

OFFICE OF THE PRINCIPAL
R.D.S. Degree Mahavidyalaya
Kundabai, Mayurbhanj, Odisha

TENDER FORM

Tender No. & Date	No. 453 dt. 27.06.2023
Name of The Tenderer	Principal R.D.S. Degree Mahavidyalaya, Kundabai, Mayurbhanj
List of Items	See in Annexure-II
Date of publication of tender notification on official website and newspapers	Date: 27.06.2023
Sale of Tender Form commence from	Date: 27.06.2023
Last date & Time for sale of tender form	Date: 11.07.2023
Last date & Time for submission of duly filled in Tender form	Date: 11.07.2023
Date & Time for opening of Tender	Date: 12.07.2023 Time: 11.00 AM
Date and Time of the opening of Technical Bids	Date: 12.07.2023 Time: 11.00 AM
Place of opening of Tender	Office of the Principal R.D.S. Degree Mahavidyalaya, Kundabai, Mayurbhanj, Odisha
Cost of Tender Form	Rs. 500.00 (Non-refundable) by shape of DD drawn in favor of Principal, R.D.S. Degree Mahavidyalaya, Kundabai
Earnest Money	1% of the total supply order value as estimated by the college.
Performance Security	2% of the total order value

CHECK LIST

The tenderers are hereby instructed to arrange and submit the following required documents as per the checklist

Sl. No	Name of Document	Yes/No	Page No
1	CHECK -LIST		
2	Bidder Details(Annexure-I)		
3	Technical specification with Compliance Statement(Annexure-II)		
4	Copy of Valid GSTIN Registration Certificate		
5	Copy of PAN		
6	The authorization certificate of OEM/ authorized Manufacturer/ Distributor/ Dealership Certificate		
7	Copy of Income Tax Return for last 03 years (20-21, 21-22 & 22-23)		
8	Earnest Money Deposit (EMD)/ Bid Security		
9	Price schedule in prescribed format (Annexure-III)		
10	Self-declaration for not having been black listed (Annexure-IV)		
11	Guarantee/Warranty (Annexure-V)		
12	Letter of Willingness (Annexure-VI)		
13	The tenderer should have minimum 03 nos. of similar work orders during last three years in any of the Government organization Work Experience (Annexure-VII)		
14	Photocopies of the work order, Installation report of similar items(Only)		
15	Original Product catalogue		
16	Original Tender form Duly Signed & Stamp on each Page		

Signature with seal of tenderer
Date

Note - If tender is not submitted in above manner by the tenderer, may be treated as non-responsive & liable to be rejected

NOTICE INVITING TENDER

The Principal, **R.D.S. Degree Mahavidyalaya, Kundabai** invites sealed tenders under "**TWO BID SYSTEM**" from reputed suppliers of good standards for selection of a supplier for the purpose of supplying different items to **Principal R.D.S. Degree Mahavidyalaya, Kundabai, Mayurbhanj.**

"TWO BIDS SYSTEM"

Tenderer should take due care to submit the tender in accordance with requirement in sealed covers. Bids received shall be evaluated as per the Criteria prescribed in the tender document.

The College will not entertain any modifications subsequent to opening of bids and bids not conforming to tender conditions shall be liable to be rejected. Therefore, bidders are advised to submit their bids complete in all respects as per requirement of tender document specifying their acceptance to all the clauses of Bid Evaluation Criteria, General terms and conditions and compliance to the Scope of Work requirement etc.

i) Technical Bid shall consist of all technical details along with commercial terms and conditions.

AND

ii) Financial Bid shall indicate item-wise price for the items mentioned in the technical bid.

The technical bid and the financial bid should be sealed by the bidder in separate covers duly superscribed as "**Technical Bid**" and "**Financial Bid**" respectively. **Both these sealed covers should then be kept in a bigger cover** which should also be sealed & duly superscribed as "Tender for Supplying (Name of the dept.) to **Principal R.D.S. Degree Mahavidyalaya, Kundabai.**" **The Letter of Willingness & Check List and the EMD draft should be kept in the Bigger Cover.**

The tender document can also be downloaded from the official website **www.rdsdmkundabai.edu.in** of the college on payment of a non-refundable cost of Tender form of Rs 500/- in the form of a Demand Draft (DD) in favour of Principal, R.D.S. Degree Mahavidyalaya, Kundabai Payable Bank. The tender document is not transferable to any other person.

ELIGIBILITY CRITERIA

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

- A. Must be registered under GST Act
- B. Should not have been blacklisted by any State Govt. / Central Govt. / PSU India. A self-declaration is required as per **Annexure IV**.
- C. The Tenderer must be a Reputed Original Equipment manufacturer (OEM) / or the authorized Dealer of an OEM should provide all documents relating to their manufacturing/ sales capabilities. Must have Odisha Office for after sales & Service (If OEM/ Dealer outside of the State). **Tenderer who has their own sales and service station in Odisha with GST Registration Number should only quote.**
- D. Proof of Establishment of Firms / Manufacturing unit/ Dealership certificate from the OEM to be attached with **Technical Bid**.
- E. The tenderer should have minimum 03 nos. of similar work orders during last three years in any of the Government organization. Photocopies of the work order and Installation report of similar items to be attached with Technical Bid.
- F. The bidder should supply the items as per technical specification mentioned in **Annexure II**. The list of items available with the tenderer. Original Technical Catalog as Proof of Technical Specification should be enclosed by Bidder, merely Copy & Paste of Technical Specification will be outright Rejected.
- G. The bidder should compile as per **Annexure II**, duly filled in, signed and complete in all respects. No alteration / modification in the format shall be permitted.
- H. A self-declaration that the tenderer has not been blacklisted by any State Government/ /Central Govt. / PSU in India as per **Annexure IV**.
- I. Performance Statement- **Annexure-V**
- J. If any Technical conflict arises while evaluating the Technical Bid, **Principal of R.D.S. Degree Mahavidyalaya, Kundabai** may ask for **Live Demonstration** of same product in front of the Purchase committee.

