इन्दिरा गांधी राष्ट्रीय जनजातीय विश्वविद्यालय
Indira Gandhi National Tribal University
अमरकंटक (म.प्र.) | Amarkantak (M.P.)
(भारतीय संसद में पारित अधिनियम द्वारा स्थापित केन्द्रीय विश्वविद्यालय)
(A Central University Established by an Act of Parliament of India)

TENDER DOCUMENT

FOR

SUPPLY, INSTALLATION AND SERVICING OF THE LABORATORYEQTIIPMENTS

FOR

DEPARTMENT OF CHEMISTRY

Tender No. : IGNTU/Chemistry/Instruments/2018/1502 Date: 31/12/2018

This tender document contains ……18….pages

REGISTRAR

INDIRA GANDHI NATIONAL TRIBAL UNIVERSITY, AMARKANTAK

LALPUR, DISTT- ANUPPUR (M. P.) - 484 887

Telephone No. 07629-269701-02 Telefax No- 07629-2697

INDIRA GANDHI NATIONALTRIBAL UNIVERSITY

AMARKANTAK, 484887, MADHYA PRADESH, INDIA

Open tender Enquiry for procurement of Lab items/instruments for Department of Chemistry

Tender No.: IGNTU/Chemistry/Instruments/2018/.1502.....Date: 31/12/18

Tender Starting date: January 1, 2019, 10.00am

Last date of Tender submission: January 30, 2019, 5.0 pm

Technical Bid Opening Date: January 31, 2019, 3.0 pm

Tender Fee: Rs. 500 (Non-refundable)

The estimated value of the tender is about Rs 2300000/- (Rs Twenty three Lakhs) including applicable GST/taxes.

EMD: EMD of Rs. 50,000/- (Fifty thousand only) must be deposited for quoted item.

Reputed firms/manufacturers/dealers/suppliers with minimum three years of experience of supplying Scientific Instruments to Govt. Sector/PSUs/Educational Institutions/Private Institutions of repute are invited for the submission of tender(s) for various Scientific Instruments from cligible and qualified venders for supply, installation & Servicing of Laboratory and Analytical Instruments for the Department of Chemistry of the university as per **Annexure - Iin Two-bid System (Technical and FinancialBids)** on or before **January 30, 2019, 5.0 pm.** Both technical and financial bids must be submitted in separate sealed envelopes. The cover of the envelope should specify the technical/financial bids with subject as "Quotation for Chemistry with name of equipments".

The tender documents in sealed envelope must be reached to **The Registrar(Attention to: Head, Deptt. of Chemistry), Indira Gandhi National Tribal University, Amarkantak, 484887, Madhya Pradesh, India** on or before **January 30, 2019, 5.0 pm** by Speed/Registered/Couriers Posts only. The Tender document submitted without tender fee and EMD, as specified, will be not be considered and hence rejected. Incomplete tender and tender received after the due date and time will not be accepted. Format for the submission of the tender document is appended below, which may be downloaded from the university website (www.igntu.ac.in). Non-Refundable tender fee (Rs. 500/-) for proposal and EMD must be remitted through Demand Draft in favour of **Indira Gandhi National Tribal University, Amarkantak**. Bidders should submit demand draft against EMD for item. The direct cash deposition into University account and other mode of payment will not be considered. The University will not be responsible for any matter related to the non-payment of the fee. The EMD of the unsuccessful bidders shall be returned as per after expiry of the final bid validity or the DD may be returned as the case might be.

Registrar

कुलसचिव
इ.गाँ.रा.ज.जा. विश्वविद्यालय
अमरकंटक, जिला–अनूपपुर (म.प्र.)

