OFFICE OF THE PRINCIPAL, SWARNACHUD COLLEGE, MITRAPUR, BALASORE

E-Mail:swarnachudc@gmail.com

Notice No:- 01/2020-21/OHEPEE **Date:-** 19/11/2020

Tender Notice

Sealed quotation are invited from reputed firms/suppliers/dealers with valid GST registration, PAN, IT return & Authorisation Certificate from the manufacturer for supply of various items of Swrnachud College, Mitrapur, Balasore under World Bank assisted Project, OHEPEE, Govt. of Odisha so as to reach the undersigned on or before 2nd Dec,2020, 5PM by speed post/ registered post/ courier service. The authority reserves the right to accept or reject any or all quotations without assigning any reason there of.

For details, please log on to **www.swarnachudcollege.com**

Principal
Swrnachud College, Mitrapur
Principal
Swarnachud College
Mitrapur
19.11.2020

Memo No:- 01(1)/2020-21/OHEPEE **Date:-** 19/11/2020

Copy forward to Accounts Bursar/IDP Coordinator/Accountant/College Notice Board for information.

Principal
Principal
Swarnachud College
Mitrapur
19.11.2020

Memo No:- 01(2)/2020-21/OHEPEE **Date:-** 19/11/2020

Copy to D Dash, DEO-Cum-Jr. Clerk to upload in college website.

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19.11.2020

Swarnachud College, Mitrapur, Balasore

Tender Document

For

"Supply of Computers, Laptop, Projector with Screen, Inverter UPS, Battery and Laboratory Equipments, Chemicals, Specimens, Micrographs of Physics(A), Chemistry(B), Botany(C), Zoology(D)"

At

Swarnachud College, Mitrapur, Balasore.

Tender Document No: 01/2020-21/OHEPEE
Dated: 21ST Nov,2020

Issued By:

Principal,
Swarnachud College,
Mitrapur, 756020

Principal
Swarnachud College
Mitrapur
19.11.2020

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SCHEDULE OF TENDER

Tender No.	
Name of the tender issuer	Principal, Swarnachud College, Mitrapur
Scope of Work	Supply, Installation, Nature of Service and Demonstration of Laboratory equipments for Physics(A), Chemistry (B), Botany (C), Zoology(D), Computer, Laptop, Projector with screen, Inverter & Battery. Details as per Annexure I
Cost/fee of Tender Documents	Rs. 500/- in form of DD drawn in favour of Principal, Swarnachud College,Mitrapur payable at IOB, Chaturikhunta Branch, Mitrapur at the time of submission of tender document.
Earnest Money Deposit (EMD)/BID Security (Separate for Each Part)	5% of Bid value in form of DD drawn in favour of Principal, Swarnachud College, Mitrapur payable at IOB, Chaturikhunta Branch, Mitrapur at the time of submission of tender document.
Performance Bank Guarantee (PBG) (Separate for each Part)	5% of Bid Value in form of DD drawn in favour of Principal, Swarnachud College, Mitrapur payable at IOB, Chaturikhunta Branch, Mitrapur at the time of submission of tender document.
Date of issue of tender document	21st Nov,2020
Date & Time of Pre Bid clarification	26th Nov,2020, 1PM
Last Date & Time for Submission of Bids	2nd Dec,2020, 5PM
Date & Time of Opening of Technical Bids	3rd Dec,2020, 1PM
Date & Time of Price Bids Opening	3rd Dec,2020, 1PM
Name of the contact person for Communication	Mr. Prasanna Kumar Mohapatra-9778257722 S.P. Chand(HOD Chemistry)-9437128979 Dr. S.K. Panda(HOD Physics)-9437266646 Mr. A.K. Sahu(Lect. In Botany)-9861833325 Mr. S.S. Das (Lect. In Zoology)-8457073769
Address for Communication	Principal, Swarnachud College, Mitrapur, 756020

Principal
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Mitrapur

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. 2017-18, 18-19, & 19-20 should not be less than Rs 2 lakhs. The bidder must have audited financial statement of preceding 3 financial years.
3) Must have authorization certificate from the manufacturer.
4) Must have income tax return of preceding 3 financial years.
5) Must have a valid PAN.
6) Should not have been blacklisted by any State Govt. / Central Govt. / PSU in India. A self declaration is required as per **Annexure IV**.

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BID SUBMISSION

Steps to be followed for submission of bid:

1. The bid shall be submitted in three parts, the EMD, Technical Bid & the Price Bid.

i) **Earnest money Deposit (EMD):** Bidder has to submit EMD of required amount in the form of Demand draft.

Order drawn in favour of **"Principal, Swarnachud College"** payable at payable at IOB, Chaturikhunta Branch, Mitrapur. The EMD should be sealed in one envelope marked as "EMD".

Earnest Money Deposit will not carry any interest. The EMD of unsuccessful bidders will be refunded on acceptance of the work order by the successful bidder. The EMD of successful bidder will be returned on submission of performance security.

