INDIAN INSTITUTE OF TOXICOLOGY RESEARCH

(Council of Scientific & Industrial Research)
Vishvigyan Bhawan, 31, M.G Marg, Lucknow-226001

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File No.-**IITR/Pur/9(04)/2023-24/565/OTE** Date 23.07.2024

NIT after Pre-Bid (Open Tender Document)
Invitation for e-Tender on Turnkey Basis

Director, CSIR-IITR, Lucknow invites original equipment manufacturers, their authorized distributors and Indian agents, if any, for submission of e-quotations in two bids system. For complete NIT documents kindly refer to https://etenders.gov.in/eprocure/app. Its intimation has also been given on Institute's website www.iitrindia.org

Sl. No.	Tender ID	Description of items	QTY	Single/ Double bid	Bid Security (EMD) (in INR)
1	2024_CSIR_197635_1	("DESIGNING, SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND VALIDATION OF STATE-OF-THE-ART MICROBIOLOGY LABORATORY WITH ADVANCED MOLECULAR ANALYSIS FACILITY AT CSIR-IITR, LUCKNOW ON TURNKEY BASIS (AS PER ATTACHED TECHNICAL SPECIFICATION as given at page number 05 to 65)	01	Single Bid (Two Cover)	20 Lakh. To be submitted in favor of Director-IITR, Lucknow

Please note.

1. **Pre-Bid conference (PBC)-** Pre-Bid conferences were held on dated: 24.06.2024 and 04.07.2024 for the Inspection of the Proposed Site for Microbiology facility establishment and to discuss the technical specifications. The revised NIT as published in this document has taken into account the suggestions/feedback as deemed fit by the Technical Sub-Committee considering the Institutional Project requirement. No further request for change in the technical specifications shall be entertained. All the bidders are requested to submit their Bid as per final technical specification of this NIT.

2. Bid Submission Start Date: From 23.07.2024 (03:00 PM)

3. Last Date & time for online bid submission: 12.08.2024 (06:30 P.M. (IST).

4. Date & time for opening of online technical bids: 14.08.2024/ 09:00 A.M. (IST)

5. Date of Technical Presentation shall be informed after The Bidders qualified in the Preliminary Bid evaluation have to come for the technical presentation at CSIR-IITR, Lucknow. The dates with time slot for technical presentation shall be informed to the Qualified bidders via email.

6. All the participated Bidders will have to present a "**3-D walk through design Presentation for proposed Microbiology facility".** If any bidders do not participate in the technical presentation or do not present the 3- D walk through design for the proposed facility, their Bid shall be disqualified straightaway as technically not suitable.

7. The bidder must also submit SLD, BLED, Man material movement zoning, Pressure zoning, Civil drawing in the Technical Bid and should also present, during technical presentation.

8. CSIR-IITR, Vishvigyan Bhawan, 31, M.G Marg, Lucknow-226001, India, will the venue of online-bid opening.

9. **Performance Bank Guarantee (PBG)** - 5% PBG will be applicable on the Purchase Order Value with the validity spanning two months beyond the duration of the warranty. The successful bidder will have to submit the PBG, preferably in FDR.

10. The Bidders are required to submit the Integrity pact in the prescribed format as per **ANNEXURE-13** on a ₹ 100 non-judicial Stamp paper. The scanned copy of the Integrity Pact has to be submitted along with the NIT. The Bidder has to submit the original copy of Integrity pact uploaded on the portal to the Stores & Purchase Department of CSIR-IITR, Lucknow on the date specified for technical presentation **(i.e., 14.08.2024, 11:00 AM).**

11. All pages of the Integrity Pact are to be submitted by the bidder (along with the technical bid) duly signed by the same signatory who signed the bid, i.e., who is duly authorized to sign the bid and to make binding commitments on behalf of his company. Any bid not accompanied by Integrity Pact duly signed by the bidder shall be considered to be a non-responsive bid and shall be rejected straightway.

12. **Names of the Independent External Monitors: The IEMs shall**

    a. **Shree Prabhakaran Palaniappan, IAS (Retd)**
        i. **Email**-pprabakaranias@gmail.com

    b. **Dr Rajan Katoch, IAS (Retd)**
        i. Email- rkatoch@nic.in

13. Interested Bidders are requested to quote for the complete Microbiology Facility including all the equipment as per specifications at page Number 05 to 65, with a warranty period of 03 Years from the date of completion and successful acceptance by the Indenting Officer/PI.

14. Bidders are requested to submit the detailed Technical Bid mentioning the Each and every equipment required in the technical specification, Electrical and Civil Work, Laboratory Furniture and HVAC Systems etc. The Price Bid should be also be prepared in accordance with Price schedule mentioned in the part-2 of the NIT.

15. Since this is a Turn-Key contract therefore, the Bidders who are submitting their online bids on behalf of their principal ideally submit manufacturer Authorization Certificate for the quoted Instruments, failing which at least they shall submit a warranty certificate for Instruments from the OEM/Distributor along with the warranty certificate for the complete facility.

16. All bids must be accompanied by EMD of Rs 20,00,000/- (Twenty Lakh Only) as specified above and the proof of EMD must be submitted along with Techno-commercial bid (Part-1) on or before the date and time indicated above. The firms registered with DGS&D, NSIC, MSE, Make in India, start-up India, Govt. Public Undertakings, Central Autonomous Bodies and with the CSIR Labs. / Institutions, if any, are exempted from payment of Bid Security Ernest Money deposit (BS/EMD) provided *such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies.*

17. Online Bids will be opened in the presence of Bidders' representatives who choose to attend on the specified date and time. In the event of the date specified for bid receipt and opening being declared as a closed holiday for purchaser's office, the due date for submission of bids and opening of bids will be the following working day at the appointed time. EMD exemption for the trading activity is not admissible. The firms quoting the products of other OEM's are not exempted from EMD amount. If those firms do not submit the EMD of Rs 20 Lakh, their Bid shall be rejected as un-responsive.

18. Bidders are required to ensure that the e-tender documents submitted by them fulfil the requisite qualifications and required information given in the prescribed formats. Additional sheets may be used, if required. The complete tender documents should be page numbered with index, signed and stamped by the authorized signatory of the bidder.

19. Since State of the Art Microbiology Laboratory with Advanced Molecular Analysis Facility is one of its own kind, only those bidders - who have past experience of successfully Establishing at least 02 similar Microbiology Facility and/or at least one statutorily certified BSL 2/3 (of at least ₹3 crore each) in any Government/Semi-Government/DRDO/ICMR/ICAR or Autonomous Bodies of Government of India in the past 03 Years (2021-22, 2022-23, 2023-24) as evidenced with Documentary Proof – shall be eligible to apply for the NIT. While providing documentary evidence, Purchase Order of the same along with successful establishment report has to be submitted by the Bidders to ascertain the genuineness and authenticity of the claim. (This condition has been inserted in compliance of Min. of Finance OM NO: F.20/2/20214-PPD (pt) dated: 20.09.2016.

20. On demand by CSIR-IITR, the bidder will have to produce the original document/ certificates submitted with the quotation for the purpose of verification. Any mis-match can lead to rejection at any level of the concerned procurement process.

21. Bidders should strictly adhere to procurement rules of Government of India, as prescribed from time to time, with complete transparency and honesty. Any violation, if found/noticed, can lead to rejection at any level of the procurement process.

22. Only Indian firms including MSE, make in India and Start-up firms are invited to participate in this e-tender. Only those OEMs who are MSME Firms are exempt from submitting of EMD amount and turnover criteria, if any. But such MSMEs shall have to comply with the specifications/technical parameters and the requirement of Past Experience. No request for relaxation for the Past experience shall be considered. The extant rules of Govt. of India are applicable for the MSE, Make in India and Start-up firms. In order to seek the desired relaxations as mentioned here, the concerned bidders are required to enclose all the documentary proofs substantiating their claims for exemption. It may be taken care that any inconsistency/ false declaration in such documents will lead to debarring/any other action as deemed fit by the Competent Authority.

23. The bidders are also required to submit the local content certificate and Bid security Declaration, (BSD/EMD), if sought in the NIT (formats attached with the NIT) with their Part-1 bids.

24. The Bidders should also have minimum turnover of at least Rs 05 Crores throughout previous 03 Years (2021-22, 2022-23, 2023-24).

25. Class-I Local Supplier and Class-II Local Supplier, categories as defined by the Government of India are invited to participate in this NIT. They are required to attach Local Content Certificate (LCC) in their techno-commercial (Part-I) bid. The format of LCC is attached with this NIT. In procurement Preference Class-I Local Supplier will be given preference over Class-II Local Supplier as per the guidelines prescribed by Government of India. Non-Local Supplier (apart from above class-I and class-II) are requested not to submit their bid for this Open tender seeking quotation in INR. Details can be perused in this NIT at GCC 2.40.
26. The Bidders are required to submit their Rates as directed in Price Bid, Part-II (Price Bid Schedule format). The rates are required to be quoted in BOQ format and the same has to be uploaded in PDF format. Please note that in case of any discrepancy between the two, the price bid quoted in PDF will be considered for evaluation and ranking. Evaluation shall be made on the lowest quote (LQ-1), which has been stated in the Price Bid section of NIT.

27. The Director, CSIR-IITR, reserves the right to accept/reject any or all tenders either in part or in full or to split the order without assigning any reasons there for which will be binding and acceptable to all participating bidders.
28. Interested Bidders may obtain further information, if any required, from the office of the Controller of Stores & Purchase (CoSP), CSIR-IITR, Lucknow, UP, INDIA.

Controller of Stores & Purchase
CSIR-IITR, LUCKNOW

Revised Technical Specifications for "Designing, supply, erection, installation, commissioning and validation of Microbiologicaltesting facility with molecular analysis with equipment's" commissioned as provided under:

SCOPE OF WORK

The Scope of work shall include DESIGNING, SUPPLY, INSTALLATION, TESTING, COMMISSIONING AND VALIDATION OF STATE-OF-THE-ART MICROBIOLOGY LABORATORY WITH ADVANCED MOLECULAR ANALYSIS FACILITY AND A DEDICATED BSL-3 FACILITY at CSIR-IITR, LUCKNOW on TURNKEY basis.

This includes site preparation works as per approved plan & site requirement as given in the layout available in the technical specification. The site preparation shall be complete with plumbing, drainage, finishing of external works and painting, design and construction of drain and sewer line, Utility system, CCTV, BMS, FAS, and clean room finishes.

Forsafe operations as per the guidelines and monitoring of the facility, the system must have necessary controls through a direct digital control (DDC) based system with requisite sensors for controlling indoor conditions/environment including pressure gradient, temperature, humidity, exhaust, etc. An addressable fire detection system, Access Control and CCTV System shall also be provided. Any other work related to smooth working of the facility shall be treated as a part of scope of the bidder.

In addition to the above-mentioned scope details, the bidder will ensure adherence to all required construction parameters, quality and materials needed for the smooth and complete functioning of the facility.

Warranty: The party shall be responsible for successful maintenance and uninterrupted running of the facility and equipment's supplied for a minimum period of 3 years after commissioning and handing over the site.

Note: The bidder, in addition to quoting a lump sum price for the facility, will quote break up prices forcomplete civil works, external electrical line, HVAC and BMS systems, drainage line and water connection, ETP system and essential BSL 3 equipment like, pass boxes, Dynamic garment cubicles, lockers asper unit basis. BOQ for all equipment's shall be provided in the financial bid.

DETAILS OF THE WORK / DRAWING TO BE PRESENTED

The bidders are required to show details of the civil work at the time of technical presentation. Also, the following drawings/ diagram with clear marking needs to be presented:

- Single Line diagram for electrical
- 3D walkthrough design for both the option
- Man-Material movement
- Pressure Zoning
- AHU zoning
- BLED drawing
- Civil drawing, if any

General conditions:

(a) The bidder must come up with designs along with appropriate 3D walk through designs for the facility for which bid is being made. The 3D walk through design has to be presented before the duly appointed technical committee as per the date & venue that will be communicated by the Stores & Purchase Department of CSIR-IITR, Lucknow. The decision of the committee, duly constituted for technically qualifying the bids for final implementation, shall be final. The lowest quote will be decided from among those bidders who will be technically qualified by the Committee.

(b) A copy of the 3D-walk through design must be submitted to the S&P section of CSIR-IITR during the technical presentation and evaluation. Any failure to comply with this condition will lead to rejection of bid straight-away.

(c) Bidders shall provide technical bid considering the "Entire area at 1st Floor (entire floor & open area at 1st floor; as per plan given in the Technical Specification) of FT block for microbiology laboratory with advanced molecular analysis & BSL 3 facilities".

(d) Testing and commissioning of all the equipment/s, items, systems, and services supplied and installed in the Laboratory Facility and Validation of the BSL 3 Laboratory as per the BSL 3 Laboratory Certification Guidelines in the presence of representative/s of IITR and submission of compiled report. Facilitating the Institute to get the Facility Certified by RCGM will be in the scope of the Bidder.

(e) The finished floor of standalone BSL3 facility should be 1.2 M or more above road/ground level or

as per mentioned in BMBL-6/ RCGM Guidelines for statutory clearance.

(f) All structure should be waterproof construction, steel staircases if required as per design for utility, to be provided.

(g) Preparation and submission of 3 sets of "AS BUILT DRAWINGS" and OPERATION & MAINTENANCE MANUAL AND INSTRUCTIONS' for the complete installation. SOPs for all the items along with its preventive maintenance schedule should be included in this manual. The manual shall also include the detailed product manual along with its specifications and escalation matrix in case of any service required.

(h) Providing training to the institute staff on operation, servicing and maintenance of all engineering installations and handling of emergencies due to fire or engineering system failures. One engineer should be stationed for the routine maintenance of the facility for a period of 3 years from date of acceptance of the completion by the indenter.

(i) 2x50 KVA UPS back up for 30-45 min. Exhaust, 50% power/ light points in each lab, all BSC facilities to be connected with existing generator facility for dedicated uninterrupted power backup to the complete facility.

(j) The demonstration of mandatory tests (complete) for commissioning of BSL 3 will be in scope of bidder.

(k) Technical Specifications: The tenderer shall meet the respective minimum technical specifications for the item that is being bid for. Any additional features or specifications in excess of these minimum specifications will be appreciated.

(l) The Drawing given in the Tender Documents is for the purpose of understanding the site and available space. However, the bidders are advised to visit the site and assess the site conditions and work requirements. Bidder must propose the drawing/design/3D walkthrough as per the requirement of the facility.

(m) After completion of the construction and installation works, all the equipment, systems and services shall be commissioned and tested to check the operation and performance of each equipment and system.

(n) The validation of the BSL 3 Laboratory shall be carried out in accordance with the NIH/ BMBL-6/RCGM Guidelines for commissioning and validation of BSL 3 laboratories.

(o) The scope under the contract shall cover and include the following works to be executed by the bidder on "Turnkey Basis":

Design Criteria - Guidelines and Standards to be followed for the Facility

WHO Standard: Laboratory Biosafety Manual–Third edition.

BMBL Standard: Biosafety in Microbiological and Biomedical Laboratories– 6th Edition

NIH Guidelines: NIH/ CDCP (USA) Guidelines for research involving recombinant DNA molecules (Jan 2001)

DBT Guidelines and Standards: Guidelines for the Establishment of Containment Facilities: Biosafety level 2 (BSL 2) & (BSL 3) andcertification of BSL 3 Facility" issued by Department of Biotechnology, Ministry of science and technology, Government of India 2020

Design strategies to include the following:

- Use of 100 % fresh air with no recirculation for BSL3 facility.
- BSL3 facility/Standalone BSL3 facility with independent sample preparation area with appropriate statutory certification. Successful bidder shall provide and assist in appropriate statutory certification.
- Managed directional flow to ensure air always flows toward the highest area of containment. Negative Pressure monitoring and control.
- Maintain constant temperature of 23±2°C and humidity at 55±5 %. ACPH in BSL 3 labshould be more than 24 as per RCGM guidelines.
- Air supply should have Three Stage Filtration.
- Exhaust air discharge through HEPA filters with safe Bag in Bag out (BIBO) arrangement at minimum 25 feet away from AHU intake.
- Audible and visual alarms to alert personnel if a system fails.
- Building management system (BMS) for facility control & monitoring for complete showing the running/fault status of HVAC system including pressure sensors, temperature, heaters & RH sensors, BSC, Autoclaves. All the motor status of AHUs, status of VFD's for AHU and Exhaust blower motors should be available on BMS screen.
- Effluent decontamination system
- False ceiling height approx. 8 feet in all laboratories area.
- Site preparation work as per requirement/ design and as described by user & approved drawing.
- Internal work including pre-fabricated partition wall and ceiling, doors, and view panels etc. in

complete facility

- Self-levelling epoxy flooring in lab area, vitrified flooring in uncontrolled Area.
- Drain piping and water distribution piping in complete facility
- Wiring and installation of Fire alarm system, CCTV system, light fittings/ fixtures, switches, sockets, distribution boards for Light and power including MCB's etc., telephone handsets, Wi-Fi and LAN network (networking), communication/intercom, fire alarm system, access control system etc. and main power supply LT panel in complete facility
- Condensing Units of appropriate capacity with redundancy.
- Exhaust blowers with redundancy.
- Supply, return and exhaust ducting with insulation, diffusers/grilles, volume control & fire dampers
- Containment HEPA housing with filters for BSL 3 Lab supply and exhaust
- Prefabricated mist Shower module.
- Chemical type/Heating Type Effluent decontamination system.
- Pass Boxes and Dunk tank as per drawing/ site requirement.
- Work station in BSL 3 Lab with appropriate furniture's chairs/ stools.
- Double Door rectangular HPHV Autoclave (325 lit or more) for material movement.
- Ventilated Garment Cabinet- (02 nos.) separate for male and female
- Locker for minimum 12 persons or more with locking facility.
- Portable Fire Extinguishers (CO_2 /Dry Powder type) in lab and AHU room
- Cross Over bench with shoe rack
- Water softener plant of minimum 100 lts/hr capacity

The proposed facility is expected to be equipped with the following rooms/compartments with pressure gradient & unidirectional flow to be maintained in various areas of laboratory.

S.N.	Room/Compartment	Proposed pressure
1.	In-Charge Room (Fully furnished)	ATM- VRF A.C.
2.	Electrical/Server Room	ATM
3.	BMS/IT room	ATM- Split A.C
4.	Archive Room (Fully furnished)	ATM- Split A.C
5.	Scholar Room (Fully furnished)	ATM- Split A.C
6.	Wash-Room (male/Female) with sensor-based faucets	ATM
7.	Analytical Instrumentation Lab	ATM- VRF A.C.
8.	Meeting Room (Fully furnished)	ATM- VRF A.C.
9.	Sample Receipt Area	ATM- VRF A.C.

10.	Chemical & consumable storage	ATM- VRF A.C.
11.	Airlocks-(2 or more nos. Entry) or as per design	-5 to +5 Pa
12.	2nd Airlock at Exit or as per design	-5 to -10 Pa
13.	1st Airlock cum prefabricated mist shower	-20 to -30 Pa
14.	Sample storage Area	-20 to -30 Pa
15.	Autoclave Room for BSL area	-10 to -20 Pa
16.	Clean Corridor	-30 to -50 Pa
17.	BSL 3 Microbiology with independent sample preparation area	-30 to -50 Pa
18.	**BSL3- Molecular**	
19.	Master Mix	-40 to -50 Pa
20.	Extraction Room	-40 to -50 Pa
21.	PCR Room	-40 to -50 Pa
22.	Post PCR	-40 to -50 Pa
23.	Cell Culture Area (Recirculating) BSL2	-20 to -30 Pa
24.	Sample preparation area BSL2	-20 to -30 Pa
25.	Culture preparation room	
26.	Autoclave Room	
27.	Microscopy	-20 to -30 Pa
28.	Cell Lysis	-20 to -30 Pa
29.	Common Instrumentation room (Recirculating) BSL2	-10 to -20 Pa
30.	Supply AHU	ATM
31.	Biological liq. effluent decontamination system (BLED) at Ground Floor	ATM
32.	Exhaust AHU min 25 feet away from Supply AHU	ATM
33.	Mezzanine Floor to house AHU & DX units	ATM
34.	Water cooling System (Drinking) with RO	ATM
All other rooms need to be furnished with appropriate laboratory furniture including seating chairs, tables with drawers, almirah, cubicles, door locks, branded PC (where ever required) etc. Any additional features or specifications in excess of these minimum specifications will be appreciated.		

GENERAL SITE PREPARATION WORK FOR LABORATORY AND UTILITIES:

- All clean area flooring will be Epoxy/PVC seamless flooring with coving along the Partitions and Floor. Other than clean area, all floors should have branded vitrified tiles.
- All drains will be SS pipe lines (SS 304 or better) leading to ETP (SS 316) / kill tank at a suitable location.
- Guideline for standalone BSL3 facility should be 5ft/ 1.2M or more above ground as per guidelines for statutory clearance.
- Electrical work/ Repairing Civil work / Fire Safety work to be done as per NBC guidelines.
- Site preparatory works including dismantling/demolition of existing walls, clearance of melba, making opening in walls and any other ancillary work required to complete the works. The bidder

shall take all precautions not to damage any part of the remaining building and the structure. All the opening and dismantling works required for the execution of the works shall be repaired by the contractor in good condition at no extra cost.

- There is an existing DG set available and the backup power supply to the proposed laboratories is available. The required power connection including providing cabling from the existing panel to the new LT panel shall be in the scope of bidder.

TECHNICAL SPECIFICATIONS FOR FACILITY

1. Building management system (BMS):

A customize Building Management System shall be designed, programmed, including pressure sensors, temperature & RH sensors, VAV for BSL 3 Lab, VFD's for AHU and Exhaust blower motors, control wiring and BMS Control Panel with PLC with software, complete as required.

BMS shall provide control and monitor the operation of HVAC system and laboratory operating parameters in the BSL 3 Lab rooms/zones:

- Room/Area/zone pressure
- Room/Area/zone temperature & RH
- Ambient temperature & RH
- AHU and Exhaust Blower operating status
- VFD status & VAV status
- OPEN/Close dampers status
- BSC ON/OFF
- BMS shall allow START/STOP operation of the Complete HVAC system in AUTO Mode. However, the system shall have the provision to over-ride the parameters (password protected) and to enable START/STOP operation of the HVAC system in MANUAL mode, as well.
- The BMS shall provide alarm in case of HVAC system failure, collapse in room/zone negative pressure and deviation of any operating parameter from the set limits. Each BSL 3 Laboratory rooms/zones area shall be provided with Pressure, Temperature and RH sensors, wired and integrated with the BMS to display the operating conditions.

- The BMS shall be installed with complete PLC, Sensors, Controllers, power and control wiring, customized software and other associated field devices, hardware accessories etc in all respect, as per requirement and approved design.
- The HVAC system START and STOP sequence shall be interlocked to prevent positive pressurization of the BSL 3 laboratory, at any point of time. A dedicated branded desktop PC with licensed software shall be provided for the BMS operation and control along with a parallel secondary display screen at the BSL 3 laboratory entrance to show the operating parameters.
- The BMS control panel shall be powered through UPS. Upon restoration of power after a power failure HVAC Control instrument system with interconnected wiring.

