Advertised Tender Enquiry
For
1. 9Parameter Monitor
2. High End Ventilator

at
Jawaharlal Nehru Medical College Hospital
AMU, Aligarh.

NIT Issue Date : 06-07-2018
NIT No. : JNMCH/CTVS/007/2018-19
Pre-Bid Meeting : 18-07-2018 at 12:00 Noon
Last Date of Submission : 06-08-2018 at 01:00 PM
Bid opening : 07-08-2018 at 01:00PM

Tender documents may be downloaded from university website www.amu.ac.in

Aligarh Muslim University Aligarh
Office of the Medical Superintendent
JN Medical College Hospital
AMU Aligarh 202002
email: jnmedicalpurchase@gmail.com

Medical Superintendent
J.N. Medical College Hospital
A.M.U., Aligarh
Jawaharlal Nehru Medical College Hospital, AMU, Aligarh invites bids (Technical & Financial) from reputed, experienced and financially sound Companies/Firms/Agencies for the supply & installation of the **9 Parameter Monitor & High End Ventilator** to the J.N. Medical College Hospital, AMU, Aligarh. Those who are in the similar business for the last five years and providing the same service to Central/State Govt./Reputed Private Hospitals or Autonomous Bodies may send their bids both Technical & Commercial in sealed envelopes.

The interested Companies/Firms/Agencies may send their bid complete in all respect along with Earnest Money Deposit (EMD) as mentioned below for each item separately in the form of Demand Draft/Bank Guarantee issued in favour of Finance Officer, AMU, Aligarh, drawn on any scheduled bank payable at AMU, Aligarh and other requisite documents to Medical Superintendent, J.N. Medical College Hospital, AMU, Aligarh-U.P. through registered/speed post. The bids in sealed cover –I containing “Technical Bid” and sealed cover –II containing “Financial Bids” should be placed in a third sealed cover super scribed “Tender for **9 Parameter Monitor & High End Ventilator** separately mentioning Tender No. JNMCH/CTVS/07/2018-19 on or before 01:00 PM on 06.08.2018. The bids received after this deadline shall not be entertained under any circumstances whatsoever. In case of postal delay this Institute will not be responsible. The offers submitted by Telegram/Fax/email shall not be considered and no correspondence will be entertained in this matter. The EMD, in case of unsuccessful bidders shall be retained by JN Medical College Hospital, AMU Aligarh till the finalization of the tender. No interest will be paid by J.N. Medical College Hospital, AMU, Aligarh on the EMD.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Item Description</th>
<th>Qty</th>
<th>EMD (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td><strong>9 Parameter Monitor</strong></td>
<td>02Nos.</td>
<td><strong>Rs.40,000.00</strong></td>
</tr>
<tr>
<td>2.</td>
<td><strong>High End Ventilator</strong></td>
<td>01No.</td>
<td><strong>Rs.30,000.00</strong></td>
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</table>

The following documents are to be furnished by the Supplier along with **Technical Bid** as per the tender document:

i) Signed and scanned copy of valid registration certificate, experience certificate as per the tender notice, PAN, GST registration certificate and Tender Acceptance Letter.

ii) Signed and Scanned copy of documents like (Earnest Money Deposit)

iii) Signed and Scanned Copy of Make and model with HSN code of all systems, sub system send additional items should be mentioned in the technical bid and complete technical details should be provided in the form of Brochures and write-ups.

Bids will be opened on 07.08.2018 at 1:00 PM in the presence of bidders or their authorized representatives who wish to participate in the bidding process. If the opening date happens to be a closed day/holiday, the tender will be opened on the next working day.

