



अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छत्तीसगढ़)  
All India Institute of Medical Sciences, Raipur (Chhattisgarh)

## **खंडन / DISCLAIMER**

यह निविदा अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छ.ग.) के लिये बोलीदाताओं/फर्म/एजेंसी इत्यादी से प्रस्ताव नहीं बल्की प्रस्ताव प्राप्त करने का निमंत्रण है संविदात्मक दायित्व तब तक नहीं होगा जब तक औपचारिक अनुबंध पर हस्ताक्षर नहीं किया जाता और चयनित बोलीदाताओं/फर्म/एजेंसी इत्यादी के साथ एम्स रायपुर के विधिवत अधिकृत अधिकारियों के द्वारा निष्पादित किया गया हो।

This tender is not an offer by the All India Institute of Medical Sciences, Raipur, but an invitation to receive offer from bidders/firm/agency etc. No contractual obligation whatsoever shall arise from this tender process unless and until a formal contract is signed and executed by duly authorized officers of AIIMS, Raipur with the selected bidder/firm/agency.

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Tatibandh, G.E. Road, Raipur -492099 (CG),  
Tele: 0771- 2577279, 07712971307  
Website: [www.aiimsraipur.edu.in](http://www.aiimsraipur.edu.in)/[www.eprocure.gov.in](http://www.eprocure.gov.in)  
Email: [store@aiimsraipur.edu.in](mailto:store@aiimsraipur.edu.in)



अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर (छ.ग) के  
जेनेटिक्स लैब की स्थापना के लिए निविदा आमंत्रण सूचना  
**Notice Inviting Tender for Establishing of Genetics Lab at  
All India Institute of Medical Sciences, Raipur (C.G)**

**CRITICAL DATE SHEET**

Published Date	<b>19.06.2019</b>
Bid Document Download / Sale Start Date	<b>20.06.2019 at 10:00 am</b>
Clarification Start Date	<b>20.06.2019 at 11:00 am</b>
Clarification End Date	<b>24.06.2019 at 17:00 pm</b>
Pre bid meeting	<b>28.06.2019 at 15:30 pm</b>
Bid Submission Start Date	<b>01.07.2019 at 10:00 am</b>
Bid Submission End Date	<b>11.07.2019 at 15:00 pm</b>
Bid Opening Date	<b>12.07.2019 at 15:30 pm</b>

Tatibandh, G.E. Road, Raipur -492099 (CG),

Tele: 0771- 2577279, 07712971307

Website: [www.aiimsraipur.edu.in](http://www.aiimsraipur.edu.in)/[www.eprocure.gov.in](http://www.eprocure.gov.in)

Email: [store@aiimsraipur.edu.in](mailto:store@aiimsraipur.edu.in)



अखिल भारतीय आयुर्विज्ञान संस्थान, रायपुर, छत्तीसगढ़

All India Institute of Medical Sciences, Raipur (Chhattisgarh)

Tatibandh, GE Road, Raipur-492 099 (CG)

Website : [www.aiimsraipur.edu.in](http://www.aiimsraipur.edu.in)

Tele: 0771- 2971307, e-mail: [store@aiimsraipur.edu.in](mailto:store@aiimsraipur.edu.in)

1. Tenders in Two Bids (Technical & Financial Online bids) are invited on behalf of the, Director, All India Institute of Medical Sciences from interested and eligible service providers under open tenders for **Establishing of Genetics Lab**. Manual bids shall not be accepted.
2. Tender document may be downloaded from AIIMS web site [www.aiimsraipur.edu.in](http://www.aiimsraipur.edu.in) (for reference only) and CPPP site <https://eprocure.gov.in/eprocure/app> as per the schedule as given in CRITICAL DATE SHEET as under.
3. Bid shall be submitted online at CPPP website: <https://eprocure.gov.in/eprocure/app>.
4. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
5. Tenderer who has downloaded the tender from the **AIIMS web site [www.aiimsraipur.edu.in](http://www.aiimsraipur.edu.in)** and Central Public Procurement Portal (CPPP) eprocurement website <https://eprocure.gov.in/eprocure/app> **shall not tamper/modify the tender form including downloaded price bid template in any manner**. In case if the same is found to be tempered/modified in any manner, tender shall be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with AIIMS Raipur.

The Technical bid should include the detailed specifications of main item/equipment and its accessories. All items should be numbered as indicated in the Annexure-I (Any deviation should be clearly mentioned and supporting document should be submitted).

6. **Manual bid shall not be accepted in any circumstance.**
7. The complete bidding process in online bidding, Bidder should be possession of valid digital Signature Certificate (DSC) for online submission of bids. Prior to bidding DSC need to be registered on the website mentioned above.
8. **Tenderers are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at <https://eprocure.gov.in/eprocure/app>'.**
9. **Quotations should be valid for 180 days** from the tender due date i.e. tender opening date. The bidder should clearly indicate the period of delivery & other terms.
10. Relevant literature pertaining to the items quoted with full specifications should be uploaded, where ever applicable.
11. Tenderer must provide evidence of having supplied government hospital/ reputed private hospital organizations in India similar nature of items of at least **₹ 12770000.00** for Establishing of Genetics Lab of Tender value in the last three years and the copy of the same should be uploaded.

12. The firm should be registered and should have the average annual turnover at least **₹ 2,55,40,000.00** of the bidder in the last three financial years. Copies of authenticated balance sheet for the past three financial years should be uploaded.
13. The tender document must be accompanied by copy of PAN, Certificate of firm/company registration, GST registration.
14. The GST registration details may please be furnished.
15. The quantity shown against each item is approximate and may vary as per demand of the Institute at the time of placement of order.
16. The bidder must be able to provide the product/items within specified time period as prescribed in the Purchase Order, failing which the EMD will be forfeited. Furthermore on completion of the stipulated time period, Purchase Order will be cancelled and award will be given to another qualified bidder with the negotiated terms & conditions as per Institutes norms.
17. In the event of any dispute or difference(s) between the vendee (AIIMS Raipur) and the vendor(s) arising out of non-supply of material or supplies not found according to the specifications or any other cause what so ever relating to the supply or purchase order before or after the supply has been executed, shall be referred to the Director/AIIMS/Raipur who may decide the matter himself or may appoint arbitrator(s) under the arbitration and conciliation Act 1996. The decision of the arbitrator shall be final and binding on both the parties.
18. The place of arbitration and the language to be used in arbitral proceedings shall be decided by the arbitrator.
19. All disputes shall be subject to Raipur Jurisdiction only.
20. **AIIMS Raipur reserves the rights to accept/reject any bid in full or in part or accept any bid other than the lowest bid without assigning any reason thereof. Any bid containing incorrect and incomplete information shall be liable for rejection.**
21. The Tender/Bid will be opened on Store office at AIIMS Raipur Premises.
  - i) Only those financial bids will be opened whose technical bids are found suitable by the expert committee appointed for the concerned instrument/equipment.
  - ii) No separate information shall be given to individual bidders. In incomparable situation, the committee may negotiate price with the technically and financially qualified bidder before awarding the bid.
22. Copies of original documents defining the constitution or legal status, place of registration and principal place of business of the company or firm or partnership, etc.

**23. Award of Contract**

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has bid the lowest evaluated quotation price.

- i) Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
  - ii) The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the bid validity period. The terms of the accepted bid shall be incorporated in the purchase order.
- 24.** Normal comprehensive warranty/guarantee and CMC (if applicable) shall be applicable to the supplied goods.
- 25.** Rates should be quoted inclusive of packing, forwarding, postage and transportation charges etc.
- 26.** The competent authority reserves all rights to reject the goods if the same are not found in accordance with the required description / specifications/quality.
- 27. A brochure displaying clearly the product is to be attached with the tender if required.**
- 28. The amount mentioned for tender cost on the portal are totally tentative and it should not be submitted as per provision of GFR-2017**
- 29. Earnest Money:**

<b>S.No.</b>	<b>Item Description</b>	<b>EMD Amount</b>
1	Fully Automated Gel Documentation system with inbuilt CCD Camera & UPS	150000.00
2	Real Time PCR System	90000.00
3	Conventional Thermal Cycler with UPS	42000.00
4	Vortex Mixer	1200.00
5	Bio Safety Cabinet Type 2A	24000.00
6	Refrigerated Centrifuge Table top	30000.00
7	Laboratory Table top centrifuge (non- refrigerated)	24000.00
8	Laboratory water purification system with ultrapure nuclease free water	30000.00
9	Digital Dry Heating bath/block	4500.00
10	Horizontal gel electrophoresis with compatible power supply and accessories	4500.00
11	Vertical gel electrophoresis with compatible power supply and accessories	6000.00
12	Minus 20 deg. C deep freezer (400 - 600 L)	30000.00
13	Minus 80 deg. C deep freezer (500 - 600 L)	60000.00
14	Laboratory Refrigerator	15000.00
15	Laboratory Precision Water Bath	15000.00
16	Incubator	30000.00
17	Laboratory Oven	30000.00
18	Laboratory Weighing balance	7500.00
19	Tissue homogenizer	4500.00
20	Spectrophotometer	54000.00
21	Ice flaker 100kg/day output	6000.00

22	Ph/mV/TEMP Meter	3000.00
23	Magnetic Stirrer (three positions)	15000.00
24	Liquid Nitrogen Cylinders, 40-50 L	22500.00
25	Nucleic Acid Extraction System	60000.00
26	Autoclave	7500.00

**Note: The minimum amount is mentioned/ shown in online tendering i.e. Rs. 4500.00 Bidder should be submitted/ uploaded EMD amount as per above schedule.**

Earnest money by means of a Bank Demand Draft/ FD, a scanned copy to be enclosed. It is also clarified that the bids submitted without earnest money will be summarily rejected. The DD/FD may be prepared in the name of "All India Institute of Medical Sciences, Raipur (AIIMS RAIPUR)". The EMD cost must reach at officer of the Stores Officer Gate no. 5, Medical College Building, 2nd Floor, AIIMS, Raipur after opening of tender.

- i) No request for transfer of any pervious deposit of earnest money or security deposit or payment of any pending bill held by the AIIMS Raipur in respect of any previous supply will be entertained. Tenderer shall not be permitted to withdraw his bid or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulations made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited.
  - ii) Tenders without Earnest Money will be summarily rejected.
  - iii) No claim shall lie against the AIIMS Raipur in respect of erosion in the value or interest on the amount of EMD.
  - iv) If MSME firm is registered for above tendered item, then the firm will be exempted for submission of EMD amount. Firm must upload scanned copy of following documents in support of exemption.
    - (1) National Small Industries Corporation (NSIC).
  - v) The earnest money will be returned/refund to the unsuccessful tenderers after the tender is decided.
  - vi) EMD should remain valid for a period of 45 days beyond the final bid validity period. When the tenderer agrees to extend the validity of bid, he shall also extend the validity of EMD suitably.
28. In case the supplier requires any elucidation regarding the tender documents, they are requested to contact to the Store Officer, AIIMS Raipur through e-mail: store@aiimsraipur.edu.in on or before end date of clarification as per critical date sheet.
29. The EMD of the successful bidder will be returned to them without any interest after the submission of Security deposit/PSD.
30. Other terms and condition applicable as per manual for procurement of goods 2017, GFR-2017 etc.

**Stores Officer,  
AIIMS, Raipur**

**Other Terms & Conditions:**

**1. Pre-Qualification Criteria:**

- a. Bidder should be the manufacturer/authorized dealer/Distributor/Trader/ Supplier. Letter of Authorization from Manufacturer for the same and specific to the tender should be uploaded in the prescribed place.
- b. An undertaking from the original Manufacturer is required stating that they would facilitate the bidder on regular basis with technology/ product updates and extend support for the warranty as well. The scanned copy of same to be uploaded. (if applicable).