GENERAL TERMS & CONDITIONS AND INSTRUCTIONS

1. The validity of the tender should be **180** days.

2. **Who can bid?**
   i. The venders should be dealing with the supply of similar equipment at least THREE years as on date of issue of this tender.
   ii. The venders should have an annual turnover of Rs. 7 lakhs or more during the last three financial years.
   iii. The venders should undertake to provide comprehensive onsite maintenance during the warranty and after warranty period of AMC for a minimum period of Three Years.
   iv. The venders should be either an original manufacturer or the authorized dealer having been established in the field for minimum period of THREE years as on date of issue of this tender.
   v. The firm should have registered with GST/PAN etc.
   vi. The University has been granted the benefit of exemption from the payment of the Central Excise Duty and Customs Duty by the Department of Scientific and Industrial Research (DSIR), Govt. of India in respect of :
      a. Scientific and technical instruments, apparatus, equipment including computers.
      b. Accessories and spare parts of goods specified in (a) above and consumables.
      c. Computer software, compact disks, CD ROM, Recording magnetic tapes, microfilms, micro-chips etc.,
      d. Prototypes

   Hence, the bidders should take into consideration about this facility of the University while quoting for the advertised Minor equipment.
3. Venders having quoted for ISI/ISO certified equipment/services shall be given preference.
4. The Bidder should also be Authorized Service Provider of the Original equipment Manufacturer. Copy of proof to be submitted.
5. The tender documents should be submitted in **Two-Bid System** i.e. Technical Bid & Financial Bid, separately. The technical bid will be opened on the designated date and the financial bid containing the rate of various item(s) will be opened on a suitable date, to be intimated later to technically qualified bidders.
6. That the delivery/supply will be made on F.O.R. basis to the Indira Gandhi National Tribal University, Amarkantak, (M.P.). Rates should be quoted inclusive of Packaging Forwarding, Postage and Transportation charges, Octroi, etc.
7. If the tender document is submitted without deposition of EMD and Tender Fee it will be rejected out rightly.
8. Tender Fee and EMD fee shall be deposited through DD only drawn of any nationalized bank. Other mode of payment and direct cash deposit into university account will not be accepted.
9. The Earnest Money (Bid Security) of unsuccessful bidders will be returned at the earliest after expiry of the final bid.
10. The bidder should have an average annual financial turnover of Rs. 7 lakhs or more during the last three financial year (Attach audited profit & loss Accounts and balance sheet for the last financial year duly audited by CA and particulars of turnover in the preceding years).
11. Bid will be rejected if rates are not quoted in the prescribed format and should quote their offer/rates in clear terms without ambiguity. The rates should be quoted both in figures and words and legibly written without any over-writings. In case of any correction, the

same must be attested by the bidder with full signature. However, no over-writing is permissible.

