

**REQUEST FOR PROPOSAL FOR EMPANELMENT FOR SETTING UP MICROBIOLOGY SECTION AND  
INSTALLATION OF EQUIPMENTS**

(Open Tender enquiry)

**Request for Proposal (RFP) No. 06/2019-20**

**File No.11023/18/2019-QA**

Food Safety and Standards Authority of India  
(A statutory Authority established under the Food Safety and Standards Act, 2006)  
FDA Bhawan, Kotla Road, New Delhi-110002

Dated the 30<sup>th</sup> April, 2019

The Food Safety and Standards Authority of India (hereinafter called "The Authority" invites tender on Two-Bid system for **Empanelment of Bidders** for **SETTING UP MICROBIOLOGY SECTION AND INSTALLATION OF EQUIPMENTS** on turnkey basis at various location across India.

2. Bids under Two bid system (Technical Bid and Commercial Bid) in sealed covers are invited for "**EMPANELMENT OF BIDDERS FOR SETTING UP MICROBIOLOGY SECTION AND INSTALLATION OF EQUIPMENTS**". Please super scribe the above mentioned title, RFP No. and date of opening of the bids on the sealed covers to avoid the bid being declared invalid. Please also super scribe 'Technical Bid and 'Commercial Bid' on the respective covers:

3. General information about the tender is as follows: -

- |   |   |  |
|---|---|--|
| (a) Queries to be addressed to                | : | nilesh.ojha@nic.in   |
| (b) Postal Address for sending the Bids       | : | Assistant Director (Quality Assurance)<br>Food Safety and Standards<br>Authority of India, FDA Bhawan,<br>Kotla Road, New Delhi-110002 |
| (c) Name/designation of contact person        | : | Nilesh Kumar Ojha<br>Asstt. Director (Quality Assurance)   |
| (d) Telephone No.                             | : | 011- 23237417  |
| (e) Last Date and Time for Receipt of Tenders | : | <b>03<sup>rd</sup> June 2019 at 1500 Hrs</b>   |
| (f) Date and Time of Opening of Tenders       | : | <b>03<sup>rd</sup> June 2019 at 1530 Hrs</b>   |

4. This RFP is divided into five Parts as follows: --

- (a) **Part I** Contains General Information and Instructions for the Bidders about the RFP such as the time, place of submission and opening of tenders, Validity period of tenders, etc.
- (b) **Part II** Contains Essential Details of the Items/Services required, such as the Schedule of Requirements (SOR), Technical Details, Delivery Period, Mode of Delivery and Consignee details and Technical Bid Format.
- (c) **Part III** Contains Standard Conditions of RFP, which will form part of the Contract with the successful Bidder, besides other conditions contained in this RFP.

(d) **Part IV** Contains Special Conditions of RFP, which will also form part of the Contract with the successful Bidder.

(e) **Part V** Contains Evaluation Criteria and Format for Price Bids/Commercial Bids.

5. **Each page of this tender enquiry should be signed by the bidder or authorised representative and following certificate be given in the offer letter under the seal of the bidder:-**

‘ I/WE HEREBY DECLARE THAT ALL THE TERMS AND CONDITIONS GIVEN IN THE TENDER ENQUIRY ARE ACCEPTED BY ME/US ON BEHALF OF MY/OUR FIRM AS PER **ANNEXURE II**’

6. **This RFP is being issued with no financial commitment and this office reserves the right to change or vary any part thereof at any stage. This office also reserves the right to withdraw the RFP, should it become necessary at any stage.**

-Sd-

(Nilesh Kumar Ojha)  
Assistant Director (Quality Assurance)  
Food Safety and Standards  
Authority of India, FDA Bhawan,  
Kotla Road, New Delhi-110002

## PART I – GENERAL INFORMATION AND INSTUTIONS

1. **Last date and time for depositing the Bids:** **03<sup>rd</sup> June 2019 by 1500 Hrs.** The sealed quotations under two bid system (i.e. Technical Bid & Commercial Bid) in sealed covers should be deposited/reached by the due date and time. The responsibility to ensure this lies with the Bidder.
2. **Manner of depositing the Bids:** Sealed quotations should be dropped in the Tender Box marked for the said purpose by the due date and time. Late tenders will not be considered. No responsibility will be taken for postal delay or non-delivery/non receipt of Bid documents. Bids sent by FAX or e-mail will not be considered.
3. **Location of the Tender Box:** Reception Office, Food Safety and Standards Authority of India, FDA Bhawan, Kotla Road, New Delhi-110002. Only those Bids that are found in the tender box will be opened. Bids dropped in the wrong Tender Box will be rendered invalid.
4. **Time and date for opening of Bids:** The tender box will be opened on **03<sup>rd</sup> June 2019 at 1530 hrs.** (If due to any exigency, the due date for opening of the Technical-Bid is declared a closed holiday, then it will be opened on the next working day at the same time or on any other day/time, as intimated by this office).
5. **Place of Opening of the Bids:** Conference Hall of Food Safety and Standards Authority of India, FDA Bhawan, Kotla Road, New Delhi-110002. The Bidders may depute their representatives, duly authorized in writing, to attend the opening of Bids on the due date and time. Rates and important commercial/technical clauses quoted by all Bidders will be read out in the presence of the representatives of all the Bidders. This event will not be postponed due to non-presence of your representative.
6. **Two-Bid System:** In case of the Two-Bid System, only the Technical Bid would be opened on the time and date mentioned above. Date of opening of the Commercial Bid will be intimated after acceptance of the Technical Bids. Commercial Bids of only those firms will be opened, whose Technical Bids are found compliant/suitable after Technical evaluation is done.
7. **Forwarding of Bids:** Bids should be forwarded by Bidders under their original memo/letter pad inter alia furnishing details like PAN, GST number, Bank address with EFT Account, if applicable, etc. and complete postal & e-mail address of their office.
8. **Clarification regarding contents of the RFP:** A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify to the Tender Inviting Authority in writing about the clarifications sought not later than 14 (fourteen) days prior to the date of opening of the Bids. Clarifications to specific requests shall be responded through e-mail and general clarifications, affecting all the bidders shall be published in the official website of the Tender Inviting Authority ([www.fssai.gov.in](http://www.fssai.gov.in)). However it shall be the duty of the prospective bidder to ensure that the clarifications sought for have been properly received in time by the Tender Inviting Authority.
9. **Pre-Bid Conference:** All clarifications are to be resolved in the Pre-Bid Conference on **08<sup>th</sup> May 2019 at 1500hrs** in **Conference Hall of Food Safety and Standards Authority of India, FDA Bhawan, Kotla Road, New Delhi-110002** prior to submission of bids.
10. **Modification and Withdrawal of Bids:** A bidder may modify or withdraw his bid after submission provided that the written notice of modification or withdrawal is received by the Tender Inviting Authority prior to deadline prescribed for submission of bids. No bid shall be modified after the deadline for

submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the period of bid validity specified. Withdrawal of a bid during this period will result in Bidder's forfeiture of EMD.

11. **Clarification regarding contents of the Bids:** During evaluation and comparison of bids, the Tender Inviting Authority may, at its discretion, ask or call the bidder for seeking clarification on his bid. The request for clarification will be given in writing/through email and no change in prices or substance of the bid will be sought, offered or permitted. No post-bid clarification on the initiative of the bidder will be entertained.

12. **Rejection of Bids:** Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection with forfeiture of EMD. **Conditional tenders will also be rejected.**

13. **Validity of Bids:** The Bids should remain valid till **12 Months** from the last date of submission of the Bids.

## **PART II – ESSENTIAL DETAILS OF ITEMS/SERVICES REQUIRED**

The tenders are invited for **Empanelment of vendors for setting up of Microbiology section and installation of equipments** at various locations across India as mentioned under schedule of requirements in Part II of RFP. This empanelment is initially for a period of 03 years which may be extended further with the approval of Competent Authority. This Tender is a Turnkey Project. Consortium is allowed.

1. **Schedule of Requirements** – List of items/services required for setting up a state of art microbiology facility for testing food matrices and water is as follow:

- A. Microbiology Laboratory Equipments/Consumables
- B. Associated Civil and Electrical work
- C. Provision of Manpower

2. **Technical Details:**

### **PART-A**

Sl. No.	Instruments/Consumables	Qty
1	Laminar Air Flow	01
2	Bio Safety Cabinet Class II Type B2 (Total Exhaust)	01
3	Autoclave Vertical	01
4	Incubators: 1) Ambient to 70 °C and 2) 5 °C to 50°C	01
5	Digital Colony Counter	01
6	Stomacher (Lab Blender)	01
7	Water Bath – Serological	01
8	Analytical Balance	01
9	Upright Frost Free Vertical Deep Freezer (-25 °C)	01
10	UV-Vis Spectrophotometer	01
11	Binocular Microscope	01
12	Howard Mold Counter	01
13	Refrigerated Centrifuge	01
14	BOD Incubator	01
15	Micro Filtration Assembly	01
16	Digital pH Meter	01
17	Fumigator	01

18	UV Viewing Chamber	01
19	Anaerobic Jar	01
20	Hot Air Oven	01
21	Micropipette	06
22	Carbon di oxide incubator	01
23	Frost Free Double door (side by side)Refrigerator	01
24	Microbiological Media And Consumables	As per list attached in Technical Bid

## PART-B

The Associated Civil and Electrical work has to be carried out as per the Model Layout attached at **Annexure I** as far as possible and as per the requirement of States/UTs. The work has to be carried out as per CPWD rates and where the item is not available in the CPWD schedule as per the Market rate.

## PART-C

### **Manpower to be provided:**

Successful bidder will have to provide full time two trained personnel specialized in microbiology (Microbiologist -01 and Assistant Analyst -01) for 03 years who will be responsible for the working of the instrument i.e. sample preparation, method validation, operation of instrument and data interpretation. The personnel will not claim to be an employee of FSSAI/State Laboratory. The person will work under the supervision of state laboratory head and carry out the required analysis of various samples received in the lab. He will also be responsible for providing training on the instrument to the laboratory staff.

Bidders will have to maintain backup of the manpower supplied in case of prolonged leave or any unforeseen circumstances.

In case the person provided by the bidder is found to be involved in any unlawful activity, the bidder will be liable to remove him immediately and provide a replacement. The decision of the state food lab would be final and binding to the bidder in this regard.

Note : Engagement of manpower and period of engagement will be at the sole discretion of **FSSAI/State Food Commissioners or any office designated by FSSAI**

3. **Delivery Period** – Delivery period for setting up Microbiology section and installation of equipments would be **120 days** from the date of issue of Supply Order. Please note that Supply Order can be cancelled unilaterally by the Buyer in case items are not received within the Supply Ordered delivery period. Extension of Supply Ordered delivery period will be at the sole discretion of the Buyer, with applicability of Liquidated Damages(LD) clause.

4. **Penalty for delay in supplies / Installation:** In the event of delay in setting up of Microbiology section, supply, installation, testing and commissioning of the equipment to the satisfaction of the **FSSAI/State Food Commissioners or any office designated by FSSAI** beyond the stipulated date:

- a. The Bidder will inform **FSSAI/State Food Commissioners or any office designated by FSSAI** well in advance in writing the reasons for delay in supply and/or installation of the equipment.
- b. **FSSAI/State Food Commissioners or any office designated by FSSAI** shall have the right to recover liquidated damages at the rate of 0.25% of the Value of the equipment per day, by which the supplies or their satisfactory installation and commissioning is delayed subject to a maximum of 10%. Once the maximum is reached **FSSAI/State Food Commissioners or any office designated by FSSAI** may consider termination of the supply order.

**Note: The right to accept the reason(s) for delay and consider reduction or waive off the penalty for the same shall be at the sole discretion of FSSAI/State Food Commissioners or any office designated by FSSAI.**

5. **Consignee Details.** State Food Commissioners or any office designated by FSSAI
6. **Eligibility Criteria for Pre-Qualification of Bidders.** The firm/Bidder fulfilling the following eligibility criteria will be considered for opening of their Commercial Bids: -
  - (a) Annual financial turnover, during each of the last three years should not be less than Rs.03(Three) Crore. Documentary evidence duly attested by a Chartered Accountant/Company Secretary should be submitted alongwith the Technical Bid. Bidders should also enclose notary attested copy of IT returns filed for the last three financial years, notary attested audited copy of audited accounts, balance sheet, annual report etc.
  - (b) Bidder must have valid GST Registration Certification. A copy of the certificate should be enclosed with the Technical Bid.
  - (c) Bidder must possess valid PAN Card. A copy of the same should be enclosed with the Technical Bid.
  - (d) Bidders are required to submit Bank Solvency Certificate issued not earlier than 31 March 2018.
  - (e) Bidder should have sufficient experience of setting up of laboratory and installation of analytical equipments(Work order/completion Certificate to be attached). **At least one work order of setting up of microbiology laboratory should be of Government sector which should have been awarded during the last two years.** Satisfactory work certificate should only be enclosed in case of completed project.
  - (f) Bidders should have the capability to attend repairs of the equipment and have the capability to ensure the uptime in a year of 90% as per **Annexure III.** (Documentary proof shall be submitted on the after sales facilities and expertise of the bidder.)
  - (h) Bidders who have been blacklisted / debarred by the Tender Inviting Authority or blacklisted / debarred by any State Government or Central Government department/Organization should not participate in the tender during the period of blacklisting. The bidder should enclose an undertaking to this effect alongwith the Technical Bid as per **Annexure IV.**
  - (i) Bidder should also provide general information as per **Annexure V.**
  - (j) Any other details, as considered necessary, may also be provided.
  - (k) Non- receipt of above mentioned documents may lead to rejection of the bid submitted by the bidder.

7. **Two-Bid System.** The quotation must be submitted by the bidder under two –bid system i.e. Technical-Bid and Commercial Bid to be submitted in separate sealed covers. Format of Technical Bid is at para 10 of the RFP. The documents mentioned in para(s) 6 and 10 should be enclosed with the Technical – Bid. Bidders are also required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any. The Bidders are advised to submit the compliance statement as per **Annexure VI.**

8. **Other terms and Conditions:**

(a) All the terms and conditions in respect of warranty/guarantee, Training of Staff etc shall be complied with.

(b) Technical Specifications and Standards:- The Goods & Services to be provided by the successful bidder under this contract shall conform to the technical specifications and quality control parameters mentioned in **para 2 of Part-II** of this document.

(c) The bidder shall be responsible for payment of any charges due to any statutory authorities such as Income Tax, GST, Customs Duties, etc.

(d) In the event, if it found that there is some statutory deduction to be made at the source, the Tender Inviting Authority will have the authority to do so.

9. **Amendment of tender documents:**

(a) At any time prior to the dead line for submission of Tender, the Tender Inviting Authority may, for any reason, modify the tender document by amendment.

(b) The amendments shall be published on the website, and the tender shall submit copy of amendments published if any signed by the bidder or the authorized representative shall be enclosed as part of the technical bid as a proof of having read and accepted the terms and conditions of the tender document.

(c) The Tender Inviting Authority shall not be responsible for failure to inform the prospective bidders for any notices published related to each tender. Bidders are requested to browse the website of the Tender Inviting Authority for information/general notices/amendments to tender document etc on a day to day basis till the tender is concluded.



