



North-Eastern Hill University

Department of Agribusiness Management and Food Technology

Tura campus, Chandmari-794 002, West Garo Hills, Meghalaya

E-mail: abmftnehutura@gmail.com, Ph: 03651-223107, Fax: 03651-223953

No: TC/NEHU/ABMFT/Purchase-DBT-Duck//2018-10/004-1

Date: 09/10/2018

SHORT TENDER NOTICE

Sealed quotations are invited from reputed manufacturers/authorized dealers/vendors for supply, installation & commissioning of following equipment required for the DBT-NER-Duck Project of Sasikumar.R Department of Agribusiness Management and Food Technology, NEHU Tura Campus, Tura, Meghalaya.

Items with specifications:

Sr. No	Name of equipment/machinery	Technical Specification	Quantity (No's)
1	Automatic Nitrogen/Protein Estimation System	<p>Automatic Digestion System</p> <ul style="list-style-type: none"> • 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 2 mtrs. • Icons to represent output of heating process in touch screen display (70 programs, 12 ramps) • 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 20-30 feet • Unit should have integrated Data Logger Module <p>Scrubber System</p> <ul style="list-style-type: none"> • Four stage acid neutralization scrubber. • Non corrosive centrifugal suction pump with inbuilt self priming feed pump for water recirculation, • FRP Tank, Containers for Alkali and Water, Electrical Requirement: 230v/50Hz Mains. <p>Automatic Distillation System</p> <ul style="list-style-type: none"> • Auto sequencing Programmable Microprocessor based Distillation with inbuilt software, Colour Touch Screen high resolution TFT LCD Display, • Auto Intelligent run of programmable steps, Addition of Boric Acid, Dilution, KMNO4 Addition for Available Nitrogen, Alkali Addition, Steam Processing, Residue Removal, Process over indication with inbuilt delay time features, Auto Titration Connectivity feature for future upgradation, Aspiration of Receiver Residue with inbuilt mini printer for 	1

		<p>instantaneous results on input of titre value with inbuilt formula for Nitrogen, Available Nitrogen, Ammonical Nitrogen etc. without connecting to pc. Complete Automatic safety features.</p> <ul style="list-style-type: none"> • Facility to program and control distillate volume for determination of available nitrogen • Auto sensing of “NO WATER” condition in condenser & steam generator with alarm & signal to alert user. • Auto deactivation of operation after warning in case of user non availability • 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. • Auto reagent Level Sensor with Alarm for Reagents, Stainless steel non corrosive steam Generator 	
2	Automatic PC Compatible Fibre Estimation System	<ul style="list-style-type: none"> • Automatic Four Place PC Compatible Auto sequencing Fibre Estimation System for determination of Crude fibre, NDF, ADF, ADL, Cellulose, Hemicelluloses, Lignin, • Ceramic Infrared Heater. • TFT Graphic Touch Screen Display with unique wireless mouse to operate at a distance of 2 mtrs. • Icons to represent output of heating process in touch screen display (70 programs, 12 ramps) • Direct USB Port for PC with live process view on touch screen display of various stages with print options, • PC software performs Live graphical representation of time /temperature gradient on touch screen display • Remote control module for wireless data monitoring, control and transfer to PC at a distance of 20-30 feet • Preheating hot plate for acid / alkali made of Casted aluminium alloy heater with Digital PID Control • should have integrated data logger module <p>Hot Extraction Defatting System for Fibre Estimation system to defat in case of high fat content in samples</p> <ul style="list-style-type: none"> • Fully Automatic Programmable Four Place Auto sequencing PC Compatible Solvent Extraction System • TFT Graphic Touch Screen Display with unique wireless mouse to operate at a distance of 2 mtrs. • Icons to represent output of heating process in touch screen display (70 programs, 12 ramps) • Auto Phase change of extraction includes boiling, Condensation, rinsing, solvent recovery 	1

		<p>& pre drying</p> <ul style="list-style-type: none"> • 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, • Inbuilt Air pump, SS Manifold, Automatic collection of recovered Solvent ,Versatile sizes of thimble, • Remote control module for wireless data monitoring, control and transfer to PC at a distance of 20-30 feet <p>Automatic motorized solvent dispenser with LCD display 0.01 to 100 ml for auto dispensing of solvent.</p> <ul style="list-style-type: none"> • Motorized LCD Digital Bottle Top Dispenser with touch screen display, 0.01-99.9ml • Application: Electronic Motorized Digital Bottle top Dispensers is ideal for safe, accurate and precise dispensing of reagents. It is also useful for dispensing of bases, saline solutions, acids and some organic reagents. • Dispensing volume range : Dispense from 0.01ml to 99.99ml • Display : TFT touch screen display module • Dispense Nozzle : Adjustable dispensing nozzle with flexible tube • Remote Control: Incorporates a corded remote control. • Display modes: Two dispensing modes. Single volume dispensing or multi-dispensing the desired volume • Motor : High quality stepper motor provides smooth and accurate dispensing • Programming Features : Volume selection and control • Other Highlights : Recirculation feature minimizes waste when priming, Instrument is portable and can be recharged in 4 hours providing approximately 5 hours usage • Includes adaptors to fit all common lab bottles 	
3	Spice Mixer and Grinder (Lab model)	<p>Sample Grinder Mill for Sample Preparation</p> <ul style="list-style-type: none"> • Material: Stainless steel #304, • Capacity: 10-100 g, • Speed: 25000 rpm, • Fineness: 50-200mesh • Motor power: 400 W, • Weight < 3kg, • Degree of grinding: ultrafine mill grinding, Voltage: 220V 50HZ 	1
4	Refrigerator (Double door)	<ul style="list-style-type: none"> ➤ Capacity (litre): < 650 ➤ Tropicalized to perform at 40 degree ambient ➤ Danfoss/embraco compressor ➤ Dixell/eliwell digital controller ➤ SS 304 food grade steel interior 	1