12. Lowest bid (L1) will be decided by the price of the equipments quoted including charges for inland transportation, installation, commissioning, training charges, insurance and other local services required if any for delivering the equipments.
13. The warranty period should be minimum 1 year with spares or as mentioned in technical specifications (whichever is higher) from the date of installation with satisfactory performance as per specifications. For standard items which carry warranty of more than one year, standard warranty shall be applicable.
14. University will not be responsible for any postal delay.
15. Any dispute arising out of or relating to this tender inquiry shall be subject to jurisdiction the district court Anuppur MP/Honb'le High Court, Jabalpur only.
16. Indira Gandhi National Tribal University reserves the right to accept in part or in full any tender or reject any tender without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of Contract, without incurring any liability, whatsoever to the affected venders.
17. The freight, insurance charges, if any, will not be borne by the IGNTU. Similarly, shortage, pilferage in transit will be the sole responsibility of the supplier. The defective supply will have to be replaced by the supplier within 15 days without freight/transport or any other charge failing which EMD/Performance Security will be forfeited and other lawful action may be taken.
18. The delivery of the equipments will be at the risk and cost of the supplier only.
19. The venders shall ensure that their tenders should be duly sealed and signed (with date) on each page, complete in all respects as per instructions contained in the Tender Documents and send the same in a sealed envelope to the **Registrar, Indira GandhiNational Tribal University, Amarkantak, 484887, Madhya Pradesh, India** on or before **January 30, 2019, 5.0 pm** by **Speed/Registered/Couriers Post** only.
20. Venders must state that firm(s) has not been currently banned, blacklisted and debarred by any ministry/department of Central or State Governments. **Please submit an affidavit to this effect on a non-judicial stamp paper.**
21. The supply of Equipments will have to be completed within 30 days, however in case of imported instruments it may be complete within 90 days from date of issue of the Work Order/Supply Order. The liquidated charges @ 0.5% per week shall be imposed if supply made after expiry of delivery period subject to maximum 5% of the total value of equipments/contract value. EMD will be forfeited in the said case.
22. The firm will have to supply the Equipments as per specification mentioned in supply/work order/in this tender document. **Short supply of material will not be accepted in any circumstances.**
23. If any of the equipment supplied by the vender is found to be substandard, refurbished, un-merchantable or not in accordance with the Tender Document specification or otherwise faulty, the IGNTU will have the right to reject the equipment or its part. The prices of such equipment shall be refunded by the vender with 8.5% interest if such payments for such equipment have already been made to him and the Performance Guarantee will be forfeited.
24. All damaged or unapproved equipments shall be returned at suppliers cost and risk and the incidental expenses incurred thereon shall be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, shall be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other related charges.
25. No payment will be made for unsatisfactory/damaged supply of equipment(s) and uninstalled item(s).
26. No revision in rate (on higher side) will be accepted at any stage.

27. The firm shall not assign or sublet the work/job/supply order any part of it to any other firm.
28. The quoted rate shall be valid for a period of six months from the execution of the date of award of work.
29. The payment will be released after successful supply of the ordered quantity and quality of the equipments at our end in good condition subject to production of the physical verification & Installation Report of the user department/nominated committee.
30. That bidder has to offer the AMC (Annual Maintenance Contract) for the three years after the warranty/Guarantee period and should quote the rate accordingly. In AMC, the bidder have to provide free of cost visit/servicing and replacement of non-consumable items.
31. The bidders shall submit the copy of valid PAN number/GST No. and registration of firm.
32. The bills must be prepared/ raised in the name of the Registrar, IGNTU, Amarkantak, MP and should be mentioned . for Department of Chemistry.
33. The bids shall be opened on date and time as mentioned above. The bidders may send their authorized representatives to attend the bid opening, if they so desire.
34. Corrigendum, if issued any for the tender, shall form part of the Tender Document. Corrigendum will be posted IGNTU website. Bidders/ Venders are requested to visit University website regularly and note the corrigendum / amendments to the tender without fail and submit the offer accordingly. IGNTU, Lalpur, Amarkantak will not be responsible for ignorance of corrigendum.
35. In case of breach of any of the conditions above, the decision of the competent authority, Indira Gandhi national Tribal University will final and binding.
36. EMD of the successful bidder shall be returned after the completion of warranty period.

Registrar
Indira Gandhi National Tribal University

कुलसचिव
इ.गाँ.रा.ज.जा. विश्वविद्यालय
अमरकंटक, जिला--अनूपपुर (म.प्र.)

TENDER FORM-1
TECHNICAL BID

(Separate sheet should be used for each item)

Sub: Open Tender (Two-Bid) Enquiry for supply of Instruments for Dept. of Chemistry
Part-A

1	Tender Ref No/Notification No.	
2	Name & full address of the Firm & year of establishment	
3	Annual Turnover of the firm/company: Last Three financial years (enclose documents in support of the claim)	Rs..... Rs.....
4	Whether the firm is Registered: under company Act 1985. If yes enclosed certified documents	
5	a) CA Certified copies of income tax (TDS)	
	b) Copy of the balance sheet and profit and Loss account of the last 05 years	
6	a) PAN No.	
	b) GSTIN no.	
7	Details of the Earnest money Deposit (EMD) as per the specifications of the equipment(s). If not applicable please specify.	
8	Details of the cost of the tender documents worth Rs. 500/- (Rs. Five hundred only). If not applicable please specify	
9	State whether you have been currently banned/blacklisted by any ministry/Deptt. of Central Govt. or any State Govt. If so give details. Submit an Affidavit.	
10	Evidence of experience in timing supply to other institutes/Govt. Organization	