**2. Performance Security Deposit (PSD):**

- a. The successful bidder shall have to submit a Performance Security Deposit (PSD) within 30 days from the date of issue of Letter of Award (LOA). Extension of time for submission of PSD beyond 30 days band up to 60 days from the date of issue of LOA may be given by the competent authority to sign the contract agreement however a penal interest of 15% per annum shall be charged for the delay beyond 30 days. i.e. 31<sup>st</sup> day after the date of issue of LOA. In case of the contractor fails to submit the requisite PSD even after 60 days from the date of issue of LOA the contract shall be terminated duly forfeiting the EMD and other dues if any payable against the contract . The failed contractor shall be debarred from participating in re-tender (if any) for that item.
- b. Successful supplier/firm should submit Performance Security Deposit in favour of "AIIMS, Raipur" and to be received in the Store Office, 2<sup>nd</sup> Floor, Medical College Building, Tatibandh, Raipur (C.G) Pin-492099 before the date of commencement of supply or 30 days from the date of acceptance of the purchase order, whichever is earlier. The Performance Security Deposit to be furnished in the form of FDR/DD/Bank Guarantee & also performance guarantee bond as per given proforma of the tender documents, for an amount covering 10% of the contract value.
- c. The Performance Security Deposit should be established in favour of "AIIMS Raipur" through any Schedule Bank with a clause to enforce the same on their local branch at Raipur.
- d. Validity of the Performance Security Deposit shall be for a period of 60 days beyond of entire warranty period from the date of issue of installation & commissioning.
- e. After completing of warranty period a fresh BG/DD/FDR of 10% of CMC cost will be submitted (if applicable) by the supplier for performance security against CMC validity of this new BG/DD/FDR will be 60 days beyond CMC period. After submission of new security deposits, old security deposit will be released.

**3. Delivery & Installation:** The successful bidder should strictly adhere to the following delivery schedule supply, installation & commissioning should be effected **within 45 days** from the date of purchase order and this clause should be strictly adhere to failing which administrative action as deemed fit under rules will be taken against the defaulter. Otherwise Liquidation Damages will be imposed as per clause no. 4. Purchase order will be placed as required by consignee.

**4.** Purchase Order will be placed as per requirement of institute.

- 5. Penalty:** If the suppliers fails to deliver and place any or all the Equipment or perform the service by the specified date as mention in purchase order, penalty at the rate of 0.5% per week of delayed value of goods subject to the maximum of 10% of delayed goods value will be deducted, afterwards another penalty may be imposed.
- 6. Training and Demonstration (if required):** Suppliers needs to provide adequate training and demonstration at AIIMS Raipur to the nominated person of AIIMS Raipur at their cost. AIIMS Raipur will not bear any training or living expenditure in this regard. The supplier should arrange for regular weekly visit to the AIIMS, Raipur campus by its technical team and assist in maintenance of the item/equipment within warranty period. Assistance limited to locking companies with manufacturer will not be considered sufficient.
- 7. Right of Acceptance:** AIIMS, Raipur reserves the right to accept or reject any or all tenders/quotations without assigning any reason there of and also does not bind itself to accept the lowest quotation or any tender. AIIMS, Raipur also reserves the rights to accept all the equipment/instruments in the given tender or only part of it in any given schedule without assigning any reason.
- 8. Validity of the bids:** The bids shall be valid for a period of 180 days from the date of opening of the tender. This has to be so specified by the tenderer in the commercial bid which may be extended, if required.
- 9. Risk Purchase & Recovery of sums due:**
  - Failure or delay in supply of any or all items as per Requisition / Purchase Order, Specification or Brand prescribed in the tender, shall be treated as 'noncompliance' or 'breach of contract' and the order in part of full be arranged from alternative source(s) at the discretion of the hospital authority and the difference in price has to be recovered from the tenderer as mentioned elsewhere.
  - The amount will be recovered from any of his subsequent / pending bills or security Deposit.
  - In case the sum of the above is insufficient to cover the full amount recoverable, the contractor shall pay to the purchaser, on demand the remaining balance due.
- 10. Installation & Warranty Declaration:** Suppliers must give the comprehensive onsite warranty **5 years as mentioned on detailed specification** on Annexure - I is required from the date of successful installation of item/equipment against any manufacturing defects. In the installation report the model number of instrument and all spares parts/ accessories numbers should be in the line of purchase order. And suppliers must be written in the warranty declaration that “everything to be supplied by us hereunder shall be free from all defects and faults in material, workmanship and shall be of the highest quality and material of the type ordered, shall be in full conformity with the specification and shall be completed enough to carry out the experiments, as specified in the tender document.” If any item covered under warranty fails, the same shall be replaced free of cost including all the applicable charges (shipping cost both ways). **Installation must be done within stipulated time period from the date of delivery of the item/ equipment as specified in the purchase order.**

- 11. Communication of Acceptance:** AIIMS, Raipur reserves all right to reject any tender including of those tenderers who fails to comply with the instructions without assigning any reason whatsoever and does not bind itself to accept the lowest or any specific tender. The decision of this Institute in this regard will be final and binding.
- 12. Guarantee/Warranty, Service, Maintenance:** The tenderers must quote for **onsite warranty for all the items quoted (as mentioned on detailed specification on Annexure -I)** from the date of completion of the satisfactory installation as certified by the stipulated committee. The warranty charges shall not be quoted separately otherwise the bid shall be summarily rejected. Also the Bidders should submit their quote for subsequent on site CMC (**5 years as mentioned on detailed specification on Annexure-I**) but it should not be more than 7% per year of quoted unit price otherwise offer may summarily rejected. Failure to comply this condition will entail the rejection of the Bids. The price comparison shall be made taking into account on basic price and post warranty CMC. The price comparison shall be made taking into account on basic price and post warranty CMC. The Rate Contracting Authority reserves the right to award CMC (with spare parts) shall be quoted for equipment. So the price of CMC should be quoted according to the cost of equipment's. The amount of CMC would be released to the supplier on successful completion of the maintenance of that particular year duly certified by the user department.
- 13. Insolvency etc.:** In the event of the firm being adjudged insolvent or having a receiver appointed for it by a court or any other under the Insolvency Act made against them or in the case of a company the passing any resolution or making of any order for winding up, whether voluntary or otherwise, or in the event of the firm failing to comply with any of the conditions herein specified AIIMS, Raipur shall have the power to terminate the contract without any prior notice.
- 14. Force Majeure:** If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, exception, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 days from the date of occurrence thereof, neither party shall be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance and deliveries have been so resumed or not shall be final and conclusive.  
  
Further, that if the performance in whole or in part of any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, AIIMS, Raipur party may, at least option to terminate the contract.
- 15. Breach of Contract:** In case of breach of any terms and conditions as mentioned in agreement/contract, the Competent Authority, will have the right to cancel the contract without assigning any reasons thereof and nothing will be payable by AIIMS, Raipur. In that event the security deposit shall also stand forfeited.
- 16. Subletting of Contract:** The firm shall not assign or sublet the contract or any part of it to any other person or party without having prior permission in writing

of AIIMS, Raipur, which will be at liberty to refuse if thinks fit. The tender is not transferable.

**17. Right to call upon information regarding status of contract:** The AIIMS, Raipur will have the right to call upon information regarding status of contract at any point of time.

**18. Terms of payment:**

**18.1.**

Payment shall be made subject to recoveries, if any, by way of liquidated damages or any other charges as per terms & conditions of contract in the following manner.

**A) Payment for Indigenous Goods**

Payment shall be made in Indian Rupees as specified in the contract in the following manner:

- (a) **On delivery:** 70% payment of the contract price shall be paid on receipt of goods in good condition at the consignee premises and upon the submission of the following documents:
- i) Four copies of suppliers invoice showing contract number, goods description, quantity, unit price and total amount with revenue stamp.
  - ii) Two copies of packing list identifying contents of each package
  - iii) Certificate of origin and certificate of guarantee and warrantee.
  - iv) Consignee receipt certificate in original issued by the authorised representative of the consignee.
- (b) **On Acceptance:** Balance 30% payment would be made against 'Final Acceptance Certificate' of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the supplier or otherwise.

**B) Payment for Imported Goods:**

Payment of foreign currency portion shall be made in the currency as specified in the contract in the following manner:

**(a) On Shipment:**

Seventy (70) % of the CIP of each equipment price of the goods shipped shall be paid through irrevocable, non-transferable Letter of Credit (LC) in favour of the supplier bank in his country in case of Foreign Tenderer and upon submission of documents specified here under:

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, Unit price and in a total amount with revenue stamp.
- (ii) Original and four copies of the negotiable clean, on-board Bill of Lading/Airway bill, marked freight pre-paid and four copies of non-negotiable Bill of Lading/Airway Bill.
- (iii) Four copies of packing list identifying contents of each package.
- (iv) Insurance Certificate and a documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours.
- (v) Manufacturer's/Supplier's warranty certificate.
- (vi) Certificate of origin.

**(b) On Acceptance:**

Balance payment of 30% of net CIP of each equipment of goods would be made against 'Final Acceptance Certificate' to be issued by the consignee through irrevocable, non-transferable Letter of Credit (LC) opened in favour of the Foreign Principal in a bank in his country, subject to recoveries, if any.

**(c) Payment of Indian Agent Commission:**

Indian Agency Commission will be paid to the manufacturer's agent in the local currency for an amount in Indian rupees indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of contract) and shall not be subject to further escalation/exchange variation. Payment shall be paid in Indian Rupees to the Indian Agent on proof of 100% payment to the Foreign Principal.

**d) Payment for Comprehensive Annual Maintenance Contract Charges:**

The consignee will enter into CMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on yearly basis after satisfactory completion of said period duly certified by the consignee on receipt of bank guarantee.

a. The supplier shall not claim any interest on payment under the contract in any circumstance.

**18.2** Where there is a statutory requirement for tax deduction at source, such deduction towards income tax and other tax as applicable will be made from the bills payable to the supplier rates as notified from time to time.

**18.3** No payment shall be made for rejected stores. Rejected equipment's must be removed by the supplier within two weeks of the date of issue of rejection advice at their own cost & replace immediately. In case these are not removed these will be auctioned at the risk and responsibility of the suppliers without notice.

**19. Compulsory Enlistment of Indian Agents**

As per the Compulsory Enlistment Scheme of the Department of Expenditure, Ministry of Finance, it is compulsory for Indian agents who desire to quote directly on behalf of their foreign manufacturers/principals, to get themselves enlisted with the Department of Expenditure, through the Central Purchase Organization (e.g. DGS&D).

The compulsory enlistment of Indian Agents under the scheme of Ministry of Finance is simpler and differs from the registration of Indian Agents with the Central Purchase Organization (e.g. DGS&D) described in the earlier paragraphs.

The registration of the foreign manufacturer is not a must for enlisting the Indian Agent under this scheme. No Inspection Report in respect of the foreign manufacturer/principal is necessary.

The enlistment under the scheme is not equivalent to the Registration with DGS&D. Such firms do not enjoy the same status as that of DGS&D registered suppliers. A note to this effect is given in the Enlistment Letter to the firm.

## **20. Custom Duty on Imported Goods**

In respect of imported goods, the tenderers shall also specify separately the total amount of custom duty included in the quoted price. The tenderers should also indicate correctly the rate of custom duty applicable for the goods in question and the corresponding Indian Customs Tariff Number. Where customs duty is payable, the contract should clearly stipulate the quantum of duty payable etc. in unambiguous terms. AIIMS, Raipur is exempted from payment of excise duty and is eligible for concessional rate of custom duty. Necessary certificate will be issued as demand. AIIMS, Raipur will not make necessary arrangements for clearance of imported goods at the airport.

## **21. Custom Duty Reimbursement:**

The supplier will pay the customs duty wherever applicable, which will be reimbursed by purchaser as per documentary evidence. The custom duty exemption certificate will be provided to the supplier as and when required.

## **22. Good & Service Tax**

GST rates applicable on your quoted item may please be informed. Please confirm if there is any (Upward/Reduction) in your Basic Price structure. And you are also requested to pass the Input Credit as per the following Anti Profiteering Clause of GST.

**“Upon Implementation of GST, any reduction in the rate of tax on supply of goods or service or the benefit of input tax credit shall be passed on to AIIMS Raipur by way of commensurate reduction in the prices”.**

## **23. Fall Clause:**

1. Prices charged for supplies under Rate Contract by the supplier should in no event exceed the lowest prices at which he bids to sell or sells the stores of identical description to any other State Government/DGS&D/Public Undertaking during the period of the contract.
2. If at any time during the period of contract, the prices of tendered items is reduced or brought down by any law or Act of the Central or State government, the supplier shall be bound to inform Purchasing Authority immediately about such reduction in the contracted prices, in case the supplier fails to notify or fails to agree for such reduction of rates, the Purchasing authority will revise the rates on lower side. If there is a price increase for any product after quoting the rates, the bidder will have to supply the item as per quoted rates. This office will not accept any higher rates after wards.
3. If at any time during the period of contract, the supplier quotes the sale price of such goods to any other State Govt./DGS&D and Public Undertakings at a price lower than the price chargeable under the rate contract he shall forthwith notify such reduction to Purchasing Authority and the prices payable under the rate contract for the equipment's supplied from the date of coming into force of such price stands correspondingly reduced as per above stipulation.

Any deviation in the material and the specifications from the accepted terms may liable to be rejected and the suppliers need to supply all the goods in the specified form to the satisfaction/ specifications specified in the Purchase order and demonstrate at the their own cost.

**24. Arbitration:**

If any difference arises concerning this agreement, its interpretation on payment to the made there under, the same shall be settled out by mutual consultation and negotiation. If attempts for conciliation do not yield any result within a period of 30 days, either of the parties may make a request to the Director, AIIMS Raipur to settle the dispute by Sole Arbitrator. Sole arbitrator will be appointed by the Director, AIIMS Raipur. In case of such arbitrator refusing, unwilling or becoming incapable to act or his mandate having been terminated under law, another arbitrator shall be appointed in the same manner from among the panel of three persons to be submitted by the claimant. The provision of Arbitration and Conciliation Act, 1996 and the rule framed there under and in force shall be applicable to such proceedings.

**25. Legal Jurisdiction:**

The agreement shall be deemed to have been concluded in Raipur, Chhattisgarh and all obligations hereunder shall be deemed to be located at Raipur, Chhattisgarh and Court within Raipur, Chhattisgarh will have Jurisdiction to the exclusion of other courts.

**26.** Rate wise comparison of the quotes will be made and L1\* for each item will be determined accordingly. In this context, final decision of the committee will be binding to all and no claim in this regard can be entertained. The quantity indicated is tentative and may vary, and any decision in this regard by Director AIIMS Raipur shall be final.

**27. L1 firm will be decided on the basis of item wise including CMC charge for 5 years.**

**Stores Officer,  
AIIMS, Raipur**

## **Technical Bid**

The following documents are required to upload by the Bidder along with Technical Bid as per the tender document:

- a) Scanned Copy of EMD Cost must be uploaded.
- b) Please mention that the bidder is Manufacture /Distributor /Dealer / Trader/Supplier relevant document should be uploaded.
- c) In case of distributor/dealer/trader/supplier must be upload tender specific authorization certificate from OEM/ manufacturer (Form C) should be uploaded.
- d) Copy of PAN Card should be uploaded.
- e) Firm/Company registration certificate should be uploaded.
- f) The equipment should be US-FDA/CE certified/BIS/ISO certified.
- g) The GST registration details may please be furnished.
- h) In the event of increase in price detailed justification and supporting evidence may be submitted for our consideration.
- i) Income Tax Return of last three years should be uploaded.
- j) Tenderer must provide evidence of experience/supplied materials as mentioned in tender document should be uploaded
- k) Annual turnover & balance sheet of last three year duly certified by CA as mentioned in tender document should be uploaded.
- l) "Declaration by the Bidder "(Form B) should be uploaded as mentioned in tender document should be uploaded.
- m) Relevant brochure/catalogue pertaining to the items quoted with full specifications etc.
- n) An undertaking of manufacturer as per serial no. 1b of tender document page no. 07 in case of Distributor /Dealer / Trader/Supplier should be uploaded.
- o) Form A with duly filled by bidder should be uploaded.
- p) Technical Specifications Compliance Report.
- q) Have you previously supplied these items to any government/ reputed private organization? If yes, attach the relevant poof. Please provide a certificate on letter head that you have not quoted the price higher than previously supplied to any government Institute/Organisation/reputed Private Organisation or DGS&D rate in recent past. If you don't fulfil this criteria, your tender will be out rightly rejected.

## **PRICE BID**

- (a) Price bid in the form of BOQ\_XXXX.xls.
- (b) CMC Price Bid as Pdf.
- (c) Custom Duty tariff as Pdf.
- (d) Miscellaneous Sheet as Pdf.

**PARTICULARS FOR PERFORMANCE GUARANTEE BOND**

**(To be typed on Non-judicial stamp paper of the value of Indian Rupees of Two Hundred)**  
(TO BE ESTABLISHED THROUGH ANY OF THE SCHEDULED BANK (WHETHER SITUATED AT RAIPUR OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT RAIPUR. BONDS ISSUED BY CO- OPERATIVE BANKS ARE NOT ACCEPTED)

To,  
The Director  
All India Institute of Medical Sciences (AIIMS),  
Tatibandh, GE Road, Raipur-492 099 (CG)

**LETTER OF GUARANTEE**

WHERE AS All India Institute of Medical Sciences (AIIMS) Raipur (Buyer) have invited Tenders vide Tender No.....Dt.....for purchase of.....AND WHERE AS the said tender document requires the supplier/firm(seller)whose tender is accepted for the supply of instrument/machinery, etc. in response there to shall establish an irrevocable Performance Guarantee Bond in favour of "AIIMS Raipur" in the form of Bank Guarantee for Rs.....[10% (ten percent)of the purchase value] which will be valid for entire warranty period from the date of installation & commissioning, the said Performance Guarantee Bond is to be submitted within 30(Thirty) days from the date of Acceptance of the Purchase Order.

NOW THIS BANKHERE BY GUARANTEES that in the event of the said supplier/firm (seller) failing to abide by any of the conditions referred to intender document/purchase order/performance of the instrument/machinery, etc. This Bank shall pay to All India Institute of Medical Sciences (AIIMS) Raipur on demand and without protest or demur .....(Rupees.....).

This Bank further agrees that the decision of All India Institute of Medical Sciences (AIIMS) Raipur(Buyer) as to whether the said supplier/firm (Seller) has committed a breach of any of the conditions referred in tender document/ purchase order shall be final and binding.

We,.....(name of the Bank& branch) here by further agree that the Guarantee herein contained shall not be affected by any change in the constitution of the supplier/firm(Seller)and/or All India Institute of Medical Sciences (AIIMS) Raipur(Buyer).

Not with standing anything contained herein:

- a.Our liability under this Bank Guarantee shall not exceed`..... (Indian Rupees.....only).
- b.This Bank Guarantee shall be valid upto..... (date) and
- c. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if AIIMS Raipur serve upon us a written claim or demand on or before..... (Date) **Claim period should be beyond six months from the date of validity i.e. (b) above.**

This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at .....situated at..... (Address of local branch).

Yours truly,

Signature and seal of the Guarantor  
Name of the Bank:.....  
Complete Postal Address: .....

**Form-A****PARTICULARS FOR REFUND OF EMD TO SUCCESSFUL/UNSUCCESSFUL BIDDER  
RTGS/National Electronic Fund Transfer (NEFT)Mandate Form**

1	Name of the Bidder	
2	Permanent Account No(PAN)	
3	Particulars of Bank Account	
	a) Name of the Bank	
	b) Name of the Branch	
	c) Branch Code	
	d) Address	
	e) City Name	
	f) Telephone No	
	g) NEFT/IFSC Code	
	h) RTGS Code	
	i) 9 Digit MICR Code appearing on the cheque book	
	j) Type of Account	
	k) Account No.	
4	Email id of the Bidder	
5	Complete Postal Address of the bidder	

**FORM-B**

**Declaration by the Bidder:**

1. I/We have downloaded the tender from the internet site and I/We have not tampered /modified the tender documents in any manner. In case the same is found tampered/ modified, I/We understand that my/our offer shall be summarily rejected and I/We are liable to be banned from doing business with AIIMS Raipur and/or prosecuted as per laws.
2. I/We have read and fully understood all the terms and conditions contained in Tender document regarding terms & conditions of the contract& rules and I/we agree to abide them.
3. The bidder should not have been blacklisted before at any government organisation
4. No other charges would be payable by Client and there would be no increase in rates during the Contract period.

Place:.....

(Signature of Bidder with seal)

Date:.....

Name :

Seal :

Address :

**Form-C**

**MANUFACTURER's / PRINCIPAL's AUTHORIZATION FORM**

To  
The Stores Officer,  
All India Institute of Medical Sciences Raipur

Dear Sir,

TENDER: \_\_\_\_\_.

we, \_\_\_\_\_, who are established and reputable manufacturers of \_\_\_\_\_, having factories at \_\_\_\_\_ and \_\_\_\_\_, hereby authorize Messrs. (Authorised Dealer/Sole Distributor/Supplier) \_\_\_\_\_ (name and address of agents) to bid, negotiate and conclude the contract with you against Tender No. \_\_\_\_\_ for the above goods manufactured by us. No company or firm or individual other than Messrs. \_\_\_\_\_ are authorized to bid, negotiate and conclude the contract in regard to this business against this specific tender.

We hereby extend our full guarantee and warranty as per the conditions of tender for the goods bided for supply against this tender by the above firm.

The authorization is valid up to \_\_\_\_\_

Yours faithfully,

(Name)

For and on behalf of M/s. \_\_\_\_\_  
(Name of manufacturers)/Principal

**ANNEXURE-I**  
**Detailed Technical Specification for Establishing Genetics Lab**

**1. FULLY AUTOMATED GEL DOCUMENTATION SYSTEM with inbuilt CCD Camera**

1. System should be capable for Chemiluminescent and Fluorescent Western blot imaging, DNA, RNA gel and colorimetric and fluorescent protein gel imaging.
2. System should utilize Smart Exposure algorithm that determines optimal exposure times while eliminating saturation. System should also have facility to display a preview simulated image that responds to time adjustments to help determine & further refine conditions before exposure if desired.
3. System should automatically detect the sample and its size; automatically move the camera towards or away from sample to “zoom” into the correct position to maximize the utilization of the field of view.
4. System should have the facility that the sample should be automatically & mechanically rotated to help ensure square images that do not require digital rotation.
5. System should have light path that maximizes sample viewing area in a small instrument design. System should provide a field of view 21 x 16 cm or more, enough for 4 mini gels.
6. System should have 8 MP CCD camera or more, chip dimensions 16 mm diagonal or more, at-least 3.69x2.69 um pixel size. Images generated in a 16 bit format that allows 65,000 gray scales or more and dynamic range of > 4.5 OD. 12.5x10mm chip utilizes Micro lens surface technology to maximize light capture.
7. The CCD chip should provide a 75% peak quantum efficiency QE @525 nm and broad-spectrum detection for increased sensitivity across applications.
8. 1x1, 2x2, 3x3, 4x4, 5x5, 6x6 and 8x8 binning options should be available for increased sensitivity and flexibility across applications.
9. All internal components should be chemical resistant and the internal light tight chamber should be black power coated material to minimize auto fluorescent and reflections.
10. System imagers should be cooled to approximately -30C below ambient temperature to minimize the time required before operation caused by higher levels of cooling.
11. Additional cooling should not be utilized due to the low noise levels of the camera (< 0.005 e- /pixel/sec at -10°C).
12. System should come with a 25mm F/0.95 aperture lens that allows fast light capture and a large field of view.
13. System should not utilize UV lighting to minimize health and environmental hazards.
14. DNA and protein gels should be visualized using a bright green LED array with an exciting range of 480-530nm.
15. System should have technology, which allows 4-plex imaging and combination of RGB and near-IR imaging on the same blot.
16. Gel documentation system should contain an epi white and epi IR light source and a 7-position motorized filter wheel in which the following excitation filter options allow for dye flexibility of different fluorescent stains:
  - a. EX1 455–485
  - b. EX2 515–545
  - c. EX3 610–635
  - d. EX4 655–680
  - e. EX5 745–765
17. The system should be upgradable and there should be flexibility to add filters.
18. System should have built-in computer and touch screen interface. In addition, external software should be freely available on cloud that can be accessed and utilized from any computer with network access.
19. At least 3 USB and 1 network port should be in the system and the system should get directly connected to the printer.

21. System should have capacity that Image output can be in several formats- TIFF, JPG, PNG, and PDF and should also have facility to generate raw data which cannot be manipulated and can be used for authentication.
22. System should be cloud connected analysis software for molecular weight calculation, relative and absolute quantitation, and normalization. Personal data should be accessed and analyzed from any computer and any location.
23. Software should be regularly upgraded. Cloud software updates should occur automatically.
24. System imagers should support multiframe detection where an individual image can be divided into independent regions. This allows automated analysis of multiple samples in one image.
25. Should have European CE or US FDA certification or BIS approved.
26. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
27. Should be supplied with branded all-in-one computer system with at least Core i7 processor, 8GB RAM, 1TB HDD, DVD R/R, 21" or better LED Monitor, Genuine Windows 10 or more, A4 size multifunctional colour laser duplex printer and appropriate bar code reader.
28. UPS of 3 KVA with 60 minutes back up should be provided.
29. Appropriate anti-vibration table with granite top of standard make should be provided to accommodate the instrument, computer system and accessories.
30. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
31. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
32. Five (5) years warranty and Five (5) years CMC should be provided.

## **2. REAL TIME PCR SYSTEM**

1. Should be an automated system for both real-time PCR and post-PCR (end-point) analysis using in-built Peltier based block with full license for PCR process.
2. The system should be capable of applications such as absolute quantitation; simultaneous analysis of data for relative quantitation for 10 plates of 96 wells each; multiplex-PCR up to 6 targets, allelic discrimination (SNP), miRNA profiling, dissociation curve analysis, copy number variation, pathogen detection and plus/ minus assay using internal positive control.
3. The normalization of reaction due to non-PCR related fluctuations such as pipetting variations should be possible by using ROX™ or any calibrated dye.
4. Should have a Peltier based 96x 0.2ml well thermal cycle.
5. Should have temperature range of 4 oC-100 oC.
6. Should have block ramp rate of 6.5 deg C/ sec or more.
7. Should have excitation range between 450nm - 680nm and emission range between 500-730nm.
8. Should have reaction volume of 10-100 µL and should use universal thermal cycling conditions.
9. Should have standard transparent 96-well plates or individual transparent PCR tubes or 8 strip tubes compatibility.
10. Should have run time of less than 30 minutes for 40 cycles in fast mode.
11. The system should be combined with 6 decoupled excitation and emission filter sets to enable collection of up to 21 unique combinations of wavelengths during a single run for multiplexing on the 96-well block instrument.
12. Should have dynamic range up to 10 orders of magnitude.
13. Should have six independent Peltier blocks to provide six independent temperature zones to run six different assays with varying annealing temperature at the same time. Each block having the ability to set up PCR with specific temperature differential of up to 5 degree centigrade between blocks and 25 deg. from one end to another.
14. The instrument should include a heated lid assembly that heats the top half of the sample plates and provides an effective seal to minimize reaction mixture evaporation.
15. The excitation should be done by White LED light source & should come with a >05 years lifespan and detection should be done by sCMOS / CCD.
16. System should collect data for all filters for all wells regardless of plate setup.

17. System should be capable for detection of dyes like FAM/ SYBR Green, VIC/ JOE/ HEX/ TET, ABY/ NED/ TAMRA/ Cy3, JUN, ROX/ Texas Red, Mustang Purple, Cy®5/LIZ™, Cy®5.5 on a single plate.
18. System should have Factory-calibrated dyes like FAM/ SYBR Green, VIC/ JOE/ HEX/ TET, ABY/ NED/ TAMRA/ Cy3, JUN, ROX/ Texas Red, Mustang Purple, Cy®5/LIZ™, Cy®5.5.
19. The data collection and instrument control software should provide multicomponenting algorithm for de convolution of multiple dye signal with minimum cross talk.
20. It should be possible to alter the plate setup after the completion of run.
21. System should have option like Stand-alone, PC connected, or direct connection to cloud via LAN or Wi-Fi.
22. The instrument online software should allow users to batch analyze up to 500 experiments simultaneously.
23. The instrument should be UL, CE, C-TICK, WEEE, and MIQE compliant and features to assist 21 CFR part 11 compliance.
24. System should be an open platform enabling use of various chemistries without hardware change.
25. It should be standardized for Taqman-MGB Probe based 5' Nuclease Assay and SYBR Green Chemistry, to be set-up on single plate with seamless switchover during the run.
26. Pre-validated and functionally tested Taqman Gene Expression Assays as well as Taqman SNP Genotyping Assays should be readily available.
27. System should be CE IVD approved and certified.
28. System should be quoted with 2 KVA online UPS with 60 minute s back up.
29. Should have European CE or US FDA certification or BIS approved.
30. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
31. Should be supplied with Branded computer system with at least Core i7 processor, 8 GB RAM or more, 1 TB HDD or more, DVD R/R, 21" or better LED Monitor, Genuine Windows 7 or more, A4 size laser colour duplex printer and appropriate bar code reader.
32. Start-up kit for at least 200 tests should be provided free of cost.
33. Should be supplied with a set of 'variable volume pipettes' of standard make with following specifications:
  - a) Should have volume gearing mechanism for accuracy and precision.
  - b) Should be fully autoclavable for protection.
  - c) Should have soft-touch tip ejector for light tip ejection.
  - d) Should have large display for better vision ergonomics.
  - e) Should have very light pipetting forces.
  - f) Four Pipettes from 0.2 to 1000µL should be provided as follows in set:
    - i. 0.2-2µL
    - ii. 2-20µL
    - iii. 20-200µL
    - iv. 100-1000µL
- a. Should be supplied with following type of microtips (in mentioned quantity) along with microtip box should also be provided:
  - i. Size: 10, 12 x 96; Qty.: 500
  - ii. Size: 2 x 96; Qty.: 500
  - iii. Size: 1 x 96; Qty.:500
- b. F-stand should be provided with pipette set of above four types.
- c. Good Laboratory Pipetting Guide should be provided.
- d. Reagent reservoir demo pack should be provided.
34. Appropriate anti-vibration table with granite top of standard make should be provided to accommodate the instrument, computer system and accessories.
35. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
36. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
37. Five (5) years warranty and Five (5) years CMC should be provided.

### **3. Conventional Thermal Cycler/ PCR System**

1. The system should be Peltier based PCR system for high throughput amplification.
2. The system should have gradient block with sample capacity 3 x 32 x 0.2 ml PCR tubes.
3. The system should allow user to set temperatures in gradient mode.
4. The system should have temperature range 4 - 99 °C with temperature accuracy of +0.2 °C to +0.3 °C
5. The system should have a ramp rate at least 6°C /s and 4°C /s or more for cooling & heating respectively,
6. The system should have adjustable ramp rate to meet critical amplification conditions.
7. Sample ramp rate should be at least 4°C.
8. The heated lid should accommodate both flat & dome capped tubes.
9. Instrument should be usable by three different users simultaneously or exclusive of each other with two temperatures selectivity for individual user.
10. The block should be interchangeable to set more than 96 samples.
11. User should be able to set different temperatures in lanes in gradient mode.
12. The system should have a gradient range of 30-99 °C and range of gradient span should be 10°C-24 °C.
13. The system should have pre-programmed template for easy selection from different temperature protocols viz. 2 step, PCR, 3 Step PCR, Gradient PCR, Long Range PCR, Low volume PCR, RT, RT-PCR, Incubation, Cycle sequencing, Touchdown PCR, Hot Start PCR, Hot Start PCR manual, Large volume PCR, Nested cycles, reduced ramping etc.
14. Should have “Touch Screen” or high-resolution LCD display for programs.
15. Should have intuitive graphical interface for rapid input of protocols and easy file management.
16. Should have capacity to store minimum 500 to more programs, different login levels (i.e. administrator, guest and user).
17. Should have two or more USB ports to attach mouse and/or memory stick.
18. Three Multi-channel Electronic Micropipettes should be provided with following features:
  - a) Should be 08 channel electronic micropipettes with variable volume ranges of:
    - 1-10 µL
    - 5-50 µL
    - 100-1200 µL
  - b) Should have easy to read and intuitive menu navigation.
  - c) Should have multilingual user interface options.
  - d) Should have ten pipetting options including forward, reverse, diluting, stepper pipetting, mixing, sequential stepping, and more.
  - e) Should have nine aspirate/dispense speeds.
  - f) Should be able to save at least 9 programs with most common protocols.
  - g) Should be eight multichannel version with color coding by volume for easy recognition.
  - h) Should have full size backlit screen which eliminates surrounding light reflections and improves contrast in low-light conditions.
  - i) Should have quick in-lab calibration for accuracy and precision.
  - j) Should have fully autoclavable tip cone ensuring sterility and avoiding cross-contamination
  - k) Should have long-life battery with approximately 4000 pipetting operations; recharged in about one hour
  - l) Should have ergonomic design with extremely lightweight construction.
  - m) Should have trigger-action pipetting—index finger controls dispensing with just soft press of a button
  - n) Should have 120° adjustable finger rest for balance and comfort

- o) Should have soft-touch tip ejection minimizing thumb strain; should be operated by either hand.
  - p) Two years warranty should be provided.
  - q) Should be CE IVD certified.
  - r) The calibration certificates of the instrument should be provided.
  - s) Stand(s) for the same should be provided.
  - t) Appropriate microtips should be provided as follows:
    - Small; Qty.: 1000 nos.
    - Large; Qty.: 1000 nos.
19. System should be quoted with 2 KVA online UPS with 60 mins back up.
  20. System should have interchangeable block option.
  21. System should have cloud connectivity.
  22. Should have European CE & US FDA certification or BIS approved.
  23. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
  24. Start-up kit for at least 200 tests should be provided free of cost.
  25. Appropriate anti-vibration table with granite top of standard make should be provided to accommodate the instrument, computer system and accessories.
  26. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
  27. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
  28. Five (5) years warranty and Five (5) years CMC should be provided.

#### **4. VORTEX MIXER**

1. Should have brushless DC Motor.
2. Should have orbital diameter of 4 mm or more.
3. Should have speed selection from 400 RPM to 4000 RPM or better.
4. Should have touch, standby and continuous modes with status on LED.
5. Should have digital display which can switch between speed and time.
6. Should have timer setting of 1 to 900 mins.
7. Should have inbuilt counter balance.
8. Should be able to take maximum load of 500 gms.
9. Should have pulse mode programming feature.
10. Should have attachments for low speed shaking with Microplate, Microtubes & 250 ml flask.
11. Should have European CE & US FDA certification or BIS approved.
12. The calibration of instrument should be performed at the time of installation and certificates should be provided.
13. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
14. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
15. Five (5) years warranty and Five (5) years CMC should be provided.

#### **5. Class II, Type A2 Bio Safety Cabinet**

1. The Bio safety cabinet should be Class II, Type A2 in which 70% Air should be re-circulated and 30% of the air should be exhausted.
2. The Bio Safety Cabinet must include DC motors.

3. In order to ensure consistent and reliable down flow velocity across the supply HEPA filter, the cabinet must use a pressure sensor (rather than anemometer) to detect pressure drop across the supply filter.
4. The microprocessor must display the airflow velocities in real-time on an LED display.
5. The Biosafety Cabinet should have microprocessor controller, which should be easy to see and reach from a seated working position.
6. The cabinet Should be provided with Microprocessor controller and large LED display for inflow and Down flow air velocity and hours of operation, Audible and visual Alarms for HEPA filter failure, blower failure, airflow speed failure, Incorrect window position.
7. The Cabinet should have provision to fit taps for Vacuum, Water and Non Combustible Gas.
8. Approximate Dimensions: Exterior 1500 H x 1300 W x 800 D; Interior 750 H x 1200 W x 500 D.
9. The manufacturer should provide a certified copy of the personnel, product, and cross contamination (biological) tests, equivalent to or more demanding than as specified in NSF International Standard 49, performed on the unit selected from the corresponding statistical sample.
10. Cabinet should have momentum air curtain down flow velocity profile, i.e., a higher velocity of down flow behind the view screen relative to down flow velocity over the work surface for added personnel and product protection.
11. High-velocity return air slots should be located at each end of the front access opening. These slots help to prevent contaminated air from being drawn into the work area along the edges of the side wall and from escaping the work area to the ambient environment.
12. High-velocity return air slots should also be located behind the view screen on the top edge for enhanced containment and product protection.
13. Cabinet should be capable of automatically handling a 300% minimum increase in filter loading without reducing total air delivery by more than 10%. Test data to verify these capabilities should be available upon request.
14. Intake velocity through the front access opening should be a minimum of 100 FPM.
15. Each unit, before shipping, should have a complete physical test to assure cabinet meets Class II requirements. A copy of this test will be provided with the operator manual shipped with the unit.
16. The unit should have standard HEPA filter of the class H14 EN 1822 or better for a protection effectiveness of 99.99% on 0.3-micron size particles by DOP test. Filters should be serviceable from front of cabinet.
17. The cabinet should have a reduced airflow energy-saving mode, which is active when the view screen is closed. This mode of operation should reduce energy consumption by at least 50% and still meet the product and personnel protection testing requirements of NSF/ANSI 49. Particle testing while the cabinet is in this mode should exceed the requirements for ISO Class 5 conditions for 0.3-micron particles. A connection should be provided for indicating the Ready SAFE status to the facility building management system.

**Construction:**

- a. The vertical sliding view screen should be slanted at an angle of 10° from vertical, capable of moving to a fully closed position during shutdown periods.
- b. View Screen should be constructed of laminated safety plate glass, with a maximum opening of 20" for equipment loading.
- c. All biologically contaminated ducts, plenums, and work area side walls shall be permanent metal construction and maintained under negative pressure or enclosed within a negative-pressure zone.
- d. Interior work area should be 277/16" high.
- e. Cabinet should have exclusive design to provide more uniform airflow to the supply filter.
- f. Supply and exhaust filters should be frontloading.
- g. A telescoping plenum assembly should be provided to allow the filters to be directly clamped to the plenum against a closed cell neoprene gasket. Plenum applies force should apply to full perimeter of filters, rather than point force.
- h. Unit should have an audible alarm and a flashing LED to indicate when the sliding view screen is in an unsafe position. An alarm mute switch should be provided on the front-mounted cabinet control panel to allow the operator to mute the alarm tone for brief adjustments. The alarm should automatically reactivate after 5 minutes if the view screen remains in an unsafe position.
- i. Cabinet exterior construction: seal panels and dress panels of 16-gauge cold-rolled steel, powder coated finish, painted Perma White.

- j. Cabinet interior (work area) construction: one-piece, 16-gauge, Type 304 stainless steel, with a smooth, 7/16" radius between rear and side walls, and easily cleanable, the work surface tray.
- k. Work area side walls and rear wall to be one-piece construction. A straight back wall should be provided to maximize work area and easily accommodate laboratory equipment.
- l. Cabinet should be double-wall construction with negative-pressure airflow between the walls, from drain pan to top, surrounding the sides and back of work area and cable port.
- m. Bottom of access opening should be aerodynamic airflow design directing airflow into the front grille to improve access opening containment capability and bypass armrest.
- n. Cabinet should have a unitized drain pan with 7/16" radius on all sides and a fully removable work surface and work surface supports to facilitate cleaning.
- o. Cabinet should be equipped with a stainless steel ball valve to allow safe and effective draining of spills.
- p. Stainless steel air diffuser and filter protector provided in work area. Filter protector on top of cabinet is cold-rolled steel with a powder coated finish.
- q. Externally adjustable internal damper provided to compensate for changing resistance of exhaust and supply filters during certification.
- r. One petcock and one plugged penetration should be provided as standard on the right side wall. Left side wall is pre punched for optional/additional plumbing connections.
- s. All external plumbing connections to the petcocks should be made through the bottom or back of the cabinet and not the sides, allowing zero clearance between the unit and the building walls or equipment to its right and left.
- t. The unit is available with an optional stand, which includes telescoping legs that allow the work surface height to be set from 30." to 325/8" and 361/8" to 385/8".
- u. View screen guide design should be a counterweighted pulley system allowing ease of movement up and down.

#### **Electrical:**

- a. Complete unit should be listed as certified by Underwriters Laboratory for electrical, fire, and personal safety.
  - b. Cabinet should have a micro processor based control system with an easy-to clean membrane control panel mounted on the front of the cabinet facing down towards the user when sitting at the unit.
  - c. Cabinet should have adjustable timers for fluorescent lights, outlets and optional UV lights. Timers operate in 15-minute intervals.
  - d. Work area should be provided with two GFCI-protected duplex outlets, with drip proof covers and should be protected by a self-resetting circuit breaker.
  - e. A single 14' power cord and plug should be provided for electrical power source.
  - f. The unit should have optional UV light with a shutoff safety feature when the view screen is raised.
  - g. The unit should have electronic ballasts for UV and fluorescent lighting to provide longer life and lower heat output.
  - h. Cabinet should have an externally mounted fluorescent light fixture with electronic ballasts producing an average of 125 foot-candles illumination at work surface.
  - i. Other fittings required for Attaching auxiliary services: Electrical outlet socket (5 ampere rating) qty: 2 nos. Prefilter:- one.
18. The Biosafety Cabinet should be tested and comply with the following requirements (at site):
- Down flow velocity and Volume Test.
  - Inflow Velocity Test.
  - Airflow Smoke Pattern Test.
  - HEPA Filter Leakage Test.
  - Cabinet Leakage Test.
  - Electrical Leakage: Ground Circuit Resistance and Polarity Test
  - Lighting Intensity Test.
  - Vibration Test.
  - Noise Level Test.
  - UV Lamp Intensity Test.
  - Alarms and indicators test (if provided).
  - The differential pressure gauge should be calibrated.
19. Spare accessories: HEPA Filter (one)-dimensions same as above, prefilters (two).

20. Should have European CE or US FDA certification or BIS approved.
21. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
22. A suitable servo stabilizer with high and low voltage protection should be provided.
23. Appropriate workbench/ stand should be provided for the instrument.
24. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
25. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
26. Five (5) years warranty and Five (5) years CMC should be provided, including replacement of cartridges/ prefilters/ filters & other spare parts.

**6. Non -Refrigerated Table Top Centrifuge**

1. The centrifuge should have max capacity of 4x145ml.
2. The centrifuge should have max speed of 17,200 RPM or better.
3. The centrifuge should have max RCF: 29,000 x g or better
4. The centrifuge must offer swinging bucket, fixed angle and microplate rotors.
5. The system should be microprocessor controlled and should have direct, brushless induction drive.
6. Time range should be 99Hours, 59 minutes plus continuous operation.
7. Rotor should have auto locking system. Rotor shall be installed and removed with no tools in less than 5 seconds.
8. The centrifuge should be supplied with fixed angle rotor capacity (places x volume, mL) - 48 x 1.5/2; Max Speed (rpm) – 11,000 or more, RCF (x g) – 15000 x g or more.
9. The centrifuge must be supplied with fixed angle rotor 6 x 50 ml tubes, 8000 rpm or more, 10000 x g or more.
10. The centrifuge must be supplied with swinging bucket rotor, 90°, 30 x 15 ml tubes, 4000 rpm or more, 2500 x g or more.
11. The buckets and rotor sealing lids must be certified for bio-containment by a 3rd party lab of worldwide recognition.
12. Bucket lids should be operated in a safe manner without spring clips or metal components.
13. The centrifuge should be CE marked, IVD compliant, UL listed- for safety containment.
14. Should be supplied 10 KVA servo stabilizer with high and low voltage protection.
15. Should have European CE or US FDA certification or BIS approved.
16. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
17. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
18. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
19. Five (5) years warranty and Five (5) years CMC should be provided.

## 7. Refrigerated Table Top Centrifuge

1. The centrifuge should have max capacity of 4x145ml or better.
2. The centrifuge should have max speed of 17,200 RPM or better.
3. The centrifuge should have max RCF: 29,000 x g or better
4. The centrifuge should be supplied with swinging bucket, fixed angle and microplate rotors.
5. The system should be Microprocessor controlled and should have direct, brushless induction drive.
6. Should have temperature range of -10°C to 40°C.
7. Should have time range 99Hours, 59 minutes plus continuous operation.
8. Rotor should have auto locking system. Rotor shall be installed and removed with no tools in less than 5 seconds.
9. The centrifuge should be supplied with fixed angle 45° rotor, with capacity - 48 x 1.5/2 (places x volume, mL); Max Speed (rpm) - 12,500. Max RCF (x g) – 17700 x g.
10. The centrifuge should be supplied with fixed angle rotor 8 x 50 ml tubes, 5500 rpm, 4900 x g, angle of the rotor 25°, with adapter for 15 ml conical tubes.
11. The centrifuge should be supplied with swinging bucket rotor, 90°, Max Speed (rpm) - 4,000 / Max RCF (x g) - 2,500. Centrifuge 4 standard microplates or 2 midi-deep well plates, ideally suited for quick spins.
12. The buckets and rotor sealing lids should be certified for bio-containment by a 3<sup>rd</sup> party lab of worldwide recognition.
13. Bucket lids should be operated in a safe manner without spring clips or metal components.
14. The centrifuge should be CE marked, IVD compliant, UL listed for safety containment.
15. Should have European CE or US FDA certification or BIS approved.
16. Should be supplied 10 KVA servo stabilizer with high and low voltage protection.
17. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
18. Document supporting track record and satisfactory performance from institutes of national importance (minimum three) should be provided.
19. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
20. Five (5) years warranty and Five (5) years CMC should be provided.

## 8. Laboratory Ultra-Pure Water Purification System

1. The Complete Ultrapure Water system must give ASTM Type II pure and Type I ultrapure water from a single system.
2. Pre Filter should be customized based on feed water quality test report. It should be from the same manufacturer. Should provide product water that qualifies feed water requirement of the system
3. System should consist of dual pass, 2 individual RO Membrane in parallel operation (i.e. not in series).
4. Automatic Back Flush for the Dual RO Membrane should be only from RO permeate water.
5. RO Membrane should not get rejected water from another RO Membrane. It should work on a parallel series.
6. Should continuously regenerate ion exchange resins to remove ion.
7. Softner should be present before EDI.
8. Innovative software must be present in the system to optimized water consumption economically.
9. Serial Interface RS-232 & PLC interface for external communication must be present in the system.
10. System should have an integrated TOC monitor.
11. System should be able to provide 10lit/hr of Type II water and 120lit/hr of Type I water.
12. System should have unique flexible glass touch display with intuitive menu navigation.
13. Carbon-resin technology to produce ultrapure water with Resistivity up to 18.2 Mohm x cm should be available.
14. System should have Top Down Flow technology inside the cartridge.
15. System should have an integrated horizontal UV oxidation chamber with dual wavelength 185 and 254nm capable of reducing TOC levels < 2ppb.
16. Should have facility of wall mounting when needed.
17. Should have touch screen function and self-diagnostic facility.

18. Final Filter should be 0.45+ 0.2µm pleated double-layered, sterile grade PESU membrane and should be validated according to HIMA & ASTM F-838-83 guidelines.
19. System should be designed, developed and produced under DIN/ISO 9001 certificate quality management system by an ISO-9001 certified company.
20. Detailed data documentation with SD Card, PC or Printer should be available.
21. System should have facility to dispense water through manual, time, volume controlled dispenser.
22. Should provide ergonomic water dispensing gun with 3.5 m or more, working radius.
23. Water dispensing flow rate should be adjustable between 0.1- 2lit. /min.
24. PIN protection for settings and service functions should be available.
25. Display should show measured values for feed water, product water, temperature, total dispensed water, count down for next recommended consumable replacement, user-friendly alert management with follow up function etc.
26. EDI water storage tank with following features should be available:
  - a. Storage of 50 litres with integrated distribution pump.
  - b. Storage tank must have an integrated vent filter with check-valve.
  - c. There should be no-time consuming sanitization process and no use of chemicals involved.
  - d. Maximum water dispensing flow rate with pump from the tank should be 3.0 lit/hour.
27. Should have European CE or US FDA certification or BIS approved.
28. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
29. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
30. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
31. Five (5) years warranty and Five (5) years CMC should be provided.
32. Product water quality should satisfy the following criteria:

<b><u>Product Water Quality</u></b>		
Technical Specifications	Type II	Type I
Output upto	10lit/hr	120lit/hr
Water dispensing flow rate	≤ 3lit/min	≤ 2lit/min
Volume controlled output		2lit/min in 100ml
Resistivity	>5Mohm.cm compensated to 25°C	18.2Mohm.cm compensated to 25°C
TOC	<50ppb	<2ppb
Microorganism content	<1cfu/1000ml	<1cfu/1000ml
Particle content	<1/ml	<1/ml
Retention of dissolved organic substances, particle, microorganism	>99%	
Typical ion retention	>98%	
Endotoxins,	---	0.001 EU/ml
Bacteria	---	< 1 cfu/100ml
RNase	---	2.9 × 10-10 KunitzU/µl
DNase	---	< 1.0 × 10-5 U/µl

## 9. **Digital Dry Bath (Heating Block)**

1. Should have microprocessor based digital control panel.
2. Should have heating temperature range around +30-120°C, temperature resolution 0.1°C or better, temperature uniformity 0.2°C or better.
3. Should have control accuracy  $\pm 0.5^\circ\text{C}$  or better, & should provide precise, accurate control over user desired temperature.
4. Should have advance internal temperature sensing probe for outstanding temperature accuracy and control.
5. Should be ideal for molecular biology work of DNA denaturation.
6. Should be provided with following blocks: 28 x 1.5 ml block, 28 x 2.0 ml block, 40 x 0.5 ml block, 1 x 96 well ELISA block.
7. All the samples should receive the same temperature treatment regardless of their position in the block.
8. Should have timer & around 4.3 inch LED touch screen display.
9. Operating voltage should be 200-240 V, Frequency- 50 Hz.
10. Easy user calibration facility should be available.
11. Should have time setting range 1-99h 59min & operation type continuous/ timed operation.
12. Should have in-built over temperature protection.
13. Protection class should be according to DIN EN60529.
14. Should be CE cULus RoHs certified.
15. Should have European CE & US FDA certification or BIS approved.
16. The calibration of the instrument should be performed at the time of installation and certificates should be provided.
17. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
18. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
19. Five (5) years warranty and Five (5) years CMC should be provided.

**10. HORIZONTAL GEL ELECTROPHORESIS SYSTEM WITH POWER SUPPLY**

1. System should have at least two comb slots on the U.V. Transmissible (UVT) gel tray.
2. UVT gel trays should be silk screened with a florescent ruler for easy measurement of bands.
3. System should be supplied with two combs, 12 & 20 well, double-sided, 1.0/1.5 mm thick.
4. System should have flexibility to run 8 to 48 samples on 1 gel.
5. There should be power-off memory which retains settings after shut-down.
6. There should be soft-touch keypad allowing quick set-up.
7. Should have non-skid rubber feet to provide stability.
8. There should be a display for voltage or current.
9. Timer should range from 0 to 999 minutes.
10. Should be supplied with compatible power supply and necessary accessories, 5000V, 1000V max one each.
11. Should have European CE or US FDA certification or BIS approved.
12. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
13. A 5 KVA servo stabilizer with high and low voltage protection should be provided.
14. Appropriate anti-vibration table with granite top of standard make should be provided to accommodate the instrument, computer system and accessories.
15. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
16. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
17. Five (5) years warranty and Five (5) years CMC should be provided.

**11. VERTICAL ELECTROPHORESIS SYSTEM WITH POWER SUPPLY**

1. The system should runs two 10 x 10cm gels or one gel when used with blocking plate; accommodates 8 x 10cm gels utilizing the provided adapter
2. The system should allow gels to easily be placed into the device
3. The system should have wedge placed in front of the cassettes, to provide even pressure against the leak-proof gasket, places the cassettes in proper running position.
4. The system should have two sizes of wedges accommodate varying thickness of precast gels.
5. The system should be flexible; use precast polyacrylamide gels or hand cast gels.
6. The system should not require cooling.
7. The system should have measurements for chambers as follows:
  - a. Double Sided Vertical System, 8-10 x 10cm gel system, 150mL to 300mL buffer volume.
  - b. Length (Metric) Gel; 8 to 10cm
  - c. Width (Metric) Gel; 10cm
  - d. Volume (Metric) Lower Buffer Chamber Max; 300ml
  - e. Volume (Metric) Lower Buffer Chamber Min; 150ml
  - f. Volume (Metric) Upper Buffer Chamber; 150ml
8. The system should have facility of power-off memory retains settings after shut-down.
9. The system should comply with following power supply ranges; Voltage 230V, max. Voltage 300V, max. Current 400 mA, Hertz 50/60 Hz, 03 sets of input jacks, display voltage or current & timer 0 to 999min.
10. The system should have soft-touch keypad to allow quick set-up.
11. The system should have non-skid rubber feet provide stability.
12. Should have European CE or US FDA certification or BIS approved.
13. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
14. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.

15. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
16. Five (5) years warranty and Five (5) years CMC should be provided.

## **12. -80 deg. Deep Freezer**

1. The freezer should be constructed using 1” thick vacuum panel insulation in conjunction with environment-friendly water blown foam.
2. Freezer door gasket should provide 7 independent insulation zones along with 4 points of contact to ensure sample security.
3. Freezer should have 4 or more internal storage compartments with a minimum of 4 polystyrene insulated inner doors to ensure sample security.
4. Freezer should have an automatic heated pressure equalization port, which allows for rapid re-entry to cabinet.
5. Freezer should have a RS485 output, dry contacts and 4-20mA output for remote monitoring purposes.
6. Freezer capacity should be 525 liters or more.
7. Freezer pull down time (to -80°C) should be less  $\leq$  6 Hours.
8. Freezer should have 1-min door opening recovery to -75°C (min) in 20 mins or less.
9. Freezer should have energy consumption at high performance  $\leq$  14 kW-hr/day.
10. Freezer should have average temperature uniformity at -80°C – 6 °C or less.
11. Freezer should have average temperature stability at -80°C – 3.5 °C or less.
12. Freezer should allow for set-point security control that blocks specific users from changing freezer set point or alarms through the use of a user name and password control. Unit should allow for up to 100 users or more.
13. Freezer should have an on-board data logger that allows for a minimum of 4GB of data storage.
14. Data should be available from the display for a minimum of 7 days. Data should also be downloadable via a USB port. Power management system should show incoming line voltage, indicate low or high line voltage, and provide voltage correction of up to +/- 10% of rating. Line voltage should be logged for a period of up to 12 years or more and be downloadable via a USB port.
15. Freezer shall have adjustable power recovery time delay that allows user to set a time delay between 1 second and 20 minutes after power failure.
16. Freezer should have a graphical display of temperature in the form of a graph that is adjustable for a period of 2, 4 or 6 hours.
17. Freezer should have a screen auto-off selection that allows the screen to darken between the hours of 9pm and 6am.
18. Freezer should display temperature of evaporator inlet, evaporator outlet, heat exchanger, first stage suction, second state suction, second stage sump, liquid line and condenser air inlet. This display should be in a graphical view to allow for diagnostic troubleshooting.
19. Freezer should use only natural, commercially available refrigerants (hydrocarbon) with no special blends.
20. Freezer should be built to and contain the registration mark for UL, cUL, and CE standards for safety and performance
21. Freezer should be supplied with a 10 KVA Online UPS with 120 mins back up.
22. Freezer should be quoted with suitable racks and boxes.

**13. Deep Freezer -40°C**

1. Freezer should have HFC refrigerants.
2. Freezer should have low voltage surge protection.
3. Freezer should have washable filter to protect the condenser from dust, minimizing the possibility of reduced refrigeration performance or increased risk to samples.
4. Freezer capacity should be 450 Liters or more.
5. Freezer should have triple-point door gasket providing longer holding time in the event of a door opening.
6. Freezer should have Non-CFC 120 mm or more polyurethane insulation, which reduces power consumption and maintains temperature set point.
7. Freezer should have rugged, heavy gauge, cold-rolled steel cabinets that resist chipping and rust.
8. Freezer should have powder coat galvanized interior.
9. Freezer should have four inner doors to reduce cold air loss and improve temperature recovery after door openings.
10. The unit should have down-feed evaporator.
11. The unit should have fixed stainless steel shelving.
12. The unit should have triple-sealing silicone door gasket.
13. Freezer pull down time to -80°C, should be less  $\leq$  6 hours.
14. Freezer should have 1 minute door opening recovery to -38°C, of 20 minutes or less.
15. Freezer should have energy consumption at high performance  $\leq$  10 kW-hr/day.
16. Freezer should have average temperature uniformity of  $-3^{\circ}\text{C}$  or less.
17. Freezer should have average stability of  $-2.5^{\circ}\text{C}$  or less.
18. Freezer should have two tube axial fans to provide maximum cooling of the compressor housing.
19. Freezer should have heavy-duty dual wheel swivel locking casters.
20. Freezer should have service valves to allow easy recovery of refrigerants and field servicing.
21. Should have hinged grill swings out for easy access to filter and battery.
22. A vacuum relief port should allow easy re-entry after door openings.

**23. Temperature control:**

- a. Freezer should have microprocessor controller and must monitor in one degree C increments, with digital display.
  - b. Freezer operating range should be  $-10^{\circ}\text{C}$  to  $-40^{\circ}\text{C}$  or better
  - c. Freezer temperature probe should be positioned to ensure the alarm sounds before the stored product can be affected by a rise in temperature.
  - d. Freezer should have battery back-up for the alarm monitoring system.
  - e. Freezer should have both visual and audible alarms and must alert operator of over and under temperature, power fail, door ajar and low battery conditions.
24. Dry contacts should be included for connection to optional remote alarms.
  25. The system should be provided with 2 external 'Thermohygrometers' of standard make date/time/temperature/humidity display.
  26. Should be built to and contain the registration mark for UL, cUL, and CE standards for safety and performance.
  27. Should be manufactured by an ISO-9001 certified company.
  28. Should have European CE or US FDA certification or BIS approved.
  29. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
  30. UPS backup of 3 KVA, adequate for 1 hour back-up should be provided.
  31. Document supporting track record and satisfactory performance from institutes of national importance (minimum 5) should be provided.
  32. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
  33. Five (5) years warranty and Five (5) years CMC should be provided.

#### **14. Laboratory Water Bath**

1. Should be rugged, high performance water bath, should maintain water temperature from ambient to 100°C.
2. Should have over-temperature safety circuitry designed to prevent thermal runaway, while auto-on and auto-off timers allow to optimize operation schedules.
3. Should be chemical and corrosion resistant, with epoxy powder-coated exterior, and easy cleaning of the chamber with seamless stainless-steel interior.
4. Should have smaller footprint for benchtop use.
5. Should have advanced microprocessor controller designed for extended functionality.
6. Should protect work with audible alarms.
7. Should conveniently save commonly used settings with four temperature presets.
8. Bath should come with clear polycarbonate gable cover, diffuser tray, drain hose and rubber duck.
9. Chamber capacity should be approx. 20 Litre.
10. Temperature range should be ambient to 100°C.
11. Should be a precision water bath with temperature stability/ uniformity @ 70°C:  $\pm 0.1^{\circ}\text{C}$  /  $\pm 0.2^{\circ}\text{C}$ .
12. Work area measurement should be around (L x W x H): 11.7 x 19.7 x 5.9 in. (297 x 500 x 150 mm).
13. Should be able to work on global voltage: 100-115V/200-230V, 50/60Hz.
14. Heater output should be approx. 1200W.
15. Should be offered with stainless steel test tube rack & concentric ring cover.
16. Should be UL Listed.
17. Should have European CE or US FDA certification or BIS approved.
18. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
19. Should be provided with 3 KVA servo stabilizer for high and low voltage protection.
20. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
21. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
22. Five (5) years warranty and Five (5) years CMC should be provided.

#### **15. Laboratory Refrigerator**

1. Temperature setting range should be approx.  $+1^{\circ}\text{C}$  to  $+12^{\circ}\text{C}$  (factory pre-set at  $+4^{\circ}\text{C}$ )
2. Should have automatic defrost mechanism and should be frost-free.
3. Should have double insulated glass doors, hinged at the ends and lockable.
4. Should have capacity of 375 litres or more.
5. Should have at-least 790 watts (1HP) industrial compressor (hermetically sealed) to provide fast cooling capacity.
6. Should have 12 shelves/ drawers or more.
7. Should have interior finishing with antioxidation & antimicrobial high strength plastic steel & exterior finishing with painted cold rolled steel.
8. Pull down time should be 9 min or better for 15o C-4o C.
9. Should have the facility of 'temperature holding' during power failure for at-least 2 hrs.
10. Avg. uniformity should be  $\pm 1.01^{\circ}\text{C}$  or better, on empty chamber.
11. Central air peak variation should be  $\pm 2.93^{\circ}\text{C}$  or better, on empty chamber.
12. Should have in-built 12-volt battery to supply power to essential components during power failure. The battery should supply power to the alarm for 18~24 hours in case of power outage.
13. Units should come with two fans for uniform and maximum forced air circulation, to ensure maximum uniformity of temperature throughout the chamber.
14. Should have at-least one 25 mm access port at the backside of the cabinet.
15. The controller should have three temperature probes, three relay outputs, a door switch and a door open alarm buzzer (independent of the general alarm buzzer).
16. Should have ISO 13485 and European CE or US FDA certification or BIS approved.
17. A suitable UPS with 60 minutes back up should be provided.

18. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
19. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
20. Five (5) years warranty and Five (5) years CMC should be provided.

## **16. Incubator**

1. Should have dual convection capability for versatility of application, fan speed adjustable from 0 to 100%.
2. Should have advanced digital timer for daily or weekly on/ off cycles.
3. Should have stainless steel interior (1.4301) and should be easy to clean and corrosion resistant.
4. Should have stainless steel exterior.
5. Should have broad temperature range from 5°C above ambient to 105 °C; should be even suitable for drying application.
6. Instrument should temperature uniformity as good as  $\pm 1$  °C or better when fan is off.
7. Temperature stability should be  $\pm 0.2$  °C or better.
8. Should have capability of turning on & off the unit at specific time, chosen from real time or hour settings.
9. Should have maximum spatial temperature deviation at 37 °C:  $\pm 1$  °C or better.
10. Should have maximum temperature deviation over time at 37 °C:  $\pm 0.2$  °C or better.
11. Instrument should have lockable door with alarm for restricted access.
12. Instrument should have facility for decontamination within a 8 hours or better heating cycle.  
There should be no need for autoclaving of the inner fittings for decontamination. The decontamination process should be certified by microbiological institute.
13. Should have a small footprint of equal to or less than 5.5 sq. ft.
14. Chamber volume should be 160 L or more.
15. Number of detachable shelves supplied should be 4 or more.
16. Max. shelf load kg should be 22 kg or more.
17. Instrument rated voltage / frequency should be V / Hz: 230 / 60.
18. Instrument rated power / max. current should be 1300 / 5.7.
19. Energy consumption at 37 °C should be 40 W or less.
20. The system should comply with European CE or US FDA or BIS approved.
21. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
22. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
23. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
24. Five (5) years warranty and Five (5) years CMC should be provided.

## **17. Oven**

1. Instrument should be based on Convection technology - Gravity convection.
2. Chamber volume should be L / cuft: 160 Liters / 6.0 or more.
3. Instrument should have stainless-steel interior for easy clean and corrosion resistant (steel quality AISI 304 or better). Exterior should also be superior quality stainless steel.
4. Instrument should have facility to turn on or off at pre-set times.
5. Instrument should have door lock to prevent disruption, tampering or accidental opening.
6. Instrument should have facility of door alarm to notify the operator when door is left open accidentally.
7. Instrument should have standard over-temperature alarm and an additional under-temperature alarm to ensure that the samples are kept at the correct temperature.
8. Instrument should have temperatures range: +50°C to 330°C or better.
9. Spatial temperature deviation should be at 150 °C:  $\pm 2.7$  °C or better.
10. Temperature deviation over time should be at 150 °C:  $\pm 0.4$  °C or better.

11. Number of shelves supplied should be 4 or more.
12. Max. shelf load kg should be 22 kg or more.
13. Rated voltage / frequency should be: V / Hz 230 / 50/60.
14. Rated power / max. current should be: W / A 3100 / 13.8.
15. Energy consumption at 150° C should be W: 430 or better.
16. Instrument should have programmable controller for temperature ramps and dwells.
17. Instrument should have facility to save up to 10 programs or more.
18. Instrument should have electronically controlled fan speed and damper position facility.
19. Instrument should have facility that programs can be repeated automatically.
20. Instrument should have access ports to allow the introduction of sensors for independent data monitoring.
21. Instrument should have simple calibration routine, to ensures temperature accuracy over time.
22. Instrument should have function that enables rapid heating.
23. The system should comply with European CE or US FDA or BIS approved.
24. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
25. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
26. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
27. Five (5) years warranty and Five (5) years CMC should be provided.

## **18. WEIGHING BALANCE**

1. The unit should be semi microbalance with motorized auto calibration & adjustment.
2. The unit should have built-in plug & play for direct data transferring system to Microsoft Windows programs (GLP/GMP compliance).
3. The unit should have self-explanatory icons and plain-text prompts on the large touch screen to show all the information (touch screen display).
4. The unit should have manually operated ergonomic draft shield.
5. The unit should comply with following technical requirements:

Readability	: 0.01/0.01/0.1 mg
Weighing Capacity	: 40/60/120 gm
Repeatability	: 0.02/0.04/0.07 mg
Linearity	: 0.1/0.1/0.2 mg
Weighing Pan	: 80 mm dia
Response Time	: 6 / 6 / 2 (s)

6. Should have European CE or US FDA certification or BIS approved.
7. The calibration of the instrument should be performed at the time of installation and certificates should be provided.
8. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
9. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
10. Five (5) years warranty and Five (5) years CMC should be provided.

**19. TISSUE HOMOGENIZER**

1. It should be able to produce rapid & highly efficient, homogenized & emulsified samples from variety of solid tissues (muscle, liver, breast tissue, etc.) in 0.2 to 1000 ml of liquid in eight to thirty seconds.
2. It should be easy to hold and light weight for one hand operation.
3. It should have autoclavable stainless steel probes and all probes should be interchangeable and six narrow slits in the stator for efficient performance.
4. It should have high-speed motor of 230v A.C & 138 watts, low wattage.
5. It should have variable speed from 6000 to 35000 rpm with 4500 to 5000 increment.
6. Weight should be approx. 1 to 1.5 Lbs, easy to hold, could be mounted on stand.
7. Probes should be made up of type 316 Stainless Steel & Fluorocarbon bushings.
8. Noise Level should be  $\leq 200$  dB.
9. It should be supplied with two Stainless steel probes, 1. (0.5 – 50.0 ml, 6.5- 7.5 mm dia and 8-8.5 cms length); 2. (0.2 – 5.0 ml, 4-5 mm dia, 4.5-5 cms length).
10. Should have European CE or US FDA certification or BIS approved.
11. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
12. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests to be provided by the company.
13. Five (5) years warranty and Five (5) years CMC should be provided.

**20. Spectrophotometer**

1. Should be a spectral scanning unit for UV-visible-Near IR wavelength range, with dedicated cuvette port (with no extra attachments) and should be able to read 96 & 384 micro well plate format.
2. Should work as a standalone system without computer and able to run with computer controlled software.
3. Analysis software should be supplied with unlimited user license.
4. Instrument should be able to read at least 16 low volume samples of 2 $\mu$ l-10 $\mu$ l using low volume analysis plate in case of DNA/ RNA purity & concentration check indirectly with standalone mode .
5. System should be able to run in stand-alone mode using 7 inch or more touch screen for quick usage.
6. The instrument should have a memory of 90 or more inbuilt protocols in stand-alone mode.
7. The system should have communication options, at-least 4 USB ports to PC/ printer and other data transfer devices and 1 Ethernet port. Should be able to connect Wi-Fi dongle.
8. The system should have facility to access data via cloud-based capabilities, wired or wireless network connection.
9. Instrument should be able to provide the wavelength range from 200nm to 1000nm with 1 nm steps.
10. Performance specifications should be as: Bandwidth:  $< 2.5$  nm or better and Xenon flash lamp life should be for 10 million 96 well microplates or more.
11. The instrument should have inbuilt incubation and linear shaking options for longer kinetic assays etc.
12. Incubation temperature should be from ambient +20 C to +450 C.
13. Spectral scanning speed from 200 to 1000 nm should be 10 sec. or less.
14. Measurement speed should be 6 sec. for 96 well and 10 sec. for 384 well plate.
15. System should have power save function for reduced energy consumption when the instrument is 'on' but not in use.
16. Visualize data in both numerical mode and heat-map/ virtual image of plate.
17. Data analysis software should be provided with the system & software should allow multiple absorbance /photometry steps in a single program to differentially analyse assays, including plate out option during the program to add required compounds and then continue the program for further analysis.

18. Should be database-based software to run backups of all data & restore back up data (in case of hardware failure of original computer).
19. Should have spectral scanning facility for all 96 samples or 384 samples & should be able to view in single graph plot.
20. Should be able to export data as pdf, excel, xml and note format.
21. Should have CE or US FDA or BIS certification.
22. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
23. To be supplied with Branded computer system with at least Core i7 processor, 8GB RAM, 1TB HDD, DVD R/R, 21" or better LED Monitor, Genuine Windows 10 or more, A4 size laser printer and appropriate bar code reader.
24. UPS backup adequate for the duration of one cycle of processing should be provided.
25. Appropriate anti-vibration table with granite top of standard make should be provided to accommodate the instrument, computer system and accessories.
26. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
27. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
28. Five (5) years warranty and Five (5) years CMC should be provided.

## **21. ICE FLAKER**

1. Should have capacity of 100 kg/24 hour or more.
2. Should have auto microcomputer control and run.
3. Should have ice storage capacity of 25kg or more.
4. Should have water consumption (L/H)  $\leq 4.5$ .
5. Should have wind cooling condensation process.
6. Should have high quality stainless steel interior and exterior, anti-corrosion and durable.
7. Should have high efficiency CFC-free R134a compressor.
8. Power overloading protection device should be there in the system.
9. Water shortage auto-detecting should be there in the system.
10. Ice storage full control device should be there in the system.
11. Should make small, granular snow ice for laboratory use.
12. Should have full display including, lack of water, too cold protection & fault warning.
13. The machine should have protective automatic shutdown with full/lack of water, automatic boot when failure removed, automatic memory & recovery function.
14. Should have European CE or US FDA certification or BIS approved.
15. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
16. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
17. Five (5) years warranty and Five (5) years CMC should be provided.

## **22. pH/mV/TEMP METER**

1. Should have multi-point push button calibration with auto buffer recognition.
2. Should have display of pH or mV with temperature.
3. Should have selectable USA or NIST buffer standards as follows: USA; pH 1.68, 4.01, 7.00, 10.01, 12.45; NIST; pH 1.68, 4.01, 6.86, 9.18, 12.45.
4. Should have built-in electrode stand and electrode arm.
5. Resolution/Accuracy should be 0.01 pH  $\pm$  0.01 pH.
6. mV Range should be  $\pm$  1999 mV.
7. Resolution should be 0.1 ( $\pm$  199.9 mV) / 1 mV ( $>$   $\pm$  199.9 mV); Accuracy should be  $\pm$ 0.2( $\pm$  199.9 mV) /  $\pm$ 2 mV ( $>$   $\pm$  199.9 mV).
8. Temp. Range should be 0.0 to 100.00 C.
9. Resolution/Accuracy should be 0.1 0 C/  $\pm$  0.3 0 C.
10. Should have ATC 0 to 100 0 C.
11. Should have 05 no. of pH Calibration Points.
12. Should have multiple buffer options.

13. Should give self-diagnostic messages.
14. Should store up to 100 sets of data.
15. Should give 3 years warranty on meter against manufacturing defect and 6 months for electrode
16. Should have European CE or US FDA certification or BIS approved.
17. The calibration of the instrument should be performed at the time of installation and certificates should be provided.
18. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
19. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests to be provided by the company.

### **23. MAGNETIC STIRRER -**

1. System should have brushless DC motor for quiet operation and maintenance free long life.
2. System should have capacity of 10 litres (water) stirring.
3. System should have 5 position stirring with 2 litres stirring for each station.
4. System should have corrosion resistant SS top surface for better chemical resistance.
5. System should have microprocessor-controlled stirrer with variable speed and time setting along with last run memory feature.
6. System should have adjustable speed from 100 to 2000 RPM in steps of 10 RPM.
7. System should have long timer ranges up to 99 hours and 59 minutes & infinite mode.
8. System should have programmable Pulse mode for homogenous stirring in clockwise and counter-clockwise direction.
9. System should have low aspect ratio (just 45 mm thick or less).
10. System should have software driven gradual acceleration.
11. System should have universal power supply - small wall mount adaptor.
12. System should have IP-42 compliant design.
13. Should have European CE or US FDA certification or BIS approved.
14. The calibration certificates should be provided at the time of installation and thereafter yearly calibration should be performed for a period of five years.
15. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
16. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
17. Five (5) years warranty and Five (5) years CMC should be provided.

### **24. Liquid Nitrogen Container**

1. The system should have 40-50 litres or more capacity container, which can accommodate six stainless steel manual filled canisters, to accommodate 1.2/2/5ml vials.
2. Canisters should be colour coded to simplify sample identification.
3. Container should be made of durable aluminium construction and vacuum insulation.
4. System should have narrow mouth design to minimize LN2 evaporation.
5. System should have secure locking clasp.
6. Static evaporation rate should not be more than: 0.5 litres/day.
7. System static holding time should be approx: 110 days.
8. System should have neck diameter approx: 120 cm.
9. System should have low-level alarm and sensor facility.
10. The system should be CE or US FDA or BIS certified.
11. Suitable elbow length 100 Cryo gloves (small, medium & large size) and 100 aprons (small, medium & large size) should be provided with the system.
12. Appropriate standard quality anti-vibration laboratory work bench/ stand should be provided for the system.
13. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
14. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
15. Five (5) years warranty and five (5) years CMC should be provided including yearly calibration of the instrument.

## **25. Nucleic acid extraction System**

1. The principle should be magnetic bead based, to purify nucleic acids, proteins, cells, bacteria in a convenient, rapid and reproducible manner from different starting materials with high quality and yield.
2. The processing volume should be flexible for all type of sample volumes from 30ul – 5000ul (microlitre).
3. The instrument should have option to run 6, 12 or 24 samples per run.
4. The instrument should be an open system, able to accommodate any kit from any manufacturer.
5. The particle collection efficiency should be >95% for better yield.
6. The instrument should have an option of stand-alone mode and PC controlled mode.
7. The system should have a memory for 200 internal protocols in stand-alone mode.
8. The instrument should be open system for any magnetic bead based kits.
9. The instrument should have an option of heating and cooling from +10<sup>0</sup>C to +75<sup>0</sup>C in RT.
10. Eluted DNA from samples in strip Block temperature should be from +4<sup>0</sup>C to +75<sup>0</sup>C in RT.
11. The instrument should be upgradable for Barcode reading option.
12. The instrument should have UV light inside the system for decontamination process.
13. The instrument should have easy protocol import / export option using USB stick.
14. The software and computer should be supplied with the instrument and the software should have unlimited users' access.
15. Should have European CE or US FDA certification or BIS approved.
16. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
17. To be supplied with Branded computer system with at least Core i7 processor, 8GB RAM, 1TB HDD, DVD R/R, 21" or better LED Monitor, Genuine Windows, A4 size laser printer and appropriate bar code reader.
18. UPS backup adequate for the duration of one cycle of processing should be provided.
19. Start-up kit or consumables for at least 200 tests should be provided free of cost.
20. Appropriate anti-vibration table with granite top of standard make should be provided to accommodate the instrument, computer system and accessories.
21. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
22. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests to be provided by the company.
23. Five (5) years warranty and Five (5) years CMC should be provided.

## **26. Autoclave**

1. The Vertical Autoclave should have Chamber Capacity of: Effective volume 113 litres or more.
2. The chamber of Vertical Autoclave should be manufactured as per ASME standards and comply with Pressure Equipment Directive.
3. The Vertical Autoclave should work on the domestic power supply of : 230 V AC, 50 HZ, Single phase.
4. The Vertical Autoclave's internal chamber, cover lid and all wetted parts should be fabricated from stainless steel of 304 grade.
5. The Vertical Autoclave outer body should be of SS 304.
6. Temperature range should be up to 135<sup>0</sup>C and pressure up to 30 psi.
7. The Vertical Autoclave's all joints should be smooth finished for crevice free internals.
8. The chamber should be hydro statically tested at 1.5 times of its working pressure and certificate should be supplied for the same.
9. The lid should be equipped with single lever lock mechanism and lever handle moulded from industrial plastic.

10. The lid should be provided with auto purge cum vacuum breaker valve and a manually operable valve for exhaust.
11. The unit should have a solenoid valve for auto purging of air & normal exhaust.
12. The Vertical Autoclave should have stainless steel pressure gauge with dual range dial display in KPA and PSI along with a co-related temperature scale for steam in degrees Celsius.
13. The operations of the unit should be controlled by touchscreen programmable logic controller with 4 temperature channels & 1 pressure channel inbuilt.
14. The Autoclave should be equipped with Touch screen HMI PLC.
15. Controlling of chamber temperature should be on all 4 temperature channels.
16. To Ensure proper sterilization cycle autoclave should have facility of connecting external printer which can give instant print of all cycle data – customer and operator name , equipment number, recipe, hold time, batch number, date & time, temperature set-point, readings of at least four temperature sensors, pressure channels F0 summation and cycle status.
17. Inbuilt 6 recipes for different load should be available.
18. Provision of automatic water filling should be available.
19. The timer should be retentive & settable up to 95 mins.
20. Power fail restoration facility: in case of power failure, the Autoclave should give option of resuming cycle with automatic adjustment of sterilization hold time.
21. The unit should have safety valve to protect the equipment in case of over pressurization.
22. The Lid should be equipped with pressure interlock device to avoid opening under pressure.
23. Lid should be equipped with door switch to avoid cycle start if door is not locked properly.
24. To ensure effective sterilization, if temperature falls below temperature set point the sterilization timer should get automatically adjusted.
25. The unit should be provided with independent safety cut-out for high temperature.
26. The unit should give indication by audio-visual alarm on completion of set autoclave cycle.
27. The electrical safety should be ensured by inbuilt MCB.
28. The unit should be mounted on 04 Nos. PU coated castors out of which atleast 2 should have locking mechanism
29. The Vertical Autoclave should be PED certified and the same should be provided.
30. Manufacturer shall be ISO 13485 certified & should submit photocopy for the same.
31. Local service setup should be available for prompt and efficient post-sales support.
32. Autoclave should have service & calibration reminder facility.
33. Autoclave should have the provision of password protection so that unauthorized people cannot access the equipment or cannot change the critical set parameters.
34. Calibration reports should be provided with NABL traceability.
35. Autoclave should have option for (to be quoted separately)
  - 1) Air Ballast
  - 2) Positive Pulsing
  - 3) Drain Cooling.
36. Should have European CE or US FDA certification or BIS approved.
37. The calibration, IQ, OQ and PQ of the instrument should be performed at the time of installation and certificates should be provided.
38. Document supporting track record and satisfactory performance from institutes of national importance (minimum one) should be provided.
39. Support for induction and follow up training of technical staff, on-site standardization and troubleshooting of procedures/ tests should be provided by the company.
40. Five (5) years warranty and Five (5) years CMC should be provided.

### **Instructions for Online Bid Submission:**

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app>.

### **REGISTRATION**

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link "Online bidder Enrolment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify/nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

### **SEARCHING FOR TENDER DOCUMENTS**

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

### **PREPARATION OF BIDS**

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.

- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the
- 3) Number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 4) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 5) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use “My Space” or “Other Important Documents” area available to them to upload such documents. These documents may be directly submitted from the “My Space” area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

#### **SUBMISSION OF BIDS**

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidder has to select the payment option as “offline” to pay the tender fee / EMD as applicable and enter details of the instrument.
- 4) Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- 5) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- 6) The server time (which is displayed on the bidders’ dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.

- 7) The documents being submitted by the bidders would be encrypted using PKI encryption all techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key.
- 8) Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 9) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 10) Upon the successful and timely submission of bids (ie after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 11) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

#### **ASSISTANCE TO BIDDERS**

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk number 0120-4200462, 0120-4001002.