BIDs are invited from reputed manufactures/Dealers/Suppliers in two bid system (Technical bid & Financial bid, separately) for purchase of “Advanced Fully Automatic Nitrogen Analyzer Assembly” for College of Agriculture, Lalsot (Dausa). Bid document can be obtained from this office by depositing bid document fee cash Rs. 500/ and also download from university website www.sknau.ac.in & sppp.rajasthan.gov.in (will have to submit DD or cash Rs 500 in favour of Dean, College of Agriculture, Lalsot, Dausa, while submitting bid). The bid should be accompanied with bid security of Rs.18000/- in the form of D.D from nationalize banks in favour of DEAN, College of Agriculture, Lalsot, Dausa. The last date for submission of bid is **16-09-2020 at 11.30 AM**. Technical bid (tender) will be opened on **16-09-2020 at 02.00 PM** and Financial Bid of qualifying firms will be opened later on. Dean, College of Agriculture, Lalsot (Dausa) reserves the right to accept or reject any or all the BIDs either in full or in parts without assigning any reason.
**BIDs shall satisfy the following conditions:**

1. The rate will be quoted in the format provided (Annexure II) in INR only and there should be clear mention of net price of the item and taxes (GST & others, if any), separately. Rate shall be valid for a minimum period of 180 days from the last date fixed for the receipt of quotations.

2. The rate quoted shall be for free delivery and installation at the College of Agriculture, Lalsot Dausa. Delivery within 40 days after receipt of purchase order.

3. Full specifications of the article quoted for shall be given in the quotation along with literature/pamphlet/drawing and name of brand and model no. of instrument etc.

4. User list of the quoted item (at least 7 in Govt. organizations, only with user satisfactory certificates) may also be additionally provided for reference.

5. If the bid is submitted by the authorized dealer on behalf of the Manufacturer/OEM, then valid authorization certificate of the Manufacturer/OEM must be attached with the bid, otherwise bid will not be considered.

6. As per CVC's guidelines No.12-02-6CTE-SPJ(1)-2/161730 (circular No.3/1/12) dated 13/1/2012, in a tender, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. Further, if an agent submits bid on behalf of the Principal/OEM the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.

7. Supply is to be made by any convenient mode of transport at supplier's risk unless otherwise specified.

8. The EMD shall be refunded to the unsuccessful bidders after finalization of the tender. In case of successful bidder, it can be adjusted towards security deposit which is 5.0% of the order value in the form of D.D. from the nationalized bank drawn in favour of DEAN, College of Agriculture, Lalsot Dausa Payable at LALSOT and shall remain valid for 60 days beyond the date of completion of all contractual obligation of supplier including warranty obligation for the equipment/goods costing Rs.1.00 lakhs (Rs. One Lakh) or more.

9. Two-year warranty has to be invariably provided by the firm.

10. Payment will be made by mode of e-payment to the supplier/firm after satisfactory completion of work.

11. The Dean, College of Agriculture, Lalsot- Dausa reserves the right to accept or reject any or all the quotations either in full or in parts without assigning any reason.

12. Quotations not complying with the above conditions are liable to be rejected.

13. Scanned copy of GST/PAN/C.S.T. Nos. may be attached with the bid.

14. **Technical and financial bids are to be prepared separately.** If technical & financial bids are not given separately, it will be rejected out rightly without assigning any reason.

15. AMC/CMC charges shall not be included for the evaluation of the financial/commercial bids.
16. In case, any dispute arising out of this contract shall be subject to the jurisdiction of Indian laws & Court at JAIPUR. Price preference and/or purchase preference as per provisions of Government of Rajasthan shall be admissible in evaluation and award of contract.

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Particulars</th>
<th>(Bid security) (₹)</th>
<th>Bid Fees (₹)</th>
<th>Bid document receiving last date and time</th>
<th>Bid document opening date and time</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>Advanced Fully Automatic Nitrogen Analyzer Assembly (Technical specifications as Annexure I)</td>
<td>18000/</td>
<td>500/</td>
<td>16-09-2020 at 11.30 AM</td>
<td>16-09-2020 at 01.00 PM</td>
</tr>
</tbody>
</table>

The following documents must be furnished with the technical bid (Annexure I) failing which tender will not be accepted at all.
2. Current Authorization letter issued from Manufacturer/Principal Firm in original.
3. Earnest Money Deposit (EMD).
4. BIS License with schedule for ISI Marked Products.
5. Average Annual turnover (Minimum -50.00 Lakhs) statements for past 3 years certified by C.A. GCC 2.6.
6. Financial Bid should be submitted separately as per the format given in Annexure II, only.
7. Statement of Past Supplies and Performance (at least 7 in Govt. organizations only) with user’s satisfactory certificate.

Annexure I

Technical specifications of Advanced Fully Automatic Nitrogen Analyzer with accessories

A. Automatic Digestion System
- Twelve Place 250 ml capacity PC Compatible Block Digestion System with all essential accessories
- TFT Graphic Touch Screen Display with wireless mouse to operate at a distance of 1-2 mtrs without PC directly.
- Should have 2 Ports in the motherboard one for PC connectivity another for direct connection to Remote Mouse/Datalogger/ Memory stick for data storage with separate port in motherboard apart from PC Port
- Integrated auto sequencing time/temperature domain of 70 programs and 12 sequencing steps
- Temperature Controller isolated 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

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Remote control module for wireless data monitoring, control and transfer to PC at a distance of 5-10 feet.
Data logger, real time clock, memory stick for data storage with separate port in mother board apart from PC Port
All essential accessories like Digestion Tubes, SS Insert Rack, Exhaust Manifold, Suction assembly for safe removal of acid fumes. Suction Assembly wall mounted on rear side of unit for safe & easy access to drain area.

