



NAGALAND UNIVERSITY

(A Central University Estd. By the Act of Parliament No.35 of 1989)

Headquarters : Lumami - 798627

No: NUL/RDC-12/SAP/2015 4406

Dated: 28th August 2018

NOTICE INVITING TENDER

Sealed tenders are hereby invited from Authorised Manufacturers/Dealers for supply and installation of equipments under UGC-SAP (DRS-III) Programme for Department of Botany, Nagaland University, Lumami. Interested firms may download the tender documents/specifications and Terms and Conditions from the University website: nagalanduniversity.ac.in and submit their quotations along with tender fee of Rs.500/- (Non-refundable) in the form of DD/Challan in favour of Registrar, Nagaland University, Lumami, in sealed envelope superscript on the cover "Quotation for Supply of Equipments under UGC-SAP (DRS-III) Programme to Botany Department, Nagaland University, Lumami" and addressed to the undersigned on or before 21st September 2018 upto 4:00PM. No tenders will be accepted beyond this date and time.

Sd/-
(Dr. Abemo)
Registrar

No: NUL/RDC-12/SAP/2015

Dated: 28th August 2018

Copy to:

1. PRO for kind information of the Vice-Chancellor, NU.
2. The Finance Officer, Nagaland University, Lumami.
3. The Head, Department of Botany, NU, Lumami, for information.
4. The Coordinator, UGC-SAP (DRS-III), for information.
5. The System Administrator, NU, Lumami, with a request to upload the NIT in the University website.
6. The Editor, Nagaland Post, Dimapur, with a request to publish in the next issue (Size 8cm x 10cm). Bills in triplicate should be submitted for payment. It is a onetime publication.
7. The Editor, Arihant Advertising Agency, S.R.C.B. Road, Fancy Bazar, Guwahati-781001, with a request to publish in the Times of India, North East Edition (Size 8cm x 10cm). Bills in triplicate should be submitted for payment. It is a onetime publication.
8. Office copy.


Registrar 29-8-18



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Sign & Seal

Supply of Equipments

Name of the Firm: _____

Address: _____

Phone contact/s: _____

Email ID: _____



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Equipments with specifications:

Sr. No.	Equipment	Over all Specification	Quantity
1	Water Purification system	<ul style="list-style-type: none">• Water purification progresses through independent cartridges with Aquastop quick-connect for fast replacement• Module 1 – Combination of pretreatment and the reverse osmosis membrane• Module 2 – Polishing cartridge contains high-quality ultrapure resin for consistent purity and long cartridge life• Easy dispensing with variable speed to control flow• Bench as well as wall mount facility• Smart2Pure 3 and 6 features smart, integrated 6 L reservoir• • Constructed with pigment-free materials• Large opening for easy and effective cleaning by hand• Sterile venting filter/reservoir overflow protects against contamination by microorganisms• CO₂ adsorber prevents TOC value increases from drawn-in CO₂• Polyethylene reservoir is opaque to light• Recirculation pump for protection of high purity water from bacterial growth during standstills and maintains the low conductivity value• Conical bottom outlet allows for complete draining and efficient cleaning and disinfection <p>Type 1 Water Resistivity at 25°C, MΩ.cm 18.2 Conductivity, μS/cm 0.055 TOC value, ppb 5-10 Bacterial content, CFU/mL <1 Particles, μm/mL <1 Flow rate, L/min 1</p> <p>Type 2 Water Pure water production at 15°C, L/h 3, 6 or 12 Resistivity at 25°C, MΩ.cm 15-10 Conductivity, μS/cm 0.067-0.1</p>	1 No.

