4
19.	Ganong' Potometer	Made up of High quality glass	4
20.	T/A Apparatus	Made up of High quality glass	4
21.	Farmers Potometer	Made up of High quality glass	4
22.	Electronic Balance	1000gm capacity, Readability 0.01 mg, Automatic calibration, voltage 220 V,	1

DEPARTMENT OF ZOOLOGY			
S. No	PRODUCT NAME	Specifications	Quantity Required
1.	Autoclave steel body	22 litre electrical 10"x18", vertical lid, 1.5kw heater, leake free, 100 %safety system, pressure gauge.	1
2.	Laminar air flow Vertical	Working size(2'x2'x2') stainless steel, 99.9 % HEPA filter size2'x2'x6" , Laminate high quality wooden board, noise level less than 55db, white knight, UV light and transparent front door.	1
3.	Water analysing instrument	microprocessor controlled with pH, Conductivity, TDS, salinity, mV and temperature	1
4.	Pipette Filler	10ml	10
5.	Haemocytometer set	Glass	10
6.	Spectrophotometer	Double beam Grating 1200 lines/mm UV visible (190-1100 nm range band width 1nm, wavelength accuracy 0.3nm,) Photometric range 0 – 200 %T, -0.3 to 3A, 0 – 9999 Conc. Halogen Deuterium Lamp, USB port to display n to computer	1
7.	Micro-pipette variable (0.1-2µl, 1-10µl, 2-20 µl, 20-200 µl, 100-1000 µl)	Variable (0.1-2µl, 1-10µl, 2-20 µl, 20-200 µl, 100-1000 µl) PP body	1
8.	BOD Incubator	Microprocessor controlled (113 litres, 2-60 ⁰ C, LED display, Microprocess temp control, 2-5 shelves approx.)	1
9.	Cooling Centrifuge with rotors (24x1.5 ml and 8x15 ml) max speed 16000rpm, brushless	Fast running, LED display, Brushless induction, digital countdown, CFC free refrigeration, pre-cooling features, Motor overload protection, imbalance signal	1
10.	Western Blotting Apparatus (Wet) Vertical	Gel transfer cell for two 10x 7.5 cm gels includes two gel holder cassetes foam pads electrodes, tank, blue cooling unit. lid with cables	1
11.	Water bath	15 litres, double walled, 355 x 405 x 100 mm, No. of holes 12, 75 mMdiameter, temp upto 100 degree C, temp sensor, digital timer, stirrer and automatic cut off	1
12.	Vortex Shaker Orbital motion, 500 ml capacity, 122x165x165 cm weight 4 kg	Orbital motion, 500 ml capacity, 122x165x165 cm weight 4 kg	1
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13.	GPS system	L1 frequency,1575.42 MHz	1
14.	Range Finder telescope,	water proof,50 mm objective, 7x magnification	1
15.	Compass	0-360 degree ,1 degree resolution,powder coat, weight 300 gm	1
16.	Compound Microscope (JUNIOR MEDICAL)	Consist with 10x and 45x, 100x oil immerse objectives and with 10x and 15x wide field eyepieces. Having double lens condenser and mechanical stage with reflector illumination complete set in thermocol packing with 100 ml of cedar wood oil.	03
17.	Digital PH Meter	Digital PH meter with conductivity. 0.01 PH resolution.mV range 0 - ± 1999	01
18.	Microscope : PROJECTION	Consist with 10x and 45x,with 10x and 15x wide field eyepieces. Power illumination and having 6" projection head to display the slide image "360 degrees rotatable"- max 450 to 675 magnification.	02
19.	Dissection microscope	With cast iron body and brass nickel plated parts superior with acromatic lenses with wooden box.	04
20.	Water bath	Water bath 6 holes: thermostatic controll with automatic thermostat SS tub and SS lid double wall - working on 220V AC - 1500 Watts. 14 Lx 12 Bx10"H	01
21.	Spirit lamp metallic ss	Spirit lamp metallic ss	05

Department of Chemistry

Sl. No.	Equipment name	Specification	Quantity
1	Digital Conductivity Meter	1. Range: 0 μ S-100 mS/cm 2. Resolution: 0.1 μ s 3. Temperature: 0-100°	5
2	Potentiometer	1. Bipolar input configuration 2. Accurate End point, 3. Automatic polarity, 4. Uniform strrer with variable control 5. MV Range: 0- \pm 1999 6. Resolution: 1Mv	5
3	Spectrophotometer-Visible	1. Wavelength range: 340-960 nm 2. Accuracy: \pm 5nm, Spectral Band width-10nm 3. 4-Digit LED Display 4. Grating-600 lines/min 5. Tungsten Halogen lamp source 6. Double position 10 mm cuvette 7. Holder Mannual Measuring mode, Complete with two glass cuvette.	2
4	Viscometer	1. Ostwald 2. Standard size 3. College Pattern 4. Centre support 5. 80-100 Sec 6. 100-120 Sec	20
5	Stalagmometer	1. Set of three (one straight, two bent) 2. Straight, graduated with Rota Flow stopcock	20
6	Paper Chromatography Cabinet, RELIGLAS	1. Ascending or Descending mode of teak wood and glass construction. 2. It can accommodate two (troughs) and six glass rods. 3. Cabinet size: 60 X 30 X60 cm approx. 4. For 4 filter papers of 46 X 57 cm Size	5
7	Calorimeter	1. Single walled calorimeter 2. Size: 4 X 3 inch	7

8.	Bunsen Burner With Stopcock		32
9.	Wire Gauze with frame		48
10.	Blowpipe		48
11.	Crucible Tongue ASS		48
12.	Test Tube Holder		48
13.	Spatula 6'		40
14.	Magnetic Stirrer with Hot plate ASS	Capacity 2L, Heating power 300W, Ceramic top, 120 rpm,	2
15.	Test Tube Brush		36
16.	Test Tube Stand		48
17.	Magnetic Stirrer Beads	Rod shaped star shape small and large	2
18.	KIPPS APPARATUS	Polypropylene material	2

