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/ 4248

RE-TENDER/E-TENDER NOTICE

On line offers are invited through e-tender from Manufacturer/Direct Importers/Authorized distributors for the supply of various items. The offers submitted earlier for the listed items by the bidders against tendered advertisement no. RMLIMS/MM(eq)/2019-20/2676 dated 03.10.2019 will be treated as cancelled. Therefore, those who have already submitted their offer against above advertisement are also required to submit again and they are required to deposit tender fee and EMD afresh and enclose its proof in technical bid as per tender terms & conditions, along with their complete offer. Earlier EMD deposited against the above mentioned cancelled tenders will be refunded to the bidder on their request.

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

Director

Date:-

14. 11.2019

- Start date of Submitting of e-Tender is:- 18.11.2019
- Last date of Submission of e-Tender is:- 02.12.2019 upto 4:00 P.M.
- Date of opening of Technical bid is :- 03.12.2019 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	Radiation Oncology	MRI compatible gynacological Brachytherapy Applicator	1 set	2360	23500	23,00,000.00
2		Gynaecological transfer tube for source transfer for brachyterhapy	1 set	2360	3500	3,00,000.00
3	Community Medicine	Ice Lined Refrigerator (ILR)	1	2360	1500	80,000.00
4	Microbiology	Bench top Cold Centrifuge with Rotors of different capacity	1	2360	10500	10,00,000.00
5	PMR	Electric Plaster Cutter	2	2360	2500	2,00,000.00
6	PWK	Battery Operating Drill Machine	2	2360	2500	2,00,000.00
7	Physiology	Tilt Table (Electric) for Automatic Function Test	1	2360	5500	5,00,000.00
8	ENT	Rigid Esophagoscope Set	1	2360	20500	20,00,000.00
9	Gastromedicine	CO2 Insufflator and Irrigation pump (for Pentax Scopes)	1	2360	5500	5,00,000.00
10		Hybridizer	1	2360	5500	5,00,000.00
11		Western Blot Apparatus	1	2360	5500	5,00,000.00
12		Orbit Shake Water Bath	1	2360	4500	4,00,000.00
13		Mini Centrifuge	2	2360	4500	4,00,000.00
14 (a)		Research Centrifuge 1st	1	2360	3500	2,50,000.00
14 (b)	D. 1	Research Centrifuge 2 nd	1	2360	3500	2,50,000.00
15	Biochemistry (Central Research	Lyophilizer	1	2360	5500	5,00,000.00
16	Lab)	Laboratory Refrigerator	2	2360	5500	5,00,000.00
17		Deep Fridge -40 ^o C	1	2360	5500	5,00,000.00
18		Ice making Machine	1	2360	1500	1,00,000.00
19		Water Distillation Plant with storage tank	1	2360	12500	12,00,000.00
20		Luminex 200 flouroanalyser with sheath delivery system for automated Molecular HLA typing & HLA serology	1	2360	65500	65,00,000.00

TENDER DOCUMENT 2019-20

GENERAL TERMS & CONDITIONS FOR INVITING E-TENDER NOTICE NO. RMLIMS/MM(EO)/2019-20/4248 DATED 14.11.2019

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

- 1. Competitive e-bids are hereby invited by the Director, Dr. RMLIMS, Gomti Nagar, Lucknow from the Original Equipment Manufacturer/ Direct importers/Authorized distributer for the supply of various items/equipments.
- 2. The tenderers shall submit the offer <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 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 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 (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. <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 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. <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.)

Annexure-A

Check list

e-Bid reference no: /RMLIMS/MM(eq)/2019-20/4248 dated 14.11.2019

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 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.		
	Turnover:-The tenderer shall have an average annual turnover of not less than two		
12	times of the tentative cost of the tendered item/items during the last three financial		
	years.		
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 MRI compatible Gynacological Brachytherapy <u>Applicator</u>

- It should be seamlessly compatible with existing HDR brachytherapy unit installed in the department
- It should be designed exclusively from non-ferrous material and should be safe for use in 3.0 Tesla MR unit as well as all commercial CT units
- The applicator should not produce image artefacts when used in CT/MR imaging
- It should have flexible geometry of the Fletcher style applicator and ensures a perfect fit with patient anatomy
- It should be exclusively compatible with existing Transfer tube specifically designed for such applicators
- It should offer desired adjustable flexibility for smooth assembly of vaginal ovoids of various sizes, and should have intrauterine tandems of various angles and sizes
- It should meet all the regulatory requirements of radiation safety as promulgated by AERB/ IAEA
 from time to time and material used should have all national and international regulatory
 approvals.

(2) Technical Specifications of Gynaecological transfer tube for source transfer for brachyterhapy

- It should be seamlessly compatible with existing HDR brachytherapy unit installed in the department
- Standard microSelectron HDR Gynecological transfer tubes for all type of gynaecological applications viz Fletcher suit applicator, Vaginal Sorbo applicators should be supplied
- The transfer tubes should be self-locking and clearly identifying channel 1, 2 and 3 and under no condition should be interchangeable with each other
- The transfer tubes should be rugged and flexible for safe movement of source without any resistance
- The transfer tubes should not modify the source transit time and in event of presence of any foreign body should not allow motion of source guide
- It should meet all the regulatory requirements of radiation safety as promulgated by AERB/ IAEA from time to time and material used should have all national and international regulatory approvals
- It should maintain its physical strength and lumen shape for temperature ranging from 5 to 45 degree
 Celsius.

(3) Technical Specifications of Ice Lined Refrigerator (ILR)

1. Description of Function:

- 1.1 Ice-lined refrigerators maintain temperatures of $+2^{\circ}$ C to $+8^{\circ}$ C. Not more than 8 hours continuous or intermittent power should be sufficient per 24 hrs. to maintain vaccine temperature below 8 deg.C.
- 1.2 Ice-lined refrigerators are required at district and regional levels, since electricity supplies are rarely perfect and standby electricity supplies may not be available.

