

**JAMIA HAMDARD**  
(HAMDARD UNIVERSITY)  
**(REACCREDITED BY NAAC IN GRADE 'A')**  
HAMDARD NAGAR, NEW DELHI-62  
Phone: 91-011-26059688 (12 Lines): Telefax : 26059663 Ext.-5326  
Website: www.jamiahamdard.edu

**TENDER DOCUMENT**

(JH/PS/TENDER/ 03/2017)

Sealed Tenders are invited from manufactures / authorized distributors, for supply, installation and commissioning of **Equipments for Jamia Hamdard (Hamdard University)** as given below.

Sl.	Name of Equipments	EMD (Rs.)
1.	<b>Transmission Electron Microscope</b>	<b>2.5 % of quoted price of each item</b>
2.	<b>Ultra Microtome</b>	
3.	<b>Binary Gradient HPLC With PDA Detector</b>	
4.	<b>Water Purifier</b>	
5.	<b>Chemidoc Gel Imaging System</b>	

1. Bonafide and reputed manufacturers / Indian agents (on behalf of their foreign Principals) may obtain Tender Form, detailed specifications etc. in respect of each items from the **Purchase Section, Jamia Hamdard, Hamdard Nagar, New Delhi** on payment of Rs. 500/- through Bank Draft (non-refundable) drawn in favour of **Registrar, Jamia Hamdard**, during working days **upto 12.06.2017 between 10.00 AM to 03.00 PM**. Specifications and tender document can also be downloaded from our website. In such cases a separate demand draft of Rs.500/- for each items may be enclosed along with EMD.  
**The last date of the receipt of the Bids is 12.06.2017 upto 3.00 p.m.**
2. **The Bids will be opened on 13.06.2017 at 11.00 a.m. in the Dean's Office, School of Pharmaceutical Education & Research.**
3. The Tender forms are to be submitted in two separate sealed envelopes- one envelope containing **Technical Bid (Part A)** and second envelope containing **Commercial Bid (Part B)**. Both the above sealed envelopes should be put in another duly sealed envelope and **superscribed appropriately with the type of bid, tender no., due date and other relevant details** and should be addressed to **The Registrar, Jamia Hamdard, Hamdard Nagar, New Delhi and dropped in Tender box available in the Purchase Section.**
4. On the due date, only Technical Bids (Part A) will be opened. Commercial Bids (Part B) shall only be opened after acceptance of Technical Bids by the competent authority. Date and time of opening the commercial bids shall be notified in writing / by post to the successful bidders of technical bids. Commercial bids shall be opened in presence of the Tender Opening Committee and the vendors who wish to be present.
5. **Fax Tender or Tender without EMD will be summarily rejected.**
6. Jamia Hamdard reserves the right to reject any / all the tenders without assigning any reason whatsoever.

**Standard terms and conditions of tender:**

1. The specifications given, as **Annexure-‘A’** should be strictly followed.
2. Earnest money should be enclosed with tender in form of DD/ Pay order in favour of Registrar, Jamia Hamdard.
3. The Tender should be neatly typed. The rates should be quoted in words and figures without any over writing/ erasure. Any over writing/ erasure will render the Tender of the particular item invalid. The tenderer should attest all corrections by affixing his signatures and each page of the tender should be signed by the tenderer.
4. The rates quoted should be per unit and should include charges for packing and delivery. However, the Sales tax, wherever applicable should be shown separately at the prevailing rate. If it is decided to ask for excise duty or any other levy as extra, the same must be specifically stated. In the absence of such a stipulation, it will be presumed that the prices include all such charges and no claim for the same will be entertained. This University is not liable to pay any other charges over the above the rates quoted.
5. The firm should have annual turnover of not less than Rs. 50 lakhs.
6. Tenderers are required to submit the following documents along with the Tender application without which the tender shall not be treated as valid.
  - a) Photocopies of up-to-date Sales Tax clearance certificate and Pan Card.
  - b) Photocopy of Trade License.
  - c) **Earnest money 2.5% of quoted price** given as above in the form of Demand Draft /Banker Cheque in favour of the Registrar, Jamia Hamdard, New Delhi; which may be forfeited if the supplier failed to supply equipments within the stipulated period.
7. The products offered by the respective firms should mention specifically the name of the manufacturer, if not manufactured by the tenderer and photocopies certifying the current status as the authorized dealer of the firm should be attached along with the tender documents by the tenderer.
8. In case of any manufacturing defects in the equipment, it should be replaced immediately.
9. Minimum warranty period for each equipment / instrument should be for **three years** with spare parts from the date of installation and the successful tenderer will be liable to repair / replace the equipment / instrument if any defect is found within the warranty period. **However, for some instruments/equipments, the warranty has been mentioned against each. In such cases, warranty mentioned against the instruments/equipments shall be applicable.**
10. Provide service for at least 7 years in writing specifying “Up time” & response time (usually less than 24 hours)
11. Local suppliers must possess an authorization from parent company & a counter guarantee of service in case of imported equipments.
12. All repairs/ replacements must be done within 5(five) days from the date of complaint otherwise a penalty @0.5% of the cost of equipment per day will be imposed after expiry of five days
13. **The successful tenderer will have to deposit 5% of the total value of supply as Security Money in the form of Performance Bank Guarantee or FDR in favour of the Registrar, Jamia Hamdard, New Delhi; which will be refunded after completion of the warranty period and will be adjusted in case of violation of terms and conditions laid down above.**
14. Payment will be made after proper installation, documentation and after obtaining quality certificate from the competent authority.
15. Successful Tenderer will have the responsibility for arranging training and allied staff for smooth handling and proper functioning of supplied equipments through specified number of training sessions.
16. **Jamia Hamdard will deduct an amount of 0.25% from all the bills for “Jamia Hamdard Relief and Welfare Fund”.**