2	Compactor Herbarium Almirah	<p>Double-wall construction and elastomeric seal keep out air and other damaging elements</p> <p>Rigid chrome push-plate and three-point locking system</p> <p>Air space at the rear and front of shelves permits circulation of fumigants</p> <p>Features lift-off hinges, fumigant compartments, chrome label holders and a paracentric key lock</p> <p>Shallow shelves allow folders to be removed easily and permit genus folders to overhang</p> <p>Double-panel airtight door and fold at the front of the shelf protect specimen folders</p> <p>Elastomeric seal and powder paint finish will not cause off-gassing</p> <p>All steel construction</p> <p>Door opens to the right</p> <p>Depth : 18.78 inch</p> <p>Height: 84.12 inch</p> <p>Width: 29.15</p>	2 Nos.
3	Gradient PCR with all accessories	<p>Should have a sample capacity of 96x0.2ml tubes, 0.2ml tube strips or 1x96-well plate with Peltier heating and cooling.</p> <p>Should have true gradient capability and have the feature of dynamic ramping (identical hold times) for all the 8 rows of a gradient.</p> <p>Should have the feature of "instant incubation" to keep samples at constant temperature for ligation and restriction digests.</p> <p>Should have a temperature differential range of 1-25°C.</p> <p>Should have intuitive touch screen interface which can displays graphics in high resolution for easy programming.</p> <p>The touch screen should be responsive for both gloved and ungloved fingers.</p> <p>Should be capable of running reaction volumes from 1-100ul.</p> <p>Should have a maximum ramp rate of 4°C/second with an average ramp rate of 2.5°C.</p> <p>Should have a temperature range of 4-100° C</p> <p>Should have a gradient range of 30-100 deg C</p> <p>Should have a temperature accuracy and uniformity of ± 0.5 deg C</p> <p>Should have a memory of >500 programs with further expansion through a USB Flash drive for transfer of files.</p> <p>Should have block and calculated temperature control modes.</p> <p>The software should have exportable Run logs and system error logs</p> <p>Should have quick boot up time of not more than 1 min.</p> <p>System should have built in library of standard</p>	1 No.

		<p>protocols for long PCR, fast PCR, reverse transcription PCR etc.</p> <p>Should have power save mode.</p> <p>Quoted model should have at least 50 successful installations in India and the user list should be provided.</p>	
4	<p>Advance Gel-Doc/ (Chemi-Doc) system with compatible PC (at least i5 processor, 4 GB RAM, 2 GB integrated graphics and 2 TB HDD) and power back up</p>	<p>Versatile system to support wide variety of applications like-</p> <p>Blotting- Chemiluminescence, Chemifluorescence, Q dot 525, Q Dot 625, X-ray films etc</p> <p>Protein Gel electrophoresis- Flamingo stain, NanoOrange, Silver stain, SYPRO Orange, etc.</p> <p>Nucleic Acid electrophoresis- EtBr, Oligreen, Picogreen, SYBER green, SYBER gold, SYBER safe, Texas red etc</p> <p>Fluorescence detection- cy 2, Pro-Q Emerald, GFP, FITC etc.</p> <p>Colony plaque Lift.</p> <p>Should have dynamic flat fielding for correction of spherical aberration & providing the CV $\leq 5\%$.</p> <p>Image resolution : 4 megapixels or more</p> <p>Imaging area: 25X36 cm or more</p> <p>Should have true 16 bit CCD camera(not A/D) with resolution of 1392 X 1040 μm & pixel density 65536 gray levels.</p> <p>Should have Peltier cooling of -30°C & with dark current 0.001e-/p/s.</p> <p>Dynamic range should be minimum 4 order of magnitude.</p> <p>System should have pre-calibrated focus for any zoom settings & sample height.</p> <p>It should be capable of Optimizing, saving, and quickly recalling the imaging acquisition settings.</p> <p>Should have motorized zoom lens- f/1.2, 12-75mm with numerical feedback.</p> <p>Safe DNA Imaging without UV exposure screen to prevent damage from UV and preserve samples for downstream protein production.</p> <p>Reproducibly position or center the sample on the image platen by using gel alignment templates.</p> <p>Should have live image acquisition records real time development of the chemiluminescent reaction. Thus removing the guesswork often involved with single event film capture of blot signals.</p> <p>Should come with 1 D analysis software with following features</p> <p>Automatic band & lane detection, Mol wt & purity analysis.</p> <p>Should have automation manager.</p> <p>Should have a multichannel viewer to overlay multiplexed or multicolor fluorescent samples.</p> <p>Single mouse click from image capture to results and reports, very fast and efficient.</p> <p>Should have comprehensive automated quantitative analysis of proteins & DNA samples in seconds.</p>	1 set