1. LIST OF ITEMS:

Supply of Laboratory equipments to **R.D.S. Degree Mahavidyalaya, Kundabai**. The items have been described in Annexure-I A bidder can submit financial bid for any number of items however care should be taken to submit for accounting units mentioned against each item.

2. BIDDER:

The term Bidder shall mean Company, Firm, Agency or the Individual to whom the Contract is awarded and shall include its/ his/ her/ its heirs and legal representative. Successful Bidder is referred to as "Party" in this tender document.

3. EARNEST MONEY DEPOSIT (EMD) & PERFORMANCE SECURITY

EMD, otherwise known as Bid Security is to be submitted by the bidder along with the bid in shape of bank draft or account payee cheque in favour of Principal, R.D.S. Degree Mahavidyalaya, Kundabai payable at State Bank of India, Udala branch. No other mode of payment will be accepted. EMD amount deposited against any other tender will not be considered for adjustment against this tender. Separate EMD for each item should be submitted.

i. The amount of EMD to be submitted by the bidder shall be 1% of the estimated value of the item. The offers not accompanied by the required EMD are liable to be rejected.

ii. The EMD will be returned to the unsuccessful bidders after expiry of the final bid validity period or within 30 working days from the date of issue of the work order whichever is earlier without any interest and the EMD of the successful bidders shall be returned without any interest after deposit of **Performance Security** which is 2% of the total order value. It can also be adjusted against part of Performance Security after intimation of the Principal in writing. The EMD of the bidder will be forfeited if the bidder misleads the authority/ not willing to accept the offer/ supplies sub-standard material.

iii. After the agreement is made between the parties, a supply order will be given to the successful bidder and the bidder shall furnish **Performance Security** in the form of DD, Nationalised Bank F.D.R./NSC/Performance bank Guarantee, duly pledged in favour of The Principal, R.D.S. Degree Mahavidyalaya, Kundabai. The security deposit will be released and given back only after satisfactory completion of the Guarantee/ Warranty period of the item. The Performance Security is to be submitted on the date of agreement and failure to do so will entail forfeiture of EMD amount. Non-acceptance of order and non-compliance there-of will also entail forfeiture of EMD.

4. MODE OF PAYMENT

(i) Payment shall be made through NEFT/ RTGS transfer only after satisfactory supply of the said items.

(ii) The principal shall be at liberty to withhold any of the payments in full or in part.

(iii) No advance payment will be made in any case

(iv) The 100% payment shall be given within 10-15 days after satisfactory installation of the equipment / material supplied & necessary training of

operating personnel.

5. MODE OF SUBMISSION OF TENDER

- A. Tender should be submitted by tenderer in prescribed form.
- B. Tenderer should submit their offer in two parts as under:
 - (a) Technical Bid, consisting of technical details, drawing/catalogues/ brochures, data sheets or models etc. **(Annexure-II)**
 - (b) Financial Bid on prescribed format attached with the tender document **(Annexure-IV)**
- C. Proposals complete in all respect should be submitted to the **R.D.S. Degree Mahavidyalaya, Kundabai** through **Speed Post/ Registered Post/ Courier Service** only. Delivery in person shall not be accepted.
- D. All details asked for in the Annexure(s) should be properly filled in and each page of tender should be Stamped & Signed by the tenderer. Failure to attach Annexure required may invalidate the tender.
- E. Any tender which is not found in the proper form or is received late due to postal delay or otherwise shall in no case be accepted.
- F. The bidder is expected to examine all instructions, forms, terms and specifications in the bid document. Failure to furnish all information required as per the tender document or submission of bids not substantially responsive to the bidding document in every respect will be at the bidder's risk and may result in rejection of the bid.
- G. Offers should be typed and Price be quoted in words as well as in figures. In case of any discrepancy or variation in between figures and words is found, the offer in words shall be finally acceptable. Disagreement with this provision shall entail the bid as non-responsive and subsequently rejected.
- H. Tender documents are not transferable.
- I. Incomplete tenders or tender received after due date and not accompanied with earnest money deposit shall be rejected.
- J. In no case the bidding manufacturer or the bidder, otherwise can authorize any other agency whatsoever to supply the items to purchaser and receive payment in respect thereof.
- K. No amendment or supplementary attachment in the bidding document shall be allowed or entertained after the bid having been submitted to the purchaser. No representation there to at any stage shall be entertained.
- L. **Principal, R.D.S. Degree Mahavidyalaya, Kundabai** reserves the right to reject any or all offers or increase/decrease in quantities, call for acceptance the offer in full or in part, without assigning any reasons thereof.
- M. ISO certified Company should have established service team & network across the state.
- N. The principal is not bound to accept the tender quoting the least in the financial bid. The principal reserves the right to place order for a part of the quantity offered. The rates quoted by the bidder shall be valid for any such part.
- O. They should be registered for GST/CST/ST & Income Tax and should enclose copies of relevant certificates.
- P. Tenderer will have to produce all these original documents at any time as deemed by the Institute.

6. TERMS & CONDITIONS

The tenderer are requested to follow the below mentioned instructions

- A. Failure to comply with the conditions will result in forfeiting of the tender.

Please cross out any mistakes and rewrite the same and countersign.