Undertaking:

1. That I/we have carefully studied all the terms & conditions and shall abide by it.
2. That I/We shall supply the items of requisite quality.
3. That I/We undertake that the information given in this tender are true and correct in all respect and I/We hold the responsibility for the same.
4. Quoted price are final and no other payment will be claimed.

Date **(Seal & Signature of the bidder)**
Place

Annexure-I

TECHNICAL BID

PART – B

List of Instruments with Technical Specificationsand Quantity

Item No.	Equipments/ Instruments	Quantity	Specifications	Compliance (Yes/No)
1	Digital Polarimeter	01	• Automatic digital Polarimeter • Light Source: Tungsten-Halogen lamp (WI) or Sodium lamp (Na), • Wavelength: 589 nm • Angular range: (±)90° • Response Speed: 6°/Sec • Accuracy: 0.01-0.002° • Resolution: 0.001° • Detector: Photomultiplier tube • Sample Chamber: Should accept sample tube up to 200 nm • Sample Tube: Cylindrical Glass Cell • Readout modes: Optical Rotation, Optical specific rotation, Optical Purity • Temperature Range: 0-40 °C • Display: On screen or personal computer via USB ports (If operating on PC, PC requirement should be mentioned. • Software: Standard or in-built **Cell:** Cylindrical Glass Cell 1. 10.5 mm D X 10 mm L (ii) 3.5 mm D X 10 mm L (iii) 10.5 mm D X 50 mm L The Polarimeter should be upgradable on the field of other wavelength filters with appropriate light source.	
2	**GAS Connection for Laboratory** 1. 2-Cylinder LPG Gas Handling System for 6 Nos. Burner (Laboratory 1) 2. 2-Cylinder LPG Gas	 Set-1 Set-1	• With 2cy. Manifold, [pressure gauge, srv, cylinder adaptor, flexible hose with nrv, 2-way ball valve, Non return Valve,Online LPG Regulator for Burner, 2- way LPG Gas Valve with hose, Bunsen Burner, 3/4" SS Pipe with Tee, Elbow etc., Steel containing Rubber Hose, 3/4" NB Pipe Clamp (5 mtrs. Pipe length) etc., • Specification as above same	

	Handling System for 10 Nos. Burner (Laboratory 2) 3. PP Spot Extractor Assembly celling mounted with blower	01	• Technical Specification: 1. Size: 1500mm X 75mm 2. MOC: Pipe – PP in suitable Color 3. Joints – Polypropylene 4. Dome - (dia 385mm) Polypropylene 5. Inbuilt Damper 6. Bracket: Wall Mounted / Ceiling Mounted 7. Ceiling Mounted Bracket Standard 8. Length: 1 Feet Long (Extra Long size available on request) MOC for Bracket: Aluminum Powder Coated	
3	Hydrogen gas Cylinder	01	Hydrogen Cylinder of 47 lit water capacity, complete with neck ring and valve, painted as specified under gas cylinder of latest act and filled with 7.0cu meter of 99.999% pure hydrogen gas and supplied along with manufacturer test certificate complete with suitable regulator	
4	Oxygen gas Cylinder	01	Oxygen Cylinder 10 Cubic feet with suitable superior quality regulator	
5	Nitrogen Cylinder	02	Nitrogen Cylinder 10 Cubic feet with suitable superior quality regulator	
6	Argon gas Cylinder	01	Nitrogen Cylinder 10 Cubic feet with suitable superior quality regulator	
7	Chemical Freezer (Upright Freezer with transparent door)	01	• Chemical resistant protection. • Vertical • Number of door : 1 or 2 • Vol: 450-500 L • Dimension: approx. 27 X 28 X 78 (Width X Depth X Hieght) Wavelength: 589 nm • Tem. range: -17 to -24 °C • Wheel: Yes • Lock: Yes • Defrost: Auto • No. of selves: 5 or 6	
8	Liquid Nitrogen Can	01 [5L-One]	• Storage Volume- 5 and 10 litre • Liquid Nitrogen container should have storage capacity for racks and boxes. • Should have chemical vacuum	

