

**Foundation for Innovative New Diagnostics India
(FIND India)**

Advertised Tender Enquiry (ATI)

**BID DOCUMENT
FOR**

**PROCUREMENT OF LABORATORY EQUIPMENT AND RELATED
SERVICES ACROSS TB LABS UNDER THE NATIONAL
TUBERCULOSIS ELIMINATION PROGRAMME (NTEP)**

**BID REF. NO.: SAMS/FIND INDIA/ G/2023/0008/0018/
PROC./EQUIPMENT/ATE/20/2023 dt. 09/05/2023**



(Procurement Agency)
STRATEGIC ALLIANCE

Management Services Pvt. Ltd.

Strategic Alliance Management Services Pvt. Ltd,
B-18, Sector-06, NOIDA
Gautam Budh Nagar (U.P.)- 201301

Email: procurement@samsconsult.com

Website: www.samsconsult.com

Checklist for bidders for submission in Proposal

(Bidders need to submit below filled and signed checklist mandatorily and provide all the required documents along with the technical proposal)

Sl. No.	Documents to be submitted along with Technical Proposal	Page No.	Remarks (if any)/ Yes/ No
1	Documents required for Preliminary examination		
i.	that the bid is signed, as per the requirements listed in the bidding documents;		
ii.	that the bid is signed by authorized signatory		
iii.	the bid is valid for the period, specified in the bidding documents;		
iv.	that the bid is accompanied by due Bid Security;		
v.	that the bidder has submitted manufacturer authorization form (in case of bidder is dealer/agent/ non-manufacturer)		
vi.	Bidder agreed to terms and conditions of bid including delivery period		
vii.	Bidder has agreed to give the required performance security as mentioned in the bid document		
2	Documents required for Technical Evaluation		
I	Letter of Technical Bid as per Form provided in Section VI – Bidding Forms ;		
li	Bidder Information Form as per Form provided in Section VI: Bidding Forms ;		
lii	Technical Compliance Sheet as per Form provided in Section VI: Bidding Forms ;		
lv	Documents establishing the compliance of Goods in accordance with ITB Para 16 ;		
V	Documents establishing bidders' qualification in accordance with ITB Para 17.2 ;		
Vi	Proforma for Performance Statement (for a period of last three years) as per format given in Section VI: Bidding Forms along with supporting documents;		
Vii	Bidder firm's Certificate of Incorporation/ Registration, Article and Memorandum of Association or any such registration document;		

Letter of Technical Bid

The Bidder must prepare the Letter of Technical Bid on its letterhead clearly showing the Bidder's complete name and address.

Note: All italicized text is for use in preparing these forms and shall be deleted from the final products.

Date: **[insert date (as day, month and year) of Bid Submission]**

Bid Ref. No.: **[insert number of bidding process]**

To: ***[insert complete name of Purchaser]***

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda issued in accordance with Instructions to Bidders (ITB 10);
- (b) We are agreeing to submit the Bid Security of the schedules quoted as mentioned in the bid document.
- (c) We meet the eligibility requirements and have no Conflict of Interest in accordance with ITB 4;
- (d) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: **[insert table giving brief description of the Goods, Equipment and Related Services]**;
- (e) Our bid shall be valid for a period fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (f) If our bid is accepted, **we commit to obtain a performance security (10% of the total contract amount) in accordance with the Bidding Documents;**
- (g) We are not participating, as a Bidder or as a subcontractor, in more than one bid in this bidding process in accordance with ITB 4.3(e), other than alternative bids submitted in accordance with ITB 13;
- (h) We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not debarred by any Procuring Entity under the State / UT Government, the Central Government, Autonomous body, Authority by whatever name called under them, UNOPS, UNDP, SAMS or GFATM as on the date of opening of bids;
- (i) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any activities which is in contravention of the Code of Integrity proscribed in ITB Para 3 of the Bidding Documents;

- (j) We hereby certify that we are neither associated nor has been associated directly or indirectly with the consultant or any other entity that has prepared the design, specifications and other documents for the subject matter of procurement or is being proposed as Project Manager for the contract
- (k) We hereby certify that we have fulfilled our obligations to pay all such taxes as payable to the Central Government or the State Government or any local authority;
- (l) We hereby certify that we are not insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons;
- (m) We hereby certify that our directors and officers have not been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
- (n) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed; and

Name of the Bidder	_____
Name of the person duly authorized to sign the Bid on behalf of the Bidder	_____
Title of the person signing the Bid	_____
Signature of the person named above	_____
Date signed	_____

Section I

NOTICE INVITING BIDS

FOR

PROCUREMENT OF GOODS & EQUIPMENT AND RELATED SERVICES ACROSS TB LABS UNDER
THE NATIONAL TUBERCULOSIS ELIMINATION PROGRAMME (NTEP)

Bid Ref. No.: SAMS/FIND India/ G/2023/0008/0018/Proc./Equipment/ATE/20/2023 Dt: 09/05/2023

1. Strategic Alliance Management Services Pvt. Ltd. (SAMS) has been engaged by “Foundation for Innovative New Diagnostics India” (FIND India), New Delhi (a not-for-profit Company created under Section 8 (Indian) Companies Act, 2013) for providing procurement consultancy services for equipment, goods, works and services for TB Laboratories established across India under National Tuberculosis Elimination Programme (NTEP), Ministry of Health and Family Welfare, Govt. of India.
2. SAMS hereby invites **e-bids (through the E-procurement system of FIND India)** from eligible and qualified bidders for the supply of Equipment along with related services:

Seq. No.	Sch. Nos.	Description of Goods and Equipment	Quantity to be supplied (Nos.)
I	1	Biosafety cabinet Class II A2 with UPS	9
II	2	Laboratory Incubator (37 deg C) higher volume	5
III	3	Refrigerated centrifuge with UPS	8
IV	4	Autoclaves: Vertical	12
V	5	Autoclaves: Horizontal	3
VI	6	Laboratory Incubator (37 deg C) smaller volume	6
VII	7	Freezer (-20)	4
VIII	8	Hot Air Oven-260L	5
IX	9	Water Bath	6
X	10	Analytical Balance	6
XI	11	Precision balance	2
XII	12	Vortex	13
XIII	13	Electric Micro incinerator	9
XIV	14	Water Distillation plant	5
XV	15	pH meter	6
XVI	16	Deep Freezer (-86)	4
XVII	17	Inspissator	6
XVIII	18	Refrigerator 300-450 lit	10
XIX		Refrigerator 165-200 lit	8
XX	19	Variable Volume Pipette (0.5-10 µl)	8
XXI		Variable Volume Pipette (2-20 µl)	16
XXII		Variable Volume Pipette (20-200 µl)	20
XXIII		Variable Volume Pipette (100-1000 µl)	19
XXIV		Racks Suitable for pipettes offered, at least 4 positions	28
Total No. of Equipment to be procured			218

3. Bidding will be conducted online through the **E-procurement system of FIND India** by the 'Advertised Tender Enquiry' method and procedures as set out in the 'General Financial Rule – 2017' and Manual of Policies and Procedure for Purchase of Goods and Works issued by the Department of Expenditure, Ministry of Finance, Govt. of India.
- ❖ **Vendors are requested to submit their proposals online through FIND India E-procurement System only. If not registered yet, kindly go through the below attached "USER MANUAL" pdf below the link, for the process of vendor registration which will provide the guidance for using this vendor portal and onward submission of the proposal.**

Please find below the link for vendor registration

<https://procurementindia.finddx.org/Vendor/VendorRegistration.aspx>



FIND_UserManual_V
endorRegistration.pdf

4. Bidders are required to submit Bid Security for the amount and form mentioned in the Bid Documents. Certain class of Bidders are exempted from submission of Bid Security. Details are given in Bidding Documents.
5. The Bid Document can be freely downloaded from the website www.samsconsult.com and E-procurement system of FIND India starting from **10.00 AM on 09/05/2023** Bidders shall be solely responsible for checking the above website for any addendum/amendment issued subsequent to publication of this IFB and take the same into consideration while preparing and submitting their bids.
6. Bidders' representatives are invited to attend an offline/in-person (physical) **pre-bid meeting at 11.00 AM on 18/05/2023** at the address mentioned above. Please note that non-attendance at the pre-bid meeting will not be the cause of the disqualification of bidders. Bidders can also participate in an online pre-bid meeting through skype link <https://join.skype.com/tpVdNBpU8YzO> at the scheduled time and date of pre-bid meeting. Bidders who are unable to attend the pre-bid meeting (online or offline) can send their written requests for clarification, if any up to **05.00 PM on 17/05/2023** at email procurement@samsconsult.com.
7. **Bids must be submitted online on or before 03:00 PM on 31/05/2023 by Bidders**, registered as Vendor on the e-Procurement System of FIND. All documents required towards submission of bids must be uploaded online.
8. **The Technical Bids will be opened on the same day at 04.00 PM on 31/05/2023 the e-Procurement System** and the name of bidders who have submitted their bids upto scheduled date and time shall be announced.

Sanjay Rastogi

Director, SAMS

Section-II

Instructions to Bidders

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Section – II

Instructions to Bidders

A. GENERAL

1. Introduction

- 1.1 In connection with the Notice Inviting Bids (NIB) for Procurement of Goods, Equipment and related services as **specified in the Section III - Bid Data Sheet (BDS)**, the Purchaser **as specified in the BDS**, has issued these Bidding Documents for the supply of Goods, Equipment and related services **as specified in Section V - Schedule of Requirements**.
- 1.2 This Section provides the relevant information as well as instructions to assist prospective bidders in preparation and submission of bids. It also includes the mode and procedure to be adopted by the Purchaser for receipt and opening as well as scrutiny and evaluation of bids and subsequent placement of award of contract.
- 1.3 Before preparing the bid, and submitting the same to the Purchaser, the bidder should read and examine all the terms & conditions, instructions etc. contained in the Bidding Documents. Failure to provide required information or to comply with the instructions incorporated in this Bidding Documents may result in rejection of bids submitted by bidders.
- 1.4 The bidder shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its bid including preparation, mailing and submission of its bid and subsequently processing the same. The Purchaser shall, in no case be responsible or liable for any such cost, expenditure etc. regardless of the conduct or outcome of the bidding process.

2. Language of Bids

- 2.1 Bid submitted by the bidder and all subsequent correspondences and documents relating to the bid exchanged between the bidder and the Purchaser, shall be written in English language. However, the language of any printed literature furnished by the bidder in connection with its bid may be written in any other language, provided the same is accompanied by a self-certified English translation and, for purposes of interpretation of the bid, the English translation shall prevail.

3. Code of Integrity

- 3.1 The Purchaser and all officers or employees of the purchaser, whether involved in the procurement process or otherwise, or Bidders and their representatives or consultants or service providers participating in a procurement process or other persons involved, directly or indirectly in any way in a procurement process shall maintain an unimpeachable standard of integrity.
- 3.2 The Purchaser and Bidders to uphold the Code of Integrity, which prohibits officers or employees of the Purchaser or a person participating in a procurement process, in respect of the following:

- (i) any offer, solicitation or acceptance of any bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process;
- (ii) any omission, including a misrepresentation that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
- (iii) any collusion, bid rigging or anti-competitive behaviour to impair the transparency, fairness and progress of the procurement process;
- (iv) improper use of information shared between the Purchaser and the bidders with an intent to gain unfair advantage in the procurement process or for personal gain;
- (v) any financial or business transactions between the bidder and any officer or employee of the Purchaser, who are directly or indirectly related to tender or execution process of contract;
- (vi) any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
- (vii) any obstruction of any investigation or audit of a procurement process;
- (viii) making false declaration or providing false information for participation in -
 - a) tender process or to secure a contract;
 - b) disclosure of Conflict of Interest;
 - c) disclosure by the bidder of any previous transgressions with any entity in India or any other country during the last three years or of any debarment by any other Procuring Entity.

- 3.3 In case of any breach of the Code of Integrity by a bidder or a prospective bidder, the Purchaser after giving a reasonable opportunity of being heard, may take appropriate measures including –
- a) exclusion of the bidder from the procurement process;
 - b) calling off of pre-contract negotiations and forfeiture or encashment of bid security;
 - c) forfeiture or encashment of any other security or bond relating to procurement;
 - d) recovery of payments made by the Purchaser along with interest thereon at bank rate;
 - e) cancellation of the relevant contract and recovery of compensation for loss incurred by the Purchaser;
 - f) debarment of the bidder from participation in any future procurements of Purchaser for a period not exceeding three years.

4. Conflict of Interest

- 4.1 Conflict of Interest for the Purchaser or its personnel and bidders is considered to be a situation in which a party has interests that could improperly influence that performance of its duties or responsibilities, contractual obligations, or compliance with applicable laws and regulations.
- 4.2 Purchaser describes the situations in which a Purchaser or its personnel may be considered to be in Conflict of Interest include, but are not limited to the following -
- a) Conflict of Interest occurs when the private interests of Purchaser or its personnel, such as personal, non-official, extra- professional or other relationships or personal financial assets, interfere or appear to interfere with the proper performance of its professional functions or obligations as a procurement official;
 - b) within the procurement environment, a Conflict of Interest may arise in connection with such private interests as personal investments and assets, political or other social activities and affiliations while in the service of the Purchaser, employment after retirement from service or of relatives or the receipt of a gift that may place the Purchaser or its personnel in a position of obligation;
 - c) Conflict of Interest also includes the use of assets of the Purchaser including human, financial and material assets, or the use of the office of the Purchaser or knowledge gained from official functions for private gain or to prejudice the position of someone the Purchaser or its personnel does not favour;
 - d) Conflict of Interest may also arise in situations where the Purchaser or any of its personnel is seen to benefit directly or indirectly or allow a third party, including family, friends or someone they favour, to benefit directly or indirectly from the decision or action of the Purchaser;
- 4.3 The situations in which bidders participating in a procurement process or their representatives may be considered to be in Conflict of Interest include, but are not limited to the following –
- a) If they or their personnel or representatives or agents have any relationship or financial or business transactions or interests with any official of the Purchaser that are directly or indirectly involved in or related to the procurement process or execution of contract;
 - b) If they receive or have received any direct or indirect subsidy from any other bidder;
 - c) If they have the same legal representative for purposes of the bid;
 - d) If they have a relationship with each other, directly or through common third parties that puts them in a position to have access to information about or influence on the bid of another;
 - e) If they participate in more than one bid in the same bidding process;
 - f) If they have controlling partners in common;

- g) If a bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the subject matter of procurement of the bidding process or were involved in such preparation in any way;
- 4.4 In the 'Letter of Technical Bid' to be submitted by the bidder, as per format given in **Section VI - Bidding Forms**, all bidders shall provide a signed statement that the bidder is neither associated nor has been associated directly or indirectly with the consultant or any other entity that has prepared the design, specifications and other documents for the subject matter of procurement or is being proposed as Project Manager for the contract;
- 4.5 In case of a holding company having more than one independently manufacturing unit or more than one unit having common business ownership or management, only one unit shall be allowed to submit bid or quote to prevent any Conflict of Interest. Similar restrictions shall apply to closely related sister or subsidiary companies. Such bidders must proactively declare such sister or subsidiary company or common business or management units in similar lines of business;
- 4.6 In cases of agents quoting in offshore procurements on behalf of their principal manufacturers, one agent shall not represent two manufacturers or quote on their behalf in a particular bid enquiry to prevent any Conflict of Interest.

5. Eligible Bidders and Goods

- 5.1 Bidder shall be a private entity, government-owned entity or, any combination of these having a formal intent and legal competency to enter into an agreement or contract and are registered under respective Act and Jurisdiction in India or any other country with which India has not banned trade relations.
- 5.2 Bidder should not have a Conflict of Interest as prescribed and specified in ITB Para 4, which materially affects fair competition.
- 5.3 In addition, any bidder participating in the procurement process shall –
- (i) have fulfilled his obligation to pay such of the tax payable to the Central Government or the State Government or any local authority;
 - (ii) not be insolvent, in receivership, bankrupt or being wound up, not have its affairs administered by a court or a judicial officer, not have its business activities suspended and must not be the subject of legal proceedings for any of the foregoing reasons;
 - (iii) not have, and their directors and officers not have, been convicted of any criminal offence related to their professional conduct or the making of false statements or misrepresentations as to their qualifications to enter into a procurement contract within a period of three years preceding the commencement of the procurement process, or not have been otherwise disqualified pursuant to debarment proceedings;
 - (iv) not be debarred by any Procuring Entity under the State / UT Government, the Central Government, Autonomous body, Authority by whatever name called under them, UNOPS, UNDP, SAMS or GFATM as on the date of opening of bids.

- 5.4 All goods to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term “origin” used in this clause means the place where the goods are mined, grown, produced, or manufactured or from where the related services are arranged and supplied.
- 5.5 In the ‘Letter of Technical Bid’ to be submitted by the bidder, as per format given in Section VI - Bidding Forms, all bidders shall provide a signed statement that the bidder fulfils the eligibility requirements given in ITB Para 5;

6. Bidders’ Qualification

- 6.1 Bidders should substantially meet the qualification criteria as stipulated in the **Section IV - Evaluation and Qualification Criteria**.
- 6.2 Bidders should fill and submit the “Proforma for Performance Statement (for a period of last five years)” provided in **Section VI - Bidding Forms** to provide relevant information and documents in support of fulfilment of bidder’s qualification, along with its bid.

B. BIDDING DOCUMENTS

7. Content of Bidding Documents

- 7.1 The Bidding Documents shall include the following Sections, which should be read in conjunction with any Amendment issued in accordance with ITB Para 10.
- Section I Notice Inviting Bids (NIB)
 - Section II Instructions to Bidders (ITB)
 - Section III Bid Data Sheet
 - Section IV Evaluation and Qualification Criteria
 - Section V Schedule of Requirements
 - Section VI Bidding Forms
 - Section VII General Conditions of Contract (GCC)
 - Section VIII Special Conditions of Contract (SCC)
 - Section IX Contract Forms
- 7.2 Unless downloaded directly from the Purchaser’s website **as specified in the BDS**, Purchaser shall not be responsible for the correctness of the Bidding Documents, responses to requests for clarification, the Minutes of the Pre-bid meeting, if any, or Amendment(s) to the Bidding Documents in accordance with ITB Para 10.
- 7.3 Bidders are expected to examine all instructions, forms, terms, and specifications in the Bidding Documents and to furnish with its Bid all information or documentation as is required by the Bidding Documents.

8. Clarifications of Bidding Documents

- 8.1 A Bidder requiring any clarification of the Bidding Documents shall contact the Purchaser in writing at the Purchaser's address **specified in the BDS**. The Purchaser will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of bids as **specified in the BDS**.
- 8.2 The Purchaser shall also promptly publish brief description of the enquiry but without identifying its source and its response at its website as **specified in the BDS**.
- 8.3 Should the clarification result in changes to the essential elements of the Bidding Documents, the Purchaser shall amend the Bidding Documents following the procedure given under ITB Para 10.

9. Pre-Bid Meeting

- 9.1 In order to provide response to any doubt regarding Bidding Documents, or to clarify issues, a pre-bid meeting may be scheduled, **if specified in the BDS**.
- 9.2 During the pre-bid meeting, the clarification sought by representative of prospective bidders shall be responded appropriately. However, they shall be asked to submit their written request by close of business on the next working day. The Purchaser shall publish written response to such requests for clarifications, without identifying its source. In case required, amendment(s), in terms of ITB Para 10 below shall be issued, which shall be binding on all prospective bidders.

10. Amendments to Bid Documents

- 10.1 At any time prior to the deadline for submission of bids, the Purchaser may, pursuant to ITB Para 8 and 9 and for any reason deemed fit, amend or modify the Bidding Documents by issuing Amendment(s).
- 10.2 Such Amendment(s) will be published on Purchaser's website **as specified in the BDS** and the same shall be binding on all prospective Bidders.
- 10.3 In order to give reasonable time to prospective bidders to take necessary action in preparing their bids, the Purchaser may, at its discretion extend the deadline for the submission of bids and other allied time frames, which are linked with that deadline.
- 10.4 Any bidder who has downloaded the Bidding Documents should check the Amendment(s), if any, issued on the Purchaser's website. The Purchaser shall not be responsible in any manner if prospective Bidders miss any Amendment(s) published on Purchaser's website.

C. PREPARATION OF BIDS

11. Documents Comprising the Bid

- 11.1 The bidder can submit the bid online through the **E-procurement system of FIND India** by using Two Bid System i.e. “**Technical Bid**” and “**Financial Bid**”. The Bid shall comprise the following:

Technical Bid:

- i) Letter of Technical Bid as per Form provided in **Section VI – Bidding Forms**;
- ii) Bid Security furnished in accordance with **ITB Para 19**;
- iii) Bidder Information Form as per Form provided in **Section VI: Bidding Forms**;
- iv) Technical Compliance Sheet as per Form provided in **Section VI: Bidding Forms**;
- v) Documents establishing the compliance of Goods in accordance with **ITB Para 16**;
- vi) Documents establishing bidders' qualification in accordance with **ITB Para 17.2**;
- vii) Manufacturer's Authorization, in case bid is submitted by an Agent, as per Form given in **Section VI: Bidding Forms**;
- viii) Proforma for Performance Statement (for a period of last three years) as per format given in **Section VI: Bidding Forms** along with supporting documents;
- ix) Proforma for other Details of Bidder, Manufacturer and its Bank as per format given in **Section VI: Bidding Forms**;
- x) Bidder firm's Certificate of Incorporation/ Registration, Article and Memorandum of Association or any such registration document;
- xi) Self-attested copy of GSTIN registration;
- xii) Any other document **as required in the BDS**

Financial Bid:

- i) Letter of Financial Bid as per Form provided in **Section VI – Bidding Forms**;
- ii) Price Schedule prepared in accordance with **ITB Para 14**;

12. Letter of Technical Bid, Financial Bid and Price Schedule

- 12.1 The Letter of Technical Bid, Letter of Financial Bid and Price Schedule shall be prepared as per the Forms furnished in **Section VI: Bidding Forms**. The forms must be completed without any alterations to the text, and no substitutes shall be accepted. All blank spaces shall be filled-in with the information requested.

13. Alternative Bids

- 13.1 Unless otherwise **specified in the BDS**, alternative bids shall not be considered.

14. Bid Prices

- 14.1 The prices quoted by the Bidder in the Price Schedule shall conform to the requirements specified below.
- 14.2 Equipment thereunder must be listed and priced separately in the Price Schedule. The price quoted shall correspond to 100% of the items.
- 14.3 The price to be quoted in the 'Letter of Financial Bid' in accordance with ITB Para 12.1 shall be the total price of the bid.
- 14.4 The price quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and shall not be subject to variation on any account, **unless otherwise specified in the BDS**. The bid submitted with adjustable price quotation shall be treated as nonresponsive and shall be rejected.
- 14.5 The price shall be quoted as specified in the Form of Price Schedule given in **Section VI - Bidding Forms**. The dis-aggregation of price components is required solely for the purpose of facilitating the comparison of bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered. Prices shall be entered in the following manner:
 - (i) the unit and total price of the Goods on DDP (Delivered Duty Paid) – Consignee Location basis;
 - (ii) Goods and Services Tax (GST) payable on the Goods and related services if the contract is awarded

15. Bid Currency

- 15.1 The bidder should submit its quote in Indian Rupees only.
- 15.2 Bids, where prices are quoted in any other currency shall be treated as non-responsive and rejected.

16. Documents establishing the compliance of Goods

- 16.1 To establish the conformity of the Goods to the Bidding Documents, the Bidder shall furnish as part of its Bid, **Technical Compliance Sheet** as per Form provided in **Section VI: Bidding Forms** and the documentary evidence that the Goods conform to the technical specifications and standards specified in **Section V - Schedule of Requirements**.
- 16.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods, demonstrating substantial responsiveness of the Goods to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the **Section V - Schedule of Requirements**.

- 16.3 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section V - Schedule of Requirements.

17. Documents establishing the eligibility and Qualification of the Bidder

- 17.1 To establish Bidder's their eligibility in accordance with ITB Para 5, Bidders shall complete the Letter of Technical Bid, included in **Section VI - Bidding Forms**.
- 17.2 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Purchaser's satisfaction that the Bidder meets each of the qualification criterion specified in **Section IV - Qualification and Evaluation Criteria**.

18. Period of validity of Bids

- 18.1 Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the Purchaser in accordance with ITB Para 22.1. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive.
- 18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its bid.
- 18.3 The Bidder who agrees to the extension of the period of validity of bids so requested by the Purchaser shall also extend the period of validity of bid securities submitted by them or submit new bid security to cover the extended period of validity of their bids. A bidder whose bid security is not extended or new bid securities not submitted shall be considered to have refused the request to extend the period of validity of its bids and rejected as non-responsive. The decision of the Purchaser will be final and binding in this regard.

19. Bid Security

- 19.1 Bidders shall furnish as part of their bid, a Bid Security/ Earnest Money Deposit (EMD) as per table given below for the quoted nos. of Schedules, in the form of FDR/ BG/ DD in the favour of Strategic Alliance Management Services Pvt. Ltd., payable at Noida. EMD can also be deposited online through RTGS as per details given below:

Account Name: - Strategic Alliance Management Services Pvt. Ltd.

Bank's Name: - HDFC Bank Ltd.

Shop No. AG 1 to AG 8, AG 20 to AG 21, Plot No. 2,

**Community Centre, Motia Khan, Pahar Ganj,
New Delhi – 110055, Delhi (India)**

Account No.: - 50200004088464

MICR Code: - 110240070

RTGS Code: - HDFC0000457

Seq. No.	Sch. Nos.	Description of Goods and Equipment	Total quantity to be supplied (Nos.)	EMD (In Rs.)
I	1	Biosafety cabinet Class II A2 with UPS	9	1,00,000
II	2	Laboratory Incubator (37 deg C) higher volume	5	15,000
III	3	Refrigerated centrifuge with UPS	8	1,15,000
IV	4	Autoclaves: Vertical	12	50,000
V	5	Autoclaves: Horizontal	3	40,000
VI	6	Laboratory Incubator (37 deg C)-smaller volume-70-100L	6	12,000
VII	7	Freezer (-20)	4	5,000
VIII	8	Hot Air Oven-260L	5	15,000
IX	9	Water Bath	6	5,000
X	10	Analytical Balance	6	15,000
XI	11	Precision balance	2	5,000
XII	12	Vortex	13	5,000
XIII	13	Electric Micro incinerator	9	15,000
XIV	14	Water Distillation plant	5	5,000
XV	15	pH meter	6	5,000
XVI	16	Deep Freezer (-86)	4	60,000
XVII	17	Inspissator	6	85,000
XVIII	18	Refrigerator 300-450 lit	10	12,000
XIX		Refrigerator 165-200 lit	8	
XX	19	Variable Volume Pipette (0.5-10 µl)	8	15,000
XXI		Variable Volume Pipette (2-20 µl)	16	
XXII		Variable Volume Pipette (20-200 µl)	20	
XXIII		Variable Volume Pipette (100-1000 µl)	19	
XXIV		Racks Suitable for pipettes offered, at least 4 positions	28	
Total No. of Equipment to be procured			218	

- 19.2 For FDR/BG (pledged in the name of Strategic Alliance Management Services Pvt. Ltd., Noida) if opted for, originals should reach the SAMS office within 2 days of the submission deadline. Any delay by post or courier shall not be entertained.
- 19.3 The copy of EMD receipt (of any form) should be enclosed in the online submission.
- 19.4 Any bid not accompanied by Bid Security Amount as specified in ITB Para 19.1 above shall be rejected by the Purchaser as non-responsive.
- 19.5 No interest shall be payable by the Purchaser for the sum deposited as earnest money deposit.

