

Ref. No. RMLIMS/MM(eq)/2019-20/4456

Date:- 30.11.2019

#### **RE-TENDER/E-TENDER NOTICE (2<sup>nd</sup> time offer)**

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/ 4030 dated 25.10.2019 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)/2019-20/4456 dated 30.11.2019

- Start date of Submitting of e-Tender is:- 04.12.2019
- Last date of Submission of e-Tender is:- 18.12.2019 upto 4:00 P.M.
- Date of opening of Technical bid is :- 19.12.2019 from 03:00 P.M. onwards

# **Equipment list**

Sr. no.	Name of Department	Name of Equipment	Qty	Tender Fees includin g @18% GST	EMD Amount	Total estimated cost
1	Forensic Medicine	Digital Spectrophotometer	1	2360	10500	10,00,000.00
2	rorensic medicine	Distillation Plant (Double)	1	2360	2500	2,00,000.00
3		Arthroscopy Accessories	1 Set	2360	25500	25,00,000.00
4		Magnification Surgical Loupe	1	2360	2500	2,00,000.00
5	Orthopedic	TENS	1	2360	5500	5,00,000.00
6	ormopeate	Interferential Therapy	1	2360	5500	5,00,000.00
7		Muscle Stimulation	1	2360	5500	5,00,000.00
8		Cryotherapy Unit	1	2360	2500	2,00,000.00
9	Pediatrics	Bubble CPAP machine	2	2360	5500	5,00,000.00
10	General Surgery	ASSORTED OPEN & LAPAROSCOPIC STAPLING DEVICES	1 SET	2360	15500	15,00,000.00
11		Bicycle Ergometer	1	2360	3500	3,00,000.00
12	Pharmacology	Treadmill	1	2360	3500	2,50,000.00
13	Gastrosurgery	Video recording & Editing system Laparoscopic/Endoscopic/open	1	2360	10500	10,00,000.00
14		Operating Loop	3	2360	10500	10,00,000.00
15	Obst & Gyn	Breast Pump	3	2360	15500	15,00,000.00
16	Biochemistry (Central Research	Gas Chromatography Mass Spectrometry -Mass Spectrometry ( <i>GCMS/MS</i> )	1	2360	100500	1,00,00,000.00
17	Lab)	Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	1	2360	100500	1,00,00,000.00
18	Gastrosurgery	C-Arm	1	2360	50500	50,00,000.00

### **TENDER DOCUMENT 2019-20**

### GENERAL TERMS & CONDITIONS FOR INVITING E-TENDER NOTICE NO. RMLIMS/MM(EQ)/2019-20/4456 DATED 30.11.2019

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 **online** 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.

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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. **<u>PBG</u>:-**

- 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.

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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- **177301088888888**
  - (b) Name of Account Director, Dr.Ram Manohar Lohia Institute of Medical Sciences, Gomti Nagar, Lucknow
  - (c) Name of Bank and Branch Indian Overseas Bank, Vibhuti Khand, Gomti Nagar, Luknow, U.P.-226010
  - (d) IFS Code- IOBA0001773
- 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 grevalent 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. Penalty Clause :-

- 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.

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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.

49.

- 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.

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- (ii) Quoted CMC charges including GST after expiry of warranty period from  $6^{th}$  to  $10^{th}$  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.

# 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).
  - Details of after sale service support should be provided which will include the followings:
    - (a) Corresponding address of service centre.
    - (b) Telephone No.(Office).

65.

- (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.)

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#### **Annexure-A**

#### Check list

e-Bid reference no:

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		
3	Permanent address of Bidder with e-mail and contact no. (Copy should be attached)		
4	The proof of online submission of tender fee & EMD		
5	GST Registration number (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.		
9	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.		
10	The tenderer shall specify regarding after sales services within the Guarantee/Warranty period and CMC period.		
11	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.		
12	<b>Turnover:-</b> 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.		
13	The firm will provide an affidavit to this effect that "THIS IS TO CERTIFY THAT THE RATES QUOTED for 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 ANY PRICE DISCIPANCY IS FOUND ON LATER DATE, WE WILL BE LIABLE TO REFUND THE SAME.		

Name, seal and Signature of bidder

# (1) Technical Specifications of Digital Spectrophotometer

Microprocessor based UV-VIS Spectrophotometer from reputed global manufacturer within built high resolution LCD display and dedicated soft keypad, for operation on 220V / 50Hz should have the following basic features.

-	
•	Stand-alone operation & complete control through PC with UV Software
	High visibility color touch panel with stylus
•	True double beam optics with aberration corrected concave blazed holographic grating in Czerny – Turner mounting for high energy throughput and high quality monochromatic light
•	Wide wavelength range of 1,100 nm to 190 nm
•	High resolution 1 nm spectral bandwidth over entire wavelength range
•	Spectral bandwidth of better than 1nm over the complete range of 190 to 1,100 nm to ensures compliance of Resolution with standard test of 0.02% v/v Toluene in Hexane.
•	Stray light specification of 0.03%T at 220 nm by NaI and 340nm by NaNO <sub>2</sub> should meet requirement of Absorbance much greater than 2 for 1.2% w/v of KCl solution.
•	Wavelength setting and display in steps of 0.1nm
•	Wavelength accuracy of $\pm 0.1$ nm for D <sub>2</sub> spectral line
•	Wavelength reproducibility of $\pm 0.1$ nm
•	Best in class scan speed up to 29,000 nm/min for high speed Kinetic studies
•	
•	Wide Photometric range of -4 to +4 Abs and 0 to 200 %T
•	High Photometric Accuracy of $\pm$ 0.002 Abs at 0.5 Abs
•	Very low baseline drift of 0.0003 Abs/hour
•	High baseline flatness of $\pm 0.0006$ Abs over entire wavelength
•	Ultra low Photometric noise of <0.00005 Abs
•	Dual source - high intensity Tungsten-Halogen and Deuterium lamp with automatic changeover
•	High sensitivity matched pair Silicon Photodiode detector
•	5 or more USB ports for high speed PC and printer connectivity, data storage and transfer through USB pen drive
•	Built in validation program, diagnostic and security functions
•	All operational modes as standard – Photometric; Spectrum; Quantization; Kinetics, Time Scan, DNA and Protein Quantification in stand-alone and PC mode. Additionally Multi-Component measurement should be available in stand-alone mode.
•	Following Nine hardware validation parameters are to be built-in :-
	Wavelength Accuracy
	Wavelength Repeatability
	Spectral Bandwidth
	Baseline Flatness
	Baseline Stability
	Noise Level
	Photometric Accuracy Photometric repeatability
	Stray Light
•	Semi-automatic testing
-	Interactive display for simplified testing of test items, which require test, jigs.
•	Automatic Testing
	Automatic measurement and pass/fail evaluation and printing of results.
•	Detailed print-out of test results
	Test results printout with spectra and time course data after completion of the test items.
•	Data should be read with commercial spreadsheet software.
•	Pairs of quartz cuvette of 10 mm path length, 1ml volume to be supplied as standard
•	Suitable PC with LCD monitor compatible with software and color DeskJet printer

# (2) Technical Specifications of Distillation Plant (Double)

Free standing electrically operated water still that should be capable of producing Pyrogen free distilled water as per IP/BP standards. All contact part are to be made of stainless steel. Fitted with ISI Marked Immersion water heater, low water protection & electrical control box. It should be mounted on a sturdy MS tubular stand. Made of SS 304

Certifications: should must be ISI MARKED C.E CERTIFIED and WHO GMP approved

Capacity: 5 lit./hr

# (3) Technical Specifications of Arthroscopy Accessories

- All Accessories should be attachable to existing arthroscopy system (smith & Nephew)
- USFDA approved.
  - 1. Optical Cable 2
  - 2. Shaver hand piece with attachable suction -2
  - 3. Arthroscope  $30^0 2$

 $70^{0} - 1$ 

- 4. Trocar and cannula 2
- 5. 4 mm. cannulated Drill bit -2
- 6. Grasper -2
- 7. Probe -2
- 8. Meniscal punch straight -2

Right Curved – 2

 $Left \ Curved-2$ 

- 9. Meniscal Scissors 2
- 10. Autoclavable boxes -2
- 11. Tendon Stripper (All Sizes & types) 1 each
- 12. Full high definition camera -1
- 13. Shoulder Scorpion -1

# (4) Technical Specifications of Magnification Surgical Loupe

The Surgical System should mainly consist of the optical system, adjustable HEAD MOUNT FRAME and standard accessories OPTICAL SYSTEM:

1. Optical system featuring compact design, delivering precise image with good colour fidelity extending to the peripheral zones, excellent depth of field of view ensuring clear visualization of anatomical structures.

Loupe must consist of 1 optical system, 1 carrier system, 1 instructions of use with brief instructions; incl. softcase, contact guards, protective caps and sideshields.

2. Magnification: At least 4.0 X.

3. Working Distance (Eye to operating area) of 400 mm (16 inches) or more.

4. Field of view diameter at working distance of 400 mm: 86mm or more.

5. Quick adjustment of interpupillary distance (e.g. 55mm to 75 mm) by means of left and right coaxial knobs to suit individual surgeons.

6. High Quality scratch free lens protection device with anti-reflection coating shielding the objective lens against tissue debris for increased protection.

7. High quality surface of the optical system resistant to standard disinfectants.

8. Telescopic rail enabling quick positioning of the eye piece with a single adjustment.

9. Quick adjustment of eyepiece tilt to desired viewing angles even in extreme treatment options.

10. Flip up function for unobstructed vision and eye contact with patients with single adjustment.

11. Mount to a high quality medical grade HEAD MOUNT frame.

12. Sterializable contact guard for reliable swinging of the optical system up and down.

13. Should include illumination system attached to the loupes with easy detachability option.

14. Powerful LED light source with integrated temperature control.

15. Should be able to attach easily to the optical system.

16. Light intensity up to 50000 Lux.

17. Shock proof protection for the light and accessories.

18. Light should be resembling day light and should illuminate the whole field with even illumination.

19. Extremely flexible with outstanding light transmission.

20. Should include 2 Medical grade Lithium ion rechargeable battery with charging device. Battery charger should be processor controlled with country specific power adapter. Charge level indicator should be present.

21. Should have a long run time (e.g. of atleast 3 - 4 hrs.) at 100 % intensity.

22. Belt clip for the freedom of movement.

23. All the necessary accessories for the proper functioning of the unit and suitable high quality soft case for storage.

**STANDARD ACCESSORIES**: Objective lens protective device (2), Contact Guard (2), cleaning cloth for optical components, Allen Key, accessories for the LED light Illumination, High quality soft case for protection of the surgical loupe and accessories

### MANUFACTURER AND COMPLIANCE

1. Should be European CE or US FDA approved.

# (5) Technical Specifications of TENS

- It should preferably be portable, battery operated, LCD unit.
- It should preferably consist of 2 independently controlled output channels.
- It should have various output modes like Constant, Burst, Surge, Sweep and Random which gives different pulse shapes like Symmetric, Bi-phasic and rectangular etc.
- It should preferably have Constant mode whose frequency should have wide ranges (e.g. 1-100 Hz) and wide Phase duration ranges (e.g. 50-200  $\mu$ s).
- The Burst mode should preferably have frequency up to 5 Hz and Phase duration ranges in wide range (e.g. 50-200 µs).
- The Surge mode should be able to give electrical muscle stimulations with ON-OFF time.
- The Surge mode should preferably give Co-contraction or Alternate contraction with wide frequency ranges up to 100 Hz and wide Phase duration ranges (e.g. 50-200 µs.
- The Sweep mode should preferably have frequency ranges up to 100 Hz with wide Phase duration ranges from 50-200  $\mu$ s.
- The unit should be able to give large max. Current amplitude.
- It should preferably have memory storage.
- It should preferably have digital timer of 60 minutes.
- It should be supplied with rubber electrodes with gel pads and electrode cables with carrying bag.
- USFDA /CE Approved.

# (6) Technical Specifications of Interferential Therapy

- The dual channel electrotherapy unit having IFT-4, IFT-2, TENS, EMS, HV, Russian, Micro currents, Galvanic, Faradic, I/T Curve, etc.
- It should have colored touchscreen.
- It should have IF current with variable wide range frequencies.
- The Hi-volt current should preferably have variable frequency ranges (e.g. 0.5 200 Hz) with large peak current amplitude (e.g. upto 300 mp)
- The Micro current should preferably have wide frequency ranges (e.g. up to 400 Hz).
- It should preferably have vector sweep orientation.
- The system should have free program memories.
- The system should preferably be connectable to optional vacuum unit.
- It should preferably have digital timer of large duration.
- USFDA /CE approved.

### **Delivery Contents:**

Main unit should be supplied with:

- rubber electrode
- electrode sponge
- electrode cable
- straps (2 large and 2 small)
- Power supply cord
- User manual
- Carry Bag

# (7) Technical Specifications of Muscle Stimulation

- The unit should be able to give electrical stimulations which help in treatment and relaxation of muscle spasms and give relief of chronic pain.
- It should preferably be portable, dual power supply (AC/DC) unit.
- It should preferably consist of 2 independently controlled output channels.
- It should have various output modes.
- The unit should preferably be able to give max. Current amplitude (e.g. up to 100 mA).
- It should have wide digital timer (e.g. 90 minutes).
- It should be supplied with AC Adapter, rubber electrodes with electrode sponges, lead wire straps (large and small) and 6 battery.
- USFDA /CE approved.

# (8) Technical Specifications of Cryotherapy Unit

- The equipment should preferably be based on latest air flow technology.
- The cooled air should preferably reach the therapeutic location via an application tube.
- Air current flow should be able to regulate according to needs.
- It should preferably have intelligent air flow control system with coolest possible temperature.
- Room air drawn into the device should preferably be filtered and cooled to the required therapy temperature.
- It should preferably have auto self-detection controlling system.
- It should preferably have continuous compressing for an immediate use (standby mode).
- It should preferably have provision of self-defrosting system for the best cooling performance.
- It should preferably have touch buttons and the LED display for easy and practical operation.
- It should have many levels of therapeutic air flow.
- It should preferably have standby and defrost mode.
- It should be supplied with long hose (e.g.of 2 mtr) and 1 nozzle.
- USFDA /CE approved.

## (9) Technical Specifications of Bubble CPAP machine

#### **TECHNICAL SPECIFICATION – BUBBLE CPAP**

- The system should be suitable for delivering CPAP for treatingnewborns with respiratory distress weighing 500 gms to 5000gms.
- CPAP pressure with oscillations should be generated by creating resistance in water column and bubbling of exhaled gas in the water column.

#### <u>Humidifier</u>

 It should have servo controlled heated humidifier with following features : Temperature and flow sensor with feedback mechanism.
 Monitoring temperature of gas at chamber end and near patient end additionally temperature of airway, chamber and heater plate.

Display for temperature of saturated gas.

- Alarms
- High temperature and low temperature.
- Humidity.
- Disconnections.

#### Air/Oxygen Blender

• Oxygen % Range: 21 to 100% & accurate

#### **Delivery system**

- The patient heating circuit should have integrated spiral heated coil for uniform heating.
- Humidification chamber should be auto feed with dual float system
- CPAP Bubble generator should have adjustable probe for pressure settings 3-10 cm of H20.It should have detachable overflow container to maintain constant water level. Volume for generator ~ 500ml.
- The system should have safety mechanism with pressure relief valve and ports for pressure and Fio2 monitoring.
- Should be Disposable.
- Reusable delivery system (To be quoted separately)

#### Interface

- Nasal prongs/ masks of silicon of different sizes useful forbabies weighing between 500-5000 g.
- Flexible nasal tubing.
- Nasal cannula for extremely preterm, preterm, term neonates and infants
- Nasal masks suitable for extremely preterm, preterm, termneonates & infants.
- Nasal masks should be interchangeable to nasal prongs.
- The mask should be soft and be anatomically shaped & should be Disposable.
- Reusable Delivery s (Optional. To be quoted separately)
- Nasal marks should be interchangeable to nasal prongs.

It should have mobile stand with castor, mounting brackets, a stand or support for holding the nasal tubing & IV hook. All metal parts should be corrosion resistant.

Should have local service facility.

#### Equipment should be provided with the following accessories:

- Nasal masks for extremely preterm, preterm, term neonates and infants X 25 each
- Bi- Nasal prongs for extremely preterm, preterm, term neonates and infants X 25 each
- Caps for extremely preterm, preterm, term neonates and infants X 25 each
- Disposable delivery system, Interface, nasal tubing's X 25 each
- Reusable delivery system, (Optional .To be quoted separately)

#### **CERTIFICATION**:

- The entire system including Air oxygen blender should be US FDA approved.
- Manufacturer should be ISO 9001 certified for quality standard.

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# (10) Technical Specifications of ASSORTED OPEN & LAPAROSCOPIC STAPLING DEVICES

		Assorted Stapling Devices	
S.No	Category	Specifications	Quantity
Α	Linear Cutter & Reloads for	Open Surgery	
1	Linear Cutter 55-60 mm	Linear Cutter 55/60 mm with/without integrated knife	2
	Linear Cutter reload 55-60		10
2	mm	Cartridge for Linear cutter 55/60 mm size (blue, green)	
3	Linear Cutter 75-80 mm	Linear Cutter 75/80 mm with/ without integrated knife	2
	Linear Cutter reload 75-80	Cartridge for Linear cutter 75/80 mm size (blue,	10
4	mm	green)	
5	Linear Cutter 100 mm	Linear Cutter 100 mm with/without integrated knife	2
6	Linear Cutter reload 100 mm	Cartridge for Linear cutter 100 mm size (blue, green)	10
В	Circular Staplers		
7	Circular Stapler 21 -25 mm	21-25 mm Circular Stapler with/without tilt top anvil design	5
8	Circular Stapler 28-29 mm	28-29 mm Circular Stapler with/without slim tilt top anvil design	5
9	Circular Stapler 31-33 mm	31-32 mm Circular Stapler with/without slim tilt top anvil design	5
С	Haemorrhoid Stapler		
10	Haemorrhoid Stapler	Circular Stapler for Haemorrhoids with/without detachable anvil & transparent anoscope.	5
D	Linear Staplers		
11	Linear stapler	60 mm linear stapler	2
12	Reloads for linear stapler	Reloads for above stapler (blue & green)	10

Ε	Laparoscopic Linear Cutte	r & Cartridges	
		Laparoscopic Linear Cutter with/without knife, articulating	2
	Laparoscopic Linear Cutter	and 360° rotating long Shaft length to accommodate 45mm	
13	Long Shaft	& 60 mm reload	
14	Laparoscopic Linear Cutter Short Shaft	Laparoscopic Linear Cutter without knife, articulating and 360° rotating short Shaft length to accommodate 45mm & 60 mm reload	2
15	Cartridges 60 mm	Laparoscopic linear cutter reload 60 mm (Blue, Green)	5
16	Cartridges 45 mm	Laparoscopic linear cutter reload 45 mm (Blue, Green)	5
F	Stapler & reload for Anterior	Resection	
	Linear Cutter for C Shaped	Stapler with/without knife for C shaped reload for Anterior	2
17	reload	resection.	
18	C-Shaped Reload	C Shaped reload for Anterior Resection with in-built knife,4/ 6 rows of different leg length & cut in between( blue and green)	10

G	Skin Staplers		
	Skin Staplers	With minimum 35 staples	20
Н	Barbed Sutures		
19	PDO	Cutting edge, 35 - 40 MM, <sup>1</sup> / <sub>2</sub> circle, no 1/ 1-0, 36 X 36 cm/ 45 x 45 cm	10
20	PGA	Taper point, 26 MM, I/2 circle, 2-0, 20 cm/45 cm /75 cm	10
21	PGA	Taper point, 36 MM, I/2 circle, 2-0, 45 cm/ 75 cm	10
Ι	Trocars		
22	5 mm bladeless trocar	with optical trocar tip, clear canula with sleeve of length 100 mm	10
23	11 mm bladeless trocar	with optical trocar tip, clear canula with sleeve of length 100 mm	10
24	Universal trocar sleeves	5 mm, 11 mm & 12 mm	10 each
25	12 mm bladeless trocar	with optical trocar tip, clear canula with sleeve of length 100 mm should have inbuilt reducer for accommodating 5-12 mm instruments	10

## **CONDITIONS FOR TENDER:**

- 1. All accessories should be from same original equipment manufacturer.
- 2. Should be US FDA/EUROPEAN CE approved.
- 3. The equipment should have brand name / model number embossed / etched on the equipment.
- 4. All the technical specifications in the compliance statement must be supported by original literature from the firm / O.E.M with highlighting, numbering & flagging of all technical certificates.
- 5. Offered equipment should have very strong govt. installation base
- 6. Offered equipment should have regional after sales service center of the original equipment manufacturer in the north region
- 7. For the offered main unit, the essential, optional required consumables'/accessories' shelf life should be declared on the original equipment manufacturer's letterhead.
- 8. In case of technical snag / failure / breakdown the response time for the inspection should be within 24 hours and repair within 05 days otherwise should be provided with a service machine till the period of recovery of breakdown of the unit, failing which will attract penal action as per decision of institute / hospital.
- 9. For offered equipment the training of technical staff and users should be performed by original equipment manufacturer trained service engineers service representatives.
- 10. Company should quote their latest model.
- 11. As a tendering process the **physical demonstration** of the offered equipment is **mandatory** at hospital / institute premises at bidders cost. No electronic power point or video of the offered equipment would be accepted.

# (11) Technical Specifications of Bicycle Ergometer

- Brake system microprocessor controlled eddy current brake
- Load 500-Watt, speed independent
- Speed range 30 100 rpm
- Adjustment of handlebars inclination: 360°
- Adjustment of saddle height continuous, mechanic
- Patient weight (max.) 120 kg
- The control unit must have
  - Display / patient display load, rpm, speed, time, blood pressure, heart rate (LCD) / rpm (LED)
  - Keyboard , Graphic display (load, heart rate)
- It should have exercise protocols like
  - Incremental protocols
  - o 10 User programmable, Load adjustment manual
- It should have training protocols like
  - Pulse-controlled training (integrated HR receiver)
  - Predefined performance tests
  - Wireless EMG sensors (Qty4) Should be capable of recording Each sensor should provide 1 EMG and 3 accelerometer signals. EMG with IMU sensor (Accelerometer, Gyroscope and Magnetometer). it should be Mobile application compatible and range at-least 40 meters.
  - Wireless EKG/respiration Sensors (Qty1)

# • Should have following upgradable options

- Automatic blood pressure measurement
- Oxygen saturation measurement
- Pediatricergometry / diagnostic tests for athletes
- Seamlessly Interfaces

Other compatible sensors like twin axis goniometer, Load cell, inertial sensor, FSR Sensor should be available for future application

# (12) Technical Specifications of Treadmill

- Treadmill should be operating automatically with the help of computer.
- Treadmill interface to the computer should be RS 232.
- Treadmill should operate on mains 230 V 50 Hz 12 Amp.
- Treadmill walking area should be at least width 500mm, length 1400 mm.
- Treadmill speed control should be Variable .
- Treadmill elevation control should be variable.
- Treadmill should take patient load up to 150 Kgs.
- Treadmill should work on AC drives.
- Tread mill should have to view 12 lead simultaneous, real time raw ECG
- Treadmill should have facility to view online 12 lead running raw ECG & current 12 leadavg. complex with online automatic calculation of ST level, ST slope& also to view automatic display of Zoom lead with max ST depression in single screen.
- Tread mill should be supplied with wireless (Bluetooth/ RF based) physiological monitoring device which can monitor :ECG; Heart rate; R-R interval, Respiratory rate, Oxygen saturation & amp; PPG, Accelerometer X,Y,Z, activity, Skin temperature, Galvanic skin response
- The wireless physiological monitoring device supplied with treadmill should have user friendly software for recording, analysing and printing the data, the software should allow calibration oftransducers, display of actual values, controllable gain, filter settings, baseline setting for event marking and annotation.
- Should be supplied with Compatible computer & printer & UPS.

# (13) Technical Specifications of Video recording & Editing system Laparoscopic/Endoscopic/open

- Multipurpose image and video recording system with support of DVI-D, HDMI, DP and other inputs
- Entry of patient data via worklist/DICOM, keyboard, touch or smartscreen and storage in suitable formats
- Full HD, 4K and 3D quality capture with synchronous and asynchronous recording of 2 sources with compatible screen display for 4K, 3D and full HD
- Capture by camera buttons, footswitch, keyboard, touchscreen etc.
- Inline video and data editing
- Data storage via DICOM, external storage, DVD or internal memory with retrieval of data with seamless transfer to the existing smart operating rooms and printing facility
- Image should be stored in JPG,BP,PNG etc., and Video in MPEG-4,MPEG-2, MOV etc.
- Equipment cart must be provided
- Should have line voltage of 100-240 VAC or similar, power 50-60 Hz or similar
- US FDA and CE approved
- Physical demonstration is must
- Should have Suitable warranty

# (14) Technical Specifications of Operating Loop

Magnifying loupe ranging from 2.5 to 3.5X power

Mounting Options: Through-the-Lens

Magnification Power : variable between 2.5x, 2.8x or 3.5x

-Working Distance: Customized to each user (minimum 3)

-Declination Angle: Customized to each user (minimum 3)

-Weight: Light weight (preferred less than 80g)

-Should have reduced weight and increased field size

-Fixed magnification of 3.5X with field of view around 100mm @40 cm

-Fixed magnification of 2.8X with field of view around 120-130mm @40 cm -Fixed magnification of 2.5X with field of view around 150-160mm @40 cm

-calibrated at individual working distance of surgeon -should have Light weight frame in Titanium

-Telescope should be light and small with clear and Bright Vision.

-Loupe should be made in pure titanium & strong plastic temples

-Telescope should be preferrably of Keplerian Type or similar with a prism contained internally in the magnifier offering high resolution

-The telescope manufacturer to provide customizations free of cost as and when required by the surgeons.

-Supplied with accessories like side splash protectors, cloth for cleaning, screw with keychain, box for loupe and other as applicable

-All optical systems should be made with Grade A fine annealed glass lenses fused with anti-scratch and anti-reflective coatings.

-Should be manufactured by a well known international firm with USFDA and CE certification

# (15) Technical Specifications of Breast Pump

Breast Pump configuration

- 1. Breast pump should have both Electrical and Battery backup
- 2. It should be portable and light weighted between 3 to 4 kg
- 3. It should be made up off Hospital Grade and heavy duty.
- 4. Breast pump should be easily cleaned for use by multiple mothers.
- 5. It must have double pump which is able to pump both breast at the same time to get more and better quality milk.
- 6. Breast Pump should have unique program and program card which can initiate, build & maintain sucking.
- 7. Two phase expression technology: designed to mimics the baby sucking pattern to optimize milk output, i.e. Stimulation followed by expression.
- 8. It should be closed system; membrane cap & diaphragm should be attached to Breast pump machine.
- 9. Pump should automatically change mode after 2 minutes; changes from stimulation to expression mode; also, it should possible to change it individually.
- 10.It should have single and double pumping: Two separate membrane units allow switching from single to double pumping without loss of vacuum or extra parts.
- 11.Breast pump should have digital LCD display; equipped within internal rechargeable batteries.
- 12.Live demonstration of the equipment is must.
- 13.Catalogue/Brochure should be submitted along with technical bid mentioning each and every point of technical specification.
- 14.Pump should be European CE and USFDA.
- 15.Breast pump should have protection Class II, Type B
- 16.Warranty 5 years
- 17. Availability of spares from installing date must be there for a period of at least 10 years.
- 18.Disposable accessories/consumables should preferably from same manufacturer.
- 19. The company should separately quote rate for all types of consumable and make it available in pharmacy of DR. RMLIMS (Terms and conditions of Dr. RMLIMS will apply)
- 20.Mandatory to provide 100 sets of consumables (Set containing tubing set with a pair of bottles and breast cups) along with equipment.
- 21.At the time of supply working manual of breast pump is must.

# (16) Technical Specifications of Gas Chromatography Mass Spectrometry -Mass Spectrometry (GCMS/MS)

	Specifications for GCMSMS		
The	Triple Quadrupole GCMSMS system must offer superior sensitivity and robustness, fast		
Easy	Easy methods development for multi-component quantification in biological matrices for		
pesti	pesticides, metabolites, fatty acid disorders screening, drug screenings and steroid pathway		
anal	ysis and should have following specifications.		
1.	Mode (MS): It should have Full scan, Selected Ion Monitoring (SIM), combined full		
	scan/SIM		
2.	Modes (MS/MS): It should have Multiple/Selected Reaction Monitoring (MRM/SRM),		
	combined SRM/full scan, product ion scan and Neutral loss modes.		
3.	Ion Source		
	• It should have EI source. Programmable to 350 °C or more		
	• It should have Integrated, dual filament for EI with improved filament lifetime		
4.	<b>Transfer Line Temperature:</b> The temperature should be up to 350 °C or more		
5.	Quadrupole Mass Analyze <u>r</u>		
	• Mass Range: 10–1000u or better		
	•Heated, off-axis ion guide for noise reduction and solid, homogeneous, non-coated and		
	cleanable quadrupole rods		
	•Resolution: unit resolution or better		
6.	Detection System: The detection system should be with off-axis dynode, discrete		
	dynode electron multiplier and electrometer, linear range of $>10^6$ or better		
7.	Electron Energy: It should have an adjustable electron energy upto 150 eV or better		
8.	<b>Emission Current:</b> It should have emission current up to 350 µA or more.		
9.	Collision Energy Range: Upto60 eV or better		
10.	Scan Speed		
	• The MS should have scan speed up to 15000 u/sec or better		
	•700 SRM transitions/sec or better		
	•0.5ms dwell time for SRM/MRM transition or better		
11.	Vacuum System		
	• It should have a High capacity (>300 L/s), dual-stage turbo molecular pump or better		
	• It should have Standard rotary-vane pump		
12.	Sensitivity : Electron Ionization SRM/MRM		
	1 µL of 100 fg/µLoctafluoronaphthalene (OFN) will produce the following minimum		
	signal-to-noise for the transition from m/z 272 to m/z 222: <b>30,000:1 or more.</b>		
13.	Instrument Detection Limit (Installation specifications should be less than 0.5 fg or		
	less to be demonstrated during installation): 0.5fg or less OFN derived at the 99%		
	confidence level from area precision of eight sequential injections of 1 µL, 2fg/µL OFN,		
	acquired in EI SRM/MRM. This point must be taken as mandatory.		

14.	Gas Chromatography :
	<b>Oven:</b> The column oven should have an Operating temperature range: ambient +4 °C to
	450 °C.
	Cool-down time from 450°C to 50°C should be less than 4 minutes.
	Oven Ramps/Plateaus Cool down
	• It should have number of ramps/plateaus: 20/21 or more
	• The maximum heating rate should be 120 °C/min or more
15.	Pneumatic controls
	Electronic pneumatic controls for injector and detector modules. The electronics carrier
	gas controller should allow operating in constant and programmed flow and pressure
	modes.
	• Pressure range: 0–140 psi or more
	• Split ratio: Up to 7500:1 or more
	• Pressure set points minimum increments: 0.01 kPa-0.001 psi in all ranges
	•Total Flow Setting:
	•Control of split flow in 1 mL/min from 0 to 1250 mL/min or more
	• Purge flow from 0 to 50 mL/min ore more
16.	Programmable Temperature Vaporizer Injector (PTV/MMI) – Qty 1
10.	•Programmed Temperature Injector for Supports hot/cold, split and splitless modes
	and On Column (TPOC)
	• Temperature programming of up to 3 ramps at up to 700 °C/min or more
	•Maximum Temperature: 450°C or more
	• The injector should permits large volume injection up to 250 microliters without any
	further hardware requirement.
17.	Split/splitless injector with back flush and Electronics Gas Controller – Qty 1
17.	• The injector should be able to operate with narrow & wide bore capillary columns.
	• Suitable for all capillary columns (50 μm to 530 μmi.d.)
	•Maximum Temperature: 400 °C or more
18.	Flame Ionization Detector with Electronics Gas Controller – Qty 1
10.	•Capillary column optimized compatible with 1/8" and 1/16" packed column
	•Flameout detection and automatic re-ignition
	•Minimum Detectable Level (MDL): <1.4 pg C/s or better
	• Sensitivity: >0.03 Coulombs/gC or better
	•Linear dynamic range: $>10^6$ or better
	• Maximum temperature: 450 °C or more
10	•Data Acquisition Rate: up to 300 Hz. or better
19.	GC Analytical Performance
	• The GC should have a Retention Time Repeatability of <0.0008min
20.	• Typical peak area repeatability: <1.0 % RSD Columns (02 qty each)
20.	Column with stationery phase equivalent to
	• 5% diphenyl -95% dimethyl polisilaxones 30 meter X 0.25 mm id X 0.25 um df
	• FAME column for fatty acid methyl ester analysis- 30 meter X 0.25 mm id X 0.25 um df
21.	<b>Liquid sampler:</b> liquid sampler with minimum <b>100 vial</b> capacity or more of 2ml vial size
	should be quoted. The facility of head space injections with vial capacity of 100 or more with
	10/20 ml vial size should be added on. 500 vials for same purpose should be provided.
	Page 2 of 4

22.	Data System Software with Workstation
	• It should have a single point software for controlling GCMSMS, Liquid and acquiring
	data from Mass and conventional detectors
	• Fully automated data acquiring & processing software for Environmental, Biological &
	Food Safety application should be quoted with catalogue number.
	• The latest version of the NIST Library software with original CD should be quoted
	• It should have easy automatic method development feature
	•Vendor should also offer latest branded PC (i7 or better with appropriate RAM) to
	support the system and sufficient storage( to keep the data for 10 yr) with wall mount
	LED touchscreen of 32 inch or more along with wireless keyboard and mouse &Branded
	ink tank printer (separately for offline as well as online data analysis; quoted for single
	point coordination of the Licenced software.)
23.	Solid Phase Extraction:
	•16 Port Vacuum Manifold Qty 1
	• Vacuum Manifold Pump Qty 1
	• All fittings tubings& test tube etc to install SPE Qty 1
	•C18 500MG/6ML Cartridges Qty 100
	•CYANO 500MG 3ML Qty 50
24.	Consumables
	•Graphite/Vespel ferrule for 0.25ID Column Qty 10
	•Graphite/Vespel ferrule for 0.32ID Column Qty 10
	•Injector Septa - Qty 50
	•Capillary Column nut for PTV Injector – each Qty 5
	•Column nut for MS transfer line- Qty 05.
	•Liner for S/SL and PTV Injector – each Qty 5
	•Liner Sealing Ring for PTV Injector – each Qty 10
	• Screw top vial with cap & septa 2ml size – Qty 500
	•Vacuum Pump Oil 1ltrs – Qty 1
	• Filament – Qty 5
	•Mass Tuning/Calibration Solution – Qty 1
	• Syringe 10ul capacity – Qty 2
	• Syringe 5ul capacity – Qty 2
25.	Accessories/Necessary parts to install the equipment
	•High Purity Helium, N <sub>2</sub> /Argon Gas filled cylinder – each Qty. 4
	• Double Stage SS Diaphragm Regulator for Helium, $N_2$ / Argon each Qty. 1
	•Gas Purification Panel for All gases
	•10KVA (or suitable as per company's protocol) Online UPS Backup 60min - 230
	VAC, 50Hz, Single Phase I/P & O/P
	•Sample derivatization system with interchangeable accessories capable of holding
	variety of vial sizes and types as well as offering heating/derivatization and evaporation
	of sample. Heating ambient +10 to 200 deg. C.
	•N2 evaporator: Sample evaporation under atmosphere and inert atmosphere (Nitrogen)
	•N2 gas cylinder with regulator.
	• Vibration free table with granite top to keep entire system.
	• 1.5 Ton Split AC with stabilizer – 2 Nos.
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	• Vendor must offer operator to operate the system for two complete years.			
26.	Solvents and Derivatization reagent: 5 X 5 Litre each			
	The required chemicals, solvents and derivatization reagent like Methanol, Acetone,			
	Acetonitrile, N-Hexane, Dicholoromethane(DCM), N-Heptane, MTBE, Pyridine (for			
	derivatization), Sodium Hydroxide, and Acetonitrile should be included for following			
	applications for biological fluid samples.			
27.	Standards:			
	Mix of organophosphorus pesticides, organochlorine pesticides, carbamates,			
	pyrethroides and EPA pesticides as per EPA norms- 2 vials each must be supplied with			
	at least two years of expiry.			
28.	The institute shall provide partitioned cabin for instrument; other specifications for site			
	preparation are to be fulfilled by the vendor only for successful installation. The vendors			
	may visit the site for tentative expenditure.			
29.	Important note:			
	Offer should indicate all parts with details specification and Brand clearly as			
	required in our specifications			
	The supplier should enclose the technical compliance statements against our technical			
	specifications clearly mentioning for each point. The statement should be supported by			
	relevant literature/data.			
30.	The institute shall provide partitioned cabin (Aluminium frame, glass and ACP partition)			
	for instrument; other specifications for site preparation are to be fulfilled by the vendor			
	only for successful installation. The vendors may visit the site for tentative expenditure.			
31.	Only the principle company may participate in tender. All the agreements shall be done			
	with principle company only.			

# (17) Technical Specifications of Inductively Coupled Plasma Mass Spectrometry (ICP-<u>MS)</u>

	Specifications for ICPMS		
ICP-N	ICP-MS system for elemental analysis which is the latest in the category and capable to		
	deliver <b>sub-ppb level analysis of elements ions</b> . System should be bench top model.		
Purp	ose: Trace and ultra-trace elemental analysis (ppm, ppb and ppt) in a single aspiration		
and i	n a single method. The estimation of platinum based drugs too is expected. Detailed		
speci	fications are as follows:		
1.	Sample introduction system comprises of peristaltic pump, nebulizer, and spray chamber.		
2.	A 4/3 channel (>10 rollers) peristaltic pump which can support variable flow rates.		
3.	It must include quartz nebulizer as standard having high resistance to acids.		
4.	Peltier-cooled, temperature controlled quartz spray chamber.		
5.	Quartz torch with 2.5 mm ID injector.		
6.	Complete Computer controlled adjustment of the position of the torch in X, Y and Z directions with independent movements in the three directions.		
7.	Three computer controlled gas mass flow controllers or equivalent technology for controlling all the plasma gas lines precisely (nebulizer, plasma and auxiliary gas flow).		
8.	Vendor must quote Argon and liquid dilutions system without any manual intervention.		
9.	Offered system must have mechanism to handle samples containing high TDS of 15% or more. All necessary accessories required for running High matrix high TDS samples with 15% of an higher range should be included as standard supply.		
10	with 15% % or higher range should be included as standard supply.		
10.	The ICPMS must have computer controlled RF generator operating between 25 to 40 MHZ operating from 0.6 to 1.6 KW for automatic control of torch ignition, shutdown and system warm up.		
11.	Automatic shutdown of the plasma by the system after completion of analysis.		
12.	Suitable water cooled interface vacuum and with standard high performance Ni		
	sampling and skimming cones to suit all applications.		
13.	The cones/interface should be easily demountable with all torch movement, easily cleaned and replaced		
14.	Lens /cones system should be outside the vacuum system to reduce down time.		
15.	The ion focusing system capable of removing all neutrals & photons from the ion path without causing any wear and tear to any part of the optics. For maintenance, free optics ICPMS system should have horizontal/off axis or quadruple optics. The ion optics/ quadrupole optics must be covered in warranty for 10 years of operation.		
16.	(A). Sensitivity specifications are as follows: (UOM): MCPS/ppm		
	• ${}^{9}$ Be or Li: >5		
	• $^{115}$ In or Y: >90		
	• $^{238}$ U or Tl: >70		
	(B). <b>Detectionlimit</b> : as follows		
	• <sup>9</sup> Be or Li: 1 ppt or better		
	• <sup>115</sup> In or Y: 0.5 ppt or better		
	<ul> <li><sup>238</sup>U or Tl: 0.5 ppt or better</li> </ul>		
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	(C). Following points should also be met:
	• Oxide ratio (%) CeO/Ce $\leq 2.5$ or better
	• Ba++ or Ce++/ Ba or Ce<3 or better
	• Background on-mass (cps) No gas <1
	<ul> <li>Short Term Stability &lt;3% RSD or better</li> </ul>
	<ul> <li>Long Term Stability&lt;4% RSD or better</li> </ul>
17.	<b>Mode of operation:</b> ICP-MS shall incorporate a Cell offering three modes of operation: Standard Mode, Collision Cell Mode with KED and Reaction Cell to utilize a wide variety of gases like, $H_2$ , $O_2$ , $CH_4$ in pure and/or pre-mixed gas as per hardware requirement. The system should run Standard mode, KED mode and reaction mode simultaneously in single run. System should have dedicated gas line.
18.	<b>Control:</b> The switching of reaction and collision gases or pre-mix gas will be through
	software and automated. Unit will have the flexibility of applying both gases using
	single method for removal of interferences. The Cell should come with factory fitted
	MFC (mass flow control) or equivalent technology for collision as well as reaction or
	mixed gas as per system requirement. The cell should be able to perform Mass shift
10	reaction using reactive gas like oxygen.
19.	The mass range should be from 10-250amu or better.
20. 21.	The dwell time should be as short as 100 micro second or better. Scan speed should be >3000 amu/s.
$\frac{21}{22}$ .	The analyser must have the ability to discretely control the resolution of selected mass
22.	regions dynamically without affecting the overall nominal resolution of the system.
23.	Ion detection with electron multiplier shall ensure 10 or more orders of linear dynamic
23.	range using simultaneous analog and pulse counting. It shall be possible to measure
	major and minor concentrations in a single analytical run.
24.	<i>Vacuum system</i> : Should have rotary pump and turbo molecular pump with split flow
	for extremely high gas throughput. Vacuum should be better than $1 \times 10^{-5}$ mbar in open
	valve condition and shall be better than 5 x $10^{-5}$ mbar in closed valve or condition as
	per system hard ware requirement.
25.	<i>Auto sampler</i> : Auto sample should hold 100 vials or more. It should control by same software from the manufacturer of ICPMS. It should have free X, Y, Z movement, washing & random access to all sample vials.
26.	System controller and operating system & printer: The ICPMS and other attached
	supporting system shall be driven from a dedicated computer system having the latest
	hardware and operating system. The software shall provide fully integrated operation
	of the machine and sample inlet system. There should be a facility of automatic data
	transfer from the ICP-MS PC to the desired location as per customer's choice.
27.	Vendor should also offer an additional latest branded PC (i7 or better with appropriate
	RAM) to support the system and sufficient storage( to keep the data for 10 yr) with
	wall mount LCD/LED touchscreen of 32 inch or more along with wireless keyboard
20	and mouse &Branded ink tank printer for offline data analysis.
28.	Accessories and Standards: - Installation and operational manual for installation and demonstration.
	- ICPMS set up & tuning solutions: 2 set
	- Suitable online 20 KVA UPS for a minimum backup time of 1 hr (including MCBs,
	Wires and all fittings etc)
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L	

	Dequired exhaust system for the ICD MS			
	- Required exhaust system for the ICP-MS			
	- Ar gas Cylinder with regulator $-05$ no's.			
	- O2 gas cylinder with regulator $-$ 02 no.			
- CH4, H2 or premixed gas cylinder with regulator as per system requirement				
	each			
	- He gas Cylinder with regulator $-02$ no.			
	- HF/ Inert kit withdedicated nebulizer, spray chamber, tubing set, inert torch and			
	platinum cone set.			
	- Argon manifold for 5 cylinder with auto changeover, valves, regulator and gas purification panel $-01$ no.			
	- Vibration free table with granite top to keep the system and one separate computer			
	table to keep the PC & Printer.			
	- 1.5 ton split AC with installation $-2$ Nos			
29.	Additional Consumables & Spares to be quoted apart from 1 qty. each which comes by			
27.	default			
	- Ni Sample cone-03 Nos.			
	- Ni Skimmer Cone-03 Nos.			
	- Quartz Spray Chamber-01 Nos.			
	- Quartz Torch-02 Nos.			
	- Quartz injector-01 Nos.			
	- Peristaltic Pump Tubing – uptake-10 Nos.			
	- Peristaltic Pump Tubing - Drain- 10 Nos.			
	- Autosampler uptake Probe- 01 Nos.			
	- Pump oil – for 5 years of operation			
	- Preventive maintenance kit- 02 Nos.			
	- Platinum sample cones- 1 set			
	-cone cleaning solution – 1 gallon			
	-Swab cotton tipped both ends- 200 Nos.			
	- Alumina powder- 100 gm- 2 set			
	- ICPMS autosampler vials-2000 Nos			
	- Organic solvent tubing complete set sample & drain(12 Nos each)			
	- Quartz Nebulizer 02 Nos.			
	- Rf coil-2 No			
	- Sheild torch, if required - 2 No			
	Note: Apart from above consumables vendor should offer any other consumables			
	if required. Any consumable not required for particular instrument may be			
	omitted.			
30.	Acids to supply: Supra pureNitric Acid: 5L, and Hydrochloric Acid: 5L.			
31.	Standards to supply: Individual/Multi Trace Metal standards (1000ppm, 100ml) with			
	certificate of analysis for elements and 2 year expiry such as: Chromium, Cobalt,			
	Copper, Manganese, Molybdenum, Selenium, Zinc, Calcium, Sodium, Potassium,			
	Mercury, Cadmium, Iron, Nickel, Platinum, Selenium, Silver, Thallium, Arsenic,			
	Antimony, Aluminium, Beryllium, Silicon, Iodine, Platinum.			
32.	LC (metal-free fluid path, binary pump with inbuilt degasser) must be attached to the			
	system to address the analysis/speciation of concerned ions mentioned in point no31,			
	along with autosampler (96 or more vials for 1.5/2ml) and control through same PC &			
	software as the ICP-MS instrument. The columns (Two each) for speciation of AS, Cr			
	and Hg should be quoted.			
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33.	The analysis of ions mentioned in point no. 31 along with a platinum based drug	
	(cisplatin and carboplatin) is essential to be shown at the time of installation.	
34.	The system should be future ready to upgraded (software) with nanoparticle	
	concentration estimation. The same should be quoted as optional item.	
35.	MDS for 20 samples at a time should be quoted as optional item.	
36.	The institute shall provide partitioned cabin (Aluminiumframe, glass and ACP partition) for instrument; other specifications for site preparation are to be fulfilled by the vendor only for successful installation. The vendors may visit the site for tentative expenditure.	
37.	Only the principle company may participate in tender. All the agreements shall be	
	done with principle company only.	

# (18) Technical Specifications of C-Arm

# Specification for C-Arm for Department of Surgical Gastroenterology

# Type of Machine Required - Digital Flat Panel Detector Mobile C arm system along with the accessories as per specification

	accessories as per specification
Spe	cification
Α	Gantry (C- Arm Features)
1	Vertical Free space - 80 cm or more
2	C Arm Depth- 68 cm or more
3	Angulation - +/- 200 degrees motorized
4	Field of view should be square
5	Orbital Movement - +90/-45 degrees motorized
6	Vertical movement - 40 cm or more motorized
7	The C-arm should provide side to side (wig-wag/swivel +/- 10 deg) and the horizontal travel movements of 20 cm or more
8	Touch screen monitor on C Arm to control the C Arm function for live image display.
9	Touch screen Remote Controlled unit for controlling the C Arm functions from sterile area (table side) should be provided.
В	Generator & Rotating Anode X ray Tube
1	Facility for both Radiography & Fluoroscopy
2	Power output- 25 KW or more with 40 kHz frequency or More
3	Pulse FluroscopickVp range: 40-120 kVp or more
4	Fluroscopic mA range: 4mA - 200mA or more
5	Radiographic kVp range: 40-110 kVp or more
6	Radiographic mA range: upto 200mA
7	Pulse fluroscopy with pulse rates up to 25 frames/sec
8	Focal spot - Dual focal (0.3mm & 0.6 mm)
9	Anode heat storage capacity- 365KHU or more
10	Anode cooling capacity- Inbuilt heat management capability for long interventional procedures.
11	Tube housing heat storage- 2000000 HU
12	The generator should be capable of providing a boost fluoroscopic exposure at up to 200 mA
13	Automatic dose control
14	Integrated laser light localizer for positioning without radiation
15	Radiation free collimation
16	The system should operate in full capacity on 200-240 Volts (+/- 10 %) AC
С	Flat panel detector System
1	Flat Panel detector of CSI with Amorphous Silicon doping
2	Detector Size- 30cmx30 cm
3	Pixel size - 194 micron or less
4	Monitors- 2 high resolution 18" LCD/TFT monitors
5	Last image hold capacity should be present in system
6	the system should be equipped with back-lit touch-based X ray control panel
7	The system shall allow the user to change the image orientation on the display screen during a live exposure or using the last image hold.
D	Digital System & Image management
1	The system should have multi patient data base for handling large quantities of image including dose management report.
2	The system should automatically select proper imaging parameters kvp and mA during an imaging, but should also provide the user to over -ride these setting manually

3	Real time and automatic brightness and contrast should be provided to optimize displayed image		
4	The system should provide a real – time post processing edge enhancement capabilities.		
5	The system should be capable of saving more than 100000 images to the internal hard disk and to retrieve stored images later.		
6	It should have facility to record on line fluoroscopy.		
7	It should have facility for image and fluoro sequences retrieval on a CD/DVD/Pen drive.		
8	System should have facility for DICOM connectivity and be DICOM Ready. All DICOM 3.0 functions should be offered		
9	Cine/Fluro mode Image acquisition upto 25 f/sec		
10	Real time DSA software should be provided for DSA real time image subtraction with remasking, pixelnshift, landmarking, road- mapping.		
11	Multifunctional programmable footswitch with functionality for radiation release, switching operating modes as well as storage of the last image.		
12	The system should be PACS / HIS compatible		
Е	IMAGE DISPLAY / PROCESSING		
1	Digital zoom/ magnification		
2	Digital Image rotation left/right, top /bottom, image reversal		
3	Automatic image parameter selection with provision to change to the manual		
4	Contrast/brightness control, positive /negative image inversion, edge enhancement functions		
5	Cine loop and last scene/ image hold and also saving of fluro loop		
6	Image annotation facility, measuring of distance and angle		
7	Multi image visualization		
F	Accessories		
1	Suitable U.P.S. to run the entire system for at least 30 minutes should be quoted with the system		
2	Zero Lead Aprons – 6 nos.		
3	Thyroid Shield – 6nos.		
3	Thyroid Shield – 6nos. Lead Goggles – 6 nos		
4	Lead Goggles – 6 nos		
4 5	Lead Goggles – 6 nos Gonad shield – 6 nos		
4 5 6	Lead Goggles – 6 nos         Gonad shield - 6 nos         Sterilizable cover for C Arm tube & detector 10 sets. Disposable cover for c arm tube & detector 100 nos.		
4 5 6 7	Lead Goggles – 6 nos         Gonad shield – 6 nos         Sterilizable cover for C Arm tube & detector 10 sets. Disposable cover for c arm tube & detector 100 nos.         Lead apron stand		
4 5 6 7	Lead Goggles – 6 nos         Gonad shield – 6 nos         Sterilizable cover for C Arm tube & detector 10 sets. Disposable cover for c arm tube & detector 100 nos.         Lead apron stand		
4 5 6 7 8	Lead Goggles – 6 nos         Gonad shield - 6 nos         Sterilizable cover for C Arm tube & detector 10 sets. Disposable cover for c arm tube & detector 100 nos.         Lead apron stand         Thermal printer with 200 paper rolls         Others		
4 5 6 7 8 <b>G</b> 1	Lead Goggles – 6 nos         Gonad shield - 6 nos         Sterilizable cover for C Arm tube & detector 10 sets. Disposable cover for c arm tube & detector 100 nos.         Lead apron stand         Thermal printer with 200 paper rolls         Others         Essential Certification: CE (Europe) and US FDA		
4 5 6 7 8 <b>G</b>	Lead Goggles – 6 nos         Gonad shield - 6 nos         Sterilizable cover for C Arm tube & detector 10 sets. Disposable cover for c arm tube & detector 100 nos.         Lead apron stand         Thermal printer with 200 paper rolls         Others		
4 5 6 7 8 <b>G</b> 1 2	Lead Goggles – 6 nos         Gonad shield - 6 nos         Sterilizable cover for C Arm tube & detector 10 sets. Disposable cover for c arm tube & detector 100 nos.         Lead apron stand         Thermal printer with 200 paper rolls         Others         Essential Certification: CE (Europe) and US FDA         The C Arm with Flat Panel display unit should be AERB approved. AERB certificate should be provided.         The quoted model should already be installed in India and in usage for at least 6 months to 1 year. Bidder should provide a list of institutions of repute in India where the units have been installed. Vendor should provide letter of satisfaction from institution of		
4 5 6 7 8 <b>G</b> 1 2 3	Lead Goggles – 6 nos         Gonad shield - 6 nos         Sterilizable cover for C Arm tube & detector 10 sets. Disposable cover for c arm tube & detector 100 nos.         Lead apron stand         Thermal printer with 200 paper rolls         Others         Essential Certification: CE (Europe) and US FDA         The C Arm with Flat Panel display unit should be AERB approved. AERB certificate should be provided.         The quoted model should already be installed in India and in usage for at least 6 months to 1 year. Bidder should provide a list of institutions of repute in India where the units have been installed. Vendor should provide letter of satisfaction from institution of reputed model has been installed.		
4 5 6 7 8 <b>G</b> 1 2 3 4	Lead Goggles – 6 nos         Gonad shield - 6 nos         Sterilizable cover for C Arm tube & detector 10 sets. Disposable cover for c arm tube & detector 100 nos.         Lead apron stand         Thermal printer with 200 paper rolls         Others         Essential Certification: CE (Europe) and US FDA         The C Arm with Flat Panel display unit should be AERB approved. AERB certificate should be provided.         The quoted model should already be installed in India and in usage for at least 6 months to 1 year. Bidder should provide a list of institutions of repute in India where the units have been installed. Vendor should provide letter of satisfaction from institution of reputed where quoted model has been installed.         Training should be provided to at least 4 persons of OT staff.		

#### Annexure-C

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

Sr. no.	Description
1	e-bid Notice No. RMLIMS/MM(eq)/2019-20/4456 dated 30.112019
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 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	$7^{ m th}$
14	8 <sup>th</sup>
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 Cost of equipment [Total Amount + CMC with GST (6 <sup>th</sup> to 10 <sup>th</sup> yrs) in INR]
	(Sr. no 10+19)

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

no.           1           2           3           4           5	E-bid notice no. RMLIMS/MM(eq)/2019-20/4456 dated 30.112019 Name of the equipment/item:-	
2 3 4	Name of the equipment/item:-	
3 4		
4	OEM Name/Make	
	Model no.	
	Equipment/Items HSN code	
6	Quoted unit FOB PRICE: SGD/JPY/Euro/USD etc.	
0	(exclusive of all taxes)	
	(with 05 years unconditional warranty)	
7	Standard Accessories unit FOB price if required as per tender specification in Foreign currency with HSN code	
	(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	
10	(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	
	(exclusive of all taxes) (with 05 years unconditional warranty)	
19	GST value or % (as applicable) (on sr. no 18)	
20	Total Standard Accessories Price (INR) + GST	
20	(Sr. no. 18+19)	
21	Cost of turnkey work (if required)	
22	GST value or % on cost of turnkey work (if required)	
23	Total cost of Turnkey work inclusive GST	
	(Sr. no. 21+22)	
24	<b>Total cost of Equipment</b> (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 <sup>th</sup>	
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.