- B. Cost involved in submitting the bids, attending the tender opening meeting, arrangements for the demonstration /presentation etc. shall be borne by the bidder.
- C. No tenderer shall be allowed to withdraw the tender rates after opening of the tender. If any tenderer withdraws the rates, Rates should be offered unconditionally and if rates are submitted with any condition the tender shall be rejected.
- D. Tenderer shall have to quote item wise rates; consolidated rates shall not be considered and tender shall be liable to be rejected out rightly.
- E. Tenderer/Manufacturer should have extensive **experience of at least 05 years** of designing, manufacturing, Supplying, installation and commissioning of the required item.
- F. It is a compulsory requirement that the items offered make and model, as quoted by the bidder must be supplied, installed and must be in good working condition.
- G. Tenderer should quote for the whole set of items required and should be willing to undertake responsibility of commissioning, warranties and after sales service. Part offer/offers not as per given specification will not be considered.
- H. Tenders should comply all the terms and conditions given in the tender document and be quoted for the specification given in the tender documents.
- I. Notwithstanding anything stated herein above, the principal reserves the right to assess the tenderer capability and capacity to perform the contract, should the circumstances warrant such assessment.
- J. In case any part of the equipment supplied being found to be non-functional the entire unit of equipment shall be taken as non-functional
- K. The principal reserves the right to change the quantity/ upgrade the criteria/ drop any item or part thereof/extension of delivery date at any time before placing the purchase/ work/ supply order.
- L. Right of Acceptance: The college authority is not bound itself to accept the lowest tender. It is the sole discretion of the principal to place order for better quality.
 - Signing of Tender: The individual signing the tender (or the documents in connection with it) must specify whether he/she is signing as:
 - (i) A sole proprietor of the farm, or constituted attorney of such proprietor.
 - (ii) A partner of the farm, if it be a partnership, in which case he/she must have the authority to refer to arbitration, disputes if any, concerning the business of the partnership, either by virtue of the partnership agreement or power of attorney.
 - (iii) Authorized signatory of the farm, if it is a company, a letter of the authority in this respect must be closed along with the bid.
 - (iv) A person signing the tender form or any part thereof, on behalf of another, shall be deemed to warrant that he/she has the authority to bind the other and if on inquiry it appears that the person so signing has no authority do to so, Principal may without prejudice to other Civil and Criminal remedies, cancel the contract and hold the signatory liable for all costs and damages.
 - (v) The Principal reserves the rights to reject any or all the tenders without assigning any reason thereof.

7. PRICES

Farm will submit the prices (all inclusive) for each item to be quoted on prescribed format attached with the tender document including charges for installation and

commissioning with at least One year (12 months) Warranty from the date of satisfactory installation and commissioning of the equipment. The installation will include the mechanical, civil, electrical, furnishing work (if any) required at site. The tenderer should take care that the rates and amounts are written in such a way its misinterpretations not possible.

The price ranking will be carried out as under:

1. The prices of optional items if not required as per technical specifications will be excluded for ranking purpose.
2. The ranking will be determined as under. Total Price (Cost) = Price quoted with all accessories as per technical specifications along with all the taxes and charges (if any). All these calculations must be clearly written by the bidder in price bid.
3. Offer with any price variation clause will not be accepted. The rates quoted in ambiguous terms such as "Freight on actual basis", "taxes as applicable extra" or "packing & forwarding extra" will render the tender liable for rejection.
4. G.S.T. or Central sales tax (C.S.T.) or as applicable must be reflected in the financial bid and the tax amount is to be clearly indicated separately but included in the lump sum price.
5. Bids shall be accepted with price quoted invariably in Indian Currency.
6. No increase in price shall be allowed even if claimed on the grounds of any statutory increase or fresh imposition of any other tax later.
7. Discount, if any, offered by the bidder shall not be considered unless specifically indicated in the price schedule and shall be taken into account for consideration only if it is quoted clearly with net price taking all such factors like discount, free supply etc. to arrive at net price.
8. Prices: The tenderer are required to quote as per "Annexure" (Financial Bid) in a Separate Envelope. The rates quoted shall include the cost of Material, labour, Transport & Packaging etc., as required for the completion of work.

8. VALIDITY OF BID:

The bid will remain valid for 1 months from the date of opening of financial bid.

9. TEST AND INSPECTIONS

Upon completion of the installation work, the tenderer/supplier shall facilitate inspection of the equipment by the principal or his authorized representative, to inspect & test the equipment and to confirm that they are installed in conformity to the required specifications and are serving the desired purpose. Any defect or failure to serve the desired purpose, discovered during the inspection will be promptly rectified and made good to the satisfaction of the principal or his authorized representatives.

10. GUARANTEE/ WARRANTY (Annexure-V)

The tenderer shall furnish along with their quotations the under noted Guarantee /Warranty:

- A. The Guarantee/ Warranty shall be for a period of at least 12 months from the date of satisfactory installation and handing over the equipment and of works conducted there with covered under the contract in working order. During the guarantee period the replacement of any part(s) of the equipment or rectification of defect of works will be free of cost. If the downtime exceeds seven

consecutive days at any one time, the guarantee period will be extended beyond aforesaid 12 months by a duration equal to the total down time during the period of warranty.

- B. The tenderer should produce written guarantee stating that the equipment being offered is latest model and that spares for the equipments will be available for a period of at least five years after its supply to the purchaser.
- C. The tenderer whose tender is accepted shall furnish the warranty (Where Ever Applicable) in **Annexure-V** Along with Bill.
- D. The manufacturer and the tenderer should guarantee the entire unit against defects of manufacture, workmanship and poor quality of components.
- E. The tenderer shall bear all cost of such replacement, including freight, if any, of such replace or repaired equipment and/or other articles but without being entailed to any extra payment on that or any other account. All documents required for replacement in part/parts will be made available by the indenter.