- 19.6 The EMD of the unsuccessful bidders would be returned within one month of signing of the contract.
- 19.7 The EMD shall be forfeited by the Purchaser in the following events:
- (a) When the bidder withdraws or modifies its bid during the validity of bids as specified in the Letter of Bid; or
 - (b) when the bidder, having been notified of the acceptance of its bid by the Purchaser during the period of bid validity, (i) fail or refuses to execute the Contract; or (ii) fail to furnish the Performance Security, if required in accordance with the Bid Documents.
 - (c) If the bidder tries to influence the evaluation process.
- 19.8 The Micro and Small Enterprise (MSE) bidders, registered with MSME or those registered with NSIC are exempted from submission of bid security. In such case, bidder should submit copy of MSME or National small industries corporation (NSIC) registration and documents showing exemption from submission of bid security, in lieu of bid security.

20. Format and Signing of Bids

- 20.1 The Bidder shall submit the online bids as per the instruction provided in the e-procurement portal of FIND India.
- 20.2 The Technical Bid and original of the Financial Bid shall be typed or written in ink with all pages serially numbered and signed by the bidder or a person duly authorized to sign on behalf of the bidder in token of acceptance of the terms and conditions of the Bidding Documents. This authorization shall consist of a written confirmation **as specified in the BDS** which shall be attached to the Bid.
- 20.3 Any corrections in the bid such as interlineations, erasures, or overwriting shall be valid only if they are duly signed or initialled by the person signing the bid.

D. SUBMISSION AND OPENING OF BIDS

21. Submission of Bids

- 21.1 Bidders have to submit their bids **through FIND India E-procurement System only** (<https://procurementindia.finddx.org/Vendor/VendorRegistration.aspx>).

Bidders have to follow the process as specified below: .

- As earlier mentioned under Section I, point 3, complete vendor registration through FIND India E-procurement portal for supplying goods or for providing services.
- Sign up in a secure manner and manage their access password.
- Create and manage profiles online.
- Receive online and email notifications for RFPs for various procurements.

- Submit electronic bids in response to Bid document/RFPs issued by SAMS on behalf of FIND or directly by FIND.

21.2 If bidder is not registered yet on FIND India E-procurement system, kindly go through the attached “USER MANUAL” pdf below the link, for the process of vendor registration which will provide the guidance for using this vendor portal and onward submission of the proposal.

21.3 **Please find below the link for vendor registration**
<https://procurementindia.finddx.org/Vendor/VendorRegistration.aspx>



FIND_UserManual_V
endorRegistration.pdf

22. Deadline for Submission of Bids

22.1 Bids must be submitted online before the given deadline and no later than the date and time **specified in the BDS.**

22.2 The date of submission and opening of bids shall not be extended except when –

- Adequate number of bids have not been received within the given time and the Purchaser is of the opinion that further bids are likely to be submitted if time is extended; or
- the Bidding Documents are required to be substantially modified because of discussions in pre-bid meeting or otherwise and the time for preparations of bids by the prospective bidders appears to be insufficient for which such extension is required.

22.3 In cases where the time and date of submission of bids is extended, an amendment to the Bidding Documents shall be issued in accordance with ITB Para 10, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline extended.

22.4 If the due date for submission of bids declared as non-working day, the bids shall be received and opened at the same time and hour on the next working day.

23. Late Bids

23.1 Bidder will not be able to submit bids online after closing of the deadline (date and time) for the submission of the bid as specified in the BDS.

23.2 Manual submission of bid is also not allowed.

24. Withdrawal, Substitution and Modification of Bids

- 24.1 A bidder may substitute, or modify its bid before the deadline for online submission of bids.
- 24.3 No bid shall be withdrawn, substituted, or modified after the time and date fixed for submission of online bids as specified in the BDS.

25. Opening of Bids

- 25.1 The Purchaser will open all bids, online at the time, on the date, and at the place specified in the **Key Bidding information**. The Bidders can view the online bid opening after Login as Vendor using username and password. The name of Bidders shall appear to Bidders attending online bid opening.
- 25.2 The Technical Bid shall be opened at the first instance **at 04.00 PM on 31/05/2023**.
- 25.3 The summary of opening of technical bids shall be generated online and bidders may view the response online on the website.
- 25.4 After the technical evaluation of bids are completed, the Purchaser shall notify those Bidders (through procurement portal itself) whose Bids are found non-responsive at technical evaluation stage, their Financial Bids will not be opened.
- 25.5 The Purchaser shall simultaneously notify in writing those Bidders that have qualified during technical evaluation stage and inform them of the date, time and location for the opening of the Financial Bids. The same information will be updated on the FIND procurement portal also.
- 25.6 The Financial Bids shall be opened online by the Purchaser of those Bidders found qualified during technical evaluation stage. The summary of financial bid opening will be generated online on the procurement portal, which can be viewed by the bidders also after opening and acceptance of the bids by the purchaser.

E. EVALUATION AND COMPARISON OF BIDS

26. Confidentiality

- 26.1 Information relating to the evaluation of bids and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with the bidding process until information on Contract Award is communicated to all Bidders
- 26.2 Any effort by a Bidder to influence the Purchaser in the evaluation or contract award decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB Para 26.2, from the time of bid opening to the time of Contract Award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it should do so in writing.

27. Preliminary Examination of Bids

- 27.1 The Bid Evaluation Committee constituted by the Purchaser shall conduct a preliminary scrutiny of the opened bids at the beginning to assess the prima-facie responsiveness and record its findings thereof particularly in respect of the following:
 - (a) that the bid is signed, as per the requirements listed in the Bidding Documents;
 - (b) that the bid is signed by authorised signatory
 - (c) the bid is valid for the period, specified in the Bidding Documents;
 - (d) that the bid is accompanied by due Bid Security;
 - (e) that the bidder has submitted manufacturer authorization form (in case of bidder is dealer/agent/ non-manufacturer)
 - (f) Bidder agreed to terms and conditions of bid including delivery period
 - (g) that the bid is unconditional, and that the bidder has agreed to give the required performance security; and
 - (h) whether any other conditions specified in the Bidding Documents are fulfilled.
 - (i) The Bidder is eligible to supply the goods required under this bid as per basic eligibility specified under ITB para 5 above.

28. Clarification of Bids

- 28.1 To assist in the examination, evaluation, comparison and qualification of the bids, the Bid Evaluation Committee may, at its discretion, ask any bidder in writing for clarification by a specific date regarding its bid specifically therein that if the bidder does not comply or respond by that date his bid shall be liable to be rejected. The request of the Committee for clarification and the response of the bidder thereto shall be in writing. Depending on the outcome, such bids shall be ignored or considered further;
- 28.2 Any clarification submitted by a bidder with regard to his bid that is not in response to a request by the Committee specifically shall not be considered;

- 28.3 No change in the prices or substance of the bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Committee in the evaluation of the financial bids.
- 28.4 No substantive change to qualification information or to a submission, including changes aimed at making an unqualified bidder, qualified or an unresponsive submission, responsive shall be sought, offered, or permitted under any circumstances.
- 28.5 All communication generated as above shall be included in the record of the procurement proceedings.

29. Immaterial Non-conformities in Bids

- 29.1 The Bid Evaluation Committee may waive non-conformities in the bid that do not constitute a material deviation, reservation or omission and deem the bid to be responsive;
- 29.2 The Bid Evaluation Committee may request the bidder to submit necessary information or documents which are historical in nature like audited statements of accounts, GSTIN Registration Certificate, etc. within a reasonable period of time. Failure of the bidder to comply with the request within the given time shall result in the rejection of its bid;
- 29.3 The Bid Evaluation Committee may rectify immaterial non-conformities or omissions on the basis of the information or documentation received from the bidder under ITB Para 29.2.

30. Determination of Technical Responsiveness

- 30.1 The Bid Evaluation Committee constituted by the Purchaser shall determine the responsiveness of a bid to the Bidding Documents based on the contents of the bid submitted by the Bidder;
- 30.2 A bid shall be deemed to be substantially responsive if it meets the requirements of the Bidding Documents without any material deviation, reservation, or omission where: -
- (a) "deviation" is a departure from the requirements specified in the Bidding Documents;
 - (b) "reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and
 - (c) "omission" is the failure to submit part or all of the information or documentation required in the bidding documents.
- 30.3 A "material deviation, reservation, or omission" is one that,
- (a) If accepted, shall:-
 - (i) effect in any substantial way the scope, quality, or performance of the subject matter of procurement specified in the Bidding Documents; or
 - (ii) limit in any substantial way, inconsistent with the Bidding Documents, the rights of the Purchaser or the obligation of the Bidder under the proposed contract; or
 - (b) if rectified shall unfairly affect the competitive position of other Bidders presenting responsive bids;

- 30.4 The Bid Evaluation Committee shall examine the technical aspects of the bid in particular to confirm that all requirements of Bidding Documents have been met without any material deviation, reservation or omission;
- 30.5 The Bid Evaluation Committee shall regard a bid as responsive if it conforms to all requirements set out in the Bidding Documents, or contains minor deviations that do not materially alter or depart from the characteristics, terms, conditions and other requirements set out in the Bidding Documents, that is, there is no material deviation, or if it contains errors or oversights that can be corrected without any change in the substance of the bid;
- 30.6 Bids that are not responsive or contain any material deviation shall be rejected. Bids declared as non-responsive shall be excluded from any further evaluation.

31. Nonconformities, Errors and Omissions

- 31.1 Provided that a Bid is substantially responsive, the Bid Evaluation Committee may waive any nonconformities in the Bid.
- 31.2 Provided that a bid is substantially responsive, the Purchaser or authorised representative may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
- 31.3 Provided that a bid is substantially responsive, the Bid Evaluation Committee shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component.

32. Qualification of the Bidder

- 32.1 The Purchaser shall determine to its satisfaction whether the Bidder meets the qualifying criteria **specified in Section IV - Evaluation and Qualification Criteria**
- 32.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Para 17
- 32.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Purchaser/Evaluation Committee shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's qualifications to perform satisfactorily.

33. Financial Evaluation and Comparison of Bids

33.1 In order to evaluate Financial Bids, the Purchaser shall consider the following:

- (a) evaluation will be done for Items, as **specified in the BDS**; and the Bid Price as quoted in accordance with ITB Para 14.
- (b) price adjustment for correction of arithmetic errors in accordance with ITB 34
- (c) price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 31
- (d) the additional evaluation factors are specified in **Section IV: Evaluation and Qualification Criteria**

33.2 The Purchaser shall compare the evaluated prices of all substantially responsive bids established in accordance with ITB 33 to determine the lowest evaluated bid. The comparison shall be on the basis of DDP (place of final destination) prices, together with prices for any required installation, training, commissioning. The evaluation of a bid will exclude and not take into account IGST / SGST / CGST payable on the Goods and if the contract is awarded to the Bidder.

34. Correction of Arithmetical Errors

34.1 Provided that the Bid is substantially responsive, the Bid Evaluation Committee shall correct arithmetical errors in the following cases, namely:

- (a) 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 shall prevail and the total price shall be corrected, unless in the opinion of the Committee there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected. If there is a difference in the prices mentioned on the procurement portal and financial bids uploaded on portal, the **lowest & right prices** will consider for the evaluation; if the prices are mismatched with the total price uploaded in zip folder on FIND India procurement portal; the lower prices will considered for the evaluation and award of contract.
- (b) if there is an error in a calculation of the total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and
- (c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.

34.2 If the price bid is ambiguous leading to two equally valid total price amounts, the bid shall be treated as non-responsive and rejected.

34.3 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB Para 34.1, shall result in the rejection of the Bid.

35. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids

- 35.1 The Purchaser reserves the right to accept or reject any bid, and to cancel / annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the Bidders for which the Purchaser shall keep record of clear and logical reasons properly for any such action / recall of bidding process. In case of cancellation / annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

F. AWARD OF CONTRACT

36. Award Criteria

- 36.1 The Purchaser shall award the Contract to the Bidder whose bid has been accepted after evaluation of bids.
- 36.2 The contract shall not be awarded to more than one bidder by splitting the quantity as given in Schedule of Requirements.

37. Purchaser's Right to vary Quantities at the time of Award

- 37.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section IV, Schedule of Requirements, provided this does not exceed the percentages **specified in the BDS**, and without any change in the unit prices or other terms and conditions of the bid and the Bidding Documents.

38. Notification of Award

- 38.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Purchaser will pay the Supplier in consideration of the supply of Goods (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price").
- 38.2 Until a formal Contract is prepared and executed, the Letter of Acceptance shall constitute a binding Contract.
- 38.3 The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB Para 38.1, requests in writing the grounds on which its bid was not selected.

39. Performance Security

- 39.1 Within twenty-eight (28) days of the receipt of Letter of Acceptance from the Purchaser, the successful Bidder, if required, shall furnish the Performance Security in accordance with the GCC, using the Performance Security Form included in **Section IX: Contract Forms**, or another Form acceptable to the Purchaser.
- 39.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder, whose bid is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.
- 39.3 The validity of the performance security shall be for a period of 45 days beyond the date of completion of all contractual obligations.

40. Signing of Contract

- 40.1 Promptly after notification of Award, the Purchaser shall send the successful Bidder the Contract Agreement
- 40.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Purchaser

Section III – Bid Data Sheet (BDS)

The following specific data for the goods and related services to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB

ITB Para Reference	Particulars
	A. General
ITB 1.1	The reference number of the Notice Inviting Bids (NIB) is: SAMS/FIND India/ G/2023/0008/0018/Proc./Equipment/ATE/20/2023 The Purchaser is: Strategic Alliance Management Services Pvt. Ltd, B-18, Sector-06, NOIDA Gautam Budh Nagar (U.P.)- 201301
ITB 7.2	http://www.samsconsult.com/FIND.aspx
	B. Bidding Documents
ITB 8.1	The Purchaser's address for the purpose of any clarification is: Strategic Alliance Management Services Pvt. Ltd, B-18, Sector-06, NOIDA Gautam Budh Nagar (U.P.)- 201301 <i>E-mail: procurement@samsconsult.com</i> <i>Phone: 0120-4161355, 56, 57</i> Requests for clarification should be received by the Purchaser no later than: 05.00 PM 17/05/2023
ITB 8.2	http://www.samsconsult.com/FIND.aspx
ITB 9.1	Pre-Bid Meeting shall be scheduled on hybrid mode (online & offline): Yes The name of contact person, venue, time and date for pre-bid meeting are specified as under: Name of contact person: Mr. Dinesh Kumar, Manager (Procurement) Contact Details: Phone: 011- (Ext. 105), Mobile: 8800257774; e-mail: kumard@samsconsult.com, procurement@samsconsult.com Address of Venue: Strategic Alliance Management Services Pvt. Ltd, B-18, Sector-06, NOIDA Gautam Budh Nagar (U.P.)- 201301 Time and Date: 11.00 AM on 18/05/2023 The meeting shall be held online. Prospective bidder may use the link https://join.skype.com/tPVdNBpU8YzO
ITB 10.2	http://www.samsconsult.com/FIND.aspx
	C. Preparation of Bids
ITB 11.1 (xii)	The Bidder shall submit the following additional documents in its Bid: None
ITB 13.1	Alternative Bids shall not be considered.
ITB 14.4	The price quoted by the bidder shall be fixed during the Bidder's performance of the Contract and shall not be subject to variation on any account, except for GST, payable on Goods and related services.

ITB 18.1	The bid validity period shall be 120 days after the deadline for bid submission.
ITB 20.2	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: (1) Copy of Resolution of Board of Directors (2) Authorization Letter issued by Competent authorized on bidder firms letter head / official stationary (3) Notarized affidavit
D. Submission and Opening of Bids	
ITB 22.1	Bidders are requested to submit their bids online through FIND India e-Procurement system. https://procurementindia.finddx.org/Vendor/VendorRegistration.aspx The deadline for online Bid Submission is: 03.00 PM on 31/05/2023
ITB 25.1	The Purchaser will open all bids online The date and time for online Bid opening is: 04.00 PM on 31/05/2023 https://join.skype.com/yORzhurwWwTj
E. Evaluation and Comparison of Bids	
ITB 37.1	The maximum percentage by which quantities may vary is: ±25% (Twenty Five percent)

Section IV – Evaluation and Qualification Criteria

This Section contains all the criteria that the Purchaser shall use to evaluate a bid and qualify the Bidders in accordance with ITB 30 and 32 no other factors, methods or criteria shall be used.

1. Evaluation (ITB 32)

1.1. Evaluation Criteria {ITB 33.1 (e)}

The Purchaser shall use the criteria and methodologies listed in this Section to evaluate Bids. By applying the criteria and methodologies the Purchaser shall determine the Most Advantageous Bid. This is the Bid that meets the Qualification Criteria and has been determined to be:

- a) substantially responsive to the bidding document, and
- b) the lowest evaluated cost. with applicable warranty as specified in the section 3.A.Technical Specifications – General Requirements

The determination of bidder quoting lowest evaluated cost shall be based on the comparison of evaluated bid price carried out on “Delivered Duty Paid (DDP) consignee site basis”,

2. Qualification of the Bidder (ITB 32)

2.1 Qualification Requirements (ITB 32.1)

After preliminary scrutiny of bids in accordance with ITB Para 27 above, Bidder’s shall be assessed for their qualification for the Schedules quoted by them as per criteria given below:

The Purchaser shall carry out the qualification assessment of the Bidder in accordance with ITB 32, using only the requirements specified. Requirements not included in the text below shall not be used in the evaluation of the Bidder’s qualifications.

a) If the Bidder is a manufacturer:

i) Experience and Technical Capacity

- a) Bidder should be in continuous business of manufacturing / supplying the similar Goods as specified in the bid during last five years prior to bid opening and should have manufactured and supplied the similar Goods (similar goods means items as mentioned in Section V schedule of requirements) to the extent of at **least 60% of the quantity** to be procured under this Bid, during last five years preceding the date of opening of bids.

- b) To qualify for **each Schedule**, the bidder, should have achieved an average annual turnover during last five financial years or latest (2017-18, 2018-19, 2019-20, 2020-21 and 2022-23). as per table below:

Seq. No.	Sch. Nos.	Description of Goods and Equipment	Total quantity to be supplied (Nos.)	Average Annual Turnover requirement over last five financial years or latest (2017-18, 2018-19, 2019-20, 2020-21 and 2022-23)
I	1	Biosafety cabinet Class II A2 with UPS	9	35,00,000
II	2	Laboratory Incubator (37 deg C) higher volume	5	5,00,000
III	3	Refrigerated centrifuge with UPS	8	36,00,000
IV	4	Autoclaves: Vertical	12	16,00,000
V	5	Autoclaves: Horizontal	3	12,00,000
VI	6	Laboratory Incubator (37 deg C)-smaller volume-70-100L	6	4,00,000
VII	7	Freezer (-20)	4	1,50, 000
VIII	8	Hot Air Oven-260L	5	4,50,000
IX	9	Water Bath	6	1,50,000
X	10	Analytical Balance	6	5,50,000
XI	11	Precision balance	2	1,50,000
XII	12	Vortex	13	2,00,000
XIII	13	Electric Micro incinerator	9	4,50,000
XIV	14	Water Distillation plant	5	2,50,000
XV	15	pH meter	6	1,15,000
XVI	16	Deep Freezer (-86)	4	19,00,000
XVII	17	Inspissator	6	27,50,000
XVIII	18	Refrigerator 300-450 lit	10	3,50,000
XIX		Refrigerator 165-200 lit	8	
XX	19	Variable Volume Pipette (0.5-10 µl)	8	4,80,000
XXI		Variable Volume Pipette (2-20 µl)	16	
XXII		Variable Volume Pipette (20-200 µl)	20	
XXIII		Variable Volume Pipette (100-1000 µl)	19	
XXIV		Racks Suitable for pipettes offered, at least 4 positions	28	
Total No. of Equipment to be procured			218	

ii) Documentary Evidence

The Bidder shall furnish the following documentary evidence to demonstrate that it fulfills the experience and technical capacity, as above:

- Details of past experience in support of qualification requirement given in para 2(I) a).i).a), including past performance of the Goods offered and on those of similar nature within the past five years, details of current contracts in hand and other commitments (as per form given in **Section VI, Bidding Forms- Performance Statement Form**).
- Furnish at least 2 or more documentary evidence (**Client's certificate**) in support of the satisfactory execution including timely supply by the Bidder during last five years. Purchaser may seek feedback from Clients on satisfactory supply of the goods supplied to them. In case, Purchaser gets two or more adverse feedback from existing end users, bids of those bidders will not be consider for further

evaluation. In addition, the Purchaser may take technical feedback from Govt. facilities for the use of particular goods offered by the bidder.

b) If Bidder is not manufacturer:

i) Experience and Technical Capacity

- a) If a Bidder is not a manufacturer but is offering the Goods on behalf of the Manufacturer under Manufacturer's Authorization Form (Section VI, Bidding Forms), the Bidder shall demonstrate that it has supplied the similar Goods (similar goods means items as mentioned in Section V schedule of requirements) to the extent of at least **40% of the quantity** to be procured under this Bid, during last five years preceding the date of opening of bids.
- b) To qualify for **each Schedule**, the bidder, should have achieved an average annual turnover during last five financial years or latest (2017-18, 2018-19, 2019-20, 2020-21 and 2022-23) as per table below:

Seq. No.	Sch. Nos.	Description of Goods and Equipment	Total quantity to be supplied (Nos.)	Average Annual Turnover requirement over last five financial years or latest (2017-18, 2018-19, 2019-20, 2020-21 and 2022-23)
I	1	Biosafety cabinet Class II A2 with UPS	9	35,00,000
II	2	Laboratory Incubator (37 deg C) higher volume	5	5,00,000
III	3	Refrigerated centrifuge with UPS	8	36,00,000
IV	4	Autoclaves: Vertical	12	16,00,000
V	5	Autoclaves: Horizontal	3	12,00,000
VI	6	Laboratory Incubator (37 deg C)-smaller volume-70-100L	6	4,00,000
VII	7	Freezer(-20)	4	1,50, 000
VIII	8	Hot Air Oven-260L	5	4,50,000
IX	9	Water Bath	6	1,50,000
X	10	Analytical Balance	6	5,50,000
XI	11	Precision balance	2	1,50,000
XII	12	Vortex	13	2,00,000
XIII	13	Electric Micro incinerator	9	4,50,000
XIV	14	Water Distillation plant	5	2,50,000
XV	15	pH meter	6	1,15,000
XVI	16	Deep Freezer(-86)	4	19,00,000
XVII	17	Inspissator	6	27,50,000
XVIII	18	Refrigerator 300-450 lit	10	3,50,000
XIX		Refrigerator 165-200 lit	8	
XX	19	Variable Volume Pipette (0.5-10 µl)	8	4,80,000
XXI		Variable Volume Pipette (2-20 µl)	16	
XXII		Variable Volume Pipette (20-200 µl)	20	
XXIII		Variable Volume Pipette (100-1000 µl)	19	
XXIV		Racks Suitable for pipettes offered, at least 4 positions	28	
Total No. of Equipment to be procured			218	

ii) **Documentary Evidence**

The Bidder shall furnish the following documentary evidence to demonstrate that it fulfills the experience and technical capacity, as above:

- a) Details of past experience **of Bidder firm** in support of qualification requirement given in para b).i).b) (applicable for its manufacturer);
- b) Details of past experience **of manufacturer** in support of qualification requirement given in para b).i).
 - a) (applicable for bidder); including past performance of the Goods offered and on those of similar nature within the past five years, details of current contracts in hand and other commitments (as per form given in **Section VI, Bidding Forms- Performance Statement Form**).
- c) Furnish at least 2 or more documentary evidence (**Client's certificate**) in support of the satisfactory execution including timely supply by the Bidder during last five years. Purchaser may seek feedback from Clients on satisfactory supply of the goods supplied to them. In case, Purchaser gets two or more adverse feedback from existing end users, bids of those bidders will not be consider for further evaluation. In addition, the Purchaser may take technical feedback from Govt. facilities for the use of particular goods offered by the bidder.
- c) In support of the financial capability/ turnover criteria, bidder should submit Copies of audited financial statements of accounts (including balance sheet, profit and loss account, auditor's reports, and IT returns) certified by the auditor of the Company for last five financial years or latest (2017-18, 2018-19, 2019-20, 2020-21 and 2022-23). Bidders are also submitted the CA certificated certificate for the turnover of the company of the last five years or latest.

d) **Technical demonstration of Goods / Equipment offered:**

- i) Prior to contract award, the lowest evaluated substantially responsive Bidder may be requested to organize demonstration of the goods/ equipment quoted, for inspection of quality and its efficient operation and demonstration of performance parameters before Purchaser or its authorized team. In case, the goods does not perform satisfactorily and does not pass quality / performance test, the bid would be deemed to be non-responsive and Purchaser reserves the right to move to next lowest evaluated responsive bidder for such a technical demonstration of goods.
- ii) the bidder shall arrange for demonstration of offered goods at desired location intimated later by Purchaser, at own cost, either directly or through authorized Dealer /Distributors, as the case may be, for verification by the Purchaser, whether the goods offered meets the accuracy and other quality parameters as indicated in Technical Specifications at Section IV. The bidder should be prepared to do so by keeping one sample unit of the quoted goods ready at its disposal.

Section V – Schedule of Requirements

A. List of Goods and Equipment required:

Seq. No.	Sch. Nos.	Description of Goods and Equipment	Total quantity to be supplied (Nos.)
I	1	Biosafety cabinet Class II A2 with UPS	9
II	2	Laboratory Incubator (37 deg C) higher volume	5
III	3	Refrigerated centrifuge with UPS	8
IV	4	Autoclaves: Vertical	12
V	5	Autoclaves: Horizontal	3
VI	6	Laboratory Incubator (37 deg C)-smaller volume-70-100L	6
VII	7	Freezer (-20)	4
VIII	8	Hot Air Oven-260L	5
IX	9	Water Bath	6
X	10	Analytical Balance	6
XI	11	Precision balance	2
XII	12	Vortex	13
XIII	13	Electric Micro incinerator	9
XIV	14	Water Distillation plant	5
XV	15	pH meter	6
XVI	16	Deep Freezer (-86)	4
XVII	17	Inspissator	6
XVIII	18	Refrigerator 300-450 lit	10
XIX		Refrigerator 165-200 lit	8
XX	19	Variable Volume Pipette (0.5-10 µl)	8
XXI		Variable Volume Pipette (2-20 µl)	16
XXII		Variable Volume Pipette (20-200 µl)	20
XXIII		Variable Volume Pipette (100-1000 µl)	19
XXIV		Racks Suitable for pipettes offered, at least 4 positions	28
Total No. of Equipment to be procured			218

Important Note:

Bidders can submit bid for any one or more or all schedules based on their technical capability and qualification criteria specified in the ITB. Bidders are requested to quote for the whole quantity in a schedule. If a bidder quoted for partial quantity in a schedule, the bid will be rejected.

B. List of Related Services:

Sch. No.	Description of Goods and Equipment	Total Quantity (Nos.)	CMC after expiry of 3 years comprehensive warranty period		
			Type of Service	Year	Year
1	Biosafety cabinet Class II A2 with UPS	9	CMC	Year - 4	Year - 5
2	Laboratory Incubator (37 deg C) higher volume	5	CMC	Year - 4	Year - 5
3	Refrigerated centrifuge with UPS	8	CMC	Year - 4	Year - 5
4	Autoclaves: Vertical	12	CMC	Year - 4	Year - 5
5	Autoclaves: Horizontal	3	CMC	Year - 4	Year - 5
6	Laboratory Incubator (37 deg C)-smaller volume-70-100L	6	CMC	Year - 4	Year - 5
7	Freezer(-20)	4	CMC	Year - 4	Year - 5
8	Hot Air Oven-260L	5	CMC	Year - 4	Year - 5
9	Water Bath	6	CMC	Year - 4	Year - 5
10	Analytical Balance	6	CMC	Year - 4	Year - 5
11	Precision balance	2	CMC	Year - 4	Year - 5
12	Vortex	13	-	-	-
13	Electric Micro incinerator	9	-	-	-
14	Water Distillation plant	5	CMC	Year - 4	Year - 5
15	pH meter	6	CMC	Year - 4	Year - 5
16	Deep Freezer (-86)	4	CMC	Year - 4	Year - 5
17	Inspissator	6	CMC	Year - 4	Year - 5
18	Refrigerator 300-450 lit	10	CMC	Year - 4	Year - 5
	Refrigerator 165-200 lit	8	CMC	Year - 4	Year - 5
19	Variable Volume Pipette (0.5-10 µl)	8	-	-	-
	Variable Volume Pipette (2-20 µl)	16	-	-	-
	Variable Volume Pipette (20-200 µl)	20	-	-	-
	Variable Volume Pipette (100-1000 µl)	19	-	-	-
	Racks Suitable for pipettes offered, at least 4 positions	28	-	-	-

Consignee-wise Quantity Distribution of Medical Equipment and detailed addresses of consignees:

a) Consignee-wise Quantity Distribution of Medical Equipment

Consignee-wise Quantity Distribution of Medical Equipment								
Sch. No.	Description of Equipment	IRL srinagar	RSISK-GMC, Ambikapur	IRL Deharadun	IRL, Andaman	District Hospital, Ujjain	Jaunpur Medical College	Total Req. Qty.
1	Biosafety cabinet Class II A2 with UPS	1	2	2	-	2	2	9
2	Laboratory Incubator (37 deg C) higher volume	-	1	1	1	1	1	5
3	Refrigerated centrifuge with UPS	-	2	1	2	1	2	8
4	Autoclaves: Vertical	-	3	1	3	3	2	12
5	Autoclaves: Horizontal	-	1	1	-	1	-	3
6	Laboratory Incubator (37 deg C)-smaller volume-70-100L	1	1	1	1	1	1	6
7	Freezer(-20)	-	1	1	-	1	1	4
8	Hot Air Oven-260L	-	1	1	1	1	1	5
9	Water Bath	1	1	1	1	1	1	6
10	Analytical Balance	1	1	1	1	1	1	6
11	Precision balance	-	-	-	1	-	1	2
12	Vortex	2	2	2	3	2	2	13
13	Electric Micro incinerator	-	2	1	2	2	2	9
14	Water Distillation plant	-	1	1	1	1	1	5
15	pH meter	1	1	1	1	1	1	6
16	Deep Freezer(-86)	-	1	-	1	1	1	4
17	Inspissator	-	1	1	1	1	2	6

Consignee-wise Quantity Distribution of Medical Equipment

18	Refrigerator 300-450 lit	1	2	1	2	2	2	10
	Refrigerator 165-200 lit	-	2	1	2	1	2	8
19	Variable Volume Pipette (0.5-10 µl)	-	-	-	4	-	4	8
	Variable Volume Pipette (2-20 µl)	-	4	-	4	4	4	16
	Variable Volume Pipette (20-200 µl)	2	4	2	4	4	4	20
	Variable Volume Pipette (100-1000 µl)	2	4	2	3	4	4	19
	Racks Suitable for pipettes offered, at least 4 positions	2	6	2	6	6	6	28

b) Detailed addresses of consignees:

Sr. No.	Address	consignee's representative	Tel / Mobile	Email	Alternate Staff Officer	Mobile	Alternate Staff Email
1	IRL Andaman District TB Centre Building, G.B. Pant Hospital Directorate of Health Services A&N Islands – 744 104 Port Blair	Dr. S. P. Burma Joint Secretary (NTEP)	Tel: 03192 – 242132 Mobile: 9434281711	stoan@rntcp.org	Dr. Keerthi Vasani	7063906764	irlanpb@rntcp.org
2	State TB Demonstration and Training Centre Tyagi Road 107, Chander Nagar, In front of State Nursing College, Dehradun 248001 Uttarakhand	Dr. Prashant Choudhury, Microbiologist	9012342359	irlurddn@rntcp.org	Ms. Anuja Bisht, EQA Microbiologist	7409033234	irlurddn@rntcp.org
3	State TB Training and Demonstration Center, Delegate, Chest Disease Hospital Campus, Srinagar-190001. Jammu & Kashmir	Mr. Zafar Naushad, IRL Microbiologist	09796367708	irljksgr@rntcp.org			
4	Rajmata Smt. Devendra Kumari Singhdeo (RSDKS) Government Medical College, Ambikapur: Chhattisgarh 497001	Dr. Obulesu G, Assistant Professor, Microbiology, RSDKS GMC, Ambikapur	9866112013	obulesu100@gmail.com	Dr. Shailendra Gupta, DTO	9301969795 7987031383	dtocgsrg@rntcp.org imaambikapur@gmail.com
5	District Hospital, Shrimant Maharaja, Agar Road, Madhavrav Campus, Malipura, Ujjain, Madhya Pradesh 456006	Dr. Sunita Parmar, DTO Ujjain	9425332393	dtompujn@rntcp.org	Dr. Vijay Marmat, MO, DRTB	9644487774	vij.marmat@gmail.com
6	UNS Autonomous state Medical College, Siddiqupur, Shahganj road, Jaunpur Uttar Pradesh 222001	Dr. Deepak Kumar HOD Microbiology UNS Jaunpur	7055705777	drdeepakkumar579@gmail.com			

C. Delivery & Completion Schedule

The delivery shall be made within **60 days** from the date of issue of the Notification of Award (NOA).

3. Technical Specifications

A. Technical Specifications – General Requirements

1. **Pre-requisite for equipment installation:** The pre-requisites for installation of equipment should be clearly defined in the technical proposal by bidder and the cost for pre-requisite for installation should be borne by bidder. Before proceeding for installation, bidder to confirm that pre-requisite for installation is completed on site.
2. **Installation of Equipment:** Selected/Awarded bidder has to install the delivered equipment by certified or qualified personnel. Bidder to perform IQ, OQ and PQ for equipment as per Manufacturer Protocols. Bidder to provide user training to end user during installation.
3. **Service/Maintenance:** The supplier shall have a functioning after-sale-service in India covering the whole country, including adequate infrastructure, competent and adequately staffed technical personnel with adequately provisioned spare part store allowing responding to any complaints and to repair within 7 days /replace the unit within 14 days of receipt of complaint.
4. **Comprehensive Warranty Period & CMC Services:**

Equipment Name	Biological Safety Cabinet Class IIA2 with thimble /canopy connection and with 3 KVA UPS
Comprehensive Warranty Period	3 years, Warranty period starts from successful installation and validation at site
Comprehensive Maintenance services	<p>It includes following activities during warranty and CMC Period:</p> <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out annually. • Annual Validation to be carried out. • Validation to be done annually during three years of warranty period for parameters [Air velocity, Particle count test, Filter integrity (PAO) with traceable to National /International Standards and if any other test specified by manufacturer. All the tests to be performed as per manufacturer instructions/protocol. • Validation should be done for BSC. • At initial installation: on site, prior to initial use • Annually in warranty period • After replacing filter/blower or any major repair/replacement work • After moving the cabinet <p>*Besides activities mentioned in Comprehensive Maintenance Services it includes replacements of part, consumables etc.</p>
CMC Period:	2 years after comprehensive warranty period

Equipment Name	Biological Safety Cabinet Class IIA2 with thimble /canopy connection and with UPS
Additional Requirement for installation of BSC	Providing Technical Assistance for Successful Installation: The ducting work for BSCs at all sites shall be done by separate agency hired for upgradation of the facility. However, bidder shall provide necessary technical support for successful installations, testing and commissioning of these units respective of the fact that ducting will be done by another agency.

Equipment Name	Laboratory Incubator (37°C)
Comprehensive Warranty Period	3 Years, Warranty period starts from installation and successful calibration of equipment at site.
Comprehensive Maintenance Services	<p>It includes following activities during warranty & CMC Period:</p> <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out annually. • Calibration to be done annually during the warranty period and CMC period for parameters (Temperature with traceable to National/International Standards) as per manufacturer's instructions/protocol and in case of any major repair/replacement of spare part <p>*Besides activities mentioned in Comprehensive Maintenance Services, it includes replacements of part, consumables etc.</p>
CMC Period:	2 years after comprehensive warranty period

Equipment Name	Refrigerated centrifuge with UPS
Comprehensive Warranty Period	3 years, Warranty period starts from installation and successful calibration of equipment at site.
Comprehensive Maintenance Services	<p>It includes following activities during warranty & CMC Period:</p> <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out on an annual basis. • Calibration to be carried out annually during warranty & CMC Period for parameters (Speed, Temperature & Time with traceable to National /International Standards) and in case of any major repair/replacement of spare parts. <p>*Besides activities mentioned in Comprehensive Maintenance Services, it includes replacements of part, consumables etc</p>
CMC Period	2 years after comprehensive warranty period

Equipment Name	Autoclave (Horizontal & Vertical)
Comprehensive Warranty Period	3 years, Warranty period starts from successful installation and calibration of equipment at site.
Comprehensive Maintenance Services	<p>It includes following during warranty & CMC Period</p> <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out annually. • Calibration to be done annually during warranty & CMC period for parameters (Temperature, Time & Pressure with traceable to National /International Standards) as per manufacturer's instructions/protocol and in case of any major repair/replacement of spare part. <p>*Besides activities mentioned in Comprehensive Maintenance Services, it includes replacements of part, consumables etc.</p>
CMC Period	2 years after comprehensive warranty period

Equipment Name	Deep Freezer (-20° C) Deep Freezer (-86° C)
Comprehensive Warranty Period	3 years, Warranty period starts from successful installation and calibration of equipment at site.
Comprehensive Maintenance Services	<p>It includes following during warranty & post warranty:</p> <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out annually. • Calibration to be done annually during the warranty & CMC period for parameters (Temperature with traceable to National / International Standards) as per manufacturer's instructions/protocol and in case of any major repair/replacement of spare part. <p>*Besides activities mentioned in Comprehensive Maintenance Services, it includes replacements of part, consumables etc.</p>
CMC Period	2 years after comprehensive warranty period

Equipment Name	Hot Air Oven-260L
Comprehensive Warranty Period	3 years, Warranty period starts from successful installation and calibration of equipment at site.
Comprehensive Maintenance Services	<p>It includes following during warranty & CMC Period:</p> <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out annually. • Calibration to be done annually during the warranty & CMC period for parameters (Temperature) with traceable to National / International Standards) as per manufacturer's instructions/protocol and in case of any major repair/replacement of spare part. <p>*Besides activities mentioned in Comprehensive Maintenance Services it includes replacements of part, consumables etc. during the warranty period</p>
CMC Period	2 years after comprehensive warranty period

Equipment Name	Water Bath
Comprehensive Warranty Period	3 years, Warranty period starts from successful installation and calibration of equipment at site.
Comprehensive Maintenance Services	<p>It includes following during warranty & CMC Period:</p> <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out annually. • Calibration to be done annually during the warranty & CMC period for parameters (Temperature with traceable to National / International Standards) as per manufacturer's instructions/protocol and in case of any major repair/replacement of spare part. <p>*Besides activities mentioned in Comprehensive Maintenance Services it includes replacements of part, consumables etc.</p>
CMC Period:	2 years after comprehensive warranty period

Equipment Name	Precision Balance and Analytical Balance
Comprehensive Warranty Period	3 years, Warranty period starts from successful installation and calibration of equipment at site.
Comprehensive Maintenance Services	<p>It includes following during warranty:</p> <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out annually. • Calibration to be done annually during the warranty and CMC period for parameters (accuracy, precision & linearity with traceable to National/ International Standards) as per manufacturer's instructions/protocol and in case of any major repair/replacement of spare part. <p>*Besides activities mentioned in Comprehensive Maintenance Services it includes replacements of part, consumables etc.</p>
CMC Period	2 years after comprehensive warranty period

Equipment Name	Vortex
Comprehensive Warranty Period	3 Years, Warranty period starts from the date of receipt of equipment at site.
Services under Comprehensive Warranty	<p>It includes following during warranty:</p> <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • It also includes replacements of part, consumables etc. during the warranty period

Equipment Name	Electric Micro incinerator
Comprehensive Warranty Period	3 Years, Warranty period starts from the date of receipt of equipment at site.

Services under Comprehensive Warranty	It includes following during warranty: <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • It also includes replacements of part, consumables etc. during the warranty period
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Equipment Name	Water Distillation Unit
Comprehensive Warranty Period	3 years, Warranty period starts from successful installation of equipment at site.
Comprehensive Maintenance Services	It includes following during warranty & CMC Period: <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out annually. *Besides activities mentioned in Comprehensive Maintenance Servicesit includes replacements of part, consumables etc.
CMC Period	2 years after comprehensive warranty period

Equipment Name	pH meter
Comprehensive Warranty Period	3 years, Warranty period starts from successful installation at site
Services under Comprehensive Warranty	It includes following during warranty: <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • It also includes replacements of part, consumables etc. during the warranty period

Equipment Name	Inspissator
Comprehensive Warranty Period	3 years, Warranty period starts from successful installation and calibration of equipment at site.
Comprehensive Maintenance Services	It includes following during warranty & CMC Period: <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Preventive Maintenance to be carried out annually. • Calibration to be done annually during warranty & CMC period for parameters (Temperature with traceable to National/International Standards) as per manufacturer's instructions/protocoland in case of any major repair/replacement of spare part. *Besides activities mentioned in Comprehensive Maintenance Servicesit includes replacements of part, consumables etc.
CMC Period	2 years after comprehensive warranty period

Equipment Name	1. Refrigerator 300-450 L 2. Refrigerator 165-200L
Comprehensive Warranty Period	3 Years, Warranty period starts from the date of receipt of equipment at site.
Services under Comprehensive Warranty	It includes following during warranty: <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • It also includes replacements of part, consumables etc. during the warranty period

Equipment Name	Pipette i) 0.5 -10 µl ii) 2-20 µl iii) 20-200 µl iv) 100-1000 µl
Comprehensive Warranty Period	2 years, Warranty period starts from date of receipt at site.
Services under Comprehensive Warranty	It includes following during warranty: <ul style="list-style-type: none"> • Breakdown calls to be attended as and when required. • Replacements of part, consumables etc. as and when required. • Preventive Maintenance to be carried out on annual basis. • Calibration to be to be carried out on annual basis during the warranty period and in case of any major repair/replacement of spare part for parameters (accuracy & standard deviation for the dispensing volume with traceable to National / International Standards).

- 5. Equipment Manual:** Installation, Operator, Maintenance/Service manuals in English should be provided with each equipment.
- 6. Spare part list:** Bidder to submit the spare part list including the cost for quoted equipment
- 7. Accessories list:** Bidder to submit the accessories list including the cost for quoted equipment
- 8. Factory Calibrated Certificate:** Equipment must be supplied with valid calibration certificate stating that the equipment has been calibrated at factory.
- 9. Packing data**
Packing data are not necessarily part of the bidding process but are needed for shipment and for customs declarations.
Dimensions (W × H × D) in cm.
Appliances must be transported upright
(Y/N). Customer's tariff number.
- 10.** The design and workmanship of equipment offered, including power supply, has to be suited to operate properly and continuously under the climatic conditions in India, especially humidity (e.g. <90% at 35°C), permissible ambient temperature (e.g. +5°C to +45° C), protection against fungi, and possible spikes in the electric network.
- 11.** ISO 9001: The manufacturer must have Manufacturer System Certified to ISO 9001.

Safety standards: The equipment must comply with ISI certification as per BIS Standards or any equivalent international safety standards such as IEC- 61010 and IEC-60601 etc.

B. Technical Specifications – specific requirements

Sch. No. 1: Biological Safety Cabinet Class II A2 with thimble /canopy and with 3 KVA Uninterrupted Power Supply (UPS)

Sr. No.	Technical Specifications
I	<p>Description of function: The class II BSC is used in a TB laboratory for processing specimens consisting of liquefaction of sputa and handling cultures of tubercle bacilli. This type of BSC is not adequate for handling volatile or toxic chemicals or radionuclides. Before ordering a BSC, facility and engineering requirements to be checked.</p> <p>Organization of a periodical recertification of the BSC by an authorized agency to be in place.</p>
1.	Main specifications
a	The BSC to certified to meet the requirements of class IIA2 NSF 49 or class II EN 12469; specifically, with regard to inward airflow (≥ 0.40 m/s according to EN 12469:2000 or ≥ 0.50 m/s according to NSF 49:2004). class IIA2 NSF 49 or class II EN 12469 Certification is mandatory.
b	External height ≤ 2200 mm including support stand, allowing an available space of at least 400 mm from the top of the BSC to the ceiling. Higher versions may be accepted, provided the 400 mm over the BSC is available to measure air velocity above the exhaust filter, and to have enough space for changing the filter and for ducting and/ or a thimble connection to outlet.
2	Internal working area (approximate):
A	For a BSC of 120 cm (4 ft): width 1150 mm \times depth 630 mm \times height 650–750 mm.
B	A BSC of 120 cm (4 ft) provides the minimal space needed for safe work.
C	Inside finish: stainless steel, high quality (e.g. grade 304).
D	External housing, including screws, made of stainless steel or equivalent resistant galvanized (zinc-coated) sheet steel, subsequently powder coated and thermally hardened; minimum 0.8 mm thick, or other material that is hard-wearing, resistant to disinfectants and chemicals used in a TB laboratory, and abrasion resistant.
E	Vertically adjustable sliding window: aerosol-tight, sliding, safety glass (laminated multilayer safety glass only), thickness ≥ 6.7 mm, counterbalanced.
F	High optical transmission, but absorption of UV light; minimal reflection.
G	Working aperture: ≥ 170 mm measured from work surface to the bottom of the sash window.
h	Maximal lifting height of front window: $500 \pm 10\%$ mm.
i	Ability to lock the window hermetically for gaseous disinfection for filter decontamination.
j	Single piece working surface with integrated front air grill.
K	Noise pressure level: ≤ 60 dbA. Noise pressure level should be within the approved range of NSF 49 or EN 12469 standard
3	Internal fittings
A	Two plugs, 230 ± 10 V, AC, 50 Hz, protected with separate T5A (slow blow) fuse.
B	Voltage and plugs adapted to those used in the country. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
4	Warning: Plugs inside the BSC may differ from the main connection to the electricity network.
A	Flicker-free, low-glare, warm-coloured light, >1000 lux.

B	Control display on the front of the BSC.
i)	Electrical control or indicators.
ii)	Electronic fan control.
iii)	Flow meter for air inflow velocity.
iv)	Flow indicator or meter for air down flow velocity.
v)	Operating hours indicator (counter).
vi)	UV light timer.
vii)	Filter and flow conditions.
5	ultraviolet C (UVC) light (253.7 nm wavelength); 30 W with hour counter; with interlock with white light so that the UVC light can be switched on only when the white light source is switched off.
6	Optional: (if a safety gas burner will be used): Gas tap with solenoid valve, optional right or left side.
A	For a laboratory located in a seismic area, gas pipes are not recommended; small gas containers (approximately 200–400 ml) with butane gas directly fixed to the burner to be used instead.
b	Not necessary when a micro-incinerator is used.
c	Pre filter construction preferred; easily accessible, filter change without tools preferred.
d	High-efficiency particulate air (HEPA) filter (exhaust air filter); classification at least H14; conforming with EN 1822; metal framed.
7	Air down flow velocity:
a	NSF 49–2002: Requires compliance with the manufacturer's set points, or down flow velocity with a deviation of <0.025 m/s from a nominal set point.
b	EN 12469: Airflow velocity should be between 0.25 and 0.50 m/s and is defined by the manufacturer according to the construction. Additionally, no individual measurement should differ by more than 20% of the value requested by the manufacturer within the limits given.
c	Air circulation volume flow (Modify according to the BSC dimensions):
i)	For a BSC of 120 cm (4 ft): 700–1200 m³/h.
8	Influx / Inflow air velocity:
a	According to NSF 49, the average airflow velocity at front aperture should be 0.51 m/s for class A2.
b	EN 12469 does not sub classify within class II BSC. The average airflow velocity at front aperture should be at least 0.4 m/s, according to the manufacturer's specifications.
c	Exhaust volume airflow/fresh airflow inward:
i)	For a BSC of 120 cm (4 ft): 300–600 m³/h.
d	Blower system to be able to maintain the airflow within a minimum window (narrow limits) on voltage fluctuations. Data to be available on request.
e	Alarms, visible and/or audible, for any unsafe condition of the BSC (e.g. airflow, window position, hardware or software errors). Possibility to shut down alarm for cleaning and maintenance.
9	Electricity requirements
i)	Supply voltage: 230 ± 10 V, AC, 50/60 Hz.
a	Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
b	Lead fuse T16A (slow blow) or circuit breaker B16. The electrical regulations valid in the country of use as well as the relevant connection conditions are required.
ii)	Power consumption (approximate): Modify according to the BSC dimensions
a	For a BSC of 120 cm (4 ft): 600 W.
	- Power consumption for plugs inside: Approximately 1000 W. Note: In areas with frequent breakdown of electricity supply, BSCs with low energy consumption can be an advantage; a UPS with lower capacity can be used.
	- Conform to electrical safety standards IEC 60601–1, UL 61010–1, EN 61010–1 or equivalent BIS standards.

	- Protection class (in accordance with EN 60529).
	- Designed not to interfere with circuit radio (in accordance with EN 55014).
10	Documentation
a	Manufacturer's certificate
i)	The manufacturer must have a management system certified to ISO 9001.
ii)	The manufacturer to individually test each BSC before shipment. The test report to be provided to the customer, with a duplicate fixed to the BSC. The tests to be performed with research-grade instruments for valid calibration according to test methods outlined in EN 12469 or NSF 49. The test report to contain at least data on:
	- inflow air velocity
	- downflow air velocity
	- filter leak scan for both filters to document filters' efficiency and integrity.
iii)	Quality and safety standards met by the product to be listed.
11	Accessories
a	Table or support frame (support stand) for a working height of 78 ± 2 cm, adjustable at least at three points (feet) to level.
b	A telescopic support stand is advisable for a flexible use.
c	Ergonomic laboratory chair , designed for infectious laboratory areas:
	- adjustable height to suit different users, seat range approximately 400–490 mm
	- adjustable-angle back rest (no arm rest)
	- caster wheels (five)
	- all metal parts chrome plated
	- disinfectable with alcohol-containing disinfectants.
12	Thimble Ducting: Air duct construction with thimble to exhaust air from the BSC. The air duct to be made for the BSC offered and fit precisely. A thimble connection (see WHO TB Biosafety guidelines 2012 page 33) is used with Class II type A2 BSC that is ducted to the outside. The thimble fits over the cabinet's exhaust housing, sucking the air expelled from the cabinet into ducts that lead outside. A small opening (usually 5 cm wide) is maintained between the thimble and the cabinet's exhaust housing. This opening enables room air to be drawn into the exhaust ducting system. The thimble must be removable or be designed to allow for operational testing of the cabinet. The power of the external extraction fan installed at the end of the ducting should exceed the volumetric flow rate of each BSC by 30–50% and should be controllable and connected to an uninterrupted power supply. The air from the BSC should be ducted with ventilation pipes that have a diameter exceed 20 cm. The extractor fan assembly must be easily accessible and preferably kept at the end of ducting with stable fitting. Ducting design should be straight, and number of bands should be minimal, bend should be round shaped (sharp/ square bends should not be used). Ducting should have adjustable balancing dampers with easily accessibility so that flow can be controlled as and when required.
a	All standard accessories, consumables and parts required for the proper installation, operation, and maintenance of the BSC to be included in the offer by the supplier and to be specified and quantified.
13	Operation, maintenance, and installation
a	Operation and maintenance manual At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the BSC.
b	Installation and maintenance
	- The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail
	- The bidder to also provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.
	- The supplier to provide an after-sale service that covers the whole country. The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the BSC within 14 days.

	<ul style="list-style-type: none"> - Initial on-site testing (aerosol leak test, recirculating air filter, exhaust air filter, airflow measurements inside the BSC and inward/exhaust airflow) to be carried out by a certified expert and certified compliant for satisfactory installation and safe operation. Measurement results to be printed out for documentation in the maintenance record.
14	Warranty starts with certification on site.
15	Standard maintenance tools All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning equipment, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above). If special tools are needed (e.g. to change filters), they must be provided.
16	Spare parts
a	Each assembled BSC to be accompanied by an authorized list of accessories and spare parts.
17	Warning: Special clamps may be needed to fix HEPA filter.
18	Remarks The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 5–40 °C, fungi, and spikes in the electricity supply.
19	Bidders may propose products additional to the requirements listed above.
II	3 KVA Uninterrupted power supply with battery pack for BSC
1	Description of function and use: The UPS must be used in any settings that have frequent problems in the electricity network (e.g. surges, sags, spikes and blackouts) to assure and back up the function of the BSC, so that any current work can be finalized and all potentially infectious sources closed. If the BSC is connected to a generator, the UPS will maintain the function of the BSC during the time needed for the generator to start and to provide full power.
2	Main specifications
a	UPS: microprocessor controlled, online continuous transducer, 20 minutes.
b	Booster function to regulate up voltage breakdown to 170 V.
c	Buck function to regulate down voltage increase up to 280 V.
d	Filter to protect against voltage spikes.
e	Protection against overload and short circuit.
f	Advanced battery check for automated periodic battery inspection.
g	Indicators for status (e.g. normal function, net down, working on battery, loading battery, battery capacity).
h	Sleep mode if item consuming power is shut off.
i	Power: 230 V ± 25%, 50 Hz or 60 Hz (± 10%) with automatic recognition.
j	Battery: maintenance-free, automatic shut-off before reaching the level of discharge from which recharging to the original capacity will no longer be possible.
k	Time for recharging: approximately 4 hours to reach at least 90% of total capacity.
l	Outlet voltage: 230 V ± 3%, 50 or 60 Hz ± 0.5% (if the country's standard voltage is 110 V AC, adjustment will be needed).
m	Efficiency coefficient: approximately 98%, on battery >85%.
n	Noise at 1 m distance <48 dBA.
o	Permissible ambient temperature and relative humidity: 0–40 °C and 95% (not condensing).
3	Electricity requirements
a	Supply voltage: 230 ± 10 V, AC, 50/60 Hz.
b	Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
c	Power consumption: Approximately 2400 W (may change depending on requirement for the model chosen as well as the extractor fan)

	connected with thimble connection at the outer end).
d	Protection class (in accordance with EN 60529).
e	Designed not to interfere with circuit radio (in accordance with EN 55014).
4	Documentation
a	Manufacturer's certificate
b	The manufacturer must have a management system certified to ISO 9001.
c	Quality and safety standards met by the product to be listed.
5	Accessories
a	Battery pack.
b	Connection (cable and fittings) for battery pack.
6	Operation, maintenance, and installation
a	Operation and maintenance manual
i)	At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the UPS.
b	Installation and maintenance
i)	The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.
ii)	The bidder to provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.
c	Standard maintenance tools
i)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above).
d	Spare parts
i)	Each UPS to be accompanied by an authorized list of accessories and spare parts.

Sch. No. 2 : Laboratory Incubator (37°C), Capacity approx. 400L

Sr. No.	Technical Specifications
1	Description of function and use: The incubator is used to allow growth of Mycobacteria on culture media's
2	Main specifications:
(a)	Temp: 37 °C Incubator (Temp. variation $\pm 0.5^{\circ}\text{C}$), Memmert Type, Capacity approx. 400L $\pm 10\%$
(b)	Inner chamber made up of Stainless steel make of SS-304 grade (please submit the Material of Construction certificate of SS304 grade), full length inner taughtened security glass door
(c)	Housing made of zinc galvanized sheet metal coated with epoxy, hardened by heat treatment, corrosion resistant
(d)	Triple wall with special grade glass wool insulation
(e)	Temperature range, ambient+5°C to 80°C, $\pm 0.1^{\circ}\text{C}$ resolution
(f)	Controller/Digital indicator for Temperature
(g)	Size in mm approximately (of inner chamber): - 700(W) x 900(H) x 650(D), Capacity: 15 cu. ft.(approx. 400 liters) and door swing 65 cms
(h)	Adjustable over-temperature protection controller so as to ensure that the Incubator does not go beyond the set temperature automatically gets cutoff after attaining the set temperature.

(i)	Programs stored on power failure so that when power is restored, equipment continues to function on the previous Programme.
(j)	Certificate to state that the incubator has been calibrated at the factory.
(k)	The apparatus should confirm to Indian Standard Institution Guidelines with latest amendments in Indian Standard Specification for Incubators or equivalent National or International Standards covering Markings, tests and Safety requirements. Voltage regulators of appropriate rating to be included for each item to cope with 160-260 V. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
(l)	3-4 numbers of Stainless steel make shelves”

Sch. No. 3 : Refrigerated centrifuge with UPS

Sl. No.	Technical Specifications
A	Refrigerated centrifuge
1	Description of function and use: The centrifuge will be used in a TB laboratory to spin down mycobacteria in liquefied, decontaminated materials. The compartments containing the centrifuge tubes (buckets) need to be absolutely aerosol tight and closed by transparent lids. At least 3000 G will be required for efficient sedimentation within 20 minutes of centrifugation. The centrifuge should be a desk/bench-top one.
2	Main specifications:
(a)	Metal housing, chamber stainless steel
(b)	Cooling capacity at maximum speed at +4°C
(c)	Standby cooling
(d)	Induction motor, brushless drive
(e)	Rotor with swing-out buckets, at least four positions
(f)	Rotor buckets with aerosol-tight, transparent lids
(g)	Inserts for buckets adapted to 50 ml centrifuge tubes, conical.
(h)	Capacity: about 16 or more × 50 ml.
(i)	Revolutions per minute: approximately 4500 rpm, corresponding to a radius of approximately 15 cm.
(j)	Relative centrifugal force (rcf): approximately 3400 G.
(k)	Noise level at maximum speed: not more than 60 dbA.
(l)	Programmable for all parameters (switchable between rpm and rcf) of a run; large display
(m)	Soft start and different acceleration levels (1–9); different braking levels (1–9) and brake force cut-off.
(n)	Input and recall of programs; at least 20 storage positions.
(o)	LCD display (protected against splash of liquids) for indication of run time, speed (RPM) or RCF (after entering centrifugation radius) – switchable, actual temperature, time left to finish run.
(p)	Imbalance switch-off.
(q)	Motor overheating protection.
(r)	Chamber overheating protection.
(s)	Rotor recognition for appropriate over-speed protection.
(t)	Safety lock of lid during run and as long as the rotor is moving.
(u)	Possibility of mechanical opening of lid if there is current blackout.
3.	Electricity Requirements
(a)	Supply voltage: 230 ± 10 V, AC, 50/60 Hz. Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
(b)	Power consumption: Approximately 1800 W
(c)	Conform to electrical safety standards IEC 60601–1, UL 61010–1, EN 61010–1
(d)	Excess-voltage category II
(e)	Protection class (in accordance with EN 60529)
(f)	Designed not to interfere with circuit radio (in accordance with EN 55014).
4	Spare parts

(a)	Each centrifuge to be accompanied by an authorized list of accessories and spare parts Device for mechanical opening of the centrifuge after automatic blocking as consequence of currency blackout.
(b)	Lubricants for movable parts and gaskets/ silicon O-ring (2 pack to be provided with each unit)
(c)	Spare fuses
5	Operation maintenance and Installation
5.1	Operation and maintenance manual: At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the centrifuge.
5.2	Installation and maintenance
(a)	The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.
(b)	The bidder to also provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.
(c)	The supplier to provide an after-sale service that covers the whole country. The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the centrifuge within 14 days.
6	Standard maintenance tools
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning equipment, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above).
7	Documentation
(a)	Manufacturer's certificate: The manufacturer must have a management system certified to ISO 9001. One certificate to state that the centrifuge has been calibrated at the factory.
(b)	Quality and safety standards met by the product to be listed. Operation, maintenance and installation
B	UPS with Batteries
1	Description of function and use: The UPS must be used in any settings that have frequent problems in the electricity network (e.g. surges, sags, spikes and blackouts) to assure and back up the function of the Refrigerated Centrifuge, so that any current work can be finalized and all potentially infectious sources closed. If the Refrigerated Centrifuge is connected to a generator, the UPS will maintain the function of the Refrigerated Centrifuge during the time needed for the generator to start and to provide full power.
2	Main specifications:
(a)	UPS: microprocessor controlled, online continuous transducer, 20 /30 minutes.
(b)	Booster function to regulate up voltage breakdown to 170 V.
(c)	Buck function to regulate down voltage increase up to 280 V.
(d)	Filter to protect against voltage spikes.
(e)	Protection against overload and short circuit.
(f)	Advanced battery check for automated periodic battery inspection.
(g)	Indicators for status (e.g. normal function, net down, working on battery, loading battery, battery capacity).
(h)	Sleep mode if item consuming power is shut off.
(i)	Power: 230 V \pm 25%, 50 Hz or 60 Hz (\pm 10%) with automatic recognition.
(j)	Battery: maintenance-free, automatic shut-off before reaching the level of discharge from which recharging to the original capacity will no longer be possible.
(k)	Time for recharging: approximately 4 hours to reach at least 90% of total capacity.
(l)	Outlet voltage: 230 V \pm 3%, 50 or 60 Hz \pm 0.5% (if the country's standard voltage is 110 V

(m)	Efficiency coefficient: approximately 98%, on battery >85%.
(n)	Noise at 1 m distance <48 dBA.
(o)	Permissible ambient temperature and relative humidity: 0–40 °C and 95% (not condensing).
3	Electricity requirements
3.1	Supply voltage: 230 ± 10 V, AC, 50/60 Hz. Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards
3.2	Power consumption:
(a)	Approximately 3000 W (depending on the model chosen).
(b)	Protection class (in accordance with EN 60529).
(c)	Designed not to interfere with circuit radio (in accordance with EN 55014).
4	Accessories
(a)	Battery pack.
(b)	Connection (cable and fittings) for battery pack.
5	Spare parts
	Each UPS to be accompanied by an authorized list of accessories and spare parts.
6	Operation, maintenance and installation
6.1	Operation and maintenance manual
	At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the UPS.
6.2	Installation and maintenance
(a)	The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.
(b)	The bidder to provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.
7	Standard maintenance tools
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified)
8	Documentation
(a)	Manufacturer's certificate: The manufacturer must have a management system certified to ISO 9001.
(b)	Quality and safety standards met by the product to be listed.

Sch. No. 4 : Autoclaves: Vertical

Sl. No.	Technical Specifications
1	Description of function and use: Autoclaves are used for sterilization of infectious or clean materials. For effective sterilization for smaller work load. For decontamination of infected material prior to its disposal. For faster work in the laboratory.
2	Main specifications:
(a)	Vertical autoclave, universal basic version for microbiological standard laboratory to sterilize liquids, instruments, glassware, plastic articles or general infectious waste.
(b)	Triple walled construction; chamber, basket, door lid, doorframe, bolts made of corrosion-resistant material and able to prevent stress cracking preferably made of high grade stainless steel sheet of SS-304 grade, housing with SS legs.
(c)	Pressure vessel should be Hydraulic tested at factory with minimum Hydrostatic Pressure: 2.5 kg/cm sq. (35 psi)
(d)	Working Chamber volume: approx. 70 -80 liters.
(e)	Electrically heated by immersion type heaters bearing ISI mark.
(f)	Fast safety lid lock with silicone gasket, it may be radial locking, automatic locking, single lever locking, fly nut assembly mechanism and with heat resistant/safety handle.
(g)	Manual water feed system with water level indicator, pressure gauge, steam release cock, spring loaded safety valve, water inlet and water valves.
(h)	Working temperature: 121°C, Maximum operating temperature: 134 °C (273 °F).
(i)	Working pressure: 15 PSI, Maximum operating pressure: 2.5 bar or 36 PSI
3	Automatic Water Cut-off Device – To protect the heaters from running dry and to ensure that the machine is automatically switched off in case the desired water level falls below the prescribed level.
4	Accessories should include:
(a)	Stainless steel basket (where 2 fit in autoclave directly plus two spare total 4)
(b)	Stainless steel wire basket (where 2 fit in autoclave directly plus two spare total 4)
(c)	Chemical indicator tape for sterilization (2)
(d)	Biological indicator (100)
(e)	spare heating elements (two)
(f)	fuses (10)
(g)	silicone gaskets (2).
5	Timer with Alarm System - To regulate the sterilization time of the media to be sterilized with a buzzer, Sterilization timer: 1–99 minutes. A visual chamber gauge, which easily identifies pressure in the chamber must be accessible to the operator as a backup for reading pressure gauge when no electrical power is available.
6	Micro-processor temperature control system with sensor-with user changeable set temperature and timer option. The microprocessor controls the desired temperature (pressure automatically regulated) by cutting off the current to the heating element automatically & restart the mechanism as required. The control panel to be mounted so that the components sensitive to steam and heat are protected. Large LCD display showing: <ul style="list-style-type: none"> - Chamber Temperature - Sterilization time - Alarm information

7	Alarm: audible, with display on dysfunction & after completion of sterilization cycle. Electrical control box, fitted with toggle switch, indicating Neon lamps for Autoclave ON/OFF status, heater ON/Off status. Over-temperature and over-pressure protection Limiter
8	Electrical requirements: Equipment to work on 230 ± 10 volts single phase, 50 Hz, plug type adopted to local country scenario, Voltage regulator of appropriate rating to be included to cope with 160-260 V. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
9	Standards and safety Requirements: Must submit "European CE" or any other equivalent national/ international product certification
10	Remarks: The apparatus should confirm to national or international standards with latest amendments covering Markings, Safety requirements with recommendations of safe operations from any reputed firm with ISO 9001:2000 certification.

Sch. 5 No. : Autoclaves Horizontal

Sl. No.	Technical Specifications
1	Description of function and use: Applications: For sterilizing non infective material and aqueous media in loosely stoppered flask. For drying of racks and porous loads by vacuum and intake of filtered air. For larger workloads in the laboratory.
2	Main specifications:
(a)	Made of Stainless Steel of SS-304 grade, Triple walled with a steel jacket
(b)	Separate boiler with manual water feed control (valve) with water level indicator and pressure gauge, separate compound gauge for working chamber, separate manual valve for drainage of water.
(c)	Inner, outer chamber, jacket and boiler made of stainless steel 304 grade, manual steam release valve for chamber
(d)	Inner dimensions of chamber: 300 – 320 L
3	Safety features to Include:
(a)	Spring loaded safety valve of stainless steel for both boiler and working chamber
(b)	Automatic Low Water Cut-off Device — To protect the heaters from running dry and to ensure that the machine is automatically switched off in case the desired water level falls below the prescribed level
(c)	Auto safety door lock with heat resistant silicone door gasket (withstanding temp up to 140
(d)	Over temperature and pressure protection
(e)	External Validation port for measuring temperature of the working chamber
(f)	Mounted on rigid tabular stand
(g)	There should be provision for vacuum for drying of racks and porous loads.
(h)	Working temperature: 121°C, Maximum operating temperature: 134 °C (273 °F).
(i)	Working pressure: 1.2 -1.5kg/sq. cm. Maximum operating pressure: 2.5 kg/sq.cm
4	Automatic Pressure Control Switch- To cut-off the current from the heating elements, when the desired/ set pressure value level is attained inside the chamber and restarts the mechanism once the pressure inside the chamber falls from the desired level. The pressure is adjustable from 5 psi to 20 psi with automatic pressure control switch, which controls the pressure with an accuracy of +/- 1 PSI
5	Temperature Indicator - To indicate the temperature inside the chamber.
6	Timer with Alarm System - To regulate the sterilization time of the media to be sterilized and when the desired time is passed, with a buzzer, to that the completion of sterilization cycle, Sterilization timer: 1–99 minutes.
7	Electrical requirements - Equipment to work on 440 ± 10 volts Three phase with neutral, 50 Hz, AC power supply, plug type adopted to local country scenario (MCB) with suitable voltage regulator of appropriate rating. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
8	Accessories – Should include:
(a)	Stainless steel drums (where 2 fit in autoclave directly plus two spare total 4)
(b)	Stainless steel wire basket (where 2 fit in autoclave directly plus two spare total 4)

(c)	Chemical indicator tape for sterilization (2)
(d)	Biological indicator (100)
(e)	Spare heating elements (two) fuses (10)
(f)	Silicon door gasket (2).
9	Standards and safety Requirements: Must submit "European CE" or any other equivalent national/ international product certification
10	Remarks - The apparatus should confirm to national or international standards with latest amendments covering Markings, Safety requirements with recommendations of safe operations from any reputed firm with ISO 9001:2000 certification.

Sch. No. 6 : Laboratory Incubator (37°C)- Capacity approx. 70-100L

Sr. No.	Technical Specifications
1	Description of function and use: The incubator is used to allow growth of Mycobacteria on culture media.
2	Main specifications:
(a)	Temp: 37 °C Incubator (Temp. variation $\pm 0.5^{\circ}\text{C}$), Memmert Type, Capacity 70-100 L
(b)	Inner chamber made up of Stainless steel make of SS-304 grade, full length inner taughtened security glass door
(c)	Housing made of zinc galvanized sheet metal coated with epoxy, hardened by heat treatment, corrosion resistant
(d)	Triple wall with special grade glass wool insulation
(e)	Temperature range, ambient+5°C to 80°C which is user settable, $\pm 0.1^{\circ}\text{C}$ resolution
(f)	Controller/Digital indicator for Temperature
(g)	Size in mm approximately (of inner chamber):- 500 (W)×400(H)×320(D) , Capacity:- Approx. 70-100 liters and door swing 65 cms.
(h)	Adjustable over-temperature protection controller so as to ensure that the Incubator does not go beyond the set temperature automatically gets cutoff after attaining the set temperature
(i)	Programs stored on power failure so that when power is restored, equipment continues to function on the previous Programme
(j)	Certificate to state that the incubator has been calibrated at the factory
(k)	The apparatus should confirm to Indian Standard Institution Guidelines with latest amendments in Indian Standard Specification for Incubators or equivalent National or International Standards covering Markings, tests and Safety requirements. Voltage regulators of appropriate rating to be included for each item to cope with 160-260 V. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards
(l)	2-3 numbers of Stainless steel make shelves

Sch. No. 7 : Deep Freezer (-20°C)

Sr. No.	Technical Specifications
1.	Description of function and use: The freezer is mainly used to store strains, enzymes and other temperature-sensitive reagents
2.	Main Specifications
a)	100% CFC- free.
b)	One-door freezer, to be used as free-standing freezer.
c)	Capacity (gross): ≥ 140 liters (up to 200L).
d)	Dimensions (W \times D \times H): approximately 60 cm \times 60 cm \times 85 cm.
e)	Net (interior compartment) W \times D \times H: approximately 47 cm \times 43 cm \times 69 cm.
f)	Cooling system, static.
g)	Defrosting of freezing compartment, initiated manually.
h)	Temperature range of freezer compartment: -9°C to -25°C which can be set by user for specific temperature
i)	Housing material and door: steel, coated, white.
j)	Polyurethane foam "PUF" insulation
k)	Door hinges right or left as desired, reversible.
l)	Fungus-resistant door gasket.
m)	Door with key lock.
n)	Adjustable feet for levelling.
o)	Interior container made of white plastic. At least three shelves with wire baskets. Optional -Four shelves in the freezing compartment, at least three closed with a freezing flap.
p)	External digital temperature display for freezer compartment with high accuracy sensor mounted inside the chamber suspended in air.
q)	Control panel at the top of cabinet with thermometer Alarms for-Voltage, Overheat, Over cool as well as for under temperature, power fail, Door ajar conditions
r)	Refrigerant: CFC Free.
3.	Electricity requirements
a)	Supply voltage: 230 ± 10 V, AC, 50/60 Hz. Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
b)	Power consumption: Approximately 150 W.
i)	Conform to Indian Electrical Safety standards or international standards like IEC 60601-1, UL61010-1, EN 61010-1.
ii)	Protection class (in accordance with EN 60529).
4.	Documentation
a)	Manufacturer's certificate
i)	The manufacturer must have a management system certified to ISO 9001.
ii)	Declaration of conformity to the requirements of standards and regulations of the directives that apply to the product, including energy classification, gas used as refrigerant, climate class.
iii)	One certificate to state that the freezer has been calibrated at the factory.
b)	Quality and safety standards met by the product must be listed.
5.	Operation, maintenance and installation
a)	Operation and maintenance manual At least one set of operation, maintenance and service manuals for the freezer, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the freezer.

b)	<p>Installation and maintenance</p> <p>Any prerequisites for installation to be communicated to the purchaser in advance, in detail. The supplier to provide an after-sale service that covers the whole country. The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the freezer within 14 days.</p>
c)	Standard maintenance tools:
i)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning material, to be included in the offer.
ii)	Bidders to specify the quantity of every item included in their offer (including items not specified above).
d)	<p>Spare parts:</p> <p>Each freezer to be accompanied by an authorized list of accessories and spare parts.</p>
6.	<p>Remarks</p> <p>The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 5–40 °C, fungi, and spikes in the electricity supply.</p> <p>Bidders may propose products additional to the requirements listed above.</p>

Sch. 8 No. : Hot Air Oven (For sterilization) – 260 liters

Sr. No.	Technical Specifications
1)	Description of function and use: Hot Air Oven of this larger capacity will be used for sterilization of glass ware, etc. inwashing and sterilization area of the TB C&DST Lab
2)	Main specifications:
a)	Thermostatically controlled
b)	temperature range ambient to 250°C with fine and coarse adjustment, Memmert typewith fan, digital display,
c)	Volume of interior housing: Approx.- 250-300 liters
d)	Housing: preferably stainless steel or at least with a durable, corrosion resistant coatingof metal (e.g. galvanized sheet metal coated with epoxy, hardened by heat treatment).
e)	Stainless steel (SS) at least (SS-304) interiors with supports on three sides, adjustable three shelves.
f)	Fan convection to ensure uniform temperature
g)	fitted with load indicator and safety thermostat take over indicator lamp
h)	Temperature variation $\pm 1^{\circ}\text{C}$, LCD/LED indicator.
i)	The apparatus should confirm to latest IS6365-1971 in Indian Standard Specification for Laboratory Electric Ovens or equivalent National or International Standards covering Markings, tests and Safety requirements. Voltage Regulator of appropriate rating to be included to cope with 160- 260V. The line cord / Power cord supplied with the equipmentsshall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.

Sch. No. 9 : Water Bath

Sr. No.	Technical Specifications
1	Main specifications:
(a)	Stainless Steel, insulated double walled, Inner wall of stainless steel at least SS304
(b)	Thermostatic temp. control from ambient to 85 - 90° C ($\Delta 0.50$) complete with immersion heater
(c)	Aluminum /SS cover
(d)	Brass drain cock
(e)	Dimensions outside: - (approx.) 36x41x25 cms; inside:- (approx.) 27x30x15 cms; Capacity not given because the dimensions specified are required for the proper functioning of the water bath in the Laboratory for optimum utilization of the space.
(f)	Digital microprocessors display to set temperature point preventing thermal runaway
(g)	Seamless reservoir with no welds to leak or rust, see-through cover is hinged and removable, and steeply gabled to accept taller samples
2	Electricity requirements:
(a)	Should work on 220-240 volts, AC, 50 Hz, the line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards
(b)	Power: (approx.) 1500W

Sch. No. 10 : Analytical Balance

Sr. No	Technical Specifications
1	<p>Description of function and use: An analytical balance is needed to prepare media containing drugs, for DST. The balance may also be used to calibrate, recalibrate and maintain microliter pipettes used in the laboratory, especially for molecular biology.</p> <p>Temperature variation and static electricity will cause analytical balances to display erratic readings. Therefore, the balance is to be operated on an antistatic surface, in a room with a constant temperature and a steady relative humidity of >65%.</p>
2	Main specifications
a.	Weighing capacity range: 1 mg to at least 200 g.
b.	Tare range = full capacity by subtraction.
c.	Stabilization time: ≤5 seconds.
d.	Housing resistant to chemicals and cleaning materials.
e.	Glass doors (not plastic) that close tightly.
f.	Stainless steel weighing pan, approximately 90 mm diameter.
g.	Full glass windscreen, able to be opened on both sides and from the top cover.
h.	Adjustable feet (so the balance can be levelled).
i.	Waterproof display and keypad, sealed by a durable flexible membrane.
j.	Background illuminated (backlit) display with digits at least 15 mm high.
k.	User-friendly menu (preferably in different languages but at least in English) so the balance can be configured to individual requirements.
l.	Level indicator to be close to the display or in the view field of the display.
m.	Built-in motorized calibration of weight with automatic adjustment
n.	Readability: 0.0001 g (0.1 mg).
o.	Repeatability: 0.0001 g (0.1 mg).
p.	Linearity: 0.0002 g (0.2 mg).
3	Electricity requirements
a.	<p>Supply voltage: 230 ± 10 V, AC, 50/60 Hz.</p> <p>Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.</p>
b.	Power consumption: Low.
c.	Protection class (in accordance with EN 60529)
d.	Designed not to interfere with circuit radio (in accordance with EN 55014)
4	Documentation
a.	<p>Manufacturer's certificate</p> <p>The manufacturer must have a management system certified to ISO 9001. The manufacturer to provide a declaration of conformity to standards that apply to the product, including ingress protection rating and weight classifications and applications.</p>
b.	One certificate to state that the balance has been calibrated at the factory. Certificates to be provided for each item supplied.
c.	Quality and safety standards met by the product must be listed.
5	Accessories
	<ul style="list-style-type: none"> - Protective dust cover. - Optional: Weighing scoop, 90 mm, and stainless steel.
6	Operation, installation, and maintenance
a.	<ul style="list-style-type: none"> - Installation and maintenance:- The bidder must arrange for the equipment to be installed by certified or qualified personnel at the place indicated, free of cost. Detailed installation prerequisites to be communicated

	to the purchaser in advance, especially for the electric - power supply needed, including type of plug (or other way of connection).
b.	- Detailed instruction of laboratory personnel on use, function and maintenance of the equipment (user training), as well as a comprehensive maintenance plan (logbook with daily, weekly, monthly and quarterly maintenance checklist), to be provided.
c.	The cost of the maintenance plan to be defined and guaranteed over the period of warranty.
d.	- The supplier to provide a functioning after-sale service covering the whole country. The service to have adequate infrastructure, competent staff and sufficient spare parts to be able to respond to any complaints and to repair or replace the balance within 14 days.
7	- Standard maintenance tools: - - All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).
8	Spare parts Each balance to be accompanied by an authorized list of accessories and spare parts.
9	Remarks: The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 5–40 °C, fungi, and spikes in the electricity supply.
10	Bidders may propose products additional to the requirements listed above.

Sch. No. 11 : Precision Balance

Sr. No	Technical Specifications
1)	Description of function and use: A precision balance is mainly used to weigh dyes for staining solutions and components for culture media. Temperature variation and static electricity will cause precision balances to display erratic readings. Therefore, the balance is to be operated on an antistatic surface, in a room with a constant temperature and a steady relative humidity of >65%.
2)	Main specifications:
a)	Electronic balance, weighing capacity 210 g.
b)	Tare range = full capacity by subtraction.
c)	Stabilization time: ≤5 seconds
d)	Housing resistant to chemicals and cleaning materials
e)	Stainless steel weighing pan, approximately 115 mm diameter
f)	Adjustable feet (so the balance can be levelled)
g)	Waterproof display and keypad, sealed by a durable, flexible membrane
h)	Background illuminated (backlight) display with digits at least 15 mm high
i)	User-friendly menu (preferably in different languages but at least in English) so the balance can be configured to individual requirements
j)	Level indicator to be close to the display or in the view field of the display
k)	Built-in motorized calibration of weight with automatic adjustment
l)	Readability: 0.001 g (1 mg)
m)	Repeatability: 0.001 g (1 mg)
n)	Linearity: 0.002 g (2 mg).
	Spare Part
o)	Each balance to be accompanied by an authorized list of accessories and spare parts
	Accessories
p)	Protective dust cover
q)	Weighing scoop, 90 mm, stainless steel
3)	Electricity requirements:
a)	Supply voltage: 230 ± 10 V, AC, 50/60 Hz. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
4	Power consumption: Low
a)	Confirm to electrical safety standards IEC 60601-1, UL 61010-1, EN 61010-1.
b)	Protection class (in accordance with EN 60529)
c)	Designed not to interfere with circuit radio (in accordance with EN 55014).
5	Documentation
a)	Manufacturer's certificate: The manufacturer must have a management system certified to ISO 9001
b)	One certificate to state that the balance has been calibrated at the factory.
c)	Quality and safety standards met by the product must be listed
6	<u>Operation, installation and maintenance</u>
6.1)	Operation and maintenance manual
a)	At least one set of operation, maintenance and service manuals written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the precision balance

6.2	Installation and maintenance:
a)	The bidder must arrange for the equipment to be installed by certified or qualified personnel
b)	Any prerequisites for installation to be communicated to the purchaser in advance, in detail
c)	The bidder to also provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan to be given. The cost of the maintenance plan to be defined and guaranteed over the period of warranty
d)	The supplier to provide an after-sale service that covers the whole country. The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the balance within 14 days.
e)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).

Sch. No. 12 : Vortex

Sr. No	Technical Specifications
1	Description of function and use: The mini shaker is for use in a BSC
2	Main specifications:
(a)	Adjustable speed: 100 to 2,500 rpm, continuous and intermittent "touch-control" modes,
(b)	Cup heads size: 25 mm dia. x 22 mm deep for mixing contents in McCartney bottles
(c)	Heavy cast-metal base and suction cup to assure stability, prevent "walking".
(d)	Disinfect-able
3	Electricity requirements:
(a)	Supply voltage: 220-230 Volts, AC, 50HZ. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards
4	Remarks: Equipment quoted should comply with Indian Standards Institutions Guidelines or any other National or International Guidelines.

Sch. 13 No. : Electric Micro incinerator

Sr. No.	Technical Specifications
1	Description of function and use: The micro-incinerator allows sterilization of metal inoculating loops without a flame and is suited for work in a BSC.
2	Main specifications:
(a)	Heating element of ceramic surrounded by isolating cover
(b)	Quick infrared heating to temperatures ≥ 800 °C for fast sterilization
(c)	Stand with suction-cup feet (or equivalent) for stable, safe operation
(d)	Possibility to fix the incinerator to a stand at different angles
3	Electricity requirements:
	<ul style="list-style-type: none"> – Supply voltage: 230\pm10 Volts, AC, 50/60HZ – Voltage and plugs to be adapted to meet the country requirements. – The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards
4	Power consumption maximum 2000 W
(a)	Protection class (in accordance with EN 60529)
(b)	Designed not to interfere with circuit radio (in accordance with EN 55014)
5	Accessories: Attached loop holder.
6	Spare Part: Each micro-incinerator to be accompanied by an authorized list of accessories and spare parts.
7	Documentations
(a)	Manufacture's Certificate: The manufacturer must have a management system certified to ISO 9001.
(b)	Certificates to be provided for each item supplied
(c)	Quality and safety standards met by the product must be listed
8	Operation, installation and maintenance:
8.1	Operation and maintenance manual
(a)	At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country.
8.2	Installation and maintenance
(a)	The bidder must arrange for the equipment to be installed by certified or qualified personal
(b)	Any prerequisites for installation to be communicated to the purchaser in advance, in detail.
(c)	The bidder to also provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.
(d)	The supplier to provide an after-sale service that covers the whole country.
(e)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the micro-incinerator within 14 days.
8.3	Standard Maintenance tools: All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above).
9	Remarks
(a)	The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country. The equipment may need to tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 5–40 °C, fungi, and spikes in the electricity supply.
(b)	Bidders may propose products additional to the requirements listed above.

Sch. No. 14 : Water Distillation Unit

Sr. No.	Technical Specifications
1	Main specifications
(a)	Complete unit made in stainless steel
(b)	Constant level arrangement for inlet water
(c)	Wall hanging / floor mounted model, provided with MS Bracket for wall mounting
(d)	Boiling Chamber, Lid, Cooling Condenser, and any other part coming into contact with water / steam should be made of 304 quality stainless steel.
(e)	Heating achieved by high grade efficiency immersion heaters(two)
(f)	Capacity of the plant should be 5 litres (approx.) per hour
(g)	should be provided with necessary safety features such as automatic disconnection of heater connections should the still run dry
2	Electricity requirements
(a)	Should work on 220/440 volts, AC Mains, the line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.

Sch. No. 15 : pH meter

Sr.No	Technical Specifications
1	Main specifications:
(a)	pH range 0-14 with digital display and stand by and calibration mode
(b)	Bench top with shielded electrode bulb and waterproof housing
(c)	Temperature compensation should be provided
(d)	Calibration with at least three standard calibration buffers (pH 4.0, 7.0, 10.0)
(e)	Resolution: 0.01 pH units
(f)	Accuracy: ± 0.01 pH units
(g)	No. of Display Digits: Three
(h)	Provision of spare electrode
2	Electricity requirements:
	<ul style="list-style-type: none"> - Supply voltage: 230 ± 10 V, AC, 50/60 Hz – Voltage and plugs to be adapted to meet the country requirements – The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards
3	Documentation
(a)	The manufacturer must have a management system certified to ISO 9001
(b)	A certificate to state that the pH meter has been calibrated at the factory

Sch. No. 16 : Deep Freezer (-86°C)

Sr. No	Technical Specifications
1.	Upright Model: CFC free high efficiency double refrigeration system for cooling and freezing filled in the bottom.
2.	Temperature: -50°C to 86°C $\pm 1^\circ\text{C}$ (to work in -70 to -86 °C range)
3.	Temperature Control:
a)	Digital temperature controller (including display at suitable eye level)
b)	Microprocessor Control/Microcontroller-for temperature setting
c)	Alarms for-Voltage, Over heat, Over cool as well as for under temperature, power fail, Door ajar conditions.
4.	Size
a)	300 liters or more (up to 450 L) with minimum 4 Stainless Steel, rust free shelves.
b)	Fixed in casters for easy maneuverability.
c)	Polystyrene Insulated inner doors for the compartments.
d)	Pre-coated metal body to prevent environmental damage.
5	Electricity: 230 volts AC, 50Hz single phase. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
6	Refrigeration system:
a)	Heavy-duty maintenance free refrigeration system with hermetically sealed refrigeration compressors and reliable cascaded refrigeration to minimize noise and vibration.
b)	Air-cooled with security lock to prevent unintentional switch off.
c)	Short cooling time of 6 to 7 hours at ambient temperature.
d)	The equipment should be of continuous duty.
e)	Convenient Air Filter Grill allows easy access for cleaning and changing. Access port for CO2 back up.
f)	It shall be fitted with 24x7 temperature recorders / data loggers which allows for a minimum of 3GB data storage and the data must be downloadable via a USB port.
g)	Deep freezer shall not have an automated defrosting system without a manual override.
h)	Audiovisual Electronic Alarm System in case of equipment failure/ power failure
i)	Electrically heated doors for quick opening of frozen doors.
j)	Accessories to include suitable boxes and racks for storage of specimen deposits/ DNA extracts/culture isolates in cryo-vials (16 in No. of suitable dimension for 2 ml cryo-vials). Cyro-gloves (4 sets wrist length 12") to be provided as part of accessories.
7	Remarks: The apparatus should confirm to Indian Standard Institution Guidelines with latest amendments in Indian Standard Specification for Laboratory Deep Freezers or equivalent National or International Standards covering Markings, tests and Safety requirements. Voltage regulator of appropriate rating to be included to cope with 160-260 V

Sch. No. 17 : Inspissator

Sl. No.	Technical Specifications
1	Main specifications:
(a)	A shallow polish stainless tray rested inside a tank containing water. The whole undersurface of the tray is in contact with water at a constant temperature which ensures that the temperature of the McCartney bottles with media is also constant.
(b)	The surface of the tray is a series of sloping steps (at 9-degree angle above the horizontal) and will hold 162 universal containers .
(c)	A blanket is placed over the containers to exclude draughts and a quilted cover provides thermal insulation: both blanket and quilt are made from insect-resistant materials
(d)	The temperature of the water under the tray is controlled by a digital immersion thermostat.
(e)	Accuracy and reproducibility of set temperature are ensured with the digital display of actual and, at the touch of a button, set temperature.
(f)	Built in Electronic timer (0–6 hours) which gets activated once set temperature is achieved.
(g)	The control unit is mounted on a bridge plate over one end of the bath, from which heater, stirrer and temperature sensors project down into the bath.
(h)	All moving parts are incorporated in the control unit which is removable for servicing.
(i)	The tray and tank are made of polished stainless steel
(j)	A constant level device is fitted to maintain the water level despite evaporation losses.
(k)	Std temperature: 85°C
(l)	Operating temp. range: ambient +5 to 90 °C
(m)	Temperature display: LED
(n)	Display resolution: 0.1°C
(o)	Uniformity: tray surface + or - 0.7°C
(p)	Heater power: (approx.) 1.4Kw, 230V
(q)	Tank capacity: (approx.) 45 lit
(r)	Heat up rate 20 to 85 °C ,3.5 hours
(s)	working area: length/width: (approx.) 820/594mm
(t)	Overall dimensions (approx.): L/W/H: 1040/600/380mm
(u)	Over temperature protection: Fixed cut-out
(v)	Electrical power: 220-240V 50/60 Hz, 1.5kW(approx.)
(w)	The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
(x)	Approx. weight: 25-35 kgs

Sch. 18 No. : Item No. 1 Refrigerator 300-450 lit.

Sr. No.	Technical Specifications
1	Vertical, Capacity 300 L or more (up to 450L), Frost free, CFC free, Single/ double door.
2	Household refrigerator.
3	Equipment quoted should comply with Indian Standards Institutions Guidelines or any other National or International Guidelines.
4	Supply voltage: 230 \pm 10 V, AC, 50/60 Hz.
5	Voltage and plugs to be adapted to meet the country requirements.
6	The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
7	Voltage regulator of appropriate rating to be included to cope with 160-260 V.

Sch. 18 : Item No. 2 Refrigerator 165-200 liters

Sr. No.	Technical Specifications
1	Vertical, Capacity 165 L or more (up to 200 L), Frost free, CFC free, Single door.
2	Household refrigerator.
3	Equipment quoted should comply with Indian Standards Institutions Guidelines or any other National or International Guidelines.
4	Supply voltage: 230 \pm 10 V, AC, 50/60 Hz.
5	Voltage and plugs to be adapted to meet the country requirements.
6	The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.
7	Voltage regulator of appropriate rating to be included to cope with 160-260 V.

Sch. No. 19 : Item No. i Variable Volume Pipette (0.5-10 µl)

Sr. No.	Technical Specifications				
1)	Description of function and use: Microliter pipettes are used for molecular biology procedures. a set of different volumes is required such as of 0.5 to 10µL				
2)	Main specifications:				
a)	Single-channel microliter pipettes.				
b)	Fully autoclavable (121 °C); UV-resistant material				
c)	Pipette for Range	Increment	Accuracy	Precision	
	0.5 to 10 µL	0.1 µL	At least ±5.0–1.0%	At least 3.0–0.4%	
	-In accuracy, first value applies to smallest volume, last one to the largest volume in the stated range				
	-In precision, first value applies to smallest volume, last one to the largest volume in the stated range				
d)	Three defined stops (single-button operation preferred):				
	- take-up from the first stop				
	- dispensing and blow out				
	- tip ejection				
e)	Easy and safe tip ejection mechanism				
f)	Fixation of adjusted volume				
g)	Slim pipette shaft				
h)	Cone for standard tips				
3)	Documentation				
a)	The manufacturer must have a management system certified to ISO 9001				
b)	One certificate to state that the pipette has been calibrated at the factory				
c)	Quality and safety standards met by the product must be listed.				
4)	Operation, maintenance and installation				
4.1)	Operation and maintenance manual				
a)	At least one set of operation, maintenance and service manuals for each microliter pipette, written in UN languages (or at least in English) and preferably also in the official national language of the country.				
4.2)	Installation and maintenance				
a)	The supplier to provide an after-sale service that covers the whole country				
b)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the microliter pipette within 14 days				
c)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above				
d)	A maintenance kit, with full documentation and tools for in-laboratory calibration according to ISO 9000, are part of the procurement.				
	- Spare parts				
	- Gaskets.				
	- Lubricants.				
	Each microliter pipette to be accompanied by an authorized list of accessories and spare parts				
5)	Remarks: The equipment offered to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity, ambient temperatures of 5–40 °C and fungi				
a)	Bidders may propose additional products to the requirements listed above				

Sch. No. 19 : Item No. ii Variable Volume Pipette (2-20 µl)

Sr. No.	Technical Specifications			
1)	Description of function and use: Microliter pipettes are used for molecular biology procedures. a set of different volumes is required such as of 2-20 µL			
2)	Main specifications:			
a)	Single-channel microliter pipettes.			
b)	Fully autoclavable (121 °C); UV-resistant material			
c)	Pipette for Range	Increment	Accuracy	Precision
	2 to 20 µL	0.1 µL	±3.0-1.0%	2.5-0.4%
	-In accuracy, first value applies to smallest volume, last one to the largest volume in the stated range -In precision, first value applies to smallest volume, last one to the largest volume in the stated range			
d)	Three defined stops (single-button operation preferred): - take-up from the first stop - dispensing and blow out - tip ejection			
e)	Easy and safe tip ejection mechanism			
f)	Fixation of adjusted volume			
g)	Slim pipette shaft			
h)	Cone for standard tips			
3)	Documentation			
a)	The manufacturer must have a management system certified to ISO 9001			
b)	One certificate to state that the pipette has been calibrated at the factory			
c)	Quality and safety standards met by the product must be listed.			
4)	Operation, maintenance and installation			
4.1)	Operation and maintenance manual			
a)	At least one set of operation, maintenance and service manuals for each microliter pipette, written in UN languages (or at least in English) and preferably also in the official national language of the country.			
4.2)	Installation and maintenance			
a)	The supplier to provide an after-sale service that covers the whole country			
b)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the microliter pipette within 14 days			
c)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above			
d)	A maintenance kit, with full documentation and tools for in-laboratory calibration according to ISO 9000, are part of the procurement. - Spare parts - Gaskets. - Lubricants. Each microliter pipette to be accompanied by an authorized list of accessories and spare parts			
5)	Remarks: The equipment offered to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity, ambient temperatures of 5–40 °C and fungi			
a)	Bidders may propose additional products to the requirements listed above			

Sch. No. 19 : Item No. iii - Variable Volume Pipette (20-200 µl)

Sr. No.	Technical Specifications				
1)	Description of function and use: Microliter pipettes are used for molecular biology procedures. a set of different volumes is required such as of 20-200 µL				
2)	Main specifications:				
a)	Single-channel microliter pipettes.				
b)	Fully autoclavable (121 °C); UV-resistant material				
c)	Pipette for Range	Increment	Accuracy	Precision	
	20 to 200 µL	1 µL	±1.8-0.6%	0.7 to 0.2%	
	-In accuracy, first value applies to smallest volume, last one to the largest volume in the stated range				
	-In precision, first value applies to smallest volume, last one to the largest volume in the stated range				
d)	Three defined stops (single-button operation preferred): - take-up from the first stop - dispensing and blow out - tip ejection				
e)	Easy and safe tip ejection mechanism				
f)	Fixation of adjusted volume				
g)	Slim pipette shaft				
h)	Cone for standard tips				
3)	Documentation				
a)	The manufacturer must have a management system certified to ISO 9001				
b)	One certificate to state that the pipette has been calibrated at the factory				
c)	Quality and safety standards met by the product must be listed.				
4)	Operation, maintenance and installation				
4.1)	Operation and maintenance manual				
a)	At least one set of operation, maintenance and service manuals for each microliter pipette, written in UN languages (or at least in English) and preferably also in the official national language of the country.				
4.2)	Installation and maintenance				
a)	The supplier to provide an after-sale service that covers the whole country				
b)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the microliter pipette within 14 days				
c)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above				
d)	A maintenance kit, with full documentation and tools for in-laboratory calibration according to ISO 9000, are part of the procurement. - Spare parts - Gaskets. - Lubricants. Each microliter pipette to be accompanied by an authorized list of accessories and spare parts				
5)	Remarks: The equipment offered to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity, ambient temperatures of 5–40 °C and fungi				
a)	Bidders may propose additional products to the requirements listed above				

Sch. No. 19 : Item No. iv - Variable Volume Pipette (100-1000 µl)

Sr. No.	Technical Specifications				
1)	Description of function and use: Microliter pipettes are used for molecular biology procedures. a set of different volumes is required such as of 100-1000 µL				
2)	Main specifications:				
a)	Single-channel microliter pipettes.				
b)	Fully autoclavable (121 °C); UV-resistant material				
c)	Pipette for Range	Increment	Accuracy	Precision	
	100 to 1000 µL	5 µL	±1.0-0.6%	0.7 to 0.2%	
	-In accuracy, first value applies to smallest volume, last one to the largest volume in the stated range -In precision, first value applies to smallest volume, last one to the largest volume in the stated range				
d)	Three defined stops (single-button operation preferred): <ul style="list-style-type: none">- take-up from the first stop- dispensing and blow out- tip ejection				
e)	Easy and safe tip ejection mechanism				
f)	Fixation of adjusted volume				
g)	Slim pipette shaft				
h)	Cone for standard tips				
3)	Documentation				
a)	The manufacturer must have a management system certified to ISO 9001				
b)	One certificate to state that the pipette has been calibrated at the factory				
c)	Quality and safety standards met by the product must be listed.				
4)	Operation, maintenance and installation				
4.1)	Operation and maintenance manual				
a)	At least one set of operation, maintenance and service manuals for each microliter pipette, written in UN languages (or at least in English) and preferably also in the official national language of the country.				
4.2)	Installation and maintenance				
a)	The supplier to provide an after-sale service that covers the whole country				
b)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the microliter pipette within 14 days				
c)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above				
d)	A maintenance kit, with full documentation and tools for in-laboratory calibration according to ISO 9000, are part of the procurement. <ul style="list-style-type: none">- Spare parts- Gaskets.- Lubricants. Each microliter pipette to be accompanied by an authorized list of accessories and spare parts				
5)	Remarks: The equipment offered to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity, ambient temperatures of 5–40 °C and fungi				
a)	Bidders may propose additional products to the requirements listed above				

Sch. No. 19 : Item No. v Racks Suitable for pipettes offered,at least 4 positions

1	Technical Specifications
(a)	Made of Poly propylene/acrylic, racks suitable for standard pipettes, 4 positions
(c)	High chemical resistant (at least to bleach, phenol and alcohol)

Section VI – Bidding Forms

Bidder Information Form

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: *[insert date (as day, month and year) of Bid Submission]*

Bid Ref. No.: *[insert number of bidding process]*

1. Bidder's Name <i>[insert Bidder's legal name]</i>
2. Bidder's year of registration: <i>[insert Bidder's year of registration]</i>
3. Bidder's Address: <i>[insert Bidder's legal address]</i>
4. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
5. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITB 4.3. <input type="checkbox"/> Organizational chart, a list of Board of Directors, and the beneficial ownership. <input type="checkbox"/> GSTIN Registration Certificate <input type="checkbox"/> Any other document

Technical Specification Compliance

Bidders must complete the table below.

Sch. No. 1: Biological Safety Cabinet Class II A2 with thimble /canopy and with 3 KVA Uninterrupted Power Supply (UPS)

Sr. No.	Biological Safety Cabinet Class II A2 with thimble /canopy and with 3 KVA Uninterrupted Power Supply (UPS)	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model:.....
I	<p>Description of function: The class II BSC is used in a TB laboratory for processing specimens consisting of liquefaction of sputa and handling cultures of tubercle bacilli. This type of BSC is not adequate for handling volatile or toxic chemicals or radionuclides. Before ordering a BSC, facility and engineering requirements to be checked.</p> <p>Organization of a periodical recertification of the BSC by an authorized agency to be in place.</p>	
1.	Main specifications	
a	The BSC to certified to meet the requirements of class IIA2 NSF 49 or class II EN 12469; specifically, with regard to inward airflow (≥ 0.40 m/s according to EN 12469:2000 or ≥ 0.50 m/s according to NSF 49:2004). class IIA2 NSF 49 or class II EN 12469 Certification is mandatory.	
b	External height ≤ 2200 mm including support stand, allowing an available space of at least 400 mm from the top of the BSC to the ceiling. Higher versions may be accepted, provided the 400 mm over the BSC is available to measure air velocity above the exhaust filter, and to have enough space for changing the filter and for ducting and/ or a thimble connection to outlet.	
2	Internal working area (approximate):	
A	For a BSC of 120 cm (4 ft): width 1150 mm \times depth 630 mm \times height 650–750 mm.	
B	A BSC of 120 cm (4 ft) provides the minimal space needed for safe work.	
C	Inside finish: stainless steel, high quality (e.g. grade 304).	
D	External housing, including screws, made of stainless steel or equivalent resistant galvanized (zinc-coated) sheet steel, subsequently powder coated and thermally hardened; minimum 0.8 mm thick, or other material that is hard-wearing, resistant to disinfectants and chemicals used in a TB laboratory, and abrasion resistant.	
E	Vertically adjustable sliding window: aerosol-tight, sliding, safety glass (laminated multilayer safety glass only), thickness ≥ 6.7 mm, counterbalanced.	
F	High optical transmission, but absorption of UV light; minimal reflection.	
G	Working aperture: ≥ 170 mm measured from work surface to the bottom of the sash window.	
h	Maximal lifting height of front window: $500 \pm 10\%$ mm.	
i	Ability to lock the window hermetically for gaseous disinfection for filter decontamination.	
j	Single piece working surface with integrated front air grill.	

K	Noise pressure level: ≤60 dbA. Noise pressure level should be within the approved range of NSF 49 or EN 12469 standard	
3	Internal fittings	
A	Two plugs, 230 ± 10 V, AC, 50 Hz, protected with separate T5A (slow blow) fuse.	
B	Voltage and plugs adapted to those used in the country. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
4	Warning: Plugs inside the BSC may differ from the main connection to the electricity network.	
A	Flicker-free, low-glare, warm-coloured light, >1000 lux.	
B	Control display on the front of the BSC.	
i)	Electrical control or indicators.	
ii)	Electronic fan control.	
iii)	Flow meter for air inflow velocity.	
iv)	Flow indicator or meter for air down flow velocity.	
v)	Operating hours indicator (counter).	
vi)	UV light timer.	
vii)	Filter and flow conditions.	
5	ultraviolet C (UVC) light (253.7 nm wavelength); 30 W with hour counter; with interlock with white light so that the UVC light can be switched on only when the white light source is switched off.	
6	Optional: (if a safety gas burner will be used): Gas tap with solenoid valve, optional right or left side.	
A	For a laboratory located in a seismic area, gas pipes are not recommended; small gas containers (approximately 200–400 ml) with butane gas directly fixed to the burner to be used instead.	
b	Not necessary when a micro-incinerator is used.	
c	Pre filter construction preferred; easily accessible, filter change without tools preferred.	
d	High-efficiency particulate air (HEPA) filter (exhaust air filter); classification at least H14; conforming with EN 1822; metal framed.	
7	Air down flow velocity:	
a	NSF 49–2002: Requires compliance with the manufacturer's set points, or down flow velocity with a deviation of <0.025 m/s from a nominal set point.	
b	EN 12469: Airflow velocity should be between 0.25 and 0.50 m/s and is defined by the manufacturer according to the construction. Additionally, no individual measurement should differ by more than 20% of the value requested by the manufacturer within the limits given.	
c	Air circulation volume flow (Modify according to the BSC dimensions):	
i)	For a BSC of 120 cm (4 ft): 700–1200 m³/h.	
8	Influx / Inflow air velocity:	
a	According to NSF 49, the average airflow velocity at front aperture should be 0.51 m/s for class A2.	
b	EN 12469 does not sub classify within class II BSC. The average airflow velocity at front aperture should be at least 0.4 m/s, according to the manufacturer's specifications.	
c	Exhaust volume airflow/fresh airflow inward:	
i)	For a BSC of 120 cm (4 ft): 300–600 m³/h.	
d	Blower system to be able to maintain the airflow within a minimum window (narrow limits) on voltage fluctuations. Data to be available on request.	
e	Alarms, visible and/or audible, for any unsafe condition of the BSC (e.g. airflow, window position, hardware or software errors). Possibility to shut down alarm for cleaning and maintenance.	
9	Electricity requirements	

i)	Supply voltage: 230 ± 10 V, AC, 50/60 Hz.	
a	Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
b	Lead fuse T16A (slow blow) or circuit breaker B16. The electrical regulations valid in the country of use as well as the relevant connection conditions are required.	
ii)	Power consumption (approximate): Modify according to the BSC dimensions	
a	For a BSC of 120 cm (4 ft): 600 W.	
	- Power consumption for plugs inside: Approximately 1000 W. Note: In areas with frequent breakdown of electricity supply, BSCs with low energy consumption can be an advantage; a UPS with lower capacity can be used.	-
	- Conform to electrical safety standards IEC 60601-1, UL 61010-1, EN 61010-1 or equivalent BIS standards.	
	- Protection class (in accordance with EN 60529).	
	- Designed not to interfere with circuit radio (in accordance with EN 55014).	
10	Documentation	
a	Manufacturer's certificate	
i)	The manufacturer must have a management system certified to ISO 9001.	
ii)	The manufacturer to individually test each BSC before shipment. The test report to be provided to the customer, with a duplicate fixed to the BSC. The tests to be performed with research-grade instruments for valid calibration according to test methods outlined in EN 12469 or NSF 49. The test report to contain at least data on:	
	- inflow air velocity	
	- downflow air velocity	
	- filter leak scan for both filters to document filters' efficiency and integrity.	
iii)	Quality and safety standards met by the product to be listed.	
11	Accessories	
a	Table or support frame (support stand) for a working height of 78 ± 2 cm, adjustable at least at three points (feet) to level.	
b	A telescopic support stand is advisable for a flexible use.	
c	Ergonomic laboratory chair , designed for infectious laboratory areas:	
	- adjustable height to suit different users, seat range approximately 400–490 mm	
	- adjustable-angle back rest (no arm rest)	
	- caster wheels (five)	
	- all metal parts chrome plated	
	- disinfectable with alcohol-containing disinfectants.	
12	Thimble Ducting: Air duct construction with thimble to exhaust air from the BSC. The air duct to be made for the BSC offered and fit precisely. A thimble connection (see WHO TB Biosafety guidelines 2012 page 33) is used with Class II type A2 BSC that is ducted to the outside. The thimble fits over the cabinet's exhaust housing, sucking the air expelled from the cabinet into ducts that lead outside. A small opening (usually 5 cm wide) is maintained between the thimble and the cabinet's exhaust housing. This opening enables room air to be drawn into the exhaust ducting system. The thimble must be removable or be designed to allow for operational testing of the cabinet. The power of the external extraction fan installed at the end of the ducting should exceed the volumetric flow rate of each BSC by 30–50% and should be controllable and connected to an uninterrupted power supply. The air from the BSC should be ducted with ventilation pipes that have a diameter exceed 20 cm. The extractor fan assembly must be easily accessible and preferably kept at the end of ducting with stable fitting. Ducting design should be straight, and number of bands should be minimal, bend should be round shaped (sharp/ square bends should not	

	be used). Ducting should have adjustable balancing dampers with easily accessibility so that flow can be controlled as and when required.	
a	All standard accessories, consumables and parts required for the proper installation, operation, and maintenance of the BSC to be included in the offer by the supplier and to be specified and quantified.	
13	Operation, maintenance, and installation	
a	Operation and maintenance manual At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the BSC.	
b	Installation and maintenance	
	<ul style="list-style-type: none"> - The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail 	
	<ul style="list-style-type: none"> - The bidder to also provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty. 	
	<ul style="list-style-type: none"> - The supplier to provide an after-sale service that covers the whole country. The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the BSC within 14 days. 	
	<ul style="list-style-type: none"> - Initial on-site testing (aerosol leak test, recirculating air filter, exhaust air filter, airflow measurements inside the BSC and inward/exhaust airflow) to be carried out by a certified expert and certified compliant for satisfactory installation and safe operation. Measurement results to be printed out for documentation in the maintenance record. 	
14	Warranty starts with certification on site.	
15	Standard maintenance tools All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning equipment, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above). If special tools are needed (e.g. to change filters), they must be provided.	
16	Spare parts	
a	Each assembled BSC to be accompanied by an authorized list of accessories and spare parts.	
17	Warning: Special clamps may be needed to fix HEPA filter.	
18	Remarks The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 5–40 °C, fungi, and spikes in the electricity supply.	
19	Bidders may propose products additional to the requirements listed above.	
II	3 KVA Uninterrupted power supply with battery pack for BSC	
1	Description of function and use: The UPS must be used in any settings that have frequent problems in the electricity network (e.g. surges, sags, spikes and blackouts) to assure and back up the function of the BSC, so that any current work can be finalized and all potentially infectious sources closed. If the BSC is connected to a generator, the UPS will maintain the function of the BSC during the time needed for the generator to start and to provide full power.	
2	Main specifications	
a	UPS: microprocessor controlled, online continuous transducer, 20 minutes.	

b	Booster function to regulate up voltage breakdown to 170 V.	
c	Buck function to regulate down voltage increase up to 280 V.	
d	Filter to protect against voltage spikes.	
e	Protection against overload and short circuit.	
f	Advanced battery check for automated periodic battery inspection.	
g	Indicators for status (e.g. normal function, net down, working on battery, loading battery, battery capacity).	
h	Sleep mode if item consuming power is shut off.	
i	Power: 230 V \pm 25%, 50 Hz or 60 Hz (\pm 10%) with automatic recognition.	
j	Battery: maintenance-free, automatic shut-off before reaching the level of discharge from which recharging to the original capacity will no longer be possible.	
k	Time for recharging: approximately 4 hours to reach at least 90% of total capacity.	
l	Outlet voltage: 230 V \pm 3%, 50 or 60 Hz \pm 0.5% (if the country's standard voltage is 110 V AC, adjustment will be needed).	
m	Efficiency coefficient: approximately 98%, on battery >85%.	
n	Noise at 1 m distance <48 dBA.	
o	Permissible ambient temperature and relative humidity: 0–40 °C and 95% (not condensing).	
3	Electricity requirements	
a	Supply voltage: 230 \pm 10 V, AC, 50/60 Hz.	
b	Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
c	Power consumption: Approximately 1500 W (may change depending on requirement for the model chosen as well as the extractor fan connected with thimble connection at the outer end).	
d	Protection class (in accordance with EN 60529).	
e	Designed not to interfere with circuit radio (in accordance with EN 55014).	
4	Documentation	
a	Manufacturer's certificate	
b	The manufacturer must have a management system certified to ISO 9001.	
c	Quality and safety standards met by the product to be listed.	
5	Accessories	
a	Battery pack.	
b	Connection (cable and fittings) for battery pack.	
6	Operation, maintenance, and installation	
a	Operation and maintenance manual	
i)	At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the UPS.	
b	Installation and maintenance	
i)	The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
ii)	The bidder to provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.	
c	Standard maintenance tools	
i)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above).	
d	Spare parts	
i)	Each UPS to be accompanied by an authorized list of accessories and spare parts.	

Sch. No. 2 : Laboratory Incubator (37°C), Capacity approx. 400L

Sr. No.	Laboratory Incubator (37°C), Capacity approx. 400L	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model:
1	Description of function and use: The incubator is used to allow growth of Mycobacteria on culture media.	
2	Main specifications:	
(a)	Temp: 37 °C Incubator (Temp. variation $\pm 0.5^{\circ}\text{C}$), Memmert Type, Capacity approx. 400L $\pm 10\%$	
(b)	Inner chamber made up of Stainless steel make of SS-304 grade (please submit the Material of Construction certificate of SS304 grade), full length inner taughtened security glass door	
(c)	Housing made of zinc galvanized sheet metal coated with epoxy, hardened by heat treatment, corrosion resistant	
(d)	Triple wall with special grade glass wool insulation	
(e)	Temperature range, ambient+5°C to 80°C, $\pm 0.1^{\circ}\text{C}$ resolution	
(f)	Controller/Digital indicator for Temperature	
(g)	Size in mm approximately (of inner chamber):- 700(W) x 900(H) x 650(D), Capacity: 15 cu. ft.(approx. 400 liters) and door swing 65 cms	
(h)	Adjustable over-temperature protection controller so as to ensure that the Incubator does not go beyond the set temperature automatically gets cutoff after attaining the set temperature.	
(i)	Programs stored on power failure so that when power is restored, equipment continues to function on the previous Programme.	
(j)	Certificate to state that the incubator has been calibrated at the factory.	
(k)	The apparatus should confirm to Indian Standard Institution Guidelines with latest amendments in Indian Standard Specification for Incubators or equivalent National or International Standards covering Markings, tests and Safety requirements. Voltage regulators of appropriate rating to be included for each item to cope with 160-260 V. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
(l)	3-4 numbers of Stainless steel make shelves"	

Sch. No. 3 : Refrigerated centrifuge with UPS

Sl. No.	Refrigerated centrifuge	Bidder's Specification (technical compliance/ Deviation, if any) Make: Model:.....
1	Description of function and use: The centrifuge will be used in a TB laboratory to spin down mycobacteria in liquefied, decontaminated materials. The compartments containing the centrifuge tubes (buckets) need to be absolutely aerosol tight and closed by transparent lids. At least 3000 G will be required for efficient sedimentation within 20 minutes of centrifugation. The centrifuge should be a desk/bench-top one.	
2	Main specifications:	
(a)	Metal housing, chamber stainless steel	
(b)	Cooling capacity at maximum speed at +4°C	
(c)	Standby cooling	
(d)	Induction motor, brushless drive	
(e)	Rotor with swing-out buckets, at least four positions	
(f)	Rotor buckets with aerosol-tight, transparent	
(g)	Inserts for buckets adapted to 50 ml centrifuge tubes, conical.	
(h)	Capacity: about 16 or more × 50 ml.	
(i)	Maximum revolutions per minute: approximately 4500 rpm, corresponding to a radius of approximately 15 cm.	
(j)	Relative centrifugal force (rcf): approximately 3400 G.	
(k)	Noise level at maximum speed: not more than 60 dbA.	
(l)	Programmable for all parameters (switchable between rpm and rcf) of a run; large display	
(m)	Soft start and different acceleration levels (1–9); different braking levels (1–9) and brake force cut-off.	
(n)	Input and recall of programs; at least 20 storage positions.	
(o)	LCD display (protected against splash of liquids) for indication of run time, speed (RPM) or RCF (after entering centrifugation radius) – switchable, actual temperature, time left to finish run.	
(p)	Imbalance switch-off.	
(q)	Motor overheating protection.	
(r)	Chamber overheating protection.	
(s)	Rotor recognition for appropriate over-speed protection.	
(t)	Safety lock of lid during run and as long as the rotor is moving.	
(u)	Possibility of mechanical opening of lid if there is current blackout.	
3.	Electricity Requirements	
(a)	Supply voltage: 230 ± 10 V, AC, 50/60 Hz. Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
(b)	Power consumption: Approximately 1800 W	
(c)	Conform to electrical safety standards IEC 60601–1, UL 61010–1, EN 61010–1	
(d)	Excess-voltage category II	

(e)	Protection class (in accordance with EN 60529)	
(f)	Designed not to interfere with circuit radio (in accordance with EN 55014).	
4	Spare parts	
(a)	Each centrifuge to be accompanied by an authorized list of accessories and spare parts Device for mechanical opening of the centrifuge after automatic blocking as consequence of currency blackout.	
(b)	Lubricants for movable parts and gaskets/ silicon O-ring (2 pack to be provided with each unit)	
(c)	Spare fuses	
5	Operation maintenance and Installation	
5.1	Operation and maintenance manual: At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the centrifuge.	
5.2	Installation and maintenance	
(a)	The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
(b)	The bidder to also provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.	
(c)	The supplier to provide an after-sale service that covers the whole country. The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the centrifuge within 14 days.	
6	Standard maintenance tools	
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning equipment, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above).	
7	Documentation	
(a)	Manufacturer's certificate: The manufacturer must have a management system certified to ISO 9001. One certificate to state that the centrifuge has been calibrated at the factory.	
(b)	Quality and safety standards met by the product to be listed. Operation, maintenance and installation	
B	UPS with Battery	
1	Description of function and use: The UPS must be used in any settings that have frequent problems in the electricity network (e.g. surges, sags, spikes and blackouts) to assure and back up the function of the Refrigerated Centrifuge, so that any current work can be finalized and all potentially infectious sources closed. If the Refrigerated Centrifuge is connected to a generator, the UPS will maintain the function of the Refrigerated Centrifuge during the time needed for the generator to start and to provide full power.	
2	Main specifications:	
(a)	UPS: microprocessor controlled, online continuous transducer, 20 /30 minutes.	
(b)	Booster function to regulate up voltage breakdown to 170 V.	
(c)	Buck function to regulate down voltage increase up to 280 V.	
(d)	Filter to protect against voltage spikes.	
(e)	Protection against overload and short circuit.	

(f)	Advanced battery check for automated periodic battery inspection.	
(g)	Indicators for status (e.g. normal function, net down, working on battery, loading battery, battery capacity).	
(h)	Sleep mode if item consuming power is shut off.	
(i)	Power: 230 V \pm 25%, 50 Hz or 60 Hz (\pm 10%) with automatic recognition.	
(j)	Battery: maintenance-free, automatic shut-off before reaching the level of discharge from which recharging to the original capacity will no longer be possible.	
(k)	Time for recharging: approximately 4 hours to reach at least 90% of total capacity.	
(l)	Outlet voltage: 230 V \pm 3%, 50 or 60 Hz \pm 0.5% (if the country's standard voltage is 110 V)	
(m)	Efficiency coefficient: approximately 98%, on battery >85%.	
(n)	Noise at 1 m distance <48 dBA.	
(o)	Permissible ambient temperature and relative humidity: 0–40 °C and 95% (not condensing).	
3	Electricity requirements	
3.1	Supply voltage: 230 \pm 10 V, AC, 50/60 Hz. Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards	
3.2	Power consumption:	
(a)	Approximately 3000 W (depending on the model chosen).	
(b)	Protection class (in accordance with EN 60529).	
(c)	Designed not to interfere with circuit radio (in accordance with EN 55014).	
4	Accessories	
(a)	Battery pack.	
(b)	Connection (cable and fittings) for battery pack.	
5	Spare parts	
	Each UPS to be accompanied by an authorized list of accessories and spare parts.	
6	Operation, maintenance and installation	
6.1	Operation and maintenance manual	
	At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the UPS.	
6.2	Installation and maintenance	
(a)	The bidder must arrange for the equipment to be installed by certified or qualified personnel; any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
(b)	The bidder to provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.	
7	Standard maintenance tools	
	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified)	
8	Documentation	
(a)	Manufacturer's certificate: The manufacturer must have a management system certified to ISO 9001.	
(b)	Quality and safety standards met by the product to be listed.	

Sch. No. 4 : Autoclave - Vertical

Sl. No.	Autoclave Vertical	Bidder's Specification (technical compliance/ Deviation, if any)
		Make:
		Model :
1	Description of function and use: Autoclaves are used for sterilization of infectious or clean materials. For effective sterilization for smaller work load. For decontamination of infected material prior to its disposal. For faster work in the laboratory.	
2	Main specifications:	
(a)	Vertical autoclave, universal basic version for microbiological standard laboratory to sterilize liquids, instruments, glassware, plastic articles or general infectious waste.	
(b)	Triple walled construction; chamber, basket, door lid, doorframe, bolts made of corrosion-resistant material and able to prevent stress cracking preferably made of high grade stainless steel sheet of SS-304 grade, housing with SS legs.	
(c)	Pressure vessel should be Hydraulic tested at factory with minimum Hydrostatic Pressure: 2.5 kg/cm sq. (35 psi)	
(d)	Working Chamber volume: approx. 70 -80 liters.	
(e)	Electrically heated by immersion type heaters bearing ISI mark.	
(f)	Fast safety lid lock with silicone gasket, it may be radial locking, automatic locking, single lever locking, fly nut assembly mechanism and with heat resistant/safety handle.	
(g)	Manual water feed system with water level indicator, pressure gauge, steam release cock, spring loaded safety valve, water inlet and water valves.	
(h)	Working temperature: 121°C, Maximum operating temperature: 134 °C (273 °F).	
(i)	Working pressure: 15 PSI, Maximum operating pressure: 2.5 bar or 36 PSI	
3	Automatic Water Cut-off Device – To protect the heaters from running dry and to ensure that the machine is automatically switched off in case the desired water level falls below the prescribed level.	
4	Accessories should include:	
(a)	Stainless steel basket (where 2 fit in autoclave directly plus two spare total 4)	
(b)	Stainless steel wire basket (where 2 fit in autoclave directly plus two spare total 4)	
(c)	Chemical indicator tape for sterilization (2)	
(d)	Biological indicator (100)	
(e)	spare heating elements (two)	
(f)	fuses (10)	
(g)	silicone gaskets (2).	
5	Timer with Alarm System - To regulate the sterilization time of the media to be sterilized with a buzzer, Sterilization timer: 1–99 minutes. A visual chamber gauge, which easily identifies pressure in the chamber must be accessible to the operator as a backup for reading pressure gauge when no electrical power is available.	

6	Micro-processor temperature control system with sensor-with user changeable settemperature and timer option. The microprocessor controls the desired temperature (pressure automatically regulated) by cutting off the current to the heating element automatically & restart the mechanism as required. The control panel to be mounted so that the components sensitive to steam and heat are protected. Large LCD displayshowing: <ul style="list-style-type: none"> - Chamber Temperature - Sterilization time - Alarm information 	
7	Alarm: audible, with display on dysfunction & after completion of sterilization cycle. Electrical control box, fitted with toggle switch, indicating Neon lamps for Autoclave ON/OFF status, heater ON/Off status. Over-temperature and over-pressure protection Limiter	
8	Electrical requirements: Equipment to work on 230 ± 10 volts single phase, 50 Hz, plugtype adopted to local country scenario, Voltage regulator of appropriate rating to be included to cope with 160-260 V. The line cord / Power cord supplied with the equipmentsshall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
9	Standards and safety Requirements: Must submit "European CE" or any other equivalent national/ international product certification	
10	Remarks: The apparatus should confirm to national or international standards with latest amendments covering Markings, Safety requirements with recommendations of safe operations from any reputed firm with ISO 9001:2000 certification.	

Sch. No. 5 : Autoclave - Horizontal

Sl. No.	Autoclave - Horizontal	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1	Description of function and use: Applications: For sterilizing non infective material and aqueous media in loosely stoppered flask. For drying of racks and porous loads by vacuum and intake of filtered air. For larger workloads in the laboratory.	
2	Main specifications:	
(a)	Made of Stainless Steel of SS-304 grade, Triple walled with a steel jacket	
(b)	Separate boiler with manual water feed control (valve) with water level indicator and pressure gauge, separate compound gauge for working chamber, separate manual valve for drainage of water.	
(c)	Inner, outer chamber, jacket and boiler made of stainless steel 304 grade, manual steam release valve for chamber	
(d)	Inner dimensions of chamber: 300 – 320 L	
3	Safety features to Include:	
(a)	Spring loaded safety valve of stainless steel for both boiler and working chamber	
(b)	Automatic Low Water Cut-off Device — To protect the heaters from running dry and to ensure that the machine is automatically switched off in case the desired water level falls below the prescribed level	
(c)	Auto safety door lock with heat resistant silicone door gasket (withstanding temp up to 140	
(d)	Over temperature and pressure protection	
(e)	External Validation port for measuring temperature of the working chamber	
(f)	Mounted on rigid tabular stand	
(g)	There should be provision for vacuum for drying of racks and porous loads.	
(h)	Working temperature: 121°C, Maximum operating temperature: 134 °C (273 °F).	
(i)	Working pressure: 1.2 -1.5kg/sq. cm. Maximum operating pressure: 2.5 kg/sq.cm	
4	Automatic Pressure Control Switch- To cut-off the current from the heating elements, when the desired/ set pressure value level is attained inside the chamber and restarts the mechanism once the pressure inside the chamber falls from the desired level. The pressure is adjustable from 5 psi to 20 psi with automatic pressure control switch, which controls the pressure with an accuracy of +/- 1 PSI	
5	Temperature Indicator - To indicate the temperature inside the chamber.	
6	Timer with Alarm System - To regulate the sterilization time of the media to be sterilized and when the desired time is passed, with a buzzer, to that the completion of sterilization cycle, Sterilization timer: 1–99 minutes.	

7	Electrical requirements - Equipment to work on 440 ± 10 volts Three phase with neutral, 50 Hz, AC power supply, plug type adopted to local country scenario (MCB) with suitable voltage regulator of appropriate rating. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
8	Accessories – Should include:	
(a)	Stainless steel drums (where 2 fit in autoclave directly plus two spare total 4)	
(b)	Stainless steel wire basket (where 2 fit in autoclave directly plus two spare total 4)	
(c)	Chemical indicator tape for sterilization (2)	
(d)	Biological indicator (100)	
(e)	Spare heating elements (two) fuses (10)	
(f)	Silicon door gasket (2).	
9	Standards and safety Requirements: Must submit “European CE” or any other equivalent national/ international product certification	
10	Remarks - The apparatus should confirm to national or international standards with latest amendments covering Markings, Safety requirements with recommendations of safe operations from any reputed firm with ISO 9001:2000 certification.	

Sch. No. 6 : Laboratory Incubator (37°C)- Capacity approx. 70-100L

Sr. No.	Laboratory Incubator (37°C)- Capacity approx. 70-100L	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1	Description of function and use: The incubator is used to allow growth of Mycobacteria on culture media.	
2	Main specifications:	
(a)	Temp: 37 °C Incubator (Temp. variation $\pm 0.5^{\circ}\text{C}$), Memmert Type, Capacity 70-100 L	
(b)	Inner chamber made up of Stainless steel make of SS-304 grade, full length inner taughtened security glass door	
(c)	Housing made of zinc galvanized sheet metal coated with epoxy, hardened by heat treatment, corrosion resistant	
(d)	Triple wall with special grade glass wool insulation	
(e)	Temperature range, ambient+5°C to 80°C which is user settable, $\pm 0.1^{\circ}\text{C}$ resolution	
(f)	Controller/Digital indicator for Temperature	
(g)	Size in mm approximately (of inner chamber):- 500 (W)×400(H)×320(D) , Capacity:- Approx. 70-100 liters and door swing 65 cms.	
(h)	Adjustable over-temperature protection controller so as to ensure that the Incubator does not go beyond the set temperature automatically gets cutoff after attaining the set temperature	
(i)	Programs stored on power failure so that when power is restored, equipment continues to function on the previous Programme	
(j)	Certificate to state that the incubator has been calibrated at the factory	
(k)	The apparatus should confirm to Indian Standard Institution Guidelines with latest amendments in Indian Standard Specification for Incubators or equivalent National or International Standards covering Markings, tests and Safety requirements. Voltage regulators of appropriate rating to be included for each item to cope with 160-260 V. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards	
(l)	2-3 numbers of Stainless steel make shelves	

Sch. No. 7 : Deep Freezer (-20°C)

Sr. No.	Deep Freezer (-20°C)	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1.	Description of function and use: The freezer is mainly used to store strains, enzymes and other temperature-sensitive reagents	
2.	Main Specifications	
a)	100% CFC- free.	
b)	One-door freezer, to be used as free-standing freezer.	
c)	Capacity (gross): ≥140 liters (up to 200L).	
d)	Dimensions (W × D × H): approximately 60 cm × 60 cm × 85 cm.	
e)	Net (interior compartment) W × D × H: approximately 47 cm × 43 cm × 69 cm.	
f)	Cooling system, static.	
g)	Defrosting of freezing compartment, initiated manually.	
h)	Temperature range of freezer compartment: -9 °C to - 25 °C which can be set by user for specific temperature	
i)	Housing material and door: steel, coated, white.	
j)	Polyurethane foam "PUF" insulation	
k)	Door hinges right or left as desired, reversible.	
l)	Fungus-resistant door gasket.	
m)	Door with key lock.	
n)	Adjustable feet for levelling.	
o)	Interior container made of white plastic. At least three shelves with wire baskets. Optional -Four shelves in the freezing compartment, at least three closed with a freezing flap.	
p)	External digital temperature display for freezer compartment with high accuracy sensor mounted inside the chamber suspended in air.	
q)	Control panel at the top of cabinet with thermometer Alarms for-Voltage, Overheat, Over cool as well as for under temperature, power fail, Door ajar conditions	
r)	Refrigerant: CFC Free.	
3.	Electricity requirements	
a)	Supply voltage: 230 ± 10 V, AC, 50/60 Hz. Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
b)	Power consumption: Approximately 150 W.	
i)	Conform to Indian Electrical Safety standards or international standards like IEC 60601-1, UL61010-1, EN 61010-1.	
ii)	Protection class (in accordance with EN 60529).	
4.	Documentation	
a)	Manufacturer's certificate	
i)	The manufacturer must have a management system certified to ISO 9001.	
ii)	Declaration of conformity to the requirements of standards and regulations of the directives that apply to the product, including energy classification, gas used as refrigerant, climate class.	
iii)	One certificate to state that the freezer has been calibrated at the factory.	

b)	Quality and safety standards met by the product must be listed.	
5.	Operation, maintenance and installation	
a)	Operation and maintenance manual At least one set of operation, maintenance and service manuals for the freezer, written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the freezer.	
b)	Installation and maintenance Any prerequisites for installation to be communicated to the purchaser in advance, in detail. The supplier to provide an after-sale service that covers the whole country. The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the freezer within 14 days.	
c)	Standard maintenance tools:	
i)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning material, to be included in the offer.	
ii)	Bidders to specify the quantity of every item included in their offer (including items not specified above).	
d)	Spare parts: Each freezer to be accompanied by an authorized list of accessories and spare parts.	
6.	Remarks The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 5–40 °C, fungi, and spikes in the electricity supply. Bidders may propose products additional to the requirements listed above.	

Sch. No. 8 : Hot Air Oven (For sterilization) – 260 liters

Sr. No.	Hot Air Oven (For sterilization) – 260 liters	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
Sr. No.	Technical Specifications	
1)	Description of function and use: Hot Air Oven of this larger capacity will be used for sterilization of glass ware, etc. inwashing and sterilization area of the TB C&DST Lab	
2)	Main specifications:	
a)	Thermostatically controlled	
b)	temperature range ambient to 250°C with fine and coarse adjustment, Memmert typewith fan, digital display,	
c)	Volume of interior housing: Approx.- 250-300 liters	
d)	Housing: preferably stainless steel or at least with a durable, corrosion resistant coatingof metal (e.g. galvanized sheet metal coated with epoxy, hardened by heat treatment).	
e)	Stainless steel (SS) at least (SS-304) interiors with supports on three sides, adjustable three shelves.	
f)	Fan convection to ensure uniform temperature	
g)	fitted with load indicator and safety thermostat take over indicator lamp	
h)	Temperature variation $\pm 1^{\circ}\text{C}$, LCD/LED indicator.	
i)	The apparatus should confirm to latest IS6365-1971 in Indian Standard Specification for Laboratory Electric Ovens or equivalent National or International Standards covering Markings, tests and Safety requirements. Voltage Regulator of appropriate rating to be included to cope with 160-260V. The line cord / Power cord supplied with the equipmentsshall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	

Sch. No. 9 : Water Bath

Sr. No.	Water Bath	Bidder's Specification (technical compliance/ Deviation, if any)
		Make:
		Model :
1	Main specifications:	
(a)	Stainless Steel, insulated double walled, Inner wall of stainless steel at least SS304	
(b)	Thermostatic temp. control from ambient to 85 - 90° C ($\Delta 0.50$) complete with immersion heater	
(c)	Aluminum /SS cover	
(d)	Brass drain cock	
(e)	Dimensions outside: - (approx.) 36x41x25 cms; inside:- (approx.) 27x30x15 cms; Capacity not given because the dimensions specified are required for the proper functioning of the water bath in the Laboratory for optimum utilization of the space.	
(f)	Digital microprocessors display to set temperature point preventing thermal runaway	
(g)	Seamless reservoir with no welds to leak or rust, see- through cover is hinged and removable, and steeply gabled to accept taller samples	
2	Electricity requirements:	
(a)	Should work on 220-240 volts, AC, 50 Hz, the line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards	
(b)	Power: (approx.) 1500W	

Sch. No. 10 : Analytical Balance

Sr. No.	Analytical Balance	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1	<p>Description of function and use: An analytical balance is needed to prepare media containing drugs, for DST. The balance may also be used to calibrate, recalibrate and maintain microliter pipettes used in the laboratory, especially for molecular biology. Temperature variation and static electricity will cause analytical balances to display erratic readings. Therefore, the balance is to be operated on an antistatic surface, in a room with a constant temperature and a steady relative humidity of >65%.</p>	
2	Main specifications	
a.	Weighing capacity range: 1 mg to at least 200 g.	
b.	Tare range = full capacity by subtraction.	
c.	Stabilization time: ≤5 seconds.	
d.	Housing resistant to chemicals and cleaning materials.	
e.	Glass doors (not plastic) that close tightly.	
f.	Stainless steel weighing pan, approximately 90 mm diameter.	
g.	Full glass windscreen, able to be opened on both sides and from the top cover.	
h.	Adjustable feet (so the balance can be levelled).	
i.	Waterproof display and keypad, sealed by a durable flexible membrane.	
j.	Background illuminated (backlit) display with digits at least 15 mm high.	
k.	User-friendly menu (preferably in different languages but at least in English) so the balance can be configured to individual requirements.	
l.	Level indicator to be close to the display or in the view field of the display.	
m.	Built-in motorized calibration of weight with automatic adjustment	
n.	Readability: 0.0001 g (0.1 mg).	
o.	Repeatability: 0.0001 g (0.1 mg).	
p.	Linearity: 0.0002 g (0.2 mg).	
3	Electricity requirements	
a.	<p>Supply voltage: 230 ± 10 V, AC, 50/60 Hz. Voltage and plugs to be adapted to meet the country requirements. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.</p>	
b.	Power consumption: Low.	
c.	Protection class (in accordance with EN 60529)	
d.	Designed not to interfere with circuit radio (in accordance with EN 55014)	
4	Documentation	
a.	<p>Manufacturer's certificate The manufacturer must have a management system certified to ISO 9001. The manufacturer to provide a declaration of conformity to standards that apply to the product, including ingress protection rating and weight classifications and applications.</p>	
b.	One certificate to state that the balance has been calibrated at the factory. Certificates to be provided for each item supplied.	

c.	Quality and safety standards met by the product must be listed.	
5	Accessories - Protective dust cover. - Optional: Weighing scoop, 90 mm, and stainless steel.	
6	Operation, installation, and maintenance	
a.	- Installation and maintenance:- The bidder must arrange for the equipment to be installed by certified or qualified personnel at the place indicated, free of cost. Detailed installation prerequisites to be communicated to the purchaser in advance, especially for the electric - power supply needed, including type of plug (or other way of connection).	-
b.	- Detailed instruction of laboratory personnel on use, function and maintenance of the equipment (user training), as well as a comprehensive maintenance plan (logbook with daily, weekly, monthly and quarterly maintenance checklist), to be provided.	-
c.	The cost of the maintenance plan to be defined and guaranteed over the period of warranty.	
d.	- The supplier to provide a functioning after-sale service covering the whole country. The service to have adequate infrastructure, competent staff and sufficient spare parts to be able to respond to any complaints and to repair or replace the balance within 14 days.	-
7	- Standard maintenance tools: - - All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).	-
8	Spare parts Each balance to be accompanied by an authorized list of accessories and spare parts.	
9	Remarks: The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 5–40 °C, fungi, and spikes in the electricity supply.	
10	Bidders may propose products additional to the requirements listed above.	

Sch. No. 11 : Precision Balance

Sr. No.	Precision Balance	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1)	Description of function and use: A precision balance is mainly used to weigh dyes for staining solutions and components for culture media. Temperature variation and static electricity will cause precision balances to display erratic readings. Therefore, the balance is to be operated on an antistatic surface, in a room with a constant temperature and a steady relative humidity of >65%.	
2)	Main specifications:	
a)	Electronic balance, weighing capacity 210 g.	
b)	Tare range = full capacity by subtraction.	
c)	Stabilization time: ≤5seconds	
d)	Housing resistant to chemicals and cleaning materials	
e)	Stainless steel weighing pan, approximately 115 mm diameter	
f)	Adjustable feet (so the balance can be levelled)	
g)	Waterproof display and keypad, sealed by a durable, flexible membrane	
h)	Background illuminated (backlight) display with digits at least 15 mm high	
i)	User-friendly menu (preferably in different languages but at least in English) so the balance can be configured to individual requirements	
j)	Level indicator to be close to the display or in the view field of the display	
k)	Built-in motorized calibration of weight with automatic adjustment	
l)	Readability: 0.001 g (1 mg)	
m)	Repeatability: 0.001 g (1 mg)	
n)	Linearity: 0.002 g (2 mg).	
	Spare Part	
o)	Each balance to be accompanied by an authorized list of accessories and spare parts	
	Accessories	
p)	Protective dust cover	
q)	Weighing scoop, 90 mm, stainless steel	
3)	Electricity requirements:	
a)	Supply voltage: 230 ± 10 V, AC, 50/60 Hz. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
4	Power consumption: Low	
e)	Confirm to electrical safety standards IEC 60601-1, UL 61010-1, EN 61010-1.	
f)	Protection class (in accordance with EN 60529)	
g)	Designed not to interfere with circuit radio (in accordance with EN 55014).	
5	Documentation	
a)	Manufacturer's certificate: The manufacturer must have a management system certified to ISO 9001	
b)	One certificate to state that the balance has been calibrated at the factory.	

c)	Quality and safety standards met by the product must be listed	
6	<u>Operation, installation and maintenance</u>	
6.1)	Operation and maintenance manual	
a)	At least one set of operation, maintenance and service manuals written in United Nations languages (or at least in English) and preferably also in the official national language of the country requesting the precision balance	
6.2	Installation and maintenance:	
a)	The bidder must arrange for the equipment to be installed by certified or qualified personnel	
b)	Any prerequisites for installation to be communicated to the purchaser in advance, in detail	
c)	The bidder to also provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan to be given. The cost of the maintenance plan to be defined and guaranteed over the period of warranty	
e)	The supplier to provide an after-sale service that covers the whole country. The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the balance within 14 days.	
f)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication materials, to be included in the offer. Bidders must specify the quantity of every item included in their offer (including items not specified above).	

Sch. No. 12 : Vortex

Sr. No.	Vortex	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1	Description of function and use: The mini shaker is for use in a BSC	
2	Main specifications:	
(a)	Adjustable speed: 100 to 2,500 rpm, continuous and intermittent "touch-control" modes,	
(b)	Cup heads size: 25 mm dia. x 22 mm deep for mixing contents in McCartney bottles	
(c)	Heavy cast-metal base and suction cup to assure stability, prevent "walking".	
(d)	Disinfect-able	
3	Electricity requirements:	
(a)	Supply voltage: 220-230 Volts, AC, 50HZ. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards	
4	Remarks: Equipment quoted should comply with Indian Standards Institutions Guidelines or any other National or International Guidelines.	

Sch. No. 13 : Electric Micro incinerator

Sr. No.	Electric Micro incinerator	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1	Description of function and use: The micro-incinerator allows sterilization of metal inoculating loops without a flame and is suited for work in a BSC.	
2	Main specifications:	
(a)	Heating element of ceramic surrounded by isolating cover	
(b)	Quick infrared heating to temperatures ≥ 800 °C for fast sterilization	
(c)	Stand with suction-cup feet (or equivalent) for stable, safe operation	
(d)	Possibility to fix the incinerator to a stand at different angles	
3	Electricity requirements:	
	<ul style="list-style-type: none"> – Supply voltage: 230\pm10 Volts, AC, 50/60HZ – Voltage and plugs to be adapted to meet the country requirements. – The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards 	–
4	Power consumption maximum 2000 W	
(a)	Protection class (in accordance with EN 60529)	
(b)	Designed not to interfere with circuit radio (in accordance with EN 55014)	
5	Accessories: Attached loop holder.	
6	Spare Part: Each micro-incinerator to be accompanied by an authorized list of accessories and spare parts.	
7	Documentations	
(a)	Manufacture's Certificate: The manufacturer must have a management system certified to ISO 9001.	
(b)	Certificates to be provided for each item supplied	
(c)	Quality and safety standards met by the product must be listed	
8	Operation, installation and maintenance:	
8.1	Operation and maintenance manual	
(a)	At least one set of operation, maintenance and service manuals, written in United Nations languages (or at least in English) and preferably also in the official national language of the country.	
8.2	Installation and maintenance	
(a)	The bidder must arrange for the equipment to be installed by certified or qualified personal	
(b)	Any prerequisites for installation to be communicated to the purchaser in advance, in detail.	
(c)	The bidder to also provide user training (including how to use and maintain the equipment) and a comprehensive maintenance plan. The cost of the maintenance plan to be defined and guaranteed over the period of warranty.	
(d)	The supplier to provide an after-sale service that covers the whole country.	
(e)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace	

	the micro-incinerator within 14 days.	
8.3	Standard Maintenance tools: All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above).	
9	Remarks	
(a)	The equipment offered, including its power supply, to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country. The equipment may need to tolerate high humidity (as high as 90% at 35 °C), ambient temperatures of 5–40 °C, fungi, and spikes in the electricity supply.	
(b)	Bidders may propose products additional to the requirements listed above.	

Sch. No. 14 : Water Distillation Unit

Sr. No.	Water Distillation Unit	Bidder's Specification (technical compliance/ Deviation, if any)
		Make:
		Model :
1	Main specifications	
(a)	Complete unit made in stainless steel	
(b)	Constant level arrangement for inlet water	
(c)	Wall hanging / floor mounted model, provided with MS Bracket for wall mounting	
(d)	Boiling Chamber, Lid, Cooling Condenser, and any other part coming into contact with water / steam should be made of 304 quality stainless steel.	
(e)	Heating achieved by high grade efficiency immersion heaters(two)	
(f)	Capacity of the plant should be 5 litres (approx.) per hour	
(g)	should be provided with necessary safety features such as automatic disconnection of heater connections should the still run dry	
2	Electricity requirements	
(a)	Should work on 220/440 volts, AC Mains, the line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	

Sch. No. 15 : pH meter

Sr. No.	pH meter	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
(a)	pH range 0-14 with digital display and stand by and calibration mode	
(b)	Bench top with shielded electrode bulb and waterproof housing	
(c)	Temperature compensation should be provided	
(d)	Calibration with at least three standard calibration buffers (pH 4.0, 7.0, 10.0)	
(e)	Resolution: 0.01 pH units	
(f)	Accuracy: ± 0.01 pH units	
(g)	No. of Display Digits: Three	
(h)	Provision of spare electrode	
2	Electricity requirements:	
	<ul style="list-style-type: none"> - Supply voltage: 230 ± 10 V, AC, 50/60 Hz - Voltage and plugs to be adapted to meet the country requirements - The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards 	
3	Documentation	
(a)	The manufacturer must have a management system certified to ISO 9001	
(b)	A certificate to state that the pH meter has been calibrated at the factory	

Sch. No. 16 : Deep Freezer (-86°C)

Sr. No.	Deep Freezer (-86°C)	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1.	Upright Model: CFC free high efficiency double refrigeration system for cooling and freezing filled in the bottom.	
2.	Temperature: -50°C to 86°C $\pm 1^\circ\text{C}$ (to work in -70 to -86 °C range)	
3.	Temperature Control:	
a)	Digital temperature controller (including display at suitable eye level)	
b)	Microprocessor Control/Microcontroller-for temperature setting	
c)	Alarms for-Voltage, Over heat, Over cool as well as for under temperature, power fail, Door ajar conditions.	
4.	Size	
a)	300 liters or more (up to 450 L) with minimum 4 Stainless Steel, rust free shelves.	
b)	Fixed in casters for easy maneuverability.	
c)	Polystyrene Insulated inner doors for the compartments.	
d)	Pre-coated metal body to prevent environmental damage.	
5	Electricity: 230 volts AC, 50Hz single phase. The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
6	Refrigeration system:	
a)	Heavy-duty maintenance free refrigeration system with hermetically sealed refrigeration compressors and reliable cascaded refrigeration to minimize noise and vibration.	
b)	Air-cooled with security lock to prevent unintentional switch off.	
c)	Short cooling time of 6 to 7 hours at ambient temperature.	
d)	The equipment should be of continuous duty.	
e)	Convenient Air Filter Grill allows easy access for cleaning and changing. Access port for CO ₂ back up.	
f)	It shall be fitted with 24x7 temperature recorders / data loggers which allows for a minimum of 3GB data storage and the data must be downloadable via a USB port.	
g)	Deep freezer shall not have an automated defrosting system without a manual override.	
h)	Audiovisual Electronic Alarm System in case of equipment failure/ power failure	
i)	Electrically heated doors for quick opening of frozen doors.	
j)	Accessories to include suitable boxes and racks for storage of specimen deposits/ DNA extracts/culture isolates in cryo-vials (16 in No. of suitable dimension for 2 ml cryo-vials). Cyro-gloves (4 sets wrist length 12") to be provided as part of accessories.	
7	Remarks: The apparatus should conform to Indian Standard Institution Guidelines with latest amendments in Indian Standard Specification for Laboratory Deep Freezers or equivalent National or International Standards covering Markings, tests and Safety requirements. Voltage	

	regulator of appropriate rating to be included to cope with 160-260 V	
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Sch. No. 17 : Inspissator

Sr. No.	Inspissator	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1	Main specifications:	
(a)	A shallow polish stainless tray rested inside a tank containing water. The whole undersurface of the tray is in contact with water at a constant temperature which ensures that the temperature of the McCartney bottles with media is also constant.	
(b)	The surface of the tray is a series of sloping steps (at 9-degree angle above the horizontal) and will hold 162 universal containers .	
(c)	A blanket is placed over the containers to exclude draughts and a quilted cover provides thermal insulation: both blanket and quilt are made from insect-resistant materials	
(d)	The temperature of the water under the tray is controlled by a digital immersion thermostat.	
(e)	Accuracy and reproducibility of set temperature are ensured with the digital display of actual and, at the touch of a button, set temperature.	
(f)	Built in Electronic timer (0–6 hours) which gets activated once set temperature is achieved.	
(g)	The control unit is mounted on a bridge plate over one end of the bath, from which heater, stirrer and temperature sensors project down into the bath.	
(h)	All moving parts are incorporated in the control unit which is removable for servicing.	
(i)	The tray and tank are made of polished stainless steel	
(j)	A constant level device is fitted to maintain the water level despite evaporation losses.	
(k)	Std temperature: 85°C	
(l)	Operating temp. range: ambient +5 to 90 °C	
(m)	Temperature display: LED	
(n)	Display resolution: 0.1°C	
(o)	Uniformity: tray surface + or - 0.7°C	
(p)	Heater power: (approx.) 1.4Kw, 230V+	
(q)	Tank capacity: (approx.) 45 lit	
(r)	Heat up rate 20 to 85 °C ,3.5 hours	
(s)	working area: length/width: (approx.) 820/594mm	
(t)	Overall dimensions (approx.): L/W/H: 1040/600/380mm	
(u)	Over temperature protection: Fixed cut-out	

(v)	Electrical power: 220-240V 50/60 Hz, 1.5kW(approx.)	
(w)	The line cord / Power cord supplied with the equipment shall be of acceptable durability,length, and current carrying capacity complying with Indian Standards.	
(x)	Approx. weight: 25-35 kgs	

Sch. No. 18 : Item No. 1 Refrigerator 300-450 lit.

Sr. No.	Item No. 1 Refrigerator 300-450 lit.	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1	Vertical, Capacity 300 L or more (up to 450L), Frost free, CFC free, Single/ double door.	
2	Household refrigerator.	
3	Equipment quoted should comply with Indian Standards Institutions Guidelines or any other National or International Guidelines.	
4	Supply voltage: 230 ± 10 V, AC, 50/60 Hz.	
5	Voltage and plugs to be adapted to meet the country requirements.	
6	The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
7	Voltage regulator of appropriate rating to be included to cope with 160-260 V.	

Sch. 18 : Item No. 2 Refrigerator 165-200 liters

Sr. No.	Item No. 2 Refrigerator 165-200 liters	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
1	Vertical, Capacity 165 L or more (up to 200 L), Frost free, CFC free, Single door.	
2	Household refrigerator.	
3	Equipment quoted should comply with Indian Standards Institutions Guidelines or any other National or International Guidelines.	
4	Supply voltage: 230 ± 10 V, AC, 50/60 Hz.	
5	Voltage and plugs to be adapted to meet the country requirements.	
6	The line cord / Power cord supplied with the equipment shall be of acceptable durability, length, and current carrying capacity complying with Indian Standards.	
7	Voltage regulator of appropriate rating to be included to cope with 160-260 V.	

Sch. No. 19 : Item No. i Variable Volume Pipette (0.5-10 µl)

Sr. No.	Item No. i Variable Volume Pipette (0.5-10 µl)				Bidder's Specification (technical compliance/ Deviation, if any)
					Make: Model :
1)	Description of function and use: Microliter pipettes are used for molecular biology procedures. a set of different volumes is required such as of 0.5 to 10µL				
2)	Main specifications:				
a)	Single-channel microliter pipettes.				
b)	Fully autoclavable (121 °C); UV-resistant material				
c)	Pipette for Range	Increment	Accuracy	Precision	
	0.5 to 10 µL	0.1 µL	At least ±5.0–1.0%	At least 3.0–0.4%	
	-In accuracy, first value applies to smallest volume, last one to the largest volume in the stated range -In precision, first value applies to smallest volume, last one to the largest volume in the stated range				
d)	Three defined stops (single-button operation preferred): - take-up from the first stop - dispensing and blow out - tip ejection				
e)	Easy and safe tip ejection mechanism				
f)	Fixation of adjusted volume				
g)	Slim pipette shaft				
h)	Cone for standard tips				
3)	Documentation				
a)	The manufacturer must have a management system certified to ISO 9001				
b)	One certificate to state that the pipette has been calibrated at the factory				
c)	Quality and safety standards met by the product must be listed.				
4)	Operation, maintenance and installation				
4.1)	Operation and maintenance manual				
a)	At least one set of operation, maintenance and service manuals for each microliter pipette, written in UN languages (or at least in English) and preferably also in the official national language of the country.				
4.2)	Installation and maintenance				
a)	The supplier to provide an after-sale service that covers the whole country				
b)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the microliter pipette within 14 days				
c)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above				
d)	A maintenance kit, with full documentation and tools for in-laboratory calibration according to ISO 9000, are part of the procurement. - Spare parts - Gaskets. - Lubricants. Each microliter pipette to be accompanied by an authorized list of accessories and spare parts				

5)	Remarks: The equipment offered to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity, ambient temperatures of 5–40 °C and fungi	
a)	Bidders may propose additional products to the requirements listed above	

Sch. No. 19 : Item No. ii Variable Volume Pipette (2-20 µl)

Sr. No.	Item No. ii Variable Volume Pipette (2-20 µl)					Bidder's Specification (technical compliance/ Deviation, if any) Make: Model :
1)	Description of function and use: Microliter pipettes are used for molecular biology procedures. a set of different volumes is requiredsuch as of 2-20 µL					
2)	Main specifications:					
a)	Single-channel microliter pipettes.					
b)	Fully autoclavable (121 °C); UV-resistant material					
c)		Pipette for Range 2 to 20 µL	Increment 0.1 µL	Accuracy ±3.0-1.0%	Precision 2.5-0.4%	
	-In accuracy, first value applies to smallest volume, last one to the largest volume in the stated range -In precision, first value applies to smallest volume, last one to the largest volume in the stated range					
d)	Three defined stops (single-button operation preferred): - take-up from the first stop - dispensing and blow out - tip ejection					
e)	Easy and safe tip ejection mechanism					
f)	Fixation of adjusted volume					
g)	Slim pipette shaft					
h)	Cone for standard tips					
3)	Documentation					
a)	The manufacturer must have a management system certified to ISO 9001					
b)	One certificate to state that the pipette has been calibrated at the factory					
c)	Quality and safety standards met by the product must be listed.					
4)	Operation, maintenance and installation					
4.1)	Operation and maintenance manual					
a)	At least one set of operation, maintenance and service manuals for each microliter pipette, written in UN languages (or at least in English) and preferably also in the official national language of thecountry.					
4.2)	Installation and maintenance					
a)	The supplier to provide an after-sale service that covers the whole country					
b)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able torespond to any complaints and to repair or replace the microliter pipette within 14 days					
c)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, to be included in the offer. Bidders to specify thequantity of every item included in their offer (including items not specified above					
d)	A maintenance kit, with full documentation and tools for in-laboratory calibration according to ISO9000, are part of the procurement. - Spare parts - Gaskets. - Lubricants. Each microliter pipette to be accompanied by an authorized list of accessories and spare parts					
5)	Remarks: The equipment offered to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate highhumidity, ambient temperatures of 5–40 °C and fungi					
a)	Bidders may propose additional products to the requirements listed above					

Sch. No. 19 : Item No. iii - Variable Volume Pipette (20-200 µl)

Sr. No.	Item No. iii - Variable Volume Pipette (20-200 µl)					Bidder's Specification (technical compliance/ Deviation, if any)
						Make: Model :
1)	Description of function and use: Microliter pipettes are used for molecular biology procedures. a set of different volumes is required such as of 20-200 µL					
2)	Main specifications:					
a)	Single-channel microliter pipettes.					
b)	Fully autoclavable (121 °C); UV-resistant material					
c)		Pipette for Range 20 to 200 µL	Increment 1 µL	Accuracy ±1.8-0.6%	Precision 0.7 to 0.2%	
	-In accuracy, first value applies to smallest volume, last one to the largest volume in the stated range -In precision, first value applies to smallest volume, last one to the largest volume in the stated range					
d)	Three defined stops (single-button operation preferred): - take-up from the first stop - dispensing and blow out - tip ejection					
e)	Easy and safe tip ejection mechanism					
f)	Fixation of adjusted volume					
g)	Slim pipette shaft					
h)	Cone for standard tips					
3)	Documentation					
a)	The manufacturer must have a management system certified to ISO 9001					
b)	One certificate to state that the pipette has been calibrated at the factory					
c)	Quality and safety standards met by the product must be listed.					
4)	Operation, maintenance and installation					
4.1)	Operation and maintenance manual					
a)	At least one set of operation, maintenance and service manuals for each microliter pipette, written in UN languages (or at least in English) and preferably also in the official national language of the country.					
4.2)	Installation and maintenance					
a)	The supplier to provide an after-sale service that covers the whole country					
b)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the microliter pipette within 14 days					
c)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above)					
d)	A maintenance kit, with full documentation and tools for in-laboratory calibration according to ISO 9000, are part of the procurement. - Spare parts - Gaskets. - Lubricants. Each microliter pipette to be accompanied by an authorized list of accessories and spare parts					
5)	Remarks: The equipment offered to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity, ambient temperatures of 5–40 °C and fungi					
a)	Bidders may propose additional products to the requirements listed above					

Sch. No. 19 : Item No. iv - Variable Volume Pipette (100-1000 µl)

Sr. No.	Item No. iv - Variable Volume Pipette (100-1000 µl)				Bidder's Specification (technical compliance/ Deviation, if any)
					Make: Model :
1)	Description of function and use: Microliter pipettes are used for molecular biology procedures. a set of different volumes is required such as of 100-1000 µL				
2)	Main specifications:				
a)	Single-channel microliter pipettes.				
b)	Fully autoclavable (121 °C); UV-resistant material				
c)	Pipette for Range	Increment	Accuracy	Precision	
	100 to 1000 µL	5 µL	±1.0-0.6%	0.7 to 0.2%	
	-In accuracy, first value applies to smallest volume, last one to the largest volume in the stated range -In precision, first value applies to smallest volume, last one to the largest volume in the stated range				
d)	Three defined stops (single-button operation preferred): - take-up from the first stop - dispensing and blow out - tip ejection				
e)	Easy and safe tip ejection mechanism				
f)	Fixation of adjusted volume				
g)	Slim pipette shaft				
h)	Cone for standard tips				
3)	Documentation				
a)	The manufacturer must have a management system certified to ISO 9001				
b)	One certificate to state that the pipette has been calibrated at the factory				
c)	Quality and safety standards met by the product must be listed.				
4)	Operation, maintenance and installation				
4.1)	Operation and maintenance manual				
a)	At least one set of operation, maintenance and service manuals for each microliter pipette, written in UN languages (or at least in English) and preferably also in the official national language of the country.				
4.2)	Installation and maintenance				
a)	The supplier to provide an after-sale service that covers the whole country				
b)	The service to have competent staff, adequate infrastructure and sufficient spare parts to be able to respond to any complaints and to repair or replace the microliter pipette within 14 days				
c)	All standard accessories, consumables and parts required to operate the equipment, including all standard tools and cleaning and lubrication material, to be included in the offer. Bidders to specify the quantity of every item included in their offer (including items not specified above				
d)	A maintenance kit, with full documentation and tools for in-laboratory calibration according to ISO 9000, are part of the procurement. - Spare parts - Gaskets. - Lubricants. Each microliter pipette to be accompanied by an authorized list of accessories and spare parts				
5)	Remarks: The equipment offered to be designed and constructed to operate properly and continuously in the conditions of the purchaser's country; the equipment may need to tolerate high humidity, ambient temperatures of 5–40 °C and fungi				
a)	Bidders may propose additional products to the requirements listed above				

**Sch. No. 19 : Item No. v Racks Suitable for pipettes offered,
at least 4 positions**

Sr. No.	Item No. iv Racks Suitable for pipettes offered, at least 4 positions	Bidder's Specification (technical compliance/ Deviation, if any)
		Make: Model :
(a)	Made of Poly propylene/acrylic, racks suitable for standard pipettes, 4 positions	
(c)	High chemical resistant (at least to bleach, phenol and alcohol)	

Letter of Financial Bid

The Bidder must prepare the Letter of Financial Bid on its letterhead clearly showing the Bidder's complete name and address.

Note: All italicized text is for use in preparing these forms and shall be deleted from the final products.

Date: **[insert date (as day, month and year) of Bid Submission]**

Bid Ref. No.: **[insert number of bidding process]**

To: **[insert complete name of Purchaser]**

- (a) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: **[insert table giving Schedule No. , brief description of the Goods, Equipment and Related Services and Total Bid Price]** as per attached Price Schedule attached Price Schedule.
- (b) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Name of the Bidder

Name of the person duly authorized to sign the Bid on behalf of the Bidder

Title of the person signing the Bid

Signature of the person named above

Date signed

Form of Price Schedule

Price Schedule for Goods and Equipment

[The Bidder shall fill in the Price Schedule Form for Goods in accordance with the instructions indicated. The list of line items in column 1 of the Price Schedules shall coincide with the List of Goods specified by the Purchaser in the Schedule of Requirements and may be appropriately modified as per requirement of particular Goods].

Sch. No.	Description of Goods Equipment	Qty. (Nos.)	Unit Price (DDP - Place of Destination) excl. of GST	GST on Goods (%)	Total Bid Price of Goods (incl. of GST)
1	Biosafety cabinet Class II A2 with UPS	9			
2	Laboratory Incubator (37 deg C) higher volume	5			
3	Refrigerated centrifuge with UPS	8			
4	Autoclave: Vertical	12			
5	Autoclave: Horizontal	3			
6	Laboratory Incubator (37 deg C)-smaller volume-70-100L	6			
7	Freezer(-20)	4			
8	Hot Air Oven-260L	5			
9	Water Bath	6			
10	Analytical Balance	6			
11	Precision balance	2			
12	Vortex	13			
13	Electric Micro incinerator	9			
14	Water Distillation plant	5			
15	pH meter	6			
16	Deep Freezer(-86)	4			
17	Inspissator	6			
18	Refrigerator 300-450 lit	10			
	Refrigerator 165-200 lit	8			
19	Variable Volume Pipette (0.5-10 µl)	8			
	Variable Volume Pipette (2-20 µl)	16			
	Variable Volume Pipette (20-200 µl)	20			
	Variable Volume Pipette (100-1000 µl)	19			
	Racks Suitable for pipettes offered, at least 4 positions	28			

Bidders are requested to fill up the online price bid form as per the sample mentioned below (if there is any confusion during the submission of financial bid, kindly contact SAMS Team):

For Illustration: In below table first line of item (from column A to G) to be filled with Lump sum cost of Equipment included with comprehensive warranty period + related services during the warranty period. the same should be filled for each schedule through portal price bid form.

Note: And column from column H to J, will remain zero.

A	B	C	D	E	F	G	H	I	J	K
Sch. No.	Unit name	Unit Price	Qty.	Total Price	Tax Rate on Goods (The same column should be used for Tax on services)	Tax on Goods	Price of Related Services	Tax Rate on Related Services (%)	Tax on Related Services	Total Bid Price
1	Nos.	To be filled	9	Example (1000)	To be filled	-	Put 0	Put 0		

Total Price in figures and words:

Place: _____ Name _____
Signature _____ of _____ Bidder

Date: _____ Seal of the Bidder

Bidders are requested to submit the (company letter Head) below Price Schedule Form for the Comprehensive Maintenance Charges (CMC) for 4th & 5th Year and upload the same with the Financial bid on FIND India E-procurement Portal.

Sch. No.	Description of Goods and Equipment	Total Quantity (Nos.)	Unit price of 4th Year of CMC Services	Unit price of 5th Year of CMC Services	GST on CMC Services (%)	Total Price of 4th & 5th Years of CMC Services (incl. of GST)
1	Biosafety cabinet Class II A2 with UPS	9				
2	Laboratory Incubator (37 deg C) higher volume	5				
3	Refrigerated centrifuge with UPS	8				
4	Autoclaves: Vertical	12				
5	Autoclaves: Horizontal	3				
6	Laboratory Incubator (37 deg C)-smaller volume-70-100L	6				
7	Freezer(-20)	4				
8	Hot Air Oven-260L	5				
9	Water Bath	6				
10	Analytical Balance	6				
11	Precision balance	2				
14	Water Distillation plant	5				
15	pH meter	6				
16	Deep Freezer (-86)	4				
17	Inspissator	6				
18	Refrigerator 300-450 lit	10				
	Refrigerator 165-200 lit	8				

Note: Above mentioned CMC Cost after the expiry of 3 year comprehensive warranty period would not be part of the financial evaluation, which will only be submitted by bidders for future reference along with uploaded financial bid documents and same must not be filled in the portal price bid form.

Total Price in figures and words:

Place: _____ **Name** _____ **Bidder**
Date: _____ **Signature** _____ **of** _____
_____ **Seal of the Bidder**

Manufacturer's Authorization

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the **BDS**.]*

Date: *[insert date (as day, month and year) of Bid Submission]*

Bid Ref. No.: *[insert number of bidding process]*

To: *[insert complete name of Purchaser]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a bid, the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 29 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Proforma for Performance Statement (for a period of last five years)

Name of the Firm _____

Order placed by (full address of Purchaser)	Order No. and Date	Description and quantity of ordered goods	Value of order	Date of completion of delivery		Remarks indicating reasons for late delivery, if any	Has the supply of goods been satisfactory performance? *
				As per contract	Actual		
1	2	3	4	5	6	7	8

Signature and seal of the Bidder

The Bidder shall also furnish the following documents in connection with their past performance:

- i. Copy of Purchase Orders
- ii. Copy of Invoices
- iii. Proof of Payment received from Purchasers
- iv. Documentary evidence (Client's certificate) in support of satisfactory completion of contract

Proforma for Other Details of Bidder, Manufacturer and its Bank

1. Name & full address of the Manufacturer:

2. (a) Telephone & Fax No

Office /Works

(b) Email

3. Location of the manufacturing factory.

4. Name & full address of the Bidder

5. (a) Telephone/Mobile & Fax No

Office/Factory/Works

(b) Email

6. Details of two Persons that Purchaser may contact for requests for clarification during bid evaluation:

	1 st	2 nd
(i) Name:		
(ii) Tel number (direct):		
(iii) Mobile No.		
(iv) Email address		

7. Bank details from where the Bank Guarantee for Bid Security has been issued:

(i) Name and address of the Bank:

(ii) Name of the contact Person

(iii) Phone number/Mobile

(iv) Fax Number

(v) Email address

Signature and seal of the Bidder

Section IX – General Conditions of Contract

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Section VII. General Conditions of Contract

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

- (a) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.
- (b) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.
- (c) "Contract Price" means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
- (d) "Day" means calendar day.
- (e) "Completion" means the fulfilment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
- (f) "GCC" means the General Conditions of Contract.
- (g) Goods may include all articles, material, commodities, electricity, livestock, furniture, fixtures, raw material, spares, instruments, software, machinery, equipment, industrial plant, vehicles, aircraft, ships, railway rolling stock and any other category of goods, whether in solid, liquid or gaseous form, purchased or otherwise acquired for the use of a procuring entity as well as services or works incidental to the supply of goods of the value of services or works or both does not exceed that of the goods themselves.
- (h) "Purchaser" means the entity purchasing the Goods, **as specified in the SCC.**
- (i) "SCC" means the Special Conditions of Contract.
- (j) "Subcontractor" means any person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
- (k) "Supplier" means the person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
- (l) "Consignee Location" means the place named in the **Schedule of Requirements.**

2. Contract Documents

2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof)

are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3. Code of Integrity

- 3.1 The Purchaser and all officers or employees of the purchaser, whether involved in the procurement process or otherwise, or Bidders and their representatives or consultants or service providers participating in a procurement process or other persons involved, directly or indirectly in any way in a procurement process shall maintain an unimpeachable standard of integrity.
- 3.2 Purchaser prescribes to the its personnel and Bidders to uphold the Code of Integrity, which prohibits officers or employees of a Purchaser or a person participating in a procurement process the following:
- (i) any offer, solicitation or acceptance of any bribe, reward or gift or any material benefit, either directly or indirectly, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process;
 - (ii) any omission, including a misrepresentation that misleads or attempts to mislead so as to obtain a financial or other benefit or avoid an obligation;
 - (iii) any collusion, bid rigging or anti-competitive behaviour to impair the transparency, fairness and progress of the procurement process;
 - (iv) improper use of information shared between the procuring entity and the bidders with an intent to gain unfair advantage in the procurement process or for personal gain;
 - (v) any financial or business transactions between the bidder and any officer or employee of the Purchaser, who are directly or indirectly related to tender or execution process of contract;
 - (vi) any coercion including impairing or harming or threatening to do the same, directly or indirectly, to any party or to its property to influence the procurement process;
 - (vii) any obstruction of any investigation or audit of a procurement process;
 - (viii) making false declaration or providing false information for participation in -
 - a) tender process or to secure a contract;
 - b) disclosure of Conflict of Interest;

- c) disclosure by the bidder of any previous transgressions with any entity in India or any other country during the last three years or of any debarment by any other Procuring Entity

3.3 In case of any breach of the Code of Integrity by a bidder or a prospective bidder, as the case may be, the Purchaser after giving a reasonable opportunity of being heard, may take appropriate measures including –

- a) exclusion of the bidder from the procurement process;
- b) calling off of pre-contract negotiations and forfeiture or encashment of bid security;
- c) forfeiture or encashment of any other security or bond relating to procurement;
- d) recovery of payments made by the Purchaser along with interest thereon at bank rate;
- e) cancellation of the relevant contract and recovery of compensation for loss incurred by the Purchaser;
- f) debarment of the bidder from participation in any future procurements from Purchaser for a period not exceeding three years.

4. Interpretation

4.1 If the context so requires it, singular means plural and vice versa.

4.2 Incoterms

- a) Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms.
- b) The term DDP and other similar terms, when used, shall be governed by the rules prescribed in the current edition of Incoterms **as specified in the SCC** and published by the International Chamber of Commerce in Paris, France.

4.3 Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.

4.4 Amendment

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

4.5 Non-waiver

- (a) Subject to GCC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
- (b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.6 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5. Language

- 5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in English language. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by a self-certified accurate translation of the relevant passages in English language, in which case, for purposes of interpretation of the Contract, this translation shall govern.
- 5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.

6. Joint Venture or Consortium

- 6.1 If the Supplier is a joint venture, or consortium, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture or consortium. The composition or the constitution of the joint venture or, consortium, shall not be altered without the prior consent of the Purchaser.

7. Eligibility

- 7.1 The Supplier and its Subcontractors shall have the nationality of any country with which India has not banned trade relations.
- 7.2 All Goods to be supplied under the contract shall have their origin in India or any other country with which India has not banned trade relations. The term "origin" used in this clause means the place where the goods are

mined, grown, produced, or manufactured or from where the related services are arranged and supplied

8. Notices

- 8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the **address specified in the SCC**. The term “in writing” means communicated in written form with proof of receipt.
- 8.2 A notice shall be effective from the date of delivery or on the notice’s effective date, whichever is later. In case of electronic mode of communication, a notice shall be effective from the time of sending of the electronic communication.

9. Governing Law

- 9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Union of India.

10 Settlement of Disputes

- 10.1 The Purchaser and the Supplier shall make every effort to resolve amicably any disagreement or dispute arising between them under or in connection with the Contract.
- 10.2 Dispute Redress mechanism/ Committees: 2-tier (Procuring entity level headed by the Director, State Redress Committee).
- 10.3 If, the dispute is not settled through dispute settlement mechanism and if after sixty (60) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration wherever applicable, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure **specified in the SCC**.
- 10.4 Notwithstanding any reference to arbitration herein,
- (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
 - (b) the Purchaser shall not be required to pay the Supplier any monies to the Supplier in respect of the matter related to the arbitration unless otherwise agreed.

11. Inspections and Audit by the Purchaser

- 11.1 The Supplier shall keep, and shall make all reasonable efforts to cause its Subcontractors to keep, accurate and systematic accounts and records in respect of the Goods in such form and details as will clearly identify relevant time changes and costs.
- 11.2 The Supplier shall permit, and shall cause its Subcontractors to permit, the Purchaser and/or persons appointed by the Purchaser to inspect the

Supplier's offices and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the Purchaser, if requested. The Supplier's and its Subcontractors and consultants' attention is drawn to Clause 3 [Code of Integrity], which provides, inter alia, that acts intended to materially impede the exercise of the Purchaser's inspection and audit rights provided for under this Sub-Clause 11.1 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the Purchaser's prevailing sanctions procedures)

12. Scope of Supply	12.1	The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.
13. Delivery and Documents	13.1	Subject to GCC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of shipping and other documents to be furnished by the Supplier are specified in the SCC .
14. Supplier's Responsibilities	14.1	The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 12, and the Delivery and Completion Schedule, as per GCC Clause 13.
15 Contract Price	15.1	Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments authorized in the SCC .
16. Terms of Payment	16.1	The Contract Price, including any Advance Payments, if applicable, shall be paid as specified in the SCC .
	16.2	The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and related services performed, and by the documents submitted pursuant to GCC Clause 13 and upon fulfillment of all other obligations stipulated in the Contract.
	16.3	Payments shall be made by the Purchaser, after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it subject to the defect liability as specified in the SCC .
	16.4	The payments shall be made to the Supplier under this Contract in Indian Rupees only.
17. Taxes and Duties	17.1	The Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

18. Performance Security

- 18.1 If required as specified in the SCC, the Supplier shall, within fifteen (15) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount specified in the **SCC**.
- 18.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 18.3 The Performance Security if required, shall be denominated in Indian Rupees and shall be in one of the format stipulated by the Purchaser in the **SCC**.
- 18.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in the **SCC**.

19. Copyright

- 19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party

20. Patent Indemnity

- 20.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 20.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:
 - (a) the installation of the Goods by the Supplier or the use of the Goods at the Purchaser's Site; and
 - (b) the sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

- 20.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-Clause 20.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.
- 20.3 If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.
- 20.4 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.
- 20.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.

21. Confidential Information

- 21.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 20.
- 21.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.

21.3 The obligation of a party under GCC Sub-Clauses 21.1 and 21.2 above, however, shall not apply to information that:

- (a) the Purchaser or Supplier need to share with the such institution(s) participating in the financing of the Contract;
- (b) now or hereafter enters the public domain through no fault of that party;
- (c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
- (d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.

21.4 The above provisions of GCC Clause 21 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.

21.5 The provisions of GCC Clause 21 shall survive completion or termination for whatever reason, of the Contract.

22. Subcontracting

22.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the bid. Such notification, in the original bid or later shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.

22.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

23.

Specifications and Standards

23.1 Technical Specifications and Drawings

- (a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section VI, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.
- (b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
- (c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 33.

24. Packing and Documents

- 24.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
- 24.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the **SCC**, and in any other instructions ordered by the Purchaser.

25. Insurance

- 25.1 Unless otherwise specified in the **SCC**, the Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the **SCC**.

26. Transportation and Incidental Services

- 26.1 Unless otherwise specified in the **SCC**, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.
- 26.2 The Supplier may be required to provide any or all of the following services, including additional services, if any, **specified in SCC**:
- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
 - (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
 - (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- 26.3 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services

27. Inspections and Tests

- 27.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods as are specified in the **SCC**.
- 27.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place in the Purchaser's Country as specified in the **SCC**. Subject to GCC Sub-Clause 27.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.
- 27.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 27.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.
- 27.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
- 27.5 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
- 27.6 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-Clause 27.4.
- 27.7 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-Clause 27.5, shall release the Supplier from any warranties or other obligations under the Contract.

28. Liquidated Damages

- 28.1 Except as provided under GCC Clause 32, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the **SCC** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in the **SCC**. Once the

maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause 35.

29. Warranty

- 29.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 29.2 Subject to GCC Sub-Clause 23.1(b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the state.
- 29.3 Unless otherwise specified in the **SCC**, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof, as the case may be, have been delivered to and accepted at the final destination indicated in the **SCC**.
- 29.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
- 29.5 Upon receipt of such notice, the Supplier shall, within the period specified in the **SCC**, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.
- 29.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the **SCC**, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

30 Limitation of Liability

- 30.1 Except in cases of criminal negligence or willful misconduct, the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the purchaser with respect to patent infringement.

31. Change in Laws and Regulations

- 31.1 Unless otherwise specified in the Contract, if after the date of 28 days prior to date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in India (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced

cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.

32. Force Majeure

- 32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 32.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 32.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

33. Change Orders and Contract Amendments

- 33.1 The Purchaser may at any time order the Supplier through notice in accordance to GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:
- (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
 - (b) the method of shipment or packing;
 - (c) the place of delivery; and
 - (d) the related services to be provided by the Supplier.
- 33.2 If any such change causes an increase or decrease in the cost of, or the time required for the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier's receipt of the Purchaser's change order.
- 33.3 Prices to be charged by the Supplier for any related services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the

prevailing rates charged to other parties by the Supplier for similar services.

- 33.4 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

34. Extensions of Time

- 34.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of related services pursuant to GCC Clause 14, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.
- 34.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 28, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

35. Termination

35.1 Termination for Default

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:
- i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 34;
 - ii) if the Supplier fails to perform any other obligation under the Contract; or
 - iii) if the Supplier, in the judgment of the Purchaser has engaged in breach of Code of Integrity, as defined in GCC Clause 3, in competing for or in executing the Contract.
- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods procured by the Purchaser.. However, the Supplier shall continue performance of the Contract to the extent not terminated.

35.2 Termination for Insolvency.

The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In

such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser

35.3 Termination for Convenience.

The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.

The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:

to have any portion completed and delivered at the Contract terms and prices; and/or

to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and for materials and parts previously procured by the Supplier.

36. Assignment

36.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

Section VIII – Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement and / or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC

GCC 1.1(h)	The Purchaser is: _____
GCC 1.1 (l)	The Project Site(s)/Final Destination(s) is Specified in Schedule of Requirement.
GCC 4.2 (b)	The version edition of Incoterms shall be <i>2020</i>
GCC 8.1	<p>For <u>notices</u>, the Purchaser's address shall be:</p> <p>_____</p> <p>For <u>notices</u>, the Supplier's address shall be:</p> <p>_____</p>
GCC 10.3	<p>The rules of procedure for arbitration proceedings pursuant to GCC Clause 10.3 shall be as follows:</p> <p>i) In case of Dispute or difference arising between the Purchaser and a supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The arbitral tribunal shall consist of 3 arbitrators one each to be appointed by the Purchaser and the Supplier. The third Arbitrator shall be chosen by the two Arbitrators so appointed by the Parties and shall act as Presiding arbitrator. In case of failure of the two arbitrators appointed by the parties to reach upon a consensus within a period of 30 days from the appointment of the arbitrator appointed subsequently, the Presiding Arbitrator shall be appointed in accordance with the provisions of the Arbitration and Conciliation Act 1996.</p> <p>ii) If one of the parties fails to appoint its arbitrator in pursuance of sub clause (a) above, within 30 days after receipt of the notice of the appointment of its arbitrator by the other party, then the appointment of the Arbitrator shall be made in accordance with the provisions of the Arbitration and Conciliation Act 1996.</p> <p>iii) The venue of Arbitration shall be New Delhi and the language of the arbitration proceedings and that of all councils and communications between the parties shall be English.</p> <p>iv) The decision of the majority of arbitrators shall be final and binding upon parties. The cost and expenses of Arbitration proceedings will be paid as</p>

	<p>determined by the arbitral tribunal. However, the expenses incurred by each party in connection with the preparation, presentation, etc. of its proceedings as also the fees and expenses paid to the arbitrator appointed by such party or on its behalf shall be borne by each party itself.</p> <p>v) The provisions of the Arbitration and Conciliation Act of 1996 along with the Rules herewith and any statutory modification or reenactment thereof shall apply to arbitration proceedings.</p> <p>vi) If a dispute under the Supplier Contract raises the same issues as those in respect of a related dispute with another supplier contract, the Purchaser will have the option of having the arbitration proceedings joined.</p>
GCC 12 (additional clause 12.2)	<p>Add as a new Clause 12.2 of the GCC</p> <p><i>[in case annual maintenance services are required post warranty, add these clauses with modifications as appropriate]</i></p> <p>The supplier will provide 3 years warranty that will include Comprehensive Annual maintenance (Contract) including all spare parts and repair <i>[insert as required]</i></p> <p>The supplier shall visit each site at least twice a year for preventive maintenance of equipment. During such visits, shall provide operational training to concerned staff on use of equipment. The Schedule of such visits should be shared with consignee in advance. The manufacturer should be able to provide service of equipment across the State within 24- 48 hours after receipt of breakdown report for the metro location and within 3-5 days for the non-metro located instruments, failing which a penalty as stipulated below will apply</p> <p>During the Warranty period in case of non-compliance of the above, liquidated damages at the rate of 0.5% for of the prices of any portion of stores delivered late, for each week or part thereof of delay.</p>
GCC 13.1	<p>Details of Documents to be furnished by the Supplier are:</p> <ul style="list-style-type: none"> (i) One original and two copies of the supplier's commercial invoice in name of Purchaser, indicating the Contract number, Goods description, quantity, unit price, and total amount being claimed. Invoices must be signed in original and stamped, or sealed with the company stamp/seal; (ii) One original of the manufacturer's Warranty Certificate covering all items supplied; (iii) Any other/additional procurement-specific documents required for delivery/payment purposes showing delivery up to final destination.
GCC 15.1	<p>The prices charged for the Goods supplied and the related Services performed shall be fixed during the performance of the contract.</p>
GCC 16.1	<p>The payment under this Contract shall be released by the Purchaser after due scrutiny, verification of documents submitted by supplier. Payment shall be made</p>

	<p>by Electronic clearing systems (ECS) to the Supplier's nominated bank account. The method and conditions of payment to be made to the Supplier shall be as follows:</p> <p><i>[the clauses below are suggestive; the purchaser may modify as appropriate]</i></p> <p>(a) On Delivery: Ninety (90) percent of the Contract Price of the Goods delivered to the consignee shall be paid within sixty (60) days of submission of documents specified in SCC Clause 13 above and Consignee Receipt Certificate</p> <p>(b) On Successful, Installation, Commissioning and Testing of equipment: Ten (10) percent of the Contract Price of Goods received shall be paid within sixty (60) days of receipt of Final Acceptance Certificate issued by the consignee.</p>
GCC 18.1	<p>Within 15 days after the Supplier's receipt of Notification of Award, the Supplier shall furnish Performance Security to the Purchaser for an amount of 10% <i>[insert as appropriate]</i> of the contract value, valid up to 90 days after the date of completion of performance obligations including warranty obligations.</p> <p>In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period of 12 months and the Performance Bank Guarantee for proportionate value shall be extended 90 days over and above the extended warranty period.</p>
GCC 18.3	<p>The performance security shall be in the form of a bank guarantee and the named beneficiary shall be _____ [name of purchaser]. The bank guarantee shall be issued by a Scheduled Bank in India and in the format provided in the Bidding Documents.</p>
GCC 18.4	<p>The Performance Security will be discharged and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligation, under the contract.</p>
GCC 24.2	<p>The packing, marking and documentation within and outside the packages shall be</p> <p><u>Packing Instructions:</u> The Supplier will be required to make separate packages for each Consignee. Each package will be marked with proper paint/indelible ink with the following: <i>[insert as required]</i></p>
GCC 25.1	<p>The insurance shall be in an amount equal to 110 percent of the CIP value of the Goods from "warehouse" to "warehouse" on "All Risks" basis, including war risks and strikes showing purchaser as Beneficiary.</p>
GCC 26.1	<p>The Supplier is required under the Contract to transport the Goods to the specified place of final destination. Transportation to such place of destination,</p>

	including unloading, insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs are included in the Contract Price.
GCC 26.2	Incidental services to be provided are: As per Section – V Schedule of Requirement – Technical Specifications
GCC 27.1	The Supplier shall conduct tests to confirm that the goods supplied are as per specification and enclose the test and inspection certificate along with supply.
GCC 27.2	<p>The Purchaser or his representative may conduct the Inspections of the facility any time before the award of contract and also conduct Inspection for the Goods any time before or after the dispatch of Goods.</p> <p>Unless the Goods supplied according to the Schedule of Requirements is satisfactorily installed and training on use of the equipment is provided, the Consignee will not issue the Final Acceptance Certificate.</p>
GCC 28.1	Applicable rate shall not exceed one-half percent (0.5%) per week or part thereof
GCC 28.1	The maximum amount of liquidated damages shall be: <i>10%</i>
GCC 29.3	<p>(i) In partial modification of the provisions, the warranty period shall remain valid for the period specified in Schedule of Requirements</p> <p>For purposes of the Warranty, the place(s) of final destination(s) shall be: as specified in the schedule of requirement</p> <p>The consignees mentioned in the Schedule of Requirement (Section V)</p>
GCC 29.5	<p>The manufacturer should be able to provide service of equipment across the State within 24- 48 hours after receipt of breakdown report for the metro location and within 3-5 days for the non-metro located instruments, failing which a penalty as stipulated below will apply.</p> <p>In the event of any correction of defects or replacement of defective material during the warranty period, the warranty for the corrected/replaced material shall be extended to a further period of 12 months." <i>[modify period as appropriate]</i></p>

Section – IX Contract Form

Contract Agreement

[The successful Bidder shall fill in this form in accordance with the instructions indicated]

THIS AGREEMENT made

the [insert: **number**] day of [insert: **month**], [insert: **year**].

BETWEEN

- (1) [insert complete name of Purchaser], a [insert description of type of legal entity, for example, an agency of the Ministry of of the Government of {insert name of Country of Purchaser}], or corporation incorporated under the laws of {insert name of Country of Purchaser}] and having its principal place of business at [insert address of Purchaser] (hereinafter called "the Purchaser"), of the one part, and
- (2) [insert name of Supplier], a corporation incorporated under the laws of [insert: country of Supplier] and having its principal place of business at [insert: address of Supplier] (hereinafter called "the Supplier"), of the other part :

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., [insert brief description of Goods and Services] and has accepted a Bid by the Supplier for the supply of those Goods and Services

The Purchaser and the Supplier agree as follows:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other contract documents.
 - (a) the Letter of Acceptance
 - (b) the Letter of Technical Bid and Financial Bid
 - (c) the Addenda Nos. _____ (if any)
 - (d) Special Conditions of Contract
 - (e) General Conditions of Contract
 - (f) the Specification (including Schedule of Requirements and Technical Specifications)
 - (g) the completed Schedules (including Price Schedule)
 - (h) any other document listed in GCC as forming part of the Contract
3. In consideration of the payments to be made by the Purchaser to the Supplier as specified in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other

sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Union of India on the day, month and year indicated above.

For and on behalf of the Purchaser

Signed: *[insert signature]*

in the capacity of *[insert title or other appropriate designation]*

in the presence of *[insert identification of official witness]*

For and on behalf of the Supplier

Signed: *[insert signature of authorized representative(s) of the Supplier]*

in the capacity of *[insert title or other appropriate designation]*

in the presence of *[insert identification of official witness]*

Letter of Acceptance

[on letterhead paper of the Purchaser]

..... **date.**

To: *[insert name and address of the Supplier]*

Subject: **Contract No.**

This is to notify you that your Bid dated _____ *[insert **date of bid submitted by the bidder**]* for the execution of _____ *[insert **brief description of Goods and related services**]* against Bid Invitation Ref. No. _____ *(insert **Bid Ref. No.**)* is hereby accepted by the Purchaser for the Contract Amount of Rs. _____ *[insert **amount in numbers and words**]*, as corrected and modified in accordance with the Instructions to Bidders.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose the *of* the Performance Security Form included in Section IX, Contract Forms of the Bidding Documents.

Authorized Signature:

Name and Designation of Signatory:

Name of Purchaser:

Performance Security

Bank Guarantee

[The bank, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated]

Beneficiary: *[insert name and Address of Purchaser]*

Date: *_ [Insert date of issue]*

PERFORMANCE GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *_ [insert name of Supplier]* (hereinafter called "the Applicant") has entered into Contract No. *[insert reference number of the contract]* dated *[insert date]* with the Beneficiary, for the supply of *_ [insert name of contract and brief description of Goods and related Services]* (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[insert amount in figures]* (*[insert amount in words]*),¹ such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the Day of, 2...², and any demand for payment under it must be received by us at this office indicated above on or before that date.

[signature(s)]

¹ The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance.

² Insert the date twenty-eight days after the expected completion dates described in GC Clause 18.4. The Purchaser should note that in the event of an extension of this date for completion of the Contract, the Purchaser would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the Purchaser might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months]* *[one year]*, in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

Acknowledgement of Receipt of Goods (for 90% Payment)

(This certificate is to be issued to SAMS and copy to Supplier and FIND. All the three copies should be signed in ORIGINAL.)

CONSIGNEE RECEIPT CERTIFICATE (CRC)

CRC No.

Date

To
Strategic Alliance Management Services Pvt. Ltd,
B-18, Sector-06, NOIDA
Gautam Budh Nagar (U.P.)- 201301

This is to certify that the Goods as detailed below have been received without any physical damage.

Project Name	Procurement Services to Foundation for Innovative New Diagnostics India (FIND India)
Purchaser	Strategic Alliance Management Services Pvt. Ltd., on behalf of FIND India
Contract i.e. NOA No. & Date	
Description of Goods Supplied Name of Equipment/ Laboratory Materials: Schedule No. as per Contract: Model: Serial No.:	
Packing and labeling details	
Date of manufacturing	
Date of Expiry	
Quantity supplied in Numbers	
Name of Supplier	
Invoice No. and Date	
Date of Delivery at Consignee Destination site	
Consignee full Address Name Address Contact No. Fax No.	

Seal Signature of Designated Consignee

Name :

Designation:

Seal:

Contact No:

Fax No. :

Copy To: (with Original Stamp and signature)

1. To Supplier
2. Procurement Officer, Foundation for Innovative New Diagnostics (FIND), Flat No. 6 & 8 – 14, 9th Floor, Vijaya Bank Building, 17, Barakhamba Road, New Delhi -110001, India

Final Acceptance Certificate (for Balance 10% Payment)
(This certificate is to be issued to SAMS and copy to Supplier. All the three copies 'should be signed in ORIGINAL'.)

FINAL ACCEPTANCE CERTIFICATE (FAC)

FAC No.

Date:

To

Strategic Alliance Management Services Pvt. Ltd,
 B-18, Sector-06, NOIDA
 Gautam Budh Nagar (U.P.)- 201301

Project Name	Procurement Services to Foundation for Innovative New Diagnostics India (FIND India)
Purchaser	Strategic Alliance Management Services Pvt. Ltd., on behalf of FIND India
Contract i.e. Notification of Award No. & Date	
Description of Goods Supplied Name of Equipment: Schedule No. as per Contract: Model: Serial No.:	
Name of Supplier	
Quantity Supplied in Numbers	
List with name of all or any accessories as per contract supplied with the equipment	
Date of Installation, testing and commissioning	
Is successful Installation, testing and commissioning of equipment supplied, upto the satisfaction of User done or not (Yes/No)	
Whether training provided to all users upto the satisfaction or not (Yes/No)	
Date of Final Acceptance	
Invoice No. and Date	
Date of entry in Asset register	
Consignee full Address Name Address Contact No.	

CERTIFICATE

This is to certify that we have received medical Equipment/ lab materials as detailed above in good condition in accordance with the Technical specifications and conditions of the NOA/ Contract and the same has been successfully Installed and Commissioned (if, applicable) on _____ to the satisfaction of all users and entered in the Asset/Consumable/Non-Consumable Register at page no. _____ on _____

Seal & Signature of Designated

Consignee

Name:

Designation:

Copy To: (with Original Stamp and signature)

- (1) To Supplier
- (2) Procurement Officer, Foundation for Innovative New Diagnostics (FIND), Flat No. 6 & 8 – 14, 9th Floor, Vijaya Bank Building, 17, Barakhamba Road, New Delhi -110001, India