



THE UNIVERSITY OF BURDWAN

RAJBATI, BURDWAN-713104
WEST BENGAL, INDIA

Phone No. : (0342)2659255

Tender No: DST-SERB/EEQ/BU/ENVSc./1

Date:15.07.2019

Sealed quotations (indicating Name of item, Tender No. with date and due date on the top of the envelope) are hereby invited from the competent & resourceful vendors for supplying of the following items as mentioned in the Annexure -A for DST-SERB under Dr. Sudipto Mandal, Principal Investigator (PI), Department of Environmental Science ,B.U. The sealed quotations should reach the office chamber of **Dr. Sudipto Mandal, Principal Investigator and Assistant Professor, Ecology and Environmental Modelling Laboratory, Department of Environmental Science, The University of Burdwan, 713104, WB, India** on or before **25.07.2019 up to 12:00 noon**. Quotations received after the due date shall not be entertained. The terms and conditions are stated below.

Terms and Condition:-

1. Rates must be quoted in INR (Rupees) and should be valid for acceptance for at least 6 months from the date of submission to the concerned office of the university.
2. The Project Committee is not bound to accept the lowest rate and reserve the right to accept or reject any or all the quotation without assigning any reason whatsoever.
3. The Project Committee will not accept any substandard articles under any circumstances.
4. The supplier shall be liable to such penalties as the university may decide in case of failure on the part of supplier to complete the supply of all the items within such period as maybe specified in the supply order.
5. The **Technical specification** should contain scanned copies of the following. All these documents, duly signed by the authorized signatory, are to be submitted to the above address within the closing date of submission.

Particulars of the bidder in plain paper in the following format :

- a) Tender specific authorization (MAF) from OEM
- b) Proof of PAN no.
- c) Proof of VAT/Rate of Sales Tax Registration
- d) Copies of the Income Tax Acknowledgement Receipt for the latest Assessment year, P.T. Deposit Challan for latest year, ESI Certificate, up to date clearance of Service Tax Registration (last receipt of Challan), Trade License and last three year Balance Sheet.
- e) Terms & Conditions like, Insurance, Mode of payment, Validity period, Warranty and Delivery period must be mentioned and to be submitted on firm's letter head mentioning the following :
 - i) Name and address of the Company including Telephone no., FAX no.
 - ii) Contact person - Name, mobile number, email address

- iii) Banker's name and address in details
 - f) Detailed Technical specifications
 - g) Full Specifications, Make, Model, Brochure/Leaflets/Technical Information of the item(s), if any should be given while quoting the rates.
 - h) Experience and credential documents
 - i) Any other relevant document
6. The Bidder whose bid would be accepted will be notified.
7. **Eligibility criteria for participation in the tender :**
- a) The bidder must produce tender specific authorization (MAF) from OEM.
 - b) The Technical specification must be accompanied with the copies of the Income Tax Acknowledgement Receipt for the latest Assessment year, P.T. Deposit Challan for latest year, ESI Certificate, up to date clearance of Service Tax Registration (last receipt of Challan), Pan Card, VAT Registration Certificate, Trade License and last three years Balance Sheet.
8. The firms should provide the Purchase Order Copies of same or similar items supplied to any Central Govt./Autonomous Institution/CSIR Labs/State Govt. etc.
9. All taxes and other charges must be mentioned clearly.
10. The final price of the instrument /machine must include all the other charges like packaging, forwarding, freight, transportation charges etc
11. Payment will be made on bill basis after the receipt of the item in good condition, its satisfactory installation and commissioning at the concerned laboratory. Payment due to the supplier will be made through the cheque or R.T.G.S. direct to the party bank account.
12. A vendor may submit quotation for a single item or for more than one item. VAT registration must be submitted along with the quotation.