EQUIPMENTS/APPARATUS FOR UG PHYSICS LABORATORY			
SL. NO.	NAME OF THE EQUIPMENTS/ ITEM	SPECIFICATIONS	Quantity
1	Newton's Ring Apparatus	Newton's Ring Microscope - a) Newton's Ring Apparatus – Deluxe Complete with Newton's ring lens fitted in front of microscope. Except sodium lamp and transformer	1
2	LCR Circuit for frequency Response Study.	LCR Series And Parallel Resonance Apparatus - Objective – To plot frequency vs. Current characteristics of LCR circuit when connected in series or parallel. Features- Instrument comprises 3 resistances, 3 capacitors and one inductance connected inside and connection brought out at sockets. 2 ac moving coil meters to measure voltage and current. With Built-In Sine Wave Oscillator	1
3	Set-up for Verification of the law of Malus for plane polarized light	Analyzer, Polarizer, monochromatic source with optical bench with upright	1
4	Set-up for Verification of the Stefan's law of radiation and determination of Stefan's constant.	Kit for stefans constatnt: battery eliminator with 12 V, ameter(0-5 amp), Rheostat 50 ohm, tungsten bulb of 5 watt, volt meter 0 to 12 v	1

5	Set-up for determination of the Boltzmann constant using V-I characteristics of PN junction diode.	Kit for V-I characteristics of P-N diode: Silicon P-N junction, voltmeter, Ameter, Rheostat	1
6	BH curve Apparatus of Fe using solenoid and determination of the energy loss from Hysteresis	EXCEPT CRO, Magnetic field 5gauss, different iron spokes, transformer, connecting wire with two pointed pin	1
7	Four Probe Apparatus for determination of Band gap of Semiconductor	Spring loaded, coated with Zn at the hps, Ge crystal in chip, temp about 20 degree, operating temp 170 degree	1
8	PE hysteresis loop determination Apparatus of a ferroelectric crystal	EXCEPT CRO, ferroelectric crystal, hysteresis loop panel	1
9	Dielectric Constant Measurement Apparatus of dielectric Materials and variation with frequency	dielectric material with different dielectric constant, power supply set up	1
10	Set-up to determine (1) wavelength and (2) angular spread of He-Ne laser (Red light) using plane diffraction grating.	He-Ne laser source, diffraction grating plate	1
11	Set-up to determine the Plancks constant using LEDs of at least 4 different colours.	Kit for plancks constant with four different colours	1
12	Tunnel diode To show tunneling effect using I-V characteristics.	Tunnel diode with volt meter, ameter, Rheostat, Stabilised power supply	1
13	Laser source set-up to determine wavelength of light using diffraction of single slit.	Normal laser source, diffraction grating, single slit	1
14	Collpitt's oscillator.	Kit for Collpitt's oscillator, capacitor, resistor, inductor	1
15	RC-coupled transistor amplifier to study the frequency response of voltage gain	Kit to study voltage gain in RC-coupled transistor amplifier.	1
16	Apparatus to design and study OP Amp-IC (741/351) as inverting amplifier	OP-Amp-IC(741/351), kit	1
17	Apparatus to design and study OP Amp-IC (741/351) as non inverting amplifier	OP-Amp-IC(741/351), kit	1
18	Apparatus to design and study OP Amp-IC (741/351) as integrator study frequency response.	OP-Amp-IC(741/351), kit	1

19	Apparatus to design and study OP Amp-IC (741/351) as differentiation and study frequency response.	OP-Amp-IC(741/351),kit	1
20	Zener diode to study the V-I characteristics and its use as voltage regulator.	Volt meter (0-15v),ammeter(mA),three zener diode,with multiple load resistance,kit	1
21	Apparatus to Study V-I and power curves of solar cells, and find maximum power point and efficiency.	solar cell,voltmeter,ammeter,power supply,kit	2
22	Set-up to study the variation of Thermo-emf of a Thermocouple with Difference of Temperature of its Two Junctions.	Thermo couple set up	1
23	Set-up to determine the Temperature Coefficient of Resistance by Platinum Resistance Thermometer (PRT).	Platinum thermometer resistance with power supply 220 V with bridge	1
24	Series LCR circuit Apparatus to determine its (a) Resonant frequency, (b) Impedance at resonance, (c) Quality factor Q and (d) Band width.	L = 1000 mH, R=100, ohm, C=0.1 to 0.5 microfarad	1
25	Series RC Circuit Characteristics Apparatus.	R=100 to 200 ohm, C=0.1 to 0.5 microfarad	1
26	Function generator for CRO	frequency 20 KHZ, waveforms sine , cosine etc	1
27	Computers for programming	CPU-Intel core i5, 10th generation, 16 GB RAM, 250 GB SSD, 1TB Hard drive, Monitor, Key board	2
28	Quinck's tube Apparatus	Measurement of susceptibility of paramagnetic solution	1
29	Hall Probe Apparatus for Hall coefficient of semiconductor	Hall probe with Germanium crystal, electromagnet, Power supply with 220V digital gauss meter	1

30.	Battery Eliminator (OMEGA Brand)	0 - 12 Volts, 1 Ampere	2
31.	Battery Eliminator (OMEGA Brand)	0 - 12 Volts, 2 Ampere	2
32.	Battery Eliminator (OMEGA Brand)	0 - 12 Volts, 3 Ampere	2

33.	Daniel cell Set-up (Good Quality)	***	4
34.	Laclanche Cell (Good Quality)	***	4
35.	Ohm's Law Set-up (OMEGA Brand)	Verification of Ohm's Law	3
36.	PN Junction Diode (PISCO Brand)	V - I Characteristics Curve	3
37.	Zener Diode (PISCO Brand)	Determination of Breakdown Voltage	3
38.	Optical Bench 1.5 mm (Spancotek Brand) with Uprights	***	1
39.	Travelling Microscope (PISCO Brand)	Least Count = 0.001 cm with Horizontal, Vertical, Forward & Backward Movement Capacity	1
40.	Ammeter (PISCO Brand)	(0 - 5) Ampere	2
41.	Ammeter (PISCO Brand)	(0 - 10) Ampere	2
42.	Voltmeter (PISCO Brand)	(0 - 15) Volts	2
43.	Voltmeter (PISCO Brand)	(0 - 30) Volts	2
44.	Glass Prism	6 cm × 6 cm	40
45.	Wooden Board	Fine Polished & Pin Flexible	30
46.	Rheostat (OMEGA Brand)	6 Ampere	4
47.	Meter Bridge (OMEGA Brand)	***	2
48.	Crocodile Clip (Good Quality)	***	30
49.	Connecting Plug (Good Quality)	***	
50.	Convex Lens	Focal Length = 10 cm	6
51.	Convex Lens	Focal Length = 15 cm	6
52.	Convex Lens	Focal Length = 20 cm	6
53.	Concave Lens	Focal Length = 10 cm	6