Any future clarification(s) and / or corrigendum(s) shall be communicated by the Medical Superintendent through the website [www.amu.ac.in](http://www.amu.ac.in)

Medical Superintendent, J.N. Medical College Hospital, AMU, Aligarh reserves the right to amend or withdraw any of the terms and conditions contained in the Tender Document or to reject any or all tenders without giving any notice or assigning any reason. The decision of the Medical Superintendent, J.N. Medical College Hospital, AMU, Aligarh in this regard shall be final.
Technical Specifications

SPECIFICATIONS FOR 9PARA MONITOR

The monitor should be modular in nature with possibility of future upgradation through plug & play modules which can be used in Operation Theatres, Emergency Departments, ICU’s and wards

- At least 19 inch Color TFT LCD/LED display
- High Screen resolution
- Modular slots available with measurement of up to 9 parameters: 12 lead ECG with arrhythmia analysis, SpO2, Respiratory rate, EtCO2, three invasive pressure monitoring, BIS, NIBP, two temperature probes
- Can be mounted on wall
- Touch screen and/ or analog knob facility
- Short-cut keys should be provided for ease of operation
- Suitable for adult, paediatric and neo-natal applications
- Audio and Visual Alarms
- Alarm settings can be changed for different parameters
- Three different levels of alarms: High, Medium and Low Priority. Should have user selectable values for each level of alarm
- Lithium Ion Battery with battery status indicators and 4 hours continuous monitoring back up
- Extensive data storage capabilities:
  - > 100 Hours of trend data storage capabilities
- Monitor can detect arrhythmias, with storing and reviewing facility
- 5 lead ECG cable provided with different modes of monitoring for ECG: Surgery, Monitor and Diagnostic modes of operation
- Multi-channel ST segment analysis
- Advanced Masimo Technology or its equivalent for spO2 detection.
- NIBP cuffs available for adult, paediatric and neonate patients, and wide measuring range and mode of measuring: Oscillometric
- Pulse rate measurement with accuracy of +/- 3 bpm
- WAN communication compatible
- Should be upgradable module for Cardiac output measurement using thermo dilution method
- Should be upgradable to continuous non invasive arterial pressure monitoring
- Should be CE/US FDA approved

Scope of Supply

- SpO2 probe – adult, pediatric and neonatal – one each
- NIBP cuff – adult, pediatric and neonatal – one each
- IBP transducer set – 20
- 5 lead ECG – one
- Temperature probe – 2
- EtCO2 attachment – 3
**GENERAL SPECIFICATIONS FOR HIGH END VENTILATOR**

- Must be microprocessor/computer controlled ventilator.
- Should be usable for Adult and Pediatric patients.
- Should work on electrical sources: External AC and internal battery rechargeable battery backup for at least 60 minutes for the main unit.
- The ventilator should be compressor driven. The ventilator trolley mount compressor should be (External) of same make OR OEM and it must be US FDA Approved product.
- The Ventilator must run on both the air compressor unit and/or on central pipeline air supply (60psig) if available.
- Must have an integrated color touch screen of not less than 12” in size, showing all the set ventilator and patient parameters, scalars, loops, mechanics etc. on clear display. The color touch screen should have the facility for tilt & rotate for better viewing.
- Should have external interface with RS 232 serial port of VGA for Live LCD projection (shall be used for teaching purpose)

**OXYGEN SUPPLY**

- Must have in-built O2 blender with sensor with display for set and delivered O2 concentration.
- Should provide O2 enrichment @ 40 to 60 psi o2 supply source with alarms for low or high pressure supply.
- Should have provision to work on both pipeline O2 or air supply and high pressure O2 cylinder based supply.

**MODES OF VENTILATION**

- Should have Assist Control and SIMV modes, in both pressure and volume modes.
- Should have provision of Noninvasive ventilation with leak compensation at all user set pressure values.
- Should have additional modes such as Pressure Regulated Volume Control (PRVC), APRV, Volume Support, Bilevel with PS & spontaneous Breathing Trial and any other advance modes specific to manufacturer.
- Must have provision for all the following:
  b. CPAP (0-40 cm H2O)
  c. Back-up Apnea ventilation
  d. 100% oxygen for a period of two minutes before disconnection for suctioning or other procedures.

**SETTING OF VENTILATOR:**

- Should have the at-least the following range of settings.
  a. Should be able to be programmable for Adult & Pediatric separately on switching on the equipment
  b. Setting of modes should be user friendly and have volume based and pressure based modes separately, along with provision for noninvasive ventilation
  c. Settings should be user friendly-com wheel or touch screen based
  d. Tidal volume from 20 – 2000 ml (in volume Control Mode)
  e. Respiratory rate- upto 120 bpm
  f. PEEP- 0 to 50 Cm H2O
  g. Fio2- 21 to 100%
  h. Pressure support- 0 to 50 cmH2O
  i. Rise time 0 – 2 secs in fraction of 0.1 sec or in %age steps which could be manufacturer specific
  j. Inspiration time 0.1 to 5 secs
  k. Apnea time interval setting from backup ventilation when in spontaneous mode
  l. Flow 0 to 180 L/min or more
  n. Trigger flow and pressure with sensing from 0.5 -8 L/min and -0.5 to -10 cmH2O as selected by the user
DISPLAY
Must monitor/display the following set and delivered parameters of ventilator settings:

i. Tidal volume- Inspiratory and expiratory
ii. Minute volume- Inspiratory and expiratory
iii. Peak, mean and plateau pressure
iv. PEEP
v. I:E ratio
vi. Inspiratory time
vii. Rate- total and spontaneous
viii. Compliance- static & dynamic
ix. Resistance
x. Fio2- set and delivered
xi Paux (Auxiliary Pressure)

Must display electrical power source (internal/external) and battery level.

At least- 4 user selected scalar graphic (flow, pressure and volume over time) should be displayed simultaneously on the screen with set and delivered parameter mentioned above. Should at least display 2 loops (user selectable pressure volume, flow volume, pressure flow) and facility of superimposing and saving of reference loop available. Should display all waveforms and loops simultaneously.

Must have features of expiratory and Inspiratory hold, occlusion pressure, NIF & Vital capacity Measurement.

Should be able to measure and display PEEPi and trapped volume.

Must provide at least 24 hours trending and browsing of monitored parameters.

ALARMS
Must provide for user adjustable alarms for the following with built in default setting.

a. Respiratory (high and low)
b. Minute volume (high and low)
c. Pressure (high and low)
d. FiO2 (high and low)
e. Tidal Volume (high and low)
f. Apnea
g. Gas supply failure

Must also have warming alarms of both auditory and visual for the following.

a. Low O2 pressure
b. Patient disconnect
c. Check sensor on malfunction for flow and O2 sensor
d. Low battery
e. AC Disconnect

Should have provision for record of alarm for at least 24 hours or logbook of 1000 events.

Must have audible alarms of different tones graded for high priority, immediate priority and priority tones with display of the nature of warning being highlighted on the display.

Alarms of importance like disconnection circuit leak or mechanical failure should be activated within 20 secs & should be loud and well audible.

Should have facility to silence alarms for a period of 2 mins.

MISCELLANEOUS
Must have in-built ETCO2 monitoring mainstream/sidestream on the same screen with capnography and values.

The ventilator should have the facility to measure UIP & LIP, inflection point maneuver shall calculate upper and lower inflection points and display on pressure/volume loop.
Tender for CTVS.Equipment

- Should not involve frequent change of flow sensor, O2 sensor or pressure sensor. If so the life and guarantee for these sensors, if consumable, should be specifically mentioned and added to the working cost for 10 years (i.e., CAMC). Paramagnetic O2 sensor.

Details of the following weather the same would be covered under warranty clauses, should be mentioned in the technical description and reflected in the overall cost:
- Flow sensor- autoclavable/ reusable
- O2 sensor to be covered under warranty and CAMC or paramagnetic under CAMC
- Additional expiratory/inspiratory valves, 2 each and Reusable flow sensors, 5 each to be supplied should be autoclavable and covered under warranty.
- Should be provided with all accessories
  - 2 each sets of disposable masks for non-invasive ventilation (S, M, L)
  - 20 HME filters
  - 2 each autoclavable circuits of adults and pediatrics
  - Test lung with each unit
  - Air and O2 high pressure hoses with supply line filters 5 meters.
- Should be compatible with standard disposable ventilator tubing’s with separate inspiratory and expiratory limbs connected with wye-connectors, with or without water traps and non-invasive ventilation masks available in market.
- Ventilator should be able to accept and work on all commonly used brands of disposable ventilator tubing’s humidifier assemble disposable or reusable parts.
- The ventilator should have in-built nebulizer vibrating mesh technology which is independent of flow, which is timed and synchronized to inspiratory phase. Should be autoclavable and produce 3-micron size drug particle size.
- The ventilator should be supplied with USA FDA approved humidifier along with its accessories:
  - Reusable chambers: 2 nos.
- Should conform to the international standards of BOTH European CE and USFDA for ventilator and Compressor.

Terms & Conditions:

1. The quoted rates must be valid for a period for 180 days from the date of closing of the tender. The over all offer for the assignment and bidder(s) quoted price shall remain unchanged during the period of validity. If the bidder quoted the validity shorter than the required period, he same will be treated as unresponsive and it may be rejected. In case the tenderer withdraws, modifies or change his offer during the validity period, bid is liable to be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof. The tenderer should also be ready to extend the validity, if required, without changing any terms, conditions etc. of their original tender.

2. No overwriting or cutting is permitted in the rates. If found, quotation shall be summarily rejected.

3. The Equipment/System should be USFDA/CE European approved product.

4. PRE–BID meeting with the intending bidders shall be held on 18.07.2018 from 12:00 Noon onwards in the Office of the Medical Superintendent, J.N. Medical College Hospital, AMU, Aligarh. All the prospective bidders are requested to send comments/representations on or before pre-bid meeting. Intending bidder will be allowed to seek clarification on specification, Conditions of Contract/Tender, etc. in writing to J.N. Medical College Hospital, AMU, Aligarh, within 48 hours after the pre-bid meeting.

5. The goods ordered shall be delivered and installed at the JN Medical College Hospital, AMU, Aligarh, within 30 days from the date of issue of supply order.

6. All the aspects of safe delivery, installation and commissioning shall be the exclusive responsibility of
the supplier. If the supplier fails to deliver, install and commission the goods on or before the stipulated date, then a penalty at the rate of 0.5% per week of the total order value shall be levied subject to maximum of 10% of the total order value. The successful supplier will also provide required training for supplied item at the J.N. Medical College Hospital, AMU, Aligarh. The goods should be manufactured after adoption of latest technology.

7 In the case of package supply where the delayed portion of supply materially hampers installation and commissioning of the systems, liquidated damages charge shall be levied as above on the total value of the concerned package of the purchase order. Quantum of liquidated damages assessed and levied by the purchaser shall be final and not challengeable by the supplier.

8 The supplier shall be required to perform the following services:-
   a. Installation & Commissioning, Supervision and Demonstration of the goods.
   b. Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
   c. On Site Training to Doctors/Technicians/Staff is to be provided by Supplier for operation and maintenance of the equipment for a period of 30 working days after successful installation of the machine, as per direction of user department.
   d. Supplying required number of operation & maintenance manual for the goods.
   e. To provide non-locked open software and standard interface interoperability conditions for Networked equipment’s in hospital management information system, wherever applicable.

9 The separate price list of all accessories and consumables, if any, must be attached/ enclosed along with the Financial Bid.

10 After sales service should be available on 24(hrs.) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 24hrs to ensure an uptime of minimum 95%, wherever applicable, failing which the necessary penalty measures shall be enforced.

11 The J.N. Medical College Hospital, AMU, Aligarh shall have the right to inspect and/or test the goods to confirm their conformity to the NIT Specifications at no extra cost to the Purchaser. Medical Superintendent, J.N. Medical College Hospital, AMU, Aligarh, shall be the final authority to reject full or any part of the supply which is not confirming to the specification and other terms and conditions. No payment shall be made for rejected Stores. Rejected items must be removed by the Bidders within two weeks of the date of rejection at their own cost and replaced immediately. In case these are not removed, the same will be auctioned at the risk and responsibility of the suppliers without any further notice.

12 The bidder shall provide a list of major Government and Private Institutions where its relevant bid item has been supplied during last two years.

13 The bidder (if not original equipment manufacturer must submit Original Equipment Manufacturer authorization certificate that the render is authorized for selling and maintain the equipment quoted for.

14 The bidders are required to submit user certificate for the relevant equipment on the letter head of the institution (Government/Private).

15 The successful bidder will be required to submit order copies of the supply of the equipment in Government Institutions in last 24 months for rate reasonability purpose.

16 The supplier shall make arrangements for insuring the goods against loss or damage incidental of manufacture or acquisition, transportation, storage and delivery. If the equipment is not commissioned and handed over to J.N. Medical College Hospital, AMU, Aligarh, within specified period, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the J.N. Medical College Hospital, AMU, Aligarh.

17 The bidder supplying equipment/goods or already imported goods shall quote the price only in Indian
Tender for CTVS.Equipment

Rupees. Further, imported goods to be imported and supplied by the bidder are also required to be quoted in Indian Rupees and F.O.R JNMC Hospital.

18 Please mention CGST/SGST or other taxes clearly & separately which will be payable on the goods in India.

19 The price of Annual CMC Financial Bid after warranty period must be mentioned clearly.

20 100% payment of the total order value shall be released only after the successful installation/Commissioning of the ordered goods/equipment against the submission of the inspection report. No advance payment is possible.

21 The Tenderers must quote for 05 years comprehensive warranty including all Spares, Accessories and Labour from the date of completion of the satisfactory installation. The warranty charges shall not be quoted separately. Also the bidders are requested to submit their quote (Rates) for subsequent 05 years Comprehensive Maintenance Contract (CMC) (Including All Spares, Accessories and Labour).

22 During the comprehensive warranty period, the guarantee up time of 95% of 365 days will be ensured. In case the down time exceeds the 5% limit penalty of extension of guaranty period by two days for each additional day of down time will be forced. The vendor must undertake to supply all spares for optimal up keep of the equipment for atleast FIVE YEARS after handing over the unit to the Institute. If accessories / other attachment of the system are procured from the third party, then the vendor must produce cost of accessory / other attachment and the CMC from the third party separately along with the main offer and the third party will have to sign the CMC with the Institute if required.

23 The principal or their authorized service providers are required to submit a certificate that they have satisfactory service arrangement and fully trained staff available to support the uptime guarantee.

24 Arbitration: If any difference arises concerning this agreement, its interpretation on payment to the made there- under, the same shall be settled out by mutual consultation and negotiation. If attempts for conciliation don’t yield any result within a period of 30 days, either of the parties may make a request to the other party for submission of the dispute for decision to the sole arbitrator i.e. Vice-Chancellor, AMU, Aligarh, or his nominee. The decision of the sole arbitrator shall be binding on parties. The venue of arbitrator will be at Aligarh.

25 Subletting of Work: The firm shall not assign or sublet the work/ job or any part of it to any other person or party without having first obtained permission in writing of J.N. Medical College Hospital, AMU, Aligarh, which will be at liberty to refuse if thinks fit. The tender is not transferable. Only one tender shall be submitted by one tenderer.

26 Breach of Terms and Conditions: In case of breach of any terms and conditions as mentioned above, the Competent Authority will have the right to cancel the Purchase order/work order/job without assigning any reason thereof and nothing will be payable by J.N. Medical College Hospital, AMU, Aligarh, in that event the security deposit shall also stands forfeited.