List of Items

Sl. No.	Name of the Item	Specifications	Quantity
Item no. 1	Automatic Nitrogen/ Protein Estimation System with Scrubber and Automatic Distillation system and Software	<p><u>Automatic Digestion System</u> Six Place 250 ml capacity PC Compatible Block Digestion System with all essential accessories TFT Graphic Touch Screen Display with unique wireless mouse to operate at a distance of 1-2 mtrs. Should have 2 Ports in the motherboard one for PC connectivity another for direct connection to Remote Mouse/Datalogger/ Memory stick Memory stick for data storage with separate port in mother board apart from PC Port Integrated autosequencing time/temperature domain of 70 programs and 12 sequencing steps Inbuilt mini printer for print options to document preprogrammed settings and logged datas Temperature Controller should be isolated separately in a control tower to protect electronics from digestion heat zone and acid reaction zone Temperature Control Range: Room temperature to 450 ° C, Temperature Accuracy : ± 0.5 ° C PC software performs Live graphical representation of time /temperature gradient on touch screen display Direct USB Port for PC with live process view on touch screen display of various stages with print options, Remote control module for wireless data monitoring, control and transfer to PC at a distance of 10 feet . The Entire display screen of Controller should wirelessly appear in the PC/ Laptop of user, to monitor & control from his work table. All essential accessories like Digestion Tubes, SS Insert Rack, Exhaust Manifold, Suction assembly for safe removal of acid fumes</p> <p><u>Scrubber System</u> Four stage acid neutralization scrubber. Non corrosive centrifugal inbuilt magnetic suction pump with inbuilt self priming feed pump for water recirculation, FRP Tank, Containers for Alkali and Water, Electrical Requirement: 230v/50Hz Mains.</p> <p><u>Automatic Distillation</u> Autosequencing Microprocessor based PC Compatible Distillation System with in-built software with 50 Predefinable User Storage Auto Sequence Programmes Automatic sequencing with auto Intelligent run of programmable steps which include Automatic Dilution, Auto KMNO4 addition, Automatic Alkali Addition, Automatic Steam injection, Process over indication with alarm with delay time features, Automatic Titration Connectivity feature for future upgradation with complete automatic safety features Microbrilliant distillate control with adjustable sensor, Two line Alpha numeric Digital LCD Display, Auto sensing of "NO WATER" condition in condenser & steam generator with alarm &</p>	1

		<p>signal to alert user. Auto deactivation of operation after warning in case of user non availability</p> <p>Contd...item 1</p> <p>Enables Automatic monitoring and measuring of high temperature in distillate with sensor for auto warning signal and safety alarm to alert user to control distillate temperature. Temperature displayed digitally.</p> <p>Auto reagent Level Sensor with Alarm for Reagents, Stainless steel non corrosive steam Generator</p> <p>Automatic water level monitoring & Peristaltic pump for reagents addition</p> <p>Electrical Requirement - 220 - 230V/50Hz.</p> <p>The control panel unit along with inbuilt temperature controller, timer, mother board and SMPS should be isolated in separate compartment to protect electronics from wet chemistry & acid/ alkali process area for longevity and safety of all electronic components. Nitrogen level : 0.1 to 200 mg Nitrogen (Min / Max Detection Limit)</p> <p>Nitrogen Reproducibility: $\pm 0.1\%$ RSD , Nitrogen Recovery : $> 99.5\%$</p> <p>Electrical Requirement: 220-230V single phase 50Hz A.C</p>	
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Sl. No.	Name of the Item	Specifications	Quantity
Item No.2	Tedlar Bag Capacity-1 Litre	<ul style="list-style-type: none"> • Stable for a wide variety of compounds, including VOCs, CO, CO₂ and methane. • Suitable for most gas sampling applications • Abrasion resistant • Chemically inert to most acids, aliphatic and aromatic organic compounds, chlorinated solvents, and alcohols. • Suitable for sampling and analysis of most VOCs within 2 days, and many sulfur compounds for up to 24 hours. • Inherently pure • Superior storage for organics • Minimal adsorption • Contains no additives, fillers or pigments • Choice of fitting options • Flexible and sturdy • Will not contaminate samples • Leak proof, heat sealed on all four • Low permeability – no sample loss • Thickness-0.002" • Tensile strength-8000 psi • Maximum operating temperature-204°C • Specific gravity-1.70 • Valve-Screw cap type • Oxygen permeability-50 mL/(m² x d) • Water vapour permeability-9-57 g/(m² x d) • Carbon dioxide permeability-172 mL/(m² x d) 	10 pieces

Sl. No.	Name of the Item	Specifications		Quantity
Item No. 3	Salinity Meter (pocket type)	Salinity Range	0.0 to 70.0 ppt (g/L)	1
		Salinity Resolution (ppt)	0.1 ppt (g/L)	
		Salinity Accuracy (ppt)	±1 ppt for 0.0 to 40.0 ppt; ±2 ppt for readings over 40.0 ppt	
		Salinity Calibration (ppt)	all ranges calibrated with 35.00 ppt salinity standard	
		Salinity (PSU) Range	0.0 to 70.0 PSU	
		Salinity (PSU) Resolution	0.1 PSU	
		Salinity (PSU) Accuracy	±1 PSU for 0.0 to 40.0 PSU ; ±2 PSU for readings over 40.0 PSU	
		Specific Gravity Range	1.000 to 1.041 S.G.	
		Specific Gravity Resolution	0.001 S.G.	
		Specific Gravity Accuracy	±0.001 S.G.	
		Temperature Compensation	automatic from 5.0 to 50.0°C (41.0 to 122.0°F)	