# DR. RAM MANOHAR LOHIA INSTITUTE OF MEDICAL SCIENCES VIBHUTI KHAND , GOMTI NAGAR, LUCKNOW- 226 010

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

Ref. No. RMLIMS/MM(eq)/2019-20/ 4833

#### **RE-TENDER/E-TENDER NOTICE**

Date:-

21.12.2019

On line offers are invited through e-tender from Manufacturer/Direct Importers/Authorized distributors for the supply of various items. The offers submitted earlier for the listed items by the bidders against tendered/Re-Tendered advertisement no. RMLIMS/MM(eq)/2019-20/ 4233 & 4456 dated 27.11.2019 & 30.11.2019 will be treated as cancelled. Therefore, those who have already submitted their offer against above advertisement are also required to submit again and they are required to deposit tender fee and EMD afresh and enclose its proof in technical bid as per tender terms & conditions, along with their complete offer. Earlier EMD deposited against the above mentioned cancelled tenders will be refunded to the bidder on their request.

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

**Director** 

# Re-Tender Advertisement no. RMLIMS/MM(eq)/2019-20/4833 dated 21.12.2019

- Start date of Submitting of e-Tender is:- 23.12.2019
- Last date of Submission of e-Tender is:- 06.01.2020 upto 4:00 P.M.
- Date of opening of Technical bid is :- 07.01.2020 from 03:00 P.M. onwards

# **Equipment list**

| Sr. | Name of                                   | Name of Equipment   | Qt       | Tender Fees          | EMD    | Total estimated |
|-----|---|---|----------|----------------------|--------|-----------------|
| no. | Department                                |   | y        | including<br>@18%GST | Amount | cost            |
| 1   | Nephrology                                | HDF and SLED Machine with both adult and pediatric  | 2        | 2360                 | 40500  | 40,00,000.00    |
|     |   | mode (3 <sup>rd</sup> time offer)   |          |                      |        |                 |
| 2   | Pathology                                 | HPLC Based System for<br>Hemoglobinopathies<br>(3 <sup>rd</sup> time offer)                             | 1        | 2360                 | 45500  | 45,00,000.00    |
| 3   | Forensic<br>Medicine                      | Distillation Plant (Double) (3 <sup>rd</sup> time offer)  | 1        | 2360                 | 2500   | 2,00,000.00     |
| 4   | Outhonedia                                | Arthroscopy Accessories (3 <sup>rd</sup> time offer)  | 1<br>Set | 2360                 | 25500  | 25,00,000.00    |
| 5   | Orthopedic                                | Interferential Therapy (3 <sup>rd</sup> time offer)   | 1        | 2360                 | 5500   | 5,00,000.00     |
| 6   | Pharmacology                              | Bicycle Ergometer (3 <sup>rd</sup> time offer)  | 1        | 2360                 | 3500   | 3,00,000.00     |
| 7   | Biochemistry<br>(Central<br>Research Lab) | Gas Chromatography Mass Spectrometry -Mass Spectrometry ( <i>GCMS/MS</i> ) (3 <sup>rd</sup> time offer) | 1        | 2360                 | 100500 | 1,00,00,000.00  |

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

# GENERAL TERMS & CONDITIONS FOR INVITING E-TENDER NOTICE NO. RMLIMS/MM(EO)/2019-20/4833 DATED 21.12.2019

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

- 1. Competitive e-bids are hereby invited by the Director, Dr. RMLIMS, Gomti Nagar, Lucknow from the Original Equipment Manufacturer/ Direct importers/Authorized distributer for the supply of various items/equipments.
- 2. The tenderers shall submit the offer <u>online</u> in original copy of the tender documents duly singed with seal on each page. The tenderers terms and conditions be clearly typed or legibly written giving the full name and address of the tenderers. The tenderers should quote in figures as well as in words the rates and amount tendered by him/them. Alteration, if any, unless legible and attested by the tenderers, with their full signature, shall invalidate the tender. The tender should be signed by the tenderers himself/themselves or him/their authorized agent on his/their behalf. In case the tender is signed by the agent the authority letter (latest and on original letter head of the OEM with original signature) in his favour shall be enclosed with tender documents. The tenderers should take care that the rates and amounts are written in such a way that interpolation is not possible. No blank space should be left, which would otherwise make the tender liable for rejection.
- 3. **GST Registration certificate** duly self attested must be enclosed.
- 4. Bidder must submit last three year income tax return proof duly self-attested with the bid.
- 5. The tenderers shall submit the offer online only as specified in <a href="https://etender.up.nic.in">https://etender.up.nic.in</a>. 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 distributer (declared by principal firm only) and the authority letter must be attached with technical bid. The tender submitted by third party and subletting of tender will not be entertained.
- 9. The tenderers submitting his/her tender would be deemed to have considered and accepted all the terms and conditions. No Enquiries, verbal or written, shall be entertained in respect of acceptance or rejection of the tender.
- 10. The offer shall be unconditional. Any conditional price bid and offer will not be entertained and the tender will be treated as cancelled.
- 11. The quantity shown in the Schedule may be increased or decreased to any extent depending upon the actual requirement.
- 12. The tenderer shall specify regarding after sales services facilities within the Guarantee/Warranty period and CMC period.

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

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

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

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

23. Upon receipt of the said cancellation notice, the vendor shall discontinue all works of the purchase order and matters connected with it.

- 24. Tender fee and EMD details:-
  - A. The tender fee (non-refundable) and Earnest Money Deposit (EMD) be deposited online as per following details and receipt / proof of the same must be attached with the technical bid. Otherwise tender will be treated as cancelled.
    - (a) Account Number- **177301088888888**
    - (b) Name of Account Director, Dr.Ram Manohar Lohia Institute of Medical Sciences, Gomti Nagar, Lucknow
    - (c) Name of Bank and Branch Indian Overseas Bank, Vibhuti Khand, Gomti Nagar, Luknow, U.P.-226010
    - (d) IFS Code- IOBA0001773
  - B. For online refund of EMD, following details be provided by the bidders in technical bid:
    - (a) Tender number
    - (b) Name of bidder/tenderer
    - (c) Name of equipment
    - (d) Amount of EMD
    - (e) Name of Bank and Branch
    - (f) IFS Code
    - (g) Name of account
    - (h) Bank Account number of the firm
    - i. In non-compliance of terms & conditions of the tender and/or supply order, EMD may be forfitted.
    - ii. The EMD of unsuccessful bidder will be released after the supply is matured.
    - iii. The EMD of successful bidder will be released after execution of supply order satisfactorily.
    - iv. No interest will be paid on EMD amount of successful/unsuccessful bidders.
- 25. The tenderers shall deposit the required tender fee (non. refundable) of Rs. 2360.00 i.e. Rs. 2,000.00 + Rs. 360.00 as GST @18% (Rs. Two Thousand only + Three Hundred Sixty as GST @18%) online in favour of Director, Dr.RMLIMS, Lucknow, as per the details given in Clause no. 24. The proof of online submission should be submitted in first part i.e. technical bid.
- 26. Unless otherwise specified in the order, the order price shall remain firm and will not be subject to escalation of any description during the pendency of the order, notwithstanding the change in the cost of materials, labour and/or variations in taxes, duties and other levies on raw materials and components while the order is under execution even if the execution of the order is delayed beyond the completion date specified in the order for any reason whatsoever.
- 27. The price should be on F.O.R. Dr. RMLIMS, Lucknow, Central Store basis inclusive of all levies and duties.
- 28. Prices will be quoted on F.O.B. as well as estimated CIP/CIF upto Dr.RMLIMS, Lucknow, Central Stores (Insurance from Firm's warehouse to Dr. RMLIMS, Lucknow basis) for imported goods.

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

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

29. Declare separately the FOB and CIP/CIF prices.

- 30. The offer of the tenders shall remain valid for a period of at least 180 days from the date of opening of the tender.
- 31. All goods or materials shall be supplied by the tenderers whose tender is accepted, strictly in accordance with the specifications, drawings, data sheets, other attachments and conditions stated. Any alterations of those conditions shall not be made without the consent of the Institute in writing which must be obtained before any work against the order is commenced. All material furnished by the seller pursuant to this order (irrespective of whether engineering, design data or other information has been furnished, reviewed or approved by the Institute) will be guaranteed to the best quality of their respective kind (unless otherwise specifically authorized in writing by the Institute) and shall be free from faulty design, workmanship and materials, and to be of sufficient size and capacity and of proper materials so as to fulfill in all respects with all operating conditions, if any, specified in this order.

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

- 32. The Equipment supplied shall carry an unconditional standard warranty for 5 years (60 months) to be declared by OEM from the date of satisfactory Installation and commissioning of the equipment. If any trouble or defect originating with the design, materials, workmanship or operating characteristics of any material arise at any time from the date of Installation, the same shall be promptly make such alteration, repairs and replacement as soon as notified thereof, the seller shall at his own expenses and as promptly as may be necessary to permit the materials functional in accordance with the specification and to fulfill the foregoing guarantee/ warranty and the Institute will enter into CMC agreement from six to ten year (6<sup>th</sup> years to 10<sup>th</sup> years) at the time of end of warranty date of the equipment.
- 33. i. The firm shall remove and replace/repair such defective parts of the equipment at firm's expense with in the warranty period and the warranty of such spare parts will be given by the firm either upto the original warranty period of the equipment or thirty months (30) whichever is higher.
  - ii. If firm fails in the replacing such spare parts within the desired time period, the institute at its option, may get replaced the defective spare parts at firm's expense and the warranty clause written above will be applicable on the replaced spare parts. The cost of such spare parts shall be payable by the firm to the institute either 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. <u>Custom Duty and Custom Clearance Charges</u>: The supplier will get the equipment/consignment cleared from the custom. The Custom Duty and Custom Clearance Charges will be reimbursed to the firm on the production of appropriate document and certificate. No demurrage/warehouse charges will be payable by the Institute under any circumstances. No advance payment will be payable for custom duty/ custom clearance.

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

(i) Quoted CIP/CIF rates of the equipment with all standard and essential accessories as per specification with 5 years unconditional warranty.

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

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

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

- 51. Payment to 3<sup>rd</sup> party on behalf of bidder will not be permitted in any circumstances.
- 52. All the operating and service manuals in duplicate to be provided by the vendor at the time of handing over the machine.
- 53. If there is any discrepancy in terms between General Terms & Conditions of Tender Document and specification of any equipment, then the details given in General Terms & Conditions of Tender Document will be considered valid and will be binding. Accordingly, the terms of comprehensive maintenance contract will be governed by the General Terms & Conditions of Tender Documents.
- 54. Catalogue, data sheet, complete module and other necessary document shall be provided in original form. In the shape of Duplicate or photocopier form of documents shall not be accepted.
- 55. In case of imported goods consignment must reach Indian port within currency of L/C.
- 56. No financial documents of any tenderer will be entertained after opening of financial bid/technical bid.
- 57. The supplier will make atleast quarterly visit for maintenance during warranty period.
- 58. Unconditional warranty & Guarantee for 5 years to be declared by OEM (Original Equipment Manufacturer) /Tenderer from the date of installation. The warranty/guarantee must cover all parts of the equipment except consumable only.
- 59. The firm will provide an affidavit to this effect that "THIS IS TO CERTIFY THAT THE RATES QUOTED for the equipment TO DR. RMLIMS, LUCKNOW ARE THE LOWEST ONE. WE HAVE NOT QUOTED/SUPPLIED AT LESSER PRICE TO ANY ORGANISATION WITH THESE SPECIFICATIONS. IN CASE OF NON-SUPPLY IN INDIA, THE AFFIDAVIT TO THIS EFFECT WILL HAVE TO BE SUBMITTED BY THE FIRM.

  WE FURTHER AGREE THAT IF ANY PRICE DISCRIPANCY IS FOUND ON LATER DATE, WE WILL BE LIABLE TO REFUND THE SAME.
- 60. Subletting of the tender to the sub-distributor is not permissible, if subletting is found, the EMD, submitted by tenderer, will be forfeited. If the same item is quoted by the principal and one or more distributors of same principal firm, the same will be treated as one tender and the lowest rate will be considered.
- 61. The tenderer shall insure after sales services facilities within the Guarantee/Warrantee period. The warrantee period may be extended for the period of the instruments remained out of order during warrantee period.
- 62. The Manufacturer or their Indian representative will ensure a proper after sales service as per our requirement from time to time, against the guarantee/warrantee clause as per terms and conditions agreed under negotiations would be provided to our Institute without fail. Any negligence on this account shall be the sole responsibility of foreign vendor as well as indian agent and the liability for compensation will be fixed by the Institute. An undertaking from the manufacturer that in the event of change of Indian Agent, the new agent will provide the CMC on similar terms and conditions or the manufacturer himself undertakes the responsibility of proving the satisfactory after sales services under such events. If the equipment is not rectified by the firm and the equipment is under breakdown for certain period, the Institute will impose the penalty clause for that period as deemed fit.
- 63. <u>If any information submitted by the bidder is found incorrect then</u>
  - The bidder may be blacklisted by the Institute; and/or
  - The bidder may be debarred from future participation; and/or
  - The Institute may impose such embargo in the bidder as deemed fit and/or

The Institute may take such action against the bidder as deemed fit.

- 64. <u>Turnover:</u> The tenderer shall have an average annual turnover of not less than two times of the tentative cost of the tendered item/items during the last three financial years. Turnover details should be supported by a copy of balance sheet and Tax audit report duly certified by Chartered Accountant (CA).
- 65. Details of after sale service support should be provided which will include the followings:
  - (a) Corresponding address of service centre.
  - (b) Telephone No.(Office).
  - (c) Name of Service Engineers along with mobile number & e-mail address.
- 66. The Price Bid of the technically qualified vendor will be opened on-line after technical evaluation is done.
- 67. All fields and columns of price bid must compulsorily be filled.
- 68. If, the equipment is of foreign make and quoted in Indian currency (INR), the firm will have to submit the AWB or Packing list of manufacturer/principal firm or Cargo Arrival Notice (CAN) in support of import, pertaining to the Institute, if the order is awarded to him/them. The date of these documents will be preferably of later date of supply order.
- 69. As per Institute's requirement and tender terms, the equipment need to remain functional during 05 years warranty as well as 05 years CMC period.
- 70. Any rule / guidelines declared by the Government would prevail over the existing terms and conditions.
- 71. HSN code of the equipment/goods must be mentioned in price bid format.
- 72. Check list as per annexure-A shall be submitted by the firm in technical bid.
- 73. Each & Every page or paper of the tender document should be serially numbered, singed & stamped by an authorized signatory of the bidder.

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

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

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

# **Check list**

**e-Bid reference no**: /RMLIMS/MM(eq)/2019-20/4833 dated 21.12.2019

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

| S.<br>No. | Particulars  |  | Page<br>(To) |
|-----------|--|--|--------------|
| 1         | Name of Bidder/Tenderer  |  |              |
| 2         | Name of Proprietor/ Managing Director of Bidder  |  |              |
| 3         | Permanent address of Bidder with e-mail and contact no. (Copy should be attached)  |  |              |
| 4         | The proof of online submission of tender fee & EMD   |  |              |
| 5         | GST Registration number (copy should be attached)  |  |              |
| 6         | Income Tax return certificate. (Last three years copy should be attached)  |  |              |
| 7         | Permanent Account Number (copy should be attached)   |  |              |
| 8         | The affidavit from a notary that the firm has never been black listed must be attached.  |  |              |
| 9         | The tenderers should clearly state whether he/they are Original Equipment Manufacturer/ Direct importers/Authorized distributer (declared by principal firm only) and the authority letter must be attached with technical bid.  |  |              |
| 10        | The tenderer shall specify regarding after sales services within the Guarantee/Warranty period and CMC period.   |  |              |
| 11        | The firm may be required to facilitate the copy of supply order of other establishments (preferably Government) as mentioned in the installation list in the tender, to justify the tendered rates.  |  |              |
| 12        | <u>Turnover:</u> -The tenderer shall have an average annual turnover of not less than two times of the tentative cost of the tendered item/items during the last three financial years.  |  |              |
| 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