## 10. Bid Form

**TECHNICAL BID FORM (A)**

1.	Tender to be submitted to	Assistant Director(QA), Food Safety and Standards Authority of India, FDA Bhawan, Kotla Road, New Delhi-110002
2.	Closing date and time for receipt of Tenders.	1500 hrs on <b>03<sup>rd</sup> June 2019</b>
3.	Time, date & place of opening of Technical Bids	1530 hrs on <b>03<sup>rd</sup> June 2019</b> in Conference Hall, Food Safety and Standards Authority of India, FDA Bhawan, Kotla Road, New Delhi-110002
4.	Schedule of Requirements and other Technical features as contained in Pat II of the RFP	Complied / Not complied
5.	Bank Solvency Certificate (issued not earlier than 31 March 2018)	Enclosed / Not enclosed
6.	Authenticated copy of PAN	Enclosed / Not enclosed
7.	Authenticated copy of GST Regn.	Enclosed / Not enclosed
8.	Tender Bid valid for acceptance up to 12 months from the date of opening of the commercial bid.	Accepted / Not Accepted
9.	Experience Certificate of having successfully setting up of Microbiology section and installation of equipments of similar nature.	Enclosed / Not enclosed
10.	Annual Financial Turnover during the each of the last three Financial years 2018-19, 2017-18 and 2016-17, should not be less than Rs. 03(Three)Crore.	Enclosed / Not enclosed
11.	Declaration form as per Annexure II	Enclosed / Not enclosed
12.	Certificate of Guarantee/Warranty as per Annexure III	Enclosed / Not enclosed
13.	An undertaking that the bidder has not been blacklisted/debarred by any State Govt./ Central Govt. Department/organization as per Annexure IV.	Enclosed / Not enclosed
14.	General Information about the Bidder as per Annexure V	Enclosed / Not enclosed
15.	Compliance sheet as per Annexure VI	Enclosed / Not enclosed
16.	Documentary proof shall be submitted on the after sales facilities and expertise of the bidder	Enclosed / Not enclosed
17.	Satisfactory Completion certificate of having successfully setting up of laboratory and installation of analytical equipments or work order towards setting up of microbiology lab	Enclosed / Not enclosed

Signature of Bidder \_\_\_\_\_  
Name in Block letters \_\_\_\_\_  
Capacity in which signed \_\_\_\_\_  
Date \_\_\_\_\_

Stamp of the Firm

## TECHNICAL BID FORM (B)

(a) The bids of only the technically qualified bidders will be eligible for consideration for opening of financial bid. The technical bid of the bidders will be evaluated on the basis of specification of the offered model vis-à-vis the prescribed specification given below :

### 1. Laminar Air Flow

S. No.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
1.	<b>Main body</b>	Constructed in Mild Steel with Epoxy Powder Coated		
2.	<b>Inner Surface</b>	Inner Back wall & Side wall made in stainless steel, grade SS 304		
3.	<b>Work Surface</b>	Seamless, Scratch-free, high quality 18 gauge stainless steel, grade 304		
4.	<b>Working tray</b>	Autoclavable & Removable stainless steel work surface for easy cleaning.		
5.	<b>Filter type</b>	HEPA filter with integral metal guards & frame gaskets. Supply of HEPA filter 99.997% at 0.3 micron.		
6.	<b>Primary Filter</b>	Specially designed pre filter to increase the life of HEPA filter		
7.	<b>Ergonomic tilt</b>	Exceptionally comfortable 10 deg ergonomic design improves comfort, prevents user fatigue & promotes safe working techniques.		
8.	<b>Front control panel</b>	Provided to avoid exposure of UV Light & Lamp outside, making eyes more comfortable.		

<b>9.</b>	<b>Front sash door</b>	<p>Manual sliding sash door made up of Imported poly carbonate sheet or toughened glass with sloping front for better access of samples</p> <p>Front sash door height can be easily adjusted as per required by end-user.</p> <p>The transparent sash door maximizes light &amp; visibility inside the cabinet, providing a bright &amp; open working environment.</p> <p>The closing/opening of front door is integrated with the UV ON/OFF. The UV will automatically switch "OFF" when the sash door is opened &amp; switch "ON" when door is closed to avoid accidental exposure of UV light to the operator.</p>		
<b>10.</b>	<b>Air velocity</b>	100 ft/min ± 10.		
<b>11.</b>	<b>Air volume</b>	Up to 500 CFM		
<b>12.</b>	<b>UV Light programming</b>	Available with timer		
<b>13.</b>	<b>Ultra violet tube light</b>	Germicidal i.e. 254 nm		
<b>14.</b>	<b>Electrical socket</b>	Internal socket inside the chamber,5/15 Amp		
<b>15.</b>	<b>Illumination of work surface</b>	<p>Fluorescent tube light (intensity &gt; 600 lux) provides excellent illumination for work surface &amp; reduces operator fatigue.</p> <p>Flourescent tube light in set behind front control panel.</p>		
<b>16.</b>	<b>LCD Screen Display</b>	<p>For Operating Fluorescent, Uv Light &amp; Blower With Audio and Visual alarm for HEPA filters blockage and life of the HEPA filter.</p> <p>And also for Static Pressure Measurement of HEPA Filter.</p> <p>Conveniently located display on outside of the Laminar Air Flow for easy use &amp; also easy to reach from a seated working position.</p>		
<b>17.</b>	<b>Sleep Mode Operation</b>	Automatically blower speed reduced up to 30%,this will help to save energy as well as help to maintain sterile work area during Biosafety Cabinet is not in operation		
<b>18.</b>	<b>Intelligence Alarm System</b>	Safety purpose Audio & Visual alarm for air fluctuation and for life of the HEPA filter and UV light		
<b>19.</b>	<b>Working Noise level</b>	Low/ should be < 65 dB		
<b>20.</b>	<b>Electronic / Electrical panel</b>	From clean chamber to give better contamination		

		free results.		
21.	<b>Electrical safety</b>	Electrical components used are standard for better electrical safety for the operator.		
22.	<b>Power supply</b>	230 V $\pm$ 15%, 50 Hz $\pm$ 3%		
23.	<b>Arm Rest bar</b>	To avoid contamination from outside to inside contamination & for easy working with comfort. Secure & comfortable armrests enhance your comfort during extended work sessions		
24.	<b>Drainage port</b>	Provide beneath work surface to facilitate easy & better cleaning of the interior & handling of spillage inside the chamber.		
25.	<b>Blower-Motor Assembly</b>	Dynamically & statistically balanced aluminum centrifugal impeller driven by single phase, 2800 RPM motor Double inlet blower fitted in such a way to reduces vibration & noise.  Blower is positioned in such a way that, to create an even filter loading, it helps to prolong the life of HEPA filters.  Provide uniform airflow by adjusting working voltage of fan.		
26.	<b>Certificates</b>	IQ, OQ & PQ Certificates will given Calibration & Traceability certificate provided with NABL accredited. Factory tested DOP test certificate provided.		
27.	<b>Trolley (Base Stand)</b>	Provided with lockable castor wheels		
28.	<b>Certification</b>	Product must be ISO 9001 : 2015 Certified CE Marked : CE marked product GMP Certified		
29.	<b>Applicable Standards</b>	EN ISO 14971:2012, EN ISO 13485 : 2012 , EN 980:2008 , EN 1041 : 2008 , EN 61010-1:2010, EN 61326-1:2013, EN 12469:2000.		
30.	<b>Size</b>	4'x2'x2'		
31.	<b>Warranty</b>	Warranted for 2 years after satisfactory installation and working excluding consumable parts and accessories.		

<b>32.</b>	<b>Service contract clauses,including prices</b>	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;		
<b>33.</b>	<b>Operating manuals, service manuals, other manuals</b>	Should provide 2 sets(hardcopy and soft-copy) of:- <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>		
<b>34.</b>	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

## 2. Bio Safety Cabinet Class II Type B2

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>Please Specify whether the quoted model/items meets the specification (Yes/No)</b>	<b>Specify Make and Model</b>
<b>1.</b>	<b>Size</b>	4'x2'x2' (MS Inner SS )		
<b>2.</b>	<b>Main body</b>	Constructed in Mild Steel with Epoxy Powder Coated		
<b>3.</b>	<b>Inner Surface</b>	Inner Back wall & Side wall made in stainless steel SS 304		
<b>4.</b>	<b>Work Surface</b>	Seamless ,Scratch-free, high quality 18 gauge stainless steel, grade 304		
<b>5.</b>	<b>Working tray</b>	Autoclavable & Removable stainless steel work surface for easy cleaning.		
<b>6.</b>	<b>LCD Display</b>	Digital Microprocessor Control System for Operating Fluorescent, UV Light & Blower. Continuously display true value of differential pressure of HEPA filter for inflow as well as down flow velocity. Conveniently located display on outside of the Biosafety Cabinet for easy use & also easy to reach from a		

		seated working position		
7.	<b>Sleep Mode Operation</b>	Automatically blower speed reduced up to 30%,this will help to save energy as well as help to maintain sterile work area during Biosafety Cabinet is not in operation Special precautions are taken so that if by chance the exhaust blower is not working, you will get buzzer		
8.	<b>Intelligence Alarm System</b>	Safety purpose Audio & Visual alarm for air fluctuation and for life of the HEPA filter and UV light		
9.	<b>Ultra violet tube light</b>	Germicidal i.e. 254 nm		
10.	<b>Ultra violet life meter</b>	Continuously display UV Hour on display		
11.	<b>UV Light programming</b>	Available with timer & UV Hour meter to avoid operator risk		
12.	<b>Interlocking UV</b>	The closing/opening of front door is integrated with the UV ON/OFF. The UV will automatically switch "OFF" when the sash door is opened & switch "ON" when door is closed to avoid accidental exposure of UV light to the operator.		
13.	<b>Certification</b>	An ISO 9001 : 2015 Certified Company CE Marked : CE marked product GMP Certified Product		
14.	<b>Applicable Standards</b>	EN ISO 14971:2012,EN ISO 13485 : 2012 , EN 980:2008 , EN 1041 : 2008 , EN 61010-1:2010, EN 61326-1:2013, EN 12469:2000		
15.	<b>Warranty</b>	Warranted for 2 years after satisfactory installation and working excluding consumable parts and accessories.		
16.	<b>Service contract clauses, including prices</b>	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;		
17.	<b>Operating manuals, service manuals, other</b>	Should provide 2 sets(hardcopy and soft-copy) of:- • User, technical and maintenance manuals to be supplied in English language along with machine diagrams;		

	<b>manuals</b>	<ul style="list-style-type: none"> <li>List of equipment and procedures required for local calibration and routine maintenance;</li> <li>Service and operation manuals (original and copy) to be provided;</li> <li>Advanced maintenance tasks documentation;</li> <li>Certificate of calibration and inspection</li> </ul>		
<b>18.</b>	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

### 3. Autoclave Vertical

S. No.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
<b>1.</b>	<b>Application</b>	A vertical steam sterilizer to provide safe, economical and effective sterilization for laboratories that do not want to compromise on quality, safety and reliability and need to sterilize Liquids such as nutrient media and buffer solutions, Solid items such as pipettes, tubes and filters and Glassware and plastic articles		
<b>2.</b>	<b>Chamber</b>	Vertical loading type chamber with service basket and <b>complying to the strictest international directives and standards</b> equipped with <ul style="list-style-type: none"> <li>Steam collection bottles to removes most of the steam during operation</li> <li>Ware inlet and outlet valve</li> <li>Drain valve for cleaning or changing with fresh water</li> <li>Constructed with appropriate stainless steel with superior corrosion resistance to water and steam</li> <li>High temperature and pressure resistant silicon gasket</li> <li>Built-in analog pressure gauge</li> <li>Manual pressure release valve</li> <li>Wheels/casters for easy transport.</li> </ul>		
<b>3.</b>	<b>Chamber size/Capacity</b>	Approx. 80-120 lit		
<b>4.</b>	<b>Gauges</b>	<ul style="list-style-type: none"> <li>Should have a water level gauge</li> <li>Analog gauges for measuring inner and outer steam pressure.</li> <li>Should have an inner temperature indicator.</li> </ul>		

5.	<b>Chamber size/Capacity</b>	Approx. 80-120 L		
6.	<b>Display</b>	<ul style="list-style-type: none"> <li>Fully Automatic PID Control <math>\pm 0.1</math> °C</li> <li>LED display for temperature and remaining time</li> </ul>		
7.	<b>Operating Temperature and accuracy</b>	<ul style="list-style-type: none"> <li>Maximum 123°C</li> <li>Temperature Accuracy : <math>\pm 0.5</math> °C at 121 ° C</li> <li>Must have Temperature calibration</li> </ul>		
8.	<b>Operating pressure and gauge</b>	<ul style="list-style-type: none"> <li>15 -20 psi</li> <li>ANALOG PRESSURE GAUGE ( 0 - 400 psi pressure gauge) indicating actual pressure</li> </ul>		
9.	<b>Timer</b>	Automatic START/STOP timer		
10.	<b>Safety warnings and alarms</b>	<ul style="list-style-type: none"> <li>A cycle cannot start if the door is open or not properly locked</li> <li>The door cannot unlock until chamber pressure reaches room pressure</li> <li>Over-Temperature Cut-Off with audio visual alarm</li> <li>Low Temperature Warning: If the temp. stays below 121°C for more than 5 seconds</li> <li>Low Heat Warning: If the temp. does not reach the sterilization temperature during the set periods</li> <li>Over-Pressure Cut-Off with audio visual alarm</li> <li>Over Current Cut-off with audio visual alarm.</li> <li>Low Water Level heater cut-off and ALARMS</li> </ul>		
11.	<b>Accessories</b>	<ul style="list-style-type: none"> <li>Perforated corrosion free baskets made up of SS 304 (3-4 Nos.) that are stackable two high or even more levels,</li> <li>Silicone gasket</li> </ul>		
12.	<b>Calibration certificates</b>	Certificate from ISO17025 accredited lab for temperature, pressure gauges & timer.		
13.	<b>Operation and maintenance training component</b>	<ul style="list-style-type: none"> <li>The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system and support services till customer satisfaction</li> </ul>		
14.	<b>Certificates Performance and safety standards (specific to the device type);Local and/or</b>	<ul style="list-style-type: none"> <li>Should be FDA/CE/BIS approved product.</li> <li>Manufacturer and Supplier should have ISO 13485 certification under ISO 9001for quality standards.</li> <li>Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements(or equivalent BIS Standard) Certified to be compliant with IEC 61010-1,</li> </ul>		



	<b>international</b>	IEC 61010-2-40 for safety		
<b>15.</b>	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
<b>16.</b>	<b>Service Support Contact details (Hierarchy Wise; including a toll free/ landline number)</b>	<ul style="list-style-type: none"> <li>• Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer;</li> </ul>		
<b>17.</b>	<b>Recommendations or warnings</b>	<ul style="list-style-type: none"> <li>• Any warning signs would be adequately displayed</li> </ul>		
<b>18.</b>	<b>Warranty</b>	<ul style="list-style-type: none"> <li>• Warranted for 2 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
<b>19.</b>	<b>Service contract clauses, including prices</b>	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
<b>20.</b>	<b>Operating manuals, service manuals, other manuals</b>	<p>Should provide 2 sets(hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>		
<b>21.</b>	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

**4. Incubators: 1) Ambient to 70 °C and 2) 5 °C to 50°C**

	<b>Specifications</b>	<b>Requirement</b>	Please Specify whether the quoted model/items meets the specification <b>(Yes/No)</b>	Specify Make and Model

1	<b>Application</b>	For incubation of organisms, such as on agar plates, and also for conditioning of heat sensitive media and to provide an optimal, homogeneous, temperature uniformity and stability to ensure that protocols are fully reproducible –		
2	<b>Material of construction</b>	<ul style="list-style-type: none"> <li>• Double walled construction with complete inner chamber made of Corrosion resistant stainless steel (AISI 430)</li> <li>• Outer chamber should be of steel sheet finished with powder coated paint Insulation to maintain desired temperature</li> <li>• Inner glass door</li> <li>• Inner chamber should be fabricated with ribs for adjusting shelves to convenient height and shelves to be supplied</li> <li>• Shelves should be made of polished stainless steel sheet as per chamber</li> </ul>		
3	<b>Capacity</b>	<ul style="list-style-type: none"> <li>• 150- 200 liters</li> </ul>		
4	<b>Temperature range</b>	<ul style="list-style-type: none"> <li>• Temperature should be thermostatically controlled</li> <li>• Temperature should be thermostatically controlled with range 1) <math>\pm 2^{\circ}</math> C Ambient to <math>70^{\circ}</math> C and 2) <math>5^{\circ}</math> C to <math>50^{\circ}</math> C</li> <li>• Over-Temperature Cut-Off with audio/ visual alarm</li> <li>• Low Temperature Warning alarm</li> </ul>		
5	<b>Unit</b>	<ul style="list-style-type: none"> <li>• Air ventilators to be provided on both side</li> <li>• The equipment should be provide with microprocessor controlled digital display</li> <li>• Temperature homogeneity between top and bottom shelves should be maintained by forced circulation</li> </ul>		
6	<b>Calibration</b>	Certificate from a ISO 17025 accredited lab for 3 different temperature points		
7	<b>Operation and training component</b>	<ul style="list-style-type: none"> <li>• The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction</li> </ul>		
8	<b>Certificates Performance and safety standards (specific to the device type);Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product. Manufacturer and Supplier should have ISO 13485 certification under ISO 9001for quality standards.</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements(or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>		

9	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>Must be ISO certified for quality</li> </ul>		
10	<b>Service Support Contact details (Hierarchy Wise; including a toll free/landline number)</b>	<ul style="list-style-type: none"> <li>Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer;</li> </ul>		
11	<b>Recommendations or warnings</b>	<ul style="list-style-type: none"> <li>Any warning signs would be adequately displayed</li> </ul>		
12	<b>Warranty</b>	<ul style="list-style-type: none"> <li>Warranted for 2 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
13	<b>Service contract clauses, including prices</b>	<ul style="list-style-type: none"> <li>List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
14	<b>Operating manuals, service manuals, other manuals</b>	<p>Should provide 2 sets(hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>List of equipment and procedures required for local calibration and routine maintenance;</li> <li>Service and operation manuals (original and copy) to be provided;</li> <li>Advanced maintenance tasks documentation;</li> <li>Certificate of calibration and inspection</li> </ul>		
15	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

## 5. Digital colony counter

S. No.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
1	<b>Application</b>	For fast and accurate bacterial or mold colony counting and to aid in determining counts of colony clusters and exceedingly large or small colonies, and can accommodate multiple dish sizes or formats.		
2.	<b>Material construction of</b>	Full Stainless steel fabricated body with duly heat cured epoxy coating.		