**In case of Import, the following terms and conditions will be adhered to:**

17. Prices should be quoted CIF Delhi and on F.O.R. Jamia Hamdard and inclusive of all taxes (except excise / custom duty).
18. Order Acknowledgement from principal company should be given within 10 days from date of purchase order, otherwise the order will stand cancelled automatically.
19. L/C Validity period: 90 days and will be opened on Usance (15 days D.A.)
20. Last date of shipment shall be 30 days from the opening date of L/C.
21. The beneficiary / local agent shall pay the bank amendment charges in case of any L/C amendment due to their fault/ requirements.
22. In case of payment through advance draft a photocopy of draft will be initially provided after receiving of Order Acknowledgement from Principal Company and original draft will be given only

- after the delivery and satisfactory installation of the equipment.
23. All bank charges outside India will be borne by the Supplier while only the bank charges in India will be borne by Jamia Hamdard.
  - 24. Suppliers through their own clearing agent will clear the consignment on arrival at IGI Airport. All payment in respect of clearing & landing will be borne by supplier.**
  25. Bank delivery order, CDEC & Custom duty will be provided by Jamia Hamdard only on receipt of following documents from supplier at least two days in advance.
    - i) Cargo Arrival Notice
    - ii) Master Airway Bill (MAWB)/House Airway Bill (HAWB).
    - iii) Commercial Invoice along with packing list.
  26. Jamia Hamdard will make available the relevant documents within two days after receipt of required documents from Local Supplier provided no holidays fall in between.
  27. The University shall not be responsible if the consignment incurs any demurrage.
  28. The acceptance of tender rests with the Registrar, Jamia Hamdard. Jamia Hamdard reserves the right to accept/reject a part/whole or all tenders without assigning any reason and no inquiry in this regard, will be entertained.
  29. The tenderers have to certify that these terms and conditions are acceptable to them.
  30. All legal disputes, arising if any, would be settled under jurisdiction of Delhi court.

Registrar

The above terms & conditions are accepted.

Signature.....  
 Name .....  
 Designation.....  
 Company Seal .....

## TECHNICAL SPECIFICATIONS

### Item 1: Transmission Electron Microscope

#### Key Specifications:

S. No.	ITEM	PARTICULARS
1.	Accelerating voltage	40 - 120 kV or better (continuous)
2.	Line resolution	0.2 nm
3.	Electron source	LaB <sub>6</sub> source with one free replacement in three years
4.	Point resolution	0.38 nm
5.	Magnification	35 – 650 KX, continuously variable
6.	Alpha tilt angle with standard holder	-70° to +70° or better
7.	Specimen stage	Computer controlled, 5 axis motorized eucentric side entry; tilt capacity $\pm 80$ ; Specimen Movement, X=Y= $\pm 1$ mm; Z = $\pm 0.375$ mm; drift < 1nm/min with standard holder
8.	Vacuum system	Ultra-high, standard vacuum system with specimen area pumped by turbo molecular pump or oil diffusion pump; Range, $10^{-5}$ to $10^{-6}$ Pa
9.	Imaging system (Camera)	Camera of latest technology; or CMOS retractable camera with 4k X 4k Pixels, 25 FPS at full resolution, Dynamic range >16 bit with software controllable from the main microscopic (TEM) software.
10.	TEM standard	Au or any other standard sample for TEM resolution
11.	Specimen holder	Basic specimen holder with all necessary maintenance kit includes enough packages of carbon coated copper grids/high quality forceps etc.
11.	Power supply	Must conform to the mains supply; 230 V, 50 Hz
12.	UPS	For at least 1 hr back up for the whole system
13.	Computer	A highly versatile computer with OS compatible with the instrumental softwares (data acquisition, processing and diagnosis); computer monitor of latest technology (24", TFT); 3.2 GHz processor, 16 GB memory or equivalent capacity; CD/DVD writer/ pen drive options, key board, mouse and printer attached with all original cables.
14.	Softwares	Latest version of softwares required for TEM operation, data acquisition and diagnosis. Softwares should be uploaded on the system and should be provided on CDs with complete licence and operating manuals, free of cost upgradation to be provided during warranty period.
15.	Cryo attachment	Standard automated cryo box, low dose-standard, high tilt (70°) cryo holder with pumping station, cryo-transfer tool, long duration dewar for 6h.