27 In solvency etc: In the event of the firm being adjudged insolventor having a receiver appointed for it by a court or any other order under the Insolvency Act made against them or in the case of a company the passing any resolution or making of any order for winding up, whether voluntary or otherwise, or in the event of the firm failing to comply with any of the conditions here in specified, the Medical Superintendent, J.N. Medical College Hospital, AMU, Aligarh shall have the power to terminate the contract without any prior notice.

28 Bidder shall submit a copy of the tender document and addenda thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as
Tender for CTVS Equipment

mentioned in the tender enquiry document.

29 The quantity of item given in the tender is tentative, which may be increased or decreased as per the Requirement of the hospital.

30 Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature must be enclosed with the bid.

31 Conditional bid will be treated as unresponsive and it may be rejected.

32 **Demonstration:** The J.N. Medical College Hospital, AMU, Aligarh reserves the right to ask the renderer for arranging demonstration of their equipment for which rates have been quoted to the concerned committee, if required.

33 The hospital reserves the right to accept in part or in full or reject any or more tender(s) without assigning any reasons or cancel the tendering process and reject all tender(s) at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).

34 **Applicable Law:**

- The contract shall be governed by the laws and procedures established by Govt. of India within the framework of applicable legislation and enactment made from time to time concerning such Commercial dealings/processing.

- Any disputes are subject to exclusive jurisdiction of Competent Court and Forum in Aligarh Uttar Pradesh, India only.

- The Arbitration shall be held in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the venue of arbitration shall be at Aligarh. The decision of the Arbitrator shall be final and binding on both the partied.
# Annexure-1

**TECHNICAL BID**

<table>
<thead>
<tr>
<th>Name of Firm/Contractor/Supplier</th>
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<tbody>
<tr>
<td>Complete Address &amp; Telephone No.</td>
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<tr>
<td>Name of Proprietor/Partner/Managing Director/Director.</td>
</tr>
<tr>
<td>Phone No:-</td>
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<tr>
<td>Mobile No:-</td>
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<tr>
<td>Email Id:-</td>
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<tr>
<td>Name and address of service centre nearby J.N. Medical College Hospital, AMU, Aligarh</td>
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<tr>
<td>Whether the firm is a registered firm Yes/No (attached copy of certificate).</td>
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<tr>
<td>PAN No. (enclose the attested copy of PAN Card).</td>
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<tr>
<td>Service Tax No. (enclose the attested copy of Service Tax Certificate).</td>
</tr>
<tr>
<td>GST No. (enclose the attested copy of CGST/SGST Certificate).</td>
</tr>
<tr>
<td>Whether the firm has enclosed the Bank Draft/Pay Order/Banker’s cheque of Earnest Money Deposit.</td>
</tr>
<tr>
<td>Whether the Firm/Agency has signed each and Every page of Tender/NIT.</td>
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<tr>
<td>Please provide full list of consumables.</td>
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<tr>
<td>Any other information, if necessary.</td>
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Authorized signatory of the bidder with seal.
Annexure –II

MANUFACTURER’s / PRINCIPAL’s AUTHORIZATION FORM

TO,
Medical Superintendent
JN Medical College Hospital
A.M.U. Aligarh.

Sir,

TENDER: ..............................................................................................

We, ..........................................................................................................., who are

Established and reputable manufacturer of ..........................................., having

Factories at ..................................................and .............................................hereby

Authorize M/s ...........................................(name and address of agents)
to bid, negotiate and conclude the contract with you against Tender

No..........................................................for the above goods manufactured by

us. No. Company or firms or individual other than M/s ....................................are

authorized to bid, negotiate and conclude the contract in regard to this business against this specific tender.

We hereby extend our full guarantee and warranty as per the conditions of tender for the goods offered for

supply against this tender by the above firm.

The authorization is valid up to .................................................................

Yours faithfully,

(Name)

For and behalf of M/s ........................................
(Name of manufacturers)/Principal