The bid not accompanying EMD is liable to be rejected.

ii) **The Technical bid** sealed in another envelope marked as **"Technical Bid"** and shall contain

- The bidder should supply the items as per technical specification mentioned in **Annexure I**. The list of items available with the tenderer.
- The bidder should details as per **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 as per **Annexure IV**.
- Audited balance sheet and profit & loss account along with copy of acknowledgement of income Tax return of last three financial years i.e. 2017-18, 18-19, & 19-20.

(iii) **The Price bid** shall be sealed in an envelope marked as **"Price Bid"** and shall contain the price bid as per **Annexure III** duly completed in all respects.

Rate quoted should be inclusive of GST. No extra cost will be borne by the college towards transport of goods. No price increase on account of change in tax structure, duties, levies, charges etc shall be permitted.

The three separate envelope containing EMD, technical bid and price bid should be sealed in one envelope and should be addressed as per tender schedule super-scribed as **"Supply of Laboratory equipments of Physics(A), Chemistry(B), Botany(C) and Zoology(D)", Computer, Laptop, Projector with screen, Inverter & Battery.**

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GENERAL TERMS AND CONDITION OF THE BID

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

1) Bidders shall prepare the bid and submit it in a sealed envelope addressed to **Principal, Swarnachud College, Mitrapur, Balasore** and send it through **Speed Post/Registered Post/Courier only** (no hand delivery will be entertained). Each envelope should bear the name of bider, along with the tenderer number. However 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.swarnachudcollege.com/ **Notice board of the office of Swarnachud College, Mitrapur** and in the print media.
3) The Bidders should note that Prices should not be indicated in the Technical bid and should be quoted only in the Prince Bid as per **Annexure III**. In case the prices are indicated in the Technical bid, the bid shall stand rejected.
4) **"PRE-BID Meeting"** with the intending bidders shall be held on 26th Nov,2020, 1PM at Swarnachud College. Any quarries related to this tender shall be sent to the **mail id:** swranachudcollegec@gmail.com 1 day in advance. The clarifications if any will be uploaded in the college website. All bidders are invited to attend the pre-bid meeting. No deviation to any of the term will be permitted after freezing of the same at pre-bid meeting.
   On the date of pre bid meeting the bidders may make a site verification where installations is to be made.
5) **OPENING OF TECHNICAL BID**
   The Technical proposal will be opened on 3rd Dec, 2020, 1PM at Swarnachud College in the presence of the tender Committee and representative of the bidders. No separate intimation will be given to the bidders in this regard.
6) **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. Financial proposal will be opened only of those bidders who qualify in the technical evaluation. The Committee reserves the right to reject any or all the tenderers 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 contact. **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.**

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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 within seven(07) working days of the date of notice of award of the tender. The performance security deposit will be retained till completion of the warranty period.

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 any 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 annual the bid process and reject all bids at any time prior to award of contact, 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 Balasore.

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 Committee is final and binding on the contractor.

19) Any notice given by one party to the other pursuant to this contract shall be sent in writing to Principal, Swarnachud College, Mitrapur, Balasore, 756020.

20) **Payment Terms:** All payments will be made within 07 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, Swarnachud College, Mitrapur, Balasore.

21) Completion Period: The work shall be completed in all respect within 15 days from the date of issue of work order.

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22) A firm can apply for any Parts(s) or whole of the tender. The EMD(s) and Performance Bank Guarantee(s) for Parts(s) are to be provided separately for each part(s).

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ANNEXURE – I

Items to be Supplied and Installed

DEPARTMENT OF PHYSICS(A)

Sl. No.	Name of the equipment with Technical Specification
01	**Spectrometer:-** **Technical Specification** • Scale: Brass • Dia: 150mm, L.C-30 Second • Objective: Achromatic lens, f= 178mm, Aperature 32mm • Slit: Brass with micrometer • Reticle: 90 cross etched on glass • Eyepiece: 10X, Gauss eyepiece, inbuilt magnifier • Base: 190mm Triangular, Cast Iron • Prism Size: 38 X 38 mm, Height: 38mm, Material: EDF • Mercury Vapour Lamp: 125W • Transformer with metal Box • Lamp house: 250 × 100mm (L×dia) • Aperture dia: 25mm
02	**Temperature Coefficient Instrument:-** **Technical Specification:-** • Callender and Griffith bridge with jockey • Platinum Resistance Thermometer • Galvanometer 30-0-30, 22 ohm • Hypsometer Copper • Power supply 2V DC 100mA • Connecting leads red & black 50cm (pair) • Hot plate • Banana lead socket with U clip • Thermometre – 10^0 to 150^oc x 1^oc • Connecting leads red & black 100cm (pair)
03	**Thermo-EMF Device :-** **Technical Specification** • 10 wire potentiometer with jockey • electronic standard cell , Battery eliminator 2V/100mA, Rheostat 0-5 K ohm & thermometer • Hot plate • Sensitive galvanometer 30-0-30, 22 ohm • Resistance box dial type • Flexible plug leads • 'A' Base • Rod 50cm • Engine oil 250ml • Beaker 250ml • Two way plug key • Thermocouple copper-iron
04	**Resistance Temperature Device (RTD):-** **Technical Specification** • Meter Bridge • Galvanometer • Resistance Box: 1 to 10000 ohm

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- Resistance Coil- 2nos
- Battery eliminator: 2V
- RTD: PT 100
- Constant Temperature Arrangement

5 **Quinck's Tube Instrument**:-

Technical Specification:-

POWER SUPPLY

- Voltage : 0-16V DC continuously variable & stabilized
- Voltage display: 3 ½ digital LED
- Ripple: Less than 25mV
- Overload: Current limiting protection
- Current: 5 A continuously variable, 10% to full rating
- Current display: 3 ½ digital LED
- Working voltage: 230V AC, 50 Hz single phase

DIGITAL GAUSS METER

- Range: 200G & 2kg
- Resolution: 1G at 0-200G
- Power: 220V, 50 Hz AC
- Hall probe: InAs

TRAVELING MICROSCOPE

- Travel: Horizontal 170mm
- Vertical 110mm
- Least Count: 0.01mm
- Working distance: 50mm
- Eyepiece Ramsden: 8x
- Reticle: 90° cross on glass

DIGITAL WEIGHING SCALE

- Capacity: 700g, Display: Digital, Least count: 0.1g, Body: Plastic

ELECTROMAGNET

- 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: Ferromagetic

6 **Gouy's Apparatus**:-

Techical Specification

POWER SUPPLY

- Voltage: 0-16V DC continuously variable & stabilized
- Voltage display: 3 ½ digital LED
- Ripple: Less than 25mV
- Overload: Current Limiting protection
- Cutrrent: 5 A continuously variable, 10% to full rating
- Current display: 3 ½ digital LED
- Working voltage: 230V AC, 50 Hz single phase

DIGITAL GAUSS METER

- Range: 200G & 2KG
- Resolution: 1 GM at 0-200GM
- Power: 220V, 50Hz AC
- Hall probe: InAs

TRAVELING MICROSCHOPE

- Travel: Horizontal 170MM
- Vertical: 110mm
- Least Count: 0.01mm
- Working Distance: 50mm

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- Eyepiece Ramsden: 8x
- Reticle: 90° cross on glass

DIGITAL WEIGHING SCALE
- Capacitry 700GM
- Digital Display
- Least Count: 0.1g
- Body: Plastic

ELECTROMAGNET
- Coils: 400 turns
- Coil Current: 4.5AmP(Max)
- Connection: 4mm safety socket
- U Core: 150 x 130mm(LxH), 40x40mm cross section
- I Core: Length=150mm, 40x40mm cross section
- Core material: Ferromegnetic

7 **Norton & Thevenin Apparatus:-**

Technical Specification
- Power supply Unit: 9V DC & 5V DC
- Plug in board
- Digital Volt Meter
- Digital Ammeter
- Connecting Leads Red & Black
- Variabale Resistance Module
- Resistance Module 10, 22, 50,75,100,150,220,560 Ohm

8 **Laser Device with Single & Double Slit:-**

Technical Specification:-

OPTICAL BENCH
- Material: Aluminium alloy, Type: Hexagonal section, Scale: 0-100cm, Least count: 1mm

DIODE LASER
- Peak wavelength: 635nm, Operating voltage: 5V DC, Operating current: 250mA
- Optical power: 0.40-0.8mW, Laser Product: Class II, Operating temp. : 0-40°C
- Storage temp - 10 to 50°C

PIN HOLE PHOTO DETECTOR
- Detector: Silicon photocell, Terminals: 4mm safety socket, Aperture: 1mm, Rod: 10mm diameter

SLIT HOLDER
- Clear Aperture: 45x45mm, Object holder: Clip type, Mounting Rod: 10mm diameter

SADDLE WITH MICROMETER
- Material: Aluminium, Transverse Motion: 10-0-10mm, Least count: 0.02mm
- Locking: Spring loaded, Motion: X-Y axis, Holder: 10mm dia

SINGLE WIRE
- Frame Size: 50mm x 50mm, Clear aperture: 15mm dia. (approx), Wire thickness: 0.5mm(approx)

CROSS WIRE
- Frame Size: 50mm x 50mm, Clear aperture: 15mm dia. (approx), Wire thickness: 0.5mm(approx)

TRANSVERSE SADDLE
- Material: Aluminium, Locking: Spring loaded, Motion: X-Y axis, Holder: 10mm dia

DIGITAL MULTIMETER
* Resistance: 200W, 2000, 20k, 200k & 2000K W., D.C. Voltage: 200 & 2000, mV: 20, 200 & 600V
AC Voltage: 200 & 600V, D.C. Current: 200 & 2000mA, 10A
Testing: Diode & transistor, Battery: 9V

DIFFRACTION SLIDE
- Frame Size: 50mm x 50mm
- Slit: Width= 0.06mm & Separation=0.20mm (Single, Double)

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	• Diffraction grating:80 lines/mm • Diffraction grating: 300 lines/mm • Single slit: Tapered • Double slit: Tapered • Metal gauze: 300 mesh • All individually mounted in slide frames and protected by two Glass plates
9	**CRO (Cathoderay Oscilloscope):-** **Technical Specification:-** • Function Generator- 2nos, Function: Sine, Square, Triangle • Frequency range: 0.1 Hz to 100KHz • Amplitude: 20Vpp • Frequency Multiplier: 1 to 10K in decade step • Opamp-IC741 CRO • Operation mode: CH1, CH2, -CH1, ALT, CHOP, ADD, XY, Band width: 20MHz, Rise time:<11.7ns • Deflection coefficient: 5mV/div, -20V/div, 12 steps, Input Impedance: 1Mohm/25pF • Time coefficient: 50ns/div, -200ms/div, 21 steps, Operation mode: Auto, Normal, TV • Trigger source: CH1, CH2, ALT, LINE, EXT, Trigger coupling: DC, AC, LFR, HFR, TVV, TVH • Screen size: 80mm x 100mm • Supply voltage: 230V, 50Hz
10	**Plank's Apparatus:-** **Technical Specification**:- • Selector Switch: V-I and T-I experiment • Selector Switch at V-I position • Voltmeter Display: 3 ½ digital, 7 segment LED, auto polarity & decimal indication • Voltage Range: 0.000-2.000V, Current Display: 3 ½ digital, 7 segment LED • Current Range: 0-2000microA and 0- 20mA • Temperature Display: 3 ½ digital, 7 segment LED, Temperature Range: Room temperature to 60.0°C • Oven: Heater pin 4 & 5. Temperature pin 1 & 2, Oven Connector: 5 pin, DIN type • LED Connector: 3 pin DIN type, input Voltage: 220V, 50Hz AC, Fuse: 1A, 250V OVEN WITH TEMPERATURE SENSOR • Heating Element: 20 ohm, Oven Connector: 5 pin, DIN type, Ambient Temperature: 60°C • Temperature Sensor: Pt100, Output Pin: Heater pin 4 & 5, Temperature pin 1 & 2 LED SPECIFICATION • Yellow LED Size: 5mm, Wave Length: 590nm, Connector: 9pin, Din type • Red LED Size: 5mm, Wave Length: 590nm, Connector: 9pin, Din type • Orange LED Size: 5mm, Wave Length: 590nm, Connector: 9pin, Din type • Green LED Size: 5mm, Wave Length: 590nm, Connector: 9pin, Din type
11	**Directly Heated Filament Device**:- Technical Specification:- • DC Supply: 0-250V • Vacuum diode • DC Voltmeter: (Moving Coil)- 2nos • DC Ammeter: (Moving Coil)- 2nos • Variable Pot: 2nos • Front panel built with high class insulated sheet • Circuit & Symbol diagram printed on front panel • Mains Power: 230V/50Hz
12	**Spectrometer**:- Technical Specification:- ADVANCED SPECTROMETER • Scale: Brass, Dia. 175mm

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	• Objective: Achromatic lens, f=178mm, Aperture= 32mm • Slit: German silver with knurled screw • Reticle: 90°C cross etched on glass • Least count: 20 seconds • Eyepiece: 15X, Ramsden eyepiece • Vernier: 4 verniers (telescope & prism table) • Base: 220mm dia, Aluminum casting DIFFRACTION GRATING • Size: 89x38mm • Aperture Size: 16 x 9mm • Rulings: 100,300,600 lines/mm HYDROGEN TUBE • Gas: Hydrogen research grade • Violet: 420,440nm • Blue: 490nm • Red: 670nm SPECTRUM TUBE POWER SUPPLY • Input Voltage: 220V, 50 Hz AC • Output Voltage: 0-5000V (open circuit) • Overload: 2mA (Max.) with reset switch • Socket: Spring loaded
13	**Dielectric Measurement Instrument**:- Technical Specification:- HIGH VOLTAGE POWER SUPPLY • Input Voltage: 220V, ± 5%, 50Hz AC, Output Voltage: 0-600V DC, Voltage Resolution: 10V • Voltage Display: Analog, Short circuit current: 100 micro Amp POWER SUPPLY 2-12V AC/DC • Input Voltage: 220V, ± 5%, 50Hz AC, Output Voltage: 2,3,4,5,6,8,10 & 12V AC full wave rectified, unsmoothed and unregulated D.C • Overload protection: Resettable thermal trip DIELECTRIC CONSTANT KIT • A metal Rail: Metal sheet, L= 350mm approx • B Capacitor plate: Aluminum, 20cm x 20cm (LXW) • C Capacitor Plate: Aluminum, 28cm x 28cm (LXW) • D Glass sheet: 21cm x 21 cm (LxW) • E Polystyrene sheet: 21cm x 21 cm (L x W) • F Two way switch: 4mm socket, 3nos. • G Capacitor: 0.01µF & 0.001µF • H Spacer: PVC (1,2,3,4,6mm) ELECTROMETER AMPLIFIER • Input Impedance:>10 ohm, Input Current:< 0.5 pA, Output Voltage: upto + 10V • Output Current: 5mA, Output impedance: <1 ohm, supply voltage : 12V AC

Dr Santosh Kumar Rath
Reader in Physics
94372-66646

DEPARTMENT OF CHEMISTRY(B)

Sl. No	Name of the Equipment	Specification
1.	Refrigerator	Double door,3star,231ltr,frost free, wine colour
2.	Kipps Apparatus	1000ml, Borosilicate of good quality
3.	Crucible(30ml)	30ml,50ml Grade G-3 of good quality
4.	Beaker (100ml)	100ml, Borosilicate of good quality
5.	Whatman filter paper	Whatman 41
6.	Glass Jar 360mm×125mm×25mm	Borosilicate of good quality

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7.	Glass Jar 200mm×125mm×25mm	Borosilicate of good quality
8.	Conductivity meter	i) Conductivity Range 0µs to 200ms ii) Temp 0^0C to 100^0C iii) Display-3digit LED iv) Dimension: 235W×185D×85Hmm
9.	Potentiometer	i) Measuring mode range: milli volt 0 to ± 1999mV ii) Resolution 1mV iii) Polarity: Automatic iv) Input impedence 10Ω v) Polarisation 10µA for metal electrodes
10.	VIS-Spectrophotometer	i) Micro controller based visible spectrophotometer with 1pair glass cuvette ii) Wavelength Range: 340-960nm iii) Wavelength Readout: 5nm iv) Measuring Mode: Auto, Abs,%T,Conc. v) Absorbance Range: upto 2.5Abs vi) Display: 4digit LED
11.	Burette	50ml, Borosilicate
12.	Micro oven	Good quality(ISI)
13.	Stalagometer	Borosilicate of good quality
14.	Ostwalds visco meter	Borosilicate of good quality
15.	Lakhanpal visco meter	Borosilicate of good quality
16.	Beaker	500ml,
17.	Beaker	250ml, of good quality
18.	Pipeting device	10ml,25ml
19.	Pipette	10ml, Mohr type
20.	Pipette	20ml, Mohr type
21.	Colorimeter	i) Display: 3 digit LED ii) Wave length 400-700nm iii) Resolution: % T, 0.01Abs upto 1.99Abs(OD)
22.	Thermometer	0^0C-300^0C
23.	Digital pH meter With electrode	Range: 0-14pH, Resolution:0.01pH,LED display
24.	Digital Melting point Apparatus	Inbuilt silicon, cil bath, stirrer adjustable, Greating rate range upto 275^0C with readability of 1^0C, LT-115
25.	Digital Boiling point Apparatus	Resolution 0.1^0C, Temperature 0-3000^0C with 4" TFT

SL.No	Chemicals to be required	
26.	Sodium Carbonate	
27.	Pot. Dichromate	
28.	Pot. Permanganate	
29.	Ferrous Sulphate	
30.	Ferrous ammonium sulphate	
31.	Sodium thiosulphate	
32.	Sodium oxalate	
33.	Siliver nitrate	
34.	Pot. Chloride	
35.	Pot. Nitrate	
36.	Sodium bicarbonate	

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37.	Sod. Hydroxide	
38.	Oxalic acid	
39.	Sod. Acetate	
40.	Acetic acid	
41.	Benzoic acid	
42.	Acetamilide	
43.	P. Nitrophenil	
44.	Benzamide	
45.	Urea	
46.	Oxalic acid(dehydrate)	
47.	Citric acid(monohydrate)	
48.	Phenoxy acetic acid	
49.	Malic acid	
50.	Glucose	
51.	Lactose	
52.	Ethyl acetate	
53.	Pyridine	
54.	Isoprophyl alcohol	
55.	M- phenylene diamine	
56.	Stannous chloride	
57.	Ethanol	
58.	Acetic acid	
59.	Ammonium chloride	
60.	Copper sulphate(hydrated)	
61.	Phenolphthalein	
62.	Pot. Hydroxide	
63.	Sod.acetate	
64.	Ethanol	
65.	Chloro benzene	
66.	Benzal dehyde	
67.	Glycerol	
68.	Aniline	
69.	Bromine	
70.	Glacial acetic acid	
71.	Phenol	
72.	Benzoyl Chloride	
73.	Carboxil Camp.	
74.	Starch	
75.	Sod. Sulphate	
76.	Sod. Sulphide	
77.	Copper(11) Chloride dehydrate	
78.	Manganese (II) nitrate	
79.	Phosphoric acid	
80.	Acetone	
81.	Pot. Sulphate	
82.	Aluminium Sulphate	
83.	Pot. Iodide	
84.	Acetic anhydride	
85.	Zinc dust	
86.	Salicylic acid	
87.	Ferric chloride	
88.	Phthalic anhydride	
89.	Felling 'A' soln	
90.	Felling 'B' soln	

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91.	Tollen's reagent	
92.	Schiff's reagent	
93.	2,4- Dimitrophenyl hydrazine	
94.	Sodium nitroprasside	
95.	Sodium metal	
96.	Ceric ammonium nitrate	
97.	Acetyl chloride	
98.	Benzene	
99.	Cyclohexane	
100.	Iodine	
101.	Carbon tetra chloride	
102.	Methyl acetate	
103.	Methyl red	
104.	Nickel ammonium sulphate	
105.	Dimethyl glyoxide	
106.	Copper Sulphate	
107.	Silver nitrate	
108.	Aluminium Sulphate	
109.	Potash alum	
110.	Cobalt Chloride	
111.	Cobalt Sulphate	
112.	Sod. Hydroxide	
113.	Calcium Oxide	
114.	Nessless reagent	
115.	Ferrous sulphate	
116.	Chlorine water	
117.	Carbon Disulphide	
118.	Pot. Parmanganate	
119.	Sod. Nitrite	
120.	Citric acid	
121.	Cinamic acid	
122.	Calioylamide	
123.	Bonzamide	
124.	Nitrobenzene	
125.	Methyl amiline	
126.	Ethylene diamine	
127.	P. Toluidine	
128.	Tataric acid	
129.	P- Amino phenol	
130.	P- acetylamino phenol	
131.	Ethyl iodide	
132.	Ethanolic soln.	
133.	Magnessium Chloride	
134.	Magnesium hydroxide	
135.	Aluminium hydroxide	
136.	Oxalic acid	
137.	EDTA	
138.	Borax powder	
139.	Diphenylamine	
140.	Barium chloride	
141.	Lead acetate	
142.	Sod. Bronmide	
143.	Pot. Chromate	
144.	Amm. Oxalate	

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145.	Picolinic acid	
146.	Uranyl acetate	
147.	Zinc acetate	
148.	Uric acid	
149.	α- naphthol	
150.	β- naphthol	
151.	Phenyl hydrazine	
152.	Nitro phenol	
153.	M- mitro phenol	
154.	Bleaching powder	
155.	Amm. Hydroxide	
156.	Nitric acid	
157.	Sulphuric acid	
158.	Hydrochloric acid	
159.		
160.	List of Apparatus	
161.	Filter paper (circular)	
162.	Filter paper	Whatman no. 41
163.	Litmus paper	Blue
164.	Litmus paper	Red
165.	Test tube	8''
166.	Crucible	4" and 6" dia
167.	Tongs	10"
168.	Test tube holder	10"
169.	Doctor's forcef	
170.	Measuring flask-	100 ml
171.	Measuring Flask-	250ml
172.	Measuring cylinder:-	10ml to 1000ml
173.	10 ml	
174.	20 ml	
175.	50 ml	
176.	100 ml	
177.	500 ml	
178.	1000 ml	
179.	Burette	50 ml
180.	Pipette	5ml, 10ml,20ml
181.	5 ml	
182.	20 ml	
183.	Pipetting device	10ml,25ml
184.	10 ml	
185.	25 ml	
186.	Watch glass	Circular
187.	Nichrome wire	2meter

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DEPARTMENT OF BOTANY(C)

Sl. No.	Name of the Equipments	Specification
1.	Auto Clave	Dimension-508×362×550, chamber dimenasion-254×476, weight(kg)-38, volume-23L, No. of trays-4, Trays dimensions-168×20×414 voltage(V0 and frequency (H_2)-230V and (50/60 H_2) power(w) and Current(mA)-10mA and 22090W.
2.	VIS-Spectrophotometer with cuvette.	Weight-15kg, power-230VAC+10%/50 H_2, Display-3 digit digital display, wave length-430-700nm, Detector-High sensitivity silicon photocell, Light-6v LED, Mode -%T, Abs,($0.D_o$) & range for conc. 1& 2 cuvette.
3.	Horizontal Laminar Air flow	Laminar Air flow cabinets, wooden body, working area-$2'\times2'\times2'\times3'\times2'\times2'4'\times2'\times2'$ HEPA filter-one one one PRE-Filter- one-one-one Illumination-1×20 watts 2×20 watts 2×40 watts Black UV light
4.	Digital weighing balance	*Dimensions-10×10×10cm,auto off function, capacity-50g×0.00.g(1mg) weight-1kg, covered with glass,
5.	Micropipette	*Size-1ml, 200µl,20 µl, used by hand
6.	Fisher pressure Cooker	*Size-32liter
7.	Binocular Microscope	Plan achromat= 10x, 45x,90x, oil. Condenser= 1.25 N.A. stage-Reckless Mechanical stage. Focusing- coaxil coarse/fine focusing with adjuster.
8.	Digital P^H meter	Dimension(cm)=23 Material= Metal Size- Standard, Power- 220v, Electrodes.
9.	Shaking Incubator	Flask- 16/250ml, Temp-$5^0C - 60^0C$, Digital controller inner chamber steel, Motor Unit, RPM- 50 to 100. 4 no. of tube racks- (24x10 ml tubes)
10.	Gel Electrophoresis unit	Dimension- 15x18x15 cm, Gel size(cm)= 8x7 Buffer required= 100+150 Platinum electrodes= 2 nos. Connecting wires= Black & Red. Glass plate= 1x1, notched Rectangular. Spacers= 1.0 mm, 1.5 mm(4 pcs). 7 wells of comb & low cells of comb with 0.1 mm & 1.5 mm thickness. Power unit(220v, 50Hg AC) LCD.
	Chemicals	
11.	Nutrient Agar medium	
12.	Potato dextrose Agar	
13.	Orcinol	
14.	Sodium Chloride	
15.	Yeast Extract	
16.	Ethanol	
17.	Ammonium persulphate	
18.	Tris-buffer	

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19.	Acetone	
20.	MS medium	
21.	Methanol	
22.	Formalin solution	
23.	LB medium	
24.	Manganese sulphate	
25.	HCL	
26.	Sulphuric acid	
27.	Agar agar	
28.	Safranin	
29.	Agarose	
30.	Anthrone	
31.	**Glass wares**	
32.	Plane slide	
33.	Cover slip	
34.	Dropper	
35.	Bell jar	
36.	Reagent bottle 125ml	
37.	Funnel 3"	
38.	Petri plates (80×125mm)	
39.	Test tubes (10×125mm)	
40.	Spreader	
41.	Inoculation loop	
42.	Measuring cylinder (250ml)	
43.	Beaker(500ml)	
44.	Conical flask(250ml)	
45.	Micro pipette (1ml)-Tarson	
46.	**SLIDES**	
47.	Anther: Wall and its ontogeny	
48.	Tapetum (amoeboid and glandular)	
49.	MMC, spore tetrads, uninucleate	
50.	psuedomonads	
51.	polyads	
52.	Ovule: Types-anatropous, orthotropous, amphitropous/ campylotropous, circinotropous,	
53.	Special structures: Endothelium, obturator, hypostase, caruncle and aril	
54.	Female gametophyte through permanent:Types	
55.	ultrastructure of mature egg apparatus	
56.	stomata types	
57.	trichomes: non-glandular and glandular	
58.	Xylem: Tracheary elements	
59.	tracheids	
60.	vessel elements	

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61.	perforation plates	
62.	xylem fibres	
63.	Phloem: Sieve tubes-sieve plates	
64.	phloem fibres	
65.	Tapetum (amoeboid and glandular)	
66.	Aspergillus	
67.	Penicillium	
68.	Saccharomyces	
69.	Albugo	
70.	**SPECIMENS**	
71.	clove	
72.	black pepper	
73.	Tea	
74.	Coffee	
75.	Tectona,	
76.	Pinus/Sal	
77.	Section of young stem	
78.	Riccia	
79.	Marchantia	
80.	Anthoceros	
81.	Funaria	
82.	Psilotum	
83.	Selaginella	
84.	Equisetum	
85.	Pteris	
86.	Marsilea	
87.	Rhynia	
88.	Calamites	
89.	Lepidodendron	
90.	Lyginopteris	
91.	Cycadeoidea	
92.	Williamsonnia	
93.	Oedogonium	
94.	Coleochaete	
95.	Chara	
96.	Vaucheria	
97.	Ectocarpus	
98.	Fucus	
99.	**MICROGRAPHS/ PHOTOGRAPHS**	
100	bicelled and dehisced anther stages	
101	male germ unit (MGU) through pollinia	
102	Embryogenesis: Study of development of dicot embryo	
103	Mitosis stages	

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104	Meiosis stages	
105	Bacterial recombination reproduction types	
106	Embryogenesis: Study of development of monocot embryo	
107	Chromosome anomaly	

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DEPARTMENT OF ZOOLOGY(D)

Sl. No.	Name of the Equipments	Specification
1.	Auto clave	Dimension-508x362x550, chamber dimension-254x476 wt(kg)= 38, vol= 23L, No. of Trays= 4, trays Dimension-168x20x414, voltage(v) & frequency(Hz)=230v&(50Hz) power(w) & current(mA)=10A&2200w, spring loaded valve, pressure gauge, pressure release valve, water level indicator & drain.
2.	Binocular Microscope	360° rotating, Plan achromat= 10x, 45x,90x oil.,Eye piece: wide field 10x/18mm, Condenser= 1.25 N.A. stage- Reckless Mechanical stage. Focusing- coaxil coarse/fine focusing with adjuster. Illumination- LED. Temp, Humid meter, LCD, backlight, 9v.
3.	Hymocytometer	-
4.	Sahil's Haemoglobinometer	-
5.	Vis-Spectrophotometer	Dimensions: 420×280×180, Optical system: single beam, Wt=15kg, power-230 VAC, 50 Hg. Display- 3 digit digital display. Wave length- 430-700nm. Detector-High Sensitivity silicon Photocell. Light= 6v LED. Mode- Abs, OD & range for canc. 1& 2. Cuvetter.
6.	Digital P^H meter	Display: 7Inch, electrode: 0.02pH, Current: 1×10-12A, Stability: 0.002pH/3h, mV resolution: 0.1mV, temp: 0.1° C, Dimension(cm)=23 Material= Metal Size- Standard, Power- 220v, Callibration: automatic, Env. temp. 15-30°C.
7.	Gel Electrophoresis unit	Dimension- 15x18x15 cm, Gel size(cm)= 8x7 Buffer required= 100+ 150 Platinum electrodes= 2 nos. Connecting wires= Black & Red. Glass plate= 1x1, notched Rectangular. Spacers= 1.0 mm, 1.5 mm(4 pcs). 7 wells of comb & low cells of comb with 0.1 mm & 1.5 mm thickness. Power unit(220v, 50Hg AC) LCD.
8.	BOD Incubator	Size: 18×18×18(inch)(95lit), Double walled with 3' thick PUF insulation, glass door with gasket, rocks, trays, nichrome wire heaters, 220V AC single phase 50Hg, Temp-5°C-60°C, compressor-8/200.
9.	Centrifuge	Rotor capacity, space closed roter for 1.5/2.0 ml micro tubes. RPM speed = 6000/2000G. Dimension= 162x157x115 mm Size- 20ml, 200ml, 1000ml (1ml) used by Hand.
10.	Micro pipette	Semiautoclavable, 200 µl-1000µl.

11.	Microtome	**Section Thickness Range:** From 0 - 60µm, **Setting Range:** From 20 - 60µm in 5µm increments, **Horizontal:** 28mm, Vertical stroke: 60mm, Sample orientation: 8° along the X-Y axis, rotable 360°, **Max. Section Size:** 50×45mm, **Dimensions incl. Tray:** 410mm (L) × 570mm (W) × 270mm (H) (Approx.), **Net weight :**36kg

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Computer, Laptop, Projector with screen, Inverter & Battery

SLNO	Name of the Item	Specification
1	Computer	Core i3, 8th generation, 4GB, 1TB, HDD, 3.0USB, 20" LED, OS-10, 3years Warranty
2	Laptop	Core i5, 8th generation, 4GB , 1TB, HDD, 3.0USB, OS-10, 15.6TFT, 1years Warranty
3	Projector with screen	Full HD, 3400Lum
4	Inverter	2000VA, ISI/ISO
5	Inverter	1450VA, ISI/ISO
6	Battery	220mAh
7	Battery	150mAh

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ANNEXURE – II

DETAILS OF THE TENDERER

Sl. No.	Particular	
1	Name of the Firm/Agency/Company	
2	Registered office Address & 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/Pvt. Ltd./Public Ltd)	Tenderer has to provide relevant documents (with the techinal bid) as a proof of firm type.
7	Date of Establishment and Experience in business (In number of years)	Work order to be attached for complaying point no 4 of eligibility criteria
8	G.S.T. Registration No.	
9	PAN No.	
10	Details of Earnest Money Deposit i.e Draft no, date and bank name	
11	Yearly turnover of the organization during last 3 years (yearwise) and furnish audited balance sheet and Profit and loss A/C for the last 3 years. 2017-18 2018-19 2019-20	
12	Furnish the names of 3 responsible persons along with their designation, address, Telephone Number etc. For whose organization, you have completed/work in progress as mentioned in Annexure V and who will be in a position to certify the performance of your organization.	

Date:

Place

Signature & Seal of the Bidder

Principal
Swarna Chud College
Khaspur, Balasore

ANNEXURE- III

PRICE SCHEDULE

To

The Principal,

Swarnachud College, MItrapur, Balasore, 756020

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

Sir,

I/We _____ hereby offer to supply the following items of part _____at the prices and within the period indicated below.

Sl. No.	Item	Company	Specification	Company price including GST(%)	Bidder price including GST(%)	GST	Warranty Period	Nature of service & Demonstration
1								
2								
3								
4								

It is herewith 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)

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Swarnachud College
Mitrapur,Balasore

ANNEXURE – IV

SELF DECLARATION FOR NOT BLACK LISTED

To

The Principal,

Swarnachud College, Mitrapur, Balasore, 756020.

Ref: Tender no. ..... Dated: .....

Madam/Sir,

I/We..... here by 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 & Seal of the Bidder

Principal
Swarnachud College, Mitrapur

Principal
Swarnachud College
Mitrapur, Balasore