54.	Concave Lens	Focal Length = 15 cm	6
55.	Concave Lens	Focal Length = 20 cm	6
56.	Concave Mirror	Focal Length = 10 cm	6
57.	Concave Mirror	Focal Length = 15 cm	6
58.	Concave Mirror	Focal Length = 20 cm	6
59.	Convex Mirror	Focal Length = 10 cm	6
60.	Convex Mirror	Focal Length = 15 cm	6
61.	Convex Mirror	Focal Length = 20 cm	6

DEPARTMENT OF MATHEMATICS			
Sl.no	PRODUCT NAME	Specifications	Quantity Required
1	Desktop Computer	Processor: 13th Gen Intel® Core™ i7-13700 (24 MB cache, 16 cores, 24 threads, 2.10 GHz to 5.10 GHz Turbo) Operating System: Windows 11 Home Single Language, English Monitor: 22" Monitor - E2222H Memory: 16 GB: 1 x 16 GB, DDR4, 3200 MT/s Storage: 12 GB, M.2, PCIe NVMe, SSD	1
2	Software MATLAB- 4 users	Intended Use- Academic License Term-- Perpetual	1

DEPARTMENT OF EDUCATION			
SL NO	ITEM NAME	PUBLISHER/DISTRIBUTOR	NO OF ITEM
1	CREATIVITY TEST	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282007	02
2	ACHIEVMENT TEST	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282008	02
3	ATTITUDE TEST	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282009	02
4	APTITUDE TEST	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282010	02
5	EMOTIONAL INTELLIGENCE TEST	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282011	02
6	INTELLIGENCE TEST	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282012	02
7	NEUROPSYCHOLOGICAL TEST	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282013	02
8	PROJECTIVE TEST	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282014	02
9	OBERVATION TEST	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282015	02
10	Political map of India	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
11	Historical map of India	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
12	Cultural map of India	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
13	World political map	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
14	World historical map	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
15	World natural map	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
16	Political map of Odisha	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
17	Natural map of Odisha	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
18	Political map of koraput	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
19	Geographical map of koraput	AJANTA PUBLISHERS CUTTUCK, ODISHA	05
20	ATLAS ENGLISH & ODIA MEDIUM	AJANTA PUBLISHERS CUTTUCK, ODISHA	4

PROFORMA FOR TECHNICAL BID

Sl. NO	Equipment	Item Code	Specification	MAKE	Item can be supplied as per specification Yes/NO
1.	Trinocular microscope	Bot 1	Bright field, Dark field, Phase contrast, LED lamp, Tilting binocular, Camera 5mp, USB connection Plan Achromat 4X NA 0.1 W.D. 27.8 mm 10X NA 0.25 W.D. 8.0 mm 20X NA 0.4 W.D. 2.5 mm 40X NA 0.65 W.D. 0.6 mm 100X Oil NA 1.25 W.D. 0.13 mm		
2.	PCR Machine (96 well)	Bot2	96x0.2ml well, Peltier, heated lid, non-gradient, TFT screen, Ramp rate 4-5 ⁰ C per sec Accuracy 0.1 ⁰ C.		
3.	Horizontal Gel Electrophoresis system	Bot3	Complete Set - Including base gel running unit, safety lid, at least two casting trays and combs. Gel Casting Tray: Standard form; Combs sizes: 1.0 mm -4 wells, 8 wells & 12 wells; 2.0 mm - 4 wells, 8 wells & 12 wells, Platinum electrodes		
4.	Vertical Gel Electrophoresis system	Bot4	Including base gel running unit, safety lid, connecting leads spacers etc. • Gel casting unit including glass plates, combs, casting frame etc. • Comb size includes 0.75mm, 1.0mm, 1.5mm, 2mm etc. • Number of wells 10/12/15 • Clamp based gel casting unit will be preferred		
5.	Power supply for electrophoresis Constant voltage 50,100,150,200 volts	Bot5	Number outputs 4, output voltage 2-300V, Output current 10-100mA, power 120W, display led screen, timer,		
6.	Cooling Centrifuge with	Bot6	Fast running, LED display, Brushless induction, digital		

	rotors (24x1.5 ml and 8x15 ml) max speed 16000rpm Rotors 24x1.5 ml, 8x5ml		countdown, CFC free refrigeration, precooling features, Motor overload protection, imbalance signal		
7.	UV transilluminator	Bot7	Dual wavelength 254, 365 nm wavelength, 34x30x10,		
8.	Laminar Air flow	Bot8	Working size(2'x2'x2') stainless steel, 99.9 % HEPA filter size2'x2'x6" , Laminate high quality wooden board, noise level less than 55db, white kight, UV light and transparent front door.		
9.	Micro-pipette variable	Bot9	Variable (2-20 µl, 20-200 µl, 100-1000 µl) PP body		
10.	Automatic single distillation glass unit	Bot10	Water output 2.5 litres/hr, power 4.4kw, Conductivity 1×10^{-6} , 23-250 volt, pyrogen free, Boiler and Condenser (Boro 3.3), Dimensions 650x255x440		
11.	Water bath	Bot11	15 litres, double walled, 355 x 405 x 100 mm, No. of holes 12, 75 mM diameter, temp upto 100 degree C, temp sensor, digital timer, stirrer and automatic cut off		
12.	Rain Gauze with tripod	Bot12	Orifice: 8" (200 mm) Capacity: 20" (500 mm) Resolution: 0.01" (0.2 mm) Material: Gauge: White powder-coated aluminum Funnel: Black anodized aluminum Support: Zinc-plated steel Size (with tripod support): 17.25" Dia x 27" H (438 mm x 686 mm) tripod: 8 lbs/10 lbs (3.6 kg/4.5 kg)		
13.	Electronic precision balance	Bot13	Weighing Range:220 gm, Resolution 0.001 g, Pan Size 85 mm, with glass covering		

