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### DR. RAM MANOHAR LOHIA INSTITUTE OF MEDICAL SCIENCES VIBHUTI KHAND, GOMTI NAGAR, LUCKNOW- 226 010 Phones: 0522-4918502, 4918510,Fax 0522-4918506 Website : www.drrmlims.ac.in Ref. No. RMLIMS/MM(eq)/2019-20/2460 <u>RE-TENDER/E-TENDER NOTICE (2<sup>nd</sup> time offer)</u>

On line offers are invited through e-tender from Manufacturer/Direct Importers/Authorized distributors for the supply of various items. The offers submitted earlier for the listed items by the bidders against tendered advertisement no. RMLIMS/MM(eq)/2019-20/1706 dated 30.07.2019 will be treated as cancelled. Therefore, those who have already submitted their offer against above advertisement are also required to submit again and they are required to deposit tender fee and EMD afresh and enclose its proof in technical bid as per tender terms & conditions, along with their complete offer. Earlier EMD deposited against the above mentioned cancelled tenders will be refunded to the bidder on their request.

For detailed information like Name of Equipments, Date of submission, tender fee and opening of tender etc., you may please visit the e-tender portal <u>www.etender.up.nic.in</u>. The offer will be accepted on line only on e-tender portal with terms and conditions as mentioned in tender document. Any amendment will be uploaded only on the e-tender portal <u>www.etender.up.nic.in</u>. Details are also available in our website www.drrmlims.ac.in for reference only.

Director

Advertisement no. RMLIMS/MM(eq)/2019-20/2460 dated 19.09.2019

- Start date of Submitting of e-Tender is:- 20.09.2019
- Last date of Submission of e-Tender is:- 05.10.2019 upto 4:00 P.M.
- Date of opening of Technical bid is :- 06.10.2019 from 12:00 P.M. onwards

## **Equipment list**

Sr.		Name of Equipment	Qty	Tender	EMD	Total
no.	Name of Department			Fees	Amount	estimated cost
	Ivalle of Department			@18%		
				GST		
1	Urology Pediatric	OT Light With Recorder/OT Light	1+1+2=	2360	50500	50,00,000.00
	surgery and	monitor/Portable/ floor standing	4			
	Gastrosurgery	LED operating light				
2		Electrical Torriquet/Draumatic	1+2-2	2360	7500	7 00 000 00
2	Surgical oncology and PMR	Tourniquet System	1+2-3	2300	7500	7,00,000.00
3	Orthopedic	Plaster Room Equipment with	1	2360	15500	15,00,000.00
	Orthopedie	Plaster Table				
4	Anatomy	Short spin	1	2360	1500	20,000.00
5	Community Medicine	Audiometry set	1	2360	1500	50,000.00
6	Urology	DVT Pump	2	2360	3500	3,00,000.00
7	Surgical oncology	Lap Set with ICU Facility	1	2360	50500	50,00,000.00
8	Radiodiagnosis	Portable X-Ray	1	2360	40500	40,00,000.00
9	PMR	Bipolar Electro Surgical	1	2360	15500	15,00,000.00
		Unit/Cautery/Diathermy Machine				
10	Orthopedic	Bandage Instrument Set	1	2360	2500	2,00,000.00
11	CVTS	Electrolyte Machine	1	2360	2500	2,00,000.00
12	Pediatrics	Spiro Meter	1	2360	2000	1,50,000.00
13	Biochemistry	Homogenizer	3	2360	6500	6,00,000.00
	(Teaching)					
14	Biochemistry	Thin Layer Chromatography	2	2360	1500	50,000.00
15	(Central Research	Deep Fridge -20 <sup>0</sup> C	1	2360	5500	5,00,000.00
16	Obst. & Gyn	Flectrocautery	1	2360	10500	10.00.000.00
10	Obst & Oyn	PROCTOSCOPE	10	2360	1500	1.00.000.00
18		UPPER GI & LOWER GI	10	2360	70500	70,00,000.00
10	General Surgery	ENDOSCOPY SET	-			
19		PORTABLE VENTILATOR	1	2360	15500	15,00,000
20		Haemodialysis Machine	1	2360	15500	15,00,000.00
21	Anaesthesiology	CRRT	1	2360	20500	20,00,000.00
22		Portable OT Light	2	2360	5500	5,00,000.00
23	Pharmacology	Manikin	15 sets	2360	8000	7,50,000.00
24	Pathology	Lab Centrifuge	2	2360	2500	2,00,000.00
25	Cardiology	BiPap	1	2360	6500	6,00,000.00
26	Gastrosurgery	Fluid warmer	1	2360	3500	3,00,000.00
27	Common use like ICU,	Defibrillator	12	2360	72500	72,00,000.00

#### TENDER DOCUMENT 2019-20

### GENERAL TERMS & CONDITIONS FOR INVITING E-TENDER NOTICE NO. RMLIMS/MM(EQ)/2019-20/2460 DATED 19.09.2019

The following terms & conditions should be complied with while submitting the tender:-

- 1. Competitive e-bids are hereby invited by the Director, Dr. RMLIMS, Gomti Nagar, Lucknow from the Original Equipment Manufacturer/ Direct importers/Authorized distributer for the supply of various items/equipments.
- 2. The tenderers shall submit the offer <u>online</u> in original copy of the tender documents duly singed with seal on each page. The tenderers terms and conditions be clearly typed or legibly written giving the full name and address of the tenderers. The tenderers should quote in figures as well as in words the rates and amount tendered by him/them. Alteration, if any, unless legible and attested by the tenderers, with their full signature, shall invalidate the tender. The tender should be signed by the tenderers himself/themselves or him/their authorized agent on his/their behalf. In case the tender is signed by the agent the authority letter (latest and on original letter head of the OEM with original signature) in his favour shall be enclosed with tender documents. The tenderers should take care that the rates and amounts are written in such a way that interpolation is not possible. No blank space should be left, which would otherwise make the tender liable for rejection.
- 3. **GST Registration certificate** duly self attested must be enclosed.
- 4. Bidder must submit last three year income tax return proof duly self-attested with the bid.
- 5. The tenderers shall submit the offer online only as specified in <u>https://etender.up.nic.in. The</u> offline tender will not be considered under any circumstances.
- 6. Tenders should be submitted in two-bid system consisting earnest money, tender fee, technical offer & price bid. The proof of online submission of tender fee & EMD should be submitted in first part along with technical bid and price bid be submitted in second part. The Price Bid should strictly be in the format as specified in e-tendering. **Instruments consisting different parts or items, then item wise price must be quoted in the price bid.**
- 7. All Quotes shall be FOR DR.RMLIMS, Lucknow. Delivery schedule with definite date of delivery at destination (taking into cognizance of transit facilities) must be indicated. This contractual delivery date/period should be inclusive of all the lead-time. The delivery date, as mentioned in the supply order will be binding on vendors.
- 8. The tenderers should clearly state whether he/they are Original Equipment Manufacturer/ Direct importers/Authorized distributer (declared by principal firm only) and the authority letter must be attached with technical bid. The tender submitted by third party and subletting of tender will not be entertained.
- 9. The tenderers submitting his/her tender would be deemed to have considered and accepted all the terms and conditions. No Enquiries, verbal or written, shall be entertained in respect of acceptance or rejection of the tender.
- 10. The offer shall be unconditional. Any conditional price bid and offer will not be entertained and the tender will be treated as cancelled.
- 11. The quantity shown in the Schedule may be increased or decreased to any extent depending upon the actual requirement.
- 12. The tenderer shall specify regarding after sales services facilities within the Guarantee/Warranty period and CMC period.

- 13. The tenderer shall also confirm the Installation, Commissioning, Demonstration and Training, if required, to the concerned department under intimation to The Joint Director (MM) of the Institute.
- 14. The Institute reserves the right to reject or accept the tender after reviewing the previous performance to the services given by the vendor in the equipment already supplied by him.
- 15. The Institute reserves the right to cancel/reject in full or any part of the tender which generally do not fulfill the conditions stipulated in the tender without assigning any reason.
- 16. The tenderer shall submit the pre-installation information like Civil works/ Electrical details etc. All necessary requirements along with the offer, in order to make the equipment functional and any subsequent request on post supply order will not be entertained.
- 17. The firm has to submit an undertaking that the equipment is of latest model & version, has the latest state-of-art technology and till date no revised or amended version has been launched in regard to specification given in tender document. The spare parts will remain available for at least next ten years and Software upgradation, if needed, will be provided free of cost during warranty & CMC period.
- 18. Any action on the part of the tenderer to influence anybody of the Institute will make his/their tender liable to rejection.
- 19. In the case of placement of Purchase Order, the vendor (the tenderers whose tender is accepted) shall have to confirm the purchase order within 7 days from the date of the dispatch of purchase order otherwise it will be deemed that offer is acceptable to the firm. Notwithstanding any other provision, the terms & conditions and any other items given in the Purchase order will be treated as binding with "Errors & omission excepted" basis. However, if the supplier notices any discrepancy in the order, he/ they must bring the same to the notice of the Institute and seek clarifications. Supplier will have to bear the responsibility for failure to take this action.
- 20. The Institute may, in writing, make any revision or change in the purchase order including additions or subtractions from the quantities originally ordered in the specifications or drawings. If any such revisions/changes affect the price or delivery, the same shall be subject to the adjustment of price/delivery, where required on a reasonable basis by mutual agreement in writing which should be communicated.

#### 21. **PBG:-**

- The tenderer shall furnish performance bank guarantee/FDR (as security money) @15% of FOB/FOR value in favour of Director Dr.RMLIMS, Lucknow at the time of installation of the equipment/goods and the period of PBG/FDR shall be effective from the date of installation of the equipment upto 03 months after the end date of warranty period.
- PBG/FDR will be returned to the firm on submission of another PBG/FDR @ 15% of total CMC Value of 5 years which will be valid after 03 months from the date of expiry of CMC period.
- 22. The Institute reserves the right to cancel the purchase order or any part thereof and shall be entitled to revise the contract wholly or in part by a written notice to the vendor, if;-
  - The Vendor fails to comply with the terms of the purchase order including specifications and other technical requirement.
  - The vendor becomes bankrupt or goes into liquidation
  - The vendor fails to deliver the goods in time and or does not replace the rejected goods promptly.

A receiver is appointed for any of the property owned by the vendor.

- 23. Upon receipt of the said cancellation notice, the vendor shall discontinue all works of the purchase order and matters connected with it.
- 24. Tender fee and EMD details:-
  - A. The tender fee (non-refundable) and Earnest Money Deposit (EMD) be deposited

online as per following details and receipt / proof of the same must be attached with the technical bid. Otherwise tender will be treated as cancelled.

- (a) Account Number- **3926000100166659**
- (b) Name of Account Director, Dr.Ram Manohar Lohia Institute of Medical Sciences, Gomti Nagar, Lucknow
- (c) Name of Bank and Branch Punjab National Bank, Gomti Nagar, Luknow, U.P.-226010
- (d) IFS Code- PUNB0392600
- B. For online refund of EMD, following details be provided by the bidders in technical bid:
  - (a) Tender number
  - (b) Name of bidder/tenderer
  - (c) Name of equipment
  - (d) Amount of EMD
  - (e) Name of Bank and Branch
  - (f) IFS Code
  - (g) Name of account
  - (h) Bank Account number of the firm
  - i. In non-compliance of terms & conditions of the tender and/or supply order, EMD may be forfitted.
  - ii. The EMD of unsuccessful bidder will be released after the supply is matured.
  - iii. The EMD of successful bidder will be released after execution of supply order satisfactorily.
  - iv. No interest will be paid on EMD amount of successful/unsuccessful bidders.
- 25. The tenderers shall deposit the required tender fee (non. refundable) of Rs. 2360.00 i.e. Rs. 2,000.00 + Rs. 360.00 as GST @18% (Rs. Two Thousand only + Three Hundred Sixty as GST @18%) online in favour of Director, Dr.RMLIMS, Lucknow, as per the details given in Clause no. 24. The proof of online submission should be submitted in first part i.e. technical bid.
- 26. Unless otherwise specified in the order, the order price shall remain firm and will not be subject to escalation of any description during the pendency of the order, notwithstanding the change in the cost of materials, labour and/or variations in taxes, duties and other levies on raw materials and components while the order is under execution even if the execution of the order is delayed beyond the completion date specified in the order for any reason whatsoever.
- 27. The price should be on F.O.R. Dr. RMLIMS, Lucknow, Central Store basis inclusive of all levies and duties.
- 28. Prices will be quoted on F.O.B. as well as estimated CIP/CIF upto Dr.RMLIMS, Lucknow, Central Stores (Insurance from Firm's warehouse to Dr. RMLIMS, Lucknow basis) for imported goods.

The Indian Agency Commission payable to Indian Agent, if any, shall be shown separately and that will be payable in equivalent rupee directly to Indian Agent. Indian Agency Commission payment shall be made on the basis of prevailing exchange rate at the time of payment or calculated as at the time of last date of submission of tender whichever is less. No taxes will be paid on Indian Agency Commission.

The supplier shall be responsible to get the goods air –freighted/sea freighted & air insured/marine insured up to the Dr.RMLIMS, Lucknow. Please quote price in Format enclosed as (annexure-D).

- 29. Declare separately the FOB and CIP/CIF prices.
- 30. The offer of the tenders shall remain valid for a period of at least 180 days from the date of opening of the tender.
- 31. All goods or materials shall be supplied by the tenderers whose tender is accepted, strictly in accordance with the specifications, drawings, data sheets, other attachments and conditions stated. Any alterations of those conditions shall not be made without the consent of the Institute in writing which must be obtained before any work against the order is commenced. All material furnished

by the seller pursuant to this order (irrespective of whether engineering, design data or other information has been furnished, reviewed or approved by the Institute) will be guaranteed to the best quality of their respective kind (unless otherwise specifically authorized in writing by the Institute) and shall be free from faulty design, workmanship and materials, and to be of sufficient size and capacity and of proper materials so as to fulfill in all respects with all operating conditions, if any, specified in this order.

In case of import, the suitable action will be initiated against the principal firm & tenderer, if equipment is not found in accordance with the specification as laid down in the supply order

- 32. The Equipment supplied shall carry an unconditional standard warranty for 5 years (60 months) to be declared by OEM from the date of satisfactory Installation and commissioning of the equipment. If any trouble or defect originating with the design, materials, workmanship or operating characteristics of any material arise at any time from the date of Installation, the same shall be promptly make such alteration, repairs and replacement as soon as notified thereof, the seller shall at his own expenses and as promptly as may be necessary to permit the materials functional in accordance with the specification and to fulfill the foregoing guarantee/ warranty and the Institute will enter into CMC agreement from six to ten year (6<sup>th</sup> years to 10<sup>th</sup> years) at the time of end of warranty date of the equipment.
- 33. i. The firm shall remove and replace/repair such defective parts of the equipment at firm's expense with in the warranty period and the warranty of such spare parts will be given by the firm either upto the original warranty period of the equipment or thirty months (30) whichever is higher.
  - ii. If firm fails in the replacing such spare parts within the desired time period, the institute at its option, may get replaced the defective spare parts at firm's expense and the warranty clause written above will be applicable on the replaced spare parts. The cost of such spare parts shall be payable by the firm to the institute either dirct or will be claimed from PBG.
- 34. In the event that the materials supplied do not meet the specifications and are not in accordance with the drawings, data sheets or the terms of this order, rectification is required at site, the RMLIMS shall notify to the seller giving full details of differences. The seller shall attend the site, within seven days of receipt of such notice, meet the representative of the RMLIMS and action required to correct the deficiency.
- 35. If the seller fails to attend the fault within the prescribed time Dr. RMLIMS, Lucknow shall immediately get the same rectified on costs of the seller/supplier.

#### 36. Payment Terms :-

- In case of Indian goods, 100% payment will be released within 30 days from the date of satisfactory installation.
- In case of purchase of goods/equipment by Letter of Credit mode, the payment schedule will be as follows.
  - A 75% will be released after shipment by negotiation.
  - B 25% will be released after satisfactory installation.
- 37. The mode of payment will be through irrevocable letter of credit or international Bank Draft (IBD). However, Indian Agency Commission or Technical Service charges would be paid in Indian rupee after satisfactory receipt & installation of goods at site duly verified by concerned HOD. Indian Agency Commission will be declared in the price bid. If Indian agency commission is not mentioned in the price bid no claim for it shall be admissible afterward. Please note, in case of IBD, the original bank draft may be handed over to firm only after satisfactory receipt and satisfactory installation of the equipment.
- 38. Delivery Time as mentioned in Purchase order or date of opening of letter of credit (L/C) or date of issue of letter to supply on the basis of payment through international Bank Draft (Payment through IBD will be made after supply and Installation of the equipment) shall be the essence of the order and no variation shall be permitted except with prior authorization in writing from the Purchaser.

- 39. In the event of delay in making delivery on the part of the vendor, it will be at purchaser's discretion to receive delivery with a late delivery penalty clause.
- 40. Force majeure shall mean and be limited to the following:
  - Any wars or revolutions, hostility, Acts of public enemy, sabotage, fires, explosions, epidemics, quarantine restrictions and freight embargoes.
  - \* Any riot or civil Communication
  - \* Any earthquake, flood, tempest, lightning or other natural disaster

\* Any strike, or lock-out (only those exceeding ten continuous day in duration) or other conditions affecting the performance of the seller's obligations.

41. The seller shall advise the RMLIMS by registered letter duly certified by Local Chamber of Commerce of Statuary authorities the beginning and end of the above causes of delay within 7(seven) days of occurrence and cessation of such Force Majeure conditions, in the event of delay lasting over one month, if arising our causes of Force Majeure, the RMLIMS reserves the right to cancel the order and the provisions governing termination state under articles shall apply. For delays arising out of Force Majeure, the seller shall not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure and neither the RMLIMS nor the seller shall be liable to pay extra costs provided it is Mutually established that Force Majeure conditions prevalent in his works (such as power restriction etc.) at the time of submitting the bid and whether the same have taken into consideration or not in the quotations. In the event of delay in delivery and/or unsatisfactory manufacturing progress and supply, the RMLIMS has the right to cancel the purchase order as whole or in part without liability of cancellation charges.

In the event of rejection of non-conforming goods the vendor shall be allowed, without any extension of delivery time to correct the non-conformities, if the vendor fail to do so within stipulated time, the RMLIMS may cancel the order.

- 42. No payment shall be made for rejected material nor would the tenderer be entitled to claim for such items.
- 43. Rejected items would be removed by the tenderer from the site within two weeks of the date of rejection at their own cost. In case they are not removed they will be auctioned at the risk and responsibilities of the suppliers without any further notice.

#### 44. <u>Penalty Clause</u> :-

- a. In the case of not honouring the supply order, Ram Manohar Lohia Institute of Medical Sciences, will forfeit the EMD.
- b. The time for the date of delivery/dispatch stipulated in supply order shall be deemed to be the essence of the contract and if the supplier fails to deliver or dispatch any consignment within the period prescribed for such delivery or dispatch in the supply order, liquidated damages may be deducted from the bill @ 0.5% per week or part thereof to maximum of 10% of the basic cost of goods for delayed supply (The delivery period will be calculated from the next day of the dispatch date of purchase order to the previous day of receipt of material in the Institute). The competent authority of the institute may also cancel the supply at the cost & liability of the supplier. In such a case, bid security of the supplier shall stand forfeited. The supply of equipment must be in single consignment, inclusive of all parts & accessories in adherence to the specification so as to make the equipment fully functional at the time of the installation. No installation repeat shall be signed in case of absence of any part as per the specification.

Late supply in the case of Letter of Credit goods the firm may supply the goods after getting written permission from the Institute with late delivery clause @ 0.5 % per week or part thereof to maximum of 10% of the basic cost (FOB/FOR) of goods for delayed supply (The delivery period will be calculated from the next day of the opening of Letter of Credit to the previous day of receipt of material in the Institute).

c. The standard delivery period shall be Letter of Credit (LC) period FOR/FOB nearest port in India and additional delivery period from nearest port to the Institute shall be not more than

fifteen days (15 days).

Delivery period for the Indian/foreign supply will be as per offer made by the bidder in the Technical/Financial bid. (The Institute prefers delivery period not more than 105 days).

45. The firm may be required to facilitate the copy of supply order of other establishments (preferably Government) as mentioned in the installation list in the tender, to justify the tendered rates.

- 46. List of installations for the offered equipment/items only instead of allied/other range of equipment in India along with performance report duly signed and stamped by the user(s) may be provided with the tender documents.
- 47. All disputes and questions, if any, arise between the Institute and the bidder out of or in connection with the terms and conditions contained herein or as to the construction of application thereof, or the respective rights and obligations of the parties there under or as to any clause or thing herein contained or by reason of the supply or failure or refusal to supply any material or as to any other matter in any way relating to this offer shall be decided by the Director of the Institute and when the decision would not be accepted by the bidder, then the matter shall be referred to the chairman of the Institute as sole Arbitrator. The chairman of the Institute may appoint any suitable Arbitrator whose decision dully approved by the Chairman of the Institute shall be final and binding upon both parties and subject to adjudication of Lucknow Court. Place for arbitration shall be at Lucknow (U.P.), India. Venue of such arbitration proceedings shall be the Institute. Arbitration and conciliation Act 1996 and rules made there under shall be applied to the proceedings under this clause.
- 48. A minimum of 95% uptime of equipment is to be maintained during warranty period and also after warranty period during comprehensive maintenance contract for the next five years. If the equipment is not up time upto the above mentioned period suitable action shall be taken against the supplier including imposition of penalty as deemed fit.
  - The supplier should provide comprehensive maintenance contract (with spare/consumables /Accessories including laborer charges) inclusive of customs and all taxes for the next 5 years (i.e. years 6 to 10 inclusive). The CMC Rate for the sixth year should not be more than 5% of FOB and escalation in next year CMC should also not be more than 5% of the prior year CMC rates. If the rates of CMC are not clarified by the bidders, their offer will not be considered for comparison of price and will be treated as cancelled.
    - GST on CMC will be treated as inclusive, if the firm has not mentioned GST rates separately.

The price bid will be opened **online** in the presence of authorized representative of technically qualified tenderer within reasonable time.

- i. The evaluation report of technical bids by the technical committee will be the final decision for qualifying the firm.
- ii. For Foreign Goods the exchange rate (as per **RBI reference rate**) of foreign currency will be the prevailing rate on the last date of submission of Tender .
- iii. The prices for optional items if not required in Technical Specification will be excluded for ranking purpose.
- 50. <u>Custom Duty and Custom Clearance Charges</u> :- The supplier will get the equipment/consignment cleared from the custom. The Custom Duty and Custom Clearance Charges will be reimbursed to the firm on the production of appropriate document and certificate. No demurrage/warehouse charges will be payable by the Institute under any circumstances. No advance payment will be payable for custom duty/ custom clearance.

In addition to the clause no. 06 & 49 above the criteria for determining L-1 would be as followed:-

- (i) Quoted CIP/CIF rates of the equipment with all standard and essential accessories as per specification with 5 years unconditional warranty.
- (ii) Quoted CMC charges including GST after expiry of warranty period from 6<sup>th</sup> to 10<sup>th</sup> year.
- (iii) Price with all accessories as per technical specifications along with Custom duty, Custom Clearance, Insurance, Freight, IGST, turnkey (if applicable) as quoted in price bid will be added for determination of L1 and if the rates are offered in Indian currency, the rates of GST quoted in price bid will be added for determination of L1.

If needed Institute may enquire the rate of taxes and duties at its own and only the correct rates will be applied for calculation of L-1 in the comparative chart.

49.

# For calculation of L-1 rates of taxes and duties in value or in percentage may be quoted in price bid prevailing at the time of submission of bid.

- 51. Payment to 3<sup>rd</sup> party on behalf of bidder will not be permitted in any circumstances.
- 52. All the operating and service manuals in duplicate to be provided by the vendor at the time of handing over the machine.
- 53. If there is any discrepancy in terms between General Terms & Conditions of Tender Document and specification of any equipment, then the details given in General Terms & Conditions of Tender Document will be considered valid and will be binding. Accordingly, the terms of comprehensive maintenance contract will be governed by the General Terms & Conditions of Tender Documents.
- 54. Catalogue, data sheet, complete module and other necessary document shall be provided in original form. In the shape of Duplicate or photocopier form of documents shall not be accepted.
- 55. In case of imported goods consignment must reach Indian port within currency of L/C.
- 56. No financial documents of any tenderer will be entertained after opening of financial bid/ technical bid.
- 57. The supplier will make atleast quarterly visit for maintenance during warranty period.
- 58. Unconditional warranty & Guarantee for 5 years to be declared by OEM (Original Equipment Manufacturer) /Tenderer from the date of installation. The warranty/guarantee must cover all parts of the equipment except consumable only.
- 59. The firm will provide an affidavit to this effect that "THIS IS TO CERTIFY THAT THE RATES QUOTED for the equipment TO DR. RMLIMS, LUCKNOW ARE THE LOWEST ONE. WE HAVE NOT QUOTED/SUPPLIED AT LESSER PRICE TO ANY ORGANISATION WITH THESE SPECIFICATIONS. IN CASE OF NON-SUPPLY IN INDIA, THE AFFIDAVIT TO THIS EFFECT WILL HAVE TO BE SUBMITTED BY THE FIRM. WE FURTHER AGREE THAT IF ANY PRICE DISCRIPANCY IS FOUND ON LATER DATE, WE WILL BE LIABLE TO REFUND THE SAME.
- 60. Subletting of the tender to the sub-distributor is not permissible, if subletting is found, the EMD, submitted by tenderer, will be forfeited. If the same item is quoted by the principal and one or more distributors of same principal firm, the same will be treated as one tender and the lowest rate will be considered.
- 61. The tenderer shall insure after sales services facilities within the Guarantee/Warrantee period. The warrantee period may be extended for the period of the instruments remained out of order during warrantee period.
- 62. The Manufacturer or their Indian representative will ensure a proper after sales service as per our requirement from time to time, against the guarantee/warrantee clause as per terms and conditions agreed under negotiations would be provided to our Institute without fail. Any negligence on this account shall be the sole responsibility of foreign vendor as well as indian agent and the liability for compensation will be fixed by the Institute. An undertaking from the manufacturer that in the event of change of Indian Agent, the new agent will provide the CMC on similar terms and conditions or the manufacturer himself undertakes the responsibility of proving the satisfactory after sales services under such events. If the equipment is not rectified by the firm and the equipment is under breakdown for certain period, the Institute will impose the penalty clause for that period as deemed fit.
- 63. If any information submitted by the bidder is found incorrect then
  - The bidder may be blacklisted by the Institute; and/or
  - The bidder may be debarred from future participation; and/or
  - The Institute may impose such embargo in the bidder as deemed fit and/or
  - The Institute may take such action against the bidder as deemed fit.
- 64. <u>**Turnover:-**</u> The tenderer shall have an average annual turnover of not less than two times of the tentative cost of the tendered item/items during the last three financial years. Turnover details should be supported by a copy of balance sheet and Tax audit report duly certified by Chartered Accountant (CA).
- 65. Details of after sale service support should be provided which will include the followings:
  - (a) Corresponding address of service centre.
  - (b) Telephone No.(Office).
  - (c) Name of Service Engineers along with mobile number & e-mail address.
- 66. The Price Bid of the technically qualified vendor will be opened on-line after technical evaluation is done.
- 67. All fields and columns of price bid must compulsorily be filled.
- 68. If, the equipment is of foreign make and quoted in Indian currency (INR), the firm will have to submit the AWB or Packing list of manufacturer/principal firm or Cargo Arrival Notice (CAN) in support of import,

pertaining to the Institute, if the order is awarded to him/them. The date of these documents will be preferably of later date of supply order.

- 69. As per Institute's requirement and tender terms, the equipment need to remain functional during 05 years warranty as well as 05 years CMC period.
- 70. Any rule / guidelines declared by the Government would prevail over the existing terms and conditions.
- 71. HSN code of the equipment/goods must be mentioned in price bid format.
- 72. Check list as per annexure-A shall be submitted by the firm in technical bid.
- 73. Each & Every page or paper of the tender document should be serially numbered, singed & stamped by an authorized signatory of the bidder.

#### Note:-Please note that separate tender should be quoted for each item/ equipment.

Enclosed 1- Annexure A (Format of Check List) Enclosed 2- Annexure B (Specifications of the Equipment) Enclosed 3- Annexure C (BOQ for items/equipment in Indian Currency) Enclosed 4- Annexure D (BOQ for items/equipment in Foreign Currency)

> Joint Director (MM) for Director Dr. RMLIMS, Vibhooti Khand, Gomti Nagar, Lucknow, (U.P.)

### Check list

#### e-Bid reference no:

/RMLIMS/MM(eq)/2019-20/2460 dated 19.09.2019

Before submitting the tender, the bidder should check the following enclosures (to be submitted with Technical bid **compulsorily**).

S. No.	Particulars	Page (From)	Page (To)
1	Name of Bidder/Tenderer		
2	Name of Proprietor/ Managing Director of Bidder		
2	Permanent address of Bidder with e-mail and contact no.		
5	(Copy should be attached)		
4	The proof of online submission of tender fee & EMD		
5	GST Registration number		
5	(copy should be attached)		
6	Income Tax return certificate. (Last three years copy should be attached)		
7	Permanent Account Number		
/	(copy should be attached)		
8	The affidavit from a notary that the firm has never been black listed must be attached.		
	The tenderers should clearly state whether he/they are Original Equipment		
9	Manufacturer/ Direct importers/Authorized distributer (declared by principal firm		
	only) and the authority letter must be attached with technical bid.		
10	The tenderer shall specify regarding after sales services within the		
10	Guarantee/Warranty period and CMC period.		
	The firm may be required to facilitate the copy of supply order of other		
11	establishments (preferably Government) as mentioned in the installation list in the		
	tender, to justify the tendered rates.		
	<u><b>Turnover:-</b></u> The tenderer shall have an average annual turnover of not less than two		
12	times of the tentative cost of the tendered item/items during the last three financial		
-	years.		
	The firm will provide an affidavit to this effect that "THIS IS TO CERTIFY THAT		
	THE RATES QUOTED for		
	LOWEST ONE. WE HAVE NOT QUOTED/SUPPLIED AT LESSER PRICE TO		
13	ANY ORGANISATION WITH THESE SPECIFICATIONS. IN CASE OF NON-		
	SUPPLY IN INDIA, THE AFFIDAVIT TO THIS EFFECT WILL HAVE TO BE		
	SUBMITTED ACREE THAT ANY PRICE DISCIPLINGY IS FOUND ON		
	WE FURTHER AGREE THAT ANY PRICE DISCIPANCY IS FOUND ON		
	LATEK DATE, WE WILL BE LIABLE TO REFUND THE SAME.		

Name, seal and Signature of bidder

### (1) Technical Specifications of OT Light With Recorder/OT Light with mounted camera and monitor/Portable/ floor standing LED operating light

- 1. The latest LED technology OT Light with inbuilt high definition camera should be having USFDA and European CE (Conformity European directive 93/47/EEC) certification and complaint to International Electro-technical commission IEC 60601-2-41 (applicable only on OT Lights)
- 2. The each light head should contain of several symmetrically arranged light emitting diodes (LED's) in modules to form a single light head for a shadow free single white color light and having no heat emission through IR Radiation.
- 3. Surgical light ceiling mounted plate should be consisting of: Three horizontal rotatable extension spring arms, freely 360 degree rotatable (without stops)
- 4. Should have two horizontal arms (approx. 700 mm to 1100mm in length) to hold two light heads, main and satellite dome with provision for in-light handle camera.
- 5. Third arm for monitor with tilt able bracket to hold minimum one flat panel monitor or room HD camera.
- 6. Aerodynamic circular/ petaled designed dome of the light head should not obstruct effect of the laminar airflow systems.
- 7. Variable light intensity control should be on dome for 50% to 100% intensity adjustment without change of color temperature additional wall control unit should also be provided for light and camera control.
- 8. The switching off/on and light, camera, digital intensity, and camera adjustment should be at light arm / dome and wait panel both.
- 9. Should have additionally ambient (endoscopy) dim light provision so that during MIS sufficient light is available.
- 10. Other functions like camera switching off/on and zoom should also be controllable from dome control centre.
- 11. Light intensity at 1 m distance should not be less than 160000 lux from main light head and 110000 lux from satellite light head.
- 12. Min. 2 Megapixel HD camera with 3 1/3 type CCD/CMOS sensor with 120 x Zoom ratio (minimum 10xOptical & 12xDigital) with possible to take video of object form min. 10mm distance with Auto white balance.
- 13. Min. 2 Megapixel HD camera with 3 1/3 type CCD/CMOS sensor with 120 x Zoom ratio (minimum 10xOptical & 12xDigital) with possible to take video of object form min. 10mm distance with Auto white balance.
- 14. Video Medical Regarding System- The company should provide medical grade recording compatible HD Software of its own make (same as of company) in order to facilitate online digital video recording of the procedure with suitable computer system loaded with suitable medical software and editing and retrievable facility and UPS/Battery back-up. Surgeon should be able to switch ON/Off the recording form foot switch/touch screen panel in sterile area/camera-head.
- 15. Large min. 42" LED TV HD Monitor for showing the live video in adjacent room or at nearby remote location.
- 16. Light & Camera technical specifications accepted in the compliance statement must be supported by printed literature form the firm.
- 17. Important: Light system and Camera should be compatible in future to OT Integration system as and when hospital goes for such system.
- 18. All above previously mentioned equipment's should have US FDA and /or European CE certificate (as described above) and enclosed compulsorily.

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
- 3. CMC offered for the quoted equipment must be on OEM letterhead for further years. (CMC offered on distributors/ Vendor letterhead will not be considered).
- 4. Installation process should be performed by OEM trained service engineer/ service representative on OEM's letter head/ service report, with a mandatory provision of providing preventive service visits of OEM trained service engineer/ service representative quarterly per year till completion of warranty period (i.e. 20 visits for first five years) and further quarterly visit (04 visits/ year) till the completion of CMC period.
- 5. The installation process must be completed by the OEM/ Service provider within 30 days of supply.
- 6. The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
- 7. The equipment complies with the requirement of the Medical Device Directive of class I equipment and Electromagnetic compatibility; all supporting documents must be provided.
- 8. Equipment should have brand name / model number embossed/ etched on the equipment.
- 9. In case of technical snag/ failure/ breakdown, the response time for Inspection should be within 24 Hour and repair within 5 days, otherwise provide a service machine until the period of recovery of breakdown of the unit. Failing which will attract penal action as per the decision of the University (Uptime guarantee of 95%).
- 10. The page of technical bid should be numbered and checklist should be duly filled as per the annexure and all annexure should be in accordance with the format, otherwise it may be the reason for disqualification.
- 11. All the technical specifications accepted in the compliance statement must be supported by Original Literature from the firm/ O.E.M with Highlighting, Numbering & flagging as per below mentioned format for the compliance statement.

P ~				
S.	Technical	Compliance	Page No. in the proposal submitted where	
No.	Specification	Yes / No	documentary evidence is enclosed as per	
	_		tender Specs with highlighting, Numbering	
			& flagging	
1				
2				

## (2) Technical Specifications of Electrical Torniquet/Pneumatic Tourniquet System

- i. For Hip, Knee & Joint Replacement Surgery
- ii. Battery back-up of minimum 3-4 hours
- iii. Noiseless operation
- iv. Quick pressurization of cuffs
- v. Online increase & decrease of pressure
- vi. Audible alarm on timer reaching set value
- vii. Feather touch electronic switches
- viii. Option for manual use
- ix. Cuff pressure range : 10 to 450 mm Hg
- x. Pressure regulation ; +10mm Hg of set point
- xi. Timer : Can be set from 9 hours to 59 minutes
- xii. Timer least count : 1 minute
- xiii. Internal least count : 1 millisec
- xiv. Quick release of pressure from the cuff without affecting the timer
- xv. Memory Function: Last set pressure to be stored and displayed when the machine is switched on again.
- xvi. Power supply: 230 VAC, 50 Hz±10%; built in battery for 3 Hrs backup works on generator and does not required stabilizer
- xvii. Weight : approx. 3.8 kg to 4.2 Kg
- xviii. Cuff Size: Large : 33" x 5", Big : 24"x4", Medium: 18" x 3", Small: 11" x 3", Pediatric : 8"x 2"

Company should be ISO, CE Certified.

Sr.	Description	Qty
no.		
	Consist of	
1	PLASTER ROOM TABLE with Mackentos Sheet	4
2	PLASTER SAW HEAVY HANDLE	4
3	PLASTER SAW ENGEL	4
4	PLASTER SAW BERGMAN	4
5	PLASTER SPREADER	4
6	PLASTER SHEAR-BOHLER'S	4
7	PLASTER SHEAR-STILLE'S	4
8	PLASTER SHEAR-GAY'S	4
9	BANDAGE CUTTING SCISSOR	4
10	PLASTER BENDER	4
11	PLASTER OPENER-DAW'S	4
12	Big Bowel/Bacin S.S with Stand for Plaster	4

(3) Technical Specifications of Plaster Room Equipment with Plaster Table

## (4) Technical Specifications of Short spin

Unit should provide economical thin layer preparations from any liquid matrix, especially hypo-cellular fluids such s Spinal fluids & Urines.

## **Technical Specifications:**

- Centrifuge working principles should be that the cytocentrifuge deposits cells on to a clearly defined area of a glass slide & allows for the absorption of the residual fluids into the sample chamber's filter card.
- Unit should also provides constructively flattens cells for excellent nuclear presentation.
- The action of cytocentrifuge should be that way so that it gives all cell types equal opportunity for presentation
- In load or spinning tilting feature should be available so that it reduces the possibility to touch the prepared slide from the residual fluids.
- Rotor should be easily removable for outside loading.
- Unit should have min. 10 program memory.
- Unit should have "easy-touch" program for easier key stroke & more intuitive programming.
- Revolution per Minute (RPM) should be up to 2000rpm
- Acceleration
- Indication of RCF during Centrifugation.
- Unit should display programmed & remaining time.
- Run time should be from at-least 1 min to the max of 99 min
- Unit should have the facility of safety alarm feature which reminds end-user to remove the specimens.
- Unit should be able to run 12 head & 24 specimens (using double cyto funnel) at one time.
- Opening/closing of the lid should be done with single handedly.
- Unit should not run until the lid is locked & should remain during the rotation.
- Unit should come with auto locking outer lid & autoclavable sealed head.
- Unit should have European CE or US FDA approved.
- Should be supplied with disposable funnels with integrated filter cards for single hole, double hole, clips for min 200 samples. Also 12 nos. reusable chamber for large vol. samples.
- ISO and European CE or US FDA Conformity is a must.

## Physical Dimension:-

H x W x D:- 257 x 366 x 430mm Weight: Approx. 20-30 kgs Power req:- 200-240 VAC, 50/60 Hz

## (5) Technical Specifications of Audiometry set

### **Specifications-Impedance Audiometer**

Impedance audiometer with contra ear testing facilities.

- 1. Multifrequency
- 2. Probe Frequency-226 Hz, 678Hz, 800Hz, 1000Hz
- 3. Pressure Range- +200 to 400 daPa
- 4. Volume Range: 0.1 ml to 6.0 ml
- 5. Accuracy:  $\pm 5\%$  to  $\pm 10$  daPa
- 6. Test Time- < 3 Seconds
- 7. Reflex Mode
- 8. Test Frequencies: 500,1000,2000,4000 Hz  $\pm 2\%$
- 9. Test Method: Ipsilateral, Contralateral
- 10. Noise (Band): WN/HP/LP
- 11. Intensities IPSI Lateral- 70 to 110 dbHz
- 12. Intensities Contra Lateral: 70 to 120 dbHz
- 13. Intensity Setting: Automatic or Manual
- 14. Eustachian Tube Function: Intact and Perforated mode
- 15. ETF Pressure Range: +300 to 400 daPa
- 16. Test: Ipsilateral Reflex Test with AGC, Reflex Decay
- 17. Test Programme- Reflex Test selectable
- 18. Probe- Light weight, adjustable, Hand Held, With Built in control light & switch
- 19. Printer: Silent Thermal Printer, (with paper printer facility)
- 20. Display; Graphic LCD with adjustable contrast
- 21. Power Supply- Mains 100-240 Volts, 50/60 Hz 25 VA
- 22. PC Interface- USB Cable
- 23. Automatic self calibration
- 24. Regular calibration of equipment
- 25. All accessories should be from the same manufacturer and approved.
- 26. Should attach valid USFDA & European CE certificate

## **Specifications of Pure tone Audiometer:**

- Two separate & identical channels.
- Stimulus type- Tone, warble, pulsed tone, pulsed warble, FRESH noise (FREquency specific Hearing assessment noise), Pulse FRESH noise
- Special tests-TEN test, SAL test, MLD, ABLB, SISI, Weber, Rinne, Stenger, Tone Decay, Tinnitus, Bekesy, DLF, DLI, HLS, MHA, Multi frequency weber.
- Optional test- Quick SIN, LI Pread, Pediatric.
- Frequency range-
  - TDH 39 earphone-125 to 12500HZ
  - HAD 200 earphone-125 to 20000Hz
  - Insert ear phones- 125 to 8000 Hz

- BC-250 to 8000Hz
- SF-125 to 2000Hz.
- FRESH noise stimulus-125 to 20000 Hz.
- Level Range
  - Air conduction: 125 to 5000Hz
    - 5000Hz to 20000Hz
  - Bone Conduction: 250 Hz to 5000 Hz

5000Hz to 8000Hz.

- Masking types: Narrow band Noise, Speech Weighted Noise, White band noise.
- Stimulus modulation FM (warble):- Adjustable modulation rate & depth: Modulation rate-1 to 20Hz, Modulation depth- 1 to 25% SISI: 5, 2, 1 dB decrements.
- Should have full speed USB port connector.
- Should be supplied with software
- Safety Standards:
  - Audiometer-EN 60645-1, Type1, EN60645-2Tpye A-E, ANSI s3.6 Patient safety-Complies with IEC 60601-1, Class-1, Type B; AAMI EMC-IEC 60601-1-2

USFDA Certified (must attach valid certificate)

## (6) Technical Specifications of DVT Pump

- 1. Provides Sequential, Gradient and circumferential compression around the ankle, calf and then the thigh.
- 2. Sequential Compression around the ankle, then the calf and then the thigh and circumferential compression.
- 3. Gradient compression of 45 mm of Hg at the ankle, 40 mm of Hg at the Calf and 30 mm of Hg at the thigh.
- 4. Should be compatible to unilateral or bilateral connections.
- 5. Automatically detect the type of garment.
- 6. 11 seconds of compression followed by a venting period which is equivalent to the individual venous return
- 7. Battery backup of an Integrated, Li ion battery for a continuous of 6 to 8 hrs.
- 8. Gradient compression in decreasing range of pressure from ankle to Thigh.
- 9. Compression cycle frequency is to be dependent on individual venous return
- 10. Venous Return of individual patients should be sensed by compression system itself, using the technique of air plethismography
- 11. Small, Light-weight, kink-Resistant tubing available in 7' and 4' sizes tubing can be "Daisy Chained"
- 12. Port A and B indicators, Simplified audible and visual Alarms.
- 13. Provides Animated Alarm Resolution where animated icons communicate the cause of alarm and remedies for alarms.
- 14. Provide improved durability with rating of IPX3, which certifies stable power supply, limited liquid ingress and fully protected battery etc.
- 15. Controller should provide reduced noise by having vibration dampeners and soft over moulding
- 16. Controller should have Graphic user interface of 3.2inch colour LCD screen which provides larger icons for greater visibility.
- 17. Controller material should be compatible most of hospital grade cleaning agents.
- 18. Controller should have USB port make software updates to be easy.
- 19. Controller should have adjustable bed hook which attaches easily and securely to most footboards.
- 20. Choice of three styles like Knee Length, Thigh Length & Foot cuff.
- 21. Battery backup with Heavy duty Li ion battery which supplies power for 8 hours for uninterrupted compression.
- 22. Should have trouble shooting index in the device itself.
- 23. Sleeves should be comfortable and provide Dry. Cool, Soft (DCS) technology to address patient discomfort.
- 24. System should accommodate single leg operation or both if needed.
- 25. Leg sleeves should have thin fibres of coolventing fabric to reduce itchiness.
- 26. Leg sleeves should have bladder geometry evenly distributes pressure across three bladders with minimal pressure points
- 27. Leg sleeves should have Pillowcase design delivering an optimal level of flexibility and stretch allowing sleeve layers to glide freely among each other.
- 28. Machine should be US FDA approved.

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- 6. The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
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			& flagging
1			
2			

## (7) Technical Specifications of Lap Set with ICU Facility

## A Full High Definition Laparoscopy Surgery Set should consist of the following items:

## 1) Full HD Video Image Processor:

- Should be of latest series/model and have following specifications:
- A full high definition processor should have resolution of 1920x1080 pixels with 16:9 aspect ratio.
- Should have provision of Optical image enhancement of capillary vessels and fine patterns in the superficial layer of mucosa for early detection of lesions.
- Should be with IR (ICG) visualization.
- Should have 5 or more Default User Preset for different surgical disciplines including IR
- Should have touch panel for easy access of system functions and settings
- Automatic Shutter and microprocessor controlled Automatic Gain Control
- Should have modes for maintaining uniform brightness and brightening of dark areas in Endoscopic image.
- Should have modes for False color overlay image & Fluorescence black and white image for ICG Visualization.
- Should have USB slot for capturing HD/SD Endoscopic Still Images
- Should have provision of storing 20 user settings & 50 Patient data.
- Should have one output each for DVI/HD-SDI and S-Video/Composite for HD & SD videos.

## 2) 3 Chip CCD/CMOS Full HD Camera Head with IR/ICG Compatibility

Should be of latest series/model and have following specifications:

- The 3 Chip CCD/CMOS full HD camera head should be of Eye piece type & have resolution of 1920x1080 pixels with 16:9 aspect ratio.
- Should be IR/ICG compatible and also be used as normal HD Camera head
- Should have integrated optical zoom coupler ranging from 0.9x to 1.8x and can be varied seamlessly
- Should have 2 or more programmable buttons which can be configured through the processor
- Should have provision of assigning & controlling IR visualization through Programmable buttons
- The camera head should have focus range between 15-33mm and should have provision to focus image from Coarse to fine patterns
- Camera Head should provision for Real time correction of Pixel Defect
- Camera Head & coupler should be one piece and should not weigh more than 250gms
- Camera head should be compatible with ETO/Sterrad, V-Pro means of Sterilization

## 3) <u>Powerful 300W Xenon/LED Light Source for IR (ICG) Visualization:</u>

Should have following specifications:

• A powerful 300 watt Xenon Light Or LED source capable for both White Light Imaging & IR(ICG) Visualization

- Should have Emergency Lamp facility
- Automatically adjusts light intensity to achieve ideal illumination
- Should have special filter light for observation of capillary vessels and fine patterns in the superficial layer of mucosa for early detection of lesions.
- 4) <u>26" Full HD Medical Grade Monitor: Should have following specifications:</u>
  - 26 inch full HD monitor with TFT/LCD Screen with LED backlit having resolution of 1920x1080
  - Aspect ratio 16:9
  - Should have multi-modality display compatibility
  - System should have necessary HD O/P for optimized display

### 5) <u>10 mm Telescopes:</u>

Should have following specifications:

- 10mm Telescope with 30 degree Direction of View and working length of 300mm or more
- It should have Full HD compatible Optics for better contrast & color reproduction
- Should be completely distortion free
- It should have Quick lock for attachment of video adaptors
- It should have Large field of view and depth of focus
- It should have Detachable Eyepiece type
- It should be Autoclavable & supplied in autoclavable Tray

## 5 mm Telescope:

Should have following specifications:

- Telescope having diameter of 5mm-5.5mm with 30 degree Direction of View and working length of 290mm or more
- Should provide better contrast & color reproduction
- Should be completely distortion free
- It should have Quick lock for attachment of video adaptors
- It should have Large field of view and depth of focus
- It should have Detachable Eyepiece type
- It should be Autoclavable & supplied in autoclavable Tray
- 6) **IR/ICG 10mm Telescope:** Should have following specifications:
  - 10mm Telescope with 30 degree Direction of View and working length of 300mm or more
  - It should be compatible for White Light Observation and for ICG Visualization
  - It should have ED Lens for better contrast, color reproduction & Razor sharp images
  - Should be completely distortion free
  - It should have Large field of view more than 80 deg and depth of focus
  - It should have Detachable Eyepiece type
  - It should be Autoclavable

## 7) Light Guide Cable

- It should have High resistance protection against mechanical and thermal stress
- It should have diameter of 4.0 mm or more with high fiber density
- It should have small bending radius for comfortable use
- It should be 3 meter or more in length

## 8) High Flow Co2 Gas 40L/min or more Insufflator: Should have following specifications:

- Should be digital, microprocessor controlled & automatic type
- Should have Large digital display on front panel Set pressure, Actual Pressure, Flow Rate & Volume
- Should have small cavity mode for EVH & Pediatric surgery
- Should have Powerful Insufflation with flow rate of 40 L/Min or more
- Should have alarms for Over pressure, Tube Clogging & insufficient supply of gas
- Need to provide a Pin type Co2 hose plug which can be connected to Pin type CO2 cylinders.
- 9) Trolley: A good quality Trolley should be supplied to accommodate all equipment's.

## Laparoscopic Surgery Hand Instrument Set includes:

### 1) Hand Instruments Set

- Atraumatic Grasping Forceps, 5 x 330 mm, ratchet (1 No.)
- > Johan Grasping Forceps, 5 x 330 mm, ratchet (1 no.)
- CroceOlmi Grasping Forceps, 5 x 330 mm, ratchet (1 no.)
- Maryland Forceps, 5 x 330 mm, Monopolar
- Metzenbaum Scissors, 5 x 330 mm, Monopolar
- Hook Scissors, 5 x 330 mm, Monopolar
- ▶ Johan Grasping Forceps, 5 x 330 mm, Bipolar
- Maryland Dissection Forceps, 5 x 330 mm, Bipolar
- Claw Forceps, 10 x 330 mm
- Monopolar HF-Cable
- ➢ Bipolar HF-Cable
- Straight Needle Holder, 5 x 330 mm
- Self-Alignment Needle Holder, 5 x 330 mm
- Suction/Irrigation Tube with distal holes, 5.3 x 360 mm
- Suction/Irrigation Handle Set with suction control lever
- ▶ HF-Long Hook Electrode, 5 x 330 mm
- ▶ HF-Spatula Electrode, 5 x 330 mm
- ➢ Veress Needle, 120 mm
- Clip Applicator

## 2) Lap Trocar Set

- Trocar Tube with Stopcock, 11 x 80 mm Working length (2 no)
- Trocar Spike, Tringular Tip, 11 x 80 mm working length (2 no)
- Trocar Tube with Stopcock, 5.5 x 80 mm working length (2 no)
- Trocar Spike, Tringular Tip, 5.5 x 80 mm working length (2 no)
- Trocar Reducer 13/11 mm to 5.5 mm
- Extra Sealing cap for 11 mm & 5.5 mm Trocars (2 Pk each)
   All products should be US FDA/CE with 4 digit notifications approved.

Page 3 of 3

## (8) Technical Specifications of Portable X-Ray

#### High frequency X-Ray machine suitable for general radiography.

X-RAY GENERATOR:

- High Frequency X-Ray Generator having frequency of 40 KHz or more should be provided.
- Power output of generator should be 65KW.
- Radiographic KV Range should be 40 to 150KV in 1KV/Step.
- mA Range (Rad.): 800mA
- Exposure time (Rad.):1ms to 3Sec.
- mAs Range (Rad.): 200mAs or more.

#### **CONTROL:**

A very compact, Soft Feather Touch Control Panel having following functions & indications should be provided. The panel can be supplied in Floor Mount with Spill Proof design.

Following features should be available on the control panel.

- Machine ON/OFF Switch.
- Digital Display of KV &mAs.
- KV & mAs increase and decrease switches.
- Tube focal spot selection Switch.
- Ready and X-Ray on switch with Indicators
- Bucky Selection Switch.
- Self-diagnostic Programme with Indicators for Earth fault error, KV error, filament error & Tube's Thermal Overload.
- Anatomical Programming Radiography (i.e. APR) should have preprogrammed parameters of human Anatomy Up to 216 programs, which helps the user to select exposure parameters based on body part, examination view and size of the patient.

A dual action hand switch with retractable cord should be provided for Radiation Protection of Operator.

#### X-RAY TUBE:

- One no. Dual focus Rotating Anode X-Ray tube thermally protected.
- Anode heat storage capacity of the Tube should be more than 250KHU
- One Pair of 08 meters H.V. Cable.
- One No. Multileaf Collimator with auto shut off facility should be provided.

#### TUBE STAND:

Floor to Ceiling Stand with Counter Balanced Tube Head (Rotatable ± 180 Degree), 360 Degree Rotatable; mounted on Floor Ceiling Rails for convenient movements should be provided.

#### TABLE:

Table should be with 4-way movement of the table top i.e. x axis and y axis. The Table should consist of consist of motorized reciprocating bucky with Grid of size  $17 \frac{1}{4}$ " x 18 7/8" having Grid Ratio of 8:1 – 85 lines/inch & a stainless steel Cassette Tray. The Bucky should travel the entire length of the table and should be locked at any desired position by an Electromagnetic lock.

#### VERTICAL BUCKY STAND:

- Vertical Bucky Stand with oscillating Grid of Ratio 8:1, 85 lines should be provided.
- The Bucky should moves up & down & is equipped with a stainless steel cassette tray.
- The stand should be floor-mounted type & can accommodate cassettes up to 14" X 17". The Bucky should be tilted in 6 steps of 15 degree Angle each for various Radiographs.

#### **POWER REQUIREMENT:**

The unit should be operable on 3 Phase, 440Volts AC 50Hz with line resist less than 0.4 Ohms. Line Regulation  $\pm 10\%$ .

#### **OTHER REQUIREMENTS:**

- The company should be ISO-9001: 2008, ISO-13485: 2012 certified.
- Unit should be approved by B.I.S. (Bureau of Indian Standards) for Mechanical & Electrical Safety.
- The unit should be approved by AERB.

- The company should have a local Service center.
- The company should have proven record of accomplishment in Govt. sector.
- The unit should be European CE Certified from notified body.

- 1. Demonstration mandatory at hospital premises at OEM cost.
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- 7. The equipment complies with the requirement of the Medical Device Directive of class I equipment and Electromagnetic compatibility, all supporting documents must be provided.
- 8. Equipment should have brand name / model number embossed/ etched on the equipment.
- 9. In case of technical snag/ failure/ breakdown, the response time for Inspection should be within 24 Hour and repair within 5 days, otherwise provide a service machine until the period of recovery of breakdown of the unit. Failing which will attract penal action as per the decision of the University (Uptime guarantee of 95%).
- 10. The page of technical bid should be numbered and checklist should be duly filled as per the annexures and all annexures should be in accordance with the format, otherwise it may be the reason for disqualification.
- 11. All the technical specifications accepted in the compliance statement must be supported by Original Literature from the firm/ O.E.M with Highlighting, Numbering & flagging as per below mentioned format for the compliance statement.

per bere	cr below mentioned for mile compliance statements			
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1				
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## (9) Technical Specifications of Bipolar Electro Surgical Unit/Cautery/Diathermy Machine

High End Electro Surgical Unit with Vessel Sealer Unit should be comprise of:

- 1. An integrated RF Electro Surgical Unit (For electrosurgical Cut & Coagulation modes for optimum effect of HF surgery)
- 2. Vessel Sealer (For sealing & dissection for vessels & tissues structures, during open and laparoscopic surgeries).
- A) Electro Surgical Unit should be microprocessor controlled, US-FDA & European Certificate marked in accordance with the medical devices directive (93/42/EEC) & Electro Surgical Unit should comply with the requirement of the medical device directive of class I equipment and electromagnetic compatibility.
- B) Electro Surgical Unit quoted should have very strong Installation base must be provided minimum 40 installation base in northern part of the country with Regional After Sales Service Center of the Original Equipment Manufacturer in the north region for 90 % uptime guarantee. In case of technical snag / failure / breakdown the response time for the inspection should be within 24 hours and repair within 05 days otherwise provide a service machine until the period of recovery of breakdown of the unit, failing which attracts penal action as per decision of institute / hospital.
- C) CMC Offered for the Quoted Equipment should be offered on Original Equipment Manufacturers Service Team letter head for further years & should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC Period (CMC offered by Distributor will not be considered).
- D) Special bipolar mode for coagulation of vascular tissue (Vessel Sealing) up to 7 mm with Reusable Hand instrument for open as well laparoscopic surgeries & should have FDA approval for 7mm Vessel.
- E) The system should have Monopolar Cut & Coagulation Mode, two Bipolar Modes with auto bipolar start & stop and Vessel fusion technology all integrated in one system. Should have 8 Cutting Modes & 8 Coagulation Modes
- F) The equipment should be micro controller based & should adjust the power to get the desired surgical effect on the tissue. All settings should be controlled by the machine and according to the tissue deliver. Power should be display on the screen with graph facility to show the deliver power.
- G) Should have Power and Voltage automatic regulation feature to prevent tissue damage and charring. The output voltage should be regulated in various levels.
- H) The System should have LCD Backlight adjustment for good visibility in operating room, patient plate monitoring facility, audiovisual alarm and deactivate output if contact between patient and patient plate is not proper to eliminate the risk of patient burns.
- Should have facility of connecting reusable contact quality Monitoring Return Electrode Pediatric & Adult with 100% washable footswitches ( for terminal cleaning & disinfection) – Monopolar & Bipolar
- J) The high End Electro Surgical Cautery Unit with Vessel fusion technology should be compatible with the integration system of OR mainly O.E.M's like Karl Storz, Olympus & De Vincy.
- K) The high End Electro Surgical Cautery Unit with Vessel fusion technology should be supplied along with essential accessories from same Original Equipment Manufacturer.
  - 1. Reusable patient plate Adult & Pediatrics with reusable patient plate cable = 02
  - 2. 100% Washable monopolar two pedal footswitch (for terminal disinfection)-2 nos.
  - 3. 100% Washable bipolar one pedal 100 % Washable footswitch (for terminal disinfection )-2 nos.
  - 4. Reusable Monopolar Electro Surgical Pencil 2 Units with different electrodes
  - 5. Reusable Bipolar forceps with Reusable cord 2 Units.

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
- 3. CMC offered for the quoted equipment must be on OEM letterhead for further years. (CMC offered on distributors/ Vendor letterhead will not be considered).
- 4. Installation process should be performed by OEM trained service engineer/ service representative on OEM's letter head/ service report, with a mandatory provision of providing preventive service visits of OEM trained service engineer/ service representative quarterly per year till completion of warranty period (i.e. 20 visits for first five years) and further quarterly visit (04 visits/ year) till the completion of CMC period.
- 5. The installation process must be completed by the OEM/ Service provider within 30 days of supply.
- 6. The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
- 7. The equipment complies with the requirement of the Medical Device Directive of class I equipment and Electromagnetic compatibility; all supporting documents must be provided.
- 8. Equipment should have brand name / model number embossed/ etched on the equipment.
- 9. In case of technical snag/ failure/ breakdown, the response time for Inspection should be within 24 Hour and repair within 5 days, otherwise provide a service machine until the period of recovery of breakdown of the unit. Failing which will attract penal action as per the decision of the University (Uptime guarantee of 95%).
- 10. The page of technical bid should be numbered and checklist should be duly filled as per the annexures and all annexures should be in accordance with the format, otherwise it may be the reason for disqualification.
- 11. All the technical specifications accepted in the compliance statement must be supported by Original Literature from the firm/ O.E.M with Highlighting, Numbering & flagging as per below mentioned format for the compliance statement.

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## (10) Technical Specifications of Bandage Instrument Set

# **Bidder Criteria**

1.	All Surgical Instruments should be European CE certified.
2.	All Surgical Instruments should meet criteria – ISO 9001: 2008, ISO 13485:
	2003, ISO 7153-1: 2016, ISO 14001: 2004 & ISO 18001: 2007 certified
	company.
3.	Company should have WHO GMP certificate must be enclosed with the
	tender.
4.	All Surgical instruments should be made of 4 series AISI 420 and AISI 410
	steel and certified copy must have to submit at the time of tender submission.
5.	All Surgical instruments/Micro Surgical Instruments must have stoneware
	coating, high surface hardness and anti-glaring surface for better vision.
6.	In case of Indian Manufacturer must have to submit their manufacturing &
	NSIC certificate.
7.	The surgical instrument's Manufacturer should provide demonstration as and
	when required.
8.	Bidder should submit original literature/Brochure of quoted model of surgical
	Instruments.
9.	The surgical instrument's Manufacturer should clearly mention: (A) warranty
	period (B) shelf life of Instruments © IFU (Instructions for users) of surgical
	instruments regarding recommended method of cleaning and sterilization of
	the instruments.
10.	The surgical instrument's Manufacturer should provide the details of service
	centre in state of U.P.
11.	All SS hollowware instruments should be of same parent company or same
	manufacturer and must be clearly mentioned in Original catalogue.
12.	All Instruments should have engraved logo of Govt Supply at the time of
	supplies.
13.	The surgical instrument's Manufacturer should provide the offer as per
	required surgical instrument list.
14.	List enclosed.

## LIST OF INSTRUMENTS —

SL.NO.	BANDAGE INSTRUMENT SET - ORTHOPAEDIC
1	MAYO DISSECTING SCISSOR STR 14.5CM
2	LISTER BANDAGE SCISSOR 14CM
3	LISTER BANDAGE SCISSOR 18CM
4	KOCHER HEMOSTAT FCPS FINE 1X2T STR 14CM
5	KOCHER HEMOSTAT FCPS FINE I X2T CVD 14CM
6	JOHNS-HOPKINS BULLDOG CLAMP CVD 5CM
7	DRESSING FORCEPS STANDARD STR 14.5CM
8	TISSUE FORCEPS IX2T STR 14.5CM
9	SCALPEL HANDLE NO 4
10	BUTTON-END PROBE DIA 2.0MM 14.5CM
11	GROOVED DIRECTOR 14.5CM
12	HYDROFIBBER IONIC SILVER PAD - 10X10 CM
13	Drum Sterilizer
	240MMX 165MM
	240MM X 240MM
	279MM X 127MM
	290MM X 290MM
	355MMX 127MM
	340MM X 240MM
	381MMX 305MM
14	STAINLESS STEEL CONTAINER SHOULD BE SIDE FILETER WITH HINGES
	SIZE; 600X300X260MM
	600X300X210MM
	600X300X160MM
	460X300X260MM
	460X300X210MM

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
- 3. CMC offered for the quoted equipment must be on OEM letterhead for further years. (CMC offered on distributors/ Vendor letterhead will not be considered).
- 4. Instruments should have brand name/ model number embossed/ etched on the equipment.
- 5. The page of technical bid should be numbered and checklist should be duly filled as per the annexures and all annexures should be in accordance with the format, otherwise it may be the reason for disqualification.
- 6. All the technical specifications accepted in the compliance statement must be supported by **Original** Literature from the firm/ O.E.M. with Highlighting, Numbering & flagging as per below mentioned format for the compliance statement.

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## (11) Technical Specifications of Electrolyte Machine

- 1. For analysis of Electrolytes in serum, plasma, urine and body fluids.
- 2. System should measure Na, K, Cl, Ca, and optional for Li & pH.
- **3.** Throughput atleast 60 sample/hour
- 4. Should be colour touch screen system with screen size above 5 inches"
- 5. Sample volume should be 100-200 micro-liters.
- 6. Auto Calibration Facility and provision for on demand calibration.
- 7. Quality control facility.
- **8.** Facility of flagging of abnormal results and user programmable ranges.
- 9. Standby mode: user controlled and automatically controlled.
- **10.** Memory for atleast 50000 samples.
- **11.** Built in printer for printing the data.
- **12.** Rs. 232 (standard serial port) should be available.
- **13.** Na, K, Ca, Cl, and optional for Li & pH Electrodes-02 each (1 standard and 1 spare)
- 14. Should have facility automatic reagents replacement warning
- **15.** Should be CE approved product.

## **Essential Criteria:-**

## Demonstration mandatory at hospital premises at OEM cost.

## (12) Technical Specifications of Spiro Meter

- 1. Ultrasonic flow sensor for TOTAL infection control
- 2. Easy to operate
- 3. Calibration free
- 4. Highest accuracy
- 5. Measures upto 63 parameters including F/V loop
- 6. Auto Interpretation
- 7. Runs from the USB port of any PC
- 8. Meets and Exceeds ATS/ERS Criteria
- 9. Bio calibration check feature
- 10. Ready to use GDT interfacing possibility.
- 11. In-and expiratory real-time curve.
- 12. Should not influence of humidity, barometric pressure, contamination.
- 13. Should be Auto QC
- 14. Should be multilingual
- 15. Sensor never ever in contact with sample
- 16. No cleaning, no maintenance
- 17. Extremely high accuracy for low flows (Resistance free measurements)
- 18. No down time.
- 19. Life time free software up gradation.
- 20. Should be FDA approval
- 21. Laptop with i5 processor, 2GB RAM, 500GB Hard drive and 14" TFT, with pre-loaded Windows and MS office and Acrobat reader for PDF files.

## (13) Technical Specifications of Homogenizer

- 1. High performance dispersing instrument for volumes from 1-2000ml (H2O) with digital speed display.
- 2. Wide speed range from 500-25,000 rpm that enables users to work at high circumferential speeds even with small rotor diameters.
- 3. Digital speed display.
- 4. Electronic speed control.
- 5. Electronic overload protection.
- 6. Stainless steel dispersing elements can be cleaned quickly and easily.
- 7. Plastic disposable dispersing elements are available in two sizes.
- 8. Error code display
- 9. Quiet operation
- 10. Motor rating input-800w
- 11. Motor rating output-500w
- 12. Volume range min (H2O)-0.001 ltr.
- 13. Volume range max. (H2O)-2 ltr.
- 14. Viscosity max. -5000mPas.
- 15. Speed range-500-25000 rpm.
- 16. Speed deviation-1%
- 17. Speed display-LED
- 18. Noise without element-75dB(A)
- 19. Extension arm diameter-13mm
- 20. Extension arm lenth-160mm
- 21. Process type-batch.
- 22. Permissible ON time-100%
- 23. Weight-2.5 kg.
- 24. Permissible ambient temperature 5-40 degree C.
- 25. Permissible relative moisture-80%
- 26. Protection class according to DIN EN 605291P20
- 27. Voltage-200-240V
- 28. Frequency-50/60hz.
- 29. Power input-800w

## (14) Technical Specifications of Thin Layer Chromatography Apparatus

Complete with IP/BP/USP standards having movable applicator with in-built thickness arrangement between 0.25 mm to 0.35 mm having following components:

- 1. Spreader (Applicator) made of anodized aluminium, with fixed thickness and width of 5 cm, 10 cm and 20 cm.
- 2. Perspex brass size 125 x 25 cm to support 5 glass plate of size 20 x 20 cm and two plates of size 20x5 em.
- 3. Plate store rack aluminium for ten 20x20 plates.
- 4. Spotting template Perspex.
- 5. Developing tank with lid
- 6. TLC plate set 20x20 cm or 20x10 cm
- 7. Micro-Pipette 5 microliter and 10 microliter
- 8. Scriber for making lines.
- 9. Glass sprayer with rubber bellow
- 10. TLC plate store cabinet
- 11. Special drying cabinet with inspection window
- 12. Dessicator cabinet
- 13. U.V. Chromatography inspection cabinet with two U.V. tubes 254 and 365 mm
- 14. All consumables required for installation and standardization of system to be given free of cost.
- 15. Power Supply: 230V +/-10%, 50 Hz
- 16. Should be FDA/CE/BIS approved product.
- 17. Manufacturer should have ISO certification for quality standards.

## (15) Technical Specifications of Deep Fridge -20°C

- 1. Upright freezer with left or right-hand single door opening.
- 2. Made of sturdy galvanized material and internal casing of polished stainless steel.
- 3. Operating temperature of  $-20^{\circ}$ C to  $-30^{\circ}$ C.
- 4. Capacity -1000 litres.
- 5. CFC and HCFC refrigerant free, air-cooled hermetic compressors with dual condenser fans.
- 6. Fast free switch.
- 7. Microprocessor controlled temperature and other alarms.
- 8. Mounted on four lockable castors.
- 9. Touch pad data entry and digital display of all functions.
- 10. Key operated main switch, battery-powered independent operating temperature and high/low limit alarm functions for high low temp  $\pm 10$  K to set temperature, automatic voltage boost to compensate for low voltage.
- 11. On-board power monitoring with display of incoming voltage.
- 12. Heated door sealing sturdy inner doors and minimum of three independent inner-compartments.
- 13. High density door insulation, door provision for padlock.
- 14. Battery backup.
- 15. Provision for vacuum release assembly for rapid opening of door for re-entry.
- 16. 230V AC, 50 Hz cycle, voltage stabilizer with automatic switching or facility.
- 17. ISO9001 certified or equivalent.

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
- 3. CMC offered for the quoted equipment must be on OEM letterhead for further years. (CMC offered on distributors/ Vendor letterhead will not be considered).
- 4. Installation process should be performed by OEM trained service engineer/ service representative on OEM's letter head/ service report, with a mandatory provision of providing preventive service visits of OEM trained service engineer/ service representative quarterly per year till completion of warranty period (i.e. 20 visits for first five years) and further quarterly visit (04 visits/ year) till the completion of CMC period.
- 5. The installation process must be completed by the OEM/ Service provider within 30 days of supply.
- 6. The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
- 7. The equipment complies with the requirement of the Medical Device Directive of class I equipment and Electromagnetic compatibility; all supporting documents must be provided.
- 8. Equipment should have brand name / model number embossed/ etched on the equipment.
- 9. In case of technical snag/ failure/ breakdown, the response time for Inspection should be within 24 Hour and repair within 5 days, otherwise provide a service machine until the period of recovery of breakdown of the unit. Failing which will attract penal action as per the decision of the University (Uptime guarantee of 95%).
- 10. The page of technical bid should be numbered and checklist should be duly filled as per the annexures and all annexures should be in accordance with the format, otherwise it may be the reason for disqualification.
- 11. All the technical specifications accepted in the compliance statement must be supported by **Original** Literature from the firm/ O.E.M with Highlighting, Numbering & flagging as per below mentioned format for the compliance statement.

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## (16) Technical Specifications of Electrocautery

- A) Electro Surgical Unit should be microprocessor controlled, US-FDA & European Certificate marked in accordance with the medical devices directive (93/42/EEC) & Electro Surgical Unit should comply with the requirement of the medical device directive of class I equipment and electromagnetic compatibility.
- B) Electro Surgical Unit quoted should have very strong Installation base must be provided minimum 40 installation base in northern part of the country with Regional After Sales Service Center of the Original Equipment Manufacturer in the north region for 90 % uptime guarantee. In case of technical snag / failure / breakdown the response time for the inspection should be within 24 hours and repair within 05 days otherwise provide a service machine till the period of recovery of breakdown of the unit, failing which attracts penal action as per decision of institute / hospital.
- C) CMC Should be offered on Original Equipment Manufacturers Service Team letter head for further years (CMC offered by Distributor will be not considered)
- D) The system should have Monopolar Cut & Coagulation Modes with micro controller based technology & should adjust the power to get the desired surgical effect on the tissue. All settings should be controlled by the machine and according to the tissue deliver.
- E) Should have Power and Voltage automatic regulation feature to prevent tissue damage and charring. The output voltage should be regulated in various levels.
- F) The System should have LCD Backlight adjustment for good visibility in operating room, patient plate monitoring facility, audiovisual alarm and deactivate output if contact between patient and patient plate is not proper to eliminate the risk of patient burns.
- G) Should have facility of connecting reusable contact quality Monitoring Return Electrode Pediatric & Adult with 100% washable footswitches ( for terminal cleaning & disinfection) – Monopolar & Bipolar
- H) The Electro Surgical Unit should be supplied along with essential accessories from same Original Equipment Manufacturer.
  - 1. Reusable patient plate Adult & Pediatrics with reusable patient plate cable = 01
  - 2. 100% Washable monopolar Two pedal footswitch (for terminal disinfection)-1no.
  - 3. 100 % Washable bipolar One pedal footswitch (for terminal disinfection)-1no
  - 4. Reusable Electro Surgical Monopolar Pencil 2 Unit with different electrodes (10 nos)
  - 5. Reusable Bipolar forceps with Reusable cord 1 Unit.
  - 6. Universal adaptor for attaching several Laparoscopic hand instruments -1no.
  - 7. Should be supplied along with post-surgical closure pads.

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
- 3. CMC offered for the quoted equipment must be on OEM letterhead for further years. (CMC offered on distributors/ Vendor letterhead will not be considered).
- 4. Installation process should be performed by OEM trained service engineer/ service representative on OEM's letter head/ service report, with a mandatory provision of providing preventive service visits of OEM trained service engineer/ service representative quarterly per year till completion of warranty period (i.e. 20 visits for first five years) and further quarterly visit (04 visits/ year) till the completion of CMC period.
- 5. The installation process must be completed by the OEM/ Service provider within 30 days of supply.
- 6. The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
- 7. The equipment complies with the requirement of the Medical Device Directive of class I equipment and Electromagnetic compatibility, all supporting documents must be provided.
- 8. Equipment should have brand name / model number embossed/ etched on the equipment.

- 9. In case of technical snag/ failure/ breakdown, the response time for Inspection should be within 24 Hour and repair within 5 days, otherwise provide a service machine until the period of recovery of breakdown of the unit. Failing which will attract penal action as per the decision of the University (Uptime guarantee of 95%).
- 10. The page of technical bid should be numbered and checklist should be duly filled as per the annexures and all annexures should be in accordance with the format, otherwise it may be the reason for disqualification.
- 11. All the technical specifications accepted in the compliance statement must be supported by **Original** Literature from the firm/ O.E.M with Highlighting, Numbering & flagging as per below mentioned format for the compliance statement.

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## (17) Technical Specifications of PROCTOSCOPE

Should be distal end of tube angled.

Should be all metal construction

## (18) Technical Specifications of UPPER GI & LOWER GI ENDOSCOPY SET

### SPECIFICATION FOR LOWER GI ENDOSCOPE

### VIDEO PROCESSOR

- 1. Should be compatible with Analog, HD-SDI and DVI output & 16:9 & 16:10 output for a HDTV monitor should be available.
- 2. Should contain the long-life LED light source.
- 3. Equipped with high resolution HDTV Imaging capacity.
- 4. Compact, lightweight (10-11 kg) and ergonomically designed Narrow Band Imaging capacity for compatibility with NBI Video scopes.
- 5. Equipped with one touch connection of scopes.
- 6. Portable Memory & USB Slot for image recording.
- 7. Automatic IRIS control & automatic white balance.
- 8. Equipped with memory back up for settings & Lithium battery.
- 9. Should have pre freeze function for image stabilization

### **VIDEO COLONOSCOPE:**

Should have following specifications:

- 1. Lighter and possess HD resolution image quality.
- 2. Fully immerssible in disinfectant solution.
- 3. Three or more no. of remote control switches on control body.
- 4. Compatible with leakage testing device with its airflow and pressure regulation through light source's air pump.
- 5. Should have capability of Band Imaging (NBI)

5. Should have capability of E	fund 1	ina	Sing (10D)
Field of view	:		140 degree or more
Direction of view			: 0 degree, forward viewing
Depth of field	:		2 to 100 mm or better
Distal end outer diameter			: 12.8 mm or less
Insertion tube outer diameter	:		12.8 mm or less
Tip bending rage		:	Up 180deg, Down 180deg, Right 160 deg, Left
			160 deg
Working length			: 1680 mm or more
Channel inner diameter			: 3.7 mm or more
Minimum Visible distance of	:		5 mm or closer from distal end.
Instrument used thru channel			
STANDARD ACCESSORIES			
White cap holder	-		1
Foot Holder	-		1
Scope cable holder	-		1
Keyboard	-		1
Portable memory (2GB)	-		1
Keyboard cover	-		1
Water Container	-		1
Operation Manual	-		1
White balance cap	-		1

#### NOTE:

- Manufacturer Trolley of same make.
- Monitor- HD Medical Grade 21 inch of same make.
- Compatible Biopsy forceps of same make.

### SPECIFICATION OF UPPER GI ENOSCOPE

### VIDEO PROCESSOR:

- 1. Should be compatible with Analog, HD-SDI and DVI output & 16:9 & 16:10 output for a HDTV monitor should be available.
- 2. Should contain the long-life LED light source.
- 3. Equipped with high resolution HDTV Imaging capacity.
- 4. Compact, lightweight (10-11 kg) and ergonomically designed.
- 5. Narrow Band Imaging capacity for compatibility with NBI Video scopes equipped with one touch connection of scopes.
- 6. Portable Memory & USB Slot for image recording.
- 7. Automatic IRIS control & automatic white balance equipped with memory back up for settings & Lithium battery.
- 8. Should have pre freeze function for image stabilization

### VIDEO GASTRO SCOPE:

Should have following specifications:

- 1. Lighter and possess HD resolution image quality.
- 2. Fully immerssible in disinfectant solution.
- 3. Four or more no. of remote control switches on control body.
- 4. Compatible with leakage testing device with its airflow and pressure regulation through light source's air pump.
- 5. Should have capability of Band Imaging (NBI)

1	2	
Field of view	:	140 degree or more
Direction of view		: 0 degree, forward viewing
Depth of field	:	2 to 100 mm or better
Distal end outer diameter		: 9.2 mm or less
Insertion tube outer diame	eter :	9.2 mm or less
Tip bending rage		: Up 210deg, Down 90deg, Right 100 deg, Left 100 deg
Working length		: 1030 mm or more
Channel inner diameter		: 2.8 mm or more
Minimum Visible distance	e of :	3 mm or closer from distal end.
Instrument used thru chan	nel	
	DIDA	

### STANDARD ACCESSORIES

White cap holder	-	1
Foot Holder	-	1
Scope cable holder	-	1
Keyboard	-	1
Portable memory (2GB)	-	1
Keyboard cover	-	1
Water Container	-	1
Operation Manual	-	1
White balance cap	-	1
NOTE.		

#### NOTE:

- 1. Manufacturer Trolley of same make
- 2. Monitor- HD Medical Grade 21 inch of same make.
- 3. Compatible Biopsy forceps.

#### **Essential Criteria:**

1. Demonstration mandatory at hospital premises at OEM cost.

- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
- 3. CMC offered for the quoted equipment must be on OEM letterhead for further years. (CMC offered on distributors/ Vendor letterhead will not be considered).
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- 5. The installation process must be completed by the OEM/ Service provider within 30 days of supply.
- 6. The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
- 7. The equipment complies with the requirement of the Medical Device Directive of class I equipment and Electromagnetic compatibility; all supporting documents must be provided.
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## (19) Technical Specifications of PORTABLE VENTILATOR

- 1. Should be time-cycled volume constant ventilator operating on mains, battery or ambulance/car battery. Battery backup should be for minimum of 8 hours with touch screen facility with rotary knob also.
- 2. Ventilator should be of low weight (not more than 3.6 kg) and tropicalized with operation range from -20 to + 50 degrees centigrade.
- 3. Should have integrated EL display for display of set and expired data as below :
  - Tidal volume
  - Rate
  - PEEP (integrated in main unit)
  - Inspiratory Pressure
  - Flow trigger
  - Pressure Support
  - FiO2
- 4. Should have following ventilation modes :
  - IPPV(CMV)
  - Assist Control
  - SIMV
  - CPAP
- 5. Should have both audio & visual alarms for:
  - High & Low Pressure
  - High pressure
  - Apnea
  - Setting errors
  - Low battery
  - Low pressure supply
- 6. Standard Scope of supply to include the following :
  - Main unit with inbuilt battery
  - Breathing hose set with expiratory valve and flow sensor
  - Bracket for fixing on trolley / bed rail
  - AC-DC adaptor
  - Oxygen high pressure hose
  - Test Lung
  - Instruction Manual
- 7. Quality Standards and Support requirements
  - The offered unit should have European CE.
  - The unit should comply with relevant IEC Certification
  - Airworthiness RTCA DO-160 D, section 7,8,21
  - EC Directive 93/42/EEC Class IIb
  - Electromagnetic compatibility ICE/EN 60601-1-2:2001 and ISO 10651-3
  - Indian subsidiary/ dealer should have nationwide network, support offices and must be also ISO 9001 certified.
- 8. Optional features/ requirements:
  - NIV
  - Pressure support
  - Cable for connection with ambulance/ car battery.
  - ETCO2
  - CPR MODE

#### Essential Criteria:

1. Demonstration mandatory at hospital premises at OEM cost.

- : 100ml 2 litres. : 2 - 50 breaths/min.
- : 0 to 20 mbar/cmH2O
- :-20-60 cmH2O
- : 1 15 lpm
- : 0 35 cmH2O : 40% or 100%
- . 40/0 01 100/0

- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
- 3. CMC offered for the quoted equipment must be on OEM letterhead for further years. (CMC offered on distributors/ Vendor letterhead will not be considered).
- 4. Installation process should be performed by OEM trained service engineer/ service representative on OEM's letter head/ service report, with a mandatory provision of providing preventive service visits of OEM trained service engineer/ service representative quarterly per year till completion of warranty period (i.e. 20 visits for first five years) and further quarterly visit (04 visits/ year) till the completion of CMC period.
- 5. The installation process must be completed by the OEM/ Service provider within 30 days of supply.
- 6. The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
- 7. The equipment complies with the requirement of the Medical Device Directive of class I equipment and Electromagnetic compatibility; all supporting documents must be provided.
- 8. Equipment should have brand name / model number embossed/ etched on the equipment.
- 9. In case of technical snag/ failure/ breakdown, the response time for Inspection should be within 24 Hour and repair within 5 days, otherwise provide a service machine until the period of recovery of breakdown of the unit. Failing which will attract penal action as per the decision of the University (Uptime guarantee of 95%).
- 10. The page of technical bid should be numbered and checklist should be duly filled as per the annexures and all annexures should be in accordance with the format, otherwise it may be the reason for disqualification.
- 11. All the technical specifications accepted in the compliance statement must be supported by Original Literature from the firm/ O.E.M with Highlighting, Numbering & flagging as per below mentioned format for the compliance statement.

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## (20) Technical Specifications of Haemodialysis Machine

S.No.		Specification Required
	General Data	
01. Special Feature		Should have central allocation of all functions for easy handlings of
		treatment parameters.
		Should have traffic light clearly indicates the treatments status.
		Built in tray for user convenience
	Electrical Data	
02.	Power Supply	230 V ± 10%, 47-63 Hz.
03.	Current Consumption	Max. 9A
04.	Arterial Blood Pump	
05.	Blood Flow Range	15 to 600 mL/min in 8mm bloodline systems
06.	Air bubble catcher	Should have ultrasound transmission, additional optical monitoring in
	detector	venous clamp for detecting bubble & unbreakable
07.	Heparin Pump	Delivery range, 0 to 10 mL/h, Syringe size: 20 ml.
08.	Dialysis Fluid flow	Selectable, 300-500-800 mL/min
	range	
09.	Dialysis Fluid	Selectable, 35°C - 39°C
	temperature	
10.	Dialysis Fluid	Should have range from 12.08 to 15.7 ms/cm (25°C)
	Conductivity	
11.	Ultrafiltration	Should have UF rate of 0 to 4.00 L/h
12.	Dialysis Adequacy	Should have Online Clearance Monitor (Kt/V)
13.	Disinfection and	Machine should have built – in device for measurement and monitor of
	cleaning Monitor	effective urea clearance (K), dialysis dose (Kt/V) and plasma sodium
		(Na) automatically during treatment with temperature flow of $37^{\circ}C / 600$
		mL/min and hot rinse at temperature flow of 84°C / 450 mL/min
14.	Patient Card Reader	Should have provision for integrated Patient Card for easy accessibility,
	cum Charger	automated data management.
		Should allow rapid retrieval of recent treatment prescription.
		It should ensure patient safety due to reduced inputs errors.
15.	Bicarbonate dry	Must have inbuilt dry bicarbonate cartridge for online bicarb preparation.
	concentrate	
16.	Dialysis Fluid Filter	Must have Polysulfone ultrapure dialysate fluid Endotoxin filter.
15	System	
17.	Battery Back up	Machine should have integrated battery system for at least 15-20 min
10		back up.
18.	Blood Pressure Monitor	Machine should be provided with integrated blood pressure monitoring.
19	Service Support	Company should have excellent service back up with resident engineer
20	FC Certification	Machine should have EC Certificate for quality and safety
20.	Air Detector assembly	Air Detector assembly should be unbreakable
<i>L</i> 1.	An Delector assembly	An Detector assembly should be unbleakable.

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
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- 5. The installation process must be completed by the OEM/ Service provider within 30 days of supply.
- 6. The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
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## (21) Technical Specifications of CRRT

Sr. no.	Specification Required
1.	The system shall be an acute dialysis system for the treatment of acute renal failure and capable of
	providing the following therapies:-
	Slow Continuous Ultrafiltration (SCUF)
	Continuous Venovenous Hemofiltration (CVVH)
	High-Volume Continuous Venovenous Hemofiltration (HV-CVVH)
	Continuous Venovenous Hemodiafiltration (CVVHDF)
	Continuous Venovenous Haemodialysis (CVVHD)
	Membrane Plasma Separation (MPS)
	Hemoperfusion (HP)
2	The system should contain four pumps to control the flow rates of Blood, filtrate, substitute and
	Dialysate.
3.	The system should contain integrated syringe pump incorporated in the extracorporeal blood circuit to
	permit continuous heparinization of the blood.
4.	The system should contain two integrated ceramic heaters to prevent loss of patient body heat after
	prolonged treatment.
5	The system should contain four precision and stable scales for the monitoring of the volumes of the
	total filtrate, Substitute and dialysate. Each scale Maximum loading capacity: 12kg.
6.	The system should be allowing the customer to select post or pre dilution on CVVH & HV-CVVH
	therapies.
7.	The system should be avoid ECG interference.
8.	Graphical User Interface
8.1	Keyboard function keys are provided.
8.2	An enlarged and high resolution color screen for dialysis data display:-
	High resolution LCD color display
	Its brightness is adjustable adaptively to the illumination of the environment.
8.3	The keyboard function keys and LCD color display can provide an immediate overview of the machine
	status for treatment supervision. A number of treatment parameters can be shown upon different pop-
	up menus:-
	Cumulative graphical display of treatment data and physiological trends including Pressure graphics.
8.4	There are 6 selectable programming masks for major treatment and maintenance settings:-
	Treatment modes Menu
	Preparation Menu
	Treatment parameter Menu
	Treatment Menu
	End of treatment Menu
	System parameters Menu
8.5	Informative and context related operator guidance, warning messages and alarm reports.
9.	The system must be user friendly. The system must with the following features:-
	On-screen user guidance with step-by-step screen instruction. Integrated help function. Auto priming
	of the filter, extracorporeal blood and fluids and highly preferred so that therapy performing by non-
	specialized nursing staff is possible. Flexible disposable with cassette system and filter.
10	Safety Feature:-
	High Degree of protection against electric shock. The equipment shall have a ceramic heater system
	that the Degree of protection against electric shock: Type CF (which Safe for cardiac application)
	Start-up test for every treatment.
	The equipment shall perform a self-test before every treatment to ensure all components are working
	properly.
10.1	Battery Backup:-
	The equipment shall be able to operate and monitor the extracorporeal circuit without interruption for
	at least 15 minutes battery backup in case of AC power failure.

10.2	Self-test during treatment:-		
	The equipment shall perform a self-test during treatment automatically in a fix period not less than one		
	hour to ensure all the components are working properly.		
ii	Performance Requirements		
1	Blood Circuit Vascular Access Double Needle or dual-lumen catheter		
	Blood Pump		
1.2.1	Flow rate range: 10-500ml/min for normal mode. (MPS and HP: 10-300ml/min) (Paediatric: 10-100		
	ml/min) in 10ml/min increment.		
1.2.2	Control Accuracy:±10%		
1.2.3	It shall be easy and safe to thread with blooding diameter 6.1mm (optional also 3.1 mm)		
1.2.4	Automatic set up and priming is preferred		
1.2.5	An emergency hand crank shall be provided for returning blood to patient when electrical power is		
	lost. Direction of rotation shall be limited or visually indicated.		
	Substitute Pump		
1.3.1	Delivery range: 600-9600 ml/hr. in 50 ml/hr. increment.		
1.3.2	Accuracy:±10%		
	Dialysate flow Rate		
1.4.1	Delivery range : 600-4200 ml/hr in 50 ml/hr. increment.		
1.4.2	Accurcy±10%		
	Ultrafiltration flow Rate		
1.5.1	Delivery range: 0-1800ml/hr. in 10 ml/hr. increment.		
1.5.2	Accuracy : ±10% 1.6 Anticoagulant Flow Rate (Heparin Pump)		
1.6.1	Infusion rate: 0-10 ml/hr in 0.1 ml/hr increment.		
1.2.2	Accuracy: ±5%		
1.6.3	Positive and negative extracorporeal circuit pressure shall not affect the infusion rate.		
1.6.4	Bolus injected 0.1 to 5 ml in increment of 0.1 ml (the maximum bolus amount to be injection is preset		
	to 5 ml. This parameter can be set to smaller volumes in the System parameter screen)		
1.7	Pressure Monitoring and Alarms		
1.7.1	Arterial pressure monitoring		
1.7.1.1	Range: -280 to + 300 mmHg.		
1.7.1.2	"Accuracy: $\pm 10 \text{ mmHg}$		
1.7.2	Arterial pressure alarm		
1.7.2.1	Alarm window width: 20 to 200 mmHg, size and position adjustable around actual pressure.		
1.7.2.2	Alarm Limit can spread and be reset automatically on adjustment of blood flow.		
1.7.3	Venous pressure monitoring.		
1.7.3.1	Range: -80 to 500 mmHg.		
1.7.3.2	Accuracy: ± 10 mmHg.		
1.7.4	Venous Pressure alarm		
1.7.4.1	Alarm window width: 20 to 200 mmHg, size and position adjustable around actual pressure.		
1.7.4.2	Alarm Limit can spread and be reset automatically on adjustment of blood flow		
1.7.5	Transmembrane pressure monitoring		
1.7.5.1	Range: -60 to +520 mmHg.		
1.7.5.2	Accuracy: ±10 mmHg.		
1.7.6	Transmembrane pressure alarm		
1.7.6.1	1 Alarm window width: 20 to 200 mmHg, size and position adjustable around actual pressure.		
1.7.6.2	In MPS the upper alarm limited to 100 mmHg M		
1.7.7	Pressure before filter monitoring		
1.7.7.1	Measuring Range; 0 to + 750 mmHg.		
1.8	Air Detection		
1.8.1	Alarm shall be activated for air bubbles and micro bubbles over the entire blood flow range.		
1.8.2	On detection of excessive air on the venous line, the blood pump shall be stopped and the venous		
1.0.2	return line shall be clamped at a point below the air detector.		
1.8.3	Ultrasonic air sensor shall be used for preventing being affect by ambient light.		
1.9	Substitute solution and dialysate Temperature control and alarm limit of ceramic Heater		
1.9.1	Control range: OII, 55.0 to 59.0 C in 0.5 C increment.		

1.9.2	Alarm limit: 33.5°C to 40°C 1.10. Blood Leak Detection.
1.10.1	Alarm shall be activated for response threshold smaller than or equal 0.5 ml blood loss per minute at a
	haematocrit of 32.
1.10.2	The response threshold is related to the maximum filtrate flow. The initiation of a blood leak alarm
	also depends on the ultrafiltration rate and the size of the membrane rupture in the filter.
2	Fluid Balancing and Information Display.
2.1.1	The system must be an automatic fluid balancing system that controls and monitors patient weight lost,
	total filtrate volume, Substitutive solution and dialysate volume.
2.1.2	All the above mention volumes, filter life, Anticoagulation volume should be continuously shown and
	updated in display screen in orderly fashion for ease of recording and patient safety.
2.1.3	When fluid bags are replaced, the system should automatically account for the new bag weights.
2.1.4	Automated self-test for scales in hourly shall be provided ensuring safety.
3	Machine will be prompt the acknowledge message to end user on last 5 minutes when the substitute
	bag tend to empty.
4	All consumables for 100 Treatments will be provided with each machines
5	Supplier must be local service support at consignee place

#### Essential Criteria:

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
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## (22) Technical Specifications of Portable OT Light

- 1. Domo: 500 mm Diameter
- 2. Light Intensity: 80,000 LUX
- 3. Colour Temerature:  $4300 \pm 10\%$
- 4. Field Diameter; 150-200 mm
- 5. Halogen Bulb: 1 x 24V
- 6. Input: 220 V AC, 50/60 Hz
- 7. Height Adjustment: 1200 mm maximum
- 8. Dichroic Reflector Dimension; 400 mm
- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
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## (23) Technical Specifications of Manikin

- It should be Male Multi-Venous Training Arm Kit maniquin with complete IV Therapy Training kit which includes a full-size right arms with replaceable skin and veins designed for peripheral intravenous therapy.
- It should have the following Features:
- Anatomically accurate full arms model.
- Rotation at deltoid for easier anterior and posterior vein access
- Multiple injection sites for IV insertion
- Dorsal veins of hand (3).
- Median Vein.
- Basilic Vein.
- Cephalic Vein.
- Realism of the human arm in appearance, feel and resistance at puncture sites.
- Palpable veins enable site selection and preparation.
- Subcutaneous and intramuscular injections may be performed in the deltoid.
- Infusible veins allow peripheral therapy with IV bolus or push injection method
- Realistic model for practice of intramuscular injection.
- Trainees can feel and confirm the Skelton as required for Measurement.
- Injection site corresponding to Clark's point measurement method.
- Facilitate to perform syringe infusion.
- Similar texture of the muscle and skeleton as of a human body and should help in selecting the correct region and angle for injection.
- Injected solution should be drained out by the drainage tube.
- The sensation of needle insertion should be very realistic.
- Supplied with stand for giving lateral injection in supine position
- Replaceable skin and vein system ensure longevity of model
- Should also have the facility to for training of other roots of drug administration if available.

## (24) Technical Specifications of Lab Centrifuge

Centrifuge digital, maximum speed 5200 RPM. Microprocessor base square MS body duly powder coated. Double walled light weight ABS lid. Fitted with microprocessor base 2 lines 16 characters LCD panel for 0-59 minutes countdown timer, digital rpm meter and programmable speed controller. Supplied with 8x15 ml. Swing Out Head.

#### Annexure-B

## (25) Technical Specifications of BiPap

- **1.** Non Invasive Ventilator having invasive application capabilities for Adult and Paediatric usage (above 15 Kgs).
- 2. It should be a light & compact device combining unique latest NIV features with simplicity in use.
- **3.** Modes of Ventilation: S/T (Spontaneous/Timed), PAC (Pressure Assisted Control), CPAP (Continuous Positive Airway Pressure), S (Spontaneous), T (Timed), Volume Assured Pressure Support (to ensure Alveolar ventilation).
- 4. Should incorporate latest algorithms for leak compensation and synchronization. Both should work together to provide control and flexibility to improve ventilation, comfort and sleep; better disease management, increased patient comfort and therapy acceptance (patient's breathing 'in sync' with their device.
- **5.** It should have colour screen for real-time monitoring to provide essential information including simultaneously viewed flow and pressure curves, the Ti-bar graph to fine-tune ventilation, and SpO2 and FiO2 monitoring.
- **6.** The machine should have a choice of disease-specific preset values Defaults (for obstructive, restrictive, normal lungmechanics and obesity hypoventilation) based on commonly used clinical values to help the users for optimising settings.
- 7. Should have built in internal battery for minimum 2 hours of back up time.
- 8. Should include user adjustable alarms and essential non-adjustable, fixed alarms for patient safety.
- **9.** Should have oxygen inlet port to accept higher flow up to 30 L/min of oxygen to achieve a highFiO2 with built in FiO2 monitoring.
- **10.** Should have in built data download capability for all para including SpO2 and FiO2.
- **11.** It should also provide patient reminders, such as filter and mask replacements.
- **12.** The NIV should comply with following technical specifications:

Pressure range	:	IPAP: 2–40 cm H2O&EPAP: 2–25 cm H2O		
Ti-Control setting	:	Ti Max 0.1–4 sec & Ti Min 0.1–Ti Max		
Respiratory Rate	:	5–55 bpm		
Rise Time	:	Min. 130–900 m.sec (approx.)		
Trigger and Cycle	:	Min. 5 sensitivity settings.		
Adjustable alarms	:	High Leak, Low Minute Ventilation, High Pressure,		
		Low Pressure, Low / High Respiratory Rate, Apnoea,		
		Low / High FiO2, Low SpO2, Non-vented mask		
Standard fixed alarms	:	Circuit disconnected, overpressure, Blocked tube, internal		
		battery empty.		
Weight	:	Less than 4 Kgs.		
Air filters	:	Electrostatic fibre mesh.		
Air outlets	:	Compatible with ISO 5356–1:2004		
Power supply	:	AC 100–240V 50–60Hz,		
Device DC Input	:	24 V / 3A		

**13.** Should be European CE & FDA certified.

Page 1 of 2

- 14. Should be supplied with autoclavable patient circuit, Oxygen connector, disposable full face mask (small & medium) 1 each, Reusable / Autoclavable mask (small & medium) 1 each, Fio2 & Spo2 monitoring accessories.
- **15.** Company has to provide training to all the staff, as & when required.
- **16.** All the attached (including irreparable items) accessories must be repaired/ replaced, to take care of BIPAP during warranty/Guarantee period to ensure proper and uninterrupted functioning without any extra cost.

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
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## (26) Technical Specifications of Fluid warmer

- 1. The Equipment should have Dry Heat Infrared Technology.
- 2. The equipment-desired temperature should be reached less than 40 seconds and suitable for all application.
- 3. The Equipment should have selectable temperature range  $32^{\circ}$  to  $39^{\circ}$ c.
- 4. The equipment should have interactive on board LCD display system which displays information about the rate of infusion, total volume infused, real temperature of fluid.
- 5. The equipment should have flow rate up 650ml/min to 1100ml/min.
- 6. The equipment should have high levels of safety from air embolism by integrating one ultrasonic air detection sensor.
- 7. The equipment should have two-pressure chamber.
- 8. The equipment should be supplied with 50 disposables sets with Max. Flow of 650 ml/min with backflow valve.
- 9. Meets all AABB Standards for blood warming.
- 10. The equipment should have US FDA and CE European Certificate.

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
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#### Annexure-B

## (27) Technical Specifications of Defibrillator

- 1. The machine should have facility for ECG monitoring, Manual Defibrillation (external & internal), AED and transcutaneous external pacing for adult and paediatric use
- 2. The unit should have facility of synchronized cardioversion
- 3. It should have Latest Bi Phasic Technology with Energy Selection from 1 Joule to 200 Jules.
- 4. It should have at least 5" Colour TFT Display.
- 5. It should have five Lead ECG Display.
- 6. It should have Compact Design Weight should be Less Than 8 KG.
- 7. It Should have Powerful battery Backup (60 Shocks of 200 Jules) on Fully Charge battery
- 8. It should have Shock proof for Transport use.
- 9. It should have Thermal Recorder for ECG Recording.
- 10. It should have 72 hours of Trend Memory and up to 1000 Event Storage for a Patient.
- 11. It should have Less Than 5 second for Charging 200 Jules for Quick Shock.
- 12. It should have AED & Non-invasive pacing (Transcutaneous) with Default configuration Meets 2015 AHA Guidelines.
- 13. It should Record for Marked Events, Charge, Shock and Alarm.
- 14. It should have inbuilt SPO2&NIBP or facility of upgrading to these facilities.
- 15. The Machine must be USFDA & European CE Approved.

- 1. Demonstration mandatory at hospital premises at OEM cost.
- 2. CMC offered for the quoted equipment should not be more than 5% of the quoted model with not more than 5% escalation per year after completion of CMC period.
- 3. CMC offered for the quoted equipment must be on OEM letterhead for further years. (CMC offered on distributors/ Vendor letterhead will not be considered).
- 4. Installation process should be performed by OEM trained service engineer/ service representative on OEM's letter head/ service report, with a mandatory provision of providing preventive service visits of OEM trained service engineer/ service representative quarterly per year till completion of warranty period (i.e. 20 visits for first five years) and further quarterly visit (04 visits/ year) till the completion of CMC period.
- 5. The installation process must be completed by the OEM/ Service provider within 30 days of supply.
- 6. The accessories/ consumables utilized during the period of installation process should be taken care FOC by OEM/ Service provider.
- 7. The equipment complies with the requirement of the Medical Device Directive of class I equipment and Electromagnetic compatibility, all supporting documents must be provided.0
- 8. Equipment should have brand name / model number embossed/ etched on the equipment.
- 9. In case of technical snag/ failure/ breakdown, the response time for Inspection should be within 24 Hour and repair within 5 days, otherwise provide a service machine until the period of recovery of breakdown of the unit. Failing which will attract penal action as per the decision of the University (Uptime guarantee of 95%).
- 10. The page of technical bid should be numbered and checklist should be duly filled as per the annexures and all annexures should be in accordance with the format, otherwise it may be the reason for disqualification.
- 11. All the technical specifications accepted in the compliance statement must be supported by **Original** Literature from the firm/ O.E.M with Highlighting, Numbering & flagging as per below mentioned format for the compliance statement.

S. No.	Technical Specification	Compliance Yes / No	Page No. in the proposal submitted where documentary evidence is enclosed as per tender Specs with
	•		highlighting, Numbering & flagging
1			
2			

### **BOQ for Items/Equipments in Indian Currency**

Sr. no.	Description		
1	e-bid Notice No. RMLIMS/MM(eq)/2019-20/2460 dated 19.09.2019		
2	Name of the equipment/item:-		
3	OEM Name/Make		
4	Model no.		
5	Equipment/Items HSN code no.		
6	Quoted unit PRICE IN INR		
	(exclusive of all taxes)		
	(with 05 years unconditional warranty)		
7	GST value or % as applicable (on sr. no. 06)		
8	Standard Accessories if required as per tender specification in INR with HSN		
0	code		
	(exclusive of all taxes)		
	(with 05 years unconditional warranty)		
9	GST value or % as applicable		
10	Total Equipment Price + Standard Accessories Amount (inclusive GST)		
	(Sr. no. 6+7+8+9)		
11	CMC (From 6th to 10th Year)		
12	6 <sup>th</sup>		
13	7 <sup>th</sup>		
14	$8^{ ext{th}}$		
15	9 <sup>th</sup>		
16	10 <sup>th</sup>		
17	Total CMC Cost		
18	GST value or % on CMC ( as applicable)		
19	Total CMC Price + GST		
20	[Total Amount + CMC with GST (6 <sup>th</sup> to 10 <sup>th</sup> yrs) in INR]		
	(Sr. no 10+19)		
Note:- All fields and columns of price bid must compulsorily be filled.			

#### **BOQ for Items/Equipments in Foreign Currency**

Sr.	Description	
1	E-bid notice no. RMLIMS/MM(eg)/2019-20/2460 dated 19.09.2019	
2	Name of the equipment/item:-	
3	OEM Name/Make	
4	Model no.	
5	Equipment/Items HSN code	
6	Quoted unit FOB PRICE: SGD/JPY/Euro/USD etc.	
	(exclusive of all taxes)	
	(with 05 years unconditional warranty)	
7	Standard Accessories unit FOB price if required as per tender specification in Foreign currency	
	(exclusive of all taxes)	
	(with 05 years unconditional warranty)	
8	Equipment FOB Price + Standard Accessories price in foreign currency (Sr. no. 6+7)	
9	(-) Less Indian Agency Commission (if any)	
10	Net Equipment FOB Value	
11	Add Freight & Insurance charges	
12	Total Equipment CIP / CIF Value	
	(Sr. no. 10 + 11)	
13	* Cost ofCustom Duty	
14	IGST+ other taxes	
15	* Cost of Clearance Charges	
16	* Add Indian Agency Commission in INR	
17	Cost of Equipment (CIP/CIF Value) + Custom Duty+ Custom Clearance +IGST+ Indian Agency Commission in INR	
18	* Standard Accessories if required as per tender specification in INR	
	(with 05 years unconditional warranty)	
19	GST value or % (as applicable)	
	(on sr. no 18)	
20	Total Standard Accessories Price (INR) + GST	
21	(Sr. fl0. 18+19)	
21	CST volve or % on east of turnley work (if required)	
22	Total cost of Turnkey work inclusive GST	
23	(Sr. no. 21+22)	
24	Total cost of Equipment	
25	(Sr. no. 17+18+19+20+23)	
25	CMC on net FOB value (From 6th to 10th Year)	
26	6 <sup>th</sup>	
27	$7^{ m th}$	
28	8 <sup>th</sup>	
29	9 <sup>th</sup>	
30	10 <sup>th</sup>	
31	Total CMC Value	
32	GST value or % on CMC value ( as applicable)	
33	Total CMC Price (6 <sup>th</sup> to 10 <sup>th</sup> yrs) including GST	
34	Grand total amount of equipment (Sr. no. 24+33)	

NOTE:- (\*) Conditions applied.

\* <u>Clearance Charges</u> will be paid on actual or maximum @ 1%(Inclusive all taxes) of FOB/CIF/CIP price whichever is less.

\* <u>Indian Agency Commission</u> will be paid on the conversion rate of comparative chart on which basis the P.O. has been awarded or conversion rate at the time of payment whichever is less.

\* Detail List of standard accessories (as mentioned in sr. no. 07 or 18) with price must be annexed with price bid. All fields and columns of price bid must compulsorily be filled.