3	<b>Display and counting</b>	<p>It should consist of</p> <ul style="list-style-type: none"> <li>• Digital display up to 4 digits with confirmation by audible tone.</li> <li>• It should consist of Magnifying lens (greater than 2X magnification with digital marking pen)</li> <li>• Accepts petri dish upto size 120 mm diameter with a centering adaptor for standard 90mm petri dish</li> <li>• Glare free viewing low energy bright LED's</li> <li>• A switchable black background viewing translucent and difficult to see colonies.</li> <li>• Zero reset button</li> </ul>		
4.	<b>Operation and training component</b>	<ul style="list-style-type: none"> <li>• The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction</li> </ul>		
5	<b>Certificates Performance and safety standards (specific to the device type); Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards. Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>		
6	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
7	<b>Service Support Contact details (Hierarchy Wise; including a toll free/landline number)</b>	<ul style="list-style-type: none"> <li>• Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer;</li> </ul>		
8	<b>Recommendations or warnings</b>	<ul style="list-style-type: none"> <li>• Any warning signs would be adequately displayed</li> </ul>		
9	<b>Warranty</b>	<ul style="list-style-type: none"> <li>• Warranted for 2 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
10	<b>Service contract clauses, including prices</b>	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		

11	<b>Operating manuals, service manuals, other manuals</b>	Should provide 2 sets(hardcopy and soft-copy) of:- <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>		
12	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

## 6. Stomacher (Lab Blender)

S. No.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
1.	<b>Application</b>	Stomacher is a product for the quick and safe preparation of samples before it's microbiological and chemical analysis Progressive blending adaptation to the matrix Fixed speed. Accepts all bag sizes 50 to 400 ml 100% stainless steel chamber 75w (power consumption reduced to 30% to 50%)		
2.	<b>Size (L X D X H)</b>	400x250x250mm		
3.	<b>Motion</b>	Patented pendular motion		
4.	<b>LCD Digital Display</b>	User friendly control, Auto-Manual Mode, Programmable time.		
5.	<b>Door</b>	Removable & Autoclavable door opening up to 270°		
6.	<b>Bending Capacity</b>	From 50 – 400 ml in stomacher bags (Sterile with or without filter) Adjustable electronic timer from 10 sec to 3 min Continuous mode available		
7.	<b>Brushless Motor</b>	No wearing parts, Less power consumption.		
8.	<b>Safety</b>	Electronic circuit breaker which stop the cycle in case of resistant samples motor protection No access to the homogenization chamber during the operation		
9.	<b>Easy cleaning</b>	removable paddles and easy access to the stainless steel homogenizing chamber		

10.	<b>Patented automatic bag closing</b>	Automatic bag closing. Increases your productivity & prevents MusculoSkeletal Troubles. Ensures the tightness of the bags		
11.	<b>Unit</b>	No vibration Patented crushing effect Ensured efficiency whatever the sample (from 28 kg to 126 kg) Removable paddles The easiest removable paddles on the market. Built-in waste drawer for spillage collection. 100% stainless steel chamber. Smooth surfaces and rounded corners Extreme Capacity The new « pendular » blending method is revolutionary. Power and efficiency. Progressively & gently stroked samples for an optimal blending. Not “up to” but “from” 28 kgs of pressure by paddle !		
12.	<b>Warranty</b>	Warranted for 2 years after satisfactory installation and working excluding consumable parts and accessories.		
13.	<b>Service contract clauses, including prices</b>	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;		
14.	<b>Operating manuals, service manuals, other manuals</b>	Should provide 2 sets(hardcopy and soft-copy) of:- • User, technical and maintenance manuals to be supplied in English language along with machine diagrams; • List of equipment and procedures required for local calibration and routine maintenance; • Service and operation manuals (original and copy) to be provided; • Advanced maintenance tasks documentation; • Certificate of calibration and inspection		
15.	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

#### 07. Serological Water Bath

S.no	Specification	Requirement	Please Specify whether the quoted model/items meets the specification	Specify Make and Model

			(Yes/No)	
1	<b>Application</b>	The water bath is for routine use in microbiology protocols as well for solubilisation with precise temperature control.		
2	<b>Material of construction</b>	<ul style="list-style-type: none"> <li>• Rounded, seamless stainless steel bath to preventing rust, chemical damage and contamination.</li> <li>• Powder coating like epoxy coating exterior for easy cleanup</li> <li>• corrosive resistant stainless steel</li> <li>• Gabled drip free lid</li> </ul>		
3	<b>Unit</b>	<ul style="list-style-type: none"> <li>• Microprocessor controlled digital display.</li> <li>• Instrument should have lift up drip free bath cover;</li> <li>• Carrier racks should be given for flasks and test tubes racks.</li> <li>• Convenient water bath drains.</li> <li>• Water bath protective media should be there to prevent contamination and formation of algae.</li> <li>• Easy cleaning</li> </ul>		
4	<b>Temperature</b>	<ul style="list-style-type: none"> <li>• Temperature Range: +20°C to 99°C</li> <li>• Temperature Accuracy: <math>\pm 0.2</math> °C at 37 .0°C</li> <li>• Temperature Uniformity: <math>\pm 0.5</math> °C at 37 .0°C</li> <li>• Digital LED display for operating status of TEMP</li> <li>• Over-Temperature Cut-Off</li> <li>• Temperature calibration function</li> </ul>		
5	<b>Alarms</b>	<ul style="list-style-type: none"> <li>• Audible warning safety signals should be there for high/low temperature warnings</li> <li>• Low liquid level</li> </ul>		
6	<b>Calibration</b>	<ul style="list-style-type: none"> <li>• Certificate from a ISO 17025 accredited lab for 3 different temperature points</li> </ul>		
7	<b>Operation and training component</b>	<ul style="list-style-type: none"> <li>• The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction</li> </ul>		

8	<b>Certificates Performance and safety standards (specific to the device type);Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001for quality standards.</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements(or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>		
9	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
10	<b>Service Support Contact details (Hierarchy Wise; including a toll free/landline number)</b>	<ul style="list-style-type: none"> <li>• Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer;</li> </ul>		
11	<b>Recommendations or warnings</b>	<ul style="list-style-type: none"> <li>• Any warning signs would be adequately displayed</li> </ul>		
12	<b>Warranty</b>	<ul style="list-style-type: none"> <li>• Warranted for 3 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
13	<b>Service contract clauses, including prices</b>	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
14	<b>Operating manuals, service manuals, other manuals</b>	<p>Should provide 2 sets(hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>		
15	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

## 08. Analytical Balance

S. No.	Specifications	Requirement	Please Specify whether the quoted	Specify Make and Model
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			model/items meets the specification (Yes/No)	
1	<b>Application</b>	Required to measures mass to a high degree of precision with a <b>weighing</b> capacity typically 200 g and a readability of 0.1 mg – 0.001 mg and protected by a draft shield or an enclosure.		
2	<b>Operational Requirements</b>	It should have <ul style="list-style-type: none"> <li>• Microprocessor based single pan top loading analytical balance with high accuracy and precision.</li> <li>• Reading of the weight by digital display</li> <li>• Balance with transparent case.</li> <li>• Weighing with automatic and manual start and provision for data interface.</li> </ul>		
3.	<b>Technical Specifications</b>	<ul style="list-style-type: none"> <li>• Weigh accurately up to 3rd decimal place.</li> <li>• Fully automatic time and temperature controlled internal calibration and balance should be capable to adjust itself Auto zero setting.</li> <li>• Weighing capacity up to 200g Readability 0.1 mg Repeatability 1 mg or less. Setting time 1.5 secs.</li> </ul>		
4.	<b>Balance should have</b>	<ul style="list-style-type: none"> <li>• Fast dismantling chamber for easy clean up</li> </ul>		
5.	<b>Environmental factors</b>	<ul style="list-style-type: none"> <li>• Safety for electromagnetic compatibility.</li> <li>• The unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of 80%.</li> </ul>		
6.	<b>Accessories</b>	<ul style="list-style-type: none"> <li>• All necessary accessories should be provided with unit.</li> </ul>		
7.	<b>Calibration certificate</b>	Certificate from a ISO 17025 accredited lab for 3 different weights.		
8.	<b>Operation and training component</b>	<ul style="list-style-type: none"> <li>• The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction</li> </ul>		

9.	Certificates Performance and safety standards (specific to the device type); Local and/or international	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards.</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>		
10.	Supplier/ Manufacturer	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
11.	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	<ul style="list-style-type: none"> <li>• Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer;</li> </ul>		
12.	Recommendations or warnings	<ul style="list-style-type: none"> <li>• Any warning signs would be adequately displayed</li> </ul>		
13.	<b>Warranty</b>	<ul style="list-style-type: none"> <li>• Warranted for 3 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
14.	Service contract clauses, including prices	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
15.	Operating manuals, service manuals, other manuals	<p>Should provide 2 sets (hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>		
16.	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

**09. Upright Frost Free Vertical Deep Freezer (-25 °C)**

S. no.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
1	<b>Application</b>	For storage of various biological products including, ATCC cultures, enzymes, chemicals or material testing components for a longer period of time		
2	<b>Unit</b>	<ul style="list-style-type: none"> <li>• Interior: Full stainless steel which can be easily cleaned and eliminates any possibility of cross contamination</li> <li>• Cooling Type : Direct cooling</li> <li>• Should be Vertical(Upright)type</li> <li>• Microprocessor-based</li> <li>• Frost Free</li> <li>• Refrigerant : CFC – Free</li> <li>• Easy to read, LED control panel and alarm status with integrated diagnostics</li> <li>• Doors with key lock</li> <li>• Built in Voltage stabilizer/battery back-up for 48h or more</li> <li>• Castors for easy movability</li> </ul>		
3.	<b>Capacity</b>	Capacity: 250 L or higher with a combination of sealed 5-7 pullout drawers / shelves of different sizes that can be adjusted for storage flexibility		
4.	<b>Temperature</b>	<ul style="list-style-type: none"> <li>• Range - 10 ~ - 25 °C with temperature controller</li> <li>• Digital temperature display</li> <li>• LED Display for temperature and temperature history which can be downloaded via a USB port</li> <li>• Calibration facility</li> </ul>		
5	<b>Alarms</b>	Acoustic/visual Safety alarms for <ul style="list-style-type: none"> <li>• High/low temperature,</li> <li>• door ajar and</li> <li>• malfunction system alarms</li> </ul>		
6.	<b>Optional Accessories:</b>	Racks for 50 mm boxes (incl. dividers),  Racks for 75 mm boxes (incl. dividers)		
7	<b>Voltage stabilizer</b>	Suitable and compatible voltage stabilizer		

<b>8</b>	<b>Calibration</b>	Certificate from an ISO 17025 accredited lab for 3 different temperature points.		
<b>9</b>	<b>Operation and training component</b>	<ul style="list-style-type: none"> <li>The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction</li> </ul>		
<b>10</b>	<b>Certificates Performance and safety standards (specific to the device type); Local and/or international</b>	<ul style="list-style-type: none"> <li>Should be FDA/CE/BIS approved product.</li> <li>Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards.</li> <li>Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> <li>Certified to be compliant with IEC 61010-1, IEC 61010-2- 40 for safety</li> </ul>		
<b>11</b>	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>Must be ISO certified for quality</li> </ul>		
<b>12</b>	<b>Service Support Contact details (Hierarchy Wise; including a toll free/landline number)</b>	<ul style="list-style-type: none"> <li>Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer;</li> </ul>		
<b>13</b>	<b>Recommendations or warnings</b>	<ul style="list-style-type: none"> <li>Any warning signs would be adequately displayed</li> </ul>		
<b>14</b>	<b>Warranty</b>	<ul style="list-style-type: none"> <li>Warranted for 3 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
<b>15</b>	Service contract clauses, including prices	<ul style="list-style-type: none"> <li>List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
<b>16</b>	Operating manuals, service manuals, other manuals	<p>Should provide 2 sets (hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>List of equipment and procedures required for local calibration and routine maintenance;</li> <li>Service and operation manuals (original and copy) to be provided;</li> <li>Advanced maintenance tasks documentation;</li> <li>Certificate of calibration and inspection</li> </ul>		
<b>17</b>	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

## 10. UV-VIS Spectrophotometer

S no.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
1	<b>Application</b>	UV-Vis The system should be capable to measure the all colorimetric based parameters in food and water samples as per FSSAI requirements including Enzyme assays, Kinetic assays and scans		
2	<b>System</b>	A fully automated spectrophotometer with double beam optics with pre-programmed applications using conventional quartz / glass/plastic cuvettes with all the required accessories.		
3	<b>Operation keys</b>	<ol style="list-style-type: none"> <li>Instrument should operate immediately after switch on with no warming up time</li> <li>Should be automatically programmed with on-board touch screen &amp; soft keys</li> <li>Capable to store method with analysis:&gt; 100 method programs on the instrument, &gt; 1000 results with data, evaluation results and used parameters</li> </ol>		
4.	<b>Optical Design</b>	<ul style="list-style-type: none"> <li>Double Beam with sample and reference cuvette positions; Czerny-Turner Monochromatic/Holographic grating with sealed optics</li> <li>Reference Compartment Should accommodate cells up to 10 mm path length as standard feature</li> </ul>		
5	<b>Light Source</b>	(1) Halogen lamp for Visible range (2) Deuterium Lamp for UV range, light source should be auto automatically selected as per wavelength required.		
6	<b>Detector</b>	Silicon Photodiode dual detector/PMT		
7	<b>Scan Ordinate Modes</b>	Absorbance, % Transmittance, % Reflectance		
8	<b>Resolution</b>	0.1nm or better.		
9	<b>Wavelength Range</b>	190 –1100 nm		
10	<b>Wavelength Accuracy</b>	± 0.3nm or better for entire range		
11.	<b>Wavelength Repeatability</b>	± 0.1nm or better -		
12.	<b>Scanning Speed</b>	Selectable Variable wavelength scan rate 10nm/min to 2500 nm/min or		