2. **BMS software:** Supply, Installation, Testing and Commissioning of the BMS System Software: Graphical software meeting the requirements in the given I/O summary and technical specifications including configuration and facility to create/provide the graphic mapping for all I/O summary points, configurable password protection for BMS as per specifications. Software shall be provided with unlimited web user license capacity and can be used as programming/commissioning software.

3. **BMS panel**: Automation stations/ Direct Digital Controller with I/O module etc. The networkable controllers shall be 64 bits or better, UL listed microprocessor with built in networkable (IP) type with real time clock with SD-CARD programmable memory. Minimum one networkable DDC (64 bit, UL Listed) should have inbuilt graphics display with knob operation. The networkable DDC's shall be capable of either direct sitting on IPLAN or peer to peer communication with lockable MS mounting cabinets duly powder coded connector strip, internal wiring and space to house controller & relays,connector etc. as per IO summary.

4. **CCTV System:** CCTV System shall be provided for surveillance of the Laboratory. The number of cameras will be as per the floor plan with one camera in each room except shower and changingroom. The CCTV system shall be complete with wall/ceiling mounted high resolution colour night vision cameras suitable for indoor installation, multiplexer cum DVR of 16 Channel Analog data or better, audio, text data and event data with playback feature displayed in LED colour monitor of 55" (as required), associated power and control cabling etc. and required hardware and licensed software that supports upgradation for min. 5 years. The DVR memory/Hard disk capacity shall be 5TB or more. For convenient backups the DVR shall be compatible with Windows based OS for backup through a PC.

5. **Fire Detection and Alarm System:** The complete BSL 3 Laboratory and support areas shall be provided with addressable type Fire Detection and Alarm system. The installed system shall be completed with Smoke detectors, Heat detectors, Fire Alarm panel, manual call points, response indicators, Temp/RH/Pressure Sensor, Pressure alarm visual/audio, Emergency panic button (break glass type)-audio all rooms/control room, Emergency door-open" button (For interlock door) power and control wiring, cabling etc., Wall- mounted ABC dry chemical fire extinguisher must be mounted near the exit door of the anteroom.

6. **ELECTRICAL SYSTEM AND ASSOCIATED WORKS:**

Electrical power distribution system scheme for the complete BSL 3 Laboratory should be designed and installed as per the Indian Electricity Rules and shall conform to NBC. The electrical load calculation sheet, power and light- wiring diagrams, GA and Single Line diagrams for Electrical Distribution Panels, cable routing etc., to be provided before proceeding with the work.

- **Power Distribution System:** The executing agency shall design and provide the main power distribution (LT) panel, sub distribution boards and panels complete with required switchgears, breakers, circuit breakers, power and control wiring, etc. for complete Laboratory Facility. This will include supply and laying of cabling/wiring for HVAC System and fixed equipment's and systems like Autoclaves, Bio-safety cabinets, access control system, CCTV system etc. As required in lab. For circuit and power distribution, the DB's shall be 8/12-way TPN vertical/Horizontal with double door 3 phase/1 phase, fitted with ELCB, RCCB, MCB etc. complete as required. Only multi- stranded copper conductor wires shall be used for sub-main wiring, circuit wiring, light and power wiring. All joints shall be made at main switches, distribution board socket and switch boxes only. No joint shall be made in conduits and junction boxes. Conductors shall be continuous from outlet to outlet.

- **Internal Light Points, Power Points, Fittings and Fixtures:** The Electrical fittings and fixtures in the BSL 3 Laboratory and support are as shall be sealed type, capable to withstand chemical exposures during laboratory fumigation. The Laboratory rooms shall provide 450- 500 or more lighting Lux level and the light fixtures shall be surface mounted type and serviceable from the top of the walkable false ceiling. The switches, sockets and light fixtures in BSL 3 Lab and support areas shall have IP 55 or better protection. All the electrical points, power points, light and power sockets shall be fully wired with switches, sockets, connections complete in all respect as required. Some of power points /sockets should be suitable for high power consumption instruments like deep freezers, floor model

centrifuges, biosafety cabinets etc. and will be decided based on floor map. Only multi- stranded copper conductor wires shall be used for light and power wiring. The internal wiring shall conform to the Indian Electricity rules and BIS standards. The conduit work for light points, power points, voice and datapoints, FDA system etc., shall be concealed type and shall be done in rigid PVC as per IS specifications. All the conduit pipes shall be sealed to prevent ingress of air.

7. **UPS & suitable Stabilizer:** An online UPS of 100 KVA (2x50KVA) capacity shall be provided for un- interrupted power backup to critical components like exhaust motors, Door Interlock, access control system, BMS Operation and shower control panel operation. The power backup through the UPS shall be for minimum 30-45 minutes. The UPS shall be complete with battery bank, battery rack, interconnecting cabling and wiring, complete in all respect. A stabilizer of suitable capacity for the laboratories to be considered.

8. **Communication Facility (LAN):** The Laboratory areas and support and service areas shall be provided with Data (LAN) for communication. The system shall be complete with required conduit and wiring. The Data and Voice points shall be fully wired with CAT6 cable or better completed with output terminals.

9. **LABORATORY FURNITURE/WORK STATION:**

- Stainless steel (SS304) case works for BSL 3 with non-permeable worktop (Phenolic resin top/ Epoxy Top etc.) to provide chemical and heat resistance with ease in cleaning surface. Support Area CRCA duly epoxy coated case works with granite top & wall cabinets should be provided.
- All chairs/lab stools used in clean area must be covered/made with a nonporous material that can be easily cleaned and decontaminated with appropriate disinfectants.
- Other furniture's for meeting room, In-charge room, scholar room, lab, analytical/ equipment room, to specified as per design.
- All the furniture for the facility must be SEFA 8M or better certified.

10. **MIST SHOWER:** Mist Shower is a chamber installed at exit of facility; constructed with SS 304 / SS 316, compatible with containment area, solid doors with electromagnet interlocking, having air Cleanliness - ISO 5/Class 100, Mist Time: with programmable spray time, Door Model - Straight Thru, "L"-Type, Differential pressure gauge minimum 1 No., ON/OFF Switch control Panels, straight Entry – Straight Exit / 90° L door opening, should work automatically as well as in manual mode.

11. HVAC SYSTEM

The proposed BSL 3 Laboratory and support areas shall be air-conditioned through separate dedicated Central AC system comprising of Chiller Pack/Condensing Units, Air Handling Units, Exhaust system, Air Filtration system and Air Distribution System complete in all respect. The system shall be with standby and backup provisions capable to provide uninterrupted continuous 24 x 7 x 365 days operation of the laboratory to maintain the required temperature, humidity, air-change rate, and differential pressure gradient and air filtration conditions of the Lab. The HVAC system and BMS design and working drawings to be presented and discussed for prior approval. The HVAC system shall comply with the given specifications and performance requirements shall be complete in all respect, as required and approved.

Laboratory and support areas shall be air-conditioned through independent A/C system to maintainthe required temperature, humidity, air- change rate, differential pressure gradient and air filtration conditions of the laboratory facility. The Air Handling supply system, Exhaust system,
Air Filtration system and Air Distribution system complete in all respect. The system shall be with standby and power backup provisions in supply Air Handling system, exhaust system and containment HEPA Filter housing capable to provide un-interrupted continuous 24x7x365 days operation of BSL 3 and ABSL 3 Lab. The bidder shall submit the HVAC system and BMS design and working drawings for prior approval. The HVAC system shall comply with the given specifications and performance requirements and shall be complete in all respect, as required and approved. Laboratory Temperature: $23 \pm 2^{\circ}C$ Relative Humidity: 55-60% Negative Pressure gradient: As per approved zoning plan; Sound level: 50-60db; 100% fresh air no re-circulation; ACPH of more than 24. The HVAC system shall include the following items of works, complete in all respect, as required and approved.

12. ROOM OPERATING PRESSURE: As detailed in reference to the room data sheet & applicable standards for BSL 3.

13. AIR CONDITIONING PLANT: Inner Laboratory Temperature to be maintained at $23 \pm 2^{\circ}C$

- **Chiller:** Supply, installation, testing, and commissioning of CHILLING /Dx unit complete with compressor, motor, insulated chiller, flow switch, condenser fans, vibration isolators, integral refrigerant piping and wiring, accessories as required and called for. The Chiller pack shall be skid

mounted with Air Cooled condenser, Evaporator/Chiller, Microprocessor control panel including interconnecting control and power wiring, refrigerant charge etc. complete in all respect. The chiller pack shall have multiple compressors to provide backup capacity. The noise level should not exceed 50-60db/ permissible government standard. It should also have electronic thermostats for tripping the compressors after reaching set temperature. Approved eco-friendly refrigerant R-134 a / R- 410a or better.

- **Air Handling Unit (AHU):** SITC of Double skin AHU with 2 mm or more thick thermal break Aluminium profile, 46±2 thickPUF panel having a density not less than 40 kg/m3. Panel shall have 0.6mm or more precoated G.I sheet as outer skin and inner skin. The Unit shall be suitable for clean room applications with coving inside. The AHU shall consists of fresh air intake with air intake louvre, bird screen, filter sections with 50mm or more thick metal viscous/ washable pre-filters (EU4), cooling coilwith chilled water cooling coil/DX having aluminum finned copper tubes with GI casing, aluminum fins, 20 gauge GI SS insulated drain pan, fan section with double inlet double width (DIDW) centrifugal backward curved fan with induction motor and provision for variable speed drive, direct drivenmotor suitable for 415 + 10% volts, 50Hz, 3 phase, A.C Supply. Fine filter section with rigid media type filters (EU7). AHU under shall have HEPA Filter section with H13 HEPA Filters. AHU shall be complete with Aluminum low leakage volume control damper for fresh air and supply air dampers. Fan & filter sections shall have service door not less than 500 mm width.

- **Air Flow:** No recirculation, fresh and exhaust (100%) for BSL 3 Area & recirculating 70-30 for associated supporting areas. Air control by a series of motorized damper with controlled actuator. Pressure displayed by digital type pressure differential gauge and feedback into the control software for pressure setting, maintenance, and alarm setting.

- **Air Filtration System:** All incoming air filtered by three stages Filtration in AHU. All main lab exhaust air pass through BIBO HEPA. The HEPA housing must accommodate gas decontamination and filter testing (gas tight dampers and housing).

  Three Stages for supply Pre - Filtration:

  As per ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) ASHRAE 1st stage 30% efficiency

ASHRAE 2nd stage 90% efficiency Final Stage HEPA Filtration 99.99% efficiency

- **HEPA filters for Exhaust:** BIO HEPA Filter 0.3 micron @ 99.99% efficient

- **Ultra Violet Germicidal Irradiations (UVGI) System:** Supply, installation, testing, commissioning, and handling of the UVGI System for maintaining the indoor air quality. The components of the system must be in strict conformity with the specifications. The prices to include all inter connected wiring between the UVGI lamps. The UVGI system shall be installed in supply air ducts or AHU itself.

- **Motorized Airtight Damper:** Consists of aluminum casing with factory fitted motorized damper. Casting and attachment should be stainless steel.

- **Fire Dampers:** Fire Dampers provided in the supply and exhaust air systems shall be interlockedwith the AHU blower motors such that in case of fire, the AHU fan motor should trip automatically.Fire dampers may be linked to the control panel.

- **Sound Damper:** For reducing the noise level of the air travelling through the duct. Placed after the air throwing machines to absorbs the extra noise and make the surrounding noise proof.

- **Control Pressurization:** Laboratories should be maintained at a higher negative pressure than the corridors/airlocks and other non-laboratory spaces.

- **Ultra Violet Germicidal Irradiations System:** Supply, installation, testing, commissioning & handling of the UVGI System for maintaining the indoor air quality. The components of the system must be in strict conformity with the specifications. The UVGI system shall be installed in supply air ducts or AHU itself include all inter connected wiring between the UVGI lamps.

HORIZONTAL DOUBLE DOOR AUTOCLAVE: Double door, rectangular, steam operated high pressure, high vacuum, suitable for horizontal loading of waste, with bio seal design. The chamber size shall be approx. 200 to 320lts capacity or as per site availability. The autoclave shall be free standing type. The autoclave shall be PLC controlled, programmable and shall be loaded with different pre- programmed decontamination and sterilization cycles. The chamber and door plate should be made of non- corrosive stainless steel AISI 316 and electric steam generators of AISI 304 qualities.

- The jacket would be made of Boiler Quality steel. The chamber & jacket should be hydraulicallytested to 2 times the working pressure. The normal working pressure would be 2.1 Kg/cm2 corresponding to temperature 135°C.
- The unit should be incorporated with watering vacuum pump to create vacuum of 24" when the temperature of cooling water to the pump is less than 300°C for total evacuation of the air fromthe chamber, thus allowing complete sterilization of the load in shortest possible time.
- The system shall be PLC based microprocessor with the facility of HMI (Human-Machine- Interface) which is incorporated with the sterilizer. The Micro-Processor based control Panel will control entire cycle of sterilization and steam pulsing automatically through watering vacuum pump. The control panel shall house the complete automatic process control arrangement including timers, relays, contactors etc.

The following specifications or better for the materials are preferred and as per the layout provided.

1	**MODULAR WALL PANELS, CEILING PANELS & DOORS** The entire lab as per the layout shall be made with clean room modularpartitions as per the following specification: A) **Wall panels cladding**: Standard wall partitions are a composite construction of two skins of PCGI over a GI frame work. Standard panels having an overall thickness of 60 - 75 mm or more for BSL 2 and 50-60 mm or more for BSL 3. The Partition seams are sealed by silicone with a perfectly flush finishing. PUF insulation materialis sandwiched between the two skin layers. Self-supporting wall provided in modular units consisting of external skinin PCGI/ PCGI which will be 0.6mm thick. Movable Wall Includes a) Puff Insulation 40±2 kg/m³ or better b) Silicon Sealant B) **Ceiling Panels:** False ceiling panels should be 50mm or more thickness with a composite construction of two skins of PCGI. Ceiling includes: a) PUF insulation 40±2 kg/m³ or better, Sheet Thickness 0.6mm, Silicon sealant C) **Wall Panels for internal partition**: Standard wall partitions are a composite construction of two skins of PCGI/PCGI over a GI frame work. Standard panels have an overall thickness of 80-85 mm. The Partition seams are sealed by silicone with aperfectly flush finishing. PUF insulation

	material is sandwiched between the two skin layers. Self-supporting wall provided in modular units consisting of external skinin PCGI/ PCGI which will be 0.6mm thick. Movable Wall Includes: Puff Insulation 40±2 kg/m³, Silicon Sealant D) **Coving**: Extruded Aluminium powder coated minimum 50,75,90mm clipon covings for the entire wall to wall, wall to ceiling joints, wall to floor. E) 3D/ Internal/External corner coves F) **View Panel**: Double glazed view panels made, Double adhesive tape andsilicon sealant, as per lay out or drawing **Doors:** Doors are designed to fit flush into the wall panel system on bothsides and are supplied in different dimensions. Shutter has sheet thickness of 0.6mm and the frame of 1.2mm. Standard 80 mm panel with width frame of 50 mm and shutter width of 45±2 mm. With shutter Thickness: 45±2 mm thick, SS hinges, SS 'D' type of handles on pull side, SS push plates on push side, Standard arm door closure (TS-68), view panel along with self-adhesive tape and silicon sealant, with both side key operated locking arrangement, automatic door bottom seal at the bottom, and SS kick plates G) **Cut outs:** Cut outs and reinforcement surrounding the cut out in theceiling panel for fixing SA diffuser/filters/ light fixtures in the ceiling panel. Cut outs in wall panel for fixing the electrical module boxes for power,UPS sockets and magnehelic gauges/ digital display devices for pressure and temp monitoring. Should be as per lay out &design. H) Diffuser plates, electrical Light fittings and any other cut outs for utilitieswhether punctured through the wall or ceiling must be sealed with silicon sealant.
2	**EPOXY FLOORING** **Flooring** shall be of 5 mm (3 mm + 2mm) of self-levelling industrial epoxy including screed compound for adhesion, 3 mm semisolid cladding of EPOXYwill be applied over a uniform cemented flooring and 2 mm semi-liquid epoxy over 3 mm hardened surface with bubble free perfect smooth finishing completed in three steps: Cementing (Uniform Flooring), Hardening (3 mm epoxy) and smoothening (2mm epoxy). Epoxy used for this application will be self-levelling and clean room compatible
3	**HEATING VENTILATION & AIR-CONDITIONING (HVAC) SYSTEM** The HVAC system shall be designed and installed to maintain the approved inside conditions of temperature, humidity, air-change rate (ACPH), air filtration through HEPA filters, room/zone differential pressure gradient and conditions. The HVAC System shall be designed and provided to maintain the following conditions: Laboratory Temperature: 22°C ± 2° C RH: 55 ±5 %, sound level: 50-60db, 30% fresh air 70% re-circulation for Non BSL area 100% fresh air for BSL 3. ACPH: More than 24. The HVAC system shall include the following items of works, complete in all respect, as required and approved for BSL 3 Facility.

(a) DX Condensing Unit/Chiller Unit:

The tonnage of chiller system/ DX condensing units should be calculated based on the heat load calculation. Room sizes as per the enclosed layout withroom height of approx. 8.5 ft. Air changes required to meet the laboratory conditions mentioned above & the equipment kept in laboratory etc. should be used to for Heat load calculation. To be incorporated as per requirement for better facility operation.

Necessary redundancy should be provided by additional standby coolingunit (N+1)

Supply Air Handling Units:

AHU for BSL 3 lab – (1 working + 1 Standby)

AHU for Non BSL 3 lab – with 1 working + 1 Standby motor

The 3-stage pre-filtration system is specifically and effectively protecting the BSL 3 containment rooms.

a) The first stage shall be for 10-micron particulate size

b) Second stage shall be for 5-micron particulate size

c) Third stage shall be for .3-micron particulate size.

Air Handling Unit (AHU):

Modular Outdoor type Double skin Air Handling Units of 43±2 mm thick PUF injected panels with 22–24 gauge GI inner skin and pre-coated GI outer skin all as per specification including fan with TEFC motor. AHU shall have Air Intake louver combined with pre filter, Fine Filter section, and Semi HEPA filter section. Coil section with 8 row deep cooling coil, Fan section with imported DIDW centrifugal backward curved fan, Drive set with V-belt & Motor.

AHU should be certified by AHRI / Eurovent /NNF or equivalent

AHU motor shall be compatible for working with VFD. Necessary vibration isolators & supporting arrangement. Fresh air intake arrangement, necessary water drain & air purge valves wherever required etc.

AHU should have internal energy conservative lighting integrated with door interlocking.

b) Exhaust Blowers:

A separate dedicated Exhaust Blower shall be designed and provided for exhaust from the BSL 3.

Double skin floor mounted exhaust air unit shall have:

Flanged type opening for return air duct connection.

Fan section with imported DIDW centrifugal backward curved/plug fan or better, Drive set with V belt & Motor (1w+1s). 25±2 mm thick PUF injected panels with 24-gauge GI inner skin and pre-coated GI outer skin.

The exhaust blowers shall be Centrifugal type blowers complete with blower casing, SISW blowers, drive set, base frame etc. complete in all respect.

The Class II A2/B2 Bio-Safety cabinets shall have separate dedicated Exhaust Blower.

	c) Exhaust Air Filtration The exhaust air from the BSL 3 Laboratory shall be filtered through dedicated set of HEPA filter installed in BIBO unit. The HEPA filter shall have 99.97% efficiency for 0.3-micron particulates. HEPA FILTERS Specifications: - Frame - Aluminium. Type - Flange, Media - Micro Fiber Glass, Sealing of media with epoxy Efficiency - > 99.97% down to 0.3-micron particle size. I.P.D. - 15mm WG, F.P.D. - 50mm WG. Separators – Aluminium or better **The HEPA filters shall be installed in BIBO assembly for easy and safe replacement.** Design, supply and installation of BIBO Unit complete with Bag clamping ring with shock cord for filter change. Elastic bagging ring mouth and cam lock arrangement for filter sealing Ports to be provided across filter for pressure gauge connection. DOP port to be provided across HEPA Filter at upstream and downstream.
4	**Supply and Exhaust/Return Air Ducting:** GI Ducting complete with MS painted flanges, all joints sealed with RTD silicon sealant with MS painted supports with zero leaks form joints. **Supply and Exhaust/Return Air Duct Insulation:** Chemically Cross-linked Closed Cell Polyethylene (FR XPE) Thermal insulation material. 19mm as per class 10k / ISO class 7 or 8 insulation material with Aluminium foil lamination on one side for supply duct. Chemically Cross-linked Closed Cell Polyethylene (FR XPE) Thermal insulation of 13 mm with Aluminium foil lamination on one side for return duct.
5	**ELECTRICAL WORK** **Lighting** Natural lighting should be used (optimally) where ever possible. Complete electrical power distribution system scheme for the proposed facility is required. The electrical distribution system shall be designed and installed as per relevant standards and guidelines. Work includes main power distribution panel, sub-distribution boards and panels complete with required switchgears, breakers, circuit breakers, power and control wiring etc. complete as required and approved, for power distribution system for the proposed facility. The scope of work shall include internal lighting and power, cabling/ wiring for HVAC System, Bio-safety cabinets, door interlocks and BMS etc. complete in all respect. **LT Panel** Main electrical LT panel with bus bar and sub panels for HVAC, power systemand lab equipment. Panels shall have Aluminium bus bar and required breakers and necessary tripping arrangement. (Free floor mounted, indoor type, front operated, Top/Bottom cable entry. Suitable for AHUs and exhaust units and PDB / LDB, &

	control system) -it should be equipped with interlock and programming with Pascal pressure. Electrical power Cabling 1.1 KV grade PVC/ XLPE insulated Aluminium/ copper conductor armored/ Unarmored cables on cable tray. (Copper / Aluminium armored / Flexible cables), control cables (copper), (for plug points and power sockets). **AHU Starter Panel**: Including VFD and its control circuit for supply AHU and Exhaust AHU.
6	**Backup Power System** A dedicated UPS 2x50 KVA with batteries shall be provided for providing un-interrupted power supply to the BMS and door interlock system. The UPS shall be capable to give approx. 45-60 minutes of power backup, in case of mains power failure.
7	**Internal Light Points, Fittings and Fixtures** The electrical fittings and fixtures in the facility shall be sealed type, leak proof and capable to withstand chemical exposures during laboratory fumigation. All the light points, power points, light and power sockets shall be fully wired with switches, sockets, connections complete in all respect as per approved designs and drawings. Power sockets should be provided for equipment (as per the layout provided). Modular type, power sockets with lid of 5A/15A are to be provided at various locations on the wall as per discretion and strategic arrangements /provisionsfor lab equipment. The sockets meant for UPS should be screen printed as (UPS) for ease of operation and identification marked wires and cables used shall be of copper of standard make (ISI Marked) and manufacturer.
8	**Communication Facility** The proposed facility rooms shall be provided with Data and Voice points for communication. The Data and Voice points shall be fully wired and complete with I/O points. LAN wiring for internet access inside the lab with sockets to be provided at strategic locations (near work benches) in BSL 3 labs and supporting areas. A suitable EPABX System shall be provided for the laboratory. Telephone instrument with line will be kept in In-charge room, Staff room, BSL 3 lab and any other place as suggested. Telephone with speaker for hands free operation will be provided inside BSL 3 Labs
9	**AIR CONTROL DEVICES** **a) DIFFUSERS:** Supply and installation of removable core, heavy gauge, duck heater, and powder coated supply air and return air ceiling diffuser with internally operated enamel painted opposed blade volume control damper. **b) DAMPERS:** Supply and installation of galvanized sheet powder coatedvolume control dampers for supply and return ducting. The scope of work includes providing of supports, bolts, nuts, gaskets and all accessories **c)** Motorized volume control damper with modulating electrical actuator

	d) **Fire Dampers:** Fusible link type fire dampers
10	**Door Interlock System and Access Control for the facility** The door interlock and access control system shall be provided with combination of proximity card based, numerical key pad lock based and push button-based system. The system shall be complete with access logic controllers, door electromagnets, proximity cards and card reader/s, numerical keypad locks, door release push buttons, emergency door release buttons, PC communicator, control and power wiring and cabling and other required accessories, hardware, and software, complete in all respect as required. The access control system shall be powered through UPS supply foruninterrupted operation even during mains power failure
11	**CCTV System** CCTV Monitoring Devices: Camera to continuously monitor the activities insideand outside the facility by providing central CCTV monitor. Supply, installation, testing and commissioning of the following shall be done in coordination with the site: CCTV Cam 2 MP Dome DVR with power supply Hard Disk with 5 TB Supply laying of co-axial cable with necessary accessories Wall mounted monitor (32-inch or more LED) as suggested by site.
12	**Fire Safety:** Fire detection and alarm system (FDA System) and fire extinguishers of Type ABC 4 Kg, $C0_2$ 4KG with inert gas system shall be provided at strategic locations as per fire safety guidelines. Training to be provided for its operation**.**
13	**PASS BOX** Pass boxes shall be provided at required locations for transfer of samples, Chemicals and materials into the laboratory. The Pass box shall be constructed in SS 304 (18 gauge). The corners inside the Pass box chamber shall be coved for easy cleaning. The pass box chamber dimension shall be approximately 600 mm x 600 mm x 600 mm. The unit shall be complete with door electromagnets, door interlock, UV Lamp with timer, necessary wiring, controls and all other accessories. etc. complete. The number may vary as per the requirement of the design finalized.
14	**Double Door High Pressure Autoclave/Steam sterilizer** Double vertical sliding door, steam operated, high pressure high vacuum,suitable for horizontal loading of waste with different pre-programmed decontamination and sterilization cycles. The autoclaves shall be double door, rectangular, steam operated, high pressure high vacuum, suitable for horizontal loading of waste. The autoclave shall be PLC controlled, programmable and shall be loaded with different pre- programmed decontamination and sterilization cycles. The autoclave chamber shall be constructed

	of heavy-duty SS of 316 (min. 6 mm thickness) with full argon welding. The chamber material and construction shall meet ASME standards for unfired vessels. The chamber shall be duly reinforced with the help of carbon steel. Doors and jacket shall be constructed of SS 304 (min. 5 mm thickness). Doors must be provided with automatic safety locking and unlocking devices. All doors shall be with gasket to ensure ahigh temperature seal. Chamber and doors shall be designed for working underpositive pressures up to 31 psig at up to 135° C.
15	**Laboratory Furniture as per layout** **Note-** All the furniture for the facility must be SEFA 8M or better certified. **SS working Table** Laboratory work stations -frame shall be made up of SS 304 (16 gauge), with nylon cushion/bushing for the legs, non-particle shredding material and shall be chemical resistant to allow chemical disinfection. It should be strong to hold. It should be stable and vibration free. There shall be no drawers or safe in the workstation. SS dustbins, COB, Air cotton, Hand Sanitizer, Movable trolly, etc. **PPE Storage cabinet** Garment storage cabinet-(L x W x H) (2'6"x1'6"x4') or as per design. Garment storage cabinet to be provided with key lock in the change room/Ante room. It shall be of SS 304 with two compartments and shelves for storage of clean items (standard size). **Shoe Rack** Shoe rack It should be made of SS 304 with 5 shelves, open type and wide enough to hold> 10 pairs of shoes in each shelf and shall be able to fit in available space as per design **SS Stool Laboratory Stools** Laboratory grade stool with foot rest, rotating type with castor wheels at the base, shall be provided by bidder.
16	**Storage Shelves** The storage shelves should be wall-mounted or floor-mounted, with appropriate storage area as per design.
17	**Water Shower cum Eye Wash** The showers for a) face at lower level (foot operated or sensor based) and b) for full body protection (pull chain or sensor based). Both the shower should operate simultaneously or singularly as per the requirements. Material of construction: Pipe: GI (C-Class) heavy grade confirming to IS:1239Self-closing valve: SS. Bowl for eyewash, Eye wash nozzle, shower head all to be made up of SS304 or better, Foot Pedal, Spring and Pull chain of MS Galvanized or better if sensor based.
18	**Hand Wash Sink** Modular standalone hand washing sinks made of SS 304 with foot operated/ sensor-

	based mechanism to be provided as per design inside the lab as per layout. **Plumbing work** The internal drainage system should use the minimum of pipework and remain water/airtight at all joints and connections. The entire drainage system should be made of acid-resistant materials. The internal drainage system should be connected to the main drainage system as far downstream as possible to ensure maximum dilution. The drainage system should allow easy access for inspection andmaintenance. **Hot and Cold-Water Systems** Hot and cold-water supplies to laboratories should be served by separate storage vessels and pipe work distribution systems. All pipe work, valves andflanges for water supply systems should be insulated and vapor sealed.
19	**EFFLUENT DECONTAMINATION SYSTEM** ETP: Desired Capacity: 100 liters /Day The system should be complete with following items: 1. Two nos. decontamination tanks, each of 500 liters capacity 2. Motorized valve connected with liquid level sensor through control panel 3. Disinfectant Chemical storage tank of SS 316 4. Disinfectant Chemical dosing pump 5. Non return valves 6. Interconnecting piping including piping for chemical dosing 7. Pumps for discharging decontaminated effluent into sewer/drain (1W+1S) 8. Power and control cabling/wiring for pumps and motorized valves with control panel plumbing lines as per requirement
20	**UNINTERRUPTED POWER SUPPLY SYSTEM (UPS): 2X50 KVA with 45-60 min back up or better** A central UPS console shall be provided to cater to the extreme essential power requirement of the laboratory. All critical components like lights, Door Interlocks, exhaust blowers of BSCs, Fire alarm sensor, CCTV camera & monitoring shall be provided with uninterrupted power supply for 15 minutes.
21	**Hooter/alarm** at the emergency exit door and fire detection system (sensor based)
22	**CO_2 Cylinder Bank and associated piping for CO_2 Incubators** Separate provision for CO_2 gas for Incubators. All utility piping to be fitted with backflow prevention device/non-return valve.
23	**Labelling to be done as per following details:** The biohazard warning symbol and sign must be displayed on the door(s) ofthe rooms where microorganisms of RG 3 are handled Biohazard label should be placed outside the laboratory. Labels for all switches (to be provided) including in the MCCB panels,LT Panel and AHU Control panel Labelling of the BSL 3 Lab and Ante Room/ Change room including Emergency exit.

	BSL 3 facility layout should be provided at the entrance of Lab
24	**Building Management System and Controls:** A customized BMS design to control and monitor the operation of HVAC system and the laboratory operating parameters in the BSL 3 Lab rooms/zones pressure, supply air quantity in each room, BSC Cabinet status, AHU status, exhaust blower status, VFD status, Room temperature & RH. The BMS Control System shall comprise of: a) VFD for Air Handling Units and Exhaust Blowers b) Air Flow control valve with Integral airflow measurement for BSL 3 lab. c) Motorized dampers with Open /Close Actuator for BSC exhaust blowers d) Fresh Air Damper with Proportionating Actuator e) Return Air Damper with Proportionating Actuator f) Exhaust Air Damper with Proportionating Actuator g) Pressure, Temperature & RH Sensors in BSL- 3 Lab Room The above components shall be fully integrated with the BMS to provide control and monitoring of the BSL 3 Lab operating conditions. The BMS shall be designed and provided to allow START/STOP operation of the complete HVAC system in AUTO and MANUAL mode and the system shall have the provision to over-ride the parameters (password Protected) and to enable START/STOP operation of the HVAC system. The BMS shall be complete with PLC's, Sensors, Controllers, power & control wiring, software, other associated field devices and hardware, complete in all respect, as per approved design and requirement. The HVAC system start and stop sequence shall be interlocked to provide the ON and OFF functions such that it should prevent positive pressurization of the BSL 3 Lab, at any point of time.
25	**BIOSAFETY LABORATORY VALIDATION, TESTING AND DOCUMENTATION** The validation should essentially incorporate the following: Clean room validation, Air Balancing test, Room negative Pressure Test Particle Count Test (at REST), Temperature & Relative Humidity test Light level test and Spore strip test
26	**Culture room facility (aerobic/anaerobic with negative pressure)** A dedicated room with temperature controller and monitor for aerobic/ anaerobic culture having negative pressure.
27	**Cold room**: A 4-8ºC storage room is required for microbiological facility and analysis. Prefabricated Walk-in chambers, made of double walled modular panels 80 MM (W & R) powder coated sheet 0.5mm with PUF insulation 60 mm thick or more and easy to install at site. Inner and outer of SS 304, Temperature range 2.0-8.0°C; Accuracy ±0.2°C;

	Uniformity ±0.2°C Door with hinges and lock, door size 750 x 1800 mm; Observation window 300 x 1400 or better or as per design Wall thickness 80 mm; Density 40 kg/m3 Inner size- as per site/space availability Complete fitted with sealed Air-cooled condensing unit of minimum capacity of 5.0 TR with latest Compressor, Cooler with sealed fan motor etc. With Inbuilt electrical panel board having PLC Controller with 08 or more sensors, 01 Hooter, to maintain: 2-8°C. To be provided with power back up, emergency lights and telephone connections. Should have enough racks and suitable work space area.
28	**Washing area: A separate washing area for cleaning and sterilization ofglass wares** **Documents for final submission:** Validation report with all test certificates, maintenance manuals, as Builtdrawings **WALL PARTITIONS AND FINISHES FOR NON-BSL 3 AREA** Brick wall cement plaster and wall putty. Epoxy paints for smooth wall finish. Gypsum false ceiling for non BSL 3 area

MAKE LIST

S/N	Description	Make List
1	Condensing/Chiller Units	Blue star/ Voltas/Carrier/ Equivalent
2	Air Handling Units	Zeco/ Edgetech/REVA/ Equivalent
3	BSC Exhaust air On-line Centrifugal SISW Fan	OEM/ Equivalent
4	GI Ducting	Tata/Jindal/Sail/ Equivalent
5	Aluminum Gear Operated volume control dampers for AHU, ducting and exhaust fans	Caryair/Continental/Waves/Ultimate Engineer/ /Equivalent
6	Duct Insulation	Armaflex/Supreme/Paramount/Equivalent
7	Fire dampers	Caryair/Continental/Waves/Ultimate Engineer/ Equivalent
8	Supply/ Exhaust Air Diffusers	Caryair/Continental/Waves/Ultimate Engineer/ Equivalent
9	Main Electrical LT Panel	ESC/Khokhar/PSP Techno/ Equivalent
10	Copper Armored Cable forIncomer	Polycab/National/Finolex/ Equivalent
11	Variable Frequency Drive (VFD)	ABB/Danfoss/Siemens/ Equivalent
12	Supplying and fixing of GI cable trays including steel supports with GI nut and bolt,bend, T joint, reducer, coupler and all necessary accessories etc.	PTS/PTC/Indiana/Profab/ Equivalent

13	PVC Conduit for cable laying above false ceiling	PTS/PTC/Indiana/Profab/ Equivalent
14	PVC insulated Copper earthling green wire 4 mm²Single Core	Finolex/Polycab/National/ Equivalent
15	LED Light fixtures	Crompton/ Philips/Wipro/Havel's/ Equivalent
16	Light fixtures: 2 x 36 watts FTL for plant room & General area above False ceiling	Crompton/ Philips/Wipro/Havel's/ Equivalent
17	4/6 Module Box with inner plate and SS outer plate, suitable for 1 no 5/15 amp. Socket + 2 Nos. 15 amp. Switch (for power socket andlight)	N W / Crabtree / Roma/Cona/ Equivalent
18	Room communication port/socket with RJ 11 & RJ 45 and 2 core CAT 5 cabling for communication from BSL 3 lab	N W / Crabtree / Roma/Cona/ Equivalent
19	Lighting DB/ Power DB with MCBs / MCCBs	Hagar/L&T/Legrand/GE/Schneider/ Equivalent
20	Clean room Partition panels	GIZO/Industrial Foam/ZEP Infratech/ Equivalent
21	Polyvinyl-Antistatic Vinyl flooring	Wonder floor / Royal/ Innovative Flooring/ Equivalent
22	R-45 PVC progressive ceiling to wall coving suitablefor wall & ceiling finish	GIZO/Industrial Foam/ZEP Infratech/ Equivalent
23	Clean room compatible Single Leaf doors	GIZO/Industrial Foam/ZEP Infratech/ Equivalent
24	Clean room compatible double Leaf doors	GIZO/Industrial Foam/ZEP Infratech/ Equivalent
25	BMS, Automation	Honeywell/Siemens/ Johnson Control/ Equivalent
26	Digital Differential Pressure Transmitter with Display unitat Entry door	Honeywell/Dwyer/Omron/ Equivalent
27	Access control & 3 – Door Interlock system	HID/Honeywell/Resilient/ Equivalent
28	Control & Communication cabling with termination.	Finolex/National/ Equivalent
29	SS-Static Pass Box of size 600x600 or as per design	Precious/Thermadyne/Sunil Brothers/ Equivalent
30	Double Door Autoclave	Net Steel/ Shweta Scientific/Optics Technology/ Equivalent
31	Pre /Fine/ HEPA filters	Thermadyne/AAF/Mechmaark/ Equivalent
32	BIBO Housing for HEPAfilters	Thermadyne/AAF/Mechmaark/ Equivalent
33	UPS	Microtech/ Uniline/Nexus/Equivalent
34	Fire Alarm System	Agni/Honeywell/Bosch/Siemens/ Equivalent
35	Door Interlocking & Access control system	Real Time/HID/LG/ Equivalent

TESTING, VALIDATION AND COMMISSIONING

After completion of the construction and installation works, all the equipment, systems and services shall be commissioned and tested to check the operation and performance of each equipment and system.

Once all the equipment and systems are found to be working satisfactory, the validation of the BSL 3 laboratory shall be carried out by us in the presence of authorizedrepresentatives/ committee of the Institute. The validation of the BSL 3 Laboratory shall be carried out in accordance with the NIH/RCGM Guidelines for commissioning and validation of BSL 3 laboratories. During the validation process, operation and functioning of complete installations shall be checked to verify that the equipment and systems are delivering the desired and approved performance results. It will be checked to ensure that all the biosafety and biosecurity requirements are met, are in place and functional.

Before start of the validation process, a detailed validation document giving details of validation checks and tests to be performed, the acceptance criteria as per the approved designs and drawings and the formats for recording the check and test results.

The statutory documentation for obtaining approvals from authorities like DBT-RCGM, shall be submitted /provided to IITR by the bidder. IITR shall provide the required assistance in filing on-line application protocol and facilitating in getting such clearance/s and approval as required like from IBSC committee etc. Official statutory fees if any, shall be paid to the concerned department/authority directly by the bidder in case of BSL3 facility.

The list of tests to be performed is as below (other mandatory tests, if needed, for commissioningof BSL 3 may also be demonstrated):

- Containment Barrier Integrity test
- HEPA Filter Leak Test – According to the US Federal Standard 209E
- Biosafety cabinets: velocity tests and HEPA filter integrity tests
- Ducting Pre-welding leak test
- Ducting post-welding leak test
- Room Differential Pressure test

- Particle Count Test for Cleanliness
- Air Velocity/ Pattern smoke Test
- Room Air change Rate
- Light intensity Test
- Noise level Test
- Temperature and RH

Laboratory Furniture (as per layout)

All other rooms need to be furnished with appropriate furniture/ seating chairs/ tables with drawers/ almirah/ cubicles/ door locks etc. (where ever required) etc. Any additional features or specifications in excess of these minimum specifications will be appreciated. All the furniture for the facility must be SEFA 8M or better certified

S. N	Items	Technical Detail	Unit	Qty.
1.	Static Pass Box	Static Pass Box: It shall be made of SS 304 with interlocking in such a way that both doors cannot be opened simultaneously, panel mounted, with buzzer to indicate open status for any door, with dimension of 600mm (L) X 600 MM (W) X 600 MM (D), with load bearing capacity of 40 Kg or more, Door make: single door in each side, with glass and air tight gasket, with door latch and handle of superior quality (door opening outside), with viewing glass made of 10 mm or better thick tempered glass, hinges made of SS304, with LED lamp inside pass box, indicating lamps in both sides to show status. Manual ON/OFF switch for both Fluorescent & UV lamp on both side of the Pass box. The number of pass box may vary and can be as per design and layout finalized.	No	3
2.	Dynamic Pass Box	Made up of SS 304 (18 gauge) or better, HEPA filters, blower, motor, door electromagnets, door interlock, UV Lamp with timer, necessary wiring, controls. ii) The Pass box doors shall be interlocked by providing suitable electromagnet, so that both the door cannot be opened simultaneously. The interlock shall provide visual indicator for door open/close conditions. The blower motor of Pass box shall of suitable five-star rating or better and shall be dynamically and statistically balanced. Magnehelic differential pressure gauge shall be provided to indicate the pass box chamber pressure. The pass box shall be provided with UV light with ON/OFF switch. The Supply air velocity across the terminal HEPA filter in Pass Box shall be approximately 0.45 m/sec. Noise level shall be less than 60 dB.	No	2

		The pass box shall be installed flushed with the wall on lab facility side and projected on the other side. The projected side shall be provided with SS coving at the pass box and wall junction. The number of pass box may vary and can be as per design and layout finalized.		
3.	SINK	Hand wash sink with eye shower (sensor based). The number may vary and can be as per design.	No	6
4.	Laboratory Furniture	SS Table and work benches as per layout for lab instruments. The number may vary and can be as per design and layout finalized.	Lot	1
5.	Stainless steel Shoe Rack	It should be made of SS 304 with 5 shelves or more, open type and wide enough to hold two pairs of shoes in each shelf and shall be able to fit in available space as per design	No	5
6.	Garment Storage Cabinet	One garment storage of SS 304 cabinet with key lock shall be provided in the change room.	No	1
7.	Locker	Locker with minimum 24 storage cabinets	No	1
8.	SS Bench	SS Bench with PPE storage. The number may vary and can be as per design and layout finalized.	No	3
9.	Laboratory Stools	SS Stools The number may vary and can be as per design and layout finalized.	No	15
10.	Double Door Autoclave	Double door autoclave 325 Lt.	No	1
11.	Safety Shower	Emergency Body Cum Eye shower	No	3
12.	Printer	Print Technology- Laser colour Type of Machine- Multifunction Machine, copier printer & scanner Type of Printing- Colour and Mono or better Developer Unit- Yes Platen/Flatbed Size- A4 Paper Size (Original/Image)- A3-A5 RAM size (MB)- 64 Resolution: 600x600 dpi or better Minimum Speed per Minute as per ISO/IEC 24734 in A4 Size-Mono & colour-25 Scanning Feature Availability- Yes Duplexing Feature Availability- Yes Networking Feature Availability- Yes, TCP/IP Interface: Feeder Capacity (Number)- 35 or more Number of Main Paper Tray-1 or more	No	1

		Each Main Paper Tray Capacity (Number)- standard 350 Bypass Facility- Yes, multi bypass If Yes, Bypass Tray Capacity-1 Yield of the cartridge/Ink Tank/Ink Pack supplied with Machine as per ISO/IEC: 19752/2004(E) for Black (Number of prints)- 1800 or better, colour 900 or more Duty Cycle (No of Prints/month)- 10000 Minimum Operating Temperature -10°C or better		
13.	4K smart interactive display with white board wireless casting and remote device management screen	To be supplied with appropriate accessories: pen pointer with 2 or more USB ports for meeting room. Panel Size: 65 inch or more Panel Type: TFT LCD Module with DLED Backlight Display Area (mm): 1425 (H) x 800 (V) (64 diagonal) or better Aspect Ratio: 16:9 or better Resolution: UHD 3840x2160(Pixels) or better Colours: 1.07B colours (10bit) Brightness: 300 nits (typ.) or better Contrast Ratio: 4000:1 or better Response Time: 5-6ms or better Surface Treatment: Anti-Glare Orientation: Landscape RAM: 2GB DDR4 or better Storage: 16GB or more	No	1

DETAILED SPECIFICATIONS OF EQUIPMENTS

S N.	Instruments	Technical Specifications*#	Qty.
1.	Class II B2 Type Biosafety cabinet	• Certification: NSF 49/EN12469 • Design: Approx. 4 X 2 feet (length x Depth), Biosafety cabinets Class II, Type B2; SS304 interior epoxy-coated steel exterior, removable, seamless, dished work surface with lift out knobs, Door- Fully closing, clear ¼" tempered safety glass sash counter balanced with base stand. • Circulation: Class 100, Supply and exhaust through HEPA filters. Inflow velocity of 105 fpm (0.5 m/sec), Down flow velocity of 50-80 fpm (0.25-0.40 m/s) no air recirculation • ULPA /HEPA Filter: Supply: ≥99.99% or better for particle size between 0.1 to 0.3 microns • Exhaust HEPA filter typical efficiency ≥99.99% at 0.3 microns • Suitable display for all safety information on one screen with a touch keypad • Light: standard UV and LED for work space. • Gauges: For monitoring the condition of all HEPA filters as wellas work space. • Hinged or sliding front window with audible and visual alarms, which indicate when the window is not at the correct position forsliding window models. • A front access opening of 8 -10 inches. • Noise levels ≤ 65 dbA or less • Should have ergonomic design for maximum user comfort andadjustability • Services Required: Installation & onsite validation, Calibration certificates • Manuals: Operation, maintenance & part list with detailed specifications, Operational & maintenance Training. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	2

2.	Class II A2 Type Biosafety Cabinet	• Certification: NSF 49/EN12469 • Design: Approximately 4 X 2 feet (LxW), Bio safety cabinets Class II, Type A2; SS 304 interior Epoxy- coated steel exterior, Removable, seamless, dished work surface with lift out knobs Door- Fully closing, clear ¼" tempered safety glass sash Counter balanced with base stand. • Circulation: Class 100, Supply and exhaust through HEPA filters. Inflow velocity of 105 fpm (0.5 m/sec), Down flow velocity of 50-80 fpm (0.25 to 0.40 m/s) 70 % air recirculation • HEPA filter with 99.99% or better efficiency. • Suitable display for all safety information on one screen with a touch keypad • Light: standard UV for decontamination and sufficient illumination for work space • Gauges: For monitoring the condition of all HEPA filters as well as work space. • Hinged or sliding front window with audio and visual alarms. • A front access opening of 8 or 10 inches. • Noise levels ≤ 65dbA or better • Should have ergonomic design for maximum user comfort and adjustability. • Services Required: Installation & onsite validation, calibration certificates. • Manuals: Operation, maintenance & part list with detailed specifications, Operational & maintenance Training • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	2
3.	Refrigerated Incubator	• Double walled body with inner chamber of Stainless Steel and outer galvanized steel with non- corrosive epoxy powder coated; full view glass door. • Capacity: 120-150L or more with an internal fan for uniform air circulation. • Inner chamber: 1-2 shelves (perforated and adjustable) and with illumination. • Temperature control: microprocessor based with digital display, Range: 0-70°C or higher with an accuracy of ±1°C Uniformity: ±1.0°C throughout the chamber	2

		• PID controller cum indicator with Peltier-based heating and cooling for exact maintenance of temperature for regulatory studies. • Door alarm: Low/high temperature alarm • Temperature sensor: PT-100 • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity. • Should have the standard of international safety parameter, CE approved.	
4.	Refrigerated Incubator Shaker	• Double walled body with inner chamber of Stainless Steel and outer galvanized steel with non- corrosive epoxy powder coated; full view glass door for clear chamber visibility. • Should have magnetic or five-point supported motor drive or Triple eccentric counter balance drive on 9 permanently lubricated ball bearing for vibration free operation • Stackable up to 2-fold refrigerated shakers of capacity 120-150L or better with an internal fan for uniform air circulation. • Inner chamber: 2 shelves or more (perforated and adjustable) and with illumination • Temperature Control: microprocessor based with digital display, Range: 0-70°C or higher with an accuracy of ±1°C Uniformity: ±1.0°C throughout the chamber • Shaking range: 25 to 400 rpm or better • Door alarm: Low/high temperature alarm • Cooling: CFC free refrigeration • Temperature sensor: PT-100 • Should have universal platform (washable sticky mat or SS clamps) with capacity to accommodate flasks of 5-6 Lts. • Should have the standard of international safety parameter, CE approved • Supplied with accessories: platforms and clamps for flasks (min 10 each for 250 ml, 500 ml, 1000 ml flasks) and test-tubes holder • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	4
5.	CO_2 Incubator refrigerated	• Air jacketed CO_2 incubator of Capacity: Inner volume 160 L or more, Inner chamber should be made up of SS. • Temperature Range-5ºC above ambient to 50°C or better with	2

		control accuracy of 0.1ºC, Uniformity ± 0.2°C at 37°C. • CO_2 gas range: 0.1-20% with control increment of 0.1%, accuracy +0.3% at the specified Relative Humidity (RH) at 37ºC and ambient 22°C, stability of + 0.1% at 3ºC and ambient 22ºC and gas uniformity of + 0.1% at 37ºC and ambient 22ºC across the chamber. • CO_2 recovery rate of at least of 6 min after door opening and closing event to attain 5% CO_2. • Should have optional High-Temperature Disinfection [HTD] of at least 180 ºC for 2 hours. Entire HTD cycle including the time for warming up and cooling down to incubation temperature (37ºC) for BSL3 facility. • Should have touch screen display with advanced user interface and on-board data log and option to transfer data via USB interface. • Retrofit/field upgrade with O_2 option (1-20% &/or 0.1- 20%). • Should have non-segmented glass door for additional contamination prevention and increasing CO_2 recovery after door opening. • System should have Infra-Red (IR) CO_2/TC or better sensor with auto-calibration feature • Temperature sensor: PT-100 or better • CO_2 concentration: Adjustable from 0-20% with control accuracy + 0.1% • Should come with an inline pressure regulator to ensure less gas consumption. • Should be "fan less" design to reduce chance of contamination, reduce noise level, minimum air turbulence. • The incubator should have at least 2-3 adjustable perforated stainless-steel shelves & humidity reservoir (removable) to achieve at least 93-95 % RH at 37°C. • Alarm: Audio-visual alarm for adjusted CO_2, temp and RH. • Filters: In-Chamber HEPA air filter between chamber and cylinder and microbiological filters on all gas inlets and outlets and sample port. • Should have minimum 02 Nos. or more access ports at the back of the chamber • Should conform to CE certification standards. • Accessories: Gas cylinders with regulators and pressure gauges, tubing, roller-based stand	

		• Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
6.	Upright phase contrast & dark field, Fluorescence Microscope with image analysis system	• UPRIGHT MICROSCOPE with a Par- focal distance of 60 mm or more Phase Contrast objectives of plan phase fluor of 10x NA (0.30, W.D.16mm or better), 20x (NA 0.50; W.D.2.0mm or better) & 40x (NA 0.75; W.D.2.0mm or better) and Spring loaded or better plan phase flour Oil 100x (NA 1.30; W.D 0.15mm), Spring loaded or better plan phase flour Oil 40x (NA 0.75; W.D 0.66mm) with NA value of minimum (without phase) oil immersion. • Condenser: Universal Phase turret condenser • Dark field objective 100x (Oil) with Darkfield condenser • Nose Piece: 06 position rotating turret with intelligent function. • Eye Piece: 10x (F.O.V. 22mm or above) with Rubber eye guard. • The Trinocular eyepiece tube with interpupillary distance at least 50-75mm, with Variable inclination 10-30° or more from horizontal having light distribution feature three way (100:0, 20:80/ 50:50, 0:100). • Built-in transformer or better with LED Life span 60,000 hrs or more /Halogen illumination of 100 with minimum 100W Bulb • Mechanical stage of size cross travel range of at least 75x52 mm or better with two slide holders. • LED Epi Fluorescence attachment with 5 position or better turret for filter block. • LED Illumination (same make) LED fluorescence illumination, feature must be controlled through software / control pad enabling user to select the desired wavelength. Life span minimum 20,000 hrs. or more (LED fluorescence attachment should be from the same manufacturer). • Filters: LED Filter Block for DAPI, FITC, TRITC & CY-3. • Photographic attachment: • Color digital camera: CMOS or better of 12 Megapixel or better. High Resolution suitable for Brightfield Imaging. • High resolution Monochrome digital camera attachment fluorescence imaging with capturing software with facility	1

		for image analysis/measurement and merging of fluorescence images. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity. • Should be supplied with branded computer system with screen size: 34 inch with latest Intel i-7 or better processor that support system software with 2TB or better SSD and printer with licensed Windows Professional software with on-site upgradation of system software support for minimum 5 years or more with WIFI and DVD Writer. • The microscope, camera & other accessories should be from the same manufacture. • Spare Bulb: 5Nos. (If Halogen illumination is quoted)	
7.	Inverted Microscope	• Basic Components: • Objectives: S Plan Phase 10x N.A. 0.40, W.D. 6.0mm with cover glass correction or better, S Plan ELWD phase flour 20x N.A. 0.45, W.D. 6-8mm, spring loaded or better, S Plan ELWD phase flour 40x N.A. 0.60, W.D. 2.5-3.5mm, spring loaded or better • Eyepiece tube: Trinocular tube (light distribution, bino/photo: 100:0, 20:80/ 50:50, 0:100); Interpupillary distance: 50-75 mm, Inclination:30°-45° from horizon. Eyepiece lens: 10X (F.O.V. 22mm or better) • Nosepiece: Quintuple (or better) nosepiece. • Stage size: 260 x 300m with cross travel range 100x70 or better, acrylic window provided for better view of objective. External attachable mechanical stage: with universal holder. • Condenser: ELWD condenser: N.A. 0.3 (O.D. 75mm) • Built-in LED /Halogen illuminator. • LED Epi-Fluorescence attachment: Epi- fluorescence attachment with LED illumination, with field diaphragm, Fluorescence filter block holder, 4 filter blocks mountable, 1 empty position), Lamphouse for LED illumination along with blue, green and red emission (DAPI, FITC, TRITC & CY-3) filter. • Photographic attachments: CMOS Digital camera with not less than 12 MP Resolution, or better, USB-3 connectivity facility to work in color as well as monochrome mode which can be controlled through computer fitted with Licensed	1

		image acquisition software. • Spares: Lamps 5 Nos (If Halogen Is quoted) • Should be supplied with branded computer system with screen size: 34 inch with latest Intel i-7 or better processor that support system software with 2 TB SSD and color Laser printer with licensed Windows Professional software with on-site upgradation of system software support for minimum 5 years The system should have at least with 2 USB & 2 USB-3 or more and HDMI ports with WIFI and DVD Writer. • The microscope and camera should be from the same manufacture. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
8.	Refrigerated high speed Centrifuge	• Certification: CE or UL certified or conformity • Temperature range: -10 to +40°C or better • Maximum Speed up to 30,000 rpm or more for fixed angle rotor, 16,000 rpm or more for swing out rotor with a brushless motor, aerosol tight rotor (certified) • Maximum RCF 70,000g or more for fixed angle rotor; 20,035 x g for swing out rotor • Display: Digital for temperature, time (0-99 mins) and RPM/RCF, Microprocessor controlled suitable control panel for operating the centrifuge • Cooling: CFC free refrigeration • Programmable: 30 programs or more and with program recall facility • Rotors with suitable adaptors: Fixed angle rotor: 24x1.5-2.0ml; Swing out Rotor and adapters for: 5-10 ml tubes,15ml, 50ml etc.; Plate rotor options for centrifugation of microwell plates or better with automatic rotor recognition facility. • Rotor lids should have a Quick Lock-system; with facility to perform gentle acceleration and deceleration. • Noise levels should be <54 db(A) or better • It should be possible to operate the centrifuge at set rpm, for short spin protocols • Instrument should be CE Certified and have a IVD Conformity Fast Temp option for quick pre-cooling • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to	2

		centralized Servo type stabilizer & UPS of suitable capacity.	
9.	Refrigerated Microcentrifuge	• Bench top, compact, Refrigerated Temperature setting: -10 to 40 ºC±5 or better • Microprocessor controlled • Fast Pre cooling and should maintain +4ºC at maximum speed • Up to 3 programs or more • Digital display showing rpm, RCF and time (0-99 mins), temperature • Cooling: CFC free refrigeration • Speed 14000-15000rpm or more • Suitable control panel for operating the centrifuge and a safety lid lock • Rotor for 24X1.5 / 2 ml tubes, Adaptors for 0.5 ml and 0.2 ml. • Auto balancing in situation of minor imbalance • Electrical Requirements: 120V/60Hz and 230V/50 Hz or Suitable electrical supply CE certified or equivalent • For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	3
10.	Liquid Nitrogen Can – 47L capacity with racks	• Capacity: 40-50 L • Suitable racks & boxes for storage of 1.8-2ml cryovials (for one cylinder) • Numbers of racks: Minimum 5; Box per rack: Minimum 7; Boxes: Minimum 35 • Optional: 2 Cryo-gloves and gum boots • Certification: ISI/European/CE or Conformity certification • Design: Compact light weight, double walled vacuum insulated Aluminium vessel, polyurethane coated, with a narrow mouth neck that minimizes liquid nitrogen losses. Secure locking arrangements to be provided. • Static evaporation rate: 0.3-1 Lt/day • Static Holding Time: 50-130 days	2
11.	Liquid Nitrogen Can – 33L capacity	• Optional: 2 Cryo-gloves and gum boots • Certification: ISI/European/CE or Conformity certification • Design: Compact light weight, double walled vacuum insulated Aluminium vessel, polyurethane coated, with a narrow mouth neck that minimizes liquid nitrogen losses. Secure locking arrangements to be provided.	2

		• Capacity: 30-40 L, Static evaporation rate: 0.3-1 Lt/day, Static Holding Time: 50-130 days	
12.	Liquid Transport Container	• Certification: ISI/European/CE or conformity • Design: Compact light weight, double walled Aluminium vessel, polyurethane coated, provided with vacuum insulation and a narrow mouth neck that minimizes liquid nitrogen losses. • Capacity: 50- 60 Lt, Small Neck tube, Static evaporation rate: 0.3-1 Lt/day, Static Holding Time: 50-120 days • Optional: Transport & tilting Trolley	1
13.	Water Purification System	• A compact water purification system with ISO 9001 certified designed to be fed directly by potable tap water, visual display for quality parameter, filter condition etc. Reservoir capacity of 30lts or more. Necessary pre-filters, cartridges and accessories to get ultra-pure, laboratory grade water for molecular biology work. • Resistivity: 18 or more meg-ohms-cm • Conductivity: 90 – 100 micro-ohms • Pyrogen level: To the levels 0.001 eu/ml with disposable / add on ultra-filtration cartridge • Microorganisms: <1 CFU/ml • TOC values: <5 ppb or better • Final filtration: Through 0.22-micron filter • Volume of pure and ultrapure water/day: ~5 lit/hr • Pre-filter purification cartridge extra: 02 set • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	1
14.	Autoclaves (Steam Jacketed & Vertical)	• Fully automatic vertical autoclave, suitable for sterilization under working steam pressure up to 15 psi or more and temperature of 121ºC or more. • Design: Unit made of SS 304 chamber, approx. inner dimensions 16X25 mm or better (diameter x depth) or better. Lid made of heavy gauge, with radial locking system; die pressed SS 304 with pressure gauge, steam release valve & necessary Safety valves, with foot lifting arrangement to open lid, programmable, with all functional accessories. • Capacity: 70-80 lit or better, Digital display for Time & Temp. • Alarm: Low water level alarm and cut off / Sensor open alarm	1

		• Accessories: Perforated carriers made up of SS 304 (3-4 Nos.) • Power Supply: 220/240 volts AC-50 Hz or Suitable.	
15.	Fully Automatic High Pressure high vacuum vertical autoclave	• The top-loading Vertical autoclave should have a working chamber capacity of 110 lts or higher. • The working chamber dimensions should be 46 x 70cm approx. The higher dimension size will be preferable. • The autoclave should be supplied with minimum two wire mesh carrier of SS-304 or better. • The autoclave should have at least four PT100 temperature sensors that can be controlled on all 4 sensors in order to ensure accurate sterilization and uniform temperature control. • The autoclave should have provision/ holder for petriplates. • The autoclave's chamber, lid and all wetted parts should be of SS-304 or better. • The autoclave's outer body should be of SS-304 with mat finish or better. • The autoclave should have an ergonomically designed single lever door with locking system. It should have an electronic safety switch, pressure-interlock, pressure switch, audible and visual alarm etc. • Autoclave should have an inbuilt steam generator. • The autoclave should be fitted with castors for easy maneuverability and placement. • The Autoclave should be fitted with CE Certified safety valves for the chamber and steam generator. • The complete cycle should be fully automatic. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	1
16.	Fume Hood	• Fume hood should be of American Design Standard: ASHRAE110-2016. • It should have double skinned construction to make it safer. • Material of construction- steel or polypropylene • Work Top: Granite Top with thickness of 18 mm or better • Size: 1200 x 680 x 1450 mm (W x D x H) or as per the design layout • Working bench height: 3-4 feet • Sliding type of Sash, safety visor sash for operator safety • Material of sliding sash should be laminated safety glass (or	1

		similar material) or polycarbonate. • To be commissioned with ducts and wash basin sinks with high quality drainage pipes. • Ductwork should be as per approved standards (ASHRAE) • Should have air flow monitor, with alarm and user-panel • Should have base storage cabinet for solvents • The fume hood should be equipped with appropriate centrifugal blower • The cabinet should have double-doors, and should have a mechanical safety lock/knob. • Should have cup-sink for disposal of chemicals. The cup-sink should be made of SS. • The disposal pipe should be connected to storage cabinet below fume hood via PVC or steel (or similar material) tubing. • Monkey bar is required. • Noise level: <55dB(A) • Total 6 gas inlets (3 on right and 3 on left) or better • Total 4 water supply (2 on right and 2 on left) or better • Electrical: 02 nos. or more 6/16A sockets, and appropriate energy efficient lighting • Power supply: 220-230V, 50-60Hz	
17.	Thermocyclers (PCR machine)	• Gradient thermal cycler with thermoblock to accommodate 96 x 0.2ml PCR Tube as well as 96 well PCR plate • Should be capable of testing temperatures at Denaturation, Annealing & Extension steps • Should be able to test 8-12 different temperatures in gradient function • System should be implemented with gradient technology to ensure identical ramp rates in both gradient and normal operations • System should have heating and cooling of block through Peltier technology • System should be incorporated with Flex lid technology or better to accommodate PCR tubes with flat or domed caps. • System should have fast, standard and safe temperature control modes for operation. • Block temperature control: 4-99°C or better • Accuracy ±0.2°C, Uniformity <0.5ºC (20 sec after reaching 95ºC)	2

		• Heating rate: 3 °C/s or better; Cooling rate: 2 °C/s or better • Run Mode: Standard and fast run • Lid Temperature range: 37 - 100 °C or better • Adjustable ramp rate to meet sensitive experimental conditions • Should have large display with Intuitive Graphic programming • Should have Administrator and user login with or without PIN. • Pre-programmed protocol templates for easy selection. • Instrument should display remaining runtime in larger font and the status of the run • System should be CE/ ISO certified • Minimum two or more USB ports • Auto Restart facility with user defined time interval when power fails and resumes • Programmable protocols, storage of 800- 1000 programs • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
18.	Horizontal Gel Electrophoresissystem	• Submerged gel electrophoresis apparatus with clear plastic construction for easy sample visualization • Provided with minimum 2 small (length 6-8 cm and width 12- 15cm) and 1 large tray (length 12-15cm and width 12-15cm); minimum 4 set of combs and a gel maker stand • Tray should be UV transparent • Combs: 10-15 wells and 25-30 well. All combs of 1-1.5 mmthickness. • Should have Base buffer volume approximately ~500 ml • Buffer chamber should have safety lid • Should have 1 positive and 1 negative electrode • Power pack (output 10-300V) with output terminals, timer, 3-digit LED display and start/stop function. • Should be able to operate at 220-230 V; 50-60 Hz. • Should include safety compliance: overload/overvoltage detection. • Should have constant voltage and constant current mode. • Should have option for setting manual program of voltage, current & time. • Accessories: connecting cords	2

19.	Vertical gel electrophoresis apparatus with Western blotting system	• Mini and midi gels apparatus with base running unit, safety lid, connecting leads etc. • Gel casting unit: glass plates, combs, casting frame etc. • Spacer and Comb size includes 0.75mm, 1.0mm, 1.5mm, 2mm etc. Number of wells 10/12/15 • Western blot for faster, efficient, and reproducible transfer of proteins up to 400 KD or better or equivalent • Provided with minimum five imaging modes to capture data from protein gels, nucleic acid gels, chemiluminescent western blots, and fluorescent western blots • Provided with high resolution camera for analyzing blots with licensed software that should support latest updates in future. • Power Supply suitable for vertical (mini and standard) and semi- dry and mini tank blotting. • Constant voltage and constant current modes • Output Voltage: Adjustable from 0/5/10V to 500V/600V with an increment of 1 V or less • Output Current: up to 800/1000 mA with increment of 1 mA • Output power: 300W or more • Terminals/ Sockets: 4 Pairs/4 • All necessary safety provisions like Over load, No load, Sudden change in load, power failure indication, Over Temperature etc. • Safe plugs and sockets Input Voltage: 230V ±10VAC, 50Hz	1
20.	Chemiluminescence and gel imaging and analysis system	• Gel imaging system to visualize: • Stained protein gels (Coomassie, silver, UV light-excited /fluorescent stains) • Stained nucleic acid gels (ethidium bromide and other fluorescent stains including syber dye, SYBR Safe etc.). • Compact benchtop instrument • With UV/ Green LED /visible light transillumination; Epi white LED or better with motorized zoom lens • Camera- high speed USB technology for faster automatic image capture and download Auto focus configuration. • Auto exposure setting for optimum image exposure time. • CCD/CMOS camera with resolution- 12 megapixel or more or better • Display: Touch screen/Computer controlled • Compact dark room should include: UV and Green LED Transilluminator with White Light Source	1

		• UV transillumination/ Green LED with wide range wavelength (nm): 254, 302, 365 • System should enable detection of picogram levels of sample with chemiluminescence with suitable substrate. • Machine should include 7 position or more motorized filter wheel with suitable filter for EtBr, SYBR Green, Coomassie Blue, Silver Stain • Sample placement slot should be adjustable or can be opened automatically with easy application with specific trays for UV, White and Chemiluminescent Blot samples should be provided. • Analysis software: 1D & 2D. Licensed to be compatible with above mentioned features and should support latest updates in future. • Provided with PC, Software compatibility: Windows • Should be supplied with branded computer system with Screen size: 34 inch with latest Intel i-7 or better processor that support system software with 2TB or better SSD and printer With Licensed Windows Professional Software with on-site upgradation of system software support for minimum 5 years or more with WIFI and DVD Writer. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
21.	High throughput Real-Time(Q) RT-PCR	• Table top model. • Complete system including basic system, essential accessories, the state-of-art computer workstation, acquisition and analysis software, startup kit inclusive of calibration standards etc. • Open system to accommodate Taqman, SYBR green and all other fluorescent dye-based chemistries. • Peltier based 96 well block • Standard optical 96 well plates, 0.2 ml strips, 0.2ml tubes compatibility • Min sample value requirement - 5µl • CCD camera with halogen/LED and at least five excitation and five emission filters • The built-in emission filters to support a broad range of fluorophores with a higher sensitivity for longer wave	1

		length (red dyes). The system should be configured and calibrated to use any of the following dyes or a combination thereof: FAM™, SYBR® Green, Takara Bio Green dye VIC®, JOE ™, HEX, TET, BY®, NED ™, TAMRA ™, Cy3®, JUN®, ROX™, TEXAS RED®, and capability of multiplexing for five targets or better. • Facility to calibrate new dye within the wavelength range without addition of new filters • Option for melt curve analysis • Temperature range 4-100°C • Sensitivity: The instrument should have real time quantitative PCR installation specification which demonstrates the ability to distinguish between 1.5-fold templates copies with a confidence level equal to 99.5% or better to be demonstrated with RNase P instrument verification plate at the time of installation. • Should be supplied with branded computer system with Screen size: 34 inch with latest Intel i-7 or better processor that support system software with 2TB or better SSD and printer with licensed Windows Professional software with on-site upgradation of system software support for minimum 5 years or more with WIFI and DVD Writer. • Software applications: Comparative Ct, Standard Curve, Relative Standard Curve, Allelic Discrimination / SNP Genotyping, Plus/Minus, dissociation / melt curve • All accessories CE mark or equivalent • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
22.	Electronic multichannel pipettes set	• ISO-8655 certified digital multichannel pipettes of variable volume compatible with universal tips. • 3 multichannel (twelve) pipettes with volumes (µL): 0.5 - 10, 5-100 & 50 -1200 or better. • Lightweight, ergonomic, clear display and simple to use • Applications: For 24, 96-well applications	2 sets
23.	Uni-channel Pipetteset	• ISO 8655 CERTIFIED, fully Autoclavable, single channel pipettes of variable volume compatible with universal tips and pipette stand. • Range Increment (µL): 0.1-2, 2-20, 10-100, 100-200, 100-	43 sets

		1000, 1000-5000	
24.	Analytical Balance (200 gm)	Single pan Analytical Balance with highest accuracy for weighing processes; readouts to have at least four decimal places. Equipped with a draft shield chamber to eliminate interfering ambient effects. • Weighing Range: 0.01 – 200 g • Readability: 0.1 mg/0.0001g • Calibration: Internal • Display: LCD Display • Verification interval: 0.001 g • Pan Size: 80 - 100 mm • Power Supply: 220-240V/50-60 Hz	2
25.	Analytical Balance (500 gm)	• Single pan Analytical Balance with highest accuracy for weighing processes; readouts to have at least four decimal places. Equipped with a draft shield chamber to eliminate interfering ambient effects. Weighing Range: 0.01 – 500 g; Readability: 0.1 mg (0.0001g); Calibration: Internal; Display: LCD Display • Verification interval: 0.001 g; Pan Size: 80 - 100 mm • Power Supply: 220-240V/50-60 Hz	2
26.	- 20° Vertical Deep Freezer	• Capacity: 600-700lts or higher with upright orientation • Inner shelf: 6-9 nos. • Refrigerant: Hermetically sealed compressors with CFC free. • Temperature range: -10 to +30°C or better • Temperature control: Micro-processor controlled, Digital display with temperature resolution of 0.1°C • Alarms: Low/high temperature, power failure • Frost-free system • Door closing and locking adjustment: self-closing door with key door lock, adjustable levelling feet standard (optional castors) • High density foam insulation • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	6
27.	Freezer -80 (-80°C Ultra-low Freezer)	The upright ultra-low freezer of ~500–600L capacity, with programmable operating temperature from -50 to -80°C or better	2

		• The freezer should have minimum 3 compartments with inner doors for easy handling of samples; both inner and outer doors should be insulated and sealed. • The interior chamber should be made of stainless steel preferably 304 2B or superior, and should have door handle lock system (key), power and battery switch secured by lockable plate to keep out unauthorized users. • Freezer must use Green Sustainable Natural Gas/ Hydro-carbon (HC) refrigerants HFC-free, CFC-free, HCFC-free non-flammable refrigerants, and refrigeration • Freezer should be equipped with systems monitoring audible and visible alarms with integrated battery system in case of system failure. • The system should be able to maintain minimum temperature of -50°C or less for 60 minutes or more in the event of power failure. • The system should have a suitable digital display indicating current temperature. USB Port should be present for downloading of temperature data and log events like power on off and alarms login. • The freezer should work on ambient room temperature ranging between 25-40°C. • Castor wheels & levelling adjustor should be provided for adjustment and installation. • Freezer must have ISO 9001 standard quality test requirements and IEC 61010 Electrical safety CE & UL certified. • Additional Accessories: SS Racks and cardboard boxes • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
28.	Ultra-Low Temperature -86 Deep Freezer	• Freezer should be of minimum 100 Liters capacity, with a compact design • System should have Programmable operating temperature from –50°C up to 86°C with 1°C increment • System should have reduced energy consumption, with high efficiency fan, with air filter etc. • It should also have a high efficiency compressor &	

		condenser, • System must be energy efficient and hermetically sealed Refrigeration system of 2-stage or better cascade cooling system. • Defrost method should be Manual • Freezer must use Green Sustainable Natural Gas/ Hydro-Carbon (HC) refrigerants • HFC-free, CFC- FREE, HCFC-FREE non-flammable refrigerants, and refrigeration. • Should hold 6 racks and 60 boxes for 50 mm /2" in vials or more • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
29.	Refrigerator	• Capacity: 600-700 ltr • Inner shelf: 6-9 nos. • Refrigerant: CFC free • Temperature control: Micro-processor controlled, Digital display with temperature resolution of 0.1°C • Alarms: Low/high temperature, power failure • Door closing and locking adjustment: self-closing door with key door lock, adjustable levelling feet standard (optional casters) • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	6
30.	Benchtop Freezdryer/ Lyophillizer	• Ice condenser chamber with upright ice condenser chamber with ice holding capacity 4.5 Lt or more; condensing capacity 2.5 Lt or more • Condenser temperature should be: -50 to -90°C or better for freeze drying should have automatic vacuum control system • Refrigeration system: CFC and HCF free • Equipped with Digital PID temperature controller • The system should be CE/ ISO certified. • Vacuum pump: Rotary vane vacuum pump • Should have LCD that displays system operating parameters, set Up parameters and alarm messages	1

		• system should have both automatic and manual operating system; automatic restart function in case of power failure • Should have safety shuts off, if temperature exceeds to high temperature limit, it should be equipped with hot gas or better defrost feature. • Should have moisture sensor • Should have provision for prevention of back streaming of oil • Should be provided with chemical resistant vacuum pump of with partial pressure of $2X10^{-3}$ mbar • The system should be supplied with a SS drying manifold with Ports (6-12) to connect flasks of different sizes complete with adaptors/ valves etc. • Suitable lyophillizer flasks of volume (ml): 50-100, 250-300, 500 and 1000; 10 lts of vacuum oil additionally • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
31.	Cold Storage	• Prefabricated Walk-in chambers, made of double walled modular panels 80 MM (W & R) powder coated sheet 0.5mm with PUF insulation 60 mm thick or more and easy to install at site. • Inner and outer of stainless steel 304, Temperature range 2.0-8.0°C; Accuracy ±0.2°C; Uniformity ±0.2°C • Door with hinges and lock, door size 750 x 1800 mm; Observation window 300 x 1400 mm. • Wall thickness 80 mm; Density 40 kg/m3 • Inner size- as per site/space availability • Complete fitted with sealed air-cooled condensing unit min capacity 5.0 TR with latest Compressor, Cooler with sealed fan motor etc. With Inbuilt Electrical Panel Board with PLC Controller with 08 Sensors, 01 Hooter etc. To be provided with power back up, emergency lights and telephone connections. Should have enough racks and suitable work space area.	1
32.	Microvolume Spectrophotometer	• Sample Volume 0.5-1 µl; Sample Number - 1 • Path Length: 1mm (auto ranging to 0.05mm) • Light Source: Xenon flash lamp	1

		• Detector Type: Silicon CCD array or better • Wavelength Range: 190 – 800 nm or better • Wavelength Accuracy 1 nm or better • Spectral Resolution < 1.8nm (FWHM at HG 253.7nm) • Absorbance Precision: 0.002 (1mm path) • Absorbance Accuracy: 2% (at 0.76 abs at 257 nm) or better • Absorbance Range: 0.02-300 (10mm equivalent) • Detection limit: 2ng/µl (ds DNA) Max. Concentration: 15,000 ng/µl (dsDNA) • Measurement Time: <5 seconds or better • Increased dynamic range for dilute samples (e.g., to 0.4 ng/ µl for sDNA) • Support for kinetics experiments OD measurements • Built-in stirring capability Temperature control at 37°C • Pre-programmed methods for: ssDNA, dsDNA, RNA, oligoDNA, oligoRNA, microarray (fluorescently labeled nucleic acid), Protein (A280), Protein A205, Protein colorimetric (Bradford, BCA, Lowry and Pierce™ 660), Proteins & Labels (labeled proteins), OD600, Kinetics, Custom Methods, UV-Vis • Wireless capabilities should include: Bluetooth for a keyboard and mouse Wi-Fi network connection. • Should be supplied with branded computer system with screen size: 25/34 inch with latest Intel i-7 or better processor that support system software with 2TB or better SSD and printer with licensed Windows Professional software that supports for minimum 5 years or more • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
33.	Double Beam UV-VIS Spectrophotometer	• Microprocessor based Double Beam UV-VIS Spectrophotometer working on 220V, 50Hz with variable bandwidth manufactured by an ISO 9001, ISO-14001 certified company, working on 64-bit software with following features • wavelength range: 185 to 1100 nm or better, Wavelength accuracy: ±0.1nm (at 656.1 nm) & ±0.3 nm for all range, Wavelength repeatability: ±0.05 nm, Resolution: 0.1 nm	2

		• Stray light Less than 0.005% with NaI solution at 220nm & at 340nm, 370nm using NaNO2 solution; 1% at 198nm with KCI solution **Photometric mode:** Absorbance (Abs), Transmittance (%), Reflectance (%), Energy (E) **Photometric accuracy:** ±0.002 Abs (0to0.5 Abs), ±0.003 abs (0.5 to 1.0 ABs), ±0.3% T (0 to 100% T) • All to be tested with NIST930D/NIST1930 or equivalent filter • Photometric range Absorbance: -5 to 5, Transmittance, reflectance: 0 to 100000% • Photometric repeatability: ±0.001Abs (0 to 0.5 Abs), ±0.001Abs (0.5 to 1.0 Abs). ±0.003Abs (1.0 to 2.0 Abs) ±0.1%T • Light source: 50W Halogen lamp, Deuterium lamp, Light source auto position built in Monochromator • Single Monochromator: High performance, Lo-Ray-Light blazed holographic grating in aberration corrected Czerny Turner mounting • Detector Photomultiplier tube • Software Features: Fully multitasking: Latest Windows professional version/ Vista Business (64 bit) operation or better for stable operation; QA/QC functionality; GLP/GMP support functions; flexible reporter generator, customized formats, editing of templates, multi-page print-out support, detailed on-line help with SPECTRUM MODE, KINETICS MODE, QUATITATION MODE etc. • Should be supplied with branded computer system with screen size: 25/34 inch with latest Intel i-7 or better processor that support system software with 2TB or better SSD and printer with licensed Windows Professional software that supports for minimum 5 years or more • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
34.	Anaerobic workstation with gas cylinder complete	Anaerobic workstation for anaerobes with glove/glove less with controlled atmosphere **General Features** • Equipped with two pressure/vacuum diaphragm pumps,	2

		catalyst heater/oxygen remover, desiccant tray and system of purge valves for adjusting interior atmosphere. • Useable on a lab cart or table • Work Chamber: Should have clear acrylic hood impermeable to ambient oxygen and thermoset base clamps adjust for wear, should have two ground key or more cock valves for purging (not for use with oxygen) and vacuum gauge. • Superstructure with fluorescent light system and two pumps: one for recirculation of atmospheric air through the desiccant train; the other for evacuating and purging the transfer compartment and/or work chamber • Petri plate capacity: 200-250 with interlock capacity of 20-25 plates, Interlock time cycle 30 s • Palladium catalyst • Detox advanced carbon filtration system. • Inner door, should have system that equilibrates internal pressure. • Leveling tray to assist loading and unloading of liquids. • Desiccant cartridges that can be disconnected without disturbance to the internal atmosphere. • Controls system should have automated gas control system, low gas pressure indication/alarm buzzer. • Maintenance-free dehumidification. Fully automatic de-humidity control system. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipments must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
35.	Refrigerated Vacuum Concentrator	• Microprocessor controlled cooling, heating and centrifugal motion system. • Centrifugal motion preferably with brushless motor should achieve 1700 rpm or better. • Inner chamber: rust-free. epoxy coated or better. • automatic vacuum release valve system. • Memory store- min 9 programs. • Built in vacuum delay system; • For evaporation heater capacity – 300 watt or better. • 12-13 mm or better Rotor, Holds: 40 x 1.5/ 2.0 mL; 16 x 5 mL or more; 16x10 mL or more.	1

		• Temperature range -4°C up to 100°C (1°C increment). • 1/3hp compressor or better. • To be provided with Oil free diaphragm vacuum pump (5L) for suction, a vapor Trap of -105 °C, Universal Tubing, 2-4L capacity condensation Flask (Glass- 3 nos.), Glass Cap and Bottle for heat transfer fluid- 1L or more. • Vacuum pump preferably of rotary vane direct drive type with displacement capacity of 95L/min. or more with vacuum pressure of $2x10^{-3}$ m Bar or better. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipments must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
36.	Automatic colony counter	• Table top model with high resolution camera and suitable display system to accommodate up to 110 mm Petri dishes • Illumination: Upper incident, bottom transmitted dark field. High intensity LED illuminators. • Colony Software for Colony Documentation and Interactive Counting • Standard accessories: Marking Pen, Magnifier Lens, Dust Cover	1
37.	Automated microbial identification system	• System should be fully automated for microbial identification along with the values right from inoculation of standard suspension to interpretation of final analysis results • System should be based on reliable and proven technology for identification of gram positive and gram-negative bacteria, aerobic and anaerobic and fastidious bacteria with highest discriminative between species. • System should be able to identify Gram negative, gram positive and anaerobic, bacteria, yeast as well as fungi at species level and should have a large database covering at least 3000 species or more (for bacteria, yeast and fungi) • Appropriate Data Management Software should be provided for processing, interpretation, quality control, reporting and data management of Gram-positive and Gram-negative bacteria, aerobic/anaerobic microbes.	1

		• System should have reader and built-in incubator for incubating/reading the plates/test panels/ cards. • It should have features for cluster analysis and creation of user database for additional microbial species. • System should be supplied with a minimum 25 nos. or more of plates/test panels/cards and related consumables for identification of aerobic gram negative and gram-positive bacteria, anaerobic bacteria, yeast, fungi and microbial community analysis. • System should be supplied with software for Data collection, File Management, Kinetic and Parametric analysis. • Operating temperature range: 18-30º C and above. • Operating Humidity Range: 20-80% non-condensing. • Temperature Range: 20-45˚C or better. • Temperature Indication on display. • Should be provided with suitable printer. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
38.	Bio-fermenter unit	• Capacity: 25-50L or more. • Inner and outer chamber: Stainless steel. • Temperature/Pressure Indicator Insulated Jacket. • Vertically centered with sensors for pH, DO, Temperature, foam, pressure and Biomass with controlled parameters set point or better. • Temperature range: 10-120ºC programmable. • Suitable for batch, fed-batch & continuous (chemostat) modes of operation for aerobic or anaerobic cultures. • Easy to operate, clean, & store • Fermentation chamber or unit with media preferably can be sterilized as whole or with better options • Portable & compact design with Low noise & vibrations • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	1
39.	High Performance Liquid	• Flow rate range: 0.001 to 10 ml/min in 0.001/min increments or Better; Flow Precision: <0.1% RSD or	1

	Chromatography (HPLC) System	better • Flow Accuracy: ± 1% or better • Pressure operating range: 6000 psi or more • Quaternary pump to handle 4 solvents system for mixing & gradient • Plunger Seal Wash Integral • Gradient Profiles which include gradient curves: linear, step, concave, and convex • Composition Precision 0.20% RSD or ± 0.04 min SD, whichever is greater, based on retention time • The system should have an in-built degasser for solvent degassing. **Photo Diode Array Detector:** • Wavelength:190-800nm or better, Accuracy: ±1 nm or better. • Spectral resolution: 1.2 nm or better per photodiode with a Total of 1024 or more photodiodes, digital and optical (3D modes). • Linearity <5% at 2 AU, 257 nm. • Light Source: Deuterium or tungsten Lamp. • Baseline noise: ≤10 x 10^{-6} AU at 254 nm or better. • Drift should be smaller than ≤1.0 x 10^{-3} AU/hour or better at 254 nm. • Light source: Deuterium lamp or tungsten lamp with 2000 hr warranty. • Proper leakage handling sensor preferrable. • One set of Deuterium or tungsten Lamp should be provided with the system. **Auto sampler:** • Sample capacity: 120 X 2 ml and/or 1.5 ml vials or more • Injection Volume: 0.1–100 µl or better • Replicate injections: 1–99 injections per sample vial or better; Precision: <0.5% RSD or better; Carryover :< 0.0025% or better. • Sample cooler temperature: 4-35 °C or better. **Column Heater/Cooler:** • Temperature range: Ambient to 50°C or better with 1°C increment or better. • Temperature Accuracy: ±1°C or better. • Temperature Stability: ±1°C or better	

		• Column capacity: Should accommodate 2 or more columns of 15-30 cm length or better. • C-18 Columns: 6 nos. with guard columns. • Ferrules (50 nos.), suitable size nuts (50 nos.), tube cutter and necessary tools must be provided. **Software:** • Original authenticated software (upgradable) with Single point control of whole HPLC module. • Single software should be able to control and process data and all modules of HPLC with premade template. • Should have option for data integrity along with advanced security measures. **Hardware:** • Should be supplied with branded computer system with screen size: 25/34 inch with latest Intel i-7 or better processor that support system software with 2TB or better SSD and printer with licensed Windows Professional software (latest version) that supports for minimum 5 years or more with LaserJet printer. • The system must be able to work with the voltage conditions 220-240 V; 50/60 Hz; for uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer and UPS of suitable capacity.	
40.	Bioburden analyzer online	Required at point source water supply for pure water at facility with features: • Operating Range (Temp.): 0-37 °C or better • Operating Range (Humidity): 10-90% or better • Flow Rate: 30-100 mL/min or better • Analysis Time: Continuous • Wall Mount: Anti-vibration shelf required (P/N 58 079 700) • Detection limit: 2 AFU or better (Auto Fluorescent Units) • Minimum detection size: ≥ 0.3 µm or better • Inlet pressure: 20-80 psig (2-5.5 bar(g)) • Humidity: 80% maximum RH up to 31 °C (87.8 °F) • Ambient temperature: 0 - 37 °C (32 - 98.6 °F) • Data communication: Analog output channels; Ethernet (RJ 45 Wi-Fi capable); SCADA connectivity; USB • Enclosure Material: Stainless Steel	1

		• Response Time: 2-3 seconds (1 mL) Measurement Range: 0 -10,000 AFU / mL • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
41.	BOD Incubator	• The chamber made of SS 304 of capacity 220-250 litres or more with an inner glass door with key lock protection. • High grade insulation between outer and inner chamber. • To be supplied with 2 or more stainless steel (SS 304) adjustable grids preferably removable. • Internal lighting systems should be controllable in both manual and programming mode. • The unit should have a low-noise fan to maintain air circulation and uniform temp. • Temperature: 10-60°C, accuracy: ±0.1°C or better, PID Controller cum indicator preferably with safety controller sensor with audio visual alarm. • It should have the standard of international safety parameters. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipments must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	1
42.	Ice-making machine	• Air/Water cool • Exterior Stainless Steel, Galvanized Steel • Ice Making System Closed Cell Type	1
43.	Hot air oven	• Hot air oven with microprocessor based digital temperature controller with following specifications: • The chamber of capacity 100 Lts or more should have a double wall construction- inner made of SS 304 or better with a powder coated outer surface to avoid rust. • The chamber should have a glass observation window and a key-lock door feature. • The system should have a silicon rubber sealing to reduce heat loss and fitted with minimum 2 nos. SS grids. • The system should have a graphic display with large fonts to monitor the chamber temperature. • The unit should be equipped with a fan to ensure temperature homogeneity.	2

		• Temperature: Ambient to 300°C or more Accuracy: ±0.5°C or better. • The system should possess features for alarm and timer. • It should have the standard of international safety parameter, CE approved, should meet DIN 12880:2007-05, EN 61010-1 standards. • Power supply: Should include 220-240V/50 Hz. For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer & UPS of suitable capacity.	
44.	Electrical Conductivity meter	• Benchtop conductivity meter with features that measure conductivity, TDS, Resistivity, Salinity and temperature and preferably with integrated automatic temperature compensation (ATC); Large Digital LCD display for excellent visibility • Easy navigation for main menu and electrode inspections Automatic buffer recognition and temperature compensation • TDS/SAL/RESI: Conversion from conductivity value Conductivity range: 0.001uS/cm – 3000 mS/cm or better • Salinity: 0.00 - 1000.00 PPT Salt concentration calibration • TDS: Measurement range: 0-100 ppt (g/L) • Temperature: 0.0 - 100.0 ℃ or better Resolution: 0.1 ℃ • USB peripherals (Communication with PC) Operating temperature range: 0 ℃ - 40 ℃ or better Power: AC adapter 100 ~ 240 V 50 / 60 Hz. To be supplied with accessories: Electrode stand, conductivity electrode and 84 uS, 1413 uS, 12.88 mS& 111.9 mS conductivity buffers (250 ml)	2
45.	pH Meter	• For measurement of pH, mV and temperature the system should have preferably integrated automatic temperature compensation (ATC). • Display: should have LCD display for better vision of readings with clear and well-arranged icons of parameters like pH, Temperature, mV, date & Time etc. • pH: 0.00 to 14.00; Accuracy: ±0.005. For calibration, pre-programmed buffer sets should be supplied, automatic buffer recognition and display should be possible, maximum 3-point calibration, manual	3

		calibration with selected buffers should be possible. • Range for mV: -999.9 to +999.9; Accuracy: ±0.3 mV • Temperature: 0 to 100°C or more. Accuracy: ±0.1°C • Power supply: 230V ± 10V A.C., 50 Hz. • Should be able to work between temp 5 to 40 °C or more. • Provided with standard solutions of pH 4, 7, 9, 11. • The instrument should be supplied complete in all respects like electrode holder with stand, protective cover, declaration of conformity and test certificate.	
46.	Digital hot platestirrer	• Maximum stirring speed-60-1500 rpm or better with stepless speed control and good speed stability. • Temperature range: 30-500°C or better. • Stir capacity: 5L or more • plate dimension: 11.5x11.5 inches platform or more. • Heating plate with PID Micro Processor controller dual display with safety alarm and with hot top warning indicator • Plate heating time till max. temp.: 15 mins. • Supply: 220/240V,50Hz, A.C • Hotplate: Should be chemically resistant to acid and alkali • Plate top: SS/ chemical resistant ceramic work surface. • With enclosed Stirring unit. • LED digital readouts and controls of temp and RPM. • Necessary electrical cables should be provided. • Supplied with suitable magnetic bars (4-5 nos.) • Temp. should be uniform throughout the plate area.	2
47.	Vortex Mixer	• Study design with variable, Analog speed control • Fixed and adjustable (variable) speed range 200-3000 rpm or more • Digital Display for speed • Features two modes of operation: touch and continuous • Orbit- 3-5 mm or more • Operating Environment: 4-45°C • Should be suitable with tubes of capacity (mL): 0.2, 0.5, 1, 2, 15 and 50 and flasks. • Supplied with accessories like: • Rubber Cup, Plate adapter with rubber disc, Plain adapter foam with 96X0.2, 60X0.5, 12mm well	4

48.	Refrigerated and heating circulating Water bath	• Refrigerated circulating water bath of capacity: 4-6 L or more • Corrosion Resistant stainless-steel construction • Available in benchtop and upright design • Advanced programmable control • Temperature range: 5-150°C or more; Accuracy: ±0.2°C • Should have ISO Certification, CE compliant • Equipped with safety cut-off and Low liquid level alarm • Display: Digital display • Stainless Steel Lid, Test Tube Racks • CFC free refrigeration system • Should have Class III (FL) according to DIN 12876-	2
49.	Hot plate	• Heating plate with PID Micro Processor controller dual display with safety alarm and hot top warning indicator. • Temperature range: Ambient 5-500°C or more. • For 18x24x6 inches or more to seat 8 or more conical flasks. • An easy to clean and chemical resistant ceramic coated Aluminium plate. • Top of rectangular cast iron plate has insulated beaded elements inside. • The system should have a digital temperature display. • Temperature should be uniform throughout the plate area.	2
50.	Microwave oven	• The microwave oven shall be simple in operation and with turn- able glass plates for even heat distribution. • Should have ergonomic design. • Oven Capacity: 30-32 litre or better • Control: Soft/one touch control • Timer facility available. • Microwave Frequency: 2450 MHz or better • Should have large oven window for display of inner contents	2

NOTE: As applicable

1. **For uninterrupted supply the equipment's must be connected to centralized Servo type stabilizer and UPS systems of suitable capacity will be in scope of bidder.**
2. **Equipment's should have minimum warranty of 3 years.**
3. **The equipment's should be supplied with proper certification (or as applicable), standards, dust covers**

and accessories.

4. **The whole facility including BSL 3 area should have warranty of minimum 3 years or more.**
5. **A 3D-walk through design for better technical clarification is required to be submitted by all bidders for technical presentation and evaluation.**

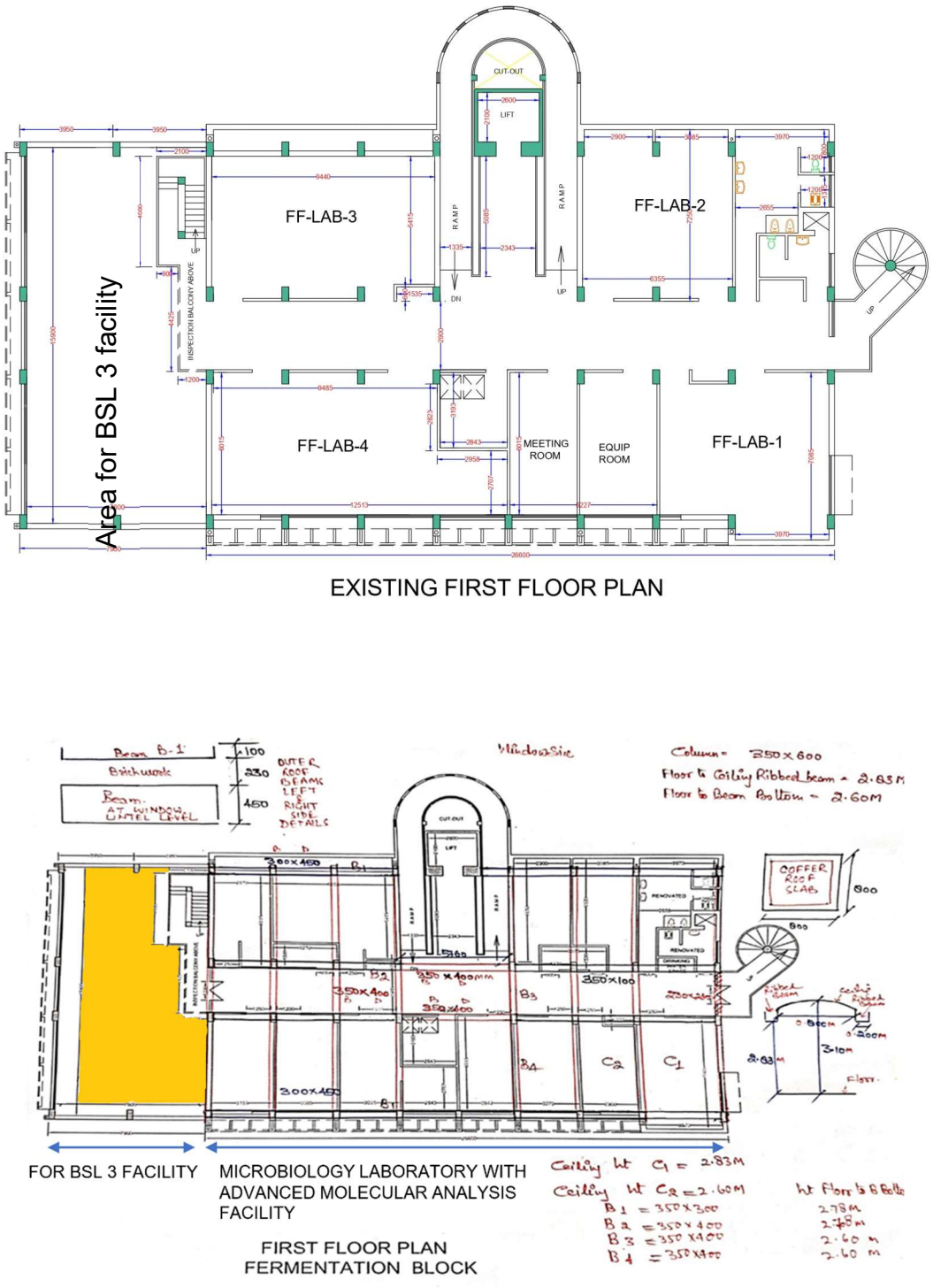

Figure 1: Layout of microbiology lab with advanced molecular & BSL 3 facility at FT block 1st floor

INSTRUCTIONS TO BIDDER FOR SUBMITTING THE ON-LINE BIDS (*To be read carefully by the interested bidders)*

1. Tender documents may be downloaded from Central Public Procurement Portal https://www.etenders.gov.in. Aspiring bidders who have not enrolled / registered in e-procurement should enrol/ register before participating through the website https://www.etenders.gov.in. The portal enrolled is free of cost. Bidders are advised to go through the instructions provided at "instructions for online bid submission".

2. Tenderers can access tender documents on the website (for searching in the NIC site https://www.etenders.gov.in, kindly go to Tender Search option, select tender type and select Council of Scientific and Industrial Research in organization tab and select CSIR-IITR, Lucknow in department type. Thereafter, click on "Search" button to view all CSIR-IITR, Lucknow tenders). Select appropriate tender and fill them with all relevant information and submit the completed tender document online on the website https://www.etenders.gov.in.

3. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their online on the CPP Portal. More information useful for submitting online bids on the CPP Portal may be obtained at: https://etender.gov.in/eprocure/app.

REGISTRATION-

4. Bidders are required to enrol on the e-procurement module of the Central Public Procurement Portal (URL: https://etender.gov.in/eprocure/app) by clicking on the link "Click here to Enrol". Enrolment on the CPP Portal is free of charges.

5. As part of the enrolment process, the bidder will be required to choose a unique username and assign a password for their accounts.

6. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.

7. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify/ nCode /eMundra etc.), with their profile.

8. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.

9. Bidder then in to the site through the secured log-in by entering their user ID/ password and the password of the DSC/ e-Token.

SEARCHING FOR TENDER DOCUMENTS-

10. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.

11. Once the bidders have selected the tenders they are interested in, they may download the required documents/ tender schedules. These tenders can be moved to the respective 'My Tender' folder. This would enable the CPP Portal to intimate the bidders through SMS/ e-mail in case there is any corrigendum issued to the tender document.

12. The bidder should make a note of the unique Tender ID assigned to each tender; in case they want to obtain any clarification/help from the Helpdesk.

PREPARATION OF BIDS-

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

14. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents – including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

15. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/ schedule and generally, they can be in PDF / XLS /RAR/ DWF /JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned documents.

16. To avoid the time and effort required in uploading the same set of slandered documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g., PAN card copy, annual reports, auditor certificate etc.) has been provided to the bidders. Bidders cab use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF ONLINE BIDS-

17. Bidder should log into the site well in advance for bid submission so that they can upload the online bid in time i.e. on or before the bid submission time. Bidders will be responsible for any delay due to other issues.

18. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.

19. The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidder, opening of bids etc. The bidders should follow this time during bid submission.

20. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128-bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid opener's public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.

21. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.

22. Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

23. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

24. The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

ASSISTANCE TO BIDDERS/TENDERERS/SUPPLIERS

25. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender of the relevant contact person indicated in the tender.

26. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

27. Tenderers are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e-submission of the bids online through the central Public Procurement Portal for e Procurement Portal for e Procurement https://www.etenders.gov.in

CHAPTER 1

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A. Introduction

1.1. **Eligible bidders**

1.1.1 This Invitation for Online bid is open to all suppliers to submit their online bids through https://etenders.gov.in/eprocure/app

1.1.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation of Online bids.

1.1.3 **Bidders' compliance to restrictions on Country sharing land border with India.**

I- Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with Competent Authority/ Department for Promotion of Industry and Internal Trade (DPIIT) as per extant GOI rules.

II- "Bidder" (including the term 'tenderer', 'consultant' or' 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency branch or office controlled by such person, participating in a Procurement process.

III- "Bidder from a country which shares a land border with India" for the purpose of this Order means:

i. An entity incorporated, established or registered in such a country; or
ii. A subsidiary of an entity incorporated, established or registered in such a country; or
iii. An entity substantially controlled through entities incorporated, established or registered in such a country; or
iv. An entity whose beneficial owner is situated in such a country; or
v. An Indian (or other) agent of such an entity; or
vi. A natural person who is a citizen of such a country; or
vii. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

IV- The beneficial owner for the purpose of above will be as under:

1. In case of company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercises control through other means.
    a. "Controlling ownership interest" means ownership of or entitlement to more than twenty-five per cent. of shares or capital or profits of the company;
    b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements.

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such associations or body of individuals;
4. Where no natural person is identified under (I) or (II) or (III) above, the beneficial owner is the relevant natural person who holds the position of senior managing Official;
5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.

V- An Agent is a person employed to do an act for another, or to represent another in dealings with third person.

VI- The successful bidder shall not be allowed to sub-contract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

VII- A certificate would be submitted by the bidders regarding their compliance to restrictions on country sharing land border with India as per format attached. If such certificate given by a bidder is found to be false, this would be a ground for further legal action in accordance with law.

A supplier or bidder shall be considered to be from a country If (i) the entity is incorporated in that country, or ii) a majority of its shareholding or effective control of the entity is exercised from that country; or (iii) more that 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meet any of these tests with respect to India.

1.2. **Cost of Online bidding**

1.2.1 The bidder shall bear all costs associated with the preparation and submission of its online bid, and “the Purchaser", will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the online bidding process.

1.3. **Fraud and corruption:**

1.3.1 The purchaser requires that the bidders/ suppliers and contractors observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the following are defined: “corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process

or in contract execution; “fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;

“Collusive practice” means a scheme or arrangement between two or more online bidders, with or without the knowledge of the purchaser, designed to establish online bid prices at artificial, non-competitive levels; and “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract;

1.3.2 The purchaser will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question.

1.3.3 The Purchaser reserves the right to take punitive action against the firms/suppliers and their related identities, if any, at any stage if they breach the procurement process or contract agreement by taking the following steps in accordance of the CSIR guidelines-

(i) Holiday listing: Temporary debarment or suspension from CSIR-IITR procurement for 12 months.

(ii) Removal from the list of registered vendors: for 12 months to 24 months.

(iii) Banning of firms(a) Country wide banning: for three years

(b) Banning from CSIR

B. The Online Bidding Documents

1.4. **Cost of Online bidding Documents**

1.4.1 Interested eligible bidders will download the **online bidding documents from** https://etenders.gov.in/eprocure/app **as** indicated in the Invitation for Online bids/e-ender/ e-NIT **at free of cost.**

1.5. **Content of Online bidding Documents**

1.5.1 The goods required, online bidding procedures and contract terms are prescribed in the online bidding documents which should be read in conjunction. The online bidding documents, apart from the **invitation for online bids have been divided into following chapters as under:**

Chapter 1: Instructions to bidder (ITB)
Chapter 2: (a) General Conditions of Contract (GCC)
(b) Special Conditions of Contract (SCC)
Chapter-3: Forms- (1) Contract form
(2) Acceptance Certificate form
(3) Performance Security form

(4) Integrity pact form (applicable if specifically mentioned)

Chapter 4: Schedule of Requirements

Part-1 (online technical bid)

(1) Bidder's information form
(2) Manufacturer's authorization form
(3) Bid securing Declaration/ EMD Declaration form as indicated in the e-tender
(4) Performance statement form
(5) Specifications and allied technical details
(6) Deviation form (technical)
(7) Service support details form
(8) Qualification requirements
(9) Documentary evidence establishing that the bidder is eligible to online bid and is qualified to perform the contract if its online bid is accepted.
(10) Documents establishing goods eligibility and conformity to the online bidding documents.

(11) Valid certificate(s) in case the item under procurement falls under the restricted category of the current export-import policy of the Govt. of India.

Part-II (online financial bid)-

to be submitted with required captions/markings on it.

(1) Financial forwarding letter
(2) Price schedule form-
    (a) Goods/services from abroad
    (b) Goods/services within India
(3) Deviation form (financial)

1.5.2 The bidder is expected **to examine all instructions, forms, terms, and specifications** in the online bidding documents. Failure to furnish all information required by the online bidding documents or submission of a online bid not substantially responsive to the online bidding documents in every respect will be **at the bidder's risk and may result in rejection of his online bid.**

1.6. **Clarification of online bidding documents**

1.6.1 A prospective bidder requiring clarification, if any, of the Online bidding Documents shall contact the Purchaser through 'seek clarification' on Tender Management of Government e-Procurement Portal https://etenders.gov.in/eprocure/app ,as well as also an e-mail to SPO should be sent within the stipulated date stated in e-tender.

1.7. **Corrigendum to the Online bidding Documents**

1.7.1 At any time prior to the deadline for submission of online bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder, may modify the online bidding documents by corrigendum.

1.7.2 Corrigendum, if any, to the online tender will be separately indicated in the e-procurement portal https://etenders.gov.in/eprocure/app

1.7.3 In case of corrigendum to the e-tender, the Purchaser, at its discretion, may extend the deadline for the submission of online bids.
1.7.4 Before submission of the bids the bidder is required to ensure that corrigendum if any, has to be incorporated in his online bid documents.

C. Preparation of Online bids

1.8. **Language of Online bid**

1.8.1 The online bid prepared by the bidder, as well as all correspondence and documents relating to the online bid exchanged by the bidder and the Purchaser, shall be written in English language only especially when the details are technical.

1.8.2 The Supplier shall bear all costs of translation, if any, to the English language and all risks of the accuracy of such translation, for documents provided by the Supplier.

1.9. **Documents Comprising the Online bid**

1.9.1 The online bid prepared by the bidder shall also include the following documents in the prescribed formats-

(a) Bidder Information Form
(b) Online bid security as specified in the Invitation to Online bids.
(c) Service support details form;
(d) Deviation Statement Form;
(e) Performance Statement Form;
(f) Manufacturer's Authorization Form.
(g) Documentary evidence establishing that the bidder is eligible to online bid and is qualified to perform the contract if its online bid is accepted.
(h) Online bid form.
(i) Documents establishing goods eligibility and conformity to online bidding documents.
(j) Applicable Price Schedule Form.

(k) Valid certificate in case the item under procurement falls under the restricted category of the current export-import policy of the Govt. of India.
(l) ***Self-Certification that the goods are not manufactured in any country which shares its land border with India (Land Border Declaration).***

1.10. **Online bid form and price schedule**

1.10.1 The bidder shall complete the Online bid Form and the appropriate price schedule form furnished in the online bidding documents. These forms must be completed without any alterations to its format and no substitutes shall be accepted. All blank spaces shall be filled in with the required information. Firm has to submit price bid in both BOQ (Excel Format) and PDF. In case of any discrepancy between BOQ (Excel Format) and PDF, the price bid submitted in PDF format will be considered as final for evaluation and ranking.

1.11. **Online bid Prices**

1.11.1 The bidder shall indicate on the appropriate **price schedule** form, the unit prices and total online bid prices of the goods it proposes to supply under the contract.

1.11.2 Prices indicated on the price-schedule form shall be entered separately in the following manner:

1.11.3 Firm has to submit price bid in both BOQ (Excel Format) and PDF. In case of any discrepancy between BOQ (Excel Format) and PDF, the price bid submitted in PDF format will be considered as final for evaluation and ranking.

For Goods manufactured within India

(i)The price of the goods quoted Ex -works including taxes already paid.
(ii) GST and other applicable taxes & duty etc. admissible will be payable on the goods if the contract is awarded.
(iii) **Banker's details such** as- Name of account holder, Account Number, Name of Bank, Branch code, RTGS code, NEFT code, SWIFT code, MICR Code etc.
a. The charges for inland transportation, insurance and other local services required for delivering the goods at the desired destination as specified in the price schedule form.
b. The installation, commissioning and training charges including any incidental services, if any.

1.11.4 In case the bid validity is requested for extension the same will be made by the supplier without altering the price bid.

1.11.5 All lots and items must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other

items. Lots or items not listed in the Price Schedule shall be assumed to be not included in the online bid.

1.11.6 The purchases made by the purchaser for scientific purpose are having concessional GST on goods If IGST is applicable then full and concessional against DSIR Registration both rates should be clearly specified.

1.11.7 If Concessional Taxes/duties as permitted by Government of India, are applicable for purchase of any equipment for R&D purpose service charges are not concessional and the GST Charges is as per the applicable HSN code. However, the supplier has to bifurcate the comprehensive annual maintenance (CAMC) in percentages of the spare parts/goods and the services clearly for arriving at the tax applicability. If CAMC charges are not bifurcated the full tax rate of services will be applicable of the CAMC charges for evaluation.

1.11.8 Bidders will be sole responsible for the tax/GST rates and HSN Codes submitted by them, therefore, they are advised to check the prevalent tax/GST rates before submitting their tenders.

1.12. Bid Currencies

1.12.1 Prices shall be quoted in Indian Rupees **only** for offers received for supply within India for this purpose the price bid should be submitted in BOQ (Excel format) as well as PDF, in case of any discrepancy between the two, the price bid in PDF will be considered for evaluation and ranking.

1.13. Documents Establishing bidder's Eligibility and qualifications

1.13.1 The participating bidder has to ensure that the eligibility criteria and other qualifications stipulated in the tender are fulfilled by them before participating in the NIT.
1.13.2 The bidder shall furnish, as part of his online bid, documents establishing the bidders' eligibility and qualification to perform the contract if the online bid is accepted. The documentary evidence of the bidder's qualification to perform the contract if the online bid is accepted shall establish to the purchaser's satisfaction that;

(a) The bidder meets the qualification criteria listed in online bidding documents, if any.

(b) Bidder that doesn't manufacture the goods it offers to supply **shall submit to Manufacturers' Authorization** Form (MAF) using the form specified in the online bidding document to demonstrate that it has been duly authorized by the manufacturer of the goods to quote and/or supply the goods. Since this is a Turk-Key contract therefore, the Bidders who are submitting their online bids on behalf of their principal should submit manufacturer Authorization Certificate for the quoted Instruments as far as possible, whereas, all the Bidders must submit a warranty certificate from the OEM.

(c) In case a bidder not doing business within India it shall furnish the certificate to the effect that the bidder is or will be represented by an agent in India equipped and able to carry out the supply, maintenance, repair obligations etc. during the warranty and post warranty period or ensure a mechanism at place for carrying out the supply, maintenance, repair obligations etc. during the warranty and post-warranty period.

1.13.3Conditional Online bids shall not be accepted**.**

1.14. Documents Establishing Goods' Eligibility and Conformity to Online bidding Documents

1.14.1 To establish the goods' eligibility, the documentary evidence of the goods and services eligibility shall consist of a statement on the country of origin of the goods and services offered which shall be confirmed by a certificate of origin at the time of shipment.

1.14.2 To establish the conformity of the goods and services to the specifications and schedule of requirements of the online bidding document, the documentary evidence of conformity of the goods and services to the online bidding documents may be in the form of literature, drawings and data, and shall consist of:

(a) A detailed description of the essential technical and performance characteristics of the goods;
(b) A list giving full particulars, including available sources and current prices, of spare parts, special tools, pre requisites/ utility materials etc., necessary for the proper and continuing functioning of the goods during the warranty period following commencement of the use of the goods by the Purchaser in the online Priced bid ; and
(c) An item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or a statement of deviations and exceptions to the provisions of the Technical Specifications.
1.14.3 For purposes of the commentary to be furnished pursuant to above, the bidder shall note that standards for workmanship, material and equipment, designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The bidder may substitute these in its online bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

1.15. Bid Security (BS)/ Bid Securing Declaration (BSD) - whichever is applicable

1.15.1 If Bid Security is required then- The bid security should be valid for minimum 45 days beyond the validity of the online bid. Bid Security/ EMD valid for a shorter period shall be rejected by the Purchaser as non-responsive or if supplier fails to extend it further on intimation given by the Purchaser. In case BSD is required in the NIT then- Bid Securing Declaration/ EMD Declaration shall be in the form given should be attached with the techno-commercial bid documents (online) by the all-participating bidders of different categories in the tender.

1.15.2 In case of non-submission of the appropriate Bid Securing Declaration with the techno-commercial bid, the bid will summarily be rejected.

1.15.3 The firms registered with DGS&D, NSIC, MSME, Make in India, start-up India, Govt. Public Undertakings, Central Autonomous Bodies and with the CSIR Labs. / Institutions, if any, are exempted from payment of Bid Security Ernest Money deposit (BS/EMD) provided *such registration includes the item they are offering which are manufactured by them and not for selling products manufactured by other companies.* The bidder must submit copy of valid registration in the support of the claim in their technical bids, in the absence of same the bid will be rejected.

1.15.4. If the Supplier is selected for giving the Purchase order/ LoI and if they fail to honour the terms & conditions stipulated in it, the Institute may take deemed fit action against it.

1.15.5 While Bid security (EMD)/Bid Securing declaration should be submitted on the firm's letter head and is a **mandatory requirement**, tenders without bid security/bid securing declaration will be rejected.

1.15.6 The bid security, if any, of unsuccessful bidder will be discharged/ returned as promptly as possible positively within a period of 15 days after the expiration of the period of bid validity or placement of order whichever is later, without any interest, provided that there is no legal/administrative matter involved/pending.

1.15.7 The successful Bidder's bid security will be discharged upon the Bidder furnishing the performance security, without any interest. Alternatively, the BS could also be adjusted against PS, if it is paid through DD/ BC.

1.15.8 In case a bidder intimates at the time of tender opening in writing that the bid is kept inside the financial bid, then in such cases, the technical bid of the party would be accepted provisionally till opening of the financial bids with which the party has attached the bid security (in case of offline)
1.15.9 The bid security may be forfeited.

(a) If a Bidder withdraws or amends or impairs or derogates its bid during the period of bid validity specified by the Bidder on the Bid Form; or

(b) In case of a successful Bidder, if the Bidder fails to furnish order acceptance within 15 days of the order or fails to sign the contract and/or fails to furnish Performance Security within 21 days from the date of contract/ order.

1.16. Period of Validity of Online bids.

1.16.1 Online bids shall remain valid for **minimum of 180 days** after the date of online bid opening prescribed by the Purchaser. A bid valid for a shorter period shall be rejected by the Purchaser as non-responsive or if supplier fails to extend it further on intimation given by the Purchaser.

1.16.2 In exceptional circumstances, the Purchaser may solicit the bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (or by cable, telex, fax or e-mail). The bid security provided shall also be suitably extended. The non-acceptance of same will lead to the rejection of the bid. A bidder granting the request will not be required nor permitted to modify its online bid.

1.16.3 Online bid evaluation will be based on the online bid prices without taking into consideration the above corrections.

1.16.4 The online bids may be submitted as specified in the Invitation for Online bids.

1.16.5 In case the online bids are invited **on two- bid system**, the bidder shall submit the bids in two separate parts. Part –I i.e. **Techno-commercial bid** shall comprise all documents listed under clause relating to Documents Comprising the commercial terms, except price schedule. Part-II i.e., **Price bid** shall contain the comprising of duly filled bid form and price schedules.

1.16.6 The online bid shall be digitally signed by the bidder or a person or persons duly authorized, all pages of the online bid, printed literature/catalogue/ Brochure / leaflet, shall be initialled by the person or persons signing the online bid.

1.16.7 Any interlineations, erasures or overwriting shall be valid only if they are initialled by the persons or persons signing the online bid.

D. Submission of Online bids as per e-tender instruction

1.17. Format and signing of Online bid

1.17.1 All bidders are requested to go through the "Instructions to bidder for submitting the on-line bids (*to be read carefully by the interested bidders)" given in the beginning of this NIT document.*

1.17.2 Deadline for Submission of Online bids

1.17.3 The online bids must be uploaded well before the last date & time for submission of online e tender. Institute will not be responsible for any cause of non-submission of the online bids due to technical fault/website congestion /Late/Delay.

1.17.3 **The Purchaser may, at its discretion**, **extend the deadline** for submission of online bids by amending the online bid documents in accordance with Clause relating to Amendment of Online bidding Documents in which case all rights and obligations of the Purchaser and Online bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

E. Opening and Evaluation of Online bids

1.18. Opening of Online bids by the Purchaser.

1.18.1 The Purchaser will open all technical online bid or Part-1 online bid in case of two online bidding system as per the schedule given in invitation for online bids. In the event of the specified date of Online bid opening being declared a holiday for the Purchaser, the Online bids shall be opened at the appointed time on the next working day. In two bid system, the financial online bid shall be opened only after technical evaluation.

1.19. Confidentiality.

1.19.1 Information relating to the examination, evaluation, comparison, and post qualification of online bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until publication of the Contract Award.

1.19.2 Any effort by a bidder to influence the Purchaser in the examination, evaluation, comparison, and post qualification of the online bids or contract award decisions may result in the rejection of its Online bid and deemed fit action can be initiated by the competent authority.

1.20. Clarification of Online bids.

1.20.1 To assist in the examination, evaluation, comparison and post qualification of the online bids, the Purchaser may, at its discretion, ask the bidder for a clarification of its bid. The request for clarification and the response shall be in writing and no change in prices or substance of the online bid shall be sought, offered or permitted. However, no negotiation shall be held except with the lowest online bidder, at the discretion of the purchaser. Any clarification submitted by a bidder in respect to its bid which is not in response to a request by the purchaser shall not be considered.

1.20.2 For clarification purpose supplier is required to provide the historical documents i.e., those documents which exist before publication/floating of this NIT.

1.21. Preliminary Examination.

1.21.1. The Purchaser shall examine the online bids to that all documents and technical documentation requested in ITB Clause 1.9 have been provided, and to determine the completeness of each document submitted and if certain clarification is required the same shall be furnished by the bidder without altering the NIT parameters.

1.21.2 The Purchaser shall check that the following documents and information have been provided in the On-line bid. If any of these documents or information is missing, the offer shall be rejected.

(a) Online bid Form and Price Schedule, in accordance with ITB Sub-Clause 1.10;

All the bids received will first be scrutinized to see whether the bid meet the basic requirements as incorporated in the bid enquiry document. The bid, which does not meet the basic requirements, will be treated as unresponsive and ignored.

The following are some of the basic important requirements, for which the bid may be declared as unresponsive and liable to be ignored/rejected at initial stage or any point of time of processing:

(i) The Online bid is unsigned.
(ii) The bidder is not eligible.
(iii) The Online bid validity is shorter than the required period/ non receipt of proper extension.
(iv) The bidder has quoted for goods manufactured by a different firm without the required authority letter from the proposed manufacturer.
(v) Bidder has not submitted the required Bid security/Bid Security Declaration (EMD/BSD), performance security (PBG) as per the requirement of the NIT.
(vi) The goods quoted are sub-standard, not meeting the required specification etc.
(vii) Against the schedule of Requirement (incorporated in the e-tender enquiry), the bidder has not quoted for the entire requirement as specified in that schedule.
(viii) The Bidder has not agreed to essential condition(s) incorporated in their Bid.
(ix) The Bidder fails to timely respond to query/clarification sought by the Purchaser during the bid evaluation.
(x) Online bid submitted by the Indian agent of the foreign Principal, who are not authorized by their OEM will be rejected.

1.22. Responsiveness of Online bids.

1.22.1 Prior to the detailed evaluation, the purchaser will determine the substantial responsiveness of each online bid to the online bidding documents. For purposes of this clause**, a substantive responsive**

online bid is one, which confirms to all terms and condition of the online bidding documents without material deviations, reservations or omissions.

A material deviation, reservation or omission is one that:
(a) affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or
(b) limits in any substantial way, inconsistent with the Online bidding Documents, the Purchaser's rights or the bidder's obligations under the Contract; or
(c) if rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive online bids.

1.22.2 The purchasers' determination of an online bid's responsiveness is to be based on the contents of the online bid itself without recourse to extrinsic evidence.

1.22.3 **If an online bid is not *substantially responsive*, it will be rejected by the Purchaser and may not subsequently be made responsive by the bidder by correction of the material deviation, reservation or omission.**

1.23. Non-Conformity, Error and Omission.

1.23.1 Provided that an Online bid is substantially responsive, the Purchaser may waive any nonconformities or omissions in the Online bid that do not constitute a material deviation.

1.23.2 **Provided that an online bid is substantially responsive, the Purchaser 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 online bid related to documentation requirements. Such omission shall not be related to any aspect of the price of the online bid. Failure of the bidder to comply with the request may result in the rejection of its Online bid**.

1.23.3 Provided that the online bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:

(a) if there is a discrepancy between the unit price and the line-item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line-item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line-item total as quoted shall govern and the unit price shall be corrected;
(b) if there is an error in a 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.

1.23.4 Provided that a online bid is substantially responsive, the purchaser may request that a bidder may confirm the correctness of arithmetic errors as done by the purchaser within a target date. In case, no reply is received then the online bid submitted shall be ignored and its bid Security may be forfeited.

1.24. Examination of Terms & Conditions, Technical Evaluation.

1.24.1 The Purchaser shall examine the Online bid to confirm that all terms and conditions specified in the GCC and the SCC have been accepted by the bidder without any material deviation or reservation.

1.24.2 The Purchaser can seek clarification from the supplier on his online bid submitted, for arriving at a clear position; this will be without altering the NIT specifications. To evaluate an Online bid, the Purchaser may constitute a Technical Sub Committee which will use all the factors, methodologies and criteria defined in NIT. In order to arrive at a clearer position, it can also ask for physical or live demonstration of the quoted model from the online bidder. For the demonstration CSIR-IITR will not bear any monetary/ documentary liability. The venue and date of demonstration will be intimated by the Purchaser.

1.24.3 The Purchaser shall evaluate the technical aspects of the online bid submitted in accordance with ITB Clause 14, to confirm that all requirements specified in Schedule of Requirements of the Online bidding Documents have been met without any material deviation or reservation.

1.24.4 If, after the examination of the terms and conditions and the technical evaluation, the Purchaser determines that the Online bid is not substantially responsive to NIT requirement, it shall reject the Online bid.

1.25. Evaluation and comparison of online bids.

1.25.1 The Purchaser shall evaluate price bid of each responsive technically qualified price bid for the strictly as per NIT requirements/ specifications.

1.25.2 In case of optional items/ requirements: - Only those the optional items / requirements will be considered, which will not change the position of Lowest Technically qualified bidders. if any, essential requirements /specifications are quoted by bidders to mislead the evaluation in form of optional items, that will be incorporated for evaluation before arriving at Lowest qualified bidders to bring all at par/ equivalent for fair competition. All expenditure incurring up to handing over the

consignment will be taken in to account for evaluation and comparison. The essential requirement will be decided by the Institute strictly on the basis of NIT.
1.25.3 If the bidder has quoted certain optional items, these items will not be taken into consideration for the evaluation of the bid unless the specifications of the optional items quoted by the vendor are a part of original NIT specifications.

1.25.4 The online bids shall be evaluated on the basis of final landing cost which shall be arrived as under:

For goods manufactured in India.
(i) The price of the goods quoted ex-works including all taxes already paid.
(ii) GST and other taxes like excise duty etc. which will be payable on the goods if the contract is awarded.
(iii) Charges for inland transportation, insurance, loading, unloading and other local services required for delivering the goods at the desired destination.
(iv) The installation, commissioning, training and additional warranty (if any) charges including incidental services, if any.
(v) Concessional Taxes/duties as permitted by Government of India , are applicable for purchase of any equipment for R&D purpose service charges are not concessional and the GST Charges is as per the applicable HSN code. However, the supplier has to bifurcate the comprehensive annual maintenance (CAMC) in percentages of the spare parts/goods and the services clearly for arriving at the tax applicability. If CAMC charges is not bifurcated the full tax rate of services will be applicable of the CAMC charges for evaluation.

1.26 packing, forwarding, freight, insurance charges, taxes etc.
1.26.1Where there is no mention of packing, forwarding, freight, insurance charges, taxes etc. such offers shall be rejected as incomplete.

1.27.1 The GCC and the SCC shall specify the mode of transport i.e. whether by air/ocean/road/rail.

1.27.2 The Purchaser shall compare all substantially responsive online bids to determine the lowest evaluated online bid, in accordance with ITB Clause 1.30.

1.28. Contacting the Purchaser

1.28.1 Subject to ITB Clause 1.24, it must be noted no bidder shall contact the Purchaser on any matter relating to its online bid, from the time of the bid opening to the time the Contract is awarded.

1.28.2 Any effort by a bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the bidder's online bid.

1.29. Post qualification

1.29.1 In the absence of pre-qualification, the Purchaser will determine to its satisfaction whether the bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 13.

1.29.2 The determination will take into account the eligibility criteria listed in the bidding documents and will be based upon an examination of the documentary evidence of the bidder's qualifications submitted by the Online bidder, as well as such other information as the Purchaser deems necessary and appropriate.

1.29.3 An affirmative determination will be a prerequisite for award of the contract to the bidder. A negative determination will result in rejection of the bidder's online bid.

F- Award of Contract

1.30. Negotiations

1.30.1 There shall not be any negotiation normally. Negotiations, if at all, shall be an exception and only in the case of items with limited source of supply. Negotiations shall be held with the lowest evaluated responsive online bidder. Counter offers tantamount to negotiations and shall be treated at par with negotiations in the case of one time purchases.

1.31. Award Criteria

1.31.1 Subject to ITB Clause 37 the Purchaser will award the contract to the successful bidder whose online bid has been determined to be substantially responsive and has been determined to be the lowest evaluated online bid, provided further that the bidder is determined to be qualified to perform the contract satisfactorily.

1.32. Purchaser's right to vary Quantities at Time of Award

1.32.1 The Purchaser reserves the right at the time of Contract award to increase or decrease the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions. Further, at the discretion of the purchaser, the quantities in the contract may be enhanced by 25% within the delivery period. This may be done by the Purchaser on issuing a separate purchase order with additional quantities on the unchanged price and other terms and conditions. The Supplier has to accept it unconditionally.

1.33. Purchaser's right to accept Any Online bid and to reject any or All Online bids

1.33.1 The Purchaser reserves the right to accept or reject any online bid, and to annul the online bidding process and reject all online bids at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders.

1.34. Notification of Award

1.34.1 Prior to the expiration of the period of online bid validity, the Purchaser will notify the successful bidder in writing by registered letter or by cable or telex or fax or e mail that the online bid has been accepted and a **separate purchase order** shall follow through post. Base upon the information provided by the bidder, the Purchase order/Award letter/Contract will include acknowledgement, delivery period, Inco-term, payment terms, I mode of dispatch, banker's details & charges, penalty, warranty, installation, commissioning & training, freight forwarder-Indian etc.

1.34.2 Until a formal contract is prepared and executed, the notification of award/LOI/Purchase order should constitute a binding contract.

1.34.3 Upon the successful bidder's furnishing of the signed Contract Form on Rs. 500/- on judicial stamp paper and performance security pursuant to ITB Clause 1.41, the purchaser will promptly notify each unsuccessful bidder and will discharge its online bid security, if any, provided there is no administrative or legal matter involved/pending..

1.35. Signing of Contract and submission of the PBG

1.35.1 Promptly after notification, the Purchaser shall send the successful bidder the Agreement/ Purchase Order/contract.

1.35.2 Within twenty-one (21) days of date of the Agreement/ Purchase Order/contract, the successful bidder shall sign, date, and return it to the Purchaser.

1.35.3 Within 21 days of signing of the contract the Performance security (as specified in the Purchase Order/ LoI/ Agreement) should be submitted by the supplier, which will be confirmed from the issuing bank.

1.35.4 All the Bank Guarantees/Performance Bank Guarantees/Extended BG/PBGs will be verified from the issuing bank before release of any payment.

1.36. Order Acceptance/Acknowledgement

1.36.1 The successful bidder should submit Order acceptance **within 14 days** from the date of issue, **failing which it shall be presumed that the vendor is not interested and his online bid security** is liable to be **forfeited** pursuant to clause 15.9 of ITB.

1.36.2 The order confirmation must be received within 15 days. However, the Purchaser has the powers to extend the time frame for submission of order confirmation and submission of Performance Security (PS). Even after extension of time, if the order confirmation /PS are not received, the contract shall be cancelled and limited e-tenders irrespective of the value shall be invited from the responding firms after forfeiting the online bid security of the defaulting firm, where applicable, provided there is no change in specifications. In such cases the defaulting firm shall not be considered again for re-tendering in the particular case.

1.37. Performance Security (The subsequent amendments in the rules of Govt. of India will be applicable):

1.37.1 **Within 21 days of receipt of the notification** of award of the Agreement/ Purchase Order/ contract, the Supplier shall furnish performance security in the amount specified in SCC, **valid till 60 days after the warranty period**. Alternatively, the PS may also be submitted at the time of release of final payment in cases where part payment is made against delivery & part on installation. The PS, where applicable, shall be submitted in advance for orders where full payment is to be made on Letter of Credit (LC) or on delivery. *The position for submission of Performance Security will be specified in the purchase order/ LoI/ Contract.* The BS should be kept valid till such time the PS is submitted.

1.37.2 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.

1.37.3 The Performance Security shall be **denominated in Indian Rupees** for the offers received for supplies within India and will be covering the validity beyond the two months of the warranty periods.

1.37.4 In the case of imports, the PS may be submitted **either by the principal or by the Indian agent** and, in the case of purchases from indigenous sources, the PS may be submitted by **either the manufacturer or their authorized dealer/ bidder.**

1.37.5 The **Performance security** shall be in one of the following **forms**, preferably in FDR:-

(a) A Fixed Deposit Receipt pledged in favour of the Purchaser.
Or,
(b) A Bank guarantee or stand-by Letter of Credit issued by a Nationalized/ Scheduled bank located in India or a Foreign bank with its operating branch in India in the form provided in the online bidding documents.
Or
(c) A Banker’s cheque or Account Payee demand draft in favour of the Purchaser.

1.37.6 The performance security will be discharged by the Purchaser and returned to the Supplier not later than 60 days following the date of completion of the Supplier's performance obligations, including any warranty obligations, unless specified otherwise in SCC, without levy of any interest.

1.37.7 In the event of any contract amendment, the supplier shall, within 21 days of receipt of such amendment, furnish the amendment to the performance security, rendering the same valid for the duration of the contract, as amended for further period of 60 days thereafter.

1.37.8 The order confirmation should be received within 15 days from the date of notification of award. However, the purchaser has the powers to extend the time frame for submission of order confirmation and submission of Performance Security (PS). Even after extension of time, if the order confirmation/ PS are not received, the contract shall be cancelled and limited e-tenders irrespective of the value would be invited from the responding firms after forfeiting the online bid security of the defaulting firm, where applicable provided there is no change in specifications. In such cases the defaulting firm would not be considered again for re-tendering in the particular case.

CHAPTER 2

CONDITIONS OF CONTRACT

A. GENERAL CONDITIONS OF CONTRACT

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2.1. Definitions

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 there from, 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” means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
(h) “Related Services” means the services incidental to the supply of the goods, such as transportation, insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.
(i) “SCC” means the Special Conditions of Contract.
(j) “Subcontractor” means any natural 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 natural person, private or government entity, or a combination of the above, whose online bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.
(l) The “Council” means the Council of Scientific & Industrial Research (CSIR), registered under the Societies Registration Act, 1860 of the Govt. of India having its registered office at 2, Rafi Marg, New Delhi-110001, India and the “Purchaser” means any of the constituent Laboratory/Institute of the Council situated at any designated place in India as specified in SCC.
(m) “The final destination,” where applicable, means the place named in the SCC.

2.2. Contract Documents

2.2.1 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.
2.2.1 If mutually agreed by the Purchaser and the Supplier, the Contract can be amended, through not deviating from its fundamental features such as scope of supply, unit price, specifications etc..

2.3 Fraud and Corruption (same as contained under Para 1.3)

2.4 Joint Venture, Consortium or Association etc. (also known as collaborations)

If the supplier is a joint venture, consortium or association etc. (also known as collaborations), all of the parties shall be jointly and severally liable to the Purchaser for the fulfilment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium or association etc.. The composition or the constitution of the joint venture, consortium or association etc. (also known as collaborations) shall not be altered without the prior consent of the Purchaser. Such collaboration should be existing before the floating of the NIT, after NIT such collaborations will not be considered.

2.5. Scope of Supply

2.5.1 The Goods and Related Services to be supplied shall be as specified in the **Schedule of Requirements.**

2.6. Suppliers' Responsibilities

2.6.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with Scope of Supply Clause of the GCC, and the Delivery and Completion Schedule, as per GCC Clause relating to delivery and document.

2.7 Contract price

2.7.1 **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 online bid.

2.8 Copy Right

2.8.1 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

2.9. Application

2.9.1 These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

2.10. Standards

2.10.1 The Goods supplied and services rendered under this Contract shall conform to the standards mentioned in the Technical Specifications and Schedule of Requirements, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.
Equivalent Indian Standards approved by BIS may also be considered.

2.11. Use of Contract Documents and Information

2.11.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far, as may be necessary for purposes of such performance.

2.11.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated above except for purposes of performing the Contract.
2.11.3 Any document, other than the Contract itself, enumerated above shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.
2.11.4 In case of any RTI query sought from the Purchaser on the NIT, bid of the Supplier (both techno-commercial and price) or any other related documents, the same may be shared as RTI reply and the Supplier will not have any objection to such RTI replies.

2.12. Patent Indemnity

2.12.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-Clause 12.2, 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 in India;
(b) the sale in any country of the products produced by the Goods.

2.12.2 If any proceedings are brought or any claim is made against the Purchaser, 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 claims.

2.13 Performance Security: (same as contained under Paras 1.35 &1.37)

2.14. Inspections and Tests

2.14.1 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 and Related Services as are specified in the SCC or as discussed and agreed to during the course of finalization of contract.

2.14.2 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at **no extra cost to the Purchaser**. The Technical Specifications and SCC shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing in a timely manner of the identity of any representatives retained for these purposes.

2.14.3 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at the point of delivery and/or at the Goods final destination. If conducted on the

premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data - shall be furnished to the inspectors at no charge to the Purchaser.

2.14.4 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 of consent to enable the Purchaser or its designated representative to attend the test and/or inspection.

2.14.5 Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.

2.14.6 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.

2.14.7 The Supplier shall provide the Purchaser with a report of the results of any such test and /or inspection.

2.14.8 With a view to ensure that claims on insurance companies, if any, are lodged in time, the bidders and /or the Indian agent shall be responsible for follow up with their principals for ascertaining the dispatch details and informing the same to the Purchaser and he shall also liaise with the Purchaser to ascertain the arrival of the consignment after clearance so that immediately thereafter in his presence the consignment could be opened and the insurance claim be lodged, if required, without any loss of time. Any delay on the part of the bidder/ Indian Agent would be viewed seriously and he shall be directly responsible for any loss sustained by the purchaser on the event of the delay.

2.15. Packing

2.15.1 The Supplier shall provide such packing of the Goods (export worthy) as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit 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.

2.15.2 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, if any, specified in SCC and in any subsequent instructions ordered by the Purchaser.

2.16. Delivery and Documents

2.16.1 Delivery of the Goods and completion and related services shall be made by the Supplier in accordance with the terms specified by the Purchaser in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

2.17. Insurance-The cost of the insurance is to be included in the bid of the quoting bidder and clearly mentioned in the price Bid, where no mentioned the same will be deemed to be included by the Purchaser.

2.18. Transportation- The cost of the Transportation is to be included in the bid of the quoting bidder and clearly mentioned in the price Bid, where no mentioned the same will be deemed to be included by the Purchaser.

2.19. Incidental Services

2.19.1 The supplier may be required to provide any or all of the services, if any, specified in SCC.

2.20. Spare Parts

2.20.1 The Supplier shall be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:
(a) Such spare parts as the Purchaser may elect to purchase from the Supplier, providing that this election shall not relieve the Supplier of any warranty/Comprehensive Maintenance obligations under the Contract; and
(b) In the event of termination of production of the spare parts:
(i) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
(ii) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.
(c) The Supplier shall provide the list of consumable or non-consumable spare parts/accessories/optional items clearly indication whether or not covered under free warranty.

2.21. Warranty and AMC/CMC- Carefully to be quoted as they are included in the price bid evaluation and ranking

2.21.1 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.

2.21.2 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 India.

2.21.3 Unless otherwise specified in the SCC/LOI/Contract, the warranty shall remain valid for **twelve (12) months** after the Goods or any portion thereof as the case may be, have been accepted at the final destination indicated in the SCC. Chapter-4 of the NIT may be noted for further clarification.

2.21.3 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.

2.21.4 Upon receipt of such notice, the Supplier shall, within a reasonable period of time, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

2.21.5 If having been notified, the Supplier fails to remedy the defect within the reasonable period of time, 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.

2.21.6 Goods requiring warranty replacements must be replaced on free of cost basis to the purchaser.

2.21.7 Bidders may note that the, additional cost of warranty, (as the case may be, if sought in the NIT) applicable after the completion of the standard warranty, should be quoted separately with annual price breakup, as it will be included in the final price evaluation. In the final award letter/ purchase order/ agreement/ LoI the Extended warranty, if any, cost will be mentioned and freeze, but will be applicable and payable only after successfully completion of warranty period on the terms and conditions stated in the LOI/Purchase Order/Contract.

2.21.8 After completion of warranty period, if Purchaser wishes, he can enter into (AMC/CMC) the Annual/comprehensive Maintenance Contract.

2.21.9 Bidders are also required to provide the AMC/CMC (as the case may be, if sought in the NIT) cost in their Price Online bid on annual basis for a period specified in the NIT. This charge will be included in the final price evaluation. In the final award letter/ purchase order/ agreement/ LoI the AMC/ CMC, if any, cost will be mentioned and freeze, but will be applicable and payable only after

successfully completion of warranty period/extended warranty period and on the terms and conditions stated.

2.21.10 Concessional Taxes/duties as permitted by Government of India , are applicable for purchase of any equipment for R&D purpose service charges are not concessional and the GST Charges is as per the applicable HSN code. However, the supplier has to bifurcate the comprehensive annual maintenance (CAMC) in percentages of the spare parts/goods and the services clearly for arriving at the tax applicability. If CAMC charges is not bifurcated the full tax rate of services will be applicable of the CAMC charges for evaluation.

2.21.11 In case the NIT is for more than one unit/set in that case each unit/set will come under warranty period after the successful installation and commissioning. Any delay before installation and commissioning will not be covered in the warranty.

2.22. Terms of Payment

2.22.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as specified in the SCC.

2.22.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to Delivery and document Clause of the GCC and upon fulfilment of other obligations stipulated in the contract.

2.22.3 Payments shall be made promptly by the Purchaser but in no case later than thirty (30) days after ***fulfilling all the terms and conditions of the purchase order with requisite supporting documents***.

2.22.4 Payment shall be made in currency as indicated in the contract/ Purchase Order after completion of all the contractual obligations by the Supplier.

2.23. Change Orders/LOI and Contract Amendments.

2.23.1 The Purchaser may at any time, by written order given to the Supplier pursuant to Clause on Notices of the GCC 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 shipping or packing;
(c) The place of delivery; and/or
(d) The Services to be provided by the Supplier.

(e) The delivery schedule.
(f) In case quantity is increased/decreased within 25% before the delivery period.

2.23.2 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 delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within fifteen (15) days from the date of the Supplier's receipt of the Purchaser's change order.

2.23.3 No variation or modification in the terms of the contract shall be made except by written amendment signed by the parties.

2.24. Assignment

2.24.1 The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

2.25. Subcontracts

2.25.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the online bid. Such notification, in the original online bid or later, shall not relieve the Supplier from any liability or duties or obligation under the Contract.

2.26. Extension of time

2.26.1 Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser.

2.26.2 If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). 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 with or without penalty, in which case the extension shall be ratified by the parties by amendment of the Contract.

2.26.3 Except as provided under the Force Majeure clause of the GCC, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to Penalty Clause of the GCC unless an extension of time is agreed upon pursuant to above clause without the application of penalty.

2.27. Penalty clause

2.27.1 Subject to GCC Clause on Force Majeure, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services or contract value for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the Percentage specified in SCC. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause on Termination for Default. The SCC shall also indicate the basis for ascertaining the value on which the penalty shall be applicable clause or as per the decision of the Competent Authority based upon the merit of the case.

2.27.2 Waiving off imposition of penalty with or without penalty is at the discretion of the Institute.

2.28. Termination for Default

2.28.1 The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part
(a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause on Extension of Time; or
(b) If the Supplier fails to perform any other obligation(s) under the Contract.
(c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent or collusive or coercive practices as defined in GCC Clause on Fraud or Corruption in competing for or in executing the Contract.

2.28.2 In the event the purchaser terminates the contract in whole or in part, he may take recourse to any one or more of the following action:
a) The Performance Security may be forfeited;
b) The purchaser may procure, upon such terms and in such manner as it deems appropriate, stores similar to those undelivered, and the supplier shall be liable for all available actions against it in terms of the contract.
c) however, the supplier shall continue to perform the contract to the extent not terminated.

2.29. Force Majeure

2.29.1 Notwithstanding the provisions of GCC Clauses relating to extension of time, penalty and Termination for Default 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.

2.29.2 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.

2.29.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof **within 21 days of its occurrence**. 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.

2.29.4 If the performance in whole or in part or any obligations under the contract is prevented or delayed by any reason of force majeure for a period exceeding 60 days, either party may at its option terminate the contract without any financial repercussions on either side.

2.30. Termination for Insolvency

2.30.1 The Purchaser may at any time terminate the Contract by giving written notice to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Purchaser.

2.31. Termination for Convenience

2.31.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time. 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.

2.31.2 The Goods that are complete and ready for shipment within 30 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:
(a) To have any portion completed and delivered at the Contract terms and prices; and/or
(b) 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.

2.32. Settlement of Disputes

2.32.1 The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

2.32.2 If, after twenty-one (21) 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, 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.

2.32.3 The dispute settlement mechanism/arbitration proceedings shall be concluded as under:

(a) 1. In the event of any question/dispute/difference arising under the agreement or in connection herewith (except as to matters the decision of which is specially provided under this agreement) the same shall be referred to the Delhi International Arbitration Centre for appointment of Arbitrator to adjudicate the dispute.
2. The award of the Arbitrator shall be final and binding on the parties. The Arbitrator may give interim award(s) and / or directions, as may be required.
3. Subject to the aforesaid provision, the arbitration and conciliation act, 1996 and the rules made hereunder to apply to the Arbitration proceedings under this clause.

2.32.4 **The venue of the arbitration shall be the place from where the purchase order or contract is issued or 2.23.3 (a), whichever is prevalent.**

2.32.5 Not withstanding 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 pay the Supplier any monies due the Supplier.

2.33. Governing Language

2.33.1 The contract shall be written in English language which shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the English language only.

2.34. Applicable Law

2.34.1 The Contract between the Supplier and the Purchaser shall be governed by the laws of India and/or UNCITRAL. Under this contract shall be taken by the parties only in Lucknow, India to competent jurisdiction.

2.35. Notices

2.35.1 Any notice given by one party to the other pursuant to this contract/order shall be sent to the other party in writing or by cable, telex, FAX, e-mail or and confirmed in writing to the other party's address specified in the SCC.

2.35.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

2.36. Taxes and Duties

2.36.1 For goods Manufactured within India, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred till its final manufacture/production.

2.36.2 After implementation of GSTIN, the bills submitted by the bidders should state their own as well as CSIR-IITR GST number and required HSN code in their online quotations, bills and references. While the bills are submitted there should a clear breakup of CGST, SGST and IGST. The bills will be raised in the name of "The Director, CSIR-Indian Institute of Toxicology Research, Lucknow".

2.36.4 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in India, the Purchaser shall make its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

2.36.5 Concessional Taxes/duties as permitted by Government of India, are applicable for purchase of any equipment for R&D purpose service charges are not concessional and the GST Charges is as per the applicable HSN code. However, the supplier has to bifurcate the comprehensive annual maintenance (CAMC) in percentages of the spare parts/goods and the services clearly for arriving at the tax applicability. If CAMC charges is not bifurcated the full tax rate of services will be applicable of the CAMC charges for evaluation.

2.37. Right to use Defective Goods

2.37.1 If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Purchaser's operation.

2.38. Protection against Damage

2.38.1 The system shall not be prone to damage during power failures and trip outs.
The normal voltage and frequency conditions available at site as under:
a) Voltage 230 volts – Single phase/ 415 V 3 phase (+_ 10%)
b) Frequency 50 Hz.

2.39. Site preparation and installation

Since this is a Turn Key Contract, the Purchaser will provide the site for Designing, Supply, Installation, Testing, Commissioning, Validation and Certification of the Microbiology laboratory with advanced Molecular Analysis facility. The Supplier will be responsible for the completion of the Project along with Installation of the equipment's in compliance with the technical and environmental specifications defined by the Supplier.

The Purchaser will designate the installation sites before the scheduled installation date to allow the Supplier to perform a site inspection to verify the appropriateness of the sites before the installation of the Equipment, if required. The supplier shall inform the purchaser about the site preparation, if any, needed for installation, of the goods at the purchasers site immediately after notification of award/contract.

2.40 Local Content/ Make In India (This clause is dynamic and the latest Government of India Policies on the subject will be considered)

Make in India procurement Preference (Ministry of Commerce and Industry, GoI, letter no. P-45021/2/2017 PP(BE-II) dated 04.06.2020)

*"Local supplier" means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed in DIPP Order No.P-45021/2/2017-PP (BE-II) dated 28th May, 2018 or by the competent Ministries/Departments in pursuance of this order.

'Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the items procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

The supplier has to declare the percent of local content in his product or services as per NIT requirement.

Local Content means the amount of value added in India which shall unless otherwise prescribed by the nodal ministry, be the total value of the item procured (excluding net domestic indirect taxes_ minus the value of imported content in the item (including all customs duties) as a proportion of the

total value in percent.

'Class-I local supplier' means a supplier or service provider, whose goods, services or works offered for procurement has local content equal to or more than 50%, as defined under this order.

'Class-II local supplier' means a supplier or service provider, whose goods, services or works offered for procurement has local content more than 20% but less than 50% as defined under this order.

Procurement Preference will be extended to the technically responsive class-I local supplier over technically responsive class-II local supplier within the price range/Margin of 20% of the LQ-1 firm. The procurement preference will be extended as per the guidelines issued by Government of India from time to time.

'Non- local suppler' means a supplier or service provider, whose goods, services or works offered for procurement has local content less than 20% as defined under this order.

Eligibility of 'Class-I local supplier'/ 'Class-II local suppler'/ 'Non-local suppliers' for different types of procurement

(a) In procurement of all goods, services or works in respect of which the Nodal Ministry/Department has communicated that there is sufficient local capacity and local competition, only Class-I local supplier, as defined under the order, shall be eligible to bid irrespective of purchase value.

(b) In procurement of all goods, services or works, not covered by sub-Para (a) above, except when Global tender enquiry has been issued. In global tender enquires, 'Non-local suppliers' shall also be eligible to bid along with 'Class-I local suppliers' and 'Class-II local suppliers'. It should be noted that this NIT is an Open tender Enquiry and the bidders are required to quote in INR only.

(c) For the purpose of this order, works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

*False declarations will be in breach of the Code of Integrity under Rule 175(1) (i) (h) of the General Finance Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Finance Rules along with such other actions as may be permissible under law.

*A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed below.

Format for Local Content Certificate attached with this NIT for the quoted item may be submitted with the Bid.

Discretion of Director, CSIR-IITR

The Director, CSIR-IITR, reserves the right to accept/ reject any or all e-tenders either in part or in full or to split the order without assigning any reasons there for which will be binding and acceptable all participating bidders.

B. GENERAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract (SCC) shall act as a general guideline and 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.

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Special conditions of contract (SCC)

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 2.1(l) The Purchaser is: **THE DIRECTOR, CSIR-Indian Institute of Toxicology Research, Vish Vigyan Bhawan, MG Marg, Lucknow-226001.**

GCC 2.1 (m) The Final Destination is: CSIR-IITR***, STORES (unless otherwise mentioned in the Purchase Order/Contract)***

GCC 2.13.1 The amount of the Performance Security shall be*:* ***5% (Fve percent)or as per the government guidelines OF THE CONTRACT/ ORDER VALUE VALID BEYOND TWO MONTHS OF THE WARRANTY PERIOD.***

GCC 2.14.1 The Inspection and Tests prior to shipment of Goods and at final acceptance are as follows:

PRE-DESPATCH INSPECTION: After the goods are manufactured and assembled, inspection and testing of the goods shall be carried out at the supplier's plant by the supplier/ purchaser representative as specified in purchase order, prior to shipment to check whether the goods are in conformity with the technical specifications.
Manufacturer's test certificate with data sheet shall be issued to this effect and submit along with the delivery documents.
The purchaser reserves the options to be present at the supplier's premises during such inspection and testing.

Acceptance Test: The acceptance test will be conducted by the Purchaser, their consultant or other such person nominated by the Purchaser at its option after the equipment is installed at Purchaser's site in the presence of supplier's representatives. The acceptance will involve trouble free operation. There shall not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the equipment is expected to occur. The Supplier shall maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Purchaser, the successful completion of the test specified.
In the event of the ordered item failing to pass the acceptance test, **a period not exceeding two weeks will be given to rectify the defects and clear the acceptance test**, failing which, the Purchaser reserve the right to get the equipment replaced by the Supplier at no extra cost to the Purchaser. Successful conduct and conclusion of the acceptance test for the installed goods and equipment's shall also be the responsibility and at the cost of the Supplier.

Manuals together with Drawings: Before the goods and equipment's are taken over by the Purchaser, the Supplier shall supply operation and maintenance Manuals together with Drawings of the goods and equipment's built. These shall be in such details as will enable the Purchaser to operate, maintain, adjust and repair all parts of the works as stated in the specifications. The Manuals and Drawings shall be in the ruling language (English) and in such form and numbers as stated in the Contract. **Unless and otherwise agreed,** the goods and equipment shall not be considered to be completed for the purposes of taking over until such Manuals and Drawing have been supplied to the Purchaser.

On **successful completion of acceptability test,** receipt of deliverables, etc. and after the **Successful Commissioning:** Purchaser is satisfied with the working of the equipment, the acceptance certificate signed by the Supplier and the representative of the Purchaser will be issued. The date on which such certificate is signed shall be deemed to be the date of successful commissioning of the equipment.

GCC 2.15.2 The marking and documentation within and outside the packages shall be:

a. Each package should have a packing list within it detailing the part No(s)., description, quantity etc.
b. Outside each package, the contract No., the name and address of the purchaser and the final destination should be indicated on all sides and top.
c. Each package should be marked as 1/x, 2/x, 3/x……x/x, where "x" is the total No. of packages contained in the consignment.
d. All the sides and top of each package should carry an appropriate indication/label/sticker indicating the precautions to be taken while handling/storage.

GCC 2.16.1 Details of Shipping and other Documents to be furnished by the Supplier are
For Goods manufactured within India:
Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by registered post / speed post and copies thereof by FAX.
(a)Two copies of Supplier's Invoice indicating, *inter-alia* description and specification of the goods, quantity, unit price, total value;
(b)Packing list;
(c)Certificate of country of origin;
(d)Insurance certificate, if required under the contract;
(e)Railway receipt/Consignment note;
(f)Manufacturer's guarantee certificate and in-house inspection certificate;
(g) Inspection certificate issued by purchaser's inspector, if any and
(h) Any other document(s) as and when required in terms of the Purchase Order/ Contract.

Note: 1.The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)

2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses/ any delay/ any penalty.

Note: 1. The nomenclature used for the item description in the invoices(s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract/ Purchase Order. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s)
2. The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses/ demurrage/ additional expenses.

GCC 2.16.3 In case of supplies from within India, the mode of transportation shall be by Air/Rail/Road. In case of supplies from abroad, the mode of transportation shall be by Air/ocean. (Confirm only *one in online bid/ online quotation which is applicable).*

GCC 2.17.1 The **Insurance s**hall be from **Source warehouse to warehouse (final destination)"** on "all risk basis" including strikes, riots and civil commotion. Insurance cost from **"Source warehouse to** CSIR-IITR **- Stores will be taken account at the time of evaluations.**

GCC 2.19.1 The incidental services (transportation, insurance, installation, training and initial maintenance and other such obligations if any) to be provided are as under:
1.
2.
3……
The cost shall be included in the contract
GCC 2.21.3 The period of validity of the Warranty shall be: MINIMUM THREE YEAR FROM THE DATE OF INSTALLATION/COMISSIONING/ SUCCESSFUL HANDING OVER THE COMPLETE FACILITY ALONG WITH VALIATION AND CERTIFICATION OF THE BSL-3 STATUTORY CERTIFICATION AND FINAL ACCEPTANCE BY THE USER. MAXIMUM WARRENTY WILL BE APPLICABLE (IF MENTIONED CATEGORICALLY IN THE e-TENDER DOCUMENTS)

2.22.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:

Commercial terms

Payment for Goods and Services supplied from India:

Payment for Goods and Services supplied from within India shall be made in Indian Rupees, as follows:

100 % against installation , commissioning, final acceptance of user and fulfilling the terms and conditions of the purchase order with supporting documents issued by the Purchaser subject to submission of performance security of 05% Contract/Purchase order value (if mentioned in contract/Purchase order).

Penalty and Liquidated damage

GCC 2.27.1 The penalty shall be: 0.5% per week or part of a week towards late delivery and towards delay in installation and commissioning.

GCC 2.27.2 The maximum number of liquidated damages shall be: 10% of the order value for late delivery and delay in installation and commissioning.

The liquidated damages shall be levied on the delivered price of the delayed Goods or unperformed Services of the contract/Purchase Order value.

GCC 2.34.1 The place of jurisdiction/arbitration is LUCKNOW.

GCC 2.35.1 For notices, the **Purchaser's address is-**
Kind Attention: **CONTROLLER OF STORES & PURCHASE**
Address for correspondence: The DIRECTOR, **INDIAN INSTITUTE OF TOXICOLOGY RESEARCH, VISH VIGYAN BHAWAN, MG MARG, LUCKNOW-226001.**
Telephone: 0522-2613357
Electronic mail address: ***director@iitr.res.in***, ***spo@iitr.res.in***, ***sopurchase@iitr.res.in***

Special conditions of contract (SCC)

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.

S.N.	GCC Clause Ref	Condition
1	GCC 2.1.1(l)	The Purchaser is: **THE DIRECTOR- CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH, VISH VIGYAN BHAWAN,31-MG MARG, LUCKNOW** ***(name and complete postal address)***
2	GCC 2.1.1(m)	The Final Destination is : **CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH, VISH VIGYAN BHAWAN,31-MG MARG, LUCKNOW** ***(complete postal address)***
3	GCC 2.13.1	The amount of the Performance Security shall be **05 % of the contract value.**
4	GCC 2.15.2	The marking and documentation within and outside the packages shall be: (a) Each package should have a packing list within it detailing the part No(s), description, quantity etc. (b) Outside each package, the contract No., the name and address of the purchaser and the final destination should be indicated on all sides and top. (c) Each package should be marked as 1/x, 2/x, 3/x……x/x, where "x" is the total No. of packages contained in the consignment. (d) All the sides and top of each package should carry an Appropriate indication/ label/sticker indicating the precautions to be taken while handling/storage.
5	GCC 2.16.1	Details of Shipping and other Documents to be furnished by the Supplier are: For goods manufactured within India Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by registered post / speed post and copies thereof by FAX/Email. (a) Two copies of Supplier's Invoice indicating, *inter-alia* description and specification of the goods, quantity, unit price, total value; (b) Packing list;

		(c) Certificate of country of origin; (d) Insurance certificate, if required under the contract; (e) Railway receipt/Consignment note; (f) Manufacturer's guarantee certificate and in-house inspection certificate;

		(g) Inspection certificate issued by purchaser's inspector, if any; and (h) Any other document(s) as and when required in terms of the contract. Note: 01. **The nomenclature used for the item description in the invoices(S), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s).** 02. **The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.** **<u>For goods manufactured abroad</u>** Within 24 hours of dispatch, the supplier shall notify the purchaser the complete details of dispatch and also supply following documents by Registered Post/courier and copies thereof by FAX/Email. (a) Two copies of supplier's Invoice giving full details of the goods including quantity, value, etc.; (b) Packing list; (c) Certificate of country of origin issued by supplier; (d) Manufacturer's guarantee and Inspection certificate; (e) Inspection certificate issued by the Purchaser's Inspector, if any; (f) Insurance Certificate, if required under the contract; (g) Name of the Vessel/Carrier; (h) Bill of Lading/Airway Bill; (I) Any other document(s) as and when required in terms of the contract.

		Note: 01. **The nomenclature used for the item description in the Invoices (s), packing list(s) and the delivery note(s) etc. should be identical to that used in the contract. The dispatch particulars including the name of the transporter should also be mentioned in the Invoice(s).** 02. **The above documents should be received by the Purchaser before arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.**
6	GCC 2.16.3	In case of supplies from within India, the mode of transportation shall be by ***Air/Rail/Road***. ***(Retain one only)*** In case of supplies from abroad, the mode of transportation shall be by air/Ocean (Retain one only)

7	GCC 2.17.1	The Insurance shall be for an amount equal to 110% of the CIF or CIP value of the contract from within "warehouse to warehouse (final destination)" on "all risk basis" including strikes, riots and civil commotion.
8	GCC 2.21.3	The period of validity of the Warranty shall be 03 Years for the Complete Microbiology Laboratory with advanced molecular Analysis facility As mentioned in the Technical Specification) from the date of acceptance.
9	GCC2.22.1	The method and conditions of payment to be made to the Supplier under this Contract shall be governed by the GFR-2019 and manual on Procurement of Goods-2019 and its amendment vide order No: **13-4(04)/15-16/S&P/Policy-Vol-II** dated: 28.05.2020. The payment terms shall be considered by the Technical Purchase Committee on merit of the bidder's request in the submitted Bid in accordance to the provisions of MPG-2019 and GFR and its subsequent amendments. The decision of the Committee shall be final and binding on the Bidders

	GCC 2.22.1	The L/C will be confirmed at the supplier's cost, if requested specifically by the supplier. All bank charges abroad shall be to the account of the beneficiary i.e., supplier and all bank charges in India shall be to the account of the opener i.e. purchaser. If L/C is requested to be extended/ reinstated for reasons not attributable to the purchaser, the charges thereof would be to the suppliers' account. Payment of local currency portion shall be made in Indian Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed. The LC for 100% value of the contract shall be established after deducting the agency commission payable if any, to the Indian agent from the FOB/FCA value. Payment for Goods and Services supplied from India: The payment shall be made in Indian Rupees, as follows: (a) After shipment: _____ percent (%) of the Contract Price shall be paid on receipt of the Goods in good condition and upon submission of the documents specified in GCC Clause 16.1 (b) On Acceptance: The remaining ___percent (%) of the Contract value shall be paid to the Supplier within thirty (30) days after the date of the acceptance certificate issued

		by the Purchaser subject to submission of performance security, if any. **Note:** **All payments due under the Contract shall be paid after deduction of statutory levies at source (