		Quoted model should have atleast 30 successful installations in India , installations and the user list should be provided along with name of scientist, name of institute, Email Id and Phone numbers.	
5	SLR Digital Camera with zoom lens and all accessories	At least 25 MP with carry bag, LED touch screen (folding)	1 No.
6	Flatbed A3 Scanner for Digital Herbarium with compatible PC (at least i5 processor, 4 GB RAM, 2 GB integrated graphics, 2 TB HDD) and 2 KVA online UPS	Flatbed Specifications Type A3 flatbed color image scanner Scanning Method Fixed document and moving carriage Optical Sensor 4-line color CCD Light Source White LED Optical Resolution 600 dpi x 600 dpi Output Resolution 1 50 dpi – 4,800 dpi (1 dpi increments), 7,200 dpi and 9,600 dpi Max. Document Size A3 (11.7" x 17")	1 set
7	Upright -80-86°C Deep Refrigerator with compatible stabilizer	Temp. Range: -40° C to -86°C:1° increment. Max Capacity : 338-500 L; SS movable Shelves / Inner door : 3/4; Max no of 2" Racks: 16;Max no of Boxes:320; Voltage: (v/Hz)-220/60, Power (W) : 1000, Microprocessor control accurate and automatically by the sense of the ambient temp. & voltage etc. LED digital display to clearly show the system status. Self-testing S/W and multi-alarm, audible & visible for-Hi-Lo temperature, power failure, sensor failure, Hi-Lo voltage, overheated condenser, Hi-Lo ambient temp. Pressure(/vacuum) equalizing design for easier Door opening. Insulated Inner door and Patented sealing design together with heat retardant keeps the cabinet from frosting. Double compressors (Danfoss) cascade refrigeration efficient and reliable; High –end EBM condenser fan. Noise level<49dB(A), Lockable castors; Pull Down time: less than 6hrs Vacuum insulation panel material: sealed vacuum between insulation layers of PUF. Safety:- Safe door lock to prevent unauthorized opening Multiple protection like password program protection, Automatic start-up delay-compressor self protection program, voltage buck-boost etc. 230V/50Hz.	1 each
8	Liquid Nitrogen Tank (for Transport)	Capacity 40-50 L. Neck Dia: 4.7 inch/120 mm Canister no: 11 Canister Dia: 2.8 inch/72 mm	1 No.

		Max. Static Evaporation loss rate : <0.4 Liters / day Static hold time : 127 days No of canisters: 11	
Minor Equipments			
9	Digital Weighing Balance	LCD with backlight Capacity : 220 Gm Readability: 0.1mg Repeatability: 0.2mg Linearity: 0.2mg Pan Size: 90 mm Response Time: <5 sec Calibration: External Housing Chemically resistant finish of the housing for the easiest cleaning	1 No.
10	Magnetic Stirrer with hot plate	Temperature range ~30-90°C Variable rotation speed with digital display	5 Nos.
11	Single Pan Balance	Capacity 600 g Readability 0.01 g (10 mg) Repeatability (±) 0.01 g Linearity (±) 0.02 g Pan Size 120 Ø mm	1 No.
12	GPS	Pocket size with all accessories	1 No.

Terms & Conditions:

1. VAT or any applicable Tax and other charges should be clearly indicated.
2. Any additional benefits like warranty period/after sales service/discount should be mentioned.
3. The rates should be quoted FOR Nagaland University, Lumami.
4. EMD of 2% of the total quoted price in the form of DD/Challan should be deposited in favour of the Registrar, Nagaland University, Lumami.
5. A Self address envelope should be enclosed along with the EMD.
6. Defective items will be replaced at the cost of the supplier.
7. The University reserves the right to accept or reject the tenders without assigning any reasons thereof and no representation will be accepted.

TERM OF PAYMENT

100% Payment after the Receipt, Installation, Verification and Acceptance of the equipments. Offers not agreeing with these terms are liable of rejection