# (Sr. no. 1) Technical Specifications of HDF and SLED Machine with Both Adult and Paediatric Mode

|                                       | I Chould be missioned accomposited by someble of macro-line  |
|---------------------------------------|--|
| Microprocessor Based<br>Control       | Should be microprocessor controlled & capable of providing therapies such as Conventional HD, Online HDF, HF & features such as Online priming, Acetate &Bicarb dialysis, Volumetric UF, Sodium/UF profiling, Online help options (in case of alarm condt.), BPM, OCM  |
| Graphical User<br>Interface (Display) | High resolution TFT touch screen with functional keys & provide cumulative graphical display of treatment data & physiological trends including sodium & UF profiles. Freely rotatable & adjustable design.  Should display different menus (preferably 9) indicating blood system, preparation, dialysate, UF, Treatment, Reinfusion, Cleaning, System parameters, & screen saver option.  Should have integrated Patient card reader system where at least 03 treatment data can be recorded.  |
| Safety Features                       | Should be a close system design with volumetric balancing system, i.e. volume in=volume out for fresh & used dialysate. Volumetric dilution of concentrates with RO water & Volumetric UF. Self Test after switching ON, Start up T1 test before each treatment, to ensure functioning of all hardware components. Leak sensor & Connection test as additional safety.   |
|                                       |  |
| Vascular Access                       | Single Needle click clack should be available Blood pump with features such as flow range of 30-600ml/min, with 10ml increments & accuracy upto ±10% Effective blood rate should be displayed in accordance to the setting & tubing size with diameter 2mm – 10mm could be used An emergency hand crank should be provided to enable reinfusion in case of power failure. Emergency button enabled bolus, UF control, and BPM control. Air free pressure measurement on arterial line, in view of reducing chance of blood clot. Protective cover for whole entire EBM (Extracorporeal Blood ckt.) |
| Heparin Pump                          | Should be automatic or manual start/stop, with infusion rate of 0.5-10ml/hr in 0.1ml/hr increments & ±5% accuracy. Heparinization stop time should be user-adjustable in 1min increment, & positive/negative extracorporeal blood ckt pressure should not affect infusion rate.  Auto Bolus administration should be programmable from 1-  |
|                                       | Graphical User Interface (Display)  Safety Features  Vascular Access   |

|          | Pressure         | Venous pressure monitoring & adjustment in case of alarm condition.  |
|----------|------------------|--|
|          | Monitoring       | (Range: -100 to +500mmHg, Accuracy: ±7%)   |
|          | &Alarms          | Arterial pressure monitoring & adjustment in case of alarm condition.  |
|          |                  | (Range: -300 to +300mmHg, Accuracy: ±7%)   |
|          | Air Detection    | Ultrasonic design & should be activated for air & micro bubbles over   |
|          |                  | entire blood flow range.   |
|          |                  | Sensitivity of detection mechanism should be specified in terms of air   |
|          |                  | bubble size & on detection of excessive air, venous clamp should activate  |
|          |                  | & blood pump stop.   |
|          |                  | Reference point for level detector measurement should be about 13 ±  |
|          |                  | 4mm, from upper edge of venous chamber.  |
| Dialysis | Treatments/Ther  | Should facilitate Acetate & Bicarbonate dialysis.  |
| Circuit  | apies            | Variable sodium & bicarbonate options.   |
| Circuit  | apres            | Volumetric UF & Sodium/UF profile options.   |
|          | Dialysate flow   | A Range of 100-1000ml/min should be available, with resolution of  |
|          | rates            | 100ml/min, with Accuracy- ± 10%, & provide good clinical outcome on  |
|          | Tutes            | EDDF therapy for acute patient   |
|          |                  | Autoflow function should be available with ON/OFF feature, in view to  |
|          |                  | save electricity & water consumption & synchronize with blood flow   |
|          |                  | changes.   |
|          |                  | Ecoflow function should be available when preparation phase is finished  |
|          |                  | to save dialysate, water, electricity  |
|          |                  | Pre-programmed more than 10 types of concentrates should be available  |
|          |                  | & its change should not be necessary for calibration   |
|          | Temperature      | Control Range: 34.0 to 39.0 deg Celsius with 0.5 increment   |
|          | Control &        | Alarm Limits: 33.5 to 40.0 deg Celsius   |
|          | Alarm            | Additi Litilits. 55.5 to 40.0 deg Ceisius  |
|          | Conductivity     | Range: 12.8 to 15.7 mS/cm  |
|          | Control &        | Accuracy: $\pm 0.1$ mS/cm  |
|          | Alarm            |  |
|          | Alami            | Dialysate conductivity should be adjustable by sodium concentration, for Acetate Dialysis-with range from 125 to 151mmol/l in increment of |
|          |                  | · · · · · · · · · · · · · · · · · · ·  |
|          |                  | 1mmol/l. For Bicarbonate dialysis, range from 125 to 151mmol/l in increment of ±8mmol/l.   |
|          | Disadisals       |  |
|          | Blood leak       | Photo detector used, & alarm should be activated for blood loss rates  |
|          | detection        | <0.5ml/min, with HCT of 20-25%. Control Box 200 AL/har given by act values of LIE values & treatment.                                      |
|          | Volumetric UF    | Control Range: 0-4L/hr, given by set values of UF volume & treatment   |
|          |                  | time, with accuracy ±1%  |
|          |                  | UF volume: 0-9.99L adjustable in 1ml increment   |
|          |                  | Treatment time: adjustable up to 9 hr 59 min. in 1 min increment   |
|          |                  | TMP monitoring: -100 to +400 mmHg.   |
|          |                  | Isolated ultrafiltration process should be provided.   |
|          |                  | Equipment should be capable of on-line preparation of bicarbonate  |
|          | 7.714            | dialysis fluid &It should be handle by one hands only  |
|          | Ultra-pure       | Should have hygienic connection for ultra-pure dialysate filter  |
|          | Dialysate filter | Should have endotoxin retention capacity not less than 10 <sup>6</sup> IU.   |
|          |                  | Machine should have an automatic program to change filter, including   |
|          |                  | emptying & filling cycles.   |
|          |                  | Filter should have life span not less than 12weeks or 100 treatments   |
|          |                  | Filter should be arranged in cross flow setting & equipment should   |
|          |                  | perform flushing during treatment automatically every 1hr. Filter change   |
|          |                  | reminder should be available.  |