N.B. 1. Total estimated amount including all departments Rs.14,00,000/- (Rupees fourteen lakhs only)

Principal
R.D.S. Degree Mahavidyalay
Kundabai, Mayurbhanj

Bidder Details

1. Name & Postal address of Bidder:
Telephones Nos.:
E-mail:
Name & address of Owners/ Partners/ Directors:
2. Nature of Farm/ Agency/Company (Sole/ Partnership/ otherwise):
3. Copy of GST Registration Certificate
4. Copy of PAN Card
5. Income Tax return of preceding 3 financial years
6. Undertaking certifying that the Farm is not black listed in Annexure
7. Each page of tender form duly signed in
8. Dealership Certificate (Latest)
9. Whether agreed to abide by all the terms & conditions of this tender

Signature of the Proprietor/ Authorized Signatory
(Name & Signature of the tenderer with seal)

Place:

Date:

LIST OF APPARATUS FOR

Brand :INDOSAW/3B-SCIENTIFIC/GINI USA/THYWE/ SPANCOTEK/ AELAB

Sl No.	Experiment Name & Technical Specification	Vendor Specification	Deviation if any
1	<p>To determine the Moment of Inertia of a Flywheel</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> ➤ Flywheel consists of a Steel disc 250mm old x 30mm wide ➤ Which is integral with a shaft running in ball bearings ➤ A peg fixed in the shaft acts as an anchor for the end of a pulling cord which is wound round the shaft ➤ The periphery f the disc is an engraved mark which passes a pointer as the flywheel revolves ➤ The bracket carrying the flywheel should be bolted to vertical surface ➤ At least 1 m above the ground ➤ This will allow the pulling cord and its load hanger ➤ Sufficient free fall to drive the flywheel for up to 10 revolutions ➤ Weights: (9 x 100gm slotted weights) ➤ Meter Scale (Optional) ➤ Digital Stop watch (Optional) 		
2	<p>To verify the Norton and Thevenin theorems.</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> ➤ DC supply: 12V/150mA (Variable) ➤ Resistor: 500Ω/1W (Variable) ➤ Resistor: 500Ω, 200Ω & 1KΩ (Fixed) ➤ DC Voltmeter: 0-12V (Moving coil) ➤ DC Ammeter: 0-20mA (Moving coil) 		
3	<p>Callender and Barnes Constant flow method</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> ➤ Calendar and Barn's continuous flow calorimeter ➤ AC Ammeter: 0-3A (Moving Coil) ➤ AC Voltmeter: 0-10V (Moving Coil) ➤ Thermometers: 10 deg to 100 deg C- 2nos ➤ Measuring cylinder: 0 to 100mg ➤ DC Supply: 2V to 12V/3A ➤ Three Flow Water containg Beaker - 1no ➤ Rubber tubing: 8mm- 2meter ➤ Digital Stop watch (Optional) 		
4	<p>To determine the Temperature Coefficient of Resistance by Platinum Resistance Thermometer</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> ➤ Platinum Resistance Thermometer ➤ Steam Boiler (Copper) ➤ DC Power Supply ➤ Calender and Griffith bridge with jockey ➤ Galvanometer 30-0-30, 22 ohm ➤ Thermometer -10^o to 150^o c x 1^oc 		
5.	<p>To study the V-I characteristics of a Zener diode and its use as voltage regulator</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> ➤ Variable DC supply: 0-15V ➤ Voltmeter Range: 0-15V ➤ Ammeter Range: 0-15mA ➤ Ammeter Display: 3 ½ Digit LCD ➤ Voltmeter Display: 3 ½ Digit LCD ➤ Variable pot: 500K-1no ➤ Interconnection: 4mm patch cord ➤ Resistance: 1KΩ-3nos ➤ Zener Diode: 6V, 9V & 12V ➤ Mains Power: 230V/50Hz 		
6	<p>To measure Magnetic Susceptibility of Solids.</p> <p><u>Technical Specification</u></p>		