13	<b>Spectral Bandwidth</b>	Variable(0.1/0.2/0.5/1/2/5) nm
14.	<b>Photometric Range</b>	Absorbance = -4.5 to 4.5 Abs or better. Transmittance & reflectance 0 to 80000 % or better.
15	<b>Photometric Accuracy</b>	0.5 A: $\pm 0.004A$ ; 1A: $\pm 0.006A$ ; 2A: $\pm 0.010A$ ; (440 nm; traceable neutral density filters)
16	<b>Stray Light</b>	Max. 0.005% (220 nm NaI) or better, Max. 0.005% (340,370 nm NaNO <sub>2</sub> ) or better Max. 1% (198 nm KCl) or better
17.	<b>Noise</b>	0.00005 Abs RMS (500nm) or better
18.	<b>Drift</b>	< 0.0005 A/hr (500 nm, 1 hour warm-up)
19	<b>Baseline flatness</b>	$\pm 0.0005$ Abs or better
20	<b>Application Software</b>	<p>Compatible Software should be user friendly &amp; simple for data handling with feature like easy to use report publisher, online help and answer wizard, GLP &amp; audit trail and fully compatible with Windows. System built in features such as real time display of concentration, time scan, photometric mode, single/multi-wavelength , capability for event recording (e.g., addition of reagents) Software should have built in</p> <p>a. Methods:</p> <ul style="list-style-type: none"> <li>• Absorbance with one or more wavelengths,</li> <li>• Scans, Nucleic acids, Proteins, OD 600,</li> <li>• Evaluation: via factor, standard and calibration curve</li> <li>• Dual wavelength with subtraction and division evaluation</li> </ul> <p>b. Method dependent evaluation:</p> <ul style="list-style-type: none"> <li>• Absorbance, concentration via factor and standard</li> <li>• Concentration via standard series using Linear regression, Nonlinear regression with 2nd and 3rd degree polynomials</li> <li>• Spline analysis,</li> <li>• Linear interpolation (point to point evaluation)</li> <li>• Absorbance allocation via subtraction and division</li> <li>• Ratio 260/280, 260/230, Molar concentration and total yield for nucleic acids.</li> </ul> <p><b>The software should be 21CFR part 11 compliant.</b></p>
21	<b>Accessories and spares</b>	<ul style="list-style-type: none"> <li>• One pair each of of 0.5, 1 and 3 ml quartz cuvettes 10 mm path length</li> <li>• One pair each of of 0.5, 1, and 3 ml glass cuvettes 10 mm path length</li> </ul>

		<ul style="list-style-type: none"> <li>• Cuvette holder</li> <li>• Deuterium Lamp</li> <li>• Halogen lamp</li> <li>• Holmium oxide glass filters for wavelength calibration.</li> <li>• NIST traceable Potassium dichromate</li> </ul>		
22	<b>Computer and printer</b>	Latest configuration factory set branded PC system with 22-23" Full HD Monitor with printer –B/W – duplex- laser-legal,A4 - 1200dpi-up to 21 ppm –capacity with network card		
23	<b>UPS</b>	Suitable UPS with 60 mins backup power		
24	<b>Calibration</b>	Certificate from an ISO 17025 accredited lab spectral calibration.		
25	<b>Compliance</b>	<b>IQOQPQ</b> of instrument and Software should be provided along with document		
26	<b>Operation and training component</b>	<ul style="list-style-type: none"> <li>• The supplier will have to carry out successful Installation at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction</li> </ul>		
27	<b>Certificates Performance and safety standards (specific to the device type);Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001for quality standards.</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements(or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010- 1, IEC 61010-2-40 for safety</li> </ul>		
28	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
29	<b>Service Support Contact details (Hierarchy Wise; including a toll free/landline number)</b>	<ul style="list-style-type: none"> <li>• Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer;</li> </ul>		
30	<b>Recommendations or warnings</b>	<ul style="list-style-type: none"> <li>• Any warning signs would be adequately displayed</li> </ul>		
31	<b>Warranty</b>	<ul style="list-style-type: none"> <li>• Warranted for 3 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
32	<b>Service contract clauses, including prices</b>	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
33	<b>Operating manuals, service manuals, other</b>	Should provide 2 sets(hardcopy and soft-copy) of:- <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine</li> </ul>		

	<b>manuals</b>	<p>diagrams;</p> <ul style="list-style-type: none"> <li>List of equipment and procedures required for local calibration and routine maintenance;</li> <li>Service and operation manuals (original and copy) to be provided;</li> <li>Advanced maintenance tasks documentation;</li> <li>Certificate of calibration and inspection</li> </ul>		
<b>34</b>	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

## 11. Binocular Microscope

<b>S no.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>Please Specify whether the quoted model/items meets the specification(Yes/No)</b>	<b>Specify Make and Model</b>
<b>1</b>	<b>Application</b>	A System complete with illumination system is required. For view of individual cells, even living ones with high magnification microscope using 2 eye lenses to reduce the eyestrain		
<b>2</b>	<b>Body</b>	<ul style="list-style-type: none"> <li>Body-Single mold sturdy stable base stand, inclined Binocular body 30 ° , 360° rotatable head with focus adjustment controls.</li> <li>A durable textured acid resistant finish</li> <li>All optical parts including objectives, eye pieces and prisms should have anti- reflective coating which also gives anti- fungal property.</li> <li>All metallic parts should be corrosion- proof, acid proof and stain-proof.</li> </ul>		
<b>3.</b>	<b>Eye piece</b>	<ul style="list-style-type: none"> <li>-Highest quality 10 X/20mm wide angle anti fungus field eyepiece. One with pointer. Diopter adjustment must be present on both eye pieces. (the image of the object as seen through the binocular eyepiece should be well defined centrally in at least 2/3 field of view)</li> <li>Achromatic, wide field, 10 x with inbuilt pointer.</li> <li>The eyepiece should be aplanatic and have a minimum field number of 18 Diopter adjustment must be present on one/ both eye pieces or on the eye piece tube.</li> </ul>		



3.	<b>Optical system</b>	<ul style="list-style-type: none"> <li>• Optical system should be infinity corrected.</li> <li>• Built-in LED light source with white light with intensity control and LED life of more than 10, 000 Hrs.</li> </ul>		
4.	<b>Objective</b>	<ul style="list-style-type: none"> <li>• -Parfocal, antifungal coated 4<math>\times</math>, 10<math>\times</math>, 40<math>\times</math> and 100<math>\times</math> (oil immersion) with semi planner achromatic correction.</li> <li>• Objective should be well centered even if their position on turret is changed.</li> <li>• 10<math>\times</math> and 40<math>\times</math> objectives should have numerical apertures of 0.25 and 0.65 respectively.</li> <li>• 100<math>\times</math> should have numerical aperture of 1.25 and should be of oil immersion.</li> <li>• Unbreakable containers to be provided for storing the objectives.</li> <li>• All objectives should be wide field, achromatic and par focal.</li> </ul>		
5.	<b>Nose piece</b>	<ul style="list-style-type: none"> <li>• Backward tilted revolving nose piece suitable to accommodate four objectives with click stop</li> <li>• . It should be provided with rubber ribbed grip for easy rotation mounted on a precision ball bearing mechanism for smooth and accurate alignment. Extra ports if any should be fitted with dust&amp; fungal proof metallic/ebonite caps.</li> </ul>		
6	<b>Focusing:</b>	<ul style="list-style-type: none"> <li>• . Coaxial coarse and fine focusing knob, capable of smooth, fine focusing movement sensitivity; minimum: 300 micron; focusing stop for slide safety. ..</li> </ul>		
7	<b>Stage</b>	<ul style="list-style-type: none"> <li>• Stage uniformly horizontal, mechanical stage having dimensions of length 140 mm (+/- 20mm) with fine Vernier graduations (minimum reading accuracy of 0.1 mm).</li> <li>• It should be designed with convenient sub-stage vertical coaxial adjustment for slide manipulation.</li> <li>• The stage should have ball-bearing arrangement to allow smooth travel in transverse directions i.e. 80 mm (+/- 5mm) and front to back direction, 50mm (+/- 5mm).</li> </ul>		
8.	<b>Sub-stage condenser</b>	<ul style="list-style-type: none"> <li>• Abbe-type condenser with numerical aperture (N.A.) 1.25 focusable with rack and pinion arrangement incorporating a spherical lens and an iris-diaphragm</li> </ul>		
9.	<b>Sub-stage illuminator</b>	<ul style="list-style-type: none"> <li>• The system should have a build-in variable light source (Illuminator).</li> <li>• This light source should have a 20 W, 6 V Halogen lamps.</li> </ul>		

		<ul style="list-style-type: none"> <li>• The system should be provided with a step down transformer and an on-off switch and intensity control.</li> <li>• The lamp should be provided with a lamp socket which has the facility for easy replacement of the bulb</li> </ul>		
10.	<b>Power supply &amp; protection</b>	<ul style="list-style-type: none"> <li>• Voltage 220 V AC, 50Hz. should have one on-off power switch</li> <li>• A plano-concave mirror in fork mounting should be supplied which would be attachable to the base for field use when power is not available.</li> <li>• Should have over-charging cut-off with visual symbol</li> </ul>		
11	<b>Battery backup</b>	<ul style="list-style-type: none"> <li>• Minimum 1 Hour</li> </ul>		
12	<b>Operating and storage conditions</b>	<ul style="list-style-type: none"> <li>• Capable of operating continuously in ambient temperature of 10 to 50 ° C and relative humidity of 15 to 90% in ideal circumstances.</li> <li>• Storage condition: Capable of being stored continuously in ambient temperature of 0 to 50 °C and relative humidity of 15 to 90%</li> </ul>		
13	<b>Manual Accessories</b>	<ul style="list-style-type: none"> <li>• Working manual should be provided with each microscope.</li> <li>• Immersion oil 25 ml □ 2</li> <li>• lens tissue paper 2 rolls or boxes)</li> <li>• Lens cleaning solution (100 ml)</li> <li>• One anti-static cleaning brush.</li> <li>• The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg C and relative humidity of 15-90%.</li> </ul>		
14.	<b>Digital camera</b>	<ul style="list-style-type: none"> <li>• 5 megapixel scientific grade (even at dim light) colour CCD camera along with image capture and analysis software and c-mount adapter. Resolution at least 2448 x 1920 effective pixel (4 x 4 binning and 2 x2 binning) and 10 bit digitization. Microscope should come along with PC (i5 6200U processor, 6 GB RAM, 1 TB HDD, DVR R/W, LED 20"). With UPS (minimum offline backup of 30 minutes).</li> </ul>		
15	<b>Certificates Performance and safety standards (specific to the device type); Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards.</li> <li>• TVU Cert</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601-General requirements (or equivalent BIS Standard)</li> </ul>		

		<ul style="list-style-type: none"> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>		
16	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
17	<b>Service contract clauses, including prices</b>	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
18	<b>Operating manuals, service manuals, other manuals</b>	<p>Should provide 2 sets(hardcopy and soft- copy) of:-</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>		
19	<b>Warranty</b>	<ul style="list-style-type: none"> <li>• Warranted for 3 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
21	<b>Operation and maintenance training</b>	The supplier will have to carry out successful installation at our laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for scientific personnel operating the system and support services till customer satisfaction with the system.		
22	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

## 12. Howard Mold Counter

S. No	Specification	Requirement	Please Specify whether the quoted model/items meets the specification(Yes/No)	Specify Make and Model
1.	<b>Application</b>	It is use in determining mold counts (is used mold fibres and spores) in tomato products and for mold counting in food quality control applications for other fruit based preparations and <b>mold</b> mycelia in butter and cream..		

2.	<b>Counting chamber</b>	Constructed entirely of glass. Centre of glass should contain a 15x20mm rectangle that is flanked by 0.1 mm shoulders on each side to support cover glass Rectangle and Cover glass should have optically plane surfaces Facilities for calibration of microscope		
3.	<b>Eyepiece micrometer</b>	Ruled into squares (grid), each of which is equal to 1/6 of the diameter of the eyepiece diaphragm opening		
4.	<b>Cover slips</b>	Thin 28mm x 33mm x 0.5mm 2 Nos Thick 28mm x 33mm x 1.0mm 2 Nos		
5.	<b>Certificates Performance and safety standards (specific to the device type); Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards.</li> <li>• TVU Cert</li> </ul>		
6.	<b>Service contract clauses, including prices</b>	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required;</li> </ul>		
7.	<b>Demonstration and training</b>	The supplier will have to carry out successful demonstration at our laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for scientific personnel operating the system till customer satisfaction with the system.		
8.	<b>Certificates Performance and safety standards (specific to the device type); Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards.</li> </ul>		
9.	<b>Payment</b>	Payment only after validation and performance demonstration		

### 13. Refrigerated Centrifuge

S. No.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model

1.	<b>Application</b>	A Multi-functional, general purpose High speed refrigerated bench top centrifuge with both fixed angle and swinging bucket rotors for sedimentation of samples with easy lift and safety lid		
2.	<b>Base unit</b>	<ul style="list-style-type: none"> <li>• Table top centrifuge with maintenance free brushless motor and have low access height</li> <li>• CFC free refrigerant</li> <li>• LCD Digital Display of time, speed and Temperature and run conditions</li> <li>• Compatible with all fixed angle and swinging bucket rotors</li> <li>• <b>Automatic rotor recognition facility</b></li> <li>• Automatic imbalance detection and cut-off</li> <li>• Should be programmable with easy preset programs for fast temperature for pre- cooling and short spin.</li> <li>• Should have motorized lid lock system</li> </ul>		
3.	<b>Temperature range</b>	<ul style="list-style-type: none"> <li>• -5°C to 40 °C</li> </ul>		
4.	<b>Speed</b>	<ul style="list-style-type: none"> <li>• Maximum speed: 15000 rpm (20000 RCF) with 8 □ 50 mL Fixed angle rotor or better</li> </ul>		
5.	<b>Rotors</b>	<ol style="list-style-type: none"> <li>1. <b>Fixed Angle Rotor</b> for 8□50 ml Falcon tube with 8 adapters for 15 mL conical bottom culture tubes/falcon/oak ridge</li> <li>2. <b>Rotor for 1.5-2.0 mL</b> Eppendorf tubes (24 places or better) and <b>adaptors</b> for 0.2 and 0.5 mL tubes</li> <li>3. <b>Deep-well micro plates</b> rotor (Four 96 well plates)</li> <li>4. <b>Swing out rotor:</b> <ul style="list-style-type: none"> <li>• Should have at least 4 □ 100 ml of capacity Maximum RCF produced should be 3200 x g or above Four buckets should be provided (either round or rectangular buckets) • Adapters for 15 ml conical bottom centrifuge tubes &amp; 50 ml conical bottom centrifuge tubes should be provided (two adapters for 6 or 8 □15 ml and two adapters for 2 or 4□50 ml)</li> <li>• Rotor and buckets should be autoclavable.</li> <li>• <b>All rotors should be autoclavable</b></li> </ul> </li> </ol>		
6.	<b>Centrifuge tubes</b>	<ul style="list-style-type: none"> <li>• Suitable 15 mL auto-clavable screw capped tubes -24 Nos</li> <li>• Suitable 50 mL auto-clavable screw capped tubes -24 Nos</li> </ul>		
7.	<b>Power requirement</b>	<ul style="list-style-type: none"> <li>• 220 v to 240 v -50 Hz If a voltage stabilizer is required, it should be supplied along with the unit</li> </ul>		