| O.1' El'.1                | E. HDE            | Deducation of Development of the state of th |
|---------------------------|-------------------|--|
| Online Fluid<br>Circuit   | For HDF           | Both option of Pre-dilution & post-dilution of blood should be available Automatic control substitution program with pre/post dilution identity integrate function, dialyser integrate function, Effective blood flow rate integrate, HCT  |
|                           |                   | integrate function, Total protein integrate & UF rate integrate functions.   |
|                           |                   | Equipment should have 2 ultra-pure filters to prepare the online substitution fluid  |
|                           |                   | Should be capable of online preparation of substitution fluid for priming & rinsing  |
|                           |                   | of extracorporeal ckt for HD/HDF/HF/ or as injection-bolus & reinfusion at the end   |
|                           |                   | of treatment.  |
|                           |                   | Substitution fluid delivery rate: 25 to 600ml/min in 1ml/min increment, with   |
|                           |                   | accuracy ± 0.1ms/cm & exchange volume -210L (max.)   |
| Dialysis                  | Equipmen          | Arterial Pressure, Venous Pressure, Blood flow rate, Dialysate Conductivity, TMP,  |
| Parameter                 | t should          | UF volume, UF rate, Remaining treatment time, Heparin infusion rate, Alarm info,   |
| Display                   | display           | etc.   |
|                           | parameter         |  |
| Online                    | s -<br>Equipmen   | Inbuilt measurement & monitoring of effective Urea clearance K, Dialysis dose  |
| Clearance                 | t should          | Kt/v, & Plasma sodium during dialysis  |
| Monitor                   | have              | This measurement should be done without any additional cost & disposable during  |
| (OCM)                     |                   | each treatment   |
| ,                         |                   | Measuring accuracy: Clearance +/-6%  |
|                           |                   | Kt/V +/-9%   |
|                           |                   | OCM conductivity evaluation should be 12 bit with 2 channels & 2 CD cells (1 cell  |
|                           |                   | for basic machine function) & Measuring range: 12.8 – 15.7 mS/cm, Accuracy: 0.05   |
|                           |                   | mS/cm  |
|                           |                   | OCM temperature evaluation should be 12 bit with 2 channels & 2 NTC (1 NTC for   |
| Dia ad Dua accura         | Eminara           | basic machine function) & Measuring range: 33.5 – 41 °C, Accuracy: 0.2 °C  |
| Blood Pressure<br>Monitor | Equipmen t should | Should be Build in non-invasive device for measuring the patient blood pressure  |
| (BPM)                     | have              | automatically Measuring Range should be  |
| (DI WI)                   | nave              | Cuff pressure range: 10-325 mmHg or wider choice   |
|                           |                   | Systolic range: 30-280 mmHg or wider choice  |
|                           |                   | MAP range: 20-255 mmHg or wider choice   |
|                           |                   | Diastolic range: 10-240 mmHg or wider choice   |
|                           |                   | Pulse rate range: 20-2451/min or wider choice  |
|                           |                   |  |
|                           |                   | Alarm values should be   |
|                           |                   | Systolic range: 90&165 mmHg MAP range: 70&120 mmHg   |
|                           |                   | Diastolic range: 50&100 mmHg   |
|                           |                   | Pulse range: 40&150 1/min  |
| Battery                   |                   | The equipment should be able to operate and monitor the extracorporeal circuit   |
| Backup                    |                   | without interruption for 20-30 min. in case of AC power failure by backup battery  |
| Disinfection              |                   | Both chemical and heat disinfections should be performed   |
| and Cleaning              |                   | Sodium hypochlorite should be used as cleansing disinfectant   |
|                           |                   | Various Programmable Cleansing Cycles should be provided with different phases   |
|                           |                   | and timings in accordance with different disinfectants.  |
|                           |                   | Should be One-touch fully automatic operation including pre-rinse, chemical-intake   |
|                           |                   | for combined disinfection & decalcification, post-chemical mandatory rinse, and  |
|                           |                   | automatic power-off; without the need of any end-user handling during this whole   |
| Blood Volume              |                   | disinfection process.  Adaptation of ultrafiltration rate based on blood volume changes. Pediatric Changes   |
| Monitor Monitor           |                   | option for patients with body weight 10-40 Kg  |
| (BVM)                     |                   | option for patients with body weight 10-40 Kg  |
| (D 1111)                  |                   |  |

| Blood Volume  | Relative  | 1.7% (absolute)   |  |
|---|-----------|---|--|
| Monitor(  | Blood     |   |  |
| BVM)  | Volume    |   |  |
|   | (RBV)     |   |  |
|   | Haematoc  | ±2.9 Hct% (if Plasma Protein Concentration range is 60 to 85 g/L) |  |
|   | rit (Hct) |   |  |
|   | Haemoglo  | $\pm 0.8 \text{ g/dl}$  |  |
|   | bin (Hb)  |   |  |
| Equipment should be USFDA/European CE approved.   |           |   |  |
| Equipment should be compatible with all types of bicarbonate fluid/ bibag for HDF and hemodialysis. |           |   |  |
| Should provide UPS with the equipment (online with 30 min. Backup)                                  |           |   |  |
| Should provide list of users, preferably government.  |           |   |  |

### (2) Technical Specifications of HPLC based system for Hemoglobinopathies

- 1. Compact bench-top fully automated HPLC system dedicated to Thalassemia and hemoglobinopathy testing and screening based on HPLC technology.
- 2. The system should be able to screen and quantitate hemoglobins HbA2, HbA, HbF and detect as well as quantitate most commonly occurring abnormal hemoglobins like HbS, HbD, HbE, HbC and presumptive identification of alpha chain variants.
- 3. System should be able to use whole blood sample with auto-sampler capable of automated haemolysis and sample dilution
- 4. System should have primary tube sampling with cap-piercing facility.
- 5. System should have optional modes for continuous loading of 80 to 90 samples at a time and stack loading of samples.
- 6. System should have onboard inventory monitoring along with real time pressure monitoring and alarms for low level/overflow
- 7. Reagent system should ensure zero-carryover between abnormal and normal haemoglobin sample specimens.
- 8. Dedicated computer, laser printer and software for printing of results is required.
- 9. Dedicated reporting software with storage capacity of at least 10000 patient results is required.
- 10. QC monitoring with printable QC charts is required.
- 11. Bidirectional interfacing facility with our HIS is required.
- 12. Company should have at least 10 installations in government sector of the quoted model or a similar model. User list with contact details and latest performance report should be provided from at least 5 users in government sector.
- 13. System should be US FDA/CE approved.

#### **Annexure-B**

# (3) 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

# (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  $30^0 2$

$$70^{0} - 1$$

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

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 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

#### (6) 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

- O Display / patient display load, rpm, speed, time, blood pressure, heart rate (LCD) / rpm (LED)
- o Keyboard, Graphic display (load, heart rate)

#### • It should have exercise protocols like

- o Incremental protocols
- o 10 User programmable, Load adjustment manual

#### • It should have training protocols like

- o Pulse-controlled training (integrated HR receiver)
- o 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.
- o Wireless EKG/respiration Sensors (Qty1)

#### • Should have following upgradable options

- o Automatic blood pressure measurement
- o Oxygen saturation measurement
- o 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

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

|      | Specifications for GCMSMS   |  |  |  |  |  |
|------|---|--|--|--|--|--|
| The  | The Triple Quadrupole GCMSMS system must offer superior sensitivity and robustness, fast      |  |  |  |  |  |
| Easy | Easy methods development for multi-component quantification in biological matrices for        |  |  |  |  |  |
| pest | pesticides , metabolites, fatty acid disorders screening, drug screenings and steroid pathway |  |  |  |  |  |
| anal | 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  |  |  |  |  |  |
|      | • It should have EI source. Programmable to 350 °C or more                                    |  |  |  |  |  |
|      | • It should have Integrated, dual filament for EI with improved filament lifetime             |  |  |  |  |  |
| 4.   | <b>Transfer Line Temperature:</b> The temperature should be up to 350 °C or more              |  |  |  |  |  |
| 5.   | Quadrupole Mass Analyze <u>r</u>  |  |  |  |  |  |
|      | Mass Range: 10 −1000u or better   |  |  |  |  |  |
|      | • Heated, off-axis ion guide for noise reduction and solid, homogeneous, non-coated and       |  |  |  |  |  |
|      | cleanable quadrupole rods   |  |  |  |  |  |
|      | •Resolution: unit resolution or better  |  |  |  |  |  |
| 6.   | <b>Detection System:</b> The detection system should be with off-axis dynode, discrete        |  |  |  |  |  |
|      | dynode electron multiplier and electrometer, linear range of >10 <sup>6</sup> or better       |  |  |  |  |  |
| 7.   | Electron Energy: It should have an adjustable electron energy upto 150 eV or better           |  |  |  |  |  |
| 8.   | <b>Emission Current:</b> It should have emission current up to 350 μA or more.                |  |  |  |  |  |
| 9.   | Collision Energy Range: Upto 60 eV or better  |  |  |  |  |  |
| 10.  | Scan Speed  |  |  |  |  |  |
|      | • The MS should have scan speed up to 15000 u/sec or better                                   |  |  |  |  |  |
|      | • 700 SRM transitions/sec or better   |  |  |  |  |  |
|      | • 0.5ms dwell time for SRM/MRM transition or better   |  |  |  |  |  |
| 11.  | Vacuum System   |  |  |  |  |  |
|      | • It should have a High capacity (>300 L/s), dual-stage turbo molecular pump or better        |  |  |  |  |  |
|      | • It should have Standard rotary-vane pump  |  |  |  |  |  |
| 12.  | Sensitivity : Electron Ionization SRM/MRM   |  |  |  |  |  |
|      | 1 μL of 100 fg/μLoctafluoronaphthalene (OFN) will produce the following minimum               |  |  |  |  |  |
|      | signal-to-noise for the transition from m/z 272 to m/z 222: <b>30,000:1 or more.</b>          |  |  |  |  |  |
| 13.  | Instrument Detection Limit (Installation specifications should be less than 0.5 fg or         |  |  |  |  |  |
|      | <b>less to be demonstrated during installation):</b> 0.5fg or less OFN derived at the 99%     |  |  |  |  |  |
|      | confidence level from area precision of eight sequential injections of 1 μL, 2fg/μL OFN,      |  |  |  |  |  |
|      | acquired in EI SRM/MRM. This point must be taken as mandatory.                                |  |  |  |  |  |

#### 14. Gas Chromatography:

**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

- It should have number of ramps/plateaus: 20/21 or more
- The maximum heating rate should be 120 °C/min or more

#### 15. | Pneumatic controls

Electronic pneumatic controls for injector and detector modules. The electronics carrier gas controller should allow operating in constant and programmed flow and pressure modes.

- Pressure range: 0–140 psi or more
- Split ratio: Up to 7500:1 or more
- Pressure set points minimum increments: 0.01 kPa-0.001 psi in all ranges
- Total Flow Setting:
- Control of split flow in 1 mL/min from 0 to 1250 mL/min or more
- Purge flow from 0 to 50 mL/min ore more

## 16. | Programmable Temperature Vaporizer Injector (PTV/MMI) - Qty 1

- Programmed Temperature Injector for Supports hot/cold, split and splitless modes and On Column (TPOC)
- Temperature programming of up to 3 ramps at up to 700 °C/min or more
- Maximum Temperature: 450°C or more
- The injector should permits large volume injection up to 250 microliters without any further hardware requirement.

# 17. Split/splitless injector with back flush and Electronics Gas Controller – Qty 1

- The injector should be able to operate with narrow & wide bore capillary columns.
- Suitable for all capillary columns (50 µm to 530 µmi.d.)
- Maximum Temperature: 400 °C or more

## 18. Flame Ionization Detector with Electronics Gas Controller – Qty 1

- Capillary column optimized compatible with 1/8" and 1/16" packed column
- Flameout detection and automatic re-ignition
- Minimum Detectable Level (MDL): <1.4 pg C/s or better
- Sensitivity: >0.03 Coulombs/gC or better
- •Linear dynamic range: >10<sup>6</sup> or better
- Maximum temperature: 450 °C or more
- Data Acquisition Rate: up to 300 Hz. or better

#### 19. GC Analytical Performance

- The GC should have a Retention Time Repeatability of <0.0008min
- Typical peak area repeatability: <1.0 % RSD

#### 20. Columns (02 qty each)

#### Column with stationery phase equivalent to

- 5% diphenyl -95% dimethyl polisilaxones 30 meter X 0.25 mm id X 0.25 um df
- FAME column for fatty acid methyl ester analysis- 30 meter X 0.25 mm id X 0.25 um df
- 21. **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.

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#### 22. Data System Software with Workstation

- It should have a single point software for controlling GCMSMS, Liquid and acquiring data from Mass and conventional detectors
- Fully automated data acquiring & processing software for Environmental, Biological & Food Safety application should be quoted with catalogue number.
- The latest version of the NIST Library software with original CD should be quoted
- It should have easy automatic method development feature
- Vendor should also offer latest branded PC (i7 or better with appropriate RAM) to support the system and sufficient storage( to keep the data for 10 yr) with wall mount LED touchscreen of 32 inch or more along with wireless keyboard and mouse & Branded ink tank printer (separately for offline as well as online data analysis; quoted for single point coordination of the Licenced software.)

#### 23. **Solid Phase Extraction:**

- •16 Port Vacuum Manifold Qty 1
- Vacuum Manifold Pump Qty 1
- All fittings tubings& test tube etc to install SPE Qty 1
- •C18 500MG/6ML Cartridges Qty 100
- •CYANO 500MG 3ML Qty 50

#### 24. Consumables

- Graphite/Vespel ferrule for 0.25ID Column Qty 10
- Graphite/Vespel ferrule for 0.32ID Column Qty 10
- Injector Septa Qty 50
- Capillary Column nut for PTV Injector each Qty 5
- Column nut for MS transfer line- Qty 05.
- •Liner for S/SL and PTV Injector each Qty 5
- •Liner Sealing Ring for PTV Injector each Qty 10
- Screw top vial with cap & septa 2ml size Qty 500
- Vacuum Pump Oil 1ltrs Qty 1
- Filament Qty 5
- Mass Tuning/Calibration Solution Qty 1
- Syringe 10ul capacity Qty 2
- Syringe 5ul capacity Qty 2

#### 25. Accessories/Necessary parts to install the equipment

- High Purity Helium, N<sub>2</sub>/Argon Gas filled cylinder each Qty. 4
- Double Stage SS Diaphragm Regulator for Helium, N<sub>2</sub>/ Argon each Qty. 1
- Gas Purification Panel for All gases
- •10KVA (or suitable as per company's protocol) Online UPS Backup 60min 230 VAC, 50Hz, Single Phase I/P & O/P
- •Sample derivatization system with interchangeable accessories capable of holding variety of vial sizes and types as well as offering heating/derivatization and evaporation of sample. Heating ambient +10 to 200 deg. C.
- N2 evaporator: Sample evaporation under atmosphere and inert atmosphere (Nitrogen)
- N2 gas cylinder with regulator.
- Vibration free table with granite top to keep entire system.
- 1.5 Ton Split AC with stabilizer 2 Nos.

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• Vendor must offer operator to operate the system for two complete years. 26. **Solvents and Derivatization reagent:** 5 X 5 Litre each The required chemicals, solvents and derivatization reagent like Methanol, Acetone, Acetonitrile, N-Hexane, Dicholoromethane(DCM), N-Heptane, MTBE, Pyridine (for derivatization), Sodium Hydroxide, and Acetonitrile should be included for following applications for biological fluid samples. **Standards:** 27. 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. The institute shall provide partitioned cabin for instrument; other specifications for site 28. preparation are to be fulfilled by the vendor only for successful installation. The vendors may visit the site for tentative expenditure. **Important note:** 29. Offer should indicate all parts with details specification and Brand clearly as required in our specifications The supplier should enclose the technical compliance statements against our technical specifications clearly mentioning for each point. The statement should be supported by relevant literature/data. The institute shall provide partitioned cabin (Aluminium frame, glass and ACP partition) 30. 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. Only the principle company may participate in tender. All the agreements shall be done 31.

with principle company only.

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

| r. no. | Description  |  |
|--------|--|--|
| 1      | e-bid Notice No. RMLIMS/MM(eq)/2019-20/4833 dated 21.12.2019   |  |
| 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)   |  |
| 9      | (with 05 years unconditional warranty)  GST value or % as applicable                                   |  |
| 10     | Total Equipment Price + Standard Accessories Amount (inclusive GST)                                    |  |
|        | (Sr. no. 6+7+8+9)  |  |
| 11     | CMC (From 6th to 10th Year)  |  |
| 12     | 6 <sup>th</sup>  |  |
| 13     | 7 <sup>th</sup>  |  |
| 14     | 8 <sup>th</sup>  |  |
| 15     | 9 <sup>th</sup>  |  |
| 16     | 10 <sup>th</sup>   |  |
| 17     | Total CMC Cost   |  |
| 18     | GST value or % on CMC ( as applicable)   |  |
| 19     | Total CMC Price + GST  |  |
| 20     | Total Cost of equipment [Total Amount + CMC with GST (6 <sup>th</sup> to 10 <sup>th</sup> yrs) in INR] |  |
|        | (Sr. no 10+19)   |  |

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

| Sr.<br>no. | Description   |  |
|------------|---|--|
| 1          | E-bid notice no. RMLIMS/MM(eq)/2019-20/4833 dated 21.12.2019  |  |
| 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.  |  |
| Ü          | (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  |  |
| O          | (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<br>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)  |  |
| 17         | (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  |  |
| 24         | (Sr. no. 21+22)  Total cost of Equipment  |  |
| ∠4         | (Sr. no. 17+18+19+20+23)  |  |
| 25         | CMC on net FOB value (From 6th to 10th Year)  |  |
| 26         | $6^{ m th}$   |  |
| 27         | $7^{ m th}$   |  |
| 28         | 8 <sup>th</sup>   |  |
| 29         | 9 <sup>th</sup>   |  |
| 30         | 10 <sup>th</sup>  |  |
| 31         | Total CMC Value   |  |
| 32         | GST value or % on CMC value ( as applicable)  |  |
| 33         | Total CMC Price (6 <sup>th</sup> to 10 <sup>th</sup> yrs) including GST                                     |  |
| 34         | Grand total amount of equipment (Sr. no. 24+33)   |  |

NOTE:- (\*) Conditions applied.

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

- \* <u>Indian Agency Commission</u> will be paid on the conversion rate of comparative chart on which basis the P.O. has been awarded or conversion rate at the time of payment whichever is less.
- $^*$  Detail List of standard accessories (as mentioned in sr. no. 07 or 18) with price must be annexed with price bid. All fields and columns of price bid must compulsorily be filled.