		<ul style="list-style-type: none"> ➤ Static cooling with fan for uniform cooling ➤ Ovel all size:48”x30”x77” with temperature range(2 to 10 and -10 to -20° C) ➤ Cooling technology-multi air flow ➤ Under counter freezer/refrigerator ➤ Standard front panel with digital temperature display and door ➤ Inverter linear compressor ➤ Water and ice dispenser 	
5	Air Condition	<ul style="list-style-type: none"> ➤ Capacity 2 tons ➤ Dual Inverter Compressor ➤ 100% copper with Ocean Black Protection ➤ Gold Fin Condenser ➤ Himalaya cool ➤ Low refrigerant detection 	1

Warranty:

1. Installation, F.O.R Destination should be at Department of Agribusiness Management, NEHU Tura Campus, Tura-7940002, Meghalaya, India
2. Minimum one year against all manufacturing defects from the date of installation.
3. Warranty and maintenance service should be provided.
4. AMC for 2 years after warranty should be included.

Delivery:

1. Within 6 weeks from the purchase order received date.
2. GST as per GOI notification should be included.
3. Inclusive of all prices up to Dept. of Agribusiness Management & Food Technology, NEHU Tura Campus, Meghalaya.

GENERAL TERMS & CONDITIONS:

1. No separate tender paper will be issued from the office; one should only download the specifications from the website.
2. The rates should be preferably quoted in Indian Rupee and FOR NEHU Tura Campus, West Garo Hills, Tura-794002, Meghalaya basis. Charges for clearing and transportation should be incurred by the supplier.
3. *Quotations should be accompanied by i) An EMD (in the form of Demand Draft) of ` 10,000/- (Rupees Then Thousand) only drawn/pledged in favor of Joint Registrar, NEHU Tura Campus, payable at Tura.*
4. The rates should be exclusive of taxes and applicable tax % should be clearly indicated.
5. Quoted rates should be valid at least for a period of 01 year.
6. The rates should be quoted along with supporting documents of specifications and technical features and list of users.
7. The system must be installed at the laboratory, and after installation a basic training must also be provided by the supplier or their Indian counterpart without any additional costs.
8. All the quotations must be accompanied with supporting documents and / or literature.
9. Demonstration may be sought from the vendors for authentication of quoted specification.
10. Details of availability of after sales support will have to be furnished. After sales support directly from manufacturer and from Assam (Guwahati) will be preferred.
11. The University is exempted from paying Custom and Excise duty.
12. Proprietary items should be quoted with sole Manufacturer/Distributorship certificate.
13. Warranty/Guarantee period should be specifically mentioned in the quotation.
14. Payment will be maximum within 30 days from the date of successful delivery, installation and commissioning of goods at Department of Agri-Business Management & Food Technology NEHU Tura campus, Chasingre, generally through A/C payee cheque. In case payment is to be made by DD, the draft commission will be deducted from the bill amount. Part payment for part delivery will not be allowed.
15. No Advance payment will be made.
16. In case of equipment worth above Rs.20 lakhs the successful bidder is to furnish an unconditional Performance Bank Guarantee (PBG) valid till 60 days after the warranty period from a scheduled

Bank for 10% of the Purchase Order value within 20 days of placement of order Or else 10% of the total bill amount will be deducted as Security deposit failing which the contract shall be deemed as terminated. The security deposits do not bear any interest and shall be released after expiry of warranty period of the items.

17. Items of Foreign origin should have Insurance up to installation on site.
18. The University reserves the right to accept or reject any or all the quotations without assigning any reason.
19. Quoted price should be inclusive of essential accessories and should be CIF NEHU Tura Campus.
20. Applications for release of EMD should be submitted to the Joint Registrar/ Department Head
21. Quotation should be submitted on or before at 02.00 PM on 24th October 2018 and open at 03.00 PM on same day, addressed to the Teacher in Charge, Department of Agribusiness Management and Food Technology, NEHU Tura campus, West Garo Hills, Tura-794002, Meghalaya.
22. The Quotation Notice number and date should be clearly superscripted in the envelope/packet containing the quotation.

Sd/-
Teacher in Charge
Dept. ABM&FT, NEHU Tura Campus