			retention and insulation capability • Spider design on platform for easy retrieval and insertion of product canisters • Each box should hold certain numbers of of 2ml vials • Evaporation rate should be less than 0.85 litres/day • Suitable Neck opening diameter for reduced liquid nitrogen loss	
9	High vacuum pump with pressure controlling attachment and supporting accessories.	01	• Robust and compact Two stage Oil Sealed, Rotary Vane Vacuum Pump with Single Phase Motor. • Should be supplied with Moisture Trap Assembly with Silica Gel. • Should be supplied with Vacuum Gauge Regulator. • Forced oil lubrication system with built-in oil vane pump enabling high performance down to 10-3 mbar. • Performance testing in accordance with Pneurop 6602. • Normal Pumping Speed @ 50Hzs – 6.2 m3/hr with 103 L/min. • Ultimate pressure – • Gas Ballast Closed - mbar (Torr) - 2x10-3 (1.5x10-3) • Gas Ballast Open - mbar (Torr) - 5x10-2 (3.75x10-2) • Pump Rotational Speed at No-Load @ 50 Hz - 1440 • Max. Nominal Power Rating @ 50 Hz - 0.37 (0.5) kw (HP) at 1 & 3 phase. • Power Supply - 230V ± 10%; 50Hz ± 5% Single Phase • Oil Capacity – 0.7-1.0 Litres	
10	Electronic Analytical Balance	01	• Capacity: 120 gm • Accuracy: 0.1mg • Pan size : 80mm dia9pprox. • Std. Deviation : ≤0.1 mg • Linearity: ± 0.2mg. • Response Time (9pprox.): 2-3 secs. • Ambient Temp : 5 to 40°C • Temp controlled of sensitivity : ± 2ppm/ °C • PSC, fully automatic calibration • GLP/GMP/ISO calibration report • Balance may be UniBloc technology preferable • Dimension : 220 mm W x 330 mm D x 310 mm H	

			• Power consumption : 7 VA • Tare range: Full • Display: Backlit LCD display • Capable of Communicating directly to PC will be preferred.	
11	Semi micro Balance	01	• Capacity: 0-120 gm • Accuracy: 0.01mg • Pan size : 70-80mm dia aprox. • Repeatability (Std. Deviation): ≤0.02 mg • Linearity: ± 0.04mg. • Response Time (pprox.): 2-3 secs. • Ambient Temp : 5 to 40°C • Temp controlled of sensitivity : ± 2ppm/ °C • Dimension : 220 mm W x 330 mm D x 310 mm H • Power consumption : 7 VA • PSC, fully automatic calibration GLP/GMP/ISO calibration report • Tare range: Full • Display: Backlit LCD display • Capable of Communicating directly to PC will be preferred.	
12	Hot air oven with temperature controller	02	• Triple walled in construction inner chamber made of st. steel and exterior made of M.S. sheets powder coated. • The gap between the two walls filled with glass wool insulation of 4". • Heating elements fitted on the two sides of the oven. • A forced air circulating system with fan for better uniformity of temperature. • Temperature controlled by electronics digital temperature controller. • Temp.Range: +5 ^{0}C to 250 ^{0}C. • Accuracy ±2°C • Capacity Liter : Between 125 to 150 liter • Minimum Chamber size: 18" X 18" X 24" (L X B X H) • Door : Single Door • Shelves : 3 strong stainless steel wire shelves • Power Supply : Indian standard	
13	HPLC Chiral	01(Chiral	1.Chiralpak AD-H Column [4.6 X 250 X	

