



Aliah University (A UGC & AICTE approved autonomous Institution under the Department of Minority Affairs

and Madrasah Education, Govt. of West Bengal) IIA/27, New Town, Rajarhat, Kolkata – 700 160, West Bengal **Web: www.aliah.ac.in**

NOTICE INVITING TENDER

Ref No: 27/AU/REG/NIT/17-18

Date: <u>16/03/2018</u>

Sub: Sealed Tenders are invited from the bonafide and resourceful Contractors/Service Providers/Agents/Wholesalers/Suppliers for Supply of Experimental Setup for Practical Physics Laboratory For the Department of Education, Aliah University, Park Circus Campus.

Aliah University, Kolkata a Premier Educational Institute under the Minority Affairs and Madrasah Education Department, Government of West Bengal, invites <u>Sealed Tenders</u> from the bonafide and resourceful Contractors/Service Providers/Agents/Wholesalers/Suppliers for Supply of Experimental Setup for Practical Physics Laboratory for the Department of Education, Aliah University, Park Circus 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 **23/03/2018 up to 02 P.M** The Technocommercial Bid will tentatively open on **23/03/2018 up to 4.15 P.M**

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- II).

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 contact **<u>phone 8584853812</u>** Email: **<u>jhaakif@gmail.com</u>**, **education.aliah@gmail.com** and **copy to** <u>registrar@aliah.ac.in</u>; **store&purchase@aliah.ac.in**

S1.	Schedule	Date & Time
1	Date of uploading of NIT (Publishing Date) at Aliah University Website	16/03/2018 up to 03 P.M
3	Bid submission start date	16/03/2018 up to 03 P.M
4	Bid Submission closing	23/03/2018 up to 02 P.M
	Techno Commercial Bid opening (Tentative) date O/o The Deputy Registrar, Aliah University, Park Circus Campus, 17, Gorachand Road, Beniapukur, Kolkata, West Bengal 700014	23/03/2018 up to 04.15 P.M

Sd/-Registrar Aliah University

ANNEXURE I: GENERAL TERMS & CONDITIONS

- 1. Supply of Physical Science Laboratory Equipment & Accessories For for Department of Education, Aliah University, Park Circus Campus must be completed within 7 days of issuing work order at Department of Education, Park Circus Campus, 17, Gorachand Road, Beniapukur, Kolkata, West Bengal 700014 <u>Phone 8584853812</u>
- 2. The successful tenderer will be required to furnish a **Performance Security Deposit** of 10% of contract amount in the form of Fixed Deposit Receipt or Bank Guarantee from any scheduled Bank duly pledged in the name of the "**Aliah University**". The security deposit can be forfeited by order of this University in the event of any breach or negligence or non- observance of any condition of contract or for unsatisfactory performance or non-observance of any condition of the contract. The Security Deposit can also be deducted from the bill & same will be refunded after satisfactorily completion of warranty period. Guaranty/Warranty period for the products must be for 1 year/ As per OEM whichever is higher.
- 3. The tenderer should bear all the transportation & insurance **risk** till the on door delivery point. 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.
- 4. **The rates** so quoted must be inclusive of all Taxes, VAT, Central Excise, Service Tax, 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 Equipment and other incidental charges for supplying at destination level and onsite warranty 1 (One) year/ As per OEM whichever is higher and also delivery charges up to the point of delivery at proper destination 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.
- 5. All necessaries cables and adapters for functioning of the equipments to be supply along with the Work
- 6. 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. 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.
- 7. 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
- 8. The bidder will be selected on overall rate only and the rate should be valid upto 180 days from issuing of Work Order
- 9. All disputes are subject to exclusive jurisdiction of competent Court and Forum in Kolkata, India only.
- 10. 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.
- 11. Payment terms: 90% payment will be released within (30) days only after successful installation and commissioning of the supplied items duly certified by the concern authority and rest 10% will be released after submission of **Performance Security Deposit** mentioned in the **Point No. 2 Of Annexure -I**. No advance payment or payment against Performa invoice will be made. Payment will be made after receipt, inspection, and installation/testing. 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:
- 12. Name of the Firm with complete postal address
- 13. Name of the Bank with Branch where the Account exist
- 14. IFSC CODE
- 15. ACCOUNT No
- 16. PAN No
- 17. 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.
- 18. The products asked for should be of very high standard and of reputed brand and preferably with **B.I.S/I.S.I** code.

Annexure II : Technical Bid Application Format (Please attach all relevant documents)

To, The Registrar Aliah University IIA/27, New Town, Kolkata-700 160

Sub: Application for Supply of Physical Science Laboratory Equipment & Accessories for Department of Education, Aliah University, Park Circus Campus.

Ref: -_____N.I.T. Nodated

Sir,

	1. A	BOUT THE ORGANIZATIO	DN
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	3
2.1	Company Registration No./Trade I Deed No. (Photocopy Required to E NIT)		
2.2	PAN Registration No (If any) (Photocopy Required to Be Submit:		
2.3	GST Registration No (If any) (Photocopy Required to Be Submit		
2.6	An undertaking should be given stating therein that the Firm has not been debarred or penalized for any reason and consequently thrown out of work by any Government Department.		

COMPLIANCE STATEMENT AND PRICE BID:

				TOTAL RATE Inclusive, Insurances and levies and should be for delivery & warranty, fixing & Installation Charges		
SL.	NAME OF EXPERIMENTAL SET-UP	Qty	Compliance to Tender specification whether YES/ NO	Basic Price (Unit Price X Qty)	GST	TOTAL Quote (RS.) (Cl E + Cl F)
Α	В	С	D	E	F	G
1	To find the weight of a given body using parallelogram law of vectors (Gravesend's apparatus)	1 Set				
2	To find the spring constant of a helical spring by method of oscillations using three different masses	1				
3	To determine the surface tension of liquid by capillary rise method only capillary apparatus)	1				
4	To determine the coefficient of viscosity of a given viscous liquid by measuring the terminal velocity of a given spherical body	1				
5	To study the relationship between the temperature of a hot body and time by	1				

	plotting a cooling carve			
	To find the speed of sound in air at room			
6	temperature using a resonant tube by two	2		
0	resonance positions (Resonant air	4		
	column) To find the relation between frequency			
7	and length of a given wire under constant	1		
	tension using Sonometer			
	To find resistance of a given wire using meter bridge and hence determine the			
	specific resistance of its material			
	consisting if 1) Meter Bridge			
8	2) Jockey	1		
	3) Resistance Box	SET		
	 4) Nichrome Wire 5) Screw Gauge & Meter Scale 			
	6) Connecting Wire			
	7) Galvanometer			
	To determine resistance per cm of a given wire by plotting a graph of potential			
	difference versus current consisting of			
9	 Wire (Nichrome) Voltmeter 	2		
	3) Ammeter			
	 4) Meter Scale 5) DC Power Source 			
	To verify the laws of combination (series /			
	parallel) of resistance using a meter			
	bridge consisting of 1) Meter Box			
10	2) Resistance Box	1		
10	 Plug Commutator Single Resistance Box : 2 Ω 	-		
	Single Resistance Box : 5 Ω			
	Single Resistance Box : 10Ω 5) Galvanometer			
	To compare the emf of two given primary			
	cells using potentiometer consisting of			
	 Potentiometer with Jockey Primary Cells 			
11	3) Millammeter	2		
	 D.C. Power Source Resistance Box 			
	6) One Way & 2 Way Key			
	7) Galvanometer To determine the internal resistance of			
	given primary cell using potentiometer			
	consisting of			
	 Potentiometer D.C. Power Source 			
12	3) Galvanometer	2		
	4) Resistance Box 5) Ammeter			
	6) Fractional Resistance Box			
	7) Primary Cell (Laclance			
	To determine resistance of a galvanometer			
	by half-deflection method its figure of			
13	1) Weston Type	1		
	Galvanometer			
	To convert the given Galvanometer (of			
14	known resistance and figure of merit) into	2		
	an ammeter and voltmeter of desired range and verify the same			
	 5) Ammeter 6) Fractional Resistance Box 7) Primary Cell (Laclance Cell / Daniel Cell) To determine resistance of a galvanometer by half-deflection method its figure of merits consisting of Weston Type Galvanometer Battery Resistance Box To convert the given Galvanometer (of known resistance and figure of merit) into an ammeter and voltmeter of desired 			

	consisting of				
	1) Galvanometer				
	2) Rheostat				
	3) Constantan Wire /				
	Manganin Wire				
	4) Screw Gauge				
	5) Wire Cutter				
	6) Battery Eliminator				
	8) Milliameter				
	9) Voltmeter				
	To find the frequency of the A.C. mains				
	with a sonometer consisting of				
	1) Sonometer				
	2) Soft Iron Wire				
	3) Tunning Fork				
15	4) Hanger	2			
10	5) Slotted Weight	-			
	6) Step Down Transformer				
	7) Electromagnet				
	8) Stand with Clamp				
	9) Meter Scale	L			
	To find the value of v for different value of				
	u in a case of a concave mirror and to find				
16	the local length consisting of	1			
10	1) Concave Mirror	1			
	2) Knitting Needle				
	3) Meter Scale				
	To determine the focal length of a convex				
	mirror using a convex lens consisting of				
17	1) Optical Bench with pin	1			
17	2) Convex Lens	1			
	/				
	To find length of a convex lens by plotting				
	graphs between u and v or between 1/u				
18	and 1/v consisting of	1			
	1) Optical Bench				
	2) Convex Lens				
	To fond the focal length of a concave lens				
	using a convex lens consisting of				
19	1) Optical Bench	1			
	2) Concave Lens				
	3) Convex Lens				
	To determine angle of minimum deviation		1		
	for a given prism by plotting a graph				
	between angle of incidence and angle of				
00		0			
20	deviation consisting of	2			
	1) Prism				
	2) Board Pin				
	3) Hair Pin				
1	To determine refractive index of a glass				
1	slab using a travelling microscope				
21	consisting of	2			
	1) Glass Slab				
	2) Travelling Microscope				
	To find the refractive index of a liquid by		1		
	using (i) concave mirror, (ii) convex lens				
1	and plane mirror consisting of				
1					
00		0			
22	3) Optical Pin	2			
	4) Stand with Clamp				
	5) Spherometer				
	6) Plumb Line				
	7) Convex Lens				
	8) Meter Scale			 	
0.0	To draw the I - V characteristic curve of a	4			
23	p - n junction in forward bias and reverse	4			
<u>6</u>			.		

	bias consisting of					
	1) Bread Board					
	2) Jn diode : $OA - 70$					
	Jn diode : OA – 71 Jn diode : OA – 72					
	Jn diode : $OA = 72$ Jn diode : BY = 125					
	Jn diode : $BY - 123$					
	3) D.C. Voltage Source					
	4) Milliammeter					
	5) Voltmeter					
	6) Microammeter					
	7) Rheostat					
	To draw the characteristic curve of a					
	zener diode and to determine its reverse					
	break down voltage consisting of					
	1) Zener Diode					
	IN 758 A					
24	IN 962 B	4				
	2) D.C. Power Supply					
	3) Microammeter					
	4) Voltmeter					
	5) Rheostat 6) Bread Board					
	7) POT					
	To study the characteristic of a CE npn /					
	pnp transistor and to find out the value of					
	current gain & voltage gain consisting of					
	1) Bread Board					
	2) Transistor : SL – 100					
	Transistor : SL – 100					
	Transistor : CL – 100					
	Transistor : BC – 147					
25	Transistor : BC – 148	4				
	Transistor : AC – 187 Transistor : 2SB – 77					
	Transistor : $2SB - 77$ Transistor : $2N - 2904$					
	3) D.C. Power Supply					
	4) POT					
	5) Milliammeter					
	6) Microammeter					
	7) Voltmeter					
	8) Multimeter					
Total (Quoted Price In INR					
Total Quoted Price In Word						

I/We agree to supply the above goods/equipment/products in accordance with the technical

Signature of the Bidder	
Name	
Designation	
Seal	

Date _____

Ref. No: <u>27/AU/REG/NIT/17-18</u>

Dated: 16/03/2018

Copy to:

- 1. Deputy Registrar and Chairman, Departmental Purchase Committee
- 2. HoD, Department of Education
- 3. Notice Board at Aliah University
- 4. Website: <u>www.aliah.ac.in</u>
- 5. Guard File

Sd/-Registrar