16.	Tomography package	Tomographic sample holder, Tomography software capable of image acquisition, reconstruction and visualization
17.	Chiller	Water chiller recirculator compatible with the microscope, operating temperature 18-23° C
18.	Inert gas flow	An Argon cylinder with regulator
19.	Warranty	Minimum three years extendable to five years

### **Item 1A: Transmission Electron Microscope (optional)**

<b>S. No.</b>	<b>Item</b>	<b>Particulars</b>
1.	EDS	EDS detector to detect elements from B – U, multiple area selection, standard EDS software with a separate, suitable PC compatibility with the TEM instrument.

## **ITEM NO. 2: ULTRAMICROTOME**

### **Key specifications:**

<b>S. No.</b>	<b>Item</b>	<b>Particulars</b>
1.	Control Unit	PC controlled and with touch screen option working on latest operating system having video monitoring facility with vibration free table and air isolation
1.	Viewing System	10X to 50X magnification
2.	Illumination system	Three independent LED light sources for bright, dark-field and trans-illumination
3.	Cutting window	0.2 –10 mm
4.	Cutting speed	0.1 to 50 or more mm/sec with power drive cutting stroke
5.	Return Speed	Upto 50 mm/sec at 2 – 3 different selected speeds
5.	Section thickness	1 nm – 9999 nm
6.	Trimming	Standard trimming tool
7.	Memory Channel	Atleast 4 memory channels feed storage
8.	Knife maker	Standard; must have the provision to cut best quality glass knives at different angles; with pressure display feature
9.	Power supply	230 V; 50 Hz
10.	Accessories	All spare parts necessary for two years of trouble free operation such as sample preparation kits, required chemicals after pellet preparation, staining kits, knife box, glass knives, diamond knife, glass strips, polymer/carbon coated copper grids, embedding moulds etc.

## **Item No. 2A: Ultramicrotome-Optional:**

1.	Cryo attachment	Optional, Range should be +35° C to -185° C should be possible to install in future.
2.	Vitrification device	<ol style="list-style-type: none"><li>1. Automated device for plunge freezing of aqueous suspensions</li><li>2. User interface for setting of variables like blotting time, temperature and humidity.</li><li>3. Relative humidity 98% or higher</li><li>4. Pressure or time adjustable, 2-sided blotting capability</li><li>5. Liquid ethane bath, ethane temperature controller, and liquid nitrogen workstation for cooling ethane/cryotransfer of grids.</li></ol>
3.	Plasma cleaner	<ol style="list-style-type: none"><li>1. Able to clean both biological TEM specimen support grids, and TEM specimen holders. If necessary, a multiple specimen holder, to hold at least 4 TEM grids, must be supplied.</li><li>2. Low sputtering</li><li>3. Easily accessible user interface to monitor vacuum, time etc.</li><li>4. Oil-free vacuum pump</li><li>5. Plasma should be generated with a mixture of oxygen and argon</li></ol>

## **ITEM NO 3: BINARY GRADIENT HPLC WITH PDA DETECTOR**

### **Key Specifications:**

#### **1. Pump:**

Flow rate: 0.001 to 10ml/min  
Flow precision: 0.05 to 0.1% RSD  
Flow accuracy:  $\pm 1\%$   
Maximum Operating Pressure: 400 to 450 Bar.

#### **2. Online vacuum degasser:**

Flow lines: 2 or more

#### **3. Manual injector:**

20  $\mu$ l sample loop with 25  $\mu$ l syringe

#### **4. PDA detector:**

Wavelength range: 190-800 nm  
Light source: Deuterium lamp and Tungsten lamp  
Wavelength accuracy:  $\pm 1$  nm  
Photodiodes: 512 or more  
Optical resolution: 1.1 nm to 1.5 nm  
Data acquisition rate: 80 Hz or better  
Baseline noise:  $10 \times 10^{-6}$  AU  
Drift:  $1 \times 10^{-3}$  to  $1 \times 10^{-4}$  AU/hr/ $^{\circ}$ C  
Flow cell: 10 mm path length and 10 to 15  $\mu$ l volume  
Lamp optimization software  
Peak purity software

#### **5. Column oven:**

Temperature range: Ambient to 70  $^{\circ}$ C  
Two columns up to 25 cm length should be accommodated

#### **6. Columns:**

C-18 column (250 mm x 4.6 mm x 5 $\mu$ m): 1  
C-8 column (250 mm x 4.6 mm x 5 $\mu$ m): 1

#### **7. Chromatography software:**

Software should be latest for controlling, acquiring and processing HPLC data  
Minimum 64-bit operating system and Windows 7 software  
Software should be 21-CFR compliance

#### **8. Computer and Printer:**

Latest configuration of i5 processor with 4 GB RAM with 500 GB Hard disk, 19" LED Monitor and HP 1020 Laser Printer.

#### **9. UPS:**

Online UPS of 2 KVA capacity with 30 minute back up time.

## **ITEM NO 4: WATER PURIFIER**

### **Ultra-Pure (Type I) water:**

Ultrapure Water (Type 1)

Flow Rate (L/min): 0.05 to 2 (Programmable flow rate)

Ultrapure Water Resistivity (MΩ·cm at 25°C): 18.2

Microorganisms (cfu/mL): < 0.01

Particulates < 0.22 μm( / mL): < 1

Pyrogen Levels (EU/mL): <0.001

RNase Level (ng/mL): < 0.01

DNase Level (pg/μL): < 4

TOC (ppb): < 5

### **Pure (Type II) water:**

Particulates: < 0.22 μm( / mL) < 1

TOC (ppb): < 30

Production Flow Rate (L/hr): 3L

Bacteria: < 1 cfu/ml

Resistivity: 10- 15 MΩ

Pyrogens: < 0.001 EU/ml (With optional UF cartridge)

## **ITEM NO 5: CHEMIDOC GEL IMAGING SYSTEM**

## **Key Specification:**

1. **Camera:** 16 bit CCD camera
  - 1.44-3.2 Megapixel camera
  - 4-5.8 Megapixel image resolution
  - Quantum efficiency >70% at 425nm
2. **Lens:** f / 0.85-1.2, motor driven
3. **Cooling system**
4. **Dynamic range:** 4-4.8 order of magnitude
5. **Exposure time:** 0.001 sec- 1hr
6. **Capture Mode:** Both automated and manual
7. **Cooling down time:** 120 sec-5 mins
8. **Application preference:** Fluorescence (EtBr, SYBR Green fluorescent gel stains)
  - Colorimetry (Coomassie Blue, Silver stain, blots, prestained markers)
  - Chemiluminescence
  - Fluorescent western blots
9. **Illumination sources:** Trans UV, Epi-White, optional Trans-white light
10. **Sample Stage:** motor driven
11. **Sample size:** 16 / 28 x 22 / 36 cm
12. **Emission filters:** filters for Cy2, Cy3/EtBr, Cy5, blue green filters and filters for commassie blue and ethidium bromide
13. **Operating voltage:** 100-240 V
14. **Operating Temperature:** 10-28°C
15. **Optional Item:** A desktop computer with suitable operating system compatible with software
16. **Warranty:** 3 years warranty



Sl.No. : .....

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**TENDER APPLICATION FORM**

- Cost of Tender Documents : Rs. 500.00 (Non refundable)
- Tender form for : “ \_\_\_\_\_ ” Sl. No.: \_\_\_\_\_
- Last date of Submission of Tender : **12/06/2017 upto 3.00 a.m.**
- Date of opening of Tender : **13/06/2017 at 11.00 a.m.**
- Tender Document Fee : DD / Receipt  
No \_\_\_\_\_ Dated \_\_\_\_\_ for  
Rs. \_\_\_\_\_ (Rs. \_\_\_\_\_)

**VENDOR DETAILS**

- 1. Name of Firm / Company : .....
- 2. Authorised person : .....
- 3. Address : .....
- Telephone(s): .....
- Fax : ..... Mobile.....
- E-mail .....
- 4. Income Tax No. / PAN No. : .....
- 5. Sales Tax No. / TIN No. : .....
- 6. Experience Certificate : .....
- (Attached photo copy)
- 7. Details of Earnest Money (EMD): DD / Banker Cheque  
No \_\_\_\_\_ Dated \_\_\_\_\_ for  
Rs. \_\_\_\_\_ (Rs. \_\_\_\_\_)

Bank \_\_\_\_\_

I/We agree to abide by the terms and conditions of the tender as laid down under Tender No. **JH/PS/Tender/ 03/2017.**

Signature .....

Name .....

Designation .....

Company Seal .....

Contact

No.....