

**JAMIA HAMDARD**  
(DEEMED TO BE UNIVERSITY)  
**(REACCREDITED BY NAAC IN GRADE 'A')**  
HAMDARD NAGAR, NEW DELHI-110062  
Phone: 91-011-26059688 (12 Lines): Ext.-5326  
Website: [www.jamiahamdard.edu](http://www.jamiahamdard.edu)



**TENDER**

**DOCUMENT FOR**

**SUPPLY AND**

**INSTALLATION OF**

**LABORATORY EQUIPMENTS/SOFTWARE**

**FOR THE SCHOOL OF ENGINEERING SCIENCES AND**

**TECHNOLOGY**

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## **(1) Schedule of Tender**

### **TENDER DOCUMENT FOR THE SUPPLY AND INSTALLATION OF LABORATORY EQUIPMENTS/SOFTWARE**

Jamia Hamdard (Deemed to be University) New Delhi, invites sealed tenders as a “2 Bid System” from reputable original equipment manufacturers/ authorized dealers/ Suppliers for supply and installation of laboratory equipments/software to the School of Engineering Sciences and Technology, in two parts, “Part A” (Technical Bid) and “Part B” (Commercial/Financial Bid).

1. Last Date of Submission of Tender: 10<sup>th</sup> July, 2018 (up to 12:00 Noon)
2. Date of opening of Tender (Technical Bid): 10<sup>th</sup> July, 2018 at 2:00 PM)
3. Type of Tender: 2 Bid Systems.
4. Mode of EMD: Bidders should send DD for EMD (Refundable without any Interest) in favour of Registrar, Jamia Hamdard, New Delhi.

***NOTE:***

- 1. IF THE TENDER IS NOT OPENED ON THE ABOVE DATE, DUE TO UNFORESEEN CIRCUMSTANCES, THEN IT WILL NOTIFY BY EMAIL OR WILL BE PUT ON WEBSITE.**
- 2. BIDDER OR THEIR AUTHORIZED REPRESENTATIVES MAY ATTEND THE OPENING OF THE TENDER.**

### **Important Notes to the Bidder**

1. Jamia Hamdard (Deemed to be University) New Delhi, invites sealed tenders as a “2 Bid System” from reputable original equipment manufacturers/ authorized dealers/ Suppliers for supply and installation of laboratory equipments/software to the School of Engineering Sciences and Technology as per the specifications.
2. Tender document can be downloaded from the University website at URL Link: <http://www.jamiahamdard.edu>
3. The bidders are requested to read the tender document carefully and ensure all the compliance with instructions herein. Non-compliance of the instructions contained in this document may disqualify the bidders from the tender process.
4. The prescribed tender documents should be submitted in one sealed envelope duly superscribed with “Supply and installation of laboratory equipments/software to the School of Engineering Sciences and Technology, Jamia Hamdard, New Delhi”. This sealed envelope should contain 2 sealed envelopes marked A and B as prescribed as under:
  - a) Envelop A containing the Technical Bid and Earnest Money Deposit (EMD) separately for each category of item, in the form of Demand Draft in favor of Registrar, Jamia Hamdard, payable at New Delhi. Tender shall be rejected if the Earnest money D.D.’s are not found in proper order along with the supporting documents. (See Terms & Conditions for more details)
  - b) Envelop B containing the Financial Bid.
5. The tender document should be addressed to: **Registrar, Jamia Hamdard , Hamdard Nagar, New Delhi-110062 and dropped in the tender/quotation box available in the Purchase Section.**

**Note: The three sets of items (Category I, Category II, Category III) have to be tendered separately.**

6. The complete tender document is to be signed with seal & is to be placed in the separate envelope along with the necessary required documents.
  - a. The duly constituted committee appointed by the competent authority of Jamia Hamdard reserves the right to select certain items (in single or multiple units) and reject the others or all

mentioned in the Schedule. The same committee will also reserve the right to revise or alter the specifications before acceptance of any tender with prior notice on the Jamia Hamdard website (<http://www.jamiahamdard.edu>).

- b. Incomplete tenders, amendments and additions to tender after opening or late tenders are liable to be ignored and rejected.
- c. The Bid shall be treated as a 2 Bid System. The Technical Bid will be considered for applicants whose Earnest Money Deposit (EMD) is found in order. Financial Bid shall be opened for those bidders who have qualified in Technical Evaluation.

All bids must be delivered to the above office up to the date and time indicated above. Bids will be opened in the presence of Bidders' authorized representatives who choose to attend on the specified date and time. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be next working day or as announced by Jamia Hamdard in the appropriate manner.

**Any clarification regarding tender before submission of tender document can be discussed with Professor M. Afshar Alam, Head, Department of Computer Science and Engineering, Jamia Hamdard**

Please note that the tender document is subjected to verification with the original document and if any discrepancy is found, the tender would be rejected. Tenders (Technical Bid) will be opened first in the presence of the attending vendors.

Note:- Bidders are required to submit separate tender for each category of item.

Registrar  
Jamia Hamdard, New Delhi

## **TERMS AND CONDITIONS**

1. Quotations may be submitted latest by 10.07.2018 **by upto 12:00 Noon** in an envelope superscripting **“Quotation for The Supply And Installation of Laboratory Equipments/Software”** and addressed to: **Registrar, Jamia Hamdard , Hamdard Nagar, New Delhi-110062 and dropped in the tender/quotation box available in the Purchase Section.**
2. Prices should be quoted (in INR) plus GST as applicable as per Govt. rule on FOR Jamia Hamdard basis, Jamia Hamdard.
3. Jamia Hamdard will deduct an amount of 0.25% from all the bills for *“Jamia Hamdard Relief and Welfare Fund”*.
4. The given specifications should be strictly followed.
5. Letter of Authorization from the company as Authorized Service Provider or Authorized Reseller should be attached.
6. **Warranty: Prices quoted should include 3 years comprehensive on-site warranty**
7. **EMD- 2.5% of the total quoted Price.**
8. Delivery Period: Within 4 weeks.
9. Payment: 100% on delivery and satisfactory installation.
10. The Vendors whose near relatives / blood relations are employed at Jamia Hamdard need not apply, and the same will not be considered.
11. The Institute does not bind itself to accept the lowest quotation and reserves the right for accepting any quotation or to reject any or all quotations and also to reduce or enhance the quantity and period of order according to departmental requirement without assigning any reason.
12. The decision of the University will be final in case of any dispute arising in implementation of the terms of the contract.
13. TAN/PAN and GST certificate should be attached with the quotation documents.
14. The manufacturer/supplier should submit the list of Universities/Govt. organizations/Institutions to whom supplies were made earlier.
15. Correction in the Quotations if any should be initialled otherwise the Quotations will be rejected at the time of the opening; the rates should be quoted in figures and in words as well.
16. No extra payment like carriage freight, loading and unloading, storekeeping, packing, forwarding etc. will be paid.

17. Income tax at source will be deducted from the running bill of supplier from the passed amount as per instruction of Income Tax Department.
18. The Institute takes no responsibility for delay or non receipt of quotation documents sent by post either way and also reserves the right to accept or reject any or all the quotations in part or full without assigning any reason thereof.
19. Late and delayed quotations shall not be considered and may be returned unopened to the bidder.
20. Quotations not in proper sealed cover or received telegraphically or by fax will not be entertained.
21. Conditional quotations will be rejected without assigning any reason.
22. The price to be given in the quotation are fixed prices, irrespective of rise in materials prices and increase in taxes etc., till the delivery of the overall consignment. No request in regard to increase in the price will be entertained after the submission of the quotation.
23. The vendor has to certify that these terms and conditions are acceptable to him.
24. All legal disputes, arising if any, would be settled under jurisdiction of Delhi court.

Registrar

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(To Be Filled by the Vendor/ Bidder)

1. Nature of the item:
2. Name of the Vendor:
3. Full Address of the Vendor:
4. Telephone/ Mobile No.
5. Fax. No. (If any)
6. Registration No. of Firm
7. PAN
8. VAT/CCT Registration No.
9. Details of the D.D.[ **E.M.D Amount (Refundable)**]:

D.D. No. \_\_\_\_\_ dated \_\_\_\_\_

drawn from the bank \_\_\_\_\_.

Seal and Signature of the bidder/Vendor



## LIST OF EQUIPMENTS/ SOFTWARE

### Category I:

S.No.	Item Name	Specification	Quantity
1.	8085 microprocessor trainer kit with LCD Display	Operating frequency 6.144 MHz 32KB of EPROM, 8 KB RAM, Three 16-bit Timers/Counters through 8253.  RS-232C interface for CRT Terminal, 16*2 LCD Display	10
2.	8085 microprocessor trainer kit with interfacing	32KB of EPROM 8 KB RAM, Three 16-bit Timers/Counters through 8253. RS-232C interface for CRT Terminal, 16*2 LCD Display  With following onboard applications : 1. On Board Traffic Light Controller 2. On Board Stepper Motor Interface 3. On Board Digital Output LED- 8 Nos 4. On Board Digital input –8 Nos 5. On Board Graphical LCD 128*64	5
3.	8086 microprocessor trainer kit with LCD Display	16*2 LCD Display and IBM / PC keyboard, On Board Assembler & Dissembler Based on Intel's 8086/8088 CPU @ 20 MHz. 64 KB of CMOS RAM , 128 KB of EPROM	5

### Category II:

S.No.	Item Name	Quantity
1.	VIVADO SYSTEM EDITION + SDSOC(25 USER)+ Zed Board (05 Number)	1 set

**Category III:**

<b>CATEGORY III</b>			
<b>S.No</b>	<b>Item Name</b>	<b>Specification</b>	
1.	BJT amplifier and emitter follower trainer kit	2 Stage RC coupled BJT amplifier & Emitter Follower trainer with built in signal generator	5
2.	Diode Characteristic trainer kit	PN diode, Zener, LED	10
3.	Clipper & Clamper Trainer Kit	Study of Series & Shunt Positive & Negative Clipper Circuits , Biased Series & Shunt Positive & Negative Clipper Circuits Combination clipper circuits. Positive, Negative & Biased Clamper circuit , Inbuilt 0-5 V supply & 1 KHz Signal Generator	5
4.	Transistor Trainer	(NPN & PNP) Characteristics Trainer with Digital Meters CB, CE, CC Mode	10
5.	Analog Trainer Kit	with AC & DC power supply Function Generator, Potentiometers, Toggle switches LCD for Voltage/Current/Frequency measurement Continuity tester & PC interface	5
6.	Wien Bridge oscillator trainer Kit		5
7.	Hartley & Collpit oscillator trainer kit		5
8.	Rectifier trainer kit	Half wave, full wave & bridge rectifier with LC filter & Load resistance	10
9.	OP-Amp Characteristic	study of Open loop gain, CMRR, Application like Adder, Subtractor, Integrator , Differentiator , inverting & Non inverting Amplifier, Ito V & V to I converter , on board function generator & DC Power supplies	4
10.	Zener Voltage Regulator		5
11.	MHz Dual trace Analog Oscilloscope	30 MHz Dual trace with Digital Readout on colour Graphic LCD for Volts/Div & Time/division. Alternate Triggering Facility.	
12.	Function Generator	10 MHz Function-Pulse Generator 10 MHz Sine , 3 MHz Square & Triangle , 2 MHz Ramp, Pulse & TTL with built in 40MHz Frequency counter.	
13.	power Supply	Multiple Output DC Power Supply 0- 30V/1A , 0 to $\pm 15$ V/1A ,4-6 V/1A	
14.	Digital Communication trainer: sampling and reconstruction trainer	Sampling & Hold Technique , effect of Duty cycle & Butterworth Filters	2
15.	Digital Communication trainer: TDM pulse code modulation transmitter trainer	with Parity & Hamming code generation	2
16.	Digital Communication trainer: TDM pulse code modulation receiver trainer	with Parity & Hamming code detection	2
17.	Digital Communication trainer: Delta, Adaptive delta & delta sigma modulation		2
18.	Digital Communication trainer: data formatting and carrier modulation transmitter trainer	ASK,FSK,PSK,QPSK	2

19.	Time Division Multiplexer (TDM) trainer	4 channel	5
20.	Frequency Division Multiplexer (FDM) trainer		5
21.	Digital lab trainer	with breadboard, DC power supply, Pulse generator, Pulse switches, Seven segment display Data switches	5
22.	Laser Fibre Optic Trainer Receiver	Dual Wave length , duplex communication .Analog & digital Link on board voice & PC-PC Communication, measurement of numerical aperture, bending loss and propagation loss	2
23.	Klystron Based Microwave bench with Klystron power supply and VSWR meter and microwave components	Solid State Klystron, Power Supply, digital Klystron Mount with, Klystron tube 2K25/2K27 Isolator, Frequency Meter , With colour LCD Display Variable Attenuator Back lit colour LCD display with Bar Graph Wave Guide Stand, S.S. Tuner	2
24.	Gunn Diode based microwave bench with klystron power supply and VSWR meter and waveguide, cavity, circulator and precision short.		2
25.	Turn Table with Horn and Dish Antenna		2
26.	Training System to Study Mobile Application Development in 3 G environment.		01
27.	GSM Trainer for understanding AT Commands in real-time GSM network with Application Module		01