14.	Spirit Lamp	Bot14	Stainless steel		
15.	Cork Borer set up	Bot15	Stainlesss steel		
16.	Capillary tube	Bot16	For paper chromatography		
17.	Chromatography Chamber	Bot17	Sodalime Glass 25x25x15 cm		
18.	Wilmott's Bubbler	Bot18	Made up of High quality glass		
19.	Ganong'Potometer	Bot19	Made up of High quality glass		
20.	T/A Apparatus	Bot20	Made up of High quality glass		
21.	Farmers Potometer	Bot21	Made up of High quality glass		
22.	Electronic Balance	Bot22	1000gm capacity, Readability 0.01 mg, Automatic calibration, voltage 220 V,		

DEPARTMENT OF ZOOLOGY

S. No	PRODUCT NAME	ITEM code	Specifications	Make	Item can be supplied as per specification Yes/NO
1.	Autoclave steel body	Zoo1	22 litre electrical 10"x18", vertical lid, 1.5kw heater, leakage free, 100 % safety system, pressure gauge.		
2.	Laminar air flow Vertical	Zoo2	Working size(2'x2'x2') stainless steel, 99.9 % HEPA filter size 2'x2'x6", Laminated high quality wooden board, noise level less than 55db, white light, UV light and transparent front door.		
3.	Water analysing instrument	Zoo3	microprocessor controlled with pH, Conductivity, TDS, salinity, mV and temperature		
4.	Pipette Filler	Zoo4	10ml		
5.	Haemocytometer set	Zoo5	Glass		
6.	Spectrophotometer	Zoo6	Double beam Grating 1200 lines/mm UV visible (190-1100 nm range band width 1nm, wavelength accuracy 0.3nm,) Photometric range 0 – 200 %T, -0.3 to 3A, 0 – 9999 Conc. Halogen Deuterium Lamp, USB port to display on computer		
7.	Micro-pipette variable (0.1-2µl, 1-10µl, 2-20 µl, 20-200 µl, 100-1000 µl)	Zoo7	Variable (0.1-2µl, 1-10µl, 2-20 µl, 20-200 µl, 100-1000 µl) PP body		
8.	BOD Incubator	Zoo8	Microprocessor controlled (113 litres, 2-60°C, LED display, Microprocessor temp control, 2-5 shelves approx.)		

9.	Cooling Centrifuge with rotors (24x1.5 ml and 8x15 ml) max speed 16000rpm, brushless	Zoo9	Fast running, LED display, Brushless induction, digital countdown, CFC free refrigeration, precooling features, Motor overload protection, imbalance signal		
10.	Western Blotting Apparatus (Wet) Vertical	Zoo10	Gel transfer cell for two 10x 7.5 cm gels includes two gel holder cassettes foam pads electrodes, tank, blue cooling unit. lid with cables		
11.	Water bath	Zoo11	15 litres, double walled, 355 x 405 x 100 mm, No. of holes 12, 75 mM diameter, temp upto 100 degree C, temp sensor, digital timer, stirrer and automatic cut off		
12.	Vortex Shaker Orbital motion, 500 ml capacity, 122x165x165 cm weight 4 kg	Zoo12	Orbital motion, 500 ml capacity, 122x165x165 cm weight 4 kg		
13.	GPS system	Zoo13	L1 frequency, 1575.42 MHz		
14.	Range Finder telescope,	Zoo14	water proof, 50 mm objective, 7x magnification		
15.	Compass	Zoo15	0-360 degree , 1 degree resolution, powder coat, weight 300 gm		
16.	Compound Microscope (JUNIOR MEDICAL)	HSZoo 16	Consist with 10x and 45x, 100x oil immerse objectives and with 10x and 15x wide field eyepieces. Having double lens condenser and mechanical stage with reflector illumination complete set in thermocol packing with 100 ml of cedar wood oil.		
17.	Digital PH Meter	HSZoo 17	Digital PH meter with conductivity. 0.01 PH resolution. mV range 0 - ± 1999		

18.	Microscope : PROJECTION	HSoo1 8	Consist with 10x and 45x,with 10x and 15x wide field eyepieces. Power illumination and having 6" projection head to display the slide image "360 degrees rotatable"- max 450 to 675 magnification.		
19.	Dissection microscope	HSZoo 19	With cast iron body and brass nickel plated parts superior with acromatic lenses with wooden box.		
20.	Water bath	HSZoo 20	Water bath 6 holes: thermostatic controll with automatic thermostat SS tub and SS lid double wall - working on 220V AC - 1500 Watts. 14 Lx 12 Bx10"H		
21.	Spirit lamp metallic ss	HSZoo 21	Spirit lamp metallic ss		

Sl. No.	Equipment name	Item Code	Specification	MAKE	Item can be supplied as per specification Yes/NO
1.	Digital Conductivity Meter	Chem1	1. Range: 0 μ S-100 mS/cm 2. Resolution: 0.1 μ s 3. Temperature: 0-100 $^{\circ}$ C		
2.	Potentiometer	Chem2	1. Bipolar input configuration 2. Accurate End point, 3. Automatic polarity, 4. Uniform strrer with variable control 5. MV Range: 0 \pm 1999 6. Resolution: 1Mv		

