

D.No.2596/Mch dated:24.03.17

Tender
For
Pediatric Cardiac ICU Equipments
At
Jawaharlal Nehru Medical College Hospital
AMU, Aligarh.

NIT Issue Date : 24th March, 2017
NIT No. : JNMC Cardiac ICU(P)/Tender/05/2017-18
Pre-Bid Meeting : 3rd April, 2017 at 03:00 PM
Last Date of Submission : 1st May, 2017 at 03:00 PM
Bid opening : 2nd May, 2017 at 03:15 P.M

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



Medical Superintendent
J.N. Medical College Hospital
A.M.U., Aligarh
[Signature]
SDM

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

Jawaharlal Nehru Medical College AMU Aligarh invites **bids in two bid system** for tenders for supply & installation of the **Pediatric Cardiac ICU Equipments** at the institute. You are requested to quote your best offer along with the complete details specifications, terms & conditions.

Chapter-I

S.No	Item Description	Qty	EMD (Rs.)
1	Pediatric Cardiac ICU Equipments		2% of the cost of Equipment

Instructions:

1. Tender Cost:

Applicant contractor must submit the demand draft for Rs 1,000/- (Rupees One thousand only) in favour of Finance Officer AMU Aligarh obtained from any Nationalized/ scheduled Bank as a tender fees. All applicable bank charges shall be borne by the applicant and he shall not have any claim what so ever on this account on Government. The Demand Draft submitted for tender fee shall be non- refundable. **The demand drafts for tender fees must be delivered to JN Medical College Aligarh along with tender quotation on or before last date/time of Bid Submission.**

2. EMD Payment:

The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of **(2% of The Cost of Equipment)** by way of demand drafts or Bank Guarantee only. The demand drafts or Bank Guarantee shall be drawn in favour of "**Finance Officer AMU Aligarh**". The EMD of the successful bidder shall be returned after the successful submission of Bank Guarantee/ Security Deposit and for unsuccessful bidder(s) it would be returned after award of the contract. **The demand drafts or Bank Guarantee for EMD must deliver to JN Medical College Aligarh on or before last date/time of Bid Submission.**

- a) Tenderer shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulation made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited.
- b) The firm who are registered with National Small Industries Corporation (NSIC) / OR Small Scale Industries (SSI) are exempted to submit the EMD (Copy of registration must be provided along with technical bid)
- c) The EMD, in case of unsuccessful bidders shall be retained by JN Medical College Aligarh, till the finalization of the tender. No interest will be payable by JN Medical College Aligarh, on the EMD.

3. The Hard Copy of original instruments in respect of cost of tender document, earnest money deposit etc. must be delivered to the JN Medical College Aligarh on or before last date/time of Bid Submission as mentioned above. The bid without tender fee and EMD will be summarily rejected.

4. Submission of Tender:

The tender shall be submitted in two part, viz., technical bid and financial bid. All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

The offers submitted by Telegram/Fax/email shall not be considered. No correspondence will be entertained in this matter.

i) Technical Bid

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

- i) Signed and scanned copy of appropriate value of valid registration certificate (if any), experience certificate as per the tender notice, PAN, VAT registration certificate and Tender Acceptance Letter.
- ii) Signed and Scanned copy of documents like Tender Cost (Tender Fees/ Earnest Money Deposit)
- iii) Signed and Scanned Copy of Make and model of all systems, sub systems and additional items should be mentioned in the technical bid and complete technical details should be provided in the form of Brochures and write-ups.

Terms & Conditions:

1. Validity: The quoted rates must be valid for a period for 180 days from the date of closing of the tender. The overall 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, the same will be treated as unresponsive and it may be rejected.

2. "PRE –BID Meeting" with the intending bidders shall be held on 3rd April, 2017 from 03:00 P.M. onwards at JN Medical College 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, etc. in writing to JN Medical College Aligarh, within 48 hours after the pre- bid meeting.

3. 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.

4. Delivery and Installation:

I. For goods supplied from India:

All the goods ordered shall be delivered and Installed at JN Medical College Aligarh, within **30 days** from the date of issue of supply order.

II. For goods imported directly from abroad:

All the goods ordered shall be delivered and Installed at JN Medical College Aligarh, within **60 days** from the date of opening of letter of credit for shipment.

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 tenderer will also provide required training for supplied items at JN Medical College Aligarh. The goods should be manufactured after adoption of latest technology.

If at any time during the currency of the contract, the supplier encounters conditions hindering timely of the goods and performance of services, the supplier shall promptly inform the JN Medical College Aligarh, for extension of the delivery schedule accordingly. On receiving the supplier's communication, the JN Medical College Aligarh, shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.

In the case of package supply where the delayed portion of supply materially hampers installation and commissioning of the systems, liquidated damages charges 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. Signing the Contract:** - The successful bidder shall be required to execute the Contract Agreement accepting all terms and conditions stipulated herein on a non-judicial stamp paper of Rs. 500/- (Rs. Five Hundred only) along with performance security within fifteen days of the issue of the Letter of notification of award. In the event of failure on the part of the successful bidder to sign the Contract within the period stipulated above, the EMD shall be forfeited and the acceptance of BID shall be considered as cancelled.
- 9. Performance Security:** As a guarantee towards due performance and compliance of the contract work, the successful bidder (contractor) will deposit an amount equal to 10% of order value and should be kept valid for a period of 60 day beyond completion of all the contractual obligation, including CMC period towards security deposit by way of demand draft/ bank Guarantee in favour of "Finance officer AMU Aligarh" drawn on any Nationalized Bank/Scheduled Bank and payable at Aligarh within fifteen days of the issue of the Letter of notification of award along with non-judicial stamp paper of Rs. 500/- (Contract agreement).
- 10. Incidental Services:** 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 inter-operability conditions for networked equipment's in hospital management information system, wherever applicable.
- 11. Accessories & Consumables:** The separate price list of all accessories and consumables, if any, must be attached/ enclosed along with the Financial Bid.
- 12. After Sales Service:** After sales service centre should be available on 24 (hrs.) X 7 (days) X 365 (days) basis. Complaints should be attended properly, maximum within 24 hrs to ensure an uptime of minimum 95%, wherever applicable, failing which the necessary penalty measures shall be enforced.
- 13. Inspection:**
 - a. JN Medical College Aligarh shall have the right to inspect and/or to test the goods to confirm their conformity to the NIT Specifications at no extra cost to the Purchaser.
 - b. JN Medical College Aligarh has the right to inspect, test and, where necessary, reject the Goods after the goods arrival at the final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by JN Medical College Aligarh, prior to the goods shipment.
 - c. Medical superintendent, JN Medical College 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.
 - d. 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, these will be auctioned at the risk and responsibility of the suppliers without any further notice.

14. Documents:

- a. **All pages of the Tender should be numbered and indexed.**
- b. The bidder shall provide in its tender the required as well as the relevant documents like technical data, literature, drawings etc. to establish that the goods and services offered in the tender fully confirm to the goods and services specified by the purchaser in the tender documents. For this purpose the bidder shall also provide a clause-by-clause commentary on the technical specifications and other technical details incorporated by the purchaser in the tender documents to establish technical responsiveness of the goods and services offered in its tender duly indicating relevant page numbers in the product literature.
- c. The bidder shall provide a list of major Government and Private Institutions where its relevant bid item has been supplied during last one year.

15. Manufacturer Authorisation: The bidder (if not original equipment manufacturer must submit Original Equipment Manufacturer authorization certificate that the tenderer is authorized for selling and maintain the equipment quoted for. Performa attached at **Annexure- III**.

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

17. The successful bidder will be required to submit order copies of the supply of the equipment in Government institutions in last 12 month for rate reasonability purpose.

18. Insurance: - The supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. If the equipment's is not commissioned and handed over to JN Medical College 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 JN Medical College Aligarh.

19. Tender Currencies:

- a. The bidder supplying indigenous goods or already imported goods shall quote only in Indian Rupees. Further, imported goods to be imported and supplied by the bidder are also required to be quoted in Indian Rupees.
- b. For imported goods if supplied directly from abroad, prices shall be quoted in any freely convertible currency say US Dollar, Euro, GBP or Yen. As regards price(s) for allied services, if any, required with the goods, the same shall be quoted in Indian Rupees only, if such services are to be performed /undertaken in India.
- c. Tenders, where prices are quoted in any other way shall be treated as non -responsive and rejected.

20. Tender Prices: While filling up the columns of the Financial Bid, the following aspects should be noted for compliance:

For domestic goods or goods of foreign origin located within India, the prices in the corresponding Financial Bid shall be entered separately in the following manner:

- a. The price of the goods, quoted ex-factory/ ex-showroom/ ex-warehouse/ off-the-shelf, as applicable, including all taxes and duties like sales tax, CST/ VAT, CENVAT, Custom Duty, Excise Duty etc. already paid or payable on the components and raw material used in the manufacture or assembly of the goods quoted ex-factory etc. or on the previously imported goods of foreign origin quoted ex-showroom etc.;
- b. Any sales tax or other taxes and any duties including excise duty, which will be payable on the goods in India if the contract is awarded;

- c. Charges towards Packing & Forwarding, Inland Transportation, Insurance, Loading/Unloading and other local costs incidental to delivery of the goods to their final destination as specified in the List of Requirements and Financial Bid;
- d. The price of Incidental Services, as mentioned in List of Requirements and Financial Bid;
- e. The prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Financial Bid; and
- f. The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Financial Bid.

For goods offered from abroad, the prices in the corresponding Financial Bid shall be entered separately in the following manner:

- a. The price of goods quoted FOB port of shipment, as indicated in the List of Requirements and Financial Bid;
- b. The price of goods quoted CIF port of entry in India as indicated in the list of Requirements and Financial Bid;
- c. The price of goods quoted for delivery at JN Medical College Aligarh, as indicated in the list of Requirements Financial Bid and Consignee List;
- d. Wherever applicable, the amount of custom duty with CDEC applicable on CIF value on the goods to be imported;
- e. The charges for Loading/Unloading, Inland transportation, Insurance and other local costs, Incidental cost to delivery of the goods from the port of entry in India to JN Medical College Aligarh, as specified in the List of Requirement and Financial Bid;
- f. The charges for Incidental Services, as in the List of Requirement and Financial Bid;
- g. The prices of Turkey (if any), as mentioned in List of Requirements, Technical Specification and Financial Bid; and
- h. The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Financial Bid.

Additional information and instruction on Duties and Taxes: If the Bidder desires to ask for excise duty, sales tax/CST / VAT/ CENVAT, Custom Duty, Service Tax, Works Contract Tax etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

Excise Duty:

- a. If reimbursement of excise duty is intended as extra over the quoted prices, the supplier must specifically say so also indicating the rate, quantum and nature of the duty applicable. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of excise duty will be entertained after the opening of tenders.
- b. If a Bidder chooses to quote a price inclusive of excise duty and also desires to be reimbursed for variation, if any, in the excise duty during the time of supply, the Bidder must clearly mention the same and also indicate the rate and quantum of excise duty included in its price. Failure to indicate all such details in clear terms may result in rejection of that tender.
- c. Subject to sub clauses (i) & (ii) above, any change in excise duty upward/downward as a result of any statutory variation in excise duty taking place within contract terms shall be allowed to the extent of actual quantum of excise duty paid by the supplier. In case of downward revision in excise duty, the actual quantum of reduction of excise duty shall be reimbursed to the purchaser by the supplier. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

Sales Tax: - If a bidder asks for sales tax/CST / VAT/CENVAT, Service Tax and Works Contract Tax to be paid extra, the rate and nature of sales tax applicable should be shown separately. The CST / VAT/CENVAT, Service Tax and Works Contract Tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale is legally liable to sales tax/ CST / VAT/CENVAT, Service Tax and Works Contract Tax and is payable as per the terms of the contract.

Octroi Duty and Local Duties & Taxes:- Normally, goods to be supplied to Government departments against Government contracts are exempted from levy of town duty, Octroi duty, terminal tax and other levies of local bodies. However, on some occasions, the local bodies (like town body, municipal body etc.) as per their regulations allow such exemptions only on production of certificate to this effect from the concerned Government department. Keeping this in view, the supplier shall ensure that the goods to be supplied by the supplier against the contract placed by the JN Medical College Aligarh, are exempted from levy of any such duty or tax and, wherever necessary, obtain the exemption certificate from the JN Medical College Aligarh. However, if a local body still insists upon payment of such local duties and taxes, the same should be paid by the supplier to the local body to avoid delay in supplies and possible demurrage charges and obtain a receipt for the same. The supplier should forward the receipt obtained for such payment to the JN Medical College Aligarh, to enable the JN Medical College Aligarh, reimburse the supplier and take other necessary action in the matter.

Customs Duty: In respect of imported goods offered from abroad, the bidder shall specify the rate as well as the total amount of customs duty payable with Custom Duty Exemption Certificate, if applicable, on the quoted goods in the Financial Bid. The bidder shall also indicate the corresponding Indian Customs Tariff Number applicable for the goods.

- a. For transportation of imported goods offered from abroad, relevant instructions as incorporated shall be followed.
- b. For insurance of goods to be supplied, relevant instructions as provided shall be followed.
- c. Unless otherwise specifically indicated in this NIT document, the terms FCA, FOB, FAS, CIF, CIP etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris.
- d. The need for indication of all such price components by the bidders, as required in this clause is for the purpose of comparison of the tenders by the purchaser and will no way restrict the JN Medical College Aligarh, right to award the contract on the selected bidder on any of the terms offered.

21. Indian Agent:- If a foreign bidder has engaged an agent in India in connection with its bid, the foreign bidder, in addition to indicating Indian agent's commission, if any, shall also furnish the following information:

- a. The complete name and address of the Indian Agent and its Permanent Account Number as allotted by the Indian Income Tax authority.
- b. The details of the services to be rendered by the agent for the subject requirement.
- c. Details of Service outlets in India, nearest to the JN Medical College Aligarh, to render services during Warranty and CMC Period.

22. Firm Price

- a. Unless otherwise specified in the NIT, prices quoted by the bidder shall remain firm and fixed during the currency of the contract and not subject to variation on any account.
- b. However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated will apply.

23. Conversion of tender currencies to Indian Rupees: - In case the bid document permits the bidders to quote their prices in different currencies, all such quoted prices of the responsive bidders will be converted to a single currency viz., Indian Rupees for the purpose of equitable comparison and evaluation, as per the closing exchange rates established by the Reserve Bank of India for similar transactions, as on the date of '**Last Date of Submission of Tender**'.

24. Payment Terms:

i) Payment for goods supplied from India:

100% payment of the total order value shall be released after the successful installation/commissioning of the ordered goods against the submission of the inspection report.

ii) Payment for Imported goods:

For imported goods payment shall be made in the following manner:

- a. **On shipment:** 75% payment of the contract price shall be paid 60 days after presentation of shipping documents {goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the supplier in a bank in his country} and upon the submission of the following documents:
 - i. Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
 - ii. Original and four copies of the clean, on-board Bill of Lading/ Airway bill, marked freight prepaid and four copies of non-negotiable Bill of Lading/Airway bill.
 - iii. Insurance Certificate;
 - iv. Certificate of origin by the chamber of commerce of the concerned country;
 - v. Certificate of country of origin;
 - vi. Manufacture's / Supplier's warranty certificate;
 - vii. Manufacturer's own factory inspection report.
- b) **On Acceptance:** 25 % payment would be made after satisfactory installation & commissioning on issuance of Inspection certificate by the JN Medical College Aligarh.

Note:-The supplier shall not claim any interest or any other payment under the contract.

25. **Custom Clearance:** For the Goods to be imported and supplied, the Institute will provide Custom Duty Exemption Certificate (CDEC) to successful bidder for availing concessional rate of duty as per prevailing Custom Tariff. In case, the bidder requires CDEC certificate, then the same should be specifically mentioned in the bid. The supplier is solely responsible for getting the material clearance from customs. Institute will provide all custom documents for custom clearance on the demand of supplier. Transportation of goods up to JN Medical College Aligarh, and its successful installation and commissioning is also the responsibility of the supplier. All charges/ expenses incurred in this process will be borne by the supplier. **NO DEMURRAGE / WHARFAGE CHARGES WILL BE PAYABLE BY THE INSTITUTE UNDER ANY CIRCUMSTANCES. NO ADVANCE PAYMENT WILL BE PAYABLE FOR CUSTOM CLEARANCE/ FREIGHT/INSURANCE ETC.**
26. **Guarantee / Warrantee Period:** 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 otherwise the offer shall be summarily rejected. Also the bidders are requested to submit their quote (Rates) for subsequent **05 years** Comprehensive Maintenance Contract (CMC) (Including All Spares, Accessories and Labour). Failure to comply this condition will entail the rejection of the bids. The price comparison shall be taking into account on basic price and post warranty CMC.
27. **Uptime guarantee:** The firm should provide uptime guarantee of 95%
28. **Downtime penalty Clause**
 - a. During the comprehensive warranty period, the guarantee uptime 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 enforced. The vendor must undertake to supply all spares for optimal upkeep of the equipment for at least FIVE YEARS after handling 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.
 - b. The principals or their authorized service providers are required to submit a certificate that they have satisfactory service arrangements and fully trained staff available to support the uptime guarantee.
29. **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 do not 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

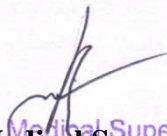
venue of arbitrator will be at Aligarh.

- 30. 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 JN Medical College Aligarh, which will be at liberty to refuse if it thinks fit. The tender is not transferable. Only one tender shall be submitted by one tenderer.
- 31. 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 work order/ job without assigning any reason thereof and nothing will be payable by JN Medical College Aligarh, in that event the security deposit shall also stand forfeited.
- 32. Insolvency etc:** In the event of the firm being adjudged insolvent or 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 herein specified JN Medical College Aligarh, shall have the power to terminate the contract without any prior notice.
- 33. Force Majeure:** If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries have been so resumed or not shall be final and conclusive.

Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may, at least option to terminate the contract.
- 34.** 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 mentioned in the tender enquiry document.
- 35.** The quantity of item given in the tender is tentative, which may be increased or decreased as per the institute's requirement.
- 36.** Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature must be enclosed with the bid.
- 37.** After due evaluation of the bid(s) Institute will award the contract to the lowest evaluated responsive tenderer
- 38.** Conditional bid will be treated as unresponsive and it may be rejected.
- 39. Demonstration:** - JN Medical College Aligarh, reserves the right to ask the tenderers for arranging demonstration of their equipment for which rates have been quoted, to the concerned committee, if required.
- 40.** The Institute 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 bidders).

41. 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 parties.
- Force Majeure: Any delay due to Force Majeure will not be attributable to the supplier.



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

Annexure-I

S. No	Item	Technical Specification	Qty
01.	ICU BED (MECHANICAL/ FIVE FUNCTIONS WITH SEPARATE DEGREE FUNCTION)	<ul style="list-style-type: none"> • Overall Size: Approx 2030 mm L x 900 mm W x 450 mm - 750 mm H. (Without Mattress). (+/- 5%) • Four section perforated CRCA mattress platform. • Bed should be Manually operated: <ol style="list-style-type: none"> 1. Height: 450-750 mm (without mattress) 2. Back section: 0-70 Degree 3. Leg Section: 0-30 Degree 4. Trendlenburg: 12 Degree 5. Reverse Trendlenburg: 10 Degree • Backrest and upper leg section should as they are individually and simultaneously raised. Bed Frame should be mainly made from 50 x 30 mm x 1.6 mm thick ERW tube with proper support. • The base frame should be mounted on 150 mm dia non-rusting castor twin-wheels with central and directional locking mechanism and pedal operated at the foot end of the bed. • The bed should have easily detachable polymer moulded head & foot boards and four corner buffers. • Bed should have split type polymer moulded swing down railings, 2 Nos on each side made from non-rusting moulded material with degree indicator. • There should be two locations on the head side of a bed to hold one stainless steel Saline rod 12 mm dia with 19 mm dia, 18 g stainless steel outer covering tube holder with a knob. • Quick manual backrest release system with operating lever on both side of top frame. • Mattress of bed should be made up of high density foam with anti-microbial agent incorporated into all components so that it prohibits the growth of bacteria and fungi, and is easy to clean. Cover should be water proof and can withstand chemical disinfection. The mattress should have flame retardant properties. • All mild steel components should be thoroughly in-house pretreated chemically to remove rust. Grease, oil etc. by dip tank processes, including separate degreasing, pickling, phosphating each followed by water rinsing passivating and hot air drying to give phosphate coating. 	

		<ul style="list-style-type: none"> • The treated metal surface should then be coated in-house with epoxy polyester powder with paint film thickness of 60 microns (Minimum) and oven baked at 180 deg. to 200 deg. centigrade. • Product should be ISO 9001, ISO 13485, ISO 14001, OHSAS 18001, CE European, Anti microbial Copper, WHO-GMP and BIFMA 	
	<p>ICU BED (FULLY MOTORISED/ FIVE FUNCTION WITH SEPARATE DEGREE FUNCTION)</p>	<ul style="list-style-type: none"> • Overall Size: Approx 2030 mm L x 900 mm W x 450 mm - 750 mm H. (Without Mattress). (+/- 5%) • Four section perforated CRCA mattress platform. • Bed should be electrically operated: Remote control or Integrated panel for easy to operate various positions like height, back, foot movement etc. by touching single fold protection button. Bed Should have step less electrical adjustments for the following <ul style="list-style-type: none"> a. Height: 450-750 mm (without mattress) b. Back section: 0-70 Degree c. Leg Section: 0-30 Degree d. Trendlenburg: 12 Degree e. Reverse Trendlenburg: 10 Degree • It should have CPR button for emergency override to return the backrest to flat position quickly. • The nurse hand control should have indications for power on and the battery charge. • All electro mechanical actuators need to be compatible with class of IP 54. • Backrest and upper leg section should as they are individually and simultaneously raised. • Bed Frame should be mainly made from 50 x 30 mm x 1.6 mm thick ERW tube with proper support. • The base frame should be mounted on 150 mm dia non-rusting castor twin-wheels with central and directional locking mechanism and pedal operated at the foot end of the bed. • The bed should have easily detachable polymer moulded head & foot boards and four corner buffers. 	

		<ul style="list-style-type: none"> • Bed should have split type polymer moulded swing down railings, 2 Nos on each side made from non-rusting moulded material with degree indicator. • There should be two locations on the head side of a bed to hold one stainless steel Saline rod 12 mm dia with 19 mm dia, 18 g stainless steel outer covering tube holder with a knob. • Quick manual backrest release system with operating lever on both side of top frame. • Mattress of bed should be made up of high density foam with anti-microbial agent incorporated into all components so that it prohibits the growth of bacteria and fungi, and is easy to clean. Cover should be water proof and can withstand chemicaldisinfection. The mattress should have flame retardant properties. • All mild steel components should be thoroughly in-house pretreated chemically to remove rust. Grease, oil etc. by dip tank processes, including separate degreasing, pickling, phosphating each followed by water rinsing passivating and hot air drying to give phosphate coating. • The treated metal surface should then be coated in-house with epoxy polyester powder with paint film thickness of 60 microns (Minimum) and oven baked at 180 deg. to 200 deg. centigrade. • Product should be ISO 9001, ISO 13485, ISO 14001, OHSAS 18001, CE European, Anti microbial Copper, WHO-GMP and BIFMA
	<p>PORTABLE 12 CHANNEL ECG RECORDER</p>	<p>Electrocardiograph should have capability of recording 12-lead ECG in A4 format and should have the following features:</p> <ul style="list-style-type: none"> ➤ Simultaneous acquisition of up to 12 leads ➤ Facility for recording in Manual or Auto mode or Rhythm or RR Mode ➤ Arrhythmia triggered printing mode ➤ Sensitivity : 2.5,5,10,20 mm/mV & AGC ➤ Recording speeds of 12.5, 25 and 50 mm/sec ➤ Should have a frequency Response: 0.05 Hz to 150 Hz ➤ Sampling frequency : 1000 Hz ➤ User selectable filter: AC Filter, EMG filter- 25 or 35 or 45 Hz or OFF, Anti-Drift filter ➤ Print formats : Manual : 3/6/12& AUTO: 3X4 with Rhythm; 3X4 with 3 Rhythm; 6X2 with Rhythm; 12X1 ➤ At least 210 mm width for the thermal printer

		<ul style="list-style-type: none"> ➤ Alphanumeric key pad for data input ➤ Printer must compatible with roll or Z fold ECG paper ➤ Save ECG in PDF format directly to USB Drive ➤ Light weight – Less than < 5.5 Kg with Battery ➤ Should have Lithium-Ion Battery ➤ Should be able to operate to a maximum of 4 Hours on a newly charged battery ➤ Easy to carry handle ➤ Greater 5.5” Foldable Display to Preview signal quality prior to printing thereby saving time and paper ➤ Capability to generate any number of ECG copies possible for distribution ➤ Automatic measurement and interpretations of ECG data. ➤ Facility to store at least 200 ECG data ➤ DF protection ➤ Pace Maker detection ➤ PC interface facility and optional PC interface software (Optional ECG data transfer feature) ➤ External storing and retrieving facility through USB storage device ➤ RS232/Ethernet Port ➤ Direct External PC printer interface facility ➤ Standard accessories must be provided along with the machine <p>Power Cable – 1 no; 10 Lead Patient Cable – 1no; Suction Electrodes – 6 nos; Clip-on electrodes – 4 nos; ECG Gel – 1 bottle; Thermal recording Paper – 1no;User Manual- 1no</p> <ul style="list-style-type: none"> ➤ Product should be CE certified 	
	<p>ANAESTHESIA WORKSTATION COMPLETE WITH ANAESTHESIA GAS DELIVERY SYSTEM, VAPORISER, CIRCLE ABSORBER SYSTEM WITH BUILT IN ANAESTHESIA VENTILATOR</p>	<p>General</p> <ul style="list-style-type: none"> • Should have provision for delivery of Oxygen, Nitrous oxide and medical Air with pressure gauges. • The machine should be capable of delivering Low flow and Minimal flow anaesthesia. • The anaesthesia machine with circle absorber, Ventilator and Vaporiser should be CE and US FDA approved. • Should have independent attachments for connecting central gas supply and pin indexed cylinders. • Anesthesia machine frame shall be manufactured in strong but lightweight material. Aluminium or composite material is preferential over steel frame construction. • The machine shall have a maximum of four castors/wheels for manoeuvrability. These must be of a sturdy/robust design. • The ability to individually lock the brake mechanisms of the front two castors is mandatory. • The machine shall have a traditional layout with obvious major components eg. Anesthesia Delivery, Circle absorber, Vaporiser and Ventilator. • Pipeline, cylinder and Airway pressures should all be displayed on analogue gauges and be visible at all times during operation. • Frame shall accommodate up to two backup cylinders one each for Oxygen and Nitrous Oxide • In the event of complete power loss and battery failure it shall still be possible to manually ventilate and deliver anaesthetic agent. 	

- The common gas outlet shall be easily accessible in the event of an emergency and for use of alternate breathing circuits
- Should have Top shelf ,Manoeuvring handle and foot rest
- Machine should have sufficient table top work space.
- The unit should have a battery back-up facility for the ventilator in the event of power loss. Minimum 30 minutes battery backup required.
- Input Power : 200 – 240 VAC

Gas Flow

- Antistatic and Cascaded dual flow tubes should be available for all gases to allow suitable resolution and accurate control at low total fresh gas flows.
- The flow range shall be 50ml-10 lpm
- Should have N2O cut off facility if O2 supply fails.
- Should have Oxygen failure alarm both Visual and Audible.
- Should have Oxygen Flush facility bypassing Vaporiser. O2 flush switch should be conveniently placed for easy accessibility. O2 flush switch should non lockable.
- The mechanical anti-hypoxic system must be present.
- Should have minimum mandatory Oxygen flow.
- It shall be possible to deliver Air with only basal flow oxygen independent of the abovementioned hypoxic control.
- Gas flow shall be controlled mechanically only
- Visual display of individual gas flows is mandatory, this shall be by physical means such as glass flowmeters independent of electrical power
- The option for electronic flow displays for all gases in addition to individual physical flow display is desirable (optional); price should be quoted seperately
- Flow meters should have the option of backlight illumination

Vaporizers

- The unit should accommodate at least two vaporizers for Anesthetic agent delivery.
- The manifold should only accept Vaporizers with approved Back bar connections and prevent usage of more than one vaporizer simultaneously. Preferably selectatec compatible back bar.
- Vaporizers supplied with the unit shall be routine maintenance free for the life of the product
- Vaporizers supplied with the unit shall be manufactured from lightweight materials to aid in fitting & removal

Ventilator

- Ventilator shall cater for a diverse range of patient groups from neonates to patients with restrictive airways
- Ventilator shall have a large colour TFT touch screen display, for exclusive use of ventilator control and monitoring.
- Ventilator display shall be mounted on adjustable side arm making it possible to view from various angle
- Control of the ventilator user interface shall be by touch screen and rotary dial

- Ventilator shall have the following ventilation abilities, volume control (VCV), Pressure ventilation with decelerating flow pressure control(PCV), **SIMV &PSV (optional)**
- On power up, in the case of an emergency mechanical ventilation shall be available without the need to carry out user or machine self-checks
- Ventilator should have a leak and compliance test .
- Should have user adjustable alarms for major parameters
- Apnea alarms must be user adjustable to allow for all operating conditions and phases during Anesthesia
- Ventilator should have the ability to display Patient Spirometry loops.
- Ventilator shall display a dynamic compliance measurement
- The volume measurement flow sensors/transducers shall be housed completely within the breathing system absorber & not remoted via tubes or channels

Ventilator Parameters

Tidal Volume	-	≤20ml to ≥1000 ml
Frequency	-	≤ 10 to ≥80 bpm
I:E Ratio	-	≤1:0.5 to ≥1:5
PEEP	-	OFF, ≤4 - ≥20 cmH2O
Pressure Limit	-	≤5 - ≥70 cmH2O
Minute Volume	-	0.5 to 50 lpm
Inspiratory Flow	-	2-70 lpm

Breathing System

- The breathing system designed so that it can be removed & replaced as a complete unit without the use of tools preferably with front facing inspiratory and Expiratory gas outlets
- All parts of the breathing system that are in contact with patient gas shall be latex free and Autoclavable except for non autoclavable removable part like O2 sensor and Pressure manometer.
- Bag/Vent switch shall be integrated on the absorber and should activate ventilator in vent mode and vice versa (One step operation).
- Breathing system should have heater system to avoid water condensation.
- Should have quick release canister for sodalime , capacity minimum 1 litre
- The breathing system absorber canisters shall have a bypass system to allow for canister change mid-case without loss of ventilation pressure. The requirement for an automatic bypass without extra input from the user is mandatory
- The fresh gas hose shall have a method of locking/securing its connection system to the CGO
- Should have provision for FiO2 monitoring cell and FiO2 value should be monitored on the main screen.

		<p>Machine should be supplied with following accessories</p> <ul style="list-style-type: none"> • High pressure hoses for O2,N2O and AIR • Reusable Adult& paediatric patient circuit • Disposable adult circuit • Breathing bags – of different capacity • Power cord • User manual • FiO2 Cell • Vaporisers (Sevoflurane& Isoflurane) 	
	BED SIDE LOCKER	<ul style="list-style-type: none"> • Over all approx. size: 400 mms x 400 mms x 820 mms H. • Body consisting of 2 sides and back, is made from one piece of 20G MS CRCA sheet. Fitted with polymer moulded top with raised edges on all four sides • Drawer front and cabinet door also made from polymer moulded material. • One drawer 90 mm H x 355 mm W x 380 mm D approx fitted with very smooth slides, is provided below the top. • Under the drawer is an open storage space and below it is a closed –door cabinet. • Door of the cabinet box is pivoted at top and bottom. Base of the drawer is fitted with castors of wheel dia 50 mm, all without brake. • Two buffers shall be provided at rear side of the locker box. • All mild steel components should be thoroughly in-house pretreated chemically to remove rust. Grease, oil etc. by dip tank processes, including separate degreasing, pickling, phosphating each followed by water rinsing passivating and hot air drying to give phosphate coating. • The treated metal surface should then be coated in-house with epoxy polyester powder with paint film thickness of 60 microns (Minimum) and oven baked at 180 deg. to 200 deg. centigrade. • Product should be ISO 9001, ISO 13485, ISO 14001, OHSAS 18001, CE European, Anti microbial Copper, WHO GMP and BIFMA. 	
	CENTRAL MONITORING SYSTEM	<ul style="list-style-type: none"> • Display size min 15-19" • Shall be able to perform at least 4-realtime waveforms per patient. • Should display: Patient Name, Bed number, arrhythmia messages, alarm messages, HR, PVC, ECG lead label. • Shall be able to review & print following patient information: Graphic trends, tabular vital signs, Arrhythmia history events (upto 2000 per patient monitoring session), Unit defaults & All limits. • Support of beat-to-beat 72hr full disclosure for all monitored patients and review without additional hardware. • Should show graphic trends of parameters • It should be backed-up with UPS for the CPU. • Should have Laser printer capability. • Real time trend of parameters in the multi patient view. • Should be US FDA & European CE Certified. 	

**MULTI PARA
MONITORS**

The monitor should preferably be modular in nature with possibility of future upgradation which can be used in Operation Theatres, Emergency Departments, ICU's and wards

- Color TFT LCD/LED display
- High Screen resolution
- Slots available with measurement of up to 9 parameters
- Device should be light-weight and portable
- Touch screen facility (OPTIONAL)
- Short-cut keys should be provided for ease of operation
- Suitable for adult, paediatric and neo-natal applications
- Audio and Visual Alarms
- Different types of alarms are available: Physiological and Technical 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
- Extensive data storage capabilities.
- Monitor can detect arrhythmias, with storing and reviewing facility
- Multi-channel ST segment analysis
- Advanced Masimo Technology available which monitors SpO2 values during motion as well with different levels of sensitivities depending on the type of patient monitored (optional)
- NiBP cuffs available for adult, paediatric and neonate patients, and wide measuring range and mode of measuring: Oscillometric
- Temperature probe available for rectal and skin measurement in degrees or Fahrenheit scale
- Temperature measurement scale: 0-50 degrees
- Respiration rate should be monitored with a measurement rate of 0-150 rpm for infants and 0-120 rpm for adults
- Wireless/ LAN CNS connectivity
- **Upgradeable Options:**
 - 2 Channel IBP measurements
 - Sidestream EtCO2
 - Should have upgradeable module for Cardiac Output measurement using thermo-dilution method of measurement
 - Should be upgradeable to ICG (Impedance Cardiography) for Non-invasive measurement of Cardiac Output (optional)
 - Should be upgradeable to a thermal record which can print 2 channels (optional)
- Should be European CE / US FDA approved.

	CR SYESTEM	<p><u>Direct Digitizer</u></p> <p>Cassette Size 11”X14” / 10”X12” / 8”X10”</p> <p>Maximum Resolution 4,020 X 4,892 (14”X17”, 87.5µm)</p> <p>Should be provided with a compatible laser imager.</p>	
	TECHNICAL SPECIFICATIONS FOR X-RAY GENERATOR	<p>X-RAY GENERATOR: It should be 5KW High Frequency battery operated x-ray generator.</p> <p>MOBILE STAND: Should have mobile stand with motorized UP & DN movements.</p> <p><u>SPECIFICATIONS OF X-RAY GENERATOR</u> It should be 5KW High Frequency x-ray generator. It delivers the excellent radiographic output as per details given below: OUTPUT: 5KW, 40KHz.</p> <p>RADIOGRAPHY RATINGKV: 40 to 110 KV, mA: 20 to 100 mA interlock with KV. mAs: Upto 160mAs.</p> <p>EXPOSURE TIME: Micro Controller Based timer with time variation from 0.001 to 5.0 secs in 38 steps.</p> <p>DIGITAL DISPLAY: KV, mA & mAs.</p> <p>X-RAY TUBE: Stationary Anode tube with focal spot.</p> <p>PROTECTION: Over voltage indication and protection.</p> <p>COLLIMATOR: Light beam collimator for centering & radiation protection..</p> <p>POWER REQUIREMENT: Equipment runs on battery. However Single Phase 230 volts, 5Amps with Proper earth requires for battery charging.</p>	

<p>CRASH CART</p>	<ul style="list-style-type: none"> • Approx Size 960mm L x 500mm W x 1545mm H. • Should have 25.4mmx18G stainless steel tubular frame work. • Two light weight polystyrene boxes each with three drawers, upper drawer with medicine container of different sizes. • Provision to hold Oxygen cylinder and cardiac Massage Board. • Six numbers colored hand out bins size approx, 100mm W X 125mm dia. X 75mm height to keep important supplies at eye level. • Two nos. Stainless Steel shelves to carry monitors, ECG Machine, suction apparatus etc. • Stainless steel saline rod made of 12mm dia. approx. 750 mm long and bent at top to have an arm of 400mm approx. • Stainless steel hook shall be welded with TIG process. • Provided with corner buffers & Rails. Crash cart should be fitted with 125 mm dia. non rusting castor with two brakes and two without. • Castor made from high grade non-floor staining synthetic materials with integrated thread guards. • Wheel center having precision ball bearing to run smoothly. Pull out cardiac massage board made of MDF of minimum size 670X320X12 mm laminated on top and bottom of laminate 1mm and 0.6mm respectively. • MDF shall have water resistance property and it should be made from eco- friendly material. All stainless steel components should be of 304 quality.
<p>BI PHASIC DEFIBRILLATOR</p>	<ol style="list-style-type: none"> 1. Should use Bi Phasic waveform for shock delivery to ensure that the current is optimal and damage to heart tissues is minimal 2. Should incorporate 1-2-3 operation for ease of use 3. Should have LCD display 4. Should have a facility for charging via paddles 5. Should have energy selection from 2 – 300Joule 6. Should Have inbuilt Battery capable to delivered 100 charges/Discharges of 300 J with full charged condition 7. Should have sealed lead acid battery 8. Charging time to 300 Joule should be as low as 10 second or better 9. Should be able to synchronize to R wave 10. Should have at least 24 event recording 11. Should have both Audio Visual alarm

		<p>12. Should have a facility to monitor ECG via both Paddle and ECG cable</p> <p>13. Should have Marker indication on ECG wave</p> <p>14. Should be supplied with Adult and swipe to expose Pediatric paddles</p> <p>15. Should have inbuilt thermal printer</p> <p>16. Should be capable to print both real time and configurable delayed ECG waveform</p> <p>17. Should have facility of print annotation TIME, DATE. Heart rate, HR Limits, Event marker, ECG parameter, Defibrillation mode, Selected and Delivered energy, Patient Impedance and Hospital Info</p> <p>18. Should have input protection against High voltage</p> <p>19. Should have Electro Surgical unit filter</p> <p>20. Should be CE certified product &</p> <p>21. Manufacturer should have ISO certification</p> <p>22. Manufacturer should have authorized local service availability in Aligarh. The details of the same has to be provided separately.</p> <p>Standard Accessories: 3 Lead Patient Cable – 1 no Power Cable – 1 no ECG Gel – 1no Recording Paper – 1 roll Disposable ECG electrode – 1 Packet User Manual – 1no</p>	
	<p>EMERGENCY AND RECOVERY TROLLEY</p>	<ul style="list-style-type: none"> • Frame made of rectangular CRCA pipes with SS swing-down railing. • Removable radiolucent top with X-Ray cassette holder. • 2 section top with ratchet mechanism for back rest. • Trendlenburg/Reverse Trendlenburg position maneuverable using pneumatic pump. • Castors of 125mm diameter with diagonal locking provided for mobility with control. • Oxygen cylinder holder and SS IV stand. • The complete metal components are pre treated and epoxy powder coated. • Frame size: 2100 L * 560 W * 650-950mm H 	

**SPECIFICATION
FOR NEONATAL /
PEDIATRIC HFO
VENTILATOR**

1. It should be specifically designed for the Neonatal / Infant Patient Range.
2. It should allow the user to deliver conventional ventilation as well as HFOV.
3. It should have capability of mechanical ventilation of a range of patients from 300g to 20Kg body weight in all modes, including HFOV mode.
4. It should have effective mechanism to reduce work of breathing for Neonates.
5. The equipment must have a proximal flow sensor to ensure minimum dead space.
6. Proximal flow sensor must be used for flow triggering in patient triggered mode.
7. It should have active inspiration and active expiration in HFOV.
- 8. Conventional Mode Parameters:**
 - a. BPM: 1 to 150
 - b. Inspiratory Time: 0.1 to 3.0 sec
 - c. CPAP Pressure: 0 to 20 mbar
 - d. Inspiratory Pressure: 0 to 65 mbar
 - e. FIO₂: 21% to 100%
 - f. Tidal Volume 2-200 ml with Volume Guarantee
- 9. HFO Mode Parameters:**
 - a. HFO Frequency should be wide range more than 3 to 18 Hz
 - b. I:E Ratio: 1:1, 1:2, 1:3
 - c. Tidal Volume 2-200 ml with Volume Guarantee
 - d. It should have Delta Pressure of more than 150 mbar in HFO mode, to enable powerful HFO treatment.
10. It should have following modes CPAP, CMV+ TTV, PTV, PSV, SIMV+ TTV + PSV, HFO, HFO+CMV
11. It should have Targeted Tidal Volume Mode to give user flexibility to give desired Tidal volume at minimum possible pressure.
12. It should have ability to pre set parameters in all modes of operation
13. It should have minimum 12 inch size full colour, total touch screen, user friendly operation
14. It should have integral flow monitoring measuring lung mechanics and displaying of loops and waveforms
15. It should have trending of measured parameters with memory of 24 hours.
16. It should have integral battery with 60 minutes operating capability
17. It should be supplied with Servo heated humidifier and reusable circuit
18. Ventilator should be compatible with nitric oxide delivery system.
19. It should have an option of medical oil free air compressor of the same brand as ventilator with European CE Certification. The compressor should be mounted on the same trolley as ventilator for easy movement.
20. Should have RS232 connector for data connectivity.
21. It should be a European CE 93/42 or US-FDA 510k certified product, copy of the certificate is to be submitted as part of technical bid.
22. The equipment should be manufactured by an ISO 9001 and ISO 13485 certified manufacturer, copy of the certificate is to be submitted as part of technical bid.

		<p>23. The change of mode from HFO to conventional and conventional to HFO should happen in seamless manner without change of patient circuit and disconnection of patient from ventilator.</p> <p>24. The equipment should be supplied with below consumables and accessories:</p> <ol style="list-style-type: none"> a. Movable Trolley with minimum 2 wheels lockable b. Patient Circuit Support Arm from the same manufacturer c. Reusable Patient Circuit – Neonatal – 2 Nos d. Reusable Patient Circuit – Pediatric – 2 Nos e. Disposable Patient Circuit – Neonatal – 15 Nos f. Disposable Patient Circuit – Pediatric – 15 Nos g. Reusable Flow Sensor – Proximal – 2 Nos h. Disposable Flow Sensor – Proximal – 5 Nos i. F&P MR850 Humidifier Set with heater wire adapters for both, Reusable and disposable circuits – 1 No j. Test Lung – 1 No k. Optional Compressor from the same manufacturer, integrated on the same trolley as ventilator with function of being operated as backup supply in case if the wall air supply fails. The price of the compressor should be quoted separately. Compressor should be CE marked. l. Any other accessories, consumables required to operate all available modes and functionality should be included with initial supply. <p>25. Warranty should be 5 years from date of installation</p> <p>26. The exhalation mechanism (Expiration valves etc) should be covered in warranty & CMC.</p> <p>27. Price of the essential consumables and accessories should be</p>
	<p>INFANT RADIANT WARMER</p>	<p>SYSTEM CHARACTERISTICS</p> <ul style="list-style-type: none"> • Micro controller based servo temperature control systems • Display and Alarm Self-Test Performed when the equipment is powered ON • Heater Test performed periodically <p>HEAT SOURCE</p> <ul style="list-style-type: none"> • Heater power can be adjustable from 0-100% with 10% increments • Set Temperature range in SERVO mode 32 o C to 38o C <p>ELECTRICAL SPECIFICATIONS</p> <ul style="list-style-type: none"> • Microcontroller Based Servo Controller System • Operating Voltage* - 230v AC~, 50 Hz 110v AC~, 60Hz (* Refer rating plate on the equipment) • Heater life time - at least 12 month

Temperature Probe

- Monitoring range - 15 to 40o C
- Accuracy - 0.2o C
- Resolution - 0.1o C
- Probe Interchangeability - 0.2o C

Display

- Infant Temperature - Bright 1” Numerical LED Display
- Set Temperature - Bright 0.5” Numerical LED Display
- Over Temperature Protection - Automatic cut-off of heater at 39°C

Audio and Visual Alarm Indications

- Low Temp
- High Temp
- Probe Failure–Probe short / probe disconnection
- System Failure (with Heater Cut off)
- Power Down
- Heater Fail
- Power Fail
- Over temperature

Electronic Salient Features

- Key Lock Facility - Prevents accidental change of settings
- Alarm Mute Facility - For low critical alarms
- Examination Lamp
- Can be operated in MANUAL and SERVO Mode
- Battery backup for displays and micro controller during power failure

Electrical Protection

- Protection against electric shock
- Mode of Operation - Continuous

Mechanical Salient Features

- Easily Movable
- Tray for placements of monitoring devices
- Mattress with high quality foam
- Drawers for keeping patient records
- Height adjustable IV Pole
- Easy accessible and collapsible side door panels
- Bassinet tilting

BUBBLE CPAP

Bubble CPAP Machine with standard accessories as nasal prong, Nasal Mask, Patient circuit

Specification:-

- A) Should have a LCD based graphic display to show.
- B) Should have mounting holder for Humidifier.
- C) Should be mounted on mobile stand for ease of moving.
- D) Should be compatible with flow driven CPAP
- E) Equipment should also work without Oxygen input.
- E) Should work on centralized oxygen and air.
- F) Should have CE certification.
- G) Should be supplied from a Manufacturing company having ISO Certification.
- H) Should be provided with Apnea Monitoring function.
- I) Should be able to set Alarm automatically by press of a single key.
- J) Oxygen should have accuracy: $\pm 2\%$
- K) O₂ concentration range: 21 % to 100 % F I O₂
- L) The pressure generator near the baby should be autoclavable.
- M) The unit should be on Battery back-up at least 1 hours.
- N) Should be provided with Single use nasal Prong (Small, Medium and Large) .
- O) Should be provided with 3 nos of single use Circuit .
- P) Should be provided with Disposable bonnets in sizes of Small,medium,large 3 no.'s in each sizes.

Compressor with Standard accessories (**optional**)

- A) Should be able to switch on by press of a single key.
- B) Should have supply along oxygen hose pipe
- C) Should have supply along oxygen connector
- D) Should option to work on centralized oxygen and air.
- E) Should have mounted on castor wheel to move
- F) Should have CE certification.
- G) Should be supplied from a Manufacturing company having ISO Certification

- Servo Humidifier with Standard accessories

Specification:-

- A) Should be provided with Single use chamber .
- B) Should be provided with 3 nos of single use Circuit .
- C) Should be provided with sensor probe
- D) Should be provided with temperature probe
- D) Should have CE certification.
- E) Should be supplied from a Manufacturing company having ISO Certification.
- F) Should have alarming function

**NEONATAL-
PEDIATRIC
VENTILATOR
SPECIFICATION
(TURBIBNE
BASED)**

1. Should be a microprocessor controlled ventilator with 12'' colour TFT touch screen integrated graphics and easy to use rotary knob operation providing support to Adult/pediatric and infant/neonatal patient range.
2. Should have Air supply through integrated ultra-quiet turbine or external compressor of the same manufacturer. (Air compressor should be US FDA Approved)
3. Should be based on reliable flow measuring technology, preferably proximal flow sensor which ensures the most precise flow and pressure measurements for better patient assessment.
Ventilator modes: Assist / Control Mandatory Ventilation (A/C); SIMV; CPAP; Pressure Support Ventilation (PSV); APRV, DuoPAP / BiPAP / BiPhasic; Combination /Dual modes like PRVC / APV/ VAPS/ Automode/ Autoflow. Apnea Back -up and any other mode for safe ventilations offering both volume guarantee & lung protective strategies like volume limit etc.
4. It should have advance modes like NAVA/ASV/PAV/Smartcare.
5. It should have enhanced Invasive as well as Non-Invasive Ventilation (NIV / NPPV) modes with facility of effective leak compensation.
6. **Controls:** Tidal volume minimum 2 ml to 2000 ml in Volume Control Mode or better
7. Respiratory rates 4 to 150 BPM or better,
8. Peak flow setting from 0 to 240 lpm or better
9. Trigger sensitivity: - Flow 0.1 to 20 l/min
10. PEEP: 0 to 3 5 cm H₂O or better.
11. FiO₂: 21 to 100 %.
12. I: E ratio 1:9 to 4:1 (DuoPAP/BiPAP/BiPhasic 1: 599 to 149:1)
13. Inspiratory time (TI) 1 to 12 s
14. Pressure control 3 to 60 cmH₂O, added to PEEP/CPAP
15. Pressure support 0 to 60 cmH₂O, added to PEEP/CPAP
16. Pressure ramp 0 to 2000 ms
17. Expiratory trigger sensitivity (ETS) 5 to 80 % of inspiratory peak flow
18. Should have facility of Manual breath, O₂ enrichment, standby, screen-lock, apnea backup ventilation, inspiratory hold, screen-shot, suctioning tool, dimmable screen, configurable Quick start-Settings, start -up over body height and IBW

19. Facility to permanently deactivate the O2 alarm, if the O2 cell is depleted or defective.
20. Should have integrated nebulizer synchronized with inspiratory cycle.
21. **Alarms:** low/high Minute Volume , Low/high Pressure, Low/high tidal volume, low/ high Rate , Apnea time, low/high oxygen, Oxygen concentration, disconnect ion, loss of PEEP, exhalation obstruction, flow sensor, power supply, batteries, gas supply
22. **Display:** Should have Real-time visualization of the lungs with representations of tidal volume , lung compliance, resistance, and patient activity
23. Should have Visual representation of ventilator dependency, grouped into oxygenation, CO2 elimination, and patient activity
24. Should have Graphic display of target and actual parameters for tidal volume, frequency, pressure, and minute Ventilation.
25. Should have Real-time waveforms Paw, Flow, Volume, Ptrachea (Optional)
26. Should have facility to show at least 1 Loops: P -V, V-Flow, P-Flow
27. Should have both graphical trends for minimum of 1h, 6h, 12h, 24h, 72 hours with 1 minute resolution.
28. Should display 41 monitoring parameters including Exhaled tidal volume, Breath rate, I:E ratio, FiO2, Peak Pressure, Mean Airway Pressure, etc..
29. Source input pressure of oxygen: 40 to 60 psi. Facility to also input low pressure O2 is also desirable.
30. Should work with double limb and single limb non-proprietary patient circuit both reusable & disposable
31. Scope of Supply:
Ventilator should be supplied with Reusable Silicon Breathing circuits 1 No. each for Pediatrics /Adult & Expiratory valve assembly and 10 disposable or 1 autoclavable flow sensor Adult/Pediatric . The complete unit must be mounted on a pedestal stand (Original from Manufacturer) / for easy movement of the complete ventilator within hospital.
33. Battery Back-up: Minimum operating time of at least 6 hours for complete Ventilator including inbuilt or external compressor.
34. Ventilator should be upgradable to inbuilt Volumetric ETCO2, SPO2 and Nurse Call system.
35. Ventilator should be upgradable to inbuilt High Flow Oxygen therapy, PV tools
36. Ventilator should be US FDA and European CE Approved and manufacturer should be ISO (latest) Certified. Should be provided with US FDA approved humidifier.
37. High flow oxygen therapy (optional)

**SPECIFICATION
FOR PAEDIATRIC
& NEONATE
INTENSIVE CARE
VENTILATOR
(COMPRESSED AIR
BASED)**

1. Advanced technology ventilator for use in ICU, suitable for ventilating all categories of patients from pre-term, neonates to pediatrics.
2. Should be suitable for use during transportation within & outside the hospital.
3. Should have the following modes of ventilation:
 - a. Pressure control (PC)
 - b. Volume control (VC)
 - c. Pressure Regulated Volume Control (PRVC) (**optional**)
 - d. Pressure support with back-up ventilation
 - e. CPAP
 - f. SIMV (Volume Control) + Pressure Support
 - g. SIMV (Pressure Control) + Pressure Support
 - h. SIMV (Pressure Regulated Volume Control) + Pressure Support (**OPTIONAL**)
 - i. Machine should have Nasal CPAP. (**OPTIONAL**)
 - j. Bivent/APRV (**OPTIONAL**)
 - k. Non Invasive Ventilation (NIV for both Pressure control & pressure support)
 - l. High flow oxygen therapy (optional)
4. The system should have the following parameters:
 - A. Tidal Volume: ≤ 5 ml – ≥ 350 ml (In Volume Control mode)
 - B. Frequency: ≤ 4 to ≥ 100 breaths /min
 - C. Inspiratory time: 10% to 80% of breathy cycle
 - D. PIP: ≥ 50 cm H₂O
 - E. PEEP: ≥ 30 cm H₂O
 - F. TRIGGER FLOW: ≤ 0.5 l/s
 - G. Inspiratory rise time: 0-20% of breath cycle time
 - H. I:E ratio: 1:10 to 4:1
7. Should have following audio – visual alarms:
 - A. Airway pressure
 - B. High continuous pressure
 - C. FiO₂
 - D. Expired minute volume
 - E. Apnea
 - F. End expiratory pressure
 - G. Respiratory rate
 - H. Gas failure
 - I. Battery
8. Should have separate user interface & ventilation unit for flexible positioning around the patient. Screen can be rotated & tilted for maximum flexibility.
9. Should have built-in battery back-up for 60 minutes
10. Single device user interface screen. It should be possible to display at least three types of waveforms & loops for each breath

Direct access to vital settings:
 PEEP, O2 concentration, Respiratory rate & Volume (or Pressure)
 Screen should display following waveforms:

- Flow time
- Pressure time
- Volume time

Following loops

- Volume – pressure
- Pressure – volume

11. Machine should be supplied with following standard accessories:-

- a) Servo controlled Heated Humidifier with humidifier chamber & standard accessories.
- b) O₂ And Air Hose
- c) Reusable silicon infant/pediatric circuit
- d) Disposable nasal CPAP kit (**OPTIONAL**)

12. Should have single – piece Autoclavable interchangeable expiratory cassette for complete disinfection capability. The flow sensing should be ultrasonic to avoid calibration.

13. Should have inline nebulizer with vibrating mesh technology to ensure < 3 micron uniform drug particle size.(**OPTIONAL**)

14. Should have Permanent Ultrasonic O2 sensor to avoid the replacement of Oxygen cell periodically.

15. Should be user-friendly & have sturdy design.

16. The ventilator should be compressor based only.

17. Should be US FDA & European CE approved.

SPECIFICATION FOR NITRIC OXIDE DELIVERY SYSTEM

Measuring Range	0-200ppm NO 0-50ppm NO2
Flow Rate	250ml/min @22 mbar
Detection Principle	Electrochemical
Accuracy	±4% of reading or ±1ppm, whichever is greater
Interference	0%- NO on NO2 sensor ; <25%-NO2 on NO Sensor
Display	LCD with back light
Alarms	Audible as well as Visual. NO high alarm, NO low alarm, NO2 alarm, low battery, system malfunction, calibration overdue, sensor replacement overdue, NV memory corrupt, battery low, printer out of paper.
Warm Up time	<30secs
Response Time	<10secs to 90% FSD NO ;<30secs to 90% FSD NO2
Drift :	Sensor drift - 1% per fortnight, correctable via calibration

Operating Temperature	18-30° C
Operating Pressure	800 to 1200mbar
Operating Humidity	20 to 80% non-condensing
Sensor Operating Life	1 year
Sensor Sensitivity	0.1ppm
Battery Life	5 hrs battery(operational) on full use and fully charged battery: 18 months(storage) if properly maintained & charged as per instructions in manual
Dimensions	25DX26W X18H cm
Weight	6.8 kg
Construction	ABS
Max. Inlet Pressure (regulator)	3 bar
Regulator control range	0-7bar
Flow meter control range	0 to 500cc/min;0-100cc/min
Dimensions	1150(H) mm
Weight	13.5 kg
Construction	Aluminum in powder coated
Wheels	5 castors(2locking)
Flow meters	0-100cc/min;0-500cc/min
Regulators	Two Stage stainless steel
Storage conditions	temp -20 to 50 deg C; humidity 15 to 90% noncondensing; atmos press 500 to 1060 hPa. All not >2.5 months
Power requirements	220- 240 V AC, 50Hz
Safety	IEC Class I , CE,
Printer	Internal
RS 232	Yes
Scavenging system	yes (External, to be fitted to ventilator where facility is available)
Ambient monitoring of NO & NO2	yes
Back up battery	4 hrs
	<ul style="list-style-type: none"> • Should be supplied with below items: <ul style="list-style-type: none"> ○ INTEGRAL PRINTER - 1 No ○ Single Use Circuits for Nitric Oxide - 20 Nos ○ Movable Trolley for entire system - 1 No ○ 2 Stage Scavenging filter - 1 No ○ Calibration Kit - 1 No • The entire system should be European CE 93/42 certified. • The manufacturer should be ISO 9001 and ISO 13485 certified

<p>SYRINGE INFUSION PUMPS</p>	<ul style="list-style-type: none"> ● Should be small, compact and light-weight device ● Weight of the device should not exceed 2 Kgs ● Should work on mains cum batteries ● Should have double CPU functioning to ensure reliability and safety ● Should have anti-reverse function which prevents the upstream flow ● Should work on Ni-Mh Battery with a battery life of 4 Hours at 5 ml/hr ● Should have micro and continuous mode of injection ● Should work on syringe sizes: 10 ml, 20 ml, 30 ml, 50/60 ml ● Should have a flow rate of 0-1200 ml/hr ● Should have the following flow rate ranges for different syringe sizes: <ul style="list-style-type: none"> ○ 10 ml: 0-200 ml/hr ○ 20 ml: 0-400 ml/hr ○ 30 ml:0-600 ml/hr ○ 50 ml:0-1200 ml/hr ● Should have an infusion volume range of 0.1-9999.9 ml ● Should have adjustable bolus rate ● Should have 8 different pressure sensing ranges, ranging from 20-140 Kpa ● Should have a KVO Rate of 1 ml/hr ● Should be compatible with all types of syringes ● Should have audio and visual alarms ● Device should be Class II,CF, IPX4 ● The device should be CE/US FDA certified ● The manufacturer should be ISO certified ● Manufacturer should have authorised local service availability in Aligarh. The details of the same has to be provided separately. ● Should be provided with the following standard accessories: <ul style="list-style-type: none"> ○ User Manual-1 No Power Cord- 1 No 	
<p>VOLUMETRIC PUMP</p>	<ol style="list-style-type: none"> 1. Should have Drip rate & volumetric infusion mode 2. Should have a flow rate accuracy of +/- 5% 3. Should have drip rate accuracy of +/-1.5% 4. Should be compatible with standard IV sets of 10, 15, 20 and 60d/ml 5. The volume limit range should cover the range of 1ml to 9990ml 6. Should have adjustable bolus rate 7. Battery-Should be rechargeable, 2000mAh or more 8. Should have a drip sensor with infrared opto-electronic sensor 9. Should have LCD display with high brightness 10. Should have occlusion pressure detection covering the range of 20-140Kpa 11. Should have air-in-line detection 12. Should have anti reverse function to prevent up-stream 13. Should have occlusion pressure detection covering the range of 20-140Kpa & with at least 8 sensitivity settings. 	

		<p>14. Should have auto save of last IV setting 15. Should be CE/FDA approved.</p>	
	<p>HIGH FLOW OXYGEN THERAPY DEVICE</p>	<p>HIGH PERFORMANCE</p> <ul style="list-style-type: none"> • Designed to exceed the ISO standard for respiratory humidification • Up to 60 L/min of supplemental oxygen <p>VERSATILE</p> <ul style="list-style-type: none"> • Variety of Optiflow patient interfaces for upper and by passed airways • Wide flow range: 2-60 L/min <p>ACCESSORIES</p> <ul style="list-style-type: none"> • Tube and chamber kit 900PT501(10-pack) • Tube and chamber kit (junior) 900PT531(10-pack) • Disinfection Kit 900PT600 • Disinfection Filter 900PT601(2-pack) • Optiflow Nasal Cannula OPT842 (small) (20-pack) OPT844 (medium) (20-pack) OPT846 (large) (20-pack) • Optiflow junior Nasal Cannula OPT316 (Infant) (20-pack) OPT318 (Pediatric) (20-pack) • Cleaning Sponge Stick 900PT602 (20-pack) • Clean Storage Cover 900PT603 (20-pack) • Optiflow Tracheostomy Interface OPT870 (20-pack) • Oxygen Inlet Extension Kit 900PT422 • Mask Interface Adapter RT013 (20-pack) • Pole Mounting Tray 900PT405 • Air Filter 900PT913 (2-pack) • Hospital Pole Stand 900PT421 	

	OTHER ITEMS	<ul style="list-style-type: none">• FLUID/BLOOD WARMER• PATIENT WARMING SYSTEM• MECHANICAL CHEST PERCUSSION DEVICE• SUCTION MACHINE• PROCEDURE LIGHT	
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Annexure-II

TECHNICAL BID

Name of Firm/Contractor/Supplier	
Complete Address & Telephone No.	
Name of Proprietor/Partner/Managing Director/Director.	
Phone No:- Mobile No:- Email Id:-	
Name and address of service centre nearby JN Medical College Aligarh,	
Whether the firm is a registered firm Yes/No (attached copy of certificate).	
PAN No. (enclose the attested copy of PAN Card).	
Service Tax No. (enclose the attested copy of Service Tax Certificate).	
VAT No. (enclose the attested copy of VAT Certificate).	
Whether the firm has enclosed the Bank Draft/Pay Order/Banker's cheque of Earnest Money Deposit.	
Whether the Firm/Agency has signed each and every page of Tender/NIT.	
Please provide full list of consumables.	
Any other information, if necessary.	

Authorized signatory of the bidder with seal.

Annexure-III

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 manufacturers of _____, having factories at _____ and _____, hereby authorize Messrs. _____ (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 firm or individual other than Messrs. _____ 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 on behalf of Messrs. _____
(Name of manufacturers)/Principal.

Annexure-IV
Financial Bid

A) FINANCIAL BID FOR DOMESTIC GOODS OR GOODS OF FOREIGN ORIGIN LOCATED WITHIN INDIA OR GOODS TO BE IMPORTED AND SUPPLIED AGAINST PAYMENT IN INDIAN RUPEES

1	2	3	4	5						6	
Schedule	Brief Description of Goods	Country of Origin	Quantity (Nos.)	Price per unit (Rs.)							Total Price (at JN Medical College Aligarh) basis (Rs.) = {4 x 5(g)}
				Ex - factory/ Ex-warehouse /Ex-showroom /Off-the shelf (a)	Excise Duty(if any) [%age & value] (b)	Sales Tax/ VAT(if any) [%age & value] (c)	Packing and Forwarding charges (d)	Inland Transportation, Insurance, loading/unloading and Incidental costs - JN Medical College Aligarh, (e)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at JN Medical College Aligarh, (f)	Unit Price (at JN Medical College Aligarh, basis (g)= (a+b+c+d+e+f)	

Total Tender price in Rupees: _____

In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately.
3. The Bidder must quote price for "GOODS TO BE IMPORTED AND SUPPLIED AGAINST PAYMENT IN INDIAN RUPEES" after having taken in to account, the provision of Custom Duty Exemption Certificate (CDEC) by the Purchaser, as per Customs Tariff Act.

Place:

Date:

Name:

Business Address:

Signature of Bidder:

Seal of the Bidder:

Financial Bid

B) FINANCIAL BID FOR GOODS TO BE IMPORTED FROM ABROAD

1	2	3	4	5				6
Schedule	Brief Description of Goods	Country of Origin	Quantity (Nos.)	Price per unit (Rs.)				Total price on Destination + Insurance (local transportation and storage) = {4X 5 (d)}
				FOB price at port/ airport of Lading (a)	Carriage & Insurance (port of loading to port of entry) and other Incidental costs** (b)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at JN Medical College Aligarh** (c)	Unit Price on DDP JN Medical College Aligarh, + Extended Insurance (local transportation and storage) (d) = a+b+c	

** To be paid in Indian Currency (Rs.)

Total Tender price in foreign currency: _____

In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted.
3. The Bidder will be fully responsible for the safe arrival of the goods JN Medical College Aligarh, in good condition as per terms of DDP as per INCOTERMS, if applicable.

Indian Agent:

Indian Agency Commission - ____% of FOB

Place:

Date:

Name:

Business Address:

Signature of Bidder:

Seal of the Bidder:

Financial Bid

C) FINANCIAL BID FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT AFTER WARRANTY PERIOD:

1. S.No.	2. DESCRIPTION OF GOODS	3. QUANTITY. (Nos.)	4. Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.					5. Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]
			1 st	2 nd	3 rd	4 th	5 th	
			a	b	c	d	e	

* After completion of Warranty period.

Service Tax: Whether extra or inclusive, if extra, indicates the rate _____.

NOTE:-

1. In case of discrepancy between unit price and total prices, THE UNIT PRICE shall prevail.
2. The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual, labour and spares, after satisfactory completion of Warranty period may be quoted as per NIT conditions on yearly basis for complete equipment and Turnkey (if any).
3. The cost of CMC may be quoted along with taxes applicable. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
4. Cost of CMC will be added for Ranking/Evaluation purpose.
5. All software updates should be provided free of cost during CMC period.
6. The stipulations in Technical Specification will supersede above provisions
7. The supplier shall keep sufficient stock of spares required during Annual Comprehensive Maintenance Contract period. In case the spares are required to be imported, it would be the responsibility of the supplier to import and get them custom cleared and pay all necessary duties.

Date:

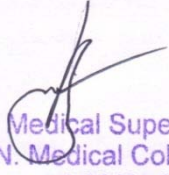
Place:

Name:

Business Address:

Signature of Bidder:

Seal of the Bidder:


 Medical Superintendent
 J.N. Medical College Hospital
 A.M.U., Aligarh