2 OperationalRequirements:

- 2.1 Vaccine storage is required for RI, Campaign and new vaccine introduction.
- 2.2 Designed for tropical climates.
- 2.3 Target holdover time should be 20 hours or more in a continuous external temperature of 43 degC.
- 2.4 Hot and cold compressor starting at 172 volts (22% below ratedvoltage).
- 2.5 Manufacturing process of the product should not use or producehazardous chemicalsgases.
- 2.6 Provision for drainage for the wastewater.
- 2.7 Should have legs in the base with rotating screw type height adjustments to balance the weight on unevenfloor.
- 2.8 The unit should have ground clearance of minimum 100mm.

3 Technical Specifications:

- 3.1 Construction: 3.2.1 Internal: Stainless 304 grade steel and 20 gauge. 3.2.2 An additional special ice lining consisting of icepacks covered by strong plasticshell.
- 3.2 External: Corrosion Resistance (CR at least 1 mmthickness)
- 3.3 Chest type with CFC freeinsulation
- 3.4 Should have horizontal water cool pack covering the top of thebasket.
- 3.5 Solid door with lock andhandle
- 3.6 Type: Compression Cycled, CFC-Free (both for refrigeration and insulation) All system tubing (suction tube, freezer tube and condensing tube) should be of minimum 99.97% of pure coppercoil.
- 3.7 Temperature of a full vaccines to remain +2 deg C to +8 deg C duringcontinuous availability of energy at ambient temperature +5 to +45 deg. C with intermittent/ continuous electricity supply 8 hours in a 24 hours cycle. The temperature difference between any two points in the cabinet should not be more than +2 deg. C once stabilized.

 3.9 Inlet of Capillary should be outside the PUFbody.
- 3.10 ON/OFF Switch and power indicator should be available
- 3.11 Net Vaccine Storage Capacity: Minimum 300 liters within basket inplace.
- 3.12 A Micro processor-based control unit should be provided for setting of temperature and display following features:
- 3.12.1 3-digit digital display (to one decimal point) of cabinet temperature. The sensor should be placed 25 to 50 mm above base of storagechamber.

- 3.12.2 Power on LED/LCD indicator
- 3.12.3 Audio (minimum 65 dBA) and visual alarm against the violation of temperaturerange(less than +2 and more than +8 degree C)
- 3.12.4 Min. & Max. cabinet temperature digital display of last 24 hrs. and breaches during last 24hrs.
- 3.12.5 The unit should be sealed/protected from dust, moisture or condensed water falling overit.
- 3.12.6 3.12 Accuracy for digital controller +- 0.5 degree centigrade.

4 SystemConfiguration

- 4.1 Programmable Micro-processor control unit with child lockfacility.
- 4.2 Should have provision to set minimum and maximum temperature at 0.1 degree Centigrade to programme the unit for continuous operation.
- 4.3 Should have provision for defrostingprogram.

5 Accessories & spares:

- 5.1 Vaccine Storage Basket allowing free circulation of air, having the size tobe able to accommodate 4 to 6 of them in the unit and suitable to match the net volume requirement. It should be minimum 5 wirebasket.
- 5.2 Stem Alcohol thermometer (specifications and standard as per MOHFW / WHO approved Annexure-1) one piece per unit range of -30 to +50 degree centigrade.

6 Environmentalfactors:

- 6.1 The unit shall be capable of being stored continuously in ambient temperature of 0 to 50deg C and relative humidity of 95%
- 6.2 The unit shall be capable of operating continuously in ambient temperature of 5 to 45 deg C and relative humidity of 90%
- 6.3 The plug should be flexible and unbreakable sealed rubbertype.

7 PowerSupply:

- 7.1 Power input to be 220-240VAC, 50Hz as appropriate fitted with Indianplug
- 7.2 Voltage stabilizer as per the MOHFW approved specifications and standard

8 Standards and Safety

- 8.1 Product should be CE approved as per EC council directive 2004/108/EC for electromagnetic compatibility and 2006/42/EC by European Union (EU) approved agency
- 8.2 Should meet WHO/UNICEF Standard WHO/PQS/E03/RF03.1.for IceLined Refrigerators
- 8.3 Test and inspection before dispatch as per WHO procedure reference WHO/PQS/E03/RF03-VP.1 Testing should be carried out from WHO certified lab/NABL/STQC Labs. Certificate of testing should be currently valid till the supply and same must be verified by inspecting authority. Testing reports shall be submitted along with unit at the time of supply.

8.4 Colourcode: WHITE

9 Documentation:

- 9.1 A paper copy of user/operator manuals to be supplied in English.
- 9.2 A paper copy of technical/wiring diagram/maintenance manuals to besupplied in English.
- 9.3 Certificate of inspection for technical compliance from an independent laboratory approved /recognized by WHO certified /National Accreditation Board for laboratories/STQC Labs is essential.
- 9.4 List of important spare parts and accessories with their part number andcosting.

10 Packing of the equipment duringshipment:

- 10.1 Thesuppliershouldprovidestrongandsufficientpackingtoensuresafearrival ofgoods at the destination free from loss ordamage.
- 10.2 A vertical arrow should be marked at the all sides of packages to ensure transportation of equipment in vertical position. TOP and BOTTOM should also bewritten.
- 10.3 Top at label and sign age's for HANDLE WITH CARE ON ALL SIDES OF THE CRATES as per packing & shipmentnorms.

(4) Technical Specifications of Bench top Cold Centrifuge with Rotors of different capacity

- 1. Refrigerated multipurpose bench-top centrifuge 4-5 Liter capacity
- 2. System should be capable of using fixed angle and swing out rotors with universal adapter to use different tube& plate formats& no need to change the adapters.
- 3. System should maintain temperature range -10°C to -40°C
- 4. System should have a maximum Capacity of 4 x 1000 ml bottles and 4MTP,96/364 well plate
- 5. Maximum speed for fixed angle rotors should be 14,000 rpm and RCF 22,000 x g force or more, for swing out rotors maximum speed 5000 rpm or more and RCF 5,200x g force or more
- 6. System should have user-friendly operation; key panel with provision to set speed RPM / RCF, radius correction values that can be changed during centrifugation.
- 7. System should have provision of least 99 storable programs
- 8. System must be equipped with automatic rotor recognition and imbalance detection for maximum operational safety
- 9. Timer setting 10 s to 99 h 59 min, with continuous run function
- 10. System should have a separate short spin function key with user defined speed
- 11. 10 acceleration & deceleration rates for smooth ramping up & down.
- 12. Noise level at max speed should be less than 60 dB(A) for quite operation in work place.

13. Rotors:

- Rotors should be made of metallic and must be fully autoclavable at 121°C.
- Swing out rotor of 4x 1000 ml with Universal bucket to fit tube/ bottle/ Plates using single adapter with maximum of 4,500rpm or more and 4,300 x g or more, Adapters for Tubes capacity: 60 x 15 mL or more, 24 x 50 mL or more, 4 x 1000 mL bottle and 4 x MTP/DWP.
- Fixed angle rotor 30 x 1.5 / 2 mL with aerosol tight lid with maximum of 13,000 rpm and 20,000 x g or more.
- 14. Centrifuge lid should possess at least two gas springs to support the lid securely when opened
- 15. System should have emergency door lock release (in case of power failure)
- 16. Features in the quotations should be substantiated with proper company catalogue/brochure/manual
- 17. System must be European CE Certified/US/FDA approved.
- 18.18. Suitable voltage stabilizer for the equipment .

(5) Technical Specifications of Electric Plaster Cutter

Specifications:

- 1. Should have a fiber body.
- 2. Should be able to cut fiber plasters.
- 3. Blades should be corrosion resistant and highly durable.
- 4. Blades should have hexagonal mounting hole.
- 5. Should be supplied with 84mm, 74mm, and 64mm diameter blades.
- 6. Should be supplied with required tools for replacing the blades, brush and duster.
- 7. Should be supplied with carrying case to accommodate the plaster cutter and other accessories.
- 8. Should have a protective guard
- 9. Should be oscillating type
- 10. Should work with input 200 to 240V AC 50 Hz supply.
- 11. Additional Accessories: Blades (84mm) 10 Nos

General Specifications

- 1. Instruments/Equipment should be US FDA/European CE approved.
- 2. Warranty/CMC as per Dr RMLIMS Policy.

(6) Technical Specifications of Battery Operating Drill Machine

Specifications:

- 1. Battery Power System should be versatile functions and should be used in all applications require in large bones and small bones.
- 2. The two trigger drill hand piece should have the feature of Drilling, Reaming & Oscillation mode.
- 3. The cannulation of the drill hand piece should be more than 4.5mm.
- 4. The modular Drill Hand piece should have adaptability to have variation in Speed and torque with different attachment to have different functions in drilling and reaming.
- 5. The speed torque ratio should be at least of three variations like 1:1, 3:1 and 5:1.
- 6. The drilling speed should be more than 900 RPM and torque should be available up to 11 Nm.
- 7. Should have quick coupling drilling attachments for AO small, Wire Driver, Pin Driver and Jacobs chuck.
- 8. Should have quick coupling Reaming attachments for AO large and Jacobs Chuck.
- 9. Bur Attachment compatible Drill Hand piece for removal of cement in revision surgery for high speed application maximum speed 30,000 RPM
- 10. Short, medium and long Bur guards and Bur (10 Nos) to be supplied with Bur attachment for cement removal
- 11. The system should have dedicated oscillating saw hand piece.
- 12. The speed of dedicated Oscillating Saw should be more than 10,000 CPM.
- 13. The oscillating saw hand piece should have rotating head at 4 intervals in 90deg each.
- 14. The system should have Arthroplasty blades (10 Nos) and special trauma blades for sawing (10 Nos).
- 15. Four station Battery charger.
- 16. Should have NiMH battery (4 Nos).
- 17. Sterilization Case for the complete system
- 18. Should have a protective guard
- 19. Should be oscillating type
- 20. Should work with input 200 to 240V AC 50 Hz supply.
- 21. Additional Accessories: Blades (84mm) 10 Nos

General Specifications

- 3. Instruments/Equipment should be US FDA/European CE approved.
- 4. Warranty/CMC as per Dr RMLIMS Policy.

(7) Technical Specifications of Tilt Table (Electric) for Automatic Function Test

Length: 78"

Width: 28"

Height: 33"

Tilt Range: 0 to -12 degrees

Casters: 4-5 casters with brake

Table top Material: 2" foam cushion over non-translucent sub-structure and steel frame

Belts, Restraining: 2-4" wide belts with hook and loop fasteners.

Table, Cover and Pad: fire retardant **vinyl cover over 2" polyfoam (or equivalent) pad

Patient Load: maximum weight capacity 350 lbs

Weight: table 275 lbs.

(8) Technical Specifications of Rigid Esophagoscope Set

S.	Instrument description	Qty.
no	77. 1	
1	Esophagoscopes	1
1.	Rigid Esophagoscope, distal illumination, oval, length 50 cm, O.D. 12 mm x 16 mm Rigid Esophagoscope, distal illumination, oval, length 50 cm, O.D. 10 mm x 14 mm	1
2.	Rigid Esophagoscope, distal illumination, oval, length 50 cm, O.D. 10 mm x 14 mm	1
3.	Rigid Esophagoscope, distal illumination, oval, length 40 cm, O.D. 8 mm x 12 mm	1
<u>4.</u> 5.	Rigid Esophagoscope, distal illumination, oval, length 40 cm, O.D. 12 mm x 14 mm	1
<i>5</i> . 6.	Rigid Esophagoscope, distal illumination, oval, length 40 cm, O.D. 10 mm x 14 mm	1
	Rigid Esophagoscope, distal illumination, oval, length 40 cm, O.D. 8 mm x 12 mm	1
7.	Rigid Esophagoscope, distal illumination, oval, length 30 cm, O.D. 12 mm x 14 mm	1
8.		
9.	Rigid Esophagoscope, distal illumination, oval, length 30 cm, O.D. 8 mm x 12 mm	1
10.	Rigid Esophagoscope, distal illumination, oval, length 30 cm, O.D. 7 mm x 10 mm	1
11.	Rigid Esophagoscope, distal illumination, oval, length 20 cm, O.D. 12 mm x 16 mm	1
12.	Rigid Esophagoscope, distal illumination, oval, length 20 cm, O.D. 10 mm x 14 mm	1
13.	Rigid Esophagoscope, distal illumination, oval, length 20 cm, O.D. 8 mm x 12 mm	1
	Rigid esophagoscope forceps	
14.	Forceps, pointed, serrated, for coins and flat foreign bodies, double-action jaws, sheath diameter 2.5 mm working length 55 cm	1
15.	Forceps, with round cupped jaws, for biopsy and foreign bodies, double-action jaws, cupped diameter 5 mm sheath diameter 2.5 mm working length 55 cm	1
16.	Forceps, alligator, for hard foreign bodies, double-action jaws, sheath diameter 2.5 mm working length 55 cm	1
17.	Forceps, universal, for biopsy and foreign bodies, double-action jaws, width 3 mm, sheath diameter 2.5 mm, working length 45 cm	2
18.	Forceps, with round cupped jaws, for biopsy, double-action jaws, cupped diameter 4 mm, sheath diameter 2 mm, working length 45 cm	1
19.	Forceps, alligator grasping, for hard foreign bodies, double-action jaws, sheath diameter 2 mm, working length 45 cm	2
20.	Forceps, pointed, serrated, for coins and flat foreign bodies, double-action jaws, sheath diameter 2 mm, working length 35 cm	2
21.	Forceps, with round cupped jaws, for biopsy, double-action jaws, cupped diameter 4 mm, sheath diameter 2 mm, working length 35 cm	1
22.	Forceps, alligator grasping, for hard foreign bodies, double-action jaws, sheath diameter 2 mm, working length 35 cm	1
23.	Denture cutting scissors, working length 45-47 cm	1
	Light cable, light source and accessories	
24.	Fiber optic light cable with straight connector, heat resistant, with safety lock, diameter approx. 3.5 mm, length 230- 250 cms	1
25.	High performance LED light source, power supply 100 – 240 VAC	1
26.	Fiber Optic Light Carrier for use with rigid esophagoscopes of length 50 cm	1
27.	Fiber Optic Light Carrier for use with rigid esophagoscopes of length 40 cm	1
28.	Fiber Optic Light Carrier for use with rigid esophagoscopes of length 30 cm	1

29.	Fiber Optic Light Carrier for use with rigid esophagoscopes of length 20 cm	1
30.	Autoclavable prismatic light deflector with connection to fiber optic light cable	2
31.	Handle, universal for all esophagoscopes	
32.	Set of bougies for cricopharyngeal dilatation of different sizes	
33.	Metallic Suction cannula, with grip and suction control for use with esophagoscope of length 50 cms, size 1 and 2	1 each
34.	Metallic Suction cannula, with grip and suction control for use with esophagoscope of length 40 cms, size 1 and 2	1 each
35.	Metallic Suction cannula, with grip and suction control for use with esophagoscope of length 30 cms, size 1 and 2	1 each
36.	Metallic Suction cannula, with grip and suction control for use with esophagoscope of length 20 cms, size 1 and 2	1 each

- ± 10% variation in size range is acceptable
 TC inlay should be welded and not pasted.
- 3. Instruments should be made from high quality surgical grade steel.
- 4. Instruments should have Laser surface or ebonized or equivalent finish to provide appropriate reflection lowering property.
- 5. The instruments should be light weight, strong, with high precision and durable.
- 6. The instruments should be non-magnetic.
- 7. Catalogue number and article number should be mentioned on each instrument.
- 8. There should be country of origin/ manufacturing engraved on each instrument.
- 9. The instruments should be autoclavable.
- 10. The instruments should be of the same make, European CE/ USFDA approved.

(9) Technical Specifications of CO2 Insufflator and Irrigation pump (for Pentax Scopes)

It should be compatible with PENTAX EPK-i7000 series processor and endoscopes. Both units should be preferably stackable

a) Co2 Insufflator

- It should have variable operating modes low, medium and High CO2 flow rates.
- It should have facility for connection to both CO2 cylinder and pipedcentral CO2 supply.
- It should have dual inline pressure regulators with additional mechanical pressure relief.

• Accessories:-

- It should have CO2 regulator for CO2 cylinder/central Supply.
- It should have hose connector and tubing to Insufflator.
- It should have disposable CO2 cap for tubing.

b) <u>Irrigation Pump</u>

- It should have technology to maintain water temperature at body temperature.
- It should have automatic prime button to provide instant irrigation upon foot pedal depression.
- The Irrigation unit should not operate unless the pump is closed.
- It should have auxiliary water set or biopsy channel irrigation capability.
- It should have following given maximum flow rules:-
 - Auxiliary water channel(m/min) 0-300
 - o Biopsy channel(ml/min) 0-600

• Accessories

- It should have water jet connector for 24 hours use.
- It should have water jet connector for single use.
- It should have irrigation tubing

(10) Technical Specifications of Hybridizer

- **1.** The system should hold up to 8 removable array carriers. Each carrier should hold up to 8 arrays, enabling up to 64 arrays to be processed at the same time.
- **2.** The system should have removable array carriers for the addition or removal of sets of arrays with minimal disruption to the hybridization cycle. Carriers should be bar-coded for tracking purposes. Eight array carriers should be included with each oven.
- **3.** System should provide precise temperature control and uniformity to generate consistent results across experiments on even the most demanding applications. Ovens should meet temperature specifications direct from the factory, avoiding the need for on-site calibration checks or procedures.
- **4.** The system should have integral locking clips that secure arrays to the oven carousel. Hybridization temperature and rotation speed should easily set using intuitive up/down arrows on the front panel. A recessed power button should protect against adverse events. The system should have status panel, highly visible display and large window that should provide immediate confirmation of proper operation when at or near the oven.
- **5.** Up to 2 ovens should be stacked to minimize space requirements.
- **6.** The oven should automatically stop the rotation when the door is opened.
- 7. The oven should be manually configured for 110 or 220V operation.
- 8. Power requirements: 220 to 240V AC, 2.5A max.
- 9. An online UPS with power backup of half an hour should be provided
- 10. Performance requirements: Rotation speed 10 to 80 RPM, programmable to 1 RPM
- 11. Oven Set Point Range: 30.0°C to 70.0°C, programmable to 01.0°C
- **12.** Time to Temperature: 30 minutes from ambient to 60° C
- **13.** Oven Temperature Accuracy: $\pm -2^{\circ}$ C from 35° to 60°C
- **14.** Appropriate regulatory requirements should me met.

(11) Technical Specifications of Western Blot Apparatus

- 1. System should be wet transfer module, used for blotting /transfer up to mini-sized gels or midi sized gels in the same gel tank with side-by-side layout.
- 2. The buffer chamber requirement should be not more than 750 ml.
- 3. The gel tank should be compatible with precast as well as own gels.
- 4. Designed for rapid transfer of proteins from polyacrylamide gels to nitrocellulose or PVDF membranes
- 5. Should have integrated power supply with blotting Software and the blot Cassette.
- 6. Programmable, memory storage file with Program: up to 10 steps.
- 7. Pre-programmed methods for Low MW, Mixed Range MW, High MW, Standard, 1.5 mm gels or unknown size gels.
- 8. USB port should be there for program transfer.
- 9. Easy-touch programming for access to pre-programmed transfer methods based on the gel
- 10. Number, gel size and molecular weight range of proteins using color LCD menu touch screen and also to easily create, run and save custom transfer methods.
- 11. Should have Audible alarm for End of run.
- 12. System should run wet transfer at room temperature & should not require any cooling blocks or chilled buffer thereby saving energy.
- 13. A power pack for blotting/electrophoresis of the below mentioned specifications should be provide with the western blot apparatus:-
- Should have minimum voltage output range8-320 V.
- Should have minimum current output range 3- 405 mA.
- Should have minimum power output range1-300 W.
- Should be able to run at constant voltage, constant current and Constant Power.
- Should have automatic recovery after power failure
- Should also have safety features like no-load detection, sudden load change detection, ground leak detection, overload/short circuit protection, over-voltage protection etc.
- Should have an internal fan to keep the system cool and safe.
- Should have provision for at least 3-4 electric plugs for simultaneous operation of > one unit.
- The Power pack should be programmable for high-throughput gel electrophoresiscapable to operate four blotting/electrophoresis units simultaneously for identical runs with LCD graphic display with clear menu prompts for easy use.

- 14. Accessories should be made available along with instrument i.e. Blot Module with gasket; Blotting Sponge Pads; Tweezers; Roller etc.
- 15. Should be European CE Declaration of conformity / USA FDA Certified.
- 16. Should be able to store 20 or more programmable methods.
- 17. Should be an open system which accepts accessories and consumables from different suppliers also.
- 18. A suitable online UPS should be supplied for at least 30 min back up for uninterrupted blotting of the protein.

(12) Technical Specifications of Orbit Shake Water Bath

- 1. The system should have heating, mixing and cooling for tubes and plate formats with choice of blocks for 5 μ L to 50 mL (0.2ml tubes or strips, 0.5, 1.5, 2, 5, 15, 50 mL tubes, 96, 384 well plates).
- 2. System should have both vortex and mixing functions. Vortex with radius of 1.5 mm and mixing speed ranging 300 to 3000 rpm.
- 3. System should be programmable for temperature and time with capability to store 20 programs.
- 4. System should have a temperature control range from 15 °C below RT to 100 °C with temperature settings ranging from 1 °C to 100 °C with accuracy of ± 0.5 °C at 20 45 °C.
- 5. Peltier driven thermal device for excellent temperature control with user controllable mixing function for complete, dependable and reproducible sample preparation.
- 6. System should have heating rate of max. 7 °C/min and cooling rate max. 2.5 °C/min between 100 °C and RT.
- 7. System should be able to set from 15 sec to 99:30 h or continuous mode.
- 8. System should have a large display to show set and actual parameters.
- 9. System should ensure prevention of lid wetting or cross-contamination.
- 10. System should have provision for heated lid to prevent condensation on the lid.
- 11. System should have maximum flexibility for user exchangeable blocks for various formats of tubes and plates.
- 12. System should possess automatic block recognition and set to its maximum speed limit.
- 13. System should have both interval mixing and short mixing functions.
- 14. System must be CE Certified.
- 15. System should have USB interface for software upgrade.

(13) Technical Specifications of Mini Centrifuge

- 1. Bench top, compact, Refrigerated mini centrifuge.
- 2. Temperature setting: $0 \text{ to } 40^{\circ}\text{C}$.
- 3. Fast Pre cooling and should maintain +4⁰C at maximum speed.
- 4. Up to 10 programs or more.
- 5. Digital display showing rpm, RCF and time.
- 6. Speed Up to 15000 rpm.
- 7. Rotor for 24X1.5 to 2 ml tubes.
- 8. Adaptors for 0.5 ml and 0.2 ml tubes.
- 9. Auto balancing in situation of minor imbalance.
- 10. Electrical Requirements: 120V/60Hz and 230V/50 Hz or Suitable electrical supply.
- 11. CE certified or equivalent.

(14 (a)) Technical Specifications of Research Centrifuge 1st

- 1. Bench top high speed refrigerated micro centrifuge.
- 2. Speed setting in both RPM 15,000 rpm or above and RCF-21,000 x g or above.
- 3. Type of Motor: Brushless induction drive.
- 4. Acceleration/ Braking time to max. Speed 15 s /16s.
- 5. The instrument should have state of art cooling technology to ensure energy efficiency & temperature accuracy that cools down to 4° C in eight minutes with temperature range from -10° C to $+40^{\circ}$ C with patented compressor technology with Fast Temp for rapid pre-cooling of the centrifuge, continuous cooling which maintains temperature when centrifugation process is not active
- 6. Built in Condensation drain to eliminate water accumulation inside rotor chamber.
- 7. The aerosol tight fully autoclavable metallic lid rotor with 24x 1.5/2.0mL & speed not less than 21000xg (15000 rpm) should be quoted along with the main unit.
- 8. Emergency lid lock release facility should be available.
- 9. Temperature Range: -10° to 40° C with temperature protection control should be able to maintain 4° C Temp at max speed.
- 10. CFC Free cooling with stand by cooling facility, fast pre-cooling of instrument should be possible.
- 11. Centrifuge chamber should be metallic for easy cleaning, aerosol –tight lid.
- 12. LCD digital display for time, speed and temperature display.
- 13. Timer should display from 60secs to 99hrs 59mins.
- 14. Control System should be microprocessor controlled.
- 15. Low noise levels.
- 16. Ability to store pre-set programs: Up to 10 programs.
- 17. Power supply 230V/50Hz.
- 18. The model should be CE Certified.
- 19. A suitable online UPS should be provided.
- 20. **Rotor Options:** Fixed Angle Rotor, Microtitre Plate and PCR plate Rotors with Adapters to be able to centrifuge (PCR strips/ PCR tubes/round bottom/ conical tubes)1.5/2ml and 5-15ml tubes. None of the point in above specifications is company specific.

(14 (b)) Technical Specifications of Research Centrifuge 2nd

- 1. Table top model.
- 2. Swing out type heads.
- 3. Speed up to 4000 to 5000 RPM.
- 4. Ability to spin 7-10 ml vacutainers and 15-50 ml falcon tubes.
- 5. Adaptors for vacutainers (2.6 to 15 ml) and falcon tubes (15-50 ml)
- 6. Capacity of at least 36 tubes.
- 7. Microprocessor controlled with digital display of speed and time
- 8. Brushlessinduction motor with frequency drive.
- 9. Imbalance detection & centrifugation stop with display of error.
- 10. Safety lid interlock to prevent opening of lid during centrifugation.
- 11. Operating voltage 220V, 50HZ.
- 12. ISO and CE Certification.
- 13. Complete assembly with rotor and all necessary accessories.
- 14. IQ/OQ/PQ should be performed and certificates provided as per part of installation is mandatory. None of the point in above specifications is company specific.

(15) Technical Specifications of Lyophilizer

- 1. Minimum condenser temperature (°C): -55
- 2. Lyophilization of water and organic based solvents at -105 °C
- 3. Condenser capacity: 5 kg; Condenser volume (L): 7
- 4. Reproducible process due to stable parameters: cooling temperature, shelf temperature variation ± 1 °C and vacuum pressure.
- 5. Cold trap and drying chamber are separately designed with high moisture capture and fast dry time.
- 6. Chamber is made of stainless steel, anti-corrosion and easy cleaning.
- 7. Temperature measuring range (°C): -120 to +100.
- 8. Temperature display resolution (°C): 0.1
- 9. Temperature display units: °C and °F
- 10. Vacuum measuring range (mbar): 0.001-100
- 11. Vacuum display resolution (mbar): 0.001
- 12. Vacuum display unites: mbar, kPa and mmHg
- 13. Power supply: 230V 50/60Hz
- 14. Wattage (W): 350
- 15. Interface: RS 232 USB
- 16. Noise (dBA):@ 1 m distance <50
- 17. At least eight port manifold for freeze drying from glass flasks.
- 18. Digital display of temperature and vacuum.
- 19. Quick seal valve I Cold trap lid made of stainless steel.

Essential Accessories as mandatory:

- 1. Vacuum control.
- 2. Vacuum pump with oil mist filter, connecting tube and clamps.
- 3. Trolley for lyophilized & vacuum pump.
- 4. Software tools for Monitoring & History

Optional Accessories:

- 5. Transparent cylinder with 6 trays each tray Ø 250 mm.
- 6. Transparent cylinder with 4 stoppering shelves and guard trays Ø 200 mm.

(16) Technical Specifications of Laboratory Refrigerator

- 1. Capacity 1000 litres
- 2. Temperature 2-8°C. CFC free refrigerator.
- 3. Microprocessor controlled panel with temperature alarm, on/off switch and digital thermometer.
- 4. Durable rust free exterior and interior.
- 5. Double door with anti-condensation heating on the glass door.
- 6. Door with lock, door hinges and latches should be rust free.
- 7. Six shelves, adjustable.
- 8. Interior lighting, drip tray and defrosting arrangement.
- 9. Adequate circulation of air to ensure even cooling.
- 10. Operable at 220V, 50 Hz.
- 11. Compressor unit to be hermetically sealed.
- 12. Preferably roller mounted.
- 13. CE quality certification.
- 14. Suitable voltage stabilizer to be provided with the equipment.

(17) Technical Specifications of Deep Fridge -40°C

- 1. Vertical, deep freezer with>450 liter capacity, a double outer door and inner doors dividing the freezer into atleast 4 separate areas, with ergonomic handle.
- 2. Interior walls made up of stainless steel.
- 3. Temperature: -40°C microprocessor controlled temperature with ±3°C uniformity range.
- 4. Environment friendly: HFC refrigerant (non-CFC, non-HCFC refrigerant).
- 5. Cascade type cooling system and quietcompressors, noiselevel: 60 < dBa.
- 6. CPU and touch pad computer control system.
- 7. LED display linked to computer controlled system.
- 8. Front access calibration for 7-day temperature recorder.
- 9. The control panel, alarm system and non-volatile memory.
- 10. The chamber temperature display during power failure alarm, open door alarm, high/low temperature & clogged condenser filter should be present.
- 11. Rechargeable battery built in as a backup for alarm systems.
- 12. After a power outage, operation should resume at pre-outage settings (non-volatile memory for temperature and alarm temperature settings).
- 13. Intelligent automatic defrost system.
- 14. Door lock: Key lock.
- 15. Washable air filter
- 16. Casters: standard casters.
- 17. With storage boxes/racks of cryo vials/ ependorf tubes.
- 18. Internal voltage and power management systems assure component protection and best operation efficiencies.
- 19. Suitable voltage stabilizer to be provided with the equipment.
- 20. ISO and CE Certification

(18) Technical Specifications of Ice making Machine

- Compact, fully automatic, self-standing, Ice flake making machine with corrosion resistant stainless steel body, to be used in maintaining low temperature and cooling for molecular research application.
- Ice Flake output Up to 20 kg/24hrs.
- Flake ice thickness 1.8 to 2.5mm flake ice thickness (Should not be ice cubes making machine).
- Storage Capacity up to 30 Kg.
- Temperature -5° C to -8° C
- Self-standing, compact design, stainless steel and sealed water system
- PU foam insulation.
- CFC free refrigerant.
- Water connection: machine should have capacity to have required level of water irrespective of alterations in pressure.
- Fully automatic, Continuous ice flake output/storage.
- Noiseless operation.
- Automatic cut off in case of Low water or No water supply.
- Power Supply 220 Volts (50Hz).
- Net weight40-80Kg.
- Certification CE marked and ISO certified.

(19) Technical Specifications of Water Distillation Plant with storage tank

- 1. Water purification system for ultra-high pure water to fulfill the requirement of experiments conducted on ICPMS for trace element analysis.
- 2.System should have combination of technologies to process tap water to ultrapure water by reverse osmosis and electro deionization (EDI) for production of ion-free water (Type II). This purified water is then processed in another system where additional technologies produce the ultrapure water suited to ultra trace analysis.
- 3. Type II water should be stored in a reservoir to provide an adequate flow rate to feed ultrapure water systems.

Type II water:

- 4.Pre filtration is required for physical impurities removal.
- 5. Pure (Type II) waterspecification as follows:
 - Flow Rate: 3L/hr
 - Water Resistivity(at 25°C):10- 15 Mega Ohms
 - Bacteria: < 10 cfu/ml
 - Water Recovery: Up to 18%
 - Silica Rejection: 99.9% Feed water chlorine <3 ppm; Feed Water fouling <12
 - TOC: < 30ppb
- 6. Built in RO, dual wavelength, UV lamp, purification pack or cartridge.
- 7. **Storage tank** at least 100 liter capacity with auto cut off with transparent sheath and dispenser tap.
- 8. Facility to attach external point of use bio-filter.
- 9. Display of temperature, conductivity, volume dispensing, alarm and tank water level indicator.
- 10. Sanitization facility to avoid contamination.
- 11. Intermittent water circulation.

Type I water:

- 12. Type I water should be produced from two stage mixed bed ion exchange and activated carbon cartridge, 185/254 nmdual wavelength UV lamp filter with an option for final filter.
- 13. Type II water should pass through feed water specific cartridge attach to the water system without treaded fittings, screws, clamps, or locking tabs for removal of trace contaminants.
- 14. To prevent deterioration of water quality during periods of non-use, the ultrapure water system will be able to recirculate water to maintain high water quality.
- 15. Dispensing height should be suitable to any glassware.
- 16. Volumetric dispensing from 0.5 L till 10L.
- 17. Monitor displaying: resistivity, level of water in reservoir, volume dispensed and other alarms.
- 18. Pharmaceutical grade, final filter with 0.22 micron membrane filter in stack disc configuration; UF cartridge at the collection end with LRV is between 5.6 and 7.65 over challenge range of 220 and 22000 Eu/mL.
- 19. Filter to remove volatile organic compounds and provide water suitable for most of the analytical experiments on LC-MS/MS; ICP-MS etc.
- 20. Filter to remove specifically trace elements to providewater suitable for ultra trace organic sensitive applications.
- 21. Ultra-Pure (Type I) water specification as follows:
 - Flow Rate: Up to 1.5 L/min (Programmable flow rate)
 - Ultrapure Water Resistivity (at 25°C): 18.2 MΩ·cm
 - Bacteria: <0.1cfu/mL
 - Particulates $< 0.22 \mu m$: < 1/ mL
 - Pyrogen Levels: <0.001 EU/mL
 - RNase Level: < 0.01 ng/mL

- DNase Level: $< 4 \text{ pg/}\mu\text{L}$
- TOC: < 5 ppb
- 22. System should start giving pure water immediately after start with water softening capacity.
- 23. IQ/OQ/PQ should be performed and certificates provided as per part of installation-mandatory.
- 24. The system should be in compliance with GLP standards.
- 25. To comply with Standard requirements, the resistivity meter shall be able to display the non-temperature-compensated resistivity.
- 26. Water purification system meets internationally-recognized safety norms, and will carry the CE mark, indicating compliance with European Union EC Directives.
- 27. The water system will incorporate a built-in Quick Reference Guide for immediate understanding of the main operations.
- 28. Consumables for one year should be offered for trouble free working.
- 29. Price of spare parts/consumables like RO/pump/cartridges should be fixed for 5 years (Warranty period).
- 30. Monthly preventive maintenance during warranty and CMC period. None of the point in above specifications is company specific.

(20) Technical Specifications of Luminex 200 flouroanalyser with sheath delivery system for automated Molecular HLA typing & HLA serology

- 1. The Instrument should be able to detect up to 100 Protein and Nucleic Acid Multiplexing analytes from a single aliquot of sample in a single reaction well.
- 2. The instrument must be able to run even a single sample at a time without any wastage of other wells
- 3.The system should be HLA typing, DSA typing, HLA antibody detection, PRA, KIR genotyping and all other test systems available for Luminex platforms.
- 4. System should have below Assay Running Capacity
- 5.A 96 well micro plate based open system with multiplexing capabilities: the following micro titer plate should be compatible with plate holder: flat bottom, conical, round, filter bottom, half plates.
- 6.Sheath container and waste container hold enough volume to run up to two 96-well plates between refills.
- 7. System should be able to run/provide low to mid Gene expression assays up to 80 plex.
- 8. Automated startup, shutdown, and routine maintenance operations
- 9.System calibration < 10 minutes
- 10. System should support other vender's calibration and verification kit / open system
- 11. Distinguish a minimum of 1 to a maximum of 100 unique xMAP microsphere sets in a single sample.
- 12. The Supplier/ Vendor should be able to support and provide various kits in areas of Stem Cell, Inflammation and Immunology, Epigenetics, cardiology, cancer signaling, neuroscience, Metabolism and Endocrinology, Autophagy and Apoptosis, Toxicity and Drug Metabolism.
- 13. The acquisition and analysis software provided should be compatible for all applications like HLA Typing, DSA Typing, HLA Antibody detection, Donor specific antibody detection, KIR genotyping etc.
- 14. Reporter laser: 532 nm, nominal output 10 15 mW, maximum 500 mW, frequency doubled diode; mode of operation, continuous wave (CW)
- 15. Classification laser: 635 nm, $9.1 \pm 6\%$, maximum output 25 mW, diode; mode of operation, continuous wave (CW)
- 16. Reporter detector: Photomultiplier tube, detection bandwidth of 565 585 nm. Classification detector and doublet discriminator: Avalanche photo diodes with temperature compensation.
- 17. Sheath flow rate: 90 μ L \pm 5 μ L/second, Cuvette: 200-micron square flow channel, Sample injection rate: 1 μ L/second ,Sample update volume: 20 200 μ L
- 18. The Instrument should be able to Detect 1000 fluorochromes phycoerythrin (PE) or others per xMAP microsphere and Reporter channel dynamic range 3.5 decades of detection.
- 19. Software should have additional features like-Should able to support Magnetic Bead as well as nonmagnetic bead applications, Automation connectivity, Auto launch of post-acquisition analysis programs, Enhance data Archiving, Intra well normalization Analysis, Low bead count detection and alert, Multi batch functionality.
- 20. Company should provide all HLA typing consumables.
- 21. Company should provide Molecular HLA typing & HLA serology application support
- 22. Company should have 64 or more protein multiplexing quantification panel
- 23. Supplier should quote the prices of all the consumables of the same brand
- 24. System should come along with compatible computer system with minimum specification-Processor: 1.86 GHz Intel® CoreTM2 or higher (2.66 GHz recommended), Main memory: 2 G RAM or higher (4GB recommended).

- 25. All the accessories required for the functioning of the equipment should be supplied along with the system
- 26. Company should be able to provide both off the shelf panel and custom panels for both proteins and gene expression assays along with HLA typing.
- 27. Training of one doctor from the institute in their factory overseas will be provided by the company at no extra cost.
- 28. One complete setup reagents able to perform 50 tests or more for HLA typing, HLA Serology and DSA typing along with all the required consumables should be supplied to complete the demonstration at the time of Installation.
- 29. HLA software to be provided by company free of Cost for HLA analysis.
- 30. The system must be connected to Institutions HIS. The whole cost including any middleware would be the responsibility of the vendor & would be considered installed only after its networking with HIS.
- 31. Company should be provided Online UPS with Battery atleast 30 min backup.

BOQ for Items/Equipments in Indian Currency

r. no.	Description	
1	e-bid Notice No. RMLIMS/MM(eq)/2019-20/4248 dated 14.11.2019	
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 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 (6 th to 10 th yrs) in INR]	
	(Sr. no 10+19)	

BOQ for Items/Equipments in Foreign Currency

Sr.	Description		
1	E-bid notice no. RMLIMS/MM(eq)/2019-20/4248 dated 14.11.2019		
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		
9	(Sr. no. 6+7)		
	(-) 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	(Sr. no. 10 + 11) * Cost ofCustom Duty		
14	IGST+ other taxes		
15	* Cost of Clearance Charges		
16	* Add Indian Agency Commission in INR		
17	Cost of Equipment (CIP/CIF Value) + Custom Duty+ Custom Clearance +IGST+ Indian		
	Agency Commission in INR		
18	* Standard Accessories if required as per tender specification in INR		
	(exclusive of all taxes) (with 05 years unconditional warranty)		
19	GST value or % (as applicable)		
	(on sr. no 18)		
20	Total Standard Accessories Price (INR) + GST		
21	(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	$6^{ m th}$		
27	$7^{ m th}$		
28	$8^{ m th}$		
29	9 th		
30	$10^{ m th}$		
31	Total CMC Value		
32	GST value or % on CMC value (as applicable)		
33	Total CMC Price (6 th to 10 th yrs) including GST		
34	Grand total amount of equipment (Sr. no. 24+33)		

NOTE:- (*) Conditions applied.

^{* &}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.