NOTICE INVITING TENDER

Ref No: 039/AU/REG/NIT/18-19  Date: 31/10/2018

Sub: Sealed Tenders are invited from Reputed Organizations for supply and installation of instruments for UG –II lab of Department of Physics, Aliah University, New Town Campus.

Aliah University, Kolkata a Premier Educational Institute under the Minority Affairs and Madrasah Education Department, Government of West Bengal, invites **Sealed Tenders are invited from Reputed Organizations to supply and installation of instruments for UG – II lab of Department of Physics, Aliah University, New Town Campus.** The tentative quantity of the required items along with technical configuration of each items are mentioned at Annexure separately.

Interested **Bidders** may submit their **Tender** complete in all respect To, The Registrar Aliah University IIA/27, New Town, Kolkata- 700160, West Bengal, India by **14/11/2018 up to 03 P.M.** The **NIT Reference Number and Purpose of BID must be written in top of Sealed Envelope.**

**Scope of Work:**
In this regard NIT has been invited in two fold basis i.e. Technical Bid and Financial Bid.

Interested bidders are requested to provide their Quotes following the **Format in Annexure- II** in their official letter heads along with signed **Compliance Statement and Price Bid (Annexure– III).** All bidders are requested to read the **Annexure I: General Terms & Conditions** before participation of the NIT.

The University retains the right to cancel any of the items at a later date after the contract is awarded. The University at its own discretion may cancel any or all the bids without assigning any reason thereof.

For any information in this regard please Email: registrar@aliah.ac.in and copy to store&purchase@aliah.ac.in

<table>
<thead>
<tr>
<th>Sl.</th>
<th>Schedule</th>
<th>Date &amp; Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tender Uploading Date</td>
<td>02/11/2018 at 02 P.M</td>
</tr>
<tr>
<td>2</td>
<td>Bid submission start date</td>
<td>05/11/2018 at 12 P.M</td>
</tr>
<tr>
<td>3</td>
<td>Bid Submission closing</td>
<td>14/11/2018 up to 03 P.M</td>
</tr>
<tr>
<td></td>
<td>Techno Commercial Bid opening date O/o The Registrar, Aliah University,</td>
<td>16/11/2018 at 3:10 P.M</td>
</tr>
<tr>
<td></td>
<td>New Town Campus. <em>(The Bid Opening date and time is tentative and could be open on availability of Concerned Committee Members)</em></td>
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</tbody>
</table>

**ANNEXURE I: GENERAL TERMS & CONDITIONS**

1. **Supply and installation of instruments for UG -II lab of Physics Department, New Town Campus** must be completed within Eight Weeks of issuing work order.

2. The Tenderer should bear all the transportation & insurance **risk** till the on door delivery point to **Physics Department, New Town Campus** Aliah University IIA/27, New Town, Kolkata- 700160 Selected bidder shall take all possible care for Govt. Property & of any damages due to negligence of his workers; the bidder/Agency shall be responsible for all such damages & repair the same at his own cost

3. **The rates** so quoted must be inclusive of GST, Central Excise, customs Duty if any, packing freight to destination, Insurances and levies and necessary installation and fixing at designated places at Aliah University and all charges i.e. cost of material and other incidental charges for supplying at destination level and onsite warranty 1 (One) year and also delivery charges up to the point of delivery at proper destination

Sd/-
Registrar
Aliah University
level and as per instruction in the work/ supply order. No extra charges will be entertained. Prices can be quoted in Indian Currency only (₹). No extra payment will be made for carrying of materials involving head load/ trolley etc.

4. Supply of Items will be made in conformity with the specification & time as mentioned in the work order as decided by the authority. **No deviation in specification will be accepted and submission of the compliance statement is compulsory.** After delivery of the materials to the respective points by selected bidder(s), authority reserves the right to collect the samples of supply the materials at random basis and send those materials for testing to ensure the quality of products etc. If it is found that materials are not according to the specification, the authority has every right to cancel the total lot or otherwise forfeit the security money, blacklisting the respective Manufacturer / Supplier and terminate the contract.