8.	<b>Voltage stabiliser</b>	<ul style="list-style-type: none"> <li>• Suitable voltage stabilizer to be provided</li> </ul>		
9.	<b>Certificates Performance and safety standards (specific to the device type); Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards.</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>		
10.	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
11.	<b>Service contract clauses, including prices</b>	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
12.	<b>Operating manuals, service manuals, other manuals</b>	<p>Should provide 2 sets (hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>		
13.	<b>Warranty</b>	<ul style="list-style-type: none"> <li>• Warranted for 3 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
14.	<b>Operation and maintenance training</b>	The supplier will have to carry out successful installation at our laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for scientific personnel operating the system and support services till customer satisfaction with the system.		
15.	<b>Payment</b>	Payment only after installation, validation and performance demonstration		

#### 14. BOD Incubator

S. No.	Specifications	Requirement	Please Specify whether the	Specify Make and Model
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			quoted model/items meets the specification (Yes/No)	
1.	<b>Application</b>	For use in microbiological laboratories to measure biochemical oxygen demand (BOD) . The incubators are used to sustain and control the humidity and temperature essential to perform many types of experiments in, microbiology and biology cells.		
2.	<b>Double walled modular structure with 3” thick PUF insulation</b>	i) Outer wall: Powder coated steel sheet with resin baked finish ii) Inner wall: Stainless steel* with ribs for adjusting removable perforated shelves at the height of 45 mm. The nuts, screws and hinges of the inner chamber shall be of Stainless Steel*. ( *SS Grade X07Cr18Ni9 of IS 6911 : 1992 or equivalent) iii) Perforated Stainless Steel*Partition tray (6 nos.)		
3.	<b>Doors</b>	Double door type <ul style="list-style-type: none"> <li>• Inner Door: Full view inner acrylic door with aluminum channel boundary, closes on a resilient gasket and permits view of the specimens (inside the Incubator), without disturbing the thermal conditions inside the chamber.</li> <li>• Interior illumination</li> <li>• Outer Door: Powder coated steel sheet with resin baked finish</li> </ul>		
4.	<b>Capacity</b>	<ul style="list-style-type: none"> <li>• 300-400 Litres</li> </ul>		
5.	<b>Temperature Range</b>	<ul style="list-style-type: none"> <li>• 5°C to 60°C with digital controller,</li> <li>• Temperature increments 0.1° C</li> </ul>		
6.	<b>Temperature Control Accuracy</b>	<ul style="list-style-type: none"> <li>• <math>\pm 0.1</math> °C or better (at 60°C).</li> </ul>		
7.	<b>Distribution Accuracy/uniformity</b>	<ul style="list-style-type: none"> <li>• <math>\pm 1</math> °C or better (at 37°C).</li> </ul>		
8.	<b>Temperature display</b>	<ul style="list-style-type: none"> <li>• Microprocessor based Digital display of temperature along with calibration certificate by ISO17025 accredited agency.</li> <li>• Temperature recorder for inner chamber with maintenance free battery backup and auto charging of battery</li> </ul>		
9.	<b>Air circulation</b>	<ul style="list-style-type: none"> <li>• With two completely in built motors along with fan to keep the temperature uniform throughout the chamber</li> </ul>		
10.	<b>Heat up time &amp; Cool Down time</b>	<ul style="list-style-type: none"> <li>• 30 min. up to 60 ° C without load.</li> <li>• 40 min. up to + 5 ° C without load</li> </ul>		
11.	<b>Timer</b>	<ul style="list-style-type: none"> <li>• 0 to 24 hrs X 7 days cyclic ON / OFF timer for illuminating port</li> </ul>		

12.	<b>Safety Alarms</b>	<p>Provision for audio-visual alarm to indicate</p> <ul style="list-style-type: none"> <li>• Door opening after 2 min.</li> <li>• Self -diagnosis function including overheat</li> <li>• Prevention and overcurrent Protection</li> </ul>		
13.	<b>Computer Interface</b>	RS 485 / RS232 interface for multiple & single communication port		
14.	<b>Voltage stabilizer</b>	Automatic Stabilizer, 4 KVA with TDR (3minutes) electronic type		
15.	<b>Documents Certificates Performance and safety standards (specific to the device type); Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards.</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> <li>• Complete with IQ, OQ, PQ, Documents, Operations and Maintenance manuals</li> </ul>		
16.	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
17.	<b>Service contract clauses, including prices</b>	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
18.	<b>Operating manuals, service manuals, other manuals</b>	<p>Should provide 2 sets (hardcopy and soft- copy) of:-</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>		
19.	<b>Warranty</b>	<ul style="list-style-type: none"> <li>• Warranted for 3 years after satisfactory installation and working excluding consumable parts and accessories.</li> </ul>		
21.	<b>Operation maintenance &amp; training</b>	The supplier will have to carry out successful installation at our laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for scientific personnel operating the system and support services till customer satisfaction with the system.		
22.	<b>Payment</b>	Payment only after installation, validation and performance demonstration		



**15. Micro Filtration Unit**

<b>S. No.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>Please Specify whether the quoted model/items meets the specification (Yes/No)</b>	<b>Specify Make and Model</b>
1.	Application	Used for the collection and preparation of samples, mobile phases, and buffers to obtain the highest quality results from downstream analysis		
2.	All-Glass Filter Holder	With borosilicate glass funnel and base, anodized aluminum spring clamp, silicone stopper, coarse-frit glass filter support and PTFE-faced funnel and base for <ol style="list-style-type: none"> <li>1. 47 mm disc filters</li> <li>2. 90 mm disc filters</li> <li>3. 25 mm filters</li> </ol>		
3.	Stainless Steel Vacuum Filter Holders	Analytical Filter Holders For 25 and 47 mm disc filter.		
4.	Filtering Flasks	Side arm connects to vacuum source with 3/8in. I.D. hose. 1 L and 4 L flasks accept no. 8 perforated stopper. 125 mL flask accepts no. 5 stopper.		
5.	Filter Forceps	Highly polished stainless steel forceps blades with beveled, un- serrated tips to prevent damaging the membrane filter.		
6.	Oil less vacuum pump	flow rates of up to 37 L/min		
7.	Membrane Filters	Filters 47mm, 90 mm and 25 mm for <ol style="list-style-type: none"> <li>a) Aqueous solvents</li> <li>b) Hydrophobic solvents</li> </ol>		
8.	Payment	Payment only after installation, and performance demonstration		

**16. Digital pH meter**

<b>S no.</b>	<b>Specifications</b>	<b>Requirement</b>	<b>Please Specify whether the quoted model/items meets the specification (Yes/No)</b>	<b>Specify Make and Model</b>

1.	<b>Application</b>	For research with a comprehensive range of features and functions, making it suitable for general laboratory, QC and GLP based applications.		
2.	<b>Unit</b>	<b>Consisting of</b> Tri-combination pH/ATC electrode with an electrode holder/arm with smooth movement and protection cover		
3.	Working pH Range	0 – 14 pH		
4.	pH resolution	± 0.01 pH		
5.	Mv	<ul style="list-style-type: none"> <li>• Range 0 - ± 1999</li> <li>• Accuracy ± 1mV</li> <li>• Resolution 1 mV</li> </ul>		
6.	Temperature Compensation	0 to 100 ° C with ATC		
7.	Temperature	Range -10 to +105°C Resolution 0.1°C Accuracy ±0.5°C ATC range 0 to 100°		
8.	Calibration Points	<ul style="list-style-type: none"> <li>• Should have 3 stage calibration with auto buffer recognition</li> <li>• NIST traceable buffer set 500 ml each (pH 4.0, 7.0 &amp; 9.0).</li> </ul>		
9.	Alarm	<ul style="list-style-type: none"> <li>• Calibration reminder interval (1 to 999hrs)</li> </ul>		
10.	Temperature Compensation	<ul style="list-style-type: none"> <li>• Automatic</li> </ul>		
11.	Display	<ul style="list-style-type: none"> <li>• Backlit blue LCD with operation icon</li> <li>• digital display with 0.001 pH unit readability</li> </ul>		
12.	Accessories	<ul style="list-style-type: none"> <li>• Extra Electrode</li> <li>• NIST Standard buffer solution (pH 4.0, 7.0, 10.01 x 500ml for each bottle)</li> <li>• standard electrode holder</li> <li>• Ac /DC Adaptor.</li> </ul>		
13.	Power	<ul style="list-style-type: none"> <li>• 9V DC</li> </ul>		
14.	Data storage& Output	Data storage facility and record maximum and minimum value. <ul style="list-style-type: none"> <li>• RS.232C output and supply Data connector cable.</li> </ul>		
15.	Documents Certificates Performance and safety standards (specific to the	<ul style="list-style-type: none"> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards.</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BIS Standard)</li> </ul>		

	device type);Local and/or international	<ul style="list-style-type: none"> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> <li>• Complete with IQ, OQ, PQ, Documents, Operations and Maintenance manuals</li> </ul>		
16.	Supplier/Manufacturer	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
17.	Service contract clauses, including prices	<ul style="list-style-type: none"> <li>• List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
18.	Operating manuals, service manuals, other manuals	<p>Should provide 2 sets(hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided; ;</li> <li>• Certificate of calibration and inspection</li> </ul>		
19.	Payment	Payment only after installation, validation and performance demonstration		

## 17. Fumigator

Sl. No.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
1.	<b>Capacity</b>	<ul style="list-style-type: none"> <li>• 5 liters with easy cleaning facility</li> </ul>		
2.	<b>Material of construction</b>	<ul style="list-style-type: none"> <li>• Body should be compact, durable, leak proof and made of stainless steel /heavy duty plastic</li> </ul>		
3.	<b>Particle size</b>	<ul style="list-style-type: none"> <li>• It should produce aerosols with particle size of less than 5 microns</li> <li>• The blower head should be rust proof inert to Formaldehyde, KMnO<sub>4</sub>, H<sub>2</sub>O<sub>2</sub> and deliver aerosols uniformly.</li> </ul>		
4.	<b>Unit</b>	<ul style="list-style-type: none"> <li>• It should be compatible with all disinfectant solutions usual concentration.</li> <li>• It should be compatible with maximum pH range (both acid and alkali).</li> <li>• The equipment should be of good quality and conform to national/ international standards.</li> </ul>		

5.	<b>Power supply</b>	<ul style="list-style-type: none"> <li>The machine should operate on 220 +- 10 volts, 50 Hz, single phase, A.C</li> <li>Provided with Cable should be at least 5 meters in length, ISI marked.</li> </ul>		
6.	<b>Operation</b>	<ul style="list-style-type: none"> <li>The discharge rate should not be less than 1Liter/25 minutes.</li> <li>The tank capacity, discharge rate and timer on the machine should be so that the disinfectant should be able to disinfect 4000-5000 cubic feet in one cycle of 2 hours (max).</li> </ul>		
7.	<b>Operation and training component</b>	<ul style="list-style-type: none"> <li>The supplier will have to carry out successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction</li> </ul>		
8.	<b>Warranty</b>	<ul style="list-style-type: none"> <li>Warranted for 3 years after satisfactory working excluding consumable parts and accessories.</li> </ul>		
9.	Service contract clauses, including prices	<ul style="list-style-type: none"> <li>List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
10.	Operating manuals, service manuals, other manuals	<p>Should provide 2 sets(hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>Service and operation manuals (original and copy) to be provided;</li> <li>Advanced maintenance tasks documentation;</li> <li>.</li> </ul>		
11.	Payment	Payment only after satisfactory performance demonstration		

## 18. UV Viewing Cabinet

	<b>Specifications</b>	<b>Requirement</b>	<b>Please Specify whether the quoted model/items meets the specification (Yes/No)</b>	<b>Specify Make and Model</b>

1.	<b>Application</b>	Eyes are protected by the UV filter in the viewing window and used for inspecting thin-layer chromatograms or other objects under UV light in absence of ambient light.		
2.	<b>Unit</b>	<ul style="list-style-type: none"> <li>• User-safe, self-contained chamber with Convenient handling</li> <li>• Clear <b>viewing</b> window (open/close via hinged door) through button operation for each of two UV tubes</li> <li>• Homogeneous illumination of chamber</li> </ul>		
3.	<b>Viewport</b>	<ul style="list-style-type: none"> <li>• Soft rubber viewport and contrast control filter that absorbs UV energy to protect the eyes</li> </ul>		
4.	<b>UV tubes</b>	<p>Two UV tubes for illumination each 8W</p> <ul style="list-style-type: none"> <li>• <b>Long-wave UV light 366 nm</b></li> <li>• <b>Short-wave UV light 254nm)</b></li> </ul>		
5.	<b>Safety timer</b>	User safety through tilt sensor and timer (automatic switch- off after 10 min)		
6.	<b>Operation and training component</b>	<ul style="list-style-type: none"> <li>• The supplier will have to carryout successful demonstration at the laboratory premises (where ever the system has to be installed) and provide on – site comprehensive training for a minimum of two scientific personnel operating the system till customer satisfaction</li> </ul>		
7.	Certificates Performance and safety standards (specific to the device type); Local and/or international	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001for quality standards.</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements(or equivalent BIS Standard) Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>		
8.	Supplier/ Manufacturer	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
9.	Service Support Contact details (Hierarchy Wise; including a toll free/landline number)	<ul style="list-style-type: none"> <li>• Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/ad-hoc) to be declared by the manufacturer;</li> </ul>		
10.	Recommendati on s or warnings	<ul style="list-style-type: none"> <li>• Any warning signs would be adequately displayed</li> </ul>		

11.	<b>Warranty</b>	<ul style="list-style-type: none"> <li>Warranted for 3 years after satisfactory working excluding consumable parts and accessories.</li> </ul>		
12.	Service contract clauses, including prices	<ul style="list-style-type: none"> <li>List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
13.	Operating manuals, service manuals, other manuals	<p>Should provide 2 sets(hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>Service and operation manuals (original and copy) to be provided;</li> <li>Advanced maintenance tasks documentation;</li> </ul>		
14.	Payment	Payment only after satisfactory performance demonstration		

### 19. Anaerobic Jar (Anaerobic Jar Filling System)

S. No.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
1.		<p>The Anaerobic Jar Filling System is develop so to achieve anaerobic atmospheric condition inside the Jar in less than 1 minute.</p> <p>Create atmosphere suitable for the culture of anaerobic as well as Microaerophilic bacteria.</p> <p>To achieve quick Anaerobic / Microaerophilic conditions, used unique vacuum technology along with purging technology.</p> <p>No additional chemicals are needed to achieve an anaerobic / microaerophilic condition.</p> <p>Touch screen Display protected with security password. Touch screen display allows to control modified purging and vacuum time by end user.</p> <p>User friendly, through programmable touch screen display, Automatically managed draining and filling of gases.</p> <p>Simple assembly, easy to connect from Jar to System &amp; Disconnect (Vice Versa).</p> <p>Alternative gases like Nitrogen or gas like combination of CO<sub>2</sub> , N<sub>2</sub> or Co<sub>2</sub>, N<sub>2</sub> with 5 % H<sub>2</sub> can also be connect.</p>		
2.	<b>Dimensions ( W / D , H )</b>	200 mm X 400 mm X 350 mm		