3.	Spectrophotometer-Visible	Chem3	1. Wavelength range: 340-960 nm 2. Accuracy: ± 5 nm, Spectral Band width-10nm 3. 4-Digit LED Display 4. Grating-600 lines/min 5. Tungsten Halogen lamp source 6. Double position 10 mm cuvette 7. Holder Manual Measuring mode, Complete with two glass cuvette.		
4.	Viscometer	Chem4	1. Ostwald 2. Standard size 3. College Pattern 4. Centre support 5. 80-100 Sec 6. 100-120 Sec		
5.	Stalagmometer	Chem5	1. Set of three (one straight, two bent) 2. Straight, graduated with Rota Flow stopcock		
6.	Paper Chromatography Cabinet, RELIGLAS	Chem6	1. Ascending or Descending mode of teak wood and glass construction. 2. It can accommodate two (troughs) and six glass rods. 3. Cabinet size: 60 X 30 X60 cm approx. 4. For 4 filter papers of 46 X 57 cm Size		
7.	Calorimeter	Chem7	1. Single walled calorimeter 2. Size: 4 X 3 inch		

Sl. No.	Equipment name	Item Code	MAKE	Item can be supplied as per specification Yes/NO
8.	Bunsen Burner With Stopcock	HSCh01		
9.	Wire Gauze with frame	HSCh02		
10.	Blowpipe	HSCh03		
11.	Crucible Tongue ASS	HSCh04		
12.	Test Tube Holder	HSCh05		
13.	Spatula 6'	HSCh06		
14.	Magnetic Stirrer with Hot plate ASS	HSCh07		
15.	Test Tube Brush	HSCh08		

16.	Test Tube Stand	HSChe09		
17.	Magnetic Stirrer Beads	HSChe010		
18.	KIPPS APPARATUS	HSChe011		

SL. NO.	NAME OF THE EQUIPMENTS/ ITEM	Item Code	SPECIFICATIONS	MAKE	Item can be supplied as per specification Yes/NO
1	Newton's Ring Apparatus	Phy1	Newton's Ring Microscope - a) Newton's Ring Apparatus – Deluxe Complete with Newton's ring lens fitted in front of microscope. Except sodium lamp and transformer		
2	LCR Circuit for frequency Response Study.	Phy2	LCR Series And Parallel Resonance Apparatus - Objective – To plot frequency vs. Current characteristics of LCR circuit when connected in series or parallel. Features- Instrument comprises 3 resistances, 3 capacitors and one inductance connected inside and connection brought out at sockets. 2 ac moving coil meters to measure voltage and current. With Built-In Sine Wave Oscillator		
3	Set-up for Verification of the law of Malus for plane polarized light	Phy3	Analyzer, Polarizer, monochromatic source with optical bench with upright		
4	Set-up for Verification of the Stefan's law of radiation and determination of Stefan's constant.	Phy4	Kit for stefans constatnt: battery eliminator with 12 V, ameter(0-5 amp), Rheostat 50 ohm, tungsten bulb of 5 watt, volt meter 0 to 12 v		
5	Set-up for determination of the Boltzmann constant using V-I characteristics of PN junction diode.	Phy5	Kit for V-I characteristics of P-N diode: Silicon P-N junction, voltmeter, Ameter,Rheostat		

6	BH curve Apparatus of Fe using solenoid and determination of the energy loss from Hysteresis	Phy6	EXCEPT CRO, Magnetic field 5gauss, different iron spokes, transformer,connecting wire with two pointed pin		
7	Four Probe Apparatus for determination of Band gap of Semiconductor	Phy7	Spring loaded,coatedwith Zn at the hps,Ge crystal in chip,temp abuot 20 degree,opearating temp 170 degree		
8	PE hysteresis loop determination Apparatus of a ferroelectric crystal	Phy8	EXCEPT CRO,ferroelectric crystal,hysteresis loop panel		
9	Dielectric Constant Measurement Apparatus of dielectric Materials and variation with frequency	Phy9	dielectric material with different dielectric constant,power supply set up		
10	Set-up to determine (1) wavelength and (2) angular spread of He-Ne laser(Red light) using plane diffraction grating.	Phy10	He-Ne laser source, diffraction grating plate		
11	Set-up to determine the Plancks constant using LEDs of at least 4 different colours.	Phy11	Kit for plancks constatnt with four different colours		
12	Ttunnel diode To show tunneling effect using I-V characteristics.	Phy12	Tunnel diode with volt meter, ameter, Rheostat, Stabilised power supply		
13	Laser source set-up to determine wavelength of light using diffraction of single slit.	Phy13	Normal laser source,diffraction grating,single slit		
14	Collpitt's oscillator.	Phy14	Kit for Collpitt's oscillator,capacitor,resistor,inductor		
15	RC-coupled transistor amplifier to study the frequency response of voltage gain	Phy15	Kit to study voltage gain in RC-coupled transistor amplifier.		
16	Apparatus to design and study OP Amp- IC (741/351) as	Phy16	OP-Amp-IC(741/351),kit		

	inverting amplifier				
17	Apparatus to design and study OP Amp-IC (741/351) as non inverting amplifier	Phy17	OP-Amp-IC(741/351),kit		
18	Apparatus to design and study OP Amp-IC (741/351) as integrator study frequency response.	Phy18	OP-Amp-IC(741/351),kit		
19	Apparatus to design and study OP Amp-IC (741/351) as differentiation and study frequency response.	Phy19	OP-Amp-IC(741/351),kit		
20	Zener diode to study the V-I characteristics and its use as voltage regulator.	Phy20	Volt meter (0-15v),ammeter(mA),three zener diode,with multiple load resistance,kit		
21	Apparatus to Study V-I and power curves of solar cells, and find maximum power point and efficiency.	Phy21	solar cell,voltmeter,ammeter,power supply,kit		
22	Set-up to study the variation of Thermo-emf of a Thermocouple with Difference of Temperature of its Two Junctions.	Phy22	Thermo couple set up		
23	Set-up to determine the Temperature Coefficient of Resistance by Platinum Resistance Thermometer (PRT).	Phy23	Platinum thermometer resistance with power supply 220 V with bridge		
24	Series LCR circuit Apparatus to determine its (a) Resonant frequency, (b) Impedance at resonance, (c) Quality factor Q and (d) Band width.	Phy24	L = 1000 mH, R=100, ohm, C=0.1 to 0.5 microfarad		