5. If any part of the service in respect of the work assigned and undertaken by you not rendered/delivered in time, Aliah University shall be entitled to levy and recover liquidated damages/ penalty at 1% per week or part thereof the delay/ default, subject to 5% maximum, on the payment due to the agency/contractor for the particular stage. Any delay beyond scheduled dates may attract higher penalty to be decided by the Aliah University.

6. **The bidder will be selected on overall rate only.**

7. **Bidder must participate in all items otherwise their bid will be rejected**

8. All disputes are subject to exclusive jurisdiction of competent Court and Forum in Kolkata, India only.

9. Any dispute arising out of this contract shall be referred to the Registrar, Aliah University, and if either of the parties hereto is dissatisfied with the decision, the dispute shall be referred to the decision of an Arbitrator, who should be acceptable to both the parties, to be appointed by the Vice-Chancellor of the University. The decision of such Arbitrator shall be final and binding on both the parties.

10. **Payment Condition:** The prices shall be inclusive of all taxes & levies including GST and other statutory duties as applicable. Rate of taxes should be indicated separately in the Price Bid. Contract Price specified in Price Bid should be based on the taxes & duties and charges prevailing at the date one day prior to the last date of Bid submission. Statutory deduction, wherever applicable, shall be made from invoice as per government rules. Necessary certificate will be issued for such deductions. Bidder submitting a bid shall produce valid statutory documents / certificates with respect to GST, Income Tax, ROC, Prof. Tax, Trade Licence, etc. All such documents / certificates shall remain valid on the last date of tender submission. GST component of the invoice of the bidder may be kept on hold in case there is any mismatch / irregularity in GST return filling on the part of the bidder. 100% payment will be released after receiving of items in good order and condition and successful installation, demonstration and commissioning duly certified by the concern authority and immediately on receipt of payment from the Govt. Department (within 60 days from the submission of bills). **Successful vendor should arrange to submit a performance security deposit in form of Performance Bank Guarantee to the tune of 10% amount of the total purchase value at the time of submitting the bill. This performance security deposit should be issued from any Nationalized Bank and validity of the same will be till warranty period +60 days from the date of delivery / installation of the material.** The payment will be made by RTGS / FUND Transfer mode only. Advance payment not allowed. **Hence, following information must be clearly written in the Price Bid for RTGS / FUND TRANSFER:**

   A. Name of the Firm with complete postal address

   B. Name of the Bank with Branch where the Account exist

   C. IFSC CODE

   D. ACCOUNT No

   E. PAN No

11. The Tenders are liable to be rejected if the fore going conditions are not complied with. The bid should be complete in all respects and duly signed wherever required. Incomplete and unsigned offer will not be accepted.

12. The products asked for should be of very high standard and preferably reputed brand and/or with **B.I.S/I.S.I.** code. **Products specification must be complied.**

13. All bidders must submit all Technical Documents as per Annexure II otherwise their bid will be cancelled. If any time/ during verification it is found that their documents are false and/or fake their Performance Security Deposit will be forfeited and the organisation became blacklisted.

14. All Bidders are requested to visit the Site of work before bid submission.

**Annexure II : Technical Bid Application Format**

(Please attach all relevant documents)

To, The
Registrar
Aliah University
IIA/27, New Town,
Sub: Application for supply and installation of instruments for UG -II lab of Department of Physics, Aliah University, New Town Campus.

Ref: __________ N.I.T. No ........................................................................dated .................................

Sir,

1. ABOUT THE ORGANIZATION

1.1 Name of the Organization

1.2 Name of Authorized Person

1.3 Registered Office Address with telephone no. & email address

1.4 Authorized Service Station Name, address, contact person name, phone number, e-mail

2. TECHNICAL DOCUMENTS

2.1 Company Registration No./Trade License No./Partnership Deed No. (Photocopy Required to Be Submitted along with NIT)

2.2 PAN Registration No (Please attach documentary evidence)

2.3 GST Registration No (Please attach documentary evidence)

2.4 The bidder/OEM self-declaration stating that he/she is not banned/debarred or black listed by any Central/State Govt. of India/PSU/Organizations/Institutes in India or abroad

ANNEXURE III COMPLIANCE STATEMENT AND PRICE BID:

<table>
<thead>
<tr>
<th>Sl No</th>
<th>Para of Tender</th>
<th>Enquiry Specification of Items Offered</th>
<th>Compliance to Quotation specification whether yes or no</th>
<th>TOTAL RATE (No. of Quantity X Unit Rate)</th>
<th>GST (%) &amp; Amount</th>
<th>Total Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Inclusive Insurances and levies and should be for delivery &amp; warranty, fixing &amp; Installation Charges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>01</td>
<td>Determination of rigidity modulus of a material of a wire by dynamic method. Accessories:</td>
<td>i) Modulus of Rigidity Apparatus-(Stand type)-complete in all respect ii) Slide calipers -(Stain less steel)-2pcs iii) Screw gauge--(Stain less steel)-2pcs iv) Digital stop watch (Good quality)-2pcs Complete in all respect.</td>
<td></td>
<td>01 Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>02</td>
<td>Determination of thermal conductivity of a bad conductor in the form of a disc by the Lees and Charlton method.</td>
<td>(1) Lee’s apparatus and the experimental specimen in the form of a disc. (2) Two thermometers, (3) Stop watch. (4) Weighing balance, (5) Special lamp stand (6) Boiler and (7) Induction Heater Complete in all respect.</td>
<td></td>
<td>02 Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>03</td>
<td>Determination of moment of inertia by using a flywheel. Fly wheel with axel supported with ball bearing, weight hanger, slotted</td>
<td></td>
<td></td>
<td>02 Set</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
<td>Set</td>
<td></td>
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<td>-----------------------------------------------------------------------------</td>
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</tbody>
</table>
| 04  | **Experiment on action due to gravity.**  
     Clamp, right angle Base and support rod  
     Free fall adapter Balls, 13 mm and 19 mm  
     Meter stick (or metric tape measure), digital timer,  
     photo gate sensor, solenoid driver etc.  
     Complete in all respect. | 01  |
| 05  | **Investigation of inductance by using a series LR circuit.**  
     Specification:  
     Signal Generator: 1Hz-100KHz  
     signal Generator with Digital  
     Frequency counter.  
     Amplitude: 0-15V/P-P  
     Wave: Sine, Square, Triangle wave.  
     In-built digital meters: High  
     impedance Digital True RMS AC  
     Millivoltmeter  
     Range-20V/2V/200Mv  
     Complete in all respect. | 02  |
| 06  | **Investigation of capacitance by using a series CR circuit.**  
     Specification:  
     Signal Generator: 1Hz-100KHz  
     signal Generator with Digital  
     Frequency counter.  
     Amplitude: 0-15V/P-P  
     Wave: Sine, Square, Triangle wave.  
     In-built digital meters: High  
     impedance Digital True RMS AC  
     Millivoltmeter  
     Range-20V/2V/200M  
     Complete in all respect. | 02  |
| 07  | **To determine the speed of ultrasonic waves in a liquid medium.**  
     Ultrasonic interferometer, sample liquids, high frequency generator,  
     measuring cell.  
     Complete in all respect. | 01  |
| 08  | **To determine the self inductance of a given coil by Rayleigh method.**  
     1 KHz oscillator, digital null detector and necessary components  
     Complete in all respect. | 02  |
| 09  | **Measuring wavelengths of a LASER with a diffraction grating**  
     Diode Laser (Good Quality)  
     Good quality optical bench. metre rule, Laser holders, Diffraction  
     grating with holder, Projector screen with holder.  
     Complete in all respect. | 02  |
<p>| 10  | <strong>To determine high resistance by the method of leakage of a condenser.</strong> | 01  |</p>
<table>
<thead>
<tr>
<th>Set No.</th>
<th>Description</th>
<th>Issues/Features</th>
<th>Notes</th>
</tr>
</thead>
</table>
| 11     | **To find the e/m of an electron by J.J Thomson's method.**  
Complete in all respect.                                                                                                               |                                                                                                                      |       |
| 12     | **Function Generator**  
Frequency Range - 0.01Hz to 1MHz in 8 decade ranges.  
Frequency Indication - ±1% ±1 digit.  
Output Impedance - 50 ohms  
Output Waveforms - Sinusoidal, Triangle, Square, Ramp, Pulse, TTL (Sync) & DC Outputs.  
Sine Distortion - <1%  
Square Wave Rise / Fall Time - <75nsec.  
Frequency Stability - < 0.5% of the set frequency  
Duty Cycle - 10% to 90% variable.  
Maximum Output Voltage - a) Into 50 ohms 10V p-p output. b) Open Circuit 20V p-p output. Amplitude Indication - 3 digit seven segment display (Vp-p) ±5%.  
Amplitude Flatness ±0.5dB upto 100KHz range / ±1.0dB for 1MHz range.  
Attenuator - Two step attenuators of 20dB & 40dB. Fine attenuation of 20dB through vernier control. (Total 80 dB attenuation).  
Attenuator Accuracy ±0.5dB per 20dB at 1KHz.  
DC Offset ±10V ±5% (DC + AC peak) in open circuit ±5V ±5% (DC + AC peak) in 50 ohms. |                                                                                                                      |       |
| 13     | **Cathode Ray Oscilloscope.**  
DC - 30MHz Bandwidth  
1mV/div Sensitivity on Both Channels  
CH1, CH2 (Independent Channels), CH1 & CH2 (Alternate / CHOP), CH2 INVT, ADD and SUBTRACT X-Y Operation  
40ns/div to 0.2s/div Time Base  
140mm Rectangular CRT with Internal Graticule  
Triggering to 40MHz  
Z Modulation (TTL Level)  
8 x 10 cm. Display  
TV Triggering Frame (V) & Line (H)  
MAINS Trigger  
Variable Hold Off  
Built-in Component Tester / Comparator |                                                                                                                      |       |
| 14     | **AC METER**  
Meter measurement Accuracy: True Root mean square (RMS) detection.                                                                 |                                                                                                                      |       |
<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Digital Voltmeter (D.C) (0-20V)</td>
<td>10</td>
</tr>
<tr>
<td>16</td>
<td>Digital Ammeter (D.C) (0-200mA)</td>
<td>10</td>
</tr>
<tr>
<td>17</td>
<td>Digital Microammeter (D.C) (0-200μA)</td>
<td>10</td>
</tr>
<tr>
<td>18</td>
<td>Discrete Component for lab.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a) EDF Prism RI-1.65 (good quality) 38×38mm</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>b) Sprit level</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>c) Biprism</td>
<td>06</td>
</tr>
<tr>
<td></td>
<td>d) Plane diffraction Grating with cover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2500 LPI (100 LPM)/7500 LPI (300 LPM)</td>
<td>06</td>
</tr>
<tr>
<td></td>
<td>e) Plane Transmission Grating with cover.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2500 LPI (100 LPM)/7500 LPI (300 LPM)</td>
<td>06</td>
</tr>
</tbody>
</table>

Overall Rate in Figure
Overall Rate in Word

I/We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs…………..…… (Amount in figures) (Rupees ………………………………………………………………………………….…………………………amount in words) within the period specified in the invitation for Tender. We confirm that the normal commercial warranty/guarantee of mentioned in this Tender shall apply to the offered items and we also confirm to agree with terms and conditions as mentioned in the invitation letter. We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery. Certify that all above information are correct to the best of my/our information, knowledge and belief.

Signature of the Bidder

Name______________________________
Designation___________________________

Date ________________

Ref. No: 039/AU/REG/NIT/18-19 Dated: 31/10/2018

Copy to:
1. Chairman, Departmental Purchase Committee
2. Notice Board at Aliah University
3. Website: www.aliah.ac.in
4. One Bengali News paper
5. Guard File

Sd/-
Registrar