3.	<b>Power Supply</b>	230 V		
4.	<b>Gas Supplies</b>	N2 and ANO2 ( CO2 : H2 : N2 ) ( 10 : 5 : 85 )		
5.	<b>Pressure</b>	150 kg / cm2		
6.	<b>Touch Screen Display</b>	HMI Type L 90 mm x D 50 mm		
7.	<b>Salient Features</b>	<ul style="list-style-type: none"> <li>• Quick &amp; Convenient Solution</li> <li>• Anaerobic Condition achieved within 1 Minute</li> <li>• Touch Screen LCD Display</li> <li>• User Friendly</li> <li>• Simple Assembly with Alternative Users Option</li> </ul>		
8.	<b>Warranty</b>	Warranted for 2 years after satisfactory installation and working excluding consumable parts and accessories.		
9.	<b>Service contract clauses, including prices</b>	List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;		
10.	<b>Operating manuals, service manuals, other manuals</b>	<p>Should provide 2 sets(hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>• User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>• List of equipment and procedures required for local calibration and routine maintenance;</li> <li>• Service and operation manuals (original and copy) to be provided;</li> <li>• Advanced maintenance tasks documentation;</li> <li>• Certificate of calibration and inspection</li> </ul>		
11.	<b>Payment</b>	Payment only after installation, validation performance demonstration		

## 20. Hot Air Oven

S. No.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
1.	<b>Application</b>	For drying glassware and also for conditioning of heat sensitive media and to provide an optimal, homogeneous, temperature uniformity and stability to ensure drying is complete		

2.	<b>Material of construction</b>	<ul style="list-style-type: none"> <li>• Should have double walled construction, with high quality insulated steel. Inner walls of 304 qualities SS, Outer walls of Epoxy Powder coated GI sheets.</li> <li>• Facility for adjustable shelves, 10 removable shelves to be provided.</li> <li>• With internal lighting facility, Insulated door fitted with heavy hinges, mechanical door lock.</li> </ul>		
3.	<b>Capacity</b>	<ul style="list-style-type: none"> <li>• Approx. 200 liters</li> </ul>		
4.	<b>Temperature range</b>	<ul style="list-style-type: none"> <li>• Temperature should be thermostatically controlled</li> <li>• It should be Ambient +5°C to 250°C with temperature setting accuracy <math>\pm 0.5</math> °C with forced air circulation for temperature uniformity</li> <li>• Separate PT 100 sensor and display for temperature (LED)</li> <li>• Safety alarms</li> </ul>		
5.	<b>Unit</b>	<ul style="list-style-type: none"> <li>• Air ventilators to be provided on both side</li> <li>• The equipment should be provide with microprocessor controlled digital display</li> <li>• Temperature homogeneity between top and bottom shelves should be maintained by forced circulation</li> </ul>		
6.	<b>Calibration</b>	<ul style="list-style-type: none"> <li>• Certificate from a ISO 17025 accredited lab for 3 different temperature points</li> </ul>		
7.	<b>Power supply</b>	All electrical peripherals required for smooth functioning e.g. voltage stabilizers should be provided.		
8.	<b>Accessories</b>	<ul style="list-style-type: none"> <li>• Should have all the accessories required for the functioning of the equipment.</li> </ul>		
9.	<b>Certificates Performance and safety standards (specific to the device type);Local and/or international</b>	<ul style="list-style-type: none"> <li>• Should be FDA/CE/BIS approved product.</li> <li>• Manufacturer and Supplier should have ISO 13485 certification under ISO 9001 for quality standards.</li> <li>• Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements(or equivalent BIS Standard)</li> <li>• Certified to be compliant with IEC 61010-1, IEC 61010-2-40 for safety</li> </ul>		
10.	<b>Supplier/ Manufacturer</b>	<ul style="list-style-type: none"> <li>• Must be ISO certified for quality</li> </ul>		
11.	<b>Service Support Contact details (Hierarchy Wise; including a toll free/landline</b>	<ul style="list-style-type: none"> <li>• Contact details of manufacturer, supplier and local service agent to be provided; Any Contract (AMC/CMC/adhoc) to be declared by the manufacturer;</li> </ul>		



	number)			
12.	Recommendations or warnings	<ul style="list-style-type: none"> <li>Any warning signs would be adequately displayed</li> </ul>		
13.	Warranty	<ul style="list-style-type: none"> <li>Warranted for 3 years after satisfactory working excluding consumable parts and accessories.</li> </ul>		
14.	Service contract clauses, including prices	<ul style="list-style-type: none"> <li>List of all spares and accessories (including minor) with part numbers and price, required for maintenance and repairs in future after guarantee/warranty period should be attached;</li> </ul>		
15.	Operating manuals, service manuals, other manuals	<p>Should provide 2 sets(hardcopy and soft-copy) of:-</p> <ul style="list-style-type: none"> <li>User, technical and maintenance manuals to be supplied in English language along with machine diagrams;</li> <li>Service and operation manuals (original and copy) to be provided;</li> <li>Advanced maintenance tasks documentation;</li> </ul>		
16.	Payment	Payment only after satisfactory performance demonstration		

21. Micropipettes (\*6 No's)

Sno.	Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
1	Material	Liquid handling equipment, Autoclavable		
2	Capacity /Volume	20-200 micro liter (Variable) 100-1000 micro liter (Variable ) 1-10ml (Variable) *2 each		
3	Feature	<ul style="list-style-type: none"> <li>Single – channel/manual</li> <li>Volume lock to prevent drifting</li> </ul>		
4	Accessory	Tips, Tip boxes		
5	Calibration	Certificate from ISO17025 accredited lab for 3 points		
6	Warranty	03 years		

22. Carbon dioxide Incubator

Specifications	Requirement	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
Capacity	150-200 Litres		
Display	LCD/LED (minimum 5")		
Processor	microprocessor		
Heating type	Air/water/Gel (microcomputer control)		
No. of shelves	3-5 minimum		
Temp. control range	0 - 80°C		
Ambient temp. range	20-40°C		
Temp. control accuracy	± 0.1		
Temp. uniformity	± 0.3		
CO <sub>2</sub> sensor	IR sensor		
CO <sub>2</sub> control range	0-20%		
CO <sub>2</sub> stability	± 0.1%		
CO <sub>2</sub> recovery time	0-10 min		
CO <sub>2</sub> tank switch/alarm	Yes		
Temp. recovery	5-15 min		
O <sub>2</sub> control system	Yes		
O <sub>2</sub> Range	0-20%		
O <sub>2</sub> accuracy	± 0.2%		
O <sub>2</sub> sensor	yes		
Humidity	95±5%		
Humidity recovery	10-20 min		
Alarm	Audio & visual		
Stacking	Possible		
Cylinders	CO <sub>2</sub> cylinders (2 nos.); Capacity- 9-10kg; Purity- 98.00%		
Communication port	Yes		
Power	AC 230V/6A, 50Hz		
Power consumption	500-600W (max.); 50-100W at 37°C		
Disinfection	Multiple will be preferred		

<b>Calibration</b>	Certificate from NABL accredited lab for 3 points		
<b>Warranty</b>	03 years with user manual		

### 23. Frost free Two Door (side by side) Refrigerator

S.No.	Specifications	Please Specify whether the quoted model/items meets the specification (Yes/No)	Specify Make and Model
	<b>Material Stainless steel</b>		
1	Capacity	Approx. 500 liters and above	
2	Adjustable Shelves	Tempered glass shelves 05 No.	
3	Temperature Range	Digital display and temperature controls Refrigerator +2 <sup>o</sup> to +8 <sup>o</sup> C Freezer -20 <sup>o</sup> C	
	Audio alarm	Alarm is door is ajar for long	
4	Inner body	Rust Free Material	
5	Refrigerant	CFC / HCFC Free	
6	Frost Free		
7	Door Lock & Interior light		
8	Same Temperature: Top to Bottom		
9	Microprocessor based Temperature Controller with Digital Display		
10	In built Voltage Stabilizer High/Low cut with timer delay		
11	Door Glass Heater for special heated front glass that enhances visibility and prevents unhygienic condensation		
12	Warranty 3years and Life time on motor		

### 24. Microbiological Media and Consumables

Sl. No.	MEDIA(Quote should be of 500gm bottles)	Yes/No
1	Acetate Agar	
2	Baird Parker Agar	
3	Bismuth Sulphite Agar	
4	Brain Heart Infusion Broth	
5	Brilliant Green Lactose Bile Broth 2%	
6	Bromocresol Purple Carbohydrate Broth	
7	Buffered Peptone Water	
8	Butterfield's Buffered Phosphate Diluent	
9	Cooked Meat Medium	
10	Carbohydrate Utilization Broth	
11	Czapek Yeast (Autolysate) CYA agar	
12	Decorboxylase Test Medium (Lysine, Ornithine, Arginine provide separately)	

13	Dextrose Tryptone Agar	
14	EC Broth	
15	Egg Yolk Tellurite Supplement	
16	Frazer Broth	
17	L- EMB Agar	
18	Gelatin Phosphate Salt Broth	
19	Gram Negative Broth (GN)	
20	Hektoen Enteric Agar	
21	Hough & Liefson Medium	
22	Half Frazer Broth	
23	Klinger Iron Agar	
24	Koser's Citrate Broth	
25	Lactobacillus MRS Agar	
26	Lactose Broth	
27	Lactose Gelatin Medium	
28	Lauryl Tryptose Broth	
29	Liver Broth	
30	Lysine Iron Agar	
31	Macconkey agar	
32	Malonate Broth	
33	Malt Agar	
34	Motility Test Medium	
35	MRVP Broth	
36	MYP Agar	
37	Modified Oxford Agar	
38	MY-40 Agar	
39	Nitrate Broth	
40	Nutrient Broth	
41	Nutrient Agar	
42	Peptone Water Diluent	
43	Plate Count Agar	
44	Phenol Red Carbohydrate Broth	
45	Potato Dextrose Agar	
46	Pseudomonas Presumptive Test Broth	
47	Pseudomonas confirmation medium (Skim Milk Agar)	
48	Palcam Agar	
49	Phosphate Buffered peptone water	
50	Selenite Cystine Broth	
51	Sheep Blood Agar	
52	Sulphite Agar	
53	Tetrathionate Broth	
54	Thiosulfate-Citrate-Bile Salts-Sucrose Agar (TCBS)	
55	T1 N1 Agar	
56	Thioglycollate Agar	
57	Tryptone Glucose Extract Agar	
58	Triple Sugar Iron Agar	

59	Tryptone Broth	
60	Trypticase Soy Broth	
61	Tryptose-Sulfite Cycloserine (TSC) Agar	
62	Urea Broth	
63	Violet Red Bile Agar	
64	Xylose Lysine Deoxycholate Agar (XLD)	

### **PART III- STANDARD CONDITIONS OF RFP**

The Bidder is required to give confirmation of their acceptance of the Standard Conditions of the Request for Proposal mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder (i.e. Seller in the Contract) as selected by the Tender Inviting Authority(i.e. Buyer). Failure to do so may result in rejection of the Bid submitted by the Bidder.

2. **Law:** The Supply Order shall be considered and made in accordance with the law of the Republic of India. The Supply Order shall be governed by and interpreted in accordance with the laws of the Republic of India.

3. **Empanelment.** Bidder for empanelment will be selected from amongst the technically qualified bidder whose bid will be the lowest and all other technically qualified bidder will be given opportunity to match the L-1 price. Rate contract will be signed with only those bidders who will match the L-1 price.

4. **Effective Date and Period of the Contract.** The contract shall be for a period of 03 years and should come into effect on the date of signature/acceptance by both the parties on the contract (Effective Date) and shall remain valid until the completion of the obligations of the parties under the contract. The deliveries and supplies and performance of the services shall commence from the effective date of the contract.

5. **Effective Date of the Supply Order:** The Supply Order shall come into effect on the date of its acknowledgment by the Seller and shall remain valid until the completion of the obligations of the parties under the Supply Order. The deliveries and supplies and performance of the service shall commence from the effective date of the Supply Order.

6. **Arbitration.** All disputes or differences arising out of or in connection with the Contract shall be settled by bilateral discussions. Any dispute, disagreement or question arising out of or relating to the Contract or relating to construction or performance, which cannot be settled amicably, may be resolved through arbitration. The standard clause of arbitration is as per the Arbitration and Conciliation Act, 1996 of India. Venue of Arbitration shall be the place from where the contract has been issued i.e. New Delhi, India.

7. **Penalty for use of Undue influence.** The Seller undertakes that he has not given, offered or promised to give, directly or indirectly, any gift, consideration, reward, commission, fees, brokerage or inducement to any person in service of the Buyer or otherwise in procuring the Contracts or forbearing to do or for having done or forborne to do any act in relation to the obtaining or execution of the present Contract or any other Contract with the Government of India for showing or forbearing to show favour or disfavour to any person in relation to the present Contract or any other Contract with the Government of India. Any breach of the aforesaid undertaking by the Seller or any one employed by him or acting on his behalf (whether with or without the knowledge of the Seller) or the commission of any offers by the Seller or anyone employed by him or acting on his behalf, as defined in Chapter IX of the Indian Penal Code, 1860 or the Prevention of Corruption Act, 1986 or any other Act enacted for the prevention of corruption shall entitle the Buyer to cancel the contract and all or any other contracts with the Seller and recover from the Seller the amount of any loss arising from such cancellation. A decision of the Buyer or his nominee to the effect that a breach of the undertaking had been committed shall be final and binding on the Seller. Giving or offering of any gift, bribe or inducement or any attempt at any such act on behalf of the Seller towards any officer/employee of the Buyer or to any other person in a position to influence any officer/employee of the Buyer for showing any favour in relation to this or any other contract, shall render the Seller to such liability/penalty as the Buyer may deem proper, including but not limited to termination of the contract, imposition of penal damages, forfeiture of the Bank Guarantee and refund of the amounts paid by the Buyer.

8. **Agents / Agency Commission:** The Seller confirms and declares to the Buyer that the Seller is the original manufacturer of the stores/provider of the services referred to in this Supply Order and has not engaged any individual or firm, whether Indian or foreign whatsoever, to intercede, facilitate or in any way to recommend to the Government of India or any of its functionaries whether officially or unofficially, to the

award of the Supply Order to the Seller; nor has any amount been paid, promised or intended to be paid to any such individual or firm in respect of any such intercession, facilitation or recommendation. The Seller agrees that if it is established at any time to the satisfaction of the Buyer that the present declaration is in any way incorrect or if at a later stage it is discovered by the Buyer that the Seller has engaged any such individual/firm, and paid or intended to pay any amount, gift, reward, fees, commission or consideration to such person, party, firm or institution, whether before or after the signing of this Supply Order, the Seller will be liable to refund that amount to the Buyer. The Seller will also be debarred from entering into any Supply Order with the Government of India/FSSAI for a minimum period of five years. The Buyer will also have a right to consider cancellation of the Supply Order either wholly or in part, without any entitlement or compensation to the Seller who shall in such an event be liable to refund all payments made by the Buyer in terms of the Supply Order along with interest at the rate of 2% per annum above LIBOR rate. The Buyer will also have the right to recover any such amount from any Supply Orders concluded earlier with the Government of India/FSSAI.

9. **Non-disclosure of Supply Order documents:** Except with the written consent of the Buyer / Seller, other party shall not disclose the Supply Order or any provision, specification, plan, design, pattern, sample or information thereof to any third party.

10. **Termination of Supply Order:** The Buyer shall have the right to terminate this Supply Order in part or in full in any of the following cases:-

(a) The delivery of the material is delayed for causes not attributable to Force Majeure for more than (02 months) after the scheduled date of delivery.

(b) The Seller is declared bankrupt or becomes insolvent.

(c) The delivery of material is delayed due to causes of Force Majeure by more than (04 months).

(d) The Buyer has noticed that the Seller has utilized the services of any Indian/Foreign agent in getting this Supply Order and paid any commission to such individual/company etc.

(e) As per decision of the Arbitration Tribunal.

11. **Notices** : Any notice required or permitted by the Supply Order shall be written in the English language and may be delivered personally or may be sent by FAX or registered pre-paid mail/airmail, addressed to the last known address of the party to whom it is sent.

12. **Transfer and Sub-letting:** The seller has no right to give, bargain, sell, assign or sublet or otherwise dispose of the Supply Order or any part thereof, as well as to give or to let a third party take benefit or advantage of the present Supply Order or any part thereof.