25	Series RC Circuit Characteristics Apparatus.	Phy25	R=100 to 200 ohm, C=0.1 to 0.5 microfarad		
26	Function generator for CRO	Phy26	frequency 20 KHZ, waveforms sine , cosine etc		
27	Computers for programming	Phy27	CPU-Intel core i5, 10th generation, 16 GB RAM, 250 GB SSD, 1TB Hard drive, Monitor, Key board		
28	Quinck's tube Apparatus	Phy28	Measurement of susceptibility of paramagnetic solution		
29	Hall Probe Apparatus for Hall coefficient of semiconductor	Phy29	Hall probe with Germanium crystal, electromagnet, Power supply with 220V digital gauss meter		

SL. NO.	NAME OF THE EQUIPMENTS/ ITEM	Item Code	MAKE	Item can be supplied as per specification Yes/NO
30.	Battery Eliminator (OMEGA Brand)	HSPHY1		
31.	Battery Eliminator (OMEGA Brand)	HSPHY2		
32.	Battery Eliminator (OMEGA Brand)	HSPHY3		
33.	Daniel cell Set-up (Good Quality)	HSPHY4		
34.	Laclanche Cell (Good Quality)	HSPHY5		
35.	Ohm's Law Set-up (OMEGA Brand)	HSPHY6		
36.	PN Junction Diode (PISCO Brand)	HSPHY7		
37.	Zener Diode (PISCO Brand)	HSPHY8		
38.	Optical Bench 1.5 mm (Spancotek Brand) with Uprights	HSPHY9		

39.	Travelling Microscope (PISCO Brand)	HSPHY10		
40.	Ammeter (PISCO Brand)	HSPHY11		
41.	Ammeter (PISCO Brand)	HSPHY12		
42.	Voltmeter (PISCO Brand)	HSPHY13		
43.	Voltmeter (PISCO Brand)	HSPHY14		
44.	Glass Prism	HSPHY15		
45.	Wooden Board	HSPHY16		
46.	Rheostat (OMEGA Brand)	HSPHY17		
47.	Meter Bridge (OMEGA Brand)	HSPHY18		
48.	Crocodile Clip (Good Quality)	HSPHY19		
49.	Connecting Plug (Good Quality)	HSPHY20		
50.	Convex Lens	HSPHY21		
51.	Convex Lens	HSPHY22		
52.	Convex Lens	HSPHY23		
53.	Concave Lens	HSPHY24		
54.	Concave Lens	HSPHY25		
55.	Concave Lens	HSPHY26		
56.	Concave Mirror	HSPHY27		
57.	Concave Mirror	HSPHY28		
58.	Concave Mirror	HSPHY29		
59.	Convex Mirror	HSPHY30		

60.	Convex Mirror	HSPHY31		
61.	Convex Mirror	HSPHY32		

Sl. no	Equipments / Item	Item Code	Specifications	MAKE	Item can be supplied as per specification Yes/NO
1	Desktop Computer	Mat1	Processor: 13th Gen Intel® Core™ i7-13700 (24 MB cache, 16 cores, 24 threads, 2.10 GHz to 5.10 GHz Turbo) Operating System: Windows 11 Home Single Language, English Monitor: 22" Monitor - E2222H Memory: 16 GB: 1 x 16 GB, DDR4, 3200 MT/s Storage :12 GB, M.2, PCIeNVMe, SSD		
2	Software MATLAB- 4 users	Mat2	Intended Use- Academic License Term-- Perpetual		

SL NO	ITEM NAME	ITEM CODE	PUBLISHER/DISTRIBUTOR	MAKE	NO OF ITEM
1	CREATIVITY TEST	Edu1	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282007		
2	ACHIEVMENT TEST	Edu2	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282008		
3	ATTITUDE TEST	Edu3	NATIONAL PSYCHOLOGICAL CORPORATION (NPC)		

			AGRA-282009		
4	APTITUDE TEST	Edu4	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282010		
5	EMOTIONAL INTELLIGENCE TEST	Edu5	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282011		
6	INTELLIGENCE TEST	Edu6	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282012		
7	NEUROPSYCHOL OGICAL TEST	Edu7	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282013		
8	PROJECTIVE TEST	Edu8	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282014		
9	OBERVATION TEST	Edu9	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282015		
10	Political map of India	Edu10	AJANTA PUBLISHERS CUTTUCK, ODISHA		
11	Historical map of India	Edu11	AJANTA PUBLISHERS CUTTUCK, ODISHA		
12	Cultural map of India	Edu12	AJANTA PUBLISHERS CUTTUCK, ODISHA		
13	World political map	Edu13	AJANTA PUBLISHERS CUTTUCK, ODISHA		
14	World historical map	Edu14	AJANTA PUBLISHERS CUTTUCK, ODISHA		
15	World natural map	Edu15	AJANTA PUBLISHERS CUTTUCK, ODISHA		
16	Political map of Odisha	Edu16	AJANTA PUBLISHERS CUTTUCK, ODISHA		
17	Natural map of Odisha	Edu17	AJANTA PUBLISHERS CUTTUCK, ODISHA		
18	Political map of koraput	Edu18	AJANTA PUBLISHERS CUTTUCK, ODISHA		
19	Geographical map of koraput	Edu19	AJANTA PUBLISHERS CUTTUCK, ODISHA		
20	ATLAS ENGLISH & ODIA MEDIUM	Edu20	AJANTA PUBLISHERS CUTTUCK, ODISHA		

ANNEXURE III**PROFORMA FOR FINANCIAL BID**

To,

The Principal,
Government Degree College, Koraput
Koraput-1

Ref: Bid no. ----- Dated -----

Sir,

I / We _____ hereby offer to supply, install and commission of the following item(s) at the prices indicated below:

Sl. NO	Equipment	Item Code	MAKE	Unit Price
1.	Trinocular microscope	Bot 1		
2.	PCR Machine (96 well)	Bot2		
3.	Horizontal Gel Electrophoresis system	Bot3		
4.	Vertical Gel Electrophoresis system	Bot4		
5.	Power supply for electrophoresis Constant voltage 50,100,150,200 volts	Bot5		
6.	Cooling Centrifuge with rotors (24x1.5 ml and 8x15 ml) max speed 16000rpm Rotors 24x1.5 ml, 8x5ml	Bot6		
7.	UV transilluminator	Bot7		
8.	Laminar Air flow	Bot8		
9.	Micro-pipette variable	Bot9		
10.	Automatic single distillation glass unit	Bot10		
11.	Water bath	Bot11		
12.	Rain Gauze with tripod	Bot12		
13.	Electronic precision balance	HSBot13		
14.	Spirit Lamp	HSBot14		

15.	Cork Borer set up	HSBot15		
16.	Capillary tube	HSBot16		
17.	Chromatography Chamber	HSBot17		
18.	Wilmott's Bubbler	HSBot18		
19.	Ganong's Potometer	HSBot19		
20.	T/A Apparatus	HSBot20		
21.	Farmers Potometer	HSBot21		
22.	Electronic Balance	HSBot22		

S. No	PRODUCT NAME	ITEM code	Make	Unit Price
1.	Autoclave steel body	Zoo1		
2.	Laminar air flow Vertical	Zoo2		
3.	Water analysing instrument	Zoo3		
4.	Pipette Filler	Zoo4		
5.	Haemocytometer set	Zoo5		
6.	Spectrophotometer	Zoo6		
7.	Micro-pipette variable (0.1-2 μ l, 1-10 μ l, 2-20 μ l, 20-200 μ l, 100-1000 μ l)	Zoo7		
8.	BOD Incubator	Zoo8		
9.	Cooling Centrifuge with rotors (24x1.5 ml and 8x15 ml) max speed 16000rpm, brushless	Zoo9		
10.	Western Blotting Apparatus (Wet) Vertical	Zoo10		
11.	Water bath	Zoo11		
12.	Vortex Shaker Orbital motion, 500 ml capacity, 122x165x165 cm	Zoo12		

	weight 4 kg			
13.	GPS system	Zoo13		
14.	Range Finder telescope,	Zoo14		
15.	Compass	Zoo15		
16.	Compound Microscope (JUNIOR MEDICAL)	HSZoo 16		03
17.	Digital PH Meter	HSZoo 17		01
18.	Microscope : PROJECTION	HSoo1 8		02
19.	Dissection microscope	HSZoo 19		04
20.	Water bath	HSZoo 20		01
21.	Spirit lamp metallic ss	HSZoo 21		05

Sl. No.	Equipment name	Item Code	MAKE	Unit Price
22.	Digital Conductivity Meter	Chem1		
23.	Potentiometer	Chem2		
24.	Spectrophotometer-Visible	Chem3		
25.	Viscometer	Chem4		
26.	Stalagmometer	Chem5		
27.	Paper Chromatography Cabinet, RELIGLAS	Chem6		
28.	Calorimeter	Chem7		

Sl. No.	Equipment name	Item Code	Make	Unit Price
1	Bunsen Burner With Stopcock	HSChe01		
2	Wire Gauze with frame	HSChe02		

3	Blowpipe	HSChe03		
4	Crucible Tongue ASS	HSChe04		
5	Test Tube Holder	HSChe05		
6	Spatula 6'	HSChe06		
7	Magnetic Stirrer with Hot plate ASS	HSChe07		
8	Test Tube Brush	HSChe08		
9	Test Tube Stand	HSChe09		
10	Magnetic Stirrer Beads	HSChe010		
11	KIPPS APPARATUS	HSChe011		

SL. NO.	NAME OF THE EQUIPMENTS/ ITEM	Item Code	MAKE	Unit Price
1.	Newton's Ring Apparatus	Phy1		
2.	LCR Circuit for frequency Response Study.	Phy2		
3.	Set-up for Verification of the law of Malus for plane polarized light	Phy3		
4.	Set-up for Verification of the Stefan's law of radiation and determination of Stefan's constant.	Phy4		
5.	Set-up for determination of the Boltzmann constant using V-I characteristics of PN junction diode.	Phy5		
6.	BH curve Apparatus of Fe using solenoid and determination of the energy loss from Hysteresis	Phy6		
7.	Four Probe Apparatus for determination of Band gap of Semiconductor	Phy7		
8.	PE hysteresis loop determination Apparatus of a ferroelectric crystal	Phy8		

9.	Dielectric Constant Measurement Apparatus of dielectric Materials and variation with frequency	Phy9		
10.	Set-up to determine (1) wavelength and (2) angular spread of He-Ne laser(Red light) using plane diffraction grating.	Phy10		
11.	Set-up to determine the Plancks constant using LEDs of at least 4 different colours.	Phy11		
12.	Tunnel diode To show tunneling effect using I-V characteristics.	Phy12		
13.	Laser source set-up to determine wavelength of light using diffraction of single slit.	Phy13		
14.	Collpitt's oscillator.	Phy14		
15.	RC-coupled transistor amplifier to study the frequency response of voltage gain	Phy15		
16.	Apparatus to design and study OP Amp-IC (741/351) as inverting amplifier	Phy16		
17.	Apparatus to design and study OP Amp-IC (741/351) as non inverting amplifier	Phy17		
18.	Apparatus to design and study OP Amp-IC (741/351) as integrator study frequency response.	Phy18		
19.	Apparatus to design and study OP Amp-IC (741/351) as differentiation and study frequency response.	Phy19		
20.	Zener diode to study the V-I characteristics and its use as voltage regulator.	Phy20		
21.	Apparatus to Study V-I and power curves of solar cells, and find maximum power point and efficiency.	Phy21		
22.	Set-up to study the variation of Thermo-emf of a Thermocouple with Difference of Temperature of its Two Junctions.	Phy22		
23.	Set-up to determine the Temperature Coefficient of Resistance by Platinum Resistance Thermometer (PRT).	Phy23		

24.	Series LCR circuit Apparatus to determine its (a) Resonant frequency, (b) Impedance at resonance, (c) Quality factor Q and (d) Band width.	Phy24		
25.	Series RC Circuit Characteristics Apparatus.	Phy25		
26.	Function generator for CRO	Phy26		
27.	Computers for programming	Phy27		
28.	Quinck's tube Apparatus	Phy28		
29.	Hall Probe Apparatus for Hall coefficient of semiconductor	Phy29		

SL. NO.	NAME OF THE EQUIPMENTS/ ITEM	Item Code	Make	Unit Price
30	Battery Eliminator (OMEGA Brand)	HSPHY1		
31	Battery Eliminator (OMEGA Brand)	HSPHY2		
32	Battery Eliminator (OMEGA Brand)	HSPHY3		
33	Daniel cell Set-up (Good Quality)	HSPHY4		
34	Laclanche Cell (Good Quality)	HSPHY5		
35	Ohm's Law Set-up (OMEGA Brand)	HSPHY6		
36	PN Junction Diode (PISCO Brand)	HSPHY7		
37	Zener Diode (PISCO Brand)	HSPHY8		
38	Optical Bench 1.5 mm (Spancotek Brand) with Uprights	HSPHY9		
39	Travelling Microscope (PISCO Brand)	HSPHY10		

40	Ammeter (PISCO Brand)	HSPHY11		
41	Ammeter (PISCO Brand)	HSPHY12		
42	Voltmeter (PISCO Brand)	HSPHY13		
43	Voltmeter (PISCO Brand)	HSPHY14		
44	Glass Prism	HSPHY15		
45	Wooden Board	HSPHY16		
46	Rheostat (OMEGA Brand)	HSPHY17		
47	Meter Bridge (OMEGA Brand)	HSPHY18		
48	Crocodile Clip (Good Quality)	HSPHY19		
49	Connecting Plug (Good Quality)	HSPHY20		
50	Convex Lens	HSPHY21		
51	Convex Lens	HSPHY22		
52	Convex Lens	HSPHY23		
53	Concave Lens	HSPHY24		
54	Concave Lens	HSPHY25		
55	Concave Lens	HSPHY26		
56	Concave Mirror	HSPHY27		
57	Concave Mirror	HSPHY28		
58	Concave Mirror	HSPHY29		
59	Convex Mirror	HSPHY30		
60	Convex Mirror	HSPHY31		
61	Convex Mirror	HSPHY32		

Sl.no	PRODUCT NAME	Item Code	MAKE	Unit Price
1	Desktop Computer	Mat1		
2	Software MATLAB-4 users	Mat2		

SL NO	ITEM NAME	Item Code	PUBLISHER/DISTRIBUTOR	MAKE	Unit Price
1	CREATIVITY TEST	Edu1	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282007		
2	ACHIEVMENT TEST	Edu2	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282008		
3	ATTITUDE TEST	Edu3	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282009		
4	APTITUDE TEST	Edu4	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282010		
5	EMOTIONAL INTELLIGENCE TEST	Edu5	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282011		
6	INTELLIGENCE TEST	Edu6	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282012		
7	NEUROPSYCHOLOGICAL TEST	Edu7	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282013		
8	PROJECTIVE TEST	Edu8	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282014		
9	OBERVATION TEST	Edu9	NATIONAL PSYCHOLOGICAL CORPORATION (NPC) AGRA-282015		

10	Political map of India	Edu10	AJANTA PUBLISHERS CUTTUCK, ODISHA		
11	Historical map of India	Edu11	AJANTA PUBLISHERS CUTTUCK, ODISHA		
12	Cultural map of India	Edu12	AJANTA PUBLISHERS CUTTUCK, ODISHA		
13	World political map	Edu13	AJANTA PUBLISHERS CUTTUCK, ODISHA		
14	World historical map	Edu14	AJANTA PUBLISHERS CUTTUCK, ODISHA		
15	World natural map	Edu15	AJANTA PUBLISHERS CUTTUCK, ODISHA		
16	Political map of Odisha	Edu16	AJANTA PUBLISHERS CUTTUCK, ODISHA		
17	Natural map of Odisha	Edu17	AJANTA PUBLISHERS CUTTUCK, ODISHA		
18	Political map of koraput	Edu18	AJANTA PUBLISHERS CUTTUCK, ODISHA		
19	Geographical map of koraput	Edu19	AJANTA PUBLISHERS CUTTUCK, ODISHA		
20	ATLAS ENGLISH & ODIA MEDIUM	Edu20	AJANTA PUBLISHERS CUTTUCK, ODISHA		

Further, It is certified that I/ we have understood the general Terms and Conditions of the bid and our offer is to supply items strictly in accordance with the requirements and the terms mentioned in the bid.

Note:

No change in the Performa is permissible.

Date:

Place:

(Signature and seal of the bidder)

DETAILS OF THE TENDERER

Sl. No	Particular	
1	Name of the Firm/Agency/Company	
2	Complete postal address	
3	Telephone Number & e-mail Id	
4	Name of Authorized Signatory (in block letters)	
5	Contact No. of authorized signatory	
6	Type of /Firm (Proprietary/ Partnership/ PvtLtd./Public Ltd) Tenderer has to provide relevant documents (with the technical bid) as a proof of firm type	
7	Date of Establishment and Experience in business (In number of years). Work order to be attached	
8	G.S.T. Registration No.	
9	PAN No.	
10	Yearly turnover of the organization during last 3 years) and furnish audited balance sheet. 2020-21 2021-22 2022-23	
12	Furnish the names of 3 organisation and their address, Telephone Number etc. where you completed similar kinds of work.	

Date:**Place:****Signature & Seal of the Bidder**

SELF DECLARATION FOR NOT BLACK LISTED

TO

The Principal,
Government College,
Koraput- 764021, Odisha

Ref. Tender No.....dated.....

Sir/Madam

I/Wehereby confirm that our firm has not been banned or blacklisted by any Government Organization/ Financial institution/ Court/ Public/ sector unit/ Central Government.

Date:.....

Place:

(Signature and seal of the bidder)

ANNEXURE-VI

DECLARATION

TO

The Principal,
Government College,
Koraput- 764021, Odisha

Ref. Tender No.....dated.....

Sir/Madam

I/Wehereby declare that my/our firm
will complete the work in time and submit the vouchers for payment within two weeks from
the date of issue of work order

Date:.....

Place:

(Signature and seal of the bidder)