B. Automatic Fully Scrubber System
- Four Stage Fully Automatic Microprocessor based programmable acid neutralization scrubber with digital display integrated online with motherboard of digestion system. FOUR Stage include: Condensation with water condensor, Neutralization in Alkali, Neutralization in Water, Dissolution of air free of acid fumes in raw tank water.
- Non corrosive centrifugal inbuilt magnetic suction pump for water recirculation in 10 litres tank avoids requirement of running water during digestion. Fibre Reinforced plastic Tank of capacity 8 litres. Auto waste disposal, auto drain of tank water, Auto indication of drain cycles.

C. Fully Automatic Distillation System with inbuilt Titration System
- Autossequencing Programmable Microprocessor based Distillation with inbuilt software. Colour Touch Screen TFT LCD Display,
- Provision for direct calculation of results in LCD touch screen without need of PC with user programmable formulae.
- Auto calculation of results on feeding of titre value with built in formula includes Preprogrammed data of all parameters including program numbers, Total Nitrogen by direct titration method, Total Nitrogen by back titration method, Protein percentage by direct titration method, Protein percentage by back titration method, Ammonical Nitrogen, further formulas customizable, All parameters can be viewed in touch screen.
- The suction module of waste residue should be door mounted for easy serviceability.
- 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 tanks to be wall mounted for easy handling and user visibility.
- Stainless steel non corrosive steam Generator, Perilstatic pump for reagent addition.
- 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 & safety of all electronics.
- Nitrogen level : 0.1 to 200 mg Nitrogen, Nitrogen Reproducibility: ± 0.1% RSD, Nitrogen Recovery > 99.5%
- Compact inbuilt Titrator for Potentiometric titration system pH Acid / Base titration with touch screen display
- The titration interconnectivity Hardware enables online titration without need of sample transfer from receiver end.
- Intelligent inbuilt software enables simultaneous titration distillation process with Auto start of titrator.
- 3 modes of titration in a single system. MET - Monotonic equivalence point titration 3 measured quantities are available: pH, U or Ipol.

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Postoffice Didwana Lalsot
Dist. Udaipur (Raj) Pin.303511
DET - Dynamic equivalence point titration 3 measured quantities are available: ph, U or Ipol. SET - End Point titration 3 measured quantities are available: ph, U or Ipol. One measurement mode for pH and milli volt.

- Status display: Flashing patterns display status as Ready, In Operation, Waiting, Malfunctioning, Error etc.
- The instrument performs Live Titration Curve Display in touch screen.
- Upgradable facility to perform photometric titrations and Voltamperometric Titrations.
- Built in magnetic stirrer with adjustable speed 150 to 1800 rpm with status indication in touch screen.
- Incorporates facility to store > 100 methods with more than 30 standard methods.
- The instrument has the facility to generate pdf reports with date, time & store it in the USB memory stick.
- pH electrode with long life cartridge technology for extended life time. pH measurement with 5 point calibration facility.
- pH Range & Resolution: 0.0 to 14.0 pH with 0.001 pH or better
- Motor driven piston burette, with a high resolution of 1/20,000 of burette volume. Complies with DIN EN ISO 8655-6 standard.
- The instrument has the possibility of connecting burettes of volume 5, 10, 20 and 50 ml (20ml supplied with equipment)
- Live data entries like sample weight, stop criteria is possible, when the titration is in progress.
- Facility to lock date and time with password protection. High-precision measuring Input, Operation by mouse-click.
- Anti-diffusion/check valve at dispensing point avoids the diffusion of reagents back to burette tip ensures micro level dispensing.
- Automatic calculation of results and display up to 9 decimals. Results: Directly in %, ppm, g/L, mg/mL, mol/L, g, mg, mL, mg/pc.
- Incorporates > 100 operator programmable protocols with inbuilt standard 30 methods library to carry out all types of titration for different application. User can load methods, change methods, store methods, create new methods, Save methods to USB flash drive and Add methods from USB flash drive. Memory stick with USB port to store more than 50,000 values.
- Facility for Good Laboratory Practice (GLP) routines supported by sample data registration in the instrument with details such as user name, date, performance test, sample code, sample weight, etc.
- Company should have good performance track record of at least 10 years with references of users of similar equipment. The instrument shall strictly confirm to the specifications with relevant brochure. The company should be reputed supplier with at least 50 installations of Automatic Nitrogen Analyser in India and at least 10 installations in Rajasthan. The company should have the proof of at least 50 users using Nitrogen Analyser for more than 10 years in India. The company should not be blacklisted or should not have any adverse remarks in the past.

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College Of Agriculture
Postoffice Diawana Laha
N.Dausa (Ra.) Pin.303517
## FINANCIAL BID FOR QUOTED ITEM

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of Item with full specification</th>
<th>Brand</th>
<th>Qty</th>
<th>Net Rate per Unit (Rs’)</th>
<th>GST (Rs’)</th>
<th>Rate of Excise duty (It should be included in net Rate) (Col. 6)</th>
<th>Amount of excise duty workout accordingly Col. No. 8 (Rs’)</th>
<th>Total rates (6+7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Advanced Fully Automatic Nitrogen Analyzer Assembly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Signature

Date

Name in Capital
Company /Firm Seal