

Published on 26.10.2019, Amar Ujala, Lucknow, Hindustan Times, New Delhi and
The New Indian Express, South Edition



DR. RAM MANOHAR LOHIA INSTITUTE OF MEDICAL SCIENCES

VIBHUTI KHAND , GOMTI NAGAR, LUCKNOW- 226 010

Phones: 0522-4918502, 4918510, Fax 0522-4918506 Website : www.drmlims.ac.in

Ref. No. RMLIMS/MM(eq)/2019-20/4030

Date:- 25.10.2019

e-TENDER NOTICE

On-line offers are invited through e-tendering from Manufacturer/ Direct importers/Authorized distributors for the supply of Medical Equipments for various department like Forensic Medicine, Anatomy, Neurosurgery, Orthopedic, Pediatrics, General Surgery, Pharmacology, Gastrosurgery, etc.

For more details like Name of Equipments, Tender cost, Earnest Money Deposit, Date of submission and opening of tender etc., you may please visit the e-tender portal www.etender.up.nic.in The above details will be available on our website www.drmlims.ac.in also for reference only. The offer will be accepted **On-Line** only on **e-tender portal** with terms and conditions as mentioned in tender documents. Any amendment will be uploaded only on the e-tender portal. www.etender.up.nic.in

Director

Advertisement no. RMLIMS/MM(eq)/2019-20/4030 dated 25.10.2019

- Start date of Submitting of e-Tender is:- 26.10.2019
- Last date of Submission of e-Tender is:- 26.11.2019 upto 4:00 P.M.
- Date of opening of Technical bid is :- 27.11.2019 from 03:00 P.M. onwards

Equipment list

| Sr. no. | Name of Department | Name of Equipment | Qty | Tender Fees including @18% GST | EMD Amount | Total estimated cost |
|---------|--|---|---------------------|--------------------------------|------------|----------------------|
| 1 | Forensic Medicine | Digital Spectrophotometer | 1 | 2360 | 10500 | 10,00,000.00 |
| 2 | | Distillation Plant (Double) | 1 | 2360 | 2500 | 2,00,000.00 |
| 3 | Neurosurgery | Coblator | 1 | 2360 | 12500 | 12,00,000.00 |
| 4 | Orthopedic | Arthroscopy Accessories | 1 Set | 2360 | 25500 | 25,00,000.00 |
| 5 | | Magnification Surgical Loupe | 1 | 2360 | 2500 | 2,00,000.00 |
| 6 | | General Orthopaedics Instrument Set | 1 | 2360 | 20500 | 20,00,000.00 |
| 7 | | TENS | 1 | 2360 | 5500 | 5,00,000.00 |
| 8 | | Interferential Therapy | 1 | 2360 | 5500 | 5,00,000.00 |
| 9 | | Muscle Stimulation | 1 | 2360 | 5500 | 5,00,000.00 |
| 10 | | Cryotherapy Unit | 1 | 2360 | 2500 | 2,00,000.00 |
| 11 | | Pediatrics | Bubble CPAP machine | 2 | 2360 | 5500 |
| 12 | General Surgery | ASSORTED OPEN & LAPAROSCOPIC STAPLING DEVICES | 1 SET | 2360 | 15500 | 15,00,000.00 |
| 13 | | Open Urology Surgery Set | 1 | 2360 | 50500 | 50,00,000.00 |
| 14 | Pharmacology | Bicycle Ergometer | 1 | 2360 | 3500 | 3,00,000.00 |
| 15 | | Treadmill | 1 | 2360 | 3500 | 2,50,000.00 |
| 16 | Gastrosurgery | Video recording & Editing system Laparoscopic/Endoscopic/open | 1 | 2360 | 10500 | 10,00,000.00 |
| 17 | | Operating Loop | 3 | 2360 | 10500 | 10,00,000.00 |
| 18 | | Minor Open Surgery set | 2 | 2360 | 20500 | 20,00,000.00 |
| 19 | Obst & Gyn | Breast Pump | 3 | 2360 | 15500 | 15,00,000.00 |
| 20 | | Obstetrics operation table with C-Arm | 1 | 2360 | 20500 | 20,00,000.00 |
| 21 | Biochemistry (Central Research Lab) | Gas Chromatography Mass Spectrometry -Mass Spectrometry (GCMS/MS) | 1 | 2360 | 100500 | 1,00,00,000.00 |
| 22 | | Inductively Coupled Plasma Mass Spectrometry (ICP-MS) | 1 | 2360 | 100500 | 1,00,00,000.00 |
| 23 | General Surgery | Laparotomy Set | 4 | 2360 | 112500 | 1,12,00,000.00 |
| 24 | 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)/2019-20/4030 DATED 25.10.2019

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 distributor for the supply of various items/equipments.
2. The tenderers shall submit the offer **online** in original copy of the tender documents duly signed 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 <https://etender.up.nic.in>. The 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 distributor (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- **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 forfeited.
 - 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 (6th years to 10th 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 direct 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 did actually exist. The seller shall categorically specify the extent of 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. **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.

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. **Custom Duty and Custom Clearance Charges** :- 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 6th to 10th 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 3rd 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. **Turnover:-** 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.)**

Annexure-A

Check list

e-Bid reference no: /RMLIMS/MM(eq)/2019-20/4030 dated 25.10.2019

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 | | |
| 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 distributor (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 | Turnover:- 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 ₂ 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 ± 0.1 nm for D ₂ spectral line |
| • | Wavelength reproducibility of ± 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 ± 0.002 Abs at 0.5 Abs |
| • | Very low baseline drift of 0.0003 Abs/hour |
| • | High baseline flatness of ± 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 Coblator

- Coblation System capable of performing tissue ablation, tissue coagulation and hemostasis via Controlled, Precise Plasma Layer.
- Should not have any need for the secondary patient grounding pad.
- The Coblation Wand should have Multi Electrode Technology that will allow a uniform production of **plasma**.
- The Coblation settings should be controlled by regulation on the generator from setting 1-9
- The Coagulation settings should be controlled by regulation on the generator
- The Coblation Surgery System should be digital which also covers the Coblation & Coagulation regulation.
- The Coblation Surgery System should have facility to use a foot control or a wireless footswitch for convenience and ease of use.
- The footswitch should have the facility to control the Ablation settings from sterile (Surgeon's) field only.
- There should be facility of separate switches at the foot control for coblation and coagulation.
- Coblation regulation from the foot control switch is essential.
- The Coblation Surgery System should be able to take 11 or more different types of wands for open and minimally invasive ENT procedures
- There must be wands which are sufficient enough for Ablation, Coagulation, and Hemostasis together with Suction & Irrigation.
- There must be provision for sub-mucosal tissue ablation and shrinkage.
- Provision & reach for laryngeal, head & neck surgeries must be there.
- It should operate at 100-300V and 100-500kHz
- There should be a saline irrigation controller with manual and auto-mode.
- Auto-mode should allow the irrigation to act when the wand is activated.
- There shouldn't be any separate power requirements for the Saline Flow Controller rather, it should derive power and run in synchronization with Coblation Surgery System Plasma Generator.

The Flow controller should have dual operational mode, i.e. Auto & Manual Mode and should self-calibrate before operation.

It should be US FDA & CE Approved

Satisfactory Performance report from minimum 10 Govt. Institutes.

The Service Center of the Company to be located in India.

Coblation WANDS

- The wand/s should be based and designed for Coblation Surgery System technology for NuroENT Head & Neck applications.
- ENT application wand/s should have capability of producing **plasma** in presence of saline medium.
- The wand/s should be available in multi electrode technology for the even formation of plasma for volumetric tissue removal.

- There must be dedicated wand each for tonsil, adenoid, sinus surgery, larynx, turbinate, soft palate, Head & Neck, etc. applications.
- The wand should be recognized by the Coblation Surgery System and as a precaution and safety measure must automatically shift to the desired settings of Coblation and coagulation.
- Depending upon the various applications there should be options of suction and non-suction wands with-in roughly 13 different types of wands for ENT Head & Neck, etc. applications.
- Depending upon the various applications there should be options of irrigation and non-irrigation wands with-in roughly 11 different types of wands for ENT Head & Neck etc. applications.
- There must be wand which is capable of sub-mucosal tissue ablation together with irrigation, suction, coagulation with good hemostasis.
- The wands should be capable of providing Coblation, coagulation, irrigation and suction functionalities with good hemostasis.
- There should be wands capable of both volumetric tissue removal as well as tissue shrinkage
- There must be dedicated wands for laryngeal applications with a long length ranging from at-least 16.50CM to 19.00CM to maintain access & surgical precision through laryngoscope.
- The laryngeal wands must be available for Bulk Tissue Removal as well as precise cutting and dissection of the laryngeal regions.
- Dedicated Head & Neck Dissection wand is must for surgeries of thyroid, parotid etc.
- It should be US FDA & CE Approved
- Satisfactory Performance report from minimum 10 Govt. Institutes.
- The Service Center of the Company to be located in India.

(4) 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 30⁰ – 2
70⁰ – 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

(5) 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:

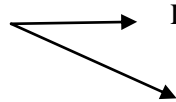
1. Optical system featuring compact design, delivering precise image with good colour fidelity extending to the peripheral zones, excellent depth of field of view ensuring clear visualization of anatomical structures.
Loupe must consist of 1 optical system, 1 carrier system, 1 instructions of use with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

(6) Technical Specifications of General Orthopaedics Instrument Set

1. BP handle - Long handle - 6
Size no 4 – 6
Size no 3 – 6
2. Tooth forceps – Large – 6
Medium - 6
Small – 6
3. Sponge holding - Large – 6
Medium – 6
4. Kidney tray - 12
5. Steel bowl – 12
6. Non tooth forceps – Large – 10
Small – 10
7. Retractor  Langen back – Small – 6
Medium – 6
Large – 6
Czerney - Small – 6
Medium – 6
Large – 6
8. HOHMANN RETRACTOR – Small – 12
Medium – 12
Large – 12
9. Tray autoclavable – Medium – 5
Large – 5
10. Box autoclavable – Large – 6
Medium – 6
11. Periosteal elevator – Medium – 6
12. Osteotome Medium Size – Curved – 6
Straight – 6
13. Mayo Scissor Straight – Small – 6
Medium – 6
Curved – Small – 6
Medium – 6
14. Allis forceps – Large – 12
Medium – 12
15. Metzenbaum Scissor Curved – Medium – 6
16. Bone holding forceps – Large – 12
Medium – 12
Small – 12
17. Needle holder – Large – 6
Medium – 6
18. Plate holding forceps – Medium – 12
Small – 12
Large – 12
19. Suture Cutting Scissor – Large – 6
20. Artery forceps – Small – 30 (24 Curved 6 straight)
Medium – 30 (24 Curved 6 straight)
Large – 12 (8 Curved 4 straight)
21. Kocher forceps – Large – 12
Medium – 12
22. Wire Cutter – 6
23. Metal tip Suction – Medium – 6
Small – 6

- 24. Ball Spiked pusher – 6
- 25. T Handle – Cannulated with Large chuck – 6
- 26. Plier – British – 6
 American – 6
- 27. Vice Grip plier – 6
- 28. Hand drill – 2
- 29. Towel clip with ratchet – 60
- 30. Hammer – 500 g – 6
 250 g – 6
- 31. Webers pointed clamp– Small – 2
 – Medium – 2
 – Large – 2
- 32. Curette – Medium – 6
- 33. Screwdriver – 3.5 mm – 6
 4.5 mm – 6
- 34. Drill bit – 2.5 – 10
 3.5 – 10

(7) 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 μ s).
- The Burst mode should preferably have frequency up to 5 Hz and Phase duration ranges in wide range (e.g. 50-200 μ s).
- 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 μ s).
- The Sweep mode should preferably have frequency ranges up to 100 Hz with wide Phase duration ranges from 50-200 μ 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.

(8) 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

(9) 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.

(10) 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.

(11) Technical Specifications of Bubble CPAP machine

TECHNICAL SPECIFICATION – BUBBLE CPAP

- The system should be suitable for delivering CPAP for treating newborns 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.

Humidifier

- 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 H₂O. 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 for babies 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, term neonates & 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.

(12) Technical Specifications of ASSORTED OPEN & LAPAROSCOPIC STAPLING DEVICES

| Assorted Stapling Devices | | | |
|---|--|--|-----------------|
| S.No | Category | Specifications | Quantity |
| A Linear Cutter & Reloads for Open Surgery | | | |
| 1 | Linear Cutter 55-60 mm | Linear Cutter 55/60 mm with/without integrated knife | 2 |
| 2 | Linear Cutter reload 55-60 mm | Cartridge for Linear cutter 55/60 mm size (blue, green) | 10 |
| 3 | Linear Cutter 75-80 mm | Linear Cutter 75/80 mm with/ without integrated knife | 2 |
| 4 | Linear Cutter reload 75-80 mm | Cartridge for Linear cutter 75/80 mm size (blue, green) | 10 |
| 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 |
| B 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 |
| C 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 |
| E Laparoscopic Linear Cutter & Cartridges | | | |
| 13 | Laparoscopic Linear Cutter Long Shaft | Laparoscopic Linear Cutter with/without knife, articulating and 360° rotating long Shaft length to accommodate 45mm & 60 mm reload | 2 |
| 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 | | | |
| 17 | Linear Cutter for C Shaped reload | Stapler with/without knife for C shaped reload for Anterior resection. | 2 |
| 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 |
| H Barbed Sutures | | | |
| 19 | PDO | Cutting edge, 35 - 40 MM, ½ circle, no 1/ 1-0, 36 X 36 cm/ 45 x 45 cm | 10 |
| 20 | PGA | Taper point, 26 MM, 1/2 circle, 2-0, 20 cm/45 cm /75 cm | 10 |
| 21 | PGA | Taper point, 36 MM, 1/2 circle, 2-0, 45 cm/ 75 cm | 10 |
| I 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.

(13) Technical Specifications of Open Urology Surgery Set

| S. NO | NAME OF INSTRUMENT | SPECIFICATIONS | QUANTITY |
|-------|--|--|----------|
| 1 | BP HANDLE | NO 3 , 125 MM | 4 |
| | | NO 4, 135 MM | 4 |
| 2 | BARRE SCALPEL HANDLE | NO 3 XL, STRAIGHT, 250 MM | 2 |
| | | NO 3 XL, 250 MM CURVED, ANGLE 12° AND 25° | 2 EACH |
| 3 | BACKHAUS TOWEL CLIP | 3-1/2 INCHES (9 CM) | 12 |
| 4 | ALLIS FORCEPS | LONG(5x6) 190mm approx | 10 |
| | | MEDIUM(5X6) 155 approx | 10 |
| 5 | ARTERY FORCEPS (CURVED) | LONG 185 mm approx | 12 |
| | | MEDIUM 140mm approx | 12 |
| | | SMALL 125mm approx | 12 |
| 6 | ARTERY FORCEPS (STRAIGHT) | LONG 185 mm approx | 12 |
| | | MEDIUM 140mm approx | 12 |
| | | SMALL 125mm approx | 12 |
| 7 | BABY MOSQUITO FORCEPS | 100 MM APPROX, CURVED | 12 |
| 8 | KOCHER'S FORCEPS | LONG 240 MM APPROX | 4 |
| | | MEDIUM 200 MM APPROX | 4 |
| 9 | BRICHER GANSKE BONE HOLDING FORCEPS | 200 MM STRAIGHT | 2 |
| | | 200 MM CURVED | 2 |
| 10 | PITHA FOREIGN BODY FORCEPS | 220 MM APPROX | 2 |
| 11 | RETRACTORS | | |
| (i) | CZERNY | length 180-205mm approx, blade width 20-25mm,depth 38-45mm | 4 |
| | KOCHER - LANGENBACK | length 220-225mm approx, blade width 10-15mm,depth 40-50mm | 4 |
| | | length 220-225mm approx, blade width 10-15mm,depth 28 mm | 2 |
| | | length 215 mm approx, blade width 10 - 15 mm, depth 80 mm | 2 |
| (ii) | DEAVER | LARGE=length 290-310mm approx, blade width 75-80mm | 4 |
| | | MEDIUM=length 290-310mm approx, blade width 50-55mm | 4 |
| | | SMALL=length 290-310mm approx, blade width 25-30mm | 4 |
| (iii) | MORRIS | length 9&3/4 inches, blade width 2 & 3/4 inches x 1 & 1/2 inches | 4 |
| (iv) | DENIS BROWNE SELF RETAINING RETRACTOR | STANDARD SIZE | 1 |
| (v) | DOYEN'S RETRACTOR | LENGTH 250 MM, BLADE 50 X 85 MM | 2 |
| (vi) | FINOCHIETTO | LENGTH 260 X 220 MM, BLADE 65 X 65 MM | 1 |
| | | LENGTH 145 X 180 MM, BLADE 40 X 60 MM | 1 |
| (vii) | GILVERNET RETRACTOR FOR RENAL PELVIS | 240 MM APPROX, BLADE 11 X 14 MM | 1 |

| | | | |
|--------|--|---|--------|
| | | 240 MM APPROX, BLADE 13 X 18 MM | 1 |
| | | 240 MM APPROX, BLADE 15 X 22 MM | 1 |
| (viii) | ROUX RETRACTOR (SET OF THREE) | 150 MM | 1 |
| | | 160 MM | 1 |
| | | 170 MM | 1 |
| 12 | DITTEL URETHRAL BOUGIES | COMPLETE SET (8F - 30 F) | 1 |
| 13 | HEGAR UTERINE DILATORS | COMPLETE SET | 1 |
| 14 | BERRI PROSTATE RETRACTOR | 360 MM | 2 |
| 15 | STRAUSS PENILE CLAMP | 130 MM APPROX | 2 |
| 16 | URETER FORCEPS | 240 MM | 2 |
| 17 | FORCEPS FOR GRASPING GLANS AND FORESKIN | 125 MM | 2 |
| 18 | FIXATION CLAMP FOR SPERMATIC CORD | 145 MM | 2 |
| 19 | INTRODUCER FOR CATHETER | 460 MM | 2 |
| 20 | SPONGE HOLDING FORCEPS | SERRATED, FENESTRATED JAW, STRAIGHT, LENGTH 225-250 MM | 2 |
| 21 | VENOUS PLEXUS CLAMP (FOR PROSTATECTOMY) | 210 MM | 2 |
| 22 | BARRE DISSECTING SCISSORS | 280 MM | 2 |
| 23 | BARRE DISSECTING FORCEPS | DELICATE 280 MM | 2 |
| 24 | MIKULICZ RETRACTOR | 255 MM WITH BLADE LENGTHS 120 MM, 145 MM & 180 MM | 1 EACH |
| 25 | TURNER WARWICK RETRACTOR | STANDARD SIZE | 2 |
| 26 | LEGNEU BLADDER SPATULA | 260 MM, BLADE 90 MM X 35 MM | 2 |
| 27 | SCISSORS | | |
| (i) | METZENBAUM | DISSECTING SCISSORS CURVED STANDARD WITH CUTTING EDGE LENGTH(295-305mm) | 2 |
| | | DISSECTING SCISSORS STRAIGHT STANDARD WITH CUTTING EDGE LENGTH(295-305mm) | 2 |
| | | DISSECTING SCISSORS CURVED STANDARD WITH CUTTING EDGE LENGTH(175-185mm) | 2 |
| | | DISSECTING SCISSORS CURVED DELICATE WITH CUTTING EDGE LENGTH(175-185mm) | 2 |
| (ii) | MAYO'S | ROUND BLADE, CURVED WITH CUTTING EDGE, LENGTH (155-180 MM) | 2 |
| | | ROUND BLADE, STRAIGHT WITH CUTTING EDGE, LENGTH 155-180 MM) | 2 |
| (iii) | DEBAKEY VASCULAR SCISSORS | 220 MM, 60° ANGLED | 2 |
| (iv) | LIGATURE SCISSORS | WAVE CUT, CURVED, 180 MM | 2 |
| 28 | TISSUE DISSECTING FORCEPS | | |
| (i) | DEBAKEY | LENGTH-240-250mm,1.5-2mm TIP | 4 |
| | | LENGTH 145-155 MM 2MM TIP | 4 |

| | | | |
|-------|---|---|--------|
| | | ANGLED 200 MM, 8 INCHES, 40 °, TIP 2MM | 4 |
| (ii) | TOOTHED STANDARD MODEL | LONG= LENGTH-240-250mm, 1×2 TEETH | 4 |
| | | MEDIUM=LENGTH-140-155mm, 1×2 TEETH | 4 |
| (iii) | NON TOOTHED STANDARD MODEL | LONG= LENGTH-240-250mm,2-3 MM WIDE TIP | 4 |
| | | MEDIUM=LENGTH-140-155mm, 2-3 MM WIDE TIP | 4 |
| 29 | MIXTER RIGHT ANGLED FORCEPS | GRUENWALD 200MM LENGTH 225-245 MM | 4 |
| | | LENGTH 135-145 MM | 4 |
| 30 | BABCOCK FORCEPS | LENGTH 150-165 MM | 8 |
| | | LENGTH 225-235MM | 8 |
| 31 | DEBAKEY BULLDOG CLAMPS | 90 X 30 MM STRAIGHT | 2 |
| | | 90 X 30 MM CURVED | 2 |
| | | 60 X 20 MM STRAIGHT | 2 |
| | | 60 X 20 MM CURVED | 2 |
| 32 | MOYNIHANS FORCEPS | CURVED, LENGTH 5 & 3/4 INCHES, SERRATED | 2 |
| 33 | LISTON BONE CUTTING FORCEPS | 140 MM | 2 |
| | | 200 MM | 2 |
| 34 | LUER STILLE BONE RONGEUR | 225 MM | 2 |
| 35 | LUER BONE RONGEUR | 180 MM | 2 |
| 36 | LAMBOTTE PERIOSTEUM ELEVATOR | 215 MM X 15 MM, 215 MM X 10 MM | 1 EACH |
| 37 | RIB RASPATORIES (DOYEN'S) | 175 MM APPROX (RIGHT & LEFT) | 2 EACH |
| 38 | RANDALL STONE HOLDING FORCEPS | 225 MM, COMPLETE SET | 1 |
| 39 | GUYON KIDNEY CLAMP | 240 MM | 2 |
| | | 230 MM | 2 |
| 40 | DEBAKEY SATINSKY CLAMP | 240 MM, JAW LENGTHS 30, 40, 47 MM | 2 EACH |
| 41 | TUFFIER ABDOMINAL SPATULA | 200 X 17 MM | 2 |
| 42 | COLLIN KIDNEY ELEVATING FORCEPS | 285 MM | 2 |
| 43 | MILLIN BLADDER RETRACTOR (SELF RETAINING) | | 1 |
| 44 | NEEDLE HOLDER | | |
| (i) | DELICATE PATTERN | LENGTH 150-160 MM | 2 |
| | | LENGTH 200-210 MM | 2 |
| | | LENGTH 295-305 MM | 2 |
| (ii) | HEAVY PATTERN / HEGAR | LENGTH 175 MM | 2 |
| | | LENGTH 205 MM | 2 |
| 45 | KIDNEY TRAY | LENGTH 165-185 MM | 2 |
| | | LENGTH 250-265 MM | 2 |
| | | LENGTH 290-305 MM | 2 |
| 46 | BOWLS | WITH CAPACITY OF 60 ML, 400 ML, 1000 ML & 2500 ML | 2 EACH |
| 47 | SKIN HOOKS | LENGTH 150-165 MM APPROX | 6 |
| 48 | TRAY | | |

| | | | |
|-------|---|---|---|
| (i) | | FOR STERILIZING INSTRUMENTS (WITH PERFORATION) | |
| | | WITH COVER WIDTH 250-300 MM, DEPTH 75-100MM, LENGTH 250-300 MM | 2 |
| (ii) | | FOR STERILIZING INSTRUMENTS (WITH PERFORATION) | |
| | | WITH COVER WIDTH 250-300 MM, DEPTH 75-100MM, LENGTH 350-400 MM | 2 |
| (iii) | | FOR STERILIZING INSTRUMENTS (WITH PERFORATION) | |
| | | WITH COVER WIDTH 250-300 MM, DEPTH 75-100MM, LENGTH 500-550 MM | 2 |
| 49 | DRESSING DRUMS/ CONTAINERS WITH LID | 15 INCHES x 12 INCHES APPROX | 1 |
| | | 11 INCHES x 9 INCHES APPROX | 1 |
| 50 | METALLIC SUCTION CANNULA | 7 FR TIP, 7-1/2 INCHES LENGTH APPROX | 1 |
| | | 9 FR TIP, 7-1/2 INCHES LENGTH APPROX | 1 |
| 51 | MAYO SAFETY PIN INSTRUMENT HOLDER | STANDARD | 2 |
| 52 | POOL SUMP SUCTION CANNULA WITH OUTER TUBE | 225 MM X 10 MM | 2 |

NOTE: ALL THE ABOVE MEASUREMENTS ARE APPROXIMATE VALUES

Conditions for tender

- 1 All Surgical Instruments should be made of high grade metal
- 2 These should comply with the DIN standards.
- 3 These should be of high quality and precision
- 4 These should be light weight, strong and durable
- 5 These should be non-magnetic
- 6 All the Surgical Instruments should have bar coding and should have anti glaring surface for better vision.
- 7 For offered Surgical Instruments, the original packing list (O.P.L) should be provided mandatory during execution of supplies.
- 8 All offered Surgical Instruments and containers should be from same manufacturer.
- 9 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.
- 10 Offered Equipment should have very strong presence in govt set ups.

- Offered Equipment should
- 11 have Warranty for 05 years.
 - 12 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.
 - 13 As a tendering process the Physical Demonstration of the offered Equipment is Mandatory at hospital / institute premises at bidders cost, no electronic PPT or Video of the offered Equipment should be accepted.
 - 14 Offered equipment should be US- FDA approved and with European CE certificate
 - 15 All instruments should be autoclavable at high temperature.
 - 16 The Tungsten Carbide inlay should be nickel based.
 - 17 The TC inlay should be welded to the instrument and not pasted.
 - 18 The manufacturer should have a direct repair facility locally available.
 - 19 It should have TUV certificate of manufacturer with details of manufacturing facility.
 - 20 The equipment should have Brand name / Model Number embossed / etched on the equipment.

(14) 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
 - 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

(15) 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.
- Treadmill 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 lead avg. 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.
- Treadmill should be supplied with wireless (Bluetooth/ RF based) physiological monitoring device which can monitor :ECG; Heart rate; R-R interval, Respiratory rate, Oxygen saturation & 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 of transducers, display of actual values, controllable gain, filter settings, baseline setting for event marking and annotation.
- Should be supplied with Compatible computer & printer & UPS.

(16) 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

(17) 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 preferably 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

(18) Technical Specifications of Minor Open Surgery set

| Specifications of Minor Open Surgery Set | |
|---|--|
| 2 | SCALPEL HANDLE #3 |
| 2 | SCALPEL HANDLE #4 |
| 2 | SCALPEL HANDLE #7 |
| 1 | TUNGSTON CARBIDE MAYO DISEC SCISRND BLDS CURVED 170MM |
| 2 | TUNGSTON CARBIDE METZENBAUM SCISSORS CURVED 180MM |
| 1 | TUNGSTON CARBIDE NELSON-METZ SCISSORS CURVED 305MM |
| 1 | TUNGSTON CARBIDE METZENBAUM SCISSORS DEL CURVED 180MM |
| 1 | TUNGSTON CARBIDE SUTURE WAVECUT SCISSORS CURVED 180MM |
| 1 | TUNGSTON CARBIDE SUTURE SCISSORS SERRATED CURVED 260MM |
| 2 | DE'BAKEY 1.5MM WIDE 242MM LONG |
| 2 | DE'BAKEY ARTERY.FCPS 2.0MM STRAIGHT 240MM |
| 1 | TUNGSTON CARBIDE THUMB FORCEPS 145MM |
| 1 | TUNGSTON CARBIDE TISSUE FORCEPS 250MM |
| 1 | STANDARD TISSUE FORCEPS 1X2 145MM |
| 1 | TISSUE FORCEPS 150MM |
| 2 | OVERHOLT FORCEPS CURVED 209MM |
| 1 | MIXTER FORCEPS LONG-SERRATED 250MM |
| 1 | BABY-MIXTER FORCEPS CURVED 140MM |
| 2 | LAHEY FORCEPS LONG-SERRATED 224MM |
| 2 | BABCOCK TISSUE FORCEPS 155MM |
| 2 | BABCOCK ARTERY.FORCEPS 240MM |
| 2 | ALLIS FORCEPS 5X6 155MM |
| 2 | ALLIS FORCEPS 5X6 190MM |
| 2 | DESJARDINS GALL STONE FORCEPS CURVED.240MM |
| 2 | FOERSTER SPONGE FCPS SERRATED STRAIGHT 242MM |
| 10 | BACKHAUS TOWEL CLAMP 135MM |
| 12 | HALSTED-MOSQUITO FORCEPS DEL STRAIGHT 125MM |
| 12 | HALSTED-MOSQUITO FORCEPS DEL CURVED 125MM |
| 6 | ADSON DELICATE FORCEPS CURVED 185MM |
| 6 | CRILE FORCEPS STRAIGHT 160MM |
| 6 | CRILE FORCEPS CURVED 160MM |
| 6 | PEAN FORCEPS CURVED 260MM |
| 6 | PEAN FORCEPS CURVED 280MM |
| 6 | KOCHER-OCHSNER FORCEPS CURVED 1X2 225MM |
| 6 | KOCHER-OCHSNER FORCEPS CURVED 1X2 280MM |
| 2 | KOCHER RETRACTOR 60X25MM |
| 2 | KELLY RETRACTOR OPEN 70X65MM 261MM |
| 1 | DEAVER RETRACTOR 25MM 305MM |
| 1 | DEAVER RETRACTOR 50MM 311MM |
| 1 | DEAVER RETRACTOR 75MM 324MM |
| 2 | LANGULARENBECK RETRACTOR 40X10MM 230MM |
| 2 | CZERNY RETRACTOR 38X22MM 175MM |

| | |
|---|--|
| 2 | CUSHING VEIN RETRACTOR 14X18MM 203MM |
| 1 | TUNGSTON CARBIDE MAYO-HEGAR NEEDLE HOLDER HEAVY SERRATED 205MM |
| 1 | TUNGSTON CARBIDE MAYO-HEGAR NEEDLE HOLDER 300MM |
| 2 | TUNGSTON CARBIDE SAROT NEEDLE HOLDER SERRATED 175MM |
| 1 | TUNGSTON CARBIDE SAROT NEEDLE HOLDER 260MM |
| 1 | TUNGSTON CARBIDE DE'BAKEY NEEDLE HOLDER DELSERRATED 210MM |
| 1 | DOYEN INTESTINAL FORCEPS STRAIGHT 235MM |
| 1 | DOYEN INTESTINAL FORCEPS CURVED 235MM |
| 2 | KIDNEY TRAY 170MM 250ML |
| 2 | KIDNEY TRAY 275MM 750ML |
| 1 | DE'BAKEY-SATINSKY TANGULARENTIAL CLMP 235MM |
| 1 | DE'BAKEY-SATINSKY TANGULARENTIAL CLMP 245MM |
| 2 | LELAND-JONES PERIPHERAL CLMP STRAIGHT 197MM |
| 2 | COOLEY BULLDOG CLAMP RING-HDL STRAIGHT 125MM |
| 1 | COOLEY BULLDOG CLMP RING-HDL CURVED 115MM |
| 1 | DE'BAKEY BULLDOG CLMP RING-HDL CURVED 125MM |
| 2 | POTTS-DE MARTEL SCISSORS 25 DGS/S 185MM |
| 1 | 1/1 BASKET W/O STACK FEET 540X253X44MM |
| 1 | 1/1 SIZE PERF BASKET LID 544X257MM |
| 1 | DISSECT. SCISS., METZENBAUM, 145MM, CURVED. DURO |
| 1 | DUROTIP DISS. SCISS., METZENBAUM, CURVED. 200MM |
| 1 | DUROTIP DISS. SCISS., METZENBAUM, CURVED. 230MM |
| 1 | DUROTIP DISS. SCISS., MAYO-LEXER, CURVED, 165MM |
| 1 | OP. SCISSORS, STRAIGHT., BL/SH, 145 MM, S |
| 1 | DISSECTING FORCEPS, SLEND. PATT., 145 MM |
| 1 | TISSUE FORCEPS, AM. PATT., 1X2 T., 145MM |
| 1 | TISSUE FORCEPS, 1X2 T., 200MM MEDIUM SIZE |
| 1 | FORCEPS, STRAIGHTAIGHT, 2MM JAW, ARTERYAUM. 200MM |
| 1 | HALSTED FORCEPS, CURVED, 1X2 TEETH, 125MM |
| 1 | HALSTED ARTERY FORCEPS, STRAIGHTAIGHT, 185 MM |
| 1 | HALSTED FORCEPS, 1X2 TEETH, STRAIGHT., 185CM |
| 1 | DUROGRIP CRILE-WOOD NEEDLE HOLDER, 145MM |
| 1 | DUROGRIP HEGAR-MAYO NEEDLE HOLDER, 205MM |
| 1 | DUROGRIP DE BAKEY NEEDLE HOLDER, 180 MM |
| 1 | CUSHING VEIN- A. WOUND RETRACTOR, 10X13MM |
| 1 | CZERNY TUMOR FORCEPS, 4X4 TEETH, 200 MM |
| 1 | NON-TRAUM. HOLDING FORC., ALLIS, 155 MM |
| 1 | INTERIOR BOX FOR INSTRUMENTS |
| 1 | NEEDLE CASE, PERFOR., 7 COMP, 150X90X10MM |
| 2 | SCALPEL HANDLE NO. 4L |
| 2 | TISSUE FORCEPS, 1X2 T., 250MM MEDIUM SIZE |
| 2 | FORCEPS, STRAIGHTAIGHT, 2MM JAW, ARTERYAUM. 240MM |
| 2 | DE BAKEY FORCEPS, ARTERYAUM, 240MM, STRAIGHT. 3,5MM |
| 2 | DUROGRIP DE BAKEY NEEDLE HOLDER, 250 MM |
| 2 | HABERER ADOMINAL SPATULA, MALLEAB., TAP. |
| 1 | NON-TRAUM. GRASPING FORCEPS, ALLIS, 255 MM |
| 1 | ALLIS INTESTINAL FORCEPS, DELIC. PATTERN |

SPECIFICATIONS for SET

- All the instruments should be made of high grade stainless steel. The quality of steel should comply with the DIN standards.
- It should be of high quality and precision.
- It should be lightweight, strong and durable & non-magnetic.
- All instruments should be autoclavable.
- The Tungsten Carbide inlay should be nickel based.
- The TC inlay should be welded to the instrument and not pasted.
- All instruments should have bar coding.
- All instruments should be supplied from single manufacturer.
- The manufacturer should have a direct repair facility available in India.
- It should have TUV certificate of manufacturer with details of manufacturing facility.
- Should be USFDA and CE approved

(19) 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.

(20) Technical Specifications of Obstetrics operation table with C-Arm

Specifications:-

1. The table should be study with modular five section table top with divided foot section.
2. The table top should be made translucent material to permit use of X-ray tray and C-ARM compatible for procedures like X-ray Embolization etc
3. It should be equipped with X-ray translucent, antistatic and disinfectant resistant moulded seamless mattress attached to the top with pins for easy attachment/detachment and hygiene.
4. Should have detachable and interchangeable Head and leg section as per the need of surgery.
5. The OT table should be equipped with two independent operating drives manual hydraulic and Electro hydraulic.
6. It should have middle section cut for lithotomy position.
7. Table positions height, lateral tilt, trendelenburg, reverse trendelenburg, should be electro hydraulically operated using a single switch on hand held controller
8. It should have the facility to operate the table in normal and reverse mode using the hand controller.
9. Hand held controller should have display for function being performed along with measurement and display of height and angular adjustment, should also have battery level indicator.
10. Adjustments for Leg section, Head section, Back section, Longitudinal slide position should be achieved manually by gas spring/gear mechanism as applicable.
11. The table should be equipped with independent foot pedal operated manual hydraulic control system located in the table base for Height, lateral tilt trendelenburg, reverse trendelenburg adjustment in case of power/battery/remote/system failure.
12. For manual adjustments position should be selected on dial using foot lever and then position should be achieved by pressing the foot pedal.
13. The base column should have telescopic cover of stainless steel to prevent the ingress of fluid in the system.
14. All metal components of the table should be made of acid proof instrument grade stainless steel to disinfecting agents and easy to clean.

15.It should have built rechargeable battery sufficient for weekly operative schedule.
The centre column panel should indicate the charging status and table battery status.

16.The table should have duty castors with central locking controlled by foot lever for easy maneuverability.

17.It should have maximum permissible load capacity of at least 200 kg dynamic and 350 kg static

18. Technical Specifications:-

- Height Adjustment : 710 (lowest) – 1140 (highest)
- Side Tilt : +30⁰
- Back Section adjustment : -40⁰ to -85⁰
- Leg section adjustment : -90⁰ to +25⁰ detachable
- Longitudinal Shift : minimum 340
- Trendelenburg adjustment : at least 40⁰
- Reverse Trendelenburg Adj : at least 40⁰
- Headrest : -50⁰ to +55⁰
- Max Width : 550 mm or max
- Overall length : 2020 mm or max

19.Should be supplied with following standard accessories:

- Padded Armrest with straps pair with clamps
- Padded Leg rests with clamps (pair)
- Anesthesia Screen with clamps
- Shoulder Supports pair with clamps
- Side Support pair with clamps
- X-ray Cassette Tray
- Infusion Rod with clamp movable
- Bowl with attachment

20.Should comply with international safety and quality standards for medical equipment – European CE ISO, 13485 and ISO 14001 USFDA

21.Table should confirm to IP-X4 standard for protection against environment.

(21) 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 methods development for multi-component quantification in biological matrices for pesticides , metabolites, fatty acid disorders screening, drug screenings and steroid pathway analysis 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 <ul style="list-style-type: none"> •It should have EI source. Programmable to 350 °C or more •It should have Integrated, dual filament for EI with improved filament lifetime |
| 4. | Transfer Line Temperature: The temperature should be up to 350 °C or more |
| 5. | Quadrupole Mass Analyzer <ul style="list-style-type: none"> •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. | Emission Current: It should have emission current up to 350 μ A or more. |
| 9. | Collision Energy Range: Upto 60 eV or better |
| 10. | Scan Speed <ul style="list-style-type: none"> •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 <ul style="list-style-type: none"> •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 μ L of 100 fg/ μ L Octafluoronaphthalene (OFN) will produce the following minimum signal-to-noise for the transition from m/z 272 to m/z 222: 30,000:1 or more. |
| 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 μ L, 2fg/ μ L OFN, acquired in EI SRM/MRM. This point must be taken as mandatory. |

| | |
|-----|--|
| 14. | <p>Gas Chromatography : Oven: 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</p> <ul style="list-style-type: none"> •It should have number of ramps/plateaus: 20/21 or more •The maximum heating rate should be 120 °C/min or more |
| 15. | <p>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.</p> <ul style="list-style-type: none"> •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. | <p>Programmable Temperature Vaporizer Injector (PTV/MMI) – Qty 1</p> <ul style="list-style-type: none"> •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. | <p>Split/splitless injector with back flush and Electronics Gas Controller – Qty 1</p> <ul style="list-style-type: none"> •The injector should be able to operate with narrow & wide bore capillary columns. •Suitable for all capillary columns (50 µm to 530 µm.i.d.) •Maximum Temperature: 400 °C or more |
| 18. | <p>Flame Ionization Detector with Electronics Gas Controller – Qty 1</p> <ul style="list-style-type: none"> •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: >10⁶ or better •Maximum temperature: 450 °C or more •Data Acquisition Rate: up to 300 Hz. or better |
| 19. | <p>GC Analytical Performance</p> <ul style="list-style-type: none"> •The GC should have a Retention Time Repeatability of <0.0008min •Typical peak area repeatability: <1.0 % RSD |
| 20. | <p>Columns (02 qty each) Column with stationery phase equivalent to</p> <ul style="list-style-type: none"> •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. | <p>Liquid sampler: liquid sampler with minimum 100 vial 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.</p> |

| | |
|-----|---|
| 22. | <p>Data System Software with Workstation</p> <ul style="list-style-type: none"> • 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. | <p>Solid Phase Extraction:</p> <ul style="list-style-type: none"> • 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. | <p>Consumables</p> <ul style="list-style-type: none"> • 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. | <p>Accessories/Necessary parts to install the equipment</p> <ul style="list-style-type: none"> • High Purity Helium, N₂/Argon Gas filled cylinder – each Qty. 4 • Double Stage SS Diaphragm Regulator for Helium, N₂/ 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. |

| | |
|-----|---|
| | <ul style="list-style-type: none"> • Vendor must offer operator to operate the system for two complete years. |
| 26. | <p>Solvents and Derivatization reagent:5 X 5 Litre each</p> <p>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.</p> |
| 27. | <p>Standards:</p> <p>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.</p> |
| 28. | <p>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.</p> |
| 29. | <p>Important note:</p> <p>Offer should indicate all parts with details specification and Brand clearly as required in our specifications</p> <p>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.</p> |
| 30. | <p>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.</p> |
| 31. | <p>Only the principle company may participate in tender. All the agreements shall be done with principle company only.</p> |

(22) Technical Specifications of Inductively Coupled Plasma Mass Spectrometry (ICP-MS)

| Specifications for ICPMS | |
|--|--|
| ICP-MS system for elemental analysis which is the latest in the category and capable to deliver sub-ppb level analysis of elements ions . System should be bench top model. | |
| Purpose: Trace and ultra-trace elemental analysis (ppm, ppb and ppt) in a single aspiration and in a single method. The estimation of platinum based drugs too is expected. Detailed specifications 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% % 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. | <p>(A). Sensitivity specifications are as follows: (UOM): MCPS/ppm</p> <ul style="list-style-type: none"> ● ⁹Be or Li: >5 ● ¹¹⁵In or Y: >90 ■ ²³⁸U or Tl: >70 <p>(B). Detectionlimit : as follows</p> <ul style="list-style-type: none"> ● ⁹Be or Li: 1 ppt or better ● ¹¹⁵In or Y: 0.5 ppt or better ■ ²³⁸U or Tl: 0.5 ppt or better |

| | |
|-----|--|
| | <p>(C). Following points should also be met:</p> <ul style="list-style-type: none"> • Oxide ratio (%) CeO/Ce ≤ 2.5 or better • Ba⁺⁺ or Ce⁺⁺/ Ba or Ce < 3 or better • Background on-mass (cps) No gas < 1 • Short Term Stability < 3% RSD or better • Long Term Stability < 4% RSD or better |
| 17. | <p>Mode of operation: 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, H₂, O₂, CH₄ 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.</p> |
| 18. | <p>Control: 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 reaction using reactive gas like oxygen.</p> |
| 19. | <p>The mass range should be from 10-250amu or better.</p> |
| 20. | <p>The dwell time should be as short as 100 micro second or better.</p> |
| 21. | <p>Scan speed should be >3000 amu/s.</p> |
| 22. | <p>The analyser must have the ability to discretely control the resolution of selected mass regions dynamically without affecting the overall nominal resolution of the system.</p> |
| 23. | <p>Ion detection with electron multiplier shall ensure 10 or more orders of linear dynamic range using simultaneous analog and pulse counting. It shall be possible to measure major and minor concentrations in a single analytical run.</p> |
| 24. | <p>Vacuum system: Should have rotary pump and turbo molecular pump with split flow for extremely high gas throughput. Vacuum should be better than 1×10^{-5} mbar in open valve condition and shall be better than 5×10^{-5} mbar in closed valve or condition as per system hardware requirement.</p> |
| 25. | <p>Auto sampler: 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.</p> |
| 26. | <p>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.</p> |
| 27. | <p>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 and mouse & Branded ink tank printer for offline data analysis.</p> |
| 28. | <p>Accessories and Standards:</p> <ul style="list-style-type: none"> - 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) |

| | |
|-----|--|
| | <ul style="list-style-type: none"> - 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 – 02 no. 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. | <p>Additional Consumables & Spares to be quoted apart from 1 qty. each which comes by default</p> <ul style="list-style-type: none"> - 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 <p>Note: Apart from above consumables vendor should offer any other consumables if required. Any consumable not required for particular instrument may be omitted.</p> |
| 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. |

| | |
|-----|---|
| 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. |

(23) Technical Specifications of Laparotomy Set

| S. NO | NAME OF INSTRUMENT | SPECIFICATIONS | QUANTITY |
|--------|---|---|---|
| 1 | BP HANDLE | NO 3 , 125 MM | 3 |
| | | NO 4, 135 MM | 3 |
| 2 | BACKHAUS TOWEL CLIP | 3-1/2 INCHES (9 CM) | 10 |
| 3 | ALLIS FORCEPS | LONG(5x6) 190mm approx | 6 |
| | | MEDIUM(5X6) 155 approx | 6 |
| 4 | ARTERY FORCEPS(CURVED) | LONG 185 mm approx | 6 |
| | | MEDIUM 140mm approx | 6 |
| | | SMALL 125mm approx | 6 |
| 5 | ARTERY FORCEPS(STRAIGHT) | LONG 185 mm approx | 6 |
| | | MEDIUM 140mm approx | 6 |
| | | SMALL 125mm approx | 6 |
| 6 | KOCHER'S FORCEPS | LONG 240mm approx | 4 |
| | | MEDIUM 200mm approx | 4 |
| 7 | RETRACTOR | | |
| | CZERNY | length 180-205mm approx, blade width 20-25mm,depth 38-45mm | 2 |
| | LANGENBACK | length 220-225mm approx, blade width 10-15mm,depth 40-50mm | 2 |
| | | length 220-225mm approx, blade width 10-15mm,depth 28mm | 2 |
| | MORRIS | 245 x 70 x 65 mm | 2 |
| | | 245 x 70 x 50 mm | 2 |
| | | 245 x 70 x 540 mm | 2 |
| DEAVER | LARGE=length 290-310mm approx, blade width 75-80mm | 2 | |
| | MEDIUM=length 290-310mm approx, blade width 50-55mm | 2 | |
| | SMALL=length 290-310mm approx, blade width 25-30mm | 2 | |
| 8 | DOYEN'S RETRACTOR | LENGTH 250 MM, BLADE 50 X 85 MM | 1 |
| | | SPONGE HOLDING FORCEPS | SERRATED, FENESTRATED JAW, STRAIGHT, LENGTH 225-250 MM |
| 9 | SCISSORS | | |
| | | METZENBAUM | DISSECTING SCISSORS CURVED STANDARD WITH CUTTING EDGE LENGTHH(295-305mm) |
| | | DISSECTING SCISSORS STRAIGHT STANDARD WITH CUTTING EDGE LENGTHH(295-305mm) | 1 |
| | | DISSECTING SCISSORS CURVED STANDARD WITH CUTTING EDGE LENGTHH(175-185mm) | 2 |
| | | DISSECTING SCISSORS STRAIGHT DELICATE WITH CUTTING EDGE LENGTHH(175-185mm) | 1 |
| | MAYO'S | ROUND BLADE, CURVED WITH CUTTING EDGE, LENGTH 155-180 MM) | 1 |
| | | ROUND BLADE, STRAIGHT WITH CUTTING EDGE, LENGTH 155-180 MM) | 1 |
| | | MULLER RECTAL SCISSORS | S SHAPED, 325 MM |

| | | | | |
|----|--|--|-------|--|
| 10 | TISSUE DISSECTING FORCEPS | | | |
| | DEBAKEY | LENGTH-240-250mm,1.5-2mm TIP | 2 | |
| | | LENGTGH 145-155 MM 2MM TIP | 2 | |
| | | ANGLED 200 MM, 8 INCHES, 40 °, TIP 2MM | 2 | |
| | | 350MM, ATRAUMATIC | 2 | |
| | TOOTHED STANDARD MODEL | LONG= LENGTH-240-250mm, 1×2 TEETH | 2 | |
| | | MEDIUM=LENGTH-140-155mm, 1×2 TEEETH | 2 | |
| | NON TOOTHED STANDARD MODEL | LONG= LENGTH-240-250mm,2-3 MM WIDE TIP | 2 | |
| | | MEDIUM=LENGTH-140-155mm, 2-3 MM WIDE TIP | 2 | |
| | | GRUENWALD 200MM | 2 | |
| 11 | MIXTER RIGHT ANGLED FORCEPS | LENGTH 225-245 MM | 2 | |
| | | LENGTH 135-145 MM | 2 | |
| | | LENGTH 290 MM | 2 | |
| | | LENGTH 180 MM | 2 | |
| 12 | BABCOCK FORCEPS | LENGTH 150-165 MM | 6 | |
| | | LENGTH 225-235MM | 6 | |
| 13 | BOWEL CLAMPS(DOYEN'S) | | | |
| | CRUSHING | STRAIGHT-LENGTH-230-240MM | 2 | |
| | | CURVED-LENGTH-230-240MM | 2 | |
| | NON CRUSHING | STRAIGHT-LENGTH-230-240MM | 2 | |
| | | CURVED-LENGTH-230-240MM | 2 | |
| | MULLER TYPE | 375 MM | 2 | |
| | PAYR INTESTINAL CLAMP | 315 MM X 146 MM | 2 | |
| | KLEINSCHMIDT APPENDECTOMY CLAMP | 130 MM | 2 | |
| | SIGMOID ANASTOMOSIS FORCEPS (RIGHT ANGLED) | 230 X 80 MM | 2 | |
| | KERSTING SIGMOID ANASTOMOSIS FORCEPS | 300 MM | 2 | |
| 14 | NEEDLE HOLDER | | | |
| | DELICATE PATTERN | LENGTH 150-160 MM | 1 | |
| | | LENGTH 200-210 MM | 1 | |
| | | LENGTH 295-305 MM | 1 | |
| | HEAVY PATTERN / HEGAR | LENGTH 175 MM | 1 | |
| | | LENGTH 205 MM | 1 | |
| 15 | KIDNEY TRAY | LENGTH 165-185 MM | 1 | |
| | | LENGTH 250-265 MM | 1 | |
| | | LENGTH 290-305 MM | 1 | |
| 16 | BOWLS | WITH CAPACITY OF 60 ML, 400 ML, | 1EACH | |
| | | 1000 ML & 2500 ML | | |
| 17 | MOYNIHANS FORCEPS | CURVED, LENGTH 5-3/4 INCHES, SERRATED | 2 | |
| 18 | GIL WERNET RETRACTOR | STANDARD SIZE | 1 | |
| | (FOR RENAL PELVIS) | | | |

| | | | | |
|----|--|---|--------|--|
| 19 | BALFOUR SELF RETAINING ABDOMINAL RETRACTOR | WITH 10 " SPREAD, FENESTRATED SIDE BLADES AND CENTRE BLADE OF STANDARD SIZE | 1 | |
| 20 | MATHIEU RECTAL SPECULUM | TRIVALVED, 215 MM X 95 MM | 1 | |
| 21 | TRAY | FOR STERILIZING INSTRUMENTS (WITH PERFORATION) WITH COVER WIDTH 250-300 MM, DEPTH 75-100MM, LENGTH 250-300 MM | 1 | |
| | | FOR STERILIZING INSTRUMENTS (WITH PERFORATION) WITH COVER WIDTH 250-300 MM, DEPTH 75-100MM, LENGTH 350-400 MM | 1 | |
| | | FOR STERILIZING INSTRUMENTS (WITH PERFORATION) WITH COVER WIDTH 250-300 MM, DEPTH 75-100MM, LENGTH 500-550 MM | 1 | |
| 22 | DRESSING DRUMS/CONTAINERS WITH LIDS | 15 INCHES x 12 INCHES 11 INCHES x 9 INCHES | 1 1 | |
| 23 | SINUS FORCEPS | STRAIGHT WITH SERRATED TIPS, LENGTH 7 INCHES | 1 | |
| 24 | METALLIC SUCTION CANNULA | 7 FR TIP, 7-1/2 INCHES LENGTH APPROX 9 FR TIP, 7-1/2 INCHES LENGTH APPROX | 1 1 | |
| 25 | POOL SUMP SUCTION CANNULA WITH OUTER TUBE | 225 MM X 10 MM | 1 | |
| 26 | SURGICAL TRAY WITH LID | 450MMx350MMx80MM APPROX | 1 | |
| 27 | TITANIUM LIGATING CLIP APPLIERS | 200 MM, ANGLED 25 DEGREE 150 MM, ANGLED 25 DEGREE | 2 2 | |
| 28 | YEOMAN RECTAL BIOPSY FORCEPS | 420 MM 250 MM | 1 1 | |
| 29 | KELLY ANUSCOPE | 160 MM X 25 MM | 1 | |
| 30 | KELLY PROCTOSCOPE | 140 MM X 20 MM | 1 | |
| | NOTE: ALL THE ABOVE MEASUREMENTS ARE APPROXIMATE VALUES | | | |
| | Conditions for tender | | | |
| 1 | All Surgical Instruments should be made of high grade metal | | | |
| 2 | These should comply with the DIN standards. | | | |
| 3 | These should be of high quality and precision | | | |
| 4 | These should be light weight, strong and durable | | | |
| 5 | These should be non-magnetic | | | |
| 6 | All the Surgical Instruments should have bar coding and should have anti glaring surface for better vision. | | | |
| 7 | For offered Surgical Instruments, the original packing list (O.P.L) should be provided mandatorily during execution of supplies. | | | |
| 8 | All offered Surgical Instruments and containers should be from same manufacturer. | | | |

| | | | |
|----|---|--|--|
| 9 | 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. | | |
| 10 | Offered Equipment should have very strong presence in govt set ups. | | |
| 11 | Offered Equipment should have Warranty for 05 years. | | |
| 12 | 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. | | |
| 13 | As a tendering process the Physical Demonstration of the offered Equipment is Mandatory at hospital / institute premises at bidders cost, no electronic PPT or Video of the offered Equipment should be accepted. | | |
| 14 | Offered equipment should be US- FDA approved and with European CE certificate | | |
| 15 | All instruments should be autoclavable at high temperature. | | |
| 16 | The Tungsten Carbide inlay should be nickel based. | | |
| 17 | The TC inlay should be welded to the instrument and not pasted. | | |
| 18 | The manufacturer should have a direct repair facility locally available. | | |
| 19 | It should have TUV certificate of manufacturer with details of manufacturing facility. | | |
| 20 | The equipment should have Brand name / Model Number embossed / etched on the equipment. | | |
| | | | |

(24) Technical Specifications of C-Arm

| Type of Machine Required - Digital Flat Panel Detector Mobile C arm system along with the accessories as per specification | |
|---|--|
| Specification | |
| A | <u>Gantry (C- Arm Features)</u> |
| 1 | Vertical Free space - 80 cm or more |
| 2 | C Arm Depth- 70 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 | Wireless remote control for movement. |
| 9 | Touch screen monitor on C Arm to control the C Arm function for live image display. |
| 10 | Remote Controlled unit for controlling the C Arm functions from sterile area should be provided. |
| 11 | Anti-Collision facility. |
| | |
| B | <u>Generator & Rotating Anode X ray Tube</u> |
| 1 | Facility for both Radiography & Fluoroscopy |
| 2 | Power output- 25 kw or more with 40 kHz frequency or More |
| 3 | Pulse Fluoroscopic kVp range: 40-120 kVp or more |
| 4 | Fluoroscopic mA range: 4mA - 200mA or more |
| 5 | Radiographic kVp range: 40-110 kVp or more |
| 6 | Radiographic mA range: upto 200mA |
| 7 | Pulse fluoroscopy with pulse rates up to 25 frames/sec |
| 8 | Focal spot - Dual focal (0.3mm & 0.6 mm) |
| 9 | Anode heat storage capacity- 600KHU 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 |
| | |
| C | <u>Flat panel detector System</u> |
| 1 | <u>Flat Panel detector of CSI with Amorphous Silicon doping</u> |
| 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 | <u>Digital System & Image management</u> |
| 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 50000 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 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 wireless 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 |
| 13 | Workstation should be wireless. |
| E | <u>IMAGE DISPLAY / PROCESSING</u> |
| 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 enhanacement functions |
| 5 | Cine loop and last scene/ image hold and also saving of fluoro loop |
| 6 | Image annotation facility, measuring of distance and angle |
| 7 | Multi image visualization |
| | |
| F | <u>Accessories</u> |
| 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. |
| 4 | Lead Goggles – 6 nos |
| 5 | Gonad shield - 6 nos |
| 6 | Sterlizable cover for C Arm tube & detector 10 sets . Disposable cover for c arm tube & detector 100 nos. |
| 7 | Lead apron stand |
| 8 | Thermal printer with 200 paper rolls |
| G | <u>Others</u> |
| | |
| 1 | Essential Certification: CE (Europe) OR US FDA |
| 2 | Machine should be supplied from the original manufacturer to our institute on the invoice of original manufacturer. Attach proforma invoice from original manufacturer (without price) in technical bid. |
| | |
| 3 | The C Arm with Flat Panel display unit should be AERB approved. AERB certificate should be provided. |
| 4 | 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. |
| 5 | Training should be provided to at least 4 persons of OT staff. |
| 6 | Catalogue & product data sheet of all items should be attached. |
| 7 | Vendor should preferably have a full-fledged& established service centre in Lucknow. Provide address & contact details of service centre& service Engineer. |
| 8 | Five years comprehensive & unconditional onsite warranty should be provided the entire unit including x ray tube, flat panel detector all quoted items including accessories. |

BOO for Items/Equipments in Indian Currency

| Sr. no. | Description |
|--|--|
| 1 | e-bid Notice No. RMLIMS/MM(eq)/2019-20/4030 dated 25.10.2019 |
| 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 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 th |
| 13 | 7 th |
| 14 | 8 th |
| 15 | 9 th |
| 16 | 10 th |
| 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 (6th to 10th 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. no. | Description |
|----------------|--|
| 1 | E-bid notice no. RMLIMS/MM(eq)/2019-20/4030 dated 25.10.2019 |
| 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 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 (Sr. no. 10 + 11) |
| 13 | * Cost of Custom 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 (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 | Total cost of Equipment (Sr. no. 17+18+19+20+23) |
| 25 | CMC on net FOB value (From 6th to 10th Year) |
| 26 | 6 th |
| 27 | 7 th |
| 28 | 8 th |
| 29 | 9 th |
| 30 | 10 th |
| 31 | Total CMC Value |
| 32 | GST value or % on CMC value (as applicable) |
| 33 | Total CMC Price (6th to 10th yrs) including GST |
| 34 | Grand total amount of equipment (Sr. no. 24+33) |

NOTE:- (*) Conditions applied.

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

* **Indian Agency Commission** 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.**