13. **Patents and other Industrial Property Rights:** The prices stated in the present Supply Order shall be deemed to include all amounts payable for the use of patents, copyrights, registered charges, trademarks and payments for any other industrial property rights. The Seller shall indemnify the Buyer against all claims from a third party at any time on account of the infringement of any or all the rights mentioned in the previous paragraphs, whether such claims arise in respect of manufacture or use. The Seller shall be responsible for the completion of the supplies including spares, tools, technical literature and training aggregates irrespective of the fact of infringement of the supplies, irrespective of the fact of infringement of any or all the rights mentioned above.

14. **Amendments:** No provision of present Supply Order shall be changed or modified in any way (including this provision) either in whole or in part except by an instrument in writing made after the date of this Supply Order and signed on behalf of both the parties and which expressly states to amend the present Supply Order.

## 15. **Taxes and Duties**

### (i) **General**

- (a) Bidders must indicate separately the relevant Taxes/Duties likely to be paid in connection with delivery of completed goods specified in RFP. In absence of this, the total cost quoted by them in their bid will be taken into account in the ranking of bids.
- (b) If a Bidder is exempted from payment of any duty/tax upto any value of supplies from them, he should clearly state that no such duty/tax will be charged by them up to the limit of exemption which they may have. If any concession is available in regard to rate/quantum of any duty/tax, it should be brought out clearly. In such cases, relevant certificate will be issued by the Buyer later to enable the Seller to obtain exemptions from taxation authorities.
- (c) Any changes in levies, taxes and duties levied by Central/State/Local government such as excise duty, Octroi/entry tax, GST etc. on final product upward as a result of any statutory variation taking place within contract period shall be allowed reimbursement by the Buyer, to the extent of actual quantum of such duty/tax paid by the Seller. Similarly, in case of downward revision in any such duty/tax, the actual quantum of reduction of such duty/tax shall be reimbursed to the Buyer by the Seller. All such adjustments shall include all reliefs, exemptions, rebates, concession etc, if any, obtained by the Seller. Section 64-A of Sales of Goods Act will be relevant in this situation.
- (d) Levies, taxes and duties levied by Central/State/Local governments such as excise duty, Octroi/entry tax, GST etc. on final product will be paid by the Buyer on actuals, based on relevant documentary evidence. Taxes and duties on input items will not be paid by Buyer and they may not be indicted separately in the bids. Bidders are required to include the same in the pricing of their product.

### (ii) **GST**

- (a) If it is desired by the Bidder to ask for GST to be paid as extra, the same must be specifically stated. In the absence of any such stipulation in the bid, it will be presumed that the prices quoted by the Bidder are inclusive of GST and no liability of GST will be developed upon the Buyer.
- (b) On the Bids quoting GST extra, the rate and the nature of GST applicable at the time of supply should be shown separately. GST will be paid to the Seller at the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale is legally liable to GST and the same is payable as per the terms of the Supply Order.

### (iii) **Octroi Duty & Local Taxes**

- (a) Normally, materials to be supplied to Government Departments against Government Supply Orders are exempted from levy of town duty, Octroi Duty, Terminal Tax and other levies of local bodies. The local Town/Municipal Body regulations at times, however, provide for such Exemption only on production of such exemption certificate from any authorised officer. Seller should ensure that stores ordered against Supply Orders placed by this office are exempted from levy of Town Duty/Octroi Duty, Terminal Tax or other local taxes and duties. Wherever required, they should obtain the exemption certificate from the Buyer, to avoid payment of such local taxes or duties.
- (b) In case where the Municipality or other local body insists upon payment of these duties or taxes the same should be paid by the Seller to avoid delay in supplies and possible demurrage charges. The receipt obtained for such payment should be forwarded to the Buyer without delay together with a copy of the relevant act or by-laws/notifications of the Municipality of the local body concerned to enable him to take up the question of refund with the concerned bodies if admissible under the said acts or rules.



## PART IV- SPECIAL CONDITIONS OF RFP

1. The Bidder is required to give confirmation of their acceptance of Special Conditions of the RFP mentioned below which will automatically be considered as part of the Contract concluded with the successful Bidder (i.e. Seller in the Contract) as selected by the Tender Inviting Authority (i.e. Buyer). Failure to do so may result in rejection of Bid submitted by the Bidder.

2. **Performance Guarantee:**

The Seller will be required to furnish a Performance Guarantee to **FSSAI/State Food Commissioners or any office designated by FSSAI** by way of Bank Guarantee through a public sector bank or a private sector bank authorized to conduct government business for a sum equal to 10% of the contract value within 30 days of receipt of the confirmed order. Performance Bank Guarantee should be valid up to 60 days beyond the date of warranty.

3. **Option Clause:** To take care of any change in the requirement during the period starting from issue of RFP till placement of the contract, Buyer reserves the right to 100% plus/minus increase or decrease the quantity of the required goods up to that limit without any change in the terms & conditions and prices quoted by the Seller. While awarding the contract, the quantity ordered can be increased or decreased by the Buyer within this tolerance limit.

4. **Payment Terms:** The payment will be made as per the following terms on production of the requisite documents:

S.N.	Amount to be paid, INR	Condition(s) for release
<b>Part A</b>		
1	80 % of the cost of equipment	On satisfactory installation and commissioning of the equipments
2	Balance 20% of the cost of equipment	On successful demonstration of the facility, training and validation
<b>Part B</b>		
1.	100% of the total cost of civil and electrical works	On Completion of Associated civil/electrical work
<b>Part C</b>		
1.	Manpower	The payment in respect of manpower will be released on half yearly basis, after it becomes due.

5. **Fall clause.** The following Fall clause will form part of the contract placed on successful bidder

(a) The price charged for the stores supplied under the contract by the Seller shall in no event exceed the lowest prices at which the Seller sells the stores or offer to sell stores of identical description to any persons/Organisation including the purchaser or any department of the Central government or any Department of State government or any statutory undertaking of the Central or State government as the case may be during the period till performance of all supply Orders placed during the currency of the rate contract is completed.

(b) If at any time, during the said period the Seller reduces the sale price, sells or offer to sell such stores to any person/organisation including the Buyer or any Deptt, of Central Govt. or any Department of the State Government or any Statutory undertaking of the Central or State Government as the case may be at a price lower than the price chargeable under the contract, the

Seller shall forthwith notify such reduction or sale or offer of sale to the Buyer and the price payable under the contract for the stores of such reduction of sale or offer of the sale shall stand correspondingly reduced.

(c) The Seller shall furnish the following certificate to the Paying Authority along with each bill for payment for supplies made against the Rate contract – “We certify that there has been no reduction in sale price of the stores of description identical to the stores supplied to the Government under the contract herein and such stores have not been offered/sold by me/us to any person/organisation including the purchaser or any department of Central Government or any Department of a state Government or any Statutory Undertaking of the Central or state Government as the case may be upto the date of bill/the date of completion of supplies against all supply orders placed during the currency of the Rate Contract at price lower than the price charged to the government under the contract except for quantity of stores categories under sub-clauses (a),(b) and of sub-para (ii) above details of which - .....”.

6. **Risk & Expense clause:-**

(a) Should the stores or any installment thereof not be delivered within the time or times specified in the contract documents, or if defective delivery is made in respect of the stores or any installment thereof, the Buyer shall after granting the Seller 45 days to cure the breach, be at liberty, without prejudice to the right to recover liquidated damages as a remedy for breach of contract, to declare the contract as cancelled either wholly or to the extent of such default.

(b) Should the stores or any installment thereof not perform in accordance with the specifications / parameters provided by the SELLER during the check proof tests to be done in the BUYER's country, the BUYER shall be at liberty, without prejudice to any other remedies for breach of contract, to cancel the contract wholly or to the extent of such default.

(c) In case of a material breach that was not remedied within 45 days, the BUYER shall, having given the right of first refusal to the SELLER be at liberty to purchase, manufacture, or procure from any other source as he thinks fit, other stores of the same or similar description to make good:-

(i) Such default.

(ii) In the event of the contract being wholly determined the balance of the stores remaining to be delivered there under.

(d) Any excess of the purchase price, cost of manufacturer, or value of any stores procured from any other supplier as the case may be, over the contract price appropriate to such default or balance shall be recoverable from the SELLER. Such recoveries shall not exceed 10% of the value of the contract.”

7. **Force Majeure clause :-**

(a) Neither party shall bear responsibility for the complete or partial nonperformance of any of its obligations (except for failure to pay any sum which has become due on account of receipt of goods under the provisions of the present contract), if the non-performance results from such Force Majeure circumstances as Flood, Fire, Earth Quake and other acts of God as well as War, Military operation, blockade, Acts or Actions of State Authorities or any other circumstances beyond the parties control that have arisen after the conclusion of the present contract.

(b) In such circumstances the time stipulated for the performance of an obligation under the present contract is extended correspondingly for the period of time of action of these circumstances and their consequences.

(c) The party for which it becomes impossible to meet obligations under this contract due to Force Majeure conditions, is to notify in written form the other party of the beginning and cessation of the above circumstances immediately, but in any case not later than 10 (Ten) days from the moment of their beginning.

(d) Certificate of a Chamber of Commerce (Commerce and Industry) or other competent authority or organization of the respective country shall be a sufficient proof of commencement and cessation of the above circumstances.

(e) If the impossibility of complete or partial performance of an obligation lasts for more than 4 (four) months, either party hereto reserves the right to terminate the contract totally or partially upon giving prior written notice of 30 (thirty) days to the other party of the intention to terminate without any liability other than reimbursement on the terms provided in the agreement for the goods received.

8. **Specification:** The following Specification clause will form part of the contract placed on successful Bidder - The Seller guarantees to meet the specifications as per Part-II of RFP and to incorporate the modifications to the existing design configuration to meet the specific requirement of the Buyer Services as per modifications/requirements recommended after the Maintenance Evaluation Trials. All technical literature and drawings shall be amended as the modifications by the Seller before supply to the Buyer. The Seller, in consultation with the Buyer, may carry out technical upgradation/alterations in the design, drawings and specifications due to change in manufacturing procedures, indigenization or obsolescence. This will, however, not in any way, adversely affect the end specifications of the equipment. Changes in technical details, drawings repair and maintenance techniques alongwith necessary tools as a result of upgradation/alterations will be provided to the Buyer free of cost within (7) days of affecting such upgradation/alterations.

9. **Quality:** The quality of the stores delivered according to the present Contract shall correspond to the technical conditions and standards valid for the deliveries of the same stores for in Seller's country or specifications enumerated as per RFP and shall also include therein modification to the stores suggested by the Buyer. Such modifications will be mutually agreed to. The Seller confirms that the stores to be supplied under this Contract shall be new i.e. not manufactured before (Year of Contract), and shall incorporate all the latest improvements and modifications thereto and spares of improved and modified equipment are backward integrated and interchangeable with same equipment supplied by the Seller in the past if any. The Seller shall supply an interchangeability certificate along with the changed part numbers wherein it should be mentioned that item would provide as much life as the original item.

10. **Inspection Authority:** Inspection may be carried out by a duly appointed Inspection Officer or duly constituted Inspection Committee before award of tender at the cost of the bidder.

11. **Franking clause:** The following franking clause will form part of the contract placed on successful Bidder –

(a) In the case of Acceptance of Goods “The fact that the goods have been inspected after the delivery period and passed by the Inspecting Officer/Committee will not have the effect of keeping the Contract alive. The goods are being passed without prejudice to the rights of the Tenderer under the terms and conditions of the Contract”.

(b) In the case of Rejection of Goods “The fact that the goods have been inspected after the delivery period and rejected by the Inspecting Officer/Committee will not bind the Buyer in any manner. The goods are being rejected without prejudice to the rights of the Buyer under the terms and conditions of the Supply Order.”

12. **Warranty/Training:** The Seller has to warrant that the Goods supplied under this Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract.

13. **Warranty:** Warranty should be provided as mentioned against each equipment after successful installation of the instrument. Service and training during warranty period should be free of cost. This should cover the repair and maintenance with spare parts of the equipment purchased under the Supply Order. This will also include :

(i) **Preventive Maintenance Service:** The Seller will provide a minimum of two Preventive Maintenance Service visits during a year to the operating base to carry out functional check-ups and minor adjustments/tuning as may be required.

(ii) **Breakdown Maintenance Service:** In case of any breakdown of the equipment/system, on receiving a call from the Buyer, the Seller is to provide maintenance service to make the equipment/system serviceable.

(b) **Response time:** The response time of the Seller should not exceed 48 hours from the time the breakdown intimation is provided by the Buyer.

(c) Serviceability of 90% per year is to be ensured. This amounts to total maximum downtime of 37 days per year. Also unserviceability should not exceed 2 working days at one time. Required spares to attain this serviceability may be stored at site by the Seller at his own cost. Total down time would be calculated at the end of the year. If downtime exceeds permitted downtime, Liquidated Damages would be applicable for the delayed period.

(d) Maximum repair turnaround time for equipment/system would be 3 days. However, the spares should be maintained in a serviceable condition to avoid complete breakdown of the equipment/system.

(e) **Technical Documentation :** All necessary changes in the documentation (Technical and Operators manual) for changes carried out on hardware and software of the equipment will be provided.

(f) During the Warranty period, the Seller shall carry out all necessary servicing/repairs to the equipment/system under Warranty at the current location of the equipment/system. Prior permission of the Buyer would be required in case certain components/sub systems are to be shifted out of location. On such occasions, before taking over the goods or components, the Seller will give suitable bank guarantee to the Buyer to cover the estimated current value of item being taken.

(g) The Buyer reserves its right to terminate the maintenance Supply Order at any time without assigning any reason after giving a notice of 1 month. The Seller will not be entitled to claim any compensation against such termination. However, while terminating the Supply Order, if any payment is due to the Seller for maintenance services already performed in terms of the Supply Order, the same would be paid to it as per the Supply Order terms.

14. **Training:** Training for the operation of instrument, software, data evaluation, trouble shooting and development of analytical methods will be provided free of cost during the warranty period.

15. **Uptime.** The successful bidder will guarantee to provide 90% uptime of all the systems during warranty and subsequent AMC. In case of failure to do so, proportionate payment will be deducted from the bank guarantee/payment due to the successful bidder. **A certificate as per Annexure III may be enclosed with the Technical Bid.**

16. **Intellectual Proprietary Rights.** The Seller shall, at all times, indemnify and keep indemnified the Buyer, free of cost, against all claims which may arise in respect of goods & services to be provided by the Seller under the contract for infringement of any intellectual property rights or any

other right protected by patent, registration of designs or trademarks.

In the event of any such claim in respect of alleged breach of patent, registered designs, trademarks etc. being made against the Buyer, the Buyer shall notify the successful bidder of the same and the Seller shall, at his own expenses take care of the same for settlement without any liability to the Buyer.

The Seller/its Indian Agent/CMC Provider shall at all times, indemnify and keep indemnified the Buyer/ Government of India against all claims/ damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under Comprehensive Warranty/ CAMC.

17. **Presentation:** Technically qualified bidders may have to make a presentation before the Technical Evaluation Committee.

18. **Special conditions:**

(a) The bidder has to arrange supply of equipment/material as per the technical specification mentioned in para 2 of Part II of RFP.

(b) The bidder has to provide the after sales support for the equipment/material and other works done.

(c) The certificate of fitness shall be obtained by the Seller.

(d) Onsite performance evaluation of the equipment may be carried out for those who qualify in the technical bid.

(e) The bidder will ensure that the equipment is properly insured for 110% of the order value to cover the transit upto site of installation of the equipment.

(f) Best trade packing suitable for safe Rail/Road/Air transit shall be used subject to packing and marking being acceptable to the Inspecting Authority.

## **PART V- EVALUATION CRITERIA & PRICE BID ISSUE**

1. **Evaluation Criteria**- The broad guidelines for evaluation of Bids will be as follows:
- (a) Only those Bids will be evaluated which are found to be fulfilling all the eligibility and qualifying requirements of the RFP, both technically and commercially.
  - (b) In respect of Two-Bid system, the technical Bids forwarded by the Bidders will be evaluated by the Tender Inviting Authority with reference to the technical characteristics mentioned in the RFP. The compliance of Technical Bids would be determined on the basis of the parameters specified in the RFP.
  - (c) The commercial terms and documents submitted as part of the technical bids shall be scrutinized by a Technical Evaluation Committee constituted by the Tender Inviting Authority.
  - (d) The Technical Evaluation Committee may also verify the veracity of claims in respect of the known performance of the equipment offered, the experience and reputation of bidder in the field, the financial solvency etc.
  - (e) The decisions of the Technical Evaluation Committee on whether the tenders are responsive or non-responsive or requiring clarifications will be informed.
  - (f) The demonstration/presentation may also be conducted by Technical Evaluation Committee in which external experts from the User Institutions/funding agencies may be Invited.
  - (g) The price Bids of only those Bidders will be opened whose Technical Bids are cleared after technical evaluation.
  - (h) The Lowest Bid will be decided upon the lowest price quoted by the particular Bidder as per the Price Format given at Para 2 below. The consideration of taxes and duties in evaluation process will be as follows :-
    - L-1 bidder will be selected from amongst the technically qualified bidder and all other technically qualified bidder will be given opportunity to match the L-1 price. Rate contract will be signed with only those bidders who will match the L-1 price.
    - L-1 bidder will be determined by excluding levies, taxes and duties levied by Central/State/Local governments such as excise duty, GST, Octroi/entry tax, etc. on Goods and Services as quoted by bidders.
  - (j) If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price will prevail and the total price will be corrected. If there is discrepancy between words and figures; the amount in words will prevail for calculation of price.
  - (k) The Lowest acceptable Bid will be considered further for placement of Supply order after complete clarification and price negotiations as decided by the Tender Inviting Authority.
  - (l) The Bidders are required to spell out the rates of GST, etc in unambiguous terms; otherwise their offers will be loaded with the maximum rates of duties and taxes for the purpose of comparison of prices. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of such duties will be entrained after the opening of tenders.
  - (m) Any other criteria as applicable to suit in a particular case.

2. **Price Bid Format :** The Price Bid Format is given below and Bidders are required to fill this up correctly with full details, as required under Part-II of RFP :-

**Cost Details**

Sl. No.	Instruments/Consumables	Qty	Price in INR
1	Laminar Air Flow	01	
2	Bio Safety Cabinet Class II Type B2 (Total Exhaust)	01	
3	Autoclave Vertical	01	
4	Incubators: 1) Ambient to 70 °C and 2) 5 °C to 50°C	01	
5	Digital Colony Counter	01	
6	Stomacher (Lab Blender)	01	
7	Water Bath – Serological	01	
8	Analytical Balance	01	
9	Upright Frost Free Vertical Deep Freezer (-25 °C)	01	
10	UV-Vis Spectrophotometer	01	
11	Binocular Microscope	01	
12	Howard Mold Counter	01	
13	Refrigerated Centrifuge	01	
14	BOD Incubator	01	
15	Micro Filtration Assembly	01	
16	Digital pH Meter	01	
17	Fumigator	01	
18	UV Viewing Chamber	01	
19	Anaerobic Jar	01	
20	Hot Air Oven	01	
21	Micropipette	06	
22	Carbon di oxide incubator	01	
23	Frost Free Double door (side by side)Refrigerator	01	

24	Microbiological Media And Consumables	As per list attached in Technical Bid	
25.	Manpower as per Part C of Part II of RFP for 01st year		
	Manpower as per Part C of Part II of RFP for 2 <sup>nd</sup> year		
	Manpower as per Part C of Part II of RFP for 3 <sup>rd</sup> year		
27.	Total Cost(Excluding Taxes and Duties)		

**Note1:**

- (a) The financial bid has to be filled necessarily in the format given above and has to be signed by the authorized representative of the bidder with full name designation and seal on each page. The above quote should include Clearing and Transportation charges.
- (b) **This project is a turnkey project.** The bidder has to quote price for all the items mentioned above. In case bidder fails to quote price for all the items his bid will not be considered for evaluation. Consortium is allowed as a single entity or a subsidiary.
- (c) Price quoted should be valid for minimum 36 months from the last date of submission of the bids.
- (d) Explanatory notes, if so desired, can be separately submitted along with the financial bid but financial bid in the above format is required to be submitted.
- (e) Please indicate separately any duties, taxes.

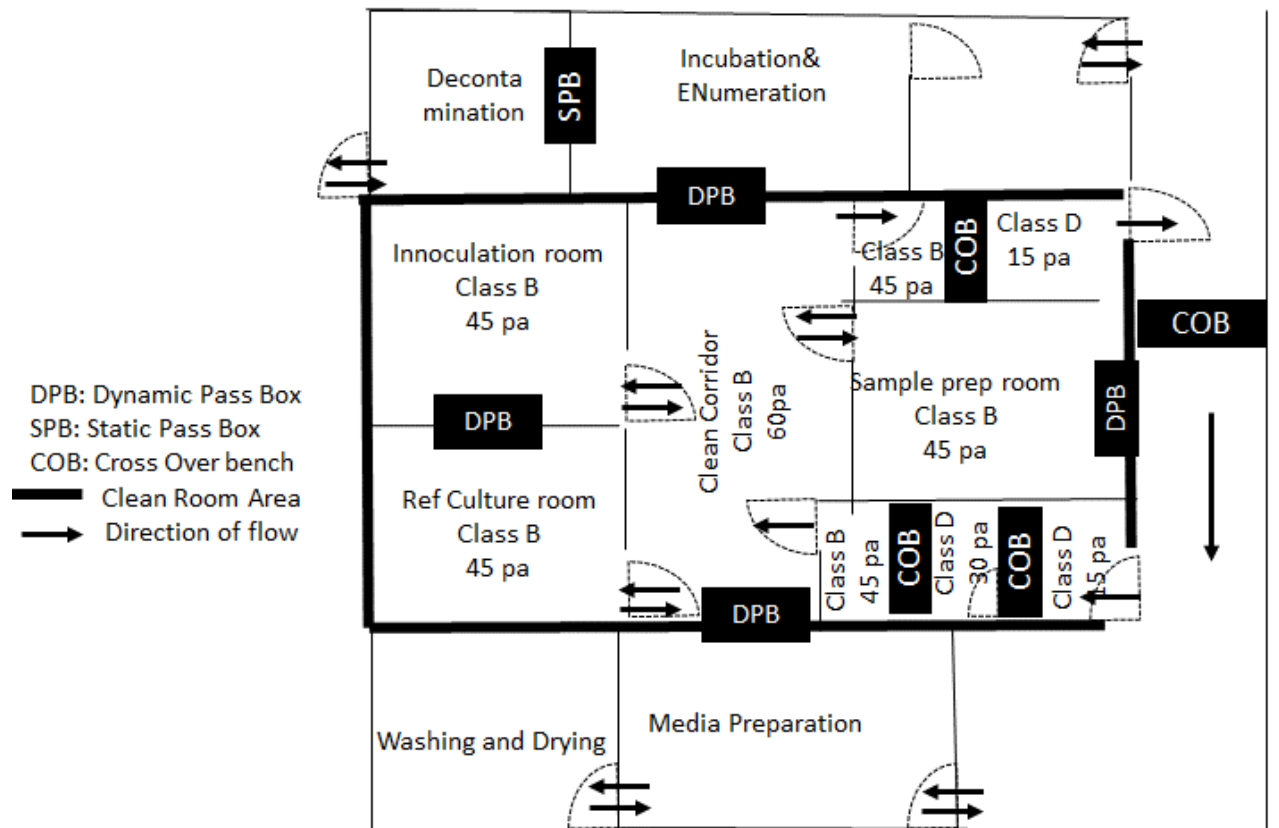
**Note 2 :** The rate may be quoted in foreign currency and/or in Indian currency, however, for comparison/evaluation purpose the bills selling market rate of exchange established by RBI for similar transaction as on date of opening of price bid shall be used to convert foreign currencies to the Indian rupees.

**Note 3 :** Determination of L-1 will be done based on Net amount (not including levies, taxes and duties levied by Central/State/Local governments such as excise duty, GST, Octroi/entry tax, etc. on final product) of all items/requirements as mentioned above.

Signature of tenderer \_\_\_\_\_  
Name in Block letter \_\_\_\_\_  
Date \_\_\_\_\_  
Capacity in which Signed \_\_\_\_\_



## Schematic showing a layout for a Microbiology Lab



**Declaration Form**

I/We M/s. \_\_\_\_\_ represented by its Proprietor / Managing  
Partner / Managing Director having its Registered Office at

\_\_\_\_\_ do hereby declare that I/We have  
carefully read all the conditions of tender..... **dated** ..... for supply of ..... floated  
by the Food Safety Standard Authority of India, New Delhi and accepts all terms & conditions of the Tender.

Signature and Seal of the Bidder  
Name in capital letters with Designation

**NOTE:**

1. This should be submitted on the letter head of the bidder company/firm.

### CERTIFICATE OF GUARANTEE/WARRANTY

- i. I/We certify that the standard guarantee/warranty shall be for a period of 36 months starting from the date of satisfactory installation, commissioning and handing over of the equipment and of the works conducted therewith covered under the Supply order in working order. During the guarantee/warranty period. I/we shall provide free “after sale service” and the replacement of any part(s) of the equipment or rectification of defects of work of the equipment will be free of cost. The replacement of the parts shall be arranged by us, at our own cost and responsibility. We undertake that the above guarantee/warranty shall begin only from the date of satisfactory and faultless functioning of the equipment for 60 days **at the place designated by FSSAI**. The benefit of change in dates of the guarantee/warranty period shall be in the interest of the user/your organization.
- ii. During the warranty period, we shall provide at least **02 preventive maintenance service per year**.
- iii. Uptime Guarantee: During the guarantee/warranty period, we will be responsible to maintain the equipment in good working conditions for a period 328 days (i.e. **90% uptime**) in a block of 365 days.
  - a. All the complaints will be attended by us within 02 working days of receipt of the complaint in our office.
  - b. In case there is delay of more than 02 days in attending to a complaint from our side then you can count the number of days in excess of the permissible response time in the downtime. The above said response time of 2 days for attending to a complaint by us will not be counted in the downtime.
  - c. **Penalty:** We shall pay a penalty equivalent to **0.5 %** of the order value of the equipment for every week or part thereof delay in rectifying the defect.

**Note: The right to accept the reason (s) for delay and consider reduction or waive off the penalty for the same shall be at the sole discretion of FSSAI/State Food Commissioners or any office designated by FSSAI**

- iv. We undertake that all the spares/consumables related to equipment & exclusively supplied by manufacturer/supplier of the equipment shall be covered under warranty. Nothing shall be payable on account of these items during warranty by the Buyer.
- v. We certify that the equipment being/quoted is the latest model and that spares for the equipment will be available for a period of at least 10 years and we also guarantee that we will keep the organization informed of any up date of the equipment over a period of 5 years.
- vi. We guarantee that in case we fail to carry out the maintenance within the stipulated period, **at the place designated by FSSAI, FSSAI/State Food Commissioners or any office designated by FSSAI** reserves the right to get the maintenance work carried out at our risk, cost and responsibility. All the expenses including excess payment for repairs/maintenance shall be adjusted against the Performance Bank Guarantee. In case the expenses exceed the amount of Performance Bank Guarantee, the same shall be recoverable from us with/without interest in accordance with the circumstances.
- vii. We shall try to repair the equipment **at the place designated by FSSAI** itself. However, the equipment will be taken to our site on our own expenses in case it is not possible to repair the same **at the place designated by FSSAI**. We shall take the entire responsibility for the safe custody and transportation of the equipment taken out for repairs till the equipment is rehabilitated to the **place designated by FSSAI** after repairs Any loss of equipment or its accessories under its charge on account of theft, fire or any other reasons shall be at our sole risk and responsibility which will be compensated to the Buyer for such losses at the order value for the damaged/lost equipment/part, including accessories.
- viii. We undertake to perform Quality check after every major repair/breakdown/taking the equipment for repair **at the place designated by FSSAI**.

- ix. In case of extended guarantee/warranty, we undertake to carry out annual calibration/IPV of the equipment.
- x. We guarantee that we will supply spare parts if and when required on agreed basis for an agreed price. The agreed basis could be an agreed discount on the published catalogue price.
- xi. We guarantee to the effect that before going out of production of spare parts, we will give adequate advance notice to you so that you may undertake to procure the balance of the life time requirements of spare parts.
- xii. We guarantee the entire unit against defects of manufacture, workmanship and poor quality of components.
- xiii. We undertake to provide PM kit as per requirement to meet uptime guarantee condition.

1. Authorized signatory  
(with seal)

Date

Place

2. Authorized signatory

**NOTE:**

1. This should be submitted on the letter head of the bidder company/firm.

**FORMAT FOR NON BLACKLISTING OF SUPPLIER**

I/ We \_\_\_\_\_Manufacturer/partner/Authorized Distributor/Agent (strike out which is not applicable) of (Supplier) \_\_\_\_\_ do hereby declare and solemnly affirm that the individual/firm/company is not black-listed by the Union/State Government/Autonomous body. Any partner or shareholder thereof is not directly or indirectly connected with or has any subsisting interest in business of my/our firm.

DEPONENT

Address \_\_\_\_\_  
\_\_\_\_\_

I/ We hereby solemnly declare and affirm that the above declaration is true and correct to the best of my knowledge and belief. No part of it is false and nothing has been concealed.

Dated:

DEPONENT

**(Note: To be furnished on Rs.50/- non-judicial stamp paper duly attested by the Executive Magistrate/Notary Public/Oath Commissioner.)**

General Information about the Bidder

1	Name of the Bidder					
	Registered address of the firm					
	State		District			
	Telephone No.		Fax			
	Email		Website			
<b>Contact Person Details</b>						
2	Name		Designation			
	Telephone No.		Mobile No.			
<b>Communication Address</b>						
3	Address					
	State		District			
	Telephone No.		Fax			
	Email		Website			
<b>Type of the Firm ( Please ✓ relevant box)</b>						
4	Private Ltd.		Public Ltd.		Proprietorship	
	Partnership		Society		Others, specify	
	Registration No. & Date of Registration.					
<b>Nature of Bussiness ( Please ✓ relevant box)</b>						
5	Original Equipment Manufacturer			Authorized Dealer /Representative		
	Direct Importer			Others, specify.		
<b>Key personnel Details (Chairman, CEO, Directors, Managing Partners etc. )</b>						
6	in case of Directors, DIN Nos. are required					
	Name		Designation			
	Name		Designation			
<b>Bank Details</b>						
7	Bank Account No.		IFSC Code			
	Bank Name & Address		Branch Name			
	Tel No		Email ID			
8	<i>Whether any criminal case was registered against the company or any of its promoters in the past?</i>				Yes / No	
9	<i>Other relevant Information provided * (Here enclose the details such as presentation on the details of the bidder in a CD preferably; please avoid submission of detailed leaflets/brochures etc, if possible.)</i>					
Date:		Office Seal		Signature of the bidder / Authorised signatory		

Signature and Seal of the Bidder  
Name in capital letters with Designation

**COMPLIANCE SHEET**

Specifications as per indent (point wise)	Compliance of the quoted model	Compliance of alternate model, if any	Remarks (Deviations)

Place:

Signature and seal of the Manufacturer/Bidder

Date:

**NOTE:**

1. This should be submitted on the letter head of the bidder company/firm.
2. Compliance statement should be supported with the printed catalogue mentioning page number and clearly highlighting the required tender specifications in the catalogue.
3. Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations"

Furnishing of wrong statement may lead to debar from the future purchases of FSSAI.