	Column	pak AD-H Column) 01(Chiral pak OD-H Column)	5] i.e. internal diameter X length X particle size 2.Chiralpak OD-H Column [4.6 X 250 X 5] i.e. internal diameter X length X particle size	
14	Magnetic Stirrers with Hot plate	07 (5MLH)	• Speed range: 100 - 1500 rpm • Speed control: scale 0 – 6 • Heating temperature range: 50 - 500 °C • Heat control: LED • Heating rate heating plate: 5 K/min • Connection for ext. temperature sensor: ETS-D5 or Suitable • Set-up plate material: ceramic • Set-up plate dimensions: 180 x 180 mm approx. • Dimensions (W x H x D): 220 x 105 x 330 mm approx • Permissible ambient temperature: 5 - 40 °C • Permissible relative humidity: 80 % • Protection class according to DIN EN 60529: IP 21 or Suitable • Voltage: 230 / 120 / 100 V • Frequency: 50/60 Hz **Salient features**: PMDC motor for higher torque even at low speeds. Better low speed stirring even with small volume. Accurate step less speed control maintains excellent speed stability. Specially designed for corrosive atmosphere reducing the chances of fumes entering the unit. Capacity 5lit. (5MLH)	
15	Melting Point Apparatus	Digital – 03	1. Digital Melting Point Apparatus with resolution 0.1°C to measure melting point/ boiling point of solid and liquid samples. Temperature range 0-300 °C with 4 digit LED display.	
		Normal – 6	Normal Melting Point apparatus by manual measurement. Temp upto 350 ^{0}C	
16	Digital Turbidity Meter	02	Digital LED display. Available in 4 ranges 0-2, 0-20, 0-200, 0-1000 NTU/JTU. 230V AC 50 HZ.	
17	Bomb Calorimeter	01	• Microprocessor Bomb Calorimeter should provide an accurate, simple & inexpensive method for determination	

			of Heat of Combustion, Calorific Value & Sulfur contents of solids, liquids and other easily burning materials for conducting laboratory practical experiments in university. Instrument should be having following specifications: • The Bomb Jacket with top cover should provide with special highly insulated material so that temperature radiation is practically nil. • Bomb body is machined from corrosion resistant stainless steel alloy and tested with high pressure. • Type of bomb: removable • Offset stirrer precludes heat from motor to Calorimeter Vessel • No temperature correction • Temperature range: 0 to 500 °C • Ambient working temp range: 10 to 38 °C and Humidity: 10-100%. • Detection of maximum rise of temperature • Temperature resolution: ± 0.0010 °C • Analysis time : Less than 15 min • Equipment can store data for 1000 test results • Windows based software • LCD display with backlit 16 x 2 characters • Battery backup for stirrer and Microprocessor unit (UPS) • RS 232C/USB interface to connect with computer • Soft touch keypad • Power supply: 220 AC voltages, 50 Hz, 10 Amp. • Safety Interlocks/Relay: Over Load Protection, Electrode Short Protection &Indication, phase Indication Lamp, Emergency Switch Off etc. • Minimum sample range: App 1.0 g • Repeatability : ± 10 Cal/g • Automatic feeding of Calorific values of ignition wire and cotton thread • Automatic firing in the bomb with software • Automatic detection of maximum rise of temperature • Automatic calculation of Heat Capacity of Bomb Calorimeter	

<table>
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<td>(Equivalent Value)
• Automatic calculation of Calorific Value of samples
• Automatic saving of Heat Capacity of Bomb Calorimeter and Calorific Values in summary format
• Automatic delivery of result data in report format
• Auto Alarm on Completion of Test.

Instrument should be supplied as following
<table>
<tr><td>Combustion Bomb</td><td>Cotton Reel</td></tr>
<tr><td>Calorimeter Vessel</td><td>Stand for Bomb Lid</td></tr>
<tr><td>Combined Lid</td><td>Hook for lifting Bomb</td></tr>
<tr><td>Stirrer</td><td>Crucible – Ni-alloy no. Quartz 01, Platinum 01 and Stainless Steel 01 crucibles</td></tr>
<tr><td>Connecting Leads</td><td>Gelatine Capsules – 50 nos.</td></tr>
<tr><td>Connecting tube for Oxygen Cylinder</td><td>Gas Release Valve</td></tr>
<tr><td>Oxygen cylinder with proper regulator</td><td>O – Rings for Bomb and Stirrer</td></tr>
<tr><td>Adjustable Spanner</td><td>Valve for Bomb</td></tr>
<tr><td>Nichrome Ignition Wire (20 M. 36 SWG)</td><td>Pellet Press</td></tr>
<tr><td>Valve Key</td><td>Instruction Manual</td></tr>
<tr><td>Benzoic Acid – 10 Tablets</td><td>Battery Backup (UPS)</td></tr>
<tr><td>Insulated Calorimeter Jacket</td><td>Computer with Printer with all cables, wires etc. to interface instrument</td></tr>
<tr><td>Leads to connect Microprocessor unit to PC</td><td>Semi Auto Gas Filling Device</td></tr>
<tr><td>Platinum Wire</td><td>And any other essential accessories</td></tr>
<tr><td>Appropriate Pellet Press Machine along with required punch and die</td><td></td></tr>
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<tr>
<td>18</td>
<td>Digital pH meter with electrode</td>
<td>03</td>
<td>Using latest microcontroller, temperature compensation, combination pH electrode, auto buffer recognition, touch keys, one touch calibration, up to 3 point calibration</td>
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			digitalLED display	
19	UV Single beam	01	• Optical System: Single beam, Grating 1200 lines/mm • Wavelength Range: 190-1100nm • Bandwidth: 2nm • Wavelength Accuracy: ±0.8nm • Wavelength Repeatability: ±0.2nm Wavelength Setting: Auto • Photometric Accuracy: ±0.3%T • Photometric Repeatability: ±0.2%T • Photometric Range: -0.3 - 3A, 0 - 200 % T Stability: ± 0.002A/h @ 500nm • Baseline Flatness: ± 0.002A/h • Stray Light: <= 0.05 % T • Data Output: USB • Display: LCD • Cell Holder: 10 mm 4 position cuvette holder • Lamps: D2 lamp and Tungsten Halogen Lamp (W Lamp) • Detector: Silicon Photodiode • Power Supply: AC 220V/50Hz • Accessories: Quartz Cuvettes – A set of 2, Glass Cuvettes – A set of 4 Mains Lead, Operation Manual and Dust Cover	
20	Ultrasonic cleaner	02	• Variable temperature - from 30°C - 80°C • Digital temperature and timer display • 40KHz cleaning power • Durable stainless steel tank and cabinet. • Volume capacity ~ 5-10 liters. • Additional accessories:Test tube holder, stainless steel lid, stainless steel basket	
21	Digital Conductivity Meter	03	Using latest microcontroller, auto ranging (5 Ranges from 200µS to 1000mS), temperature compensation, auto cell constant measurement, touch keys along with conductivity cell.	
22	Digital Potentiometer	03	With digital LED display along with glass, silver, platinum and reference electrode.	
23	Digital Photo Colorimeter (8 filters)	02	Mains operated, sample size 1ml with digital LED display.	
24	Heating mantle	09 (each 1 in diff.	Made of knitted glass yarn, heaters are fitted beneath it, which provides uniform heating of	

		size)	flaks upto 400 °C. The mantles are fitted in a nicely painted sheet metal case, filled with glass wool insulation, provided with an energy regulator, indicator and a cord. Cap.250ml 1. Capacity – 250mL (Quantity-03) 2. Capacity – 500mL (Quantity-03) 3. Capacity – 1000mL (Quantity-03)	
25	Magnetic Stirrers with Hot plate	2MLH – 7 5MLH – 7	The 'MLH' series magnetic stirrers with hot plate are similar to the ML series of magnetic stirrers but have additional stainless steel hot plate. PMDC motor gives higher torque even at lower speeds and maintains speed stability despite viscosity of volume changes. Accurate step less speed control allows smooth variation up to 1200 rpm. Heating energy is controlled by energy regulator.Temperature: 0 – 200 ^{0}C **Salient features**: PMDC motor for higher torque even at low speeds. Better low speed stirring even with small volume. Accurate step less speed control maintains excellent speed stability. Specially designed for corrosive atmosphere reducing the chances of fumes entering the unit. Capacity 2 lit. (2MLH) Capacity 5lit. (5MLH)	
26	Weight box	03	Weight box capacity 200gms. With fractional weights calibration with NABL certificate	
27	Glass electrode	05	Glass electrode for pH meter superior quality	
28	Platinum Electrode for conductivity	05	Platinum Electrode for conductivity	
29	UV Cuvvate (Cell) quartz per pair	03	Quartz Materials	
30	Photometric Cell (Glass cuvette) for spectrophotometer	03	Photometric Cell made of Glass cuvette	
31	Lactometer	02	Glass silver coated superior	
32	Adaptor of Analytical balance	03	(for Shimadzu Model No NLB125120W1U (Input : 100 – 240 V, 50-60 Hz, 0.4 A; Out put : 12 V = 1.25 A)	
33	Flame Photometer and accessory 01	02	Microprocessor based flame photometer with Na and K filter upto5 point calibration. Direct readout ppm and meq L auto filter selection, auto ignition 20/49 LCD displayed, single expiration, supplied with compressor and	

			other accessories	
34	UV chamber for TLC	03	UV cabinet made of M.S sheet with power coated , one short wavelength and one long wave length and one fluorescent tube of 12" length with gadget easily operated front door and viewer at top protected with glass plate	
35	Hygrometer digital	02	This temperature & humidity meter is characterized at large character LED display, multifunction, low power consumption, high stability & accuracy Features- Display temperature, humidity and time simultaneously, Memory of MAX & Min measuring value, 12hour/2 hour displaying system selectable, C/F unit selectable, intergral hour alarm function Specification – Temperature : -10°C ~ + 50°C (14~122°F) Humidity range : 10% ~99% RH Accuracy – Temp. : ± 1°C (1.8°F) Humidity: ± 5% RH (40%~ 80%) Power supply : 1.5V (AAA size)x1 Product dimension : 100x110x21.5mm	
36	Water bath	02	Double walled outer mild steel sheet, epoxy coated, inside chamber S.S. 12 holes of 75mm dia, Temp. is thermostatically controlled 95°C. ± 1°C, fitted with on/off switch, supplied with concentric rings and a cord. Size – 400x300x100mm	

TENDER FORM

FINANCIAL BID

PART-C

Sl. No.	Name of Instrument/ Item quoted	Manufacture/ Make	Quoted Rate (Rs.)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Undertaking

1. I/We have gone through the terms & conditions as stipulated in the tender enquirydocument and confirm to accept and abide the same.

2. That I/We undertake that the information given in this tender are true and correct in allrespect and I/We hold the responsibility for the same.

Date: (Seal & Signature of the Bidder)

Place:

PART-D

Declaration

We hereby undertake that there are .....pages, serially numbered, in the submitted tender including the supporting documents. (Please number all the pages including blank page, if any) signature and seal of the bidder.

Signature of Bidder with seal and date