	<ul style="list-style-type: none"> ➤ Scientific Balance Capacity: 200gms, Falling away type, Air Damping Very quick and positive, beam coming to rest in 2-3 sec, Electromagnet: Magnetic Field 20KG at 6mm air gap Energising Coils Two of approx. 13W each, Power: 0-90Vdc, 3A for coils in series, 0-45Vdc, 6A for coil in parallel Constant Current Power Supply: Field intensity 7KG at 6mm air- gap with flat pole pieces, Energising Coil Two, each having a resistance of about 12W, Power requirement 0-90Vdc, 3A, if coil are connected in series 0-45V dc, 6A if coil are connected in parallel. 		
7	<p>To determine the Hall coefficient of a semiconductor sample</p> <p><u>Technical Specification</u></p> <p>CONSTANT CURRENT SOURCE</p> <ul style="list-style-type: none"> ➤ Current: 0-20 mA DC, Resolution: 10 micro ampere, Power: 220V ± 10%, 50 Hz AC, Display: 3 ½ digit LED ➤ Weight: 3 Kg approx <p>POWER SUPPLY</p> <ul style="list-style-type: none"> ➤ Voltage: 0-16V DC continuously variable & stabilized, Voltage display: 3 ½ digit LED, Ripple: Less than 25mV ➤ Overload: Current limiting protection, Current: 5 A continuously variable, 10% to full rating ➤ Current display: 3 ½ digit LED, Working voltage: 230V AC, 50 Hz single phase <p>DIGITAL GAUSS METER</p> <ul style="list-style-type: none"> ➤ Range: 200 Gauss & 2 k Gauss, Resolution: 0.1 Gauss at 0-200 Gauss, Offset: By Potentiometer to et ZERO ➤ Input voltage: 220V ± 5%, 50 Hz AC, Axial Hall Probe: InAs, Display: 3 ½ digit LED <p>HALL EFFECT APPARATUS</p> <ul style="list-style-type: none"> ➤ Coils: 400 Turns. Coil Current: 4.5Amp (Max.), Connection: 4mm safety socket. ➤ U Core: 150x130mm (LxH), 40x40mm cross section, I Core : Length=150mm, 40x40mm cross section. ➤ Core material: Ferromagnetic, Base dimension: 360x180x33mm, Weight: 8.8kg (approx) <p>DIGITAL MULTIMETER</p> <ul style="list-style-type: none"> ➤ Resistance: 200W, 2000, 20k, 200k & 2000k W, D.C. voltage: 200 & 2000 mV: 20, 200 & 600V ➤ AC voltage: 200 & 600V, DC Current: 200 & 2000 mA : 20 & 200 mA : 10 A ➤ Testing: Diode & transistor, Battery: 9V <p>GE CRYSTAL PCB</p> <ul style="list-style-type: none"> ➤ Crystal: Ge wafer, P type, Crystal size: 6x7x0.5mm (LxWxThickness), Resistivity: 1-10 ohm-cm ➤ Orientation: <100>, Offset pot: Trim pot, Connection: 4mm safety socket 		
8	<p>Half Adder, Full Adder and 4-Bit Binary Adder</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> ➤ DC Supply: +5V/250mA (fixed) ➤ Data Switch: 0-5V -8nos ➤ LED Indicator: 8nos ➤ Quad 4 IC7846: 3nos ➤ Quad 4 IC7404: 2nos ➤ Quad 4 IC7432: 1no ➤ Quad 4 IC7483: 1no 		
9	<p>To study the various biasing of BJT for Normal Class -A</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> ➤ DC Supply: +12V Fixed ➤ Transistor: CL 100S- 3nos ➤ Digital Voltmeter: 0-20V DC ➤ Digital Ammeter: 0-200mA DC ➤ Digital Ammeter: 0-200 µA DC ➤ Resistor: 1KΩ- 3nos, 200 KΩ- 3nos, 2.2 KΩ- 2nos 		
10	<p>To determine the Boltzmann constant using V-I</p>		

characteristics of PN junction diode

Technical Specification

P-N JUNCTION SETUP

- Selector Switch : V-I and V-T experiment, Bias & Junction

Selector Switch at V-I position/Junction

- Voltmeter Display : 3½ digit, 7segment LED, auto polarity
- Voltage Range : 0.000-1.999V
- Current Display : 3½ digit, 7segment LED
- Current Range : 0-20mA

Selector Switch at V-T position/ Junction :-

- Voltage Display : 3½ digit, 7segment LED
- Voltage Range : 0.000-1.999V
- Temperature Display : 3½ digit, 7segment LED
- Temperature Range : 273K to 353K Voltage : 220mV (p-p)

CRO in Bias Position :-

- Frequency : 5KHz & 20KHz
- Voltage : 220mV (p-p)
- Output Connector : 3 Pin, DIN type
- Voltage Range : 0.00-10.00V
- Oven : Heater pin 4 & 5. Temperature pin 1 & 2
- Oven Connector : 5 Pin, DIN type
- Diode & Transistor : 4mm safety socket
- Input Voltage : 220V, 50Hz AC

OVEN WITH TEMPERATURE SENSOR

- Heating Element : 35 ohm
- Oven Connector : 5 Pin, DIN type
- Ambient Temperature : 353K
- Temperature Sensor : Pt100
- Output Pin : Heater pin 4 & 5. Temperature pin 1 & 2

JUNCTION TRANSISTOR

- Transistor : NPN
- Type : BC109
- Connector : 4mm Plug-in Socket

DIODE

- Diode : P-N Junction
- Type : IN5402

NOTE: CRO/DSO (Optional)

DEPARTMENT OF CHEMISTRY

LIST OF APPARATUS FOR

Brand :Pragati/Biolinkk/Contech/Spancotek/Spectronics/ Pallav/Molychem

Sl No.	Apparatus Name & Technical Specification	Vendor Specification	Deviation if any
1	Stalagmometer		
02	Ostwald Viscometer		
03	Buchner Funnel with filtering Flask 1000ml		
04	Capillary Tube		
05	Digital Photo Colorimeter with in 8 Digital Filters Technical Specification: Wavelength Range: 405-700 nm, Filters: Built in 8 Digital Filters, Filters Wavelength: 405nm, 450nm, 480nm, 520nm, 540nm, 578nm, 620nm, 700nm, Display Parameters: O.D. % T, Wavelength Detector: Silicon Photo Diode, Accuracy: +0.01 O.D Stability: +0.02 O.D./ Hour		
06	Microprocessor Melting Point Apparatus Technical Specification: Cylindrical silicon oil bath, Built-in Magnetic stirrer with electronic speed controller, Electronic controller for adjusting the heating rate, Digital display of temperature with PT-100 sensor, Glare-free back ground light with adjustable light intensity, Provision for holding the melting point display, Temp. Range: 2deg above RT-275deg C		
07	Separating Funnel 100mm		
08	Digital Potentiometer Technical Specification - Range: 0 to + 199.9mV, 0 to + 1999 mV, Resolution: 0.1mV, Repeatability: +1mV, Accuracy: +1mV +1 digit, Input impedance: > 1012 ohms, Operating temperature: 10o C to 45oC, Display: 3 1/2 Digit seven segment LED display with auto polarity indication, Power: 230V + 10% AC, 50 Hz, Dimensions: 275 X 175 X 76mm, Weight: 2.5 Kg (Approx.), Accessories: Platinum Electrode, Reference Electrode, Glass Electrode and Silver Electrode-1No each, Buffer Tablets 4 pH & 7 pH, Operation Manual, Electrode Stand, and Dust Cover		
09	LCD pH Meter- Microprocessor based Technical Specification - pH range: 0-14 Ph, pH resolution: 0.01pH, pH Accuracy: ± 0.02 pH, Temperature compensation: Automatic or Manual, Temp. Range: 0-100 deg C, mV range: ±1999mV, mV resolution: 1mV, mV Accuracy: ±1mV, Electrode: pH combination electrode with built in temperature sensor - Plastic-EpHP02, Temp. Electrode: Built in, pH, mV and temp. Measurement, 3 point ph calibration, automatic buffer recognition, Buffers selectable from 1.68pH, 4.00pH, 4.01pH, 6.86pH, 7.00pH, 9.18pH, 9.20pH, 10.01pH and 12.45pH, Bi directional RS 232 interface. Baud rate selectable from 1200, 2400, 4800 and 9600, Real time clock, Memory storage of 100pH measurements		
10	Wash Bottle 500ml		
11	Methyl Acetate 500ml		
12	Hydrochloric Acid 500ml		
13	Benzanilide 100gm		
14	Acetone 500ml		
15	Sodium Hydroxide Pellets 500gm		
16	Boric Acid 500gm		
17	Borax 500gm		
18	EDTA 100gm		
19	Chloro Acetic Acid 100gm		
20	Thiamine Hydrochloric 10gm		
21	Copper Foil 100gm		
22	Viscosity Apparatus		
23	Triangular File		

DEPARTMENT OF ZOOLOGY

LIST OF APPARATUS FOR

Brand : Biolinkk/Spancotek/Spectronics/Denvar/Prime/Br Biochem/Pragati/Novel

Sl No.	Apparatus Name & Technical Specification	Vendor Specification	Deviation if any
1	Centrifuge Test Tube Graduated 15ml		
2	Beaker 50ml		
3	Beaker 100ml		
4	Beaker 250ml		
5	Beaker 500ml		
6	Conical Flask 250ml		
7	Volumetric Flask 250ml		
8	Mohr Pipette 1ml		
9	Mohr Pipette 2ml		
10	Mohr Pipette 5ml		
11	Mohr Pipette 10ml		
12	Measuring Cylinder 25ml		
13	Measuring Cylinder 50ml		
14	Measuring Cylinder 500ml		
15	Reagent Bottle 125ml		
16	Reagent Bottle 250ml		
17	Reagent Bottle 500ml		
18	Wash Bottle 500ml Plastic		
19	Cavity Block with Cover		
20	Acetic Acid 500ml		
21	Albumin Bovine 5gm		
22	Sodium Thiosulphate 500gm		
23	Sulphuric Acid 500ml		
24	Potassium Hydroxide Pellets 500gm		
25	Picric Acid 500gm		
26	Sodium Hydroxide Pellets 500gm		
27	Starch Soluble 500gm		
28	Iodine Solution 500ml		
29	Nitric Acid 500ml		
30	Hydrochloric Acid 500ml		
31	Silver Nitrate 0.05N Solution 500ml		
32	Manganese Sulphate 500gm		
33	Methanol HPLC 500ml		
34	Methyl Blue 125ml		
35	Ninhydrin Solution 125ml		
36	n- Butyl Alcohol 500ml		
37	Silica Gel White 6-20 mesh 500gm		
38	Potassium Iodide 0.1M Solution 500ml		
39	Sodium Citrate 500gm		
40	Water Bath Digital <u>Technical Specification</u> <ul style="list-style-type: none"> ➤ Size in Inches: 300x250x100mm (6 Holes) ➤ Capacity: 8 ltr. ➤ The water is double walled body inner chamber made of S.S body and outer body of mild steel with powder coated ➤ Temp. range 37 to 80 degree C with PID Temp. Controller ➤ Power: 220 V AC (Single Phase) 		

41	<p>Tissue Homogenizer</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> ➤ 3000-8000rpm adjustable speed built-in constant speed control by external load remains constant speed output 4-bit LCD screen, buttons to set the speed brushless motor greatly extend the life of the motor 		
42	<p>Advance Binocular Microscope with Illumination</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> ➤ Head: Binocular, 360° rotating, 30° inclined ➤ Eyepieces: Wide Field 10x/18mm ➤ Nosepiece: Quadruple, reversed ➤ Objectives: Semi Plan Achromatic 4x, 10x, 40x(SL) , 100x Oil ➤ Stage: Double layer Mechanical Stage Plate for X and Y movement of slide up to 50 x 75 mm with graduated scale and verniers ➤ Focusing: Coaxial coarse and fine focusing ➤ Condenser: Sliding-in, N.A. 1.25 Abbe type with adjustable height and iris diaphragm ➤ Illuminator: 3.6W X-LED3, system with adjustable intensity 		

DEPARTMENT OF BOTANY

LIST OF APPARATUS FOR

Brand : Spancotek/Spectronics/Denvar/Prime/Pragati

Sl No.	Apparatus Name & Technical Specification	Vendor Specification	Deviation if any
1	Whatmann No. 1 paper sheet		
02	Electronic Balance <u>Technical Specification</u> <ul style="list-style-type: none"> ➤ Max Capacity: 220gm ➤ Readability: 0.001g ➤ Tare Range: Full ➤ Repeatability: $\pm 0.001g$ ➤ Linearity: $\pm 0.002g$ ➤ Pan Size: 85mm ➤ Stabilization Time: 2-3 sec ➤ Communication: RS-232 ➤ Calibration: Automatic External Calibration ➤ Weighting Units: Multi weighing units ➤ Power: DC9V/500mA with 6V/1.3Ah rechargeable Battery Backup ➤ Display: Large LCD Display with back light ➤ Working temperature: 10-40 degree C ➤ Automatic External calibration ➤ 2,00,000 internal resolutions ➤ Easy to read LCD display with back light ➤ Multifunction weighing units as like g, ct, etc. ➤ Full tare range up to max capacity of the balance ➤ Counting weighing functions ➤ Standard RS 232 C interface ➤ S.S. weighing pan, Level indicator, Adjustable fit ➤ In built rechargeable battery for continuous use ➤ Zero tracking function 		
03	DNA Model (On Stand)		
04	RNA Model (On Stand)		
05	TMV Model		
06	Water Bath Digital <u>Technical Specification</u> <ul style="list-style-type: none"> ➤ Size in Inches: 300x250x100mm (6 Holes) ➤ Capacity: 8 ltr. ➤ The water is double walled body inner chamber made of S.S body and outer body of mild steel with powder coated ➤ Temp. range 37 to 80 degree C with PID Temp. Controller ➤ Power: 220 V AC (Single Phase) 		
07	Beads of different colour (red, yellow, green, blue)		
08	Aluminium Foil 100gm		
09	Alpha Naphthol 100gm		
10	Conc. Sulphuric Acid 500ml		
11	Fehling Solution A 500ml		
12	Ammonium Sulphate 500gm		
13	Sodium Carbonate 500gm		
14	Ninhydrin Solution 125ml		
15	Copper Sulphate Solution 500ml		
16	Sodium Hydroxide Solution 500ml		
17	Sudan III Stain 125ml		
18	Crystal Violet 125ml		
19	Iodine Solution 500ml		
20	Potassium Iodide 500ml		

21	Malachite Green 100ml		
22	Sucrose 500gm		
23	2,6-Dichlorophenol Indophenol 5gm		
24	0.1M Phosphate Buffer 100ml		
25	Spirit 400ml		
26	Calcium carbonate 500gm		
27	Cheese Cloth		
28	Potassium Hydroxide Solution 500ml		
29	Ethyl Ether (Diethyl Ether)		
30	Methyl Alcohol (Methanol) 500ml		
31	Ethyl Alcohol (Ethanol) 500ml		
32	Petroleum Ether 500ml		
33	Benedict's Reagent 500ml		
34	Glucose (Dextrose) 500gm		
35	Hydrochloric Acid 500ml		
36	Starch 500gm		
37	Pipette 1ml (Measuring Type)		
38	Pipette 2ml (Measuring Type)		
39	Pipette 5ml (Measuring Type)		
40	Pipette 10ml (Measuring Type)		
41	Burette 50ml		
42	Grooved Slide (Cavite Slide)		
43	Buchner's Funnel 100mm		
44	Volumetric Flask 100ml		
45	Chromatography Jar with Lid		
46	Bell Jar 8x4		
47	Wilmot's Bubbler		
48	Algae (Class work materials)		
49	Fungi (Class work materials)		
50	Bryophyta (Class work materials)		
51	Pteridophyta (Class work materials)		
52	Gymnosperm (Class work materials)		
53	Lichen (Class work materials)		

DEPARTMENT OF MICROBIOLOGY

LIST OF APPARATUS FOR

Sl No.	Apparatus Name & Technical Specification	Vendor Specification	Deviation if any
1	MICRO CENTRIFUGE HIGH SPEED 10000 R.P.M (Microprocessor based) Technical Specification: Max. Speed: 10000 r.p.m., Motor- Universal Motor (with carbon), Power- AC 220V 50Hz, Dimensions: 510x510x390mm, Weight of Machine: 21kg approx., Rotor Type- Angle Head, Rotor Capacity- 8x15ml, Max. speed on Rotor- 10000 r.p.m., LCD Display, Digital Timer- 0-59 minutes, Programmable speed controller from 2000 to 10000 in variation of 100 rpm		
02	Colony Counter Technical Specification <ul style="list-style-type: none"> ➤ DIGITAL DISPLAY: 4 digit, 0 - 9999 Maximum Count ➤ MEMORY: Microprocessor based with facility of Counting control memory against Power Failure ➤ DISH SIZE: 110 mm ➤ MAGNIFICATION: X 1.7 ➤ DIMENSIONS: L 265X B 230 X H 130 mm (Approx.) ➤ WEIGHT: 2 Kg. (Approx.) ➤ POWER: 230V ± 10% AC, 50Hz, 40W ➤ ACCESSORIES: Marking Pen -(1 No.), Magnifier Lens- (1 No.) 		
03	Test Tube with Measurement 15ml		
04	Measuring Cylinder 100ml		
05	Measuring Cylinder 250ml		
06	Measuring Cylinder 500ml		
07	Measuring Cylinder 1000ml		
08	Measuring Pipette 20ml		
09	Measuring Pipette 10ml		
10	Measuring Pipette 5ml		
11	Measuring Pipette 2ml		
12	Measuring Pipette 1ml		
13	Measuring Pipette 0.5ml		
14	Tripod Stand		
15	Stanning Rack 6 Hole		
16	Spatula Heavy (S.S)		
17	Conical Flask 100ml		
18	Conical Flask 250ml		
19	Conical Flask 500ml		
20	Petri Dish 3"		
21	Petri Dish 4"		
22	Beaker 100ml		
23	Beaker 250ml		
24	Beaker 500ml		
25	Beaker 1000ml		
26	Chromatography paper		
27	Fore shape 6" (S.S)		
28	Filter Paper 12.5cm		
29	Blotting Paper		
30	Surgical Cotton 450gm		
31	Wash Bottle 500ml		

32	W.B.C. Diluting Fluid 500ml		
33	Acetic Acid 500ml		
34	Gram's Stain Kit (One Kit)		
35	Hydrochloric Acid 500ml		
36	Sodium Hydroxide Pellets 500gm		
37	Potassium Hydroxide Pellets 500gm		
38	Peptone 500gm		
39	Sulphuric Acid 500ml		
40	TCBS Agar Powder 100gm		
41	Deoxycholate citrate Agar 100gm		
42	Mannitol salt agar 100gm		
43	BG-11 Broth 100gm		
44	MacConkey Agar 100gm		
45	EMB Agar 100gm		
46	Nigrosin Stain 25gm		
47	Potassium Permanganate 500gm		
48	Nitric Acid 500ml		
49	Enlyrine flask		
50	Benchtop Fermenter		
	<u>PERMANENT SLIDES</u>		
1	Rhizopus		
2	Aspergillus		
3	Penicillium		
4	Nostoc		
5	Annebena		
6	Chlamydimonas		
7	Volvox		
8	Plasmodium		
9	Mitosis (Plant) set of five		
10	Meiosis (Animal) set of twelve		

LIST OF APPARATUS FOR

Sl No.	Apparatus Name & Technical Specification	Qty	Vendor Specification	Deviation if any
1	LG/Epson/BenQ PH 30N-GL-CtRLA (250LM/1 SPEAKER/WIRELESS REMOTE CONTROLLER) PORTABLE 720P HD PROJECTOR	1		
2	MATH KIT SENIOR- II	1		
3	SLIDE PROJECTOR	1		
4	PORTRAITS OF GREAT MATHEMATICANS	1		
5	VOLUME RELATIONSHIP SET (37*50 CM)	1		
6	SMART BOARD	1		

Annexure-III

FINANCIAL BID

SL No	Name of theItems	Make & Model	Qty	Taxable price Per unit	GST@%	Total Price IncludingGST
1						

2						
3						
4						
5						
6						
7						
8						
9						
10						

Price: - Total price should be inclusive of all taxes. Items quoted must be as per the specifications given in enclosed Annexure-II

Signature& Seal of

the supplierPlace:

Date:

Annexure-IV

SELF DECLARATION CUM UNDERTAKING

It is certified that my Farm/ Agency/ Company has never been **black listed** by any of the Departments/ Autonomous Institutions/ Universities/

Public Sector Undertakings of the Government of India or Government of Odisha or any other State Government or reputed educational institutions and no criminal case is pending against the said Farm/ Agency/ Company as on date_____.

Signature of the Bidder:

Name of the Authorized

Signatory: Name of the

Farm/Agency/Company:

Seal of the

Farm/Agency/Company:

Annexure-V

GUARANTEE / WARRANTY

I/We hereby declare that the equipments and other articles supplied to the purchaser under this contract shall be of the best quality and workmanship and are strictly

in accordance with the specification and particulars contained/mentioned in the clause hereof and I/we hereby guarantee that the said equipment and other articles conform to the description and quality aforesaid.

The purchaser will be entitled to reject the said equipment and other articles as may be discovered not to conform to the said description and quality. On such rejection the equipment and other articles will be returned in own risk and all the provision herein contained relating to rejection thereof shall apply. I/we shall, if called upon to do so, replace within a period of 14 days or such further period that be extended from time to time by the purchase at his discretion, and an application made thereof by us, the equipment and other articles as are rejected by the purchaser and in such an event the above mentioned Warranty shall apply to the equipment and/or other articles replaced from the date of replacement thereof, otherwise the tenderer shall pay to the purchaser such damages as may arise by reason of therein contained without prejudice to any other right of the purchaser in that behalf.

The equipment being offered is latest model and that spares for the equipments will be available for a period of at least five years after its supply to the purchaser.

The Guarantee/ Warranty shall be for a period of at least 12 months from the date of satisfactory installation and handing over the equipment and of works conducted there with covered under the contract in working order. During the guarantee period the replacement of any part(s) of the equipment or rectification of defect due to manufacturing of works will be free of cost. If the down time exceeds seven consecutive days at any one time, the guarantee period will be extended beyond aforesaid 12 months by duration equal to the total down time during the period of warranty.

Signature with seal of

the tenderer Date:

Place:

Annexure-VI

LETTER OF WILLINGNESS

To
The Principal,
R.D.S. Degree Mahavidyalaya
Kundabai, Mayurbhanj, Odisha

Sub: Submission of willingness certificate to supply/ install (name of the item/Dept.) at yourcollege premise.

Sir,

I am to inform you that my farm (name of the farm with address) is ready to **supply/ install (name of the items/Dept.)** within the specified period of receipt of work order from the college, if my farm is selected as eligible bidder during the selection of tender. I am willing to accept all the clauses of Bid evaluation criteria, general terms and compliance to the scope of work requirement as mentioned in the Tender form. If my farm fails to supply and install the required items in the quoted price.

Yours faithfully,

Authorized Signatory of the

farm with SealDate:

Place:

Annexure-VII

PAST WORK EXPERIENCES

Work of Similar nature (of value not less than 2 Lakhs) over the

last 3 years

Sl. No	Name & Address of College	PO No & Date	Total Value of items supplied	Date of Supply	Contact no for College
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

Authorized Signatory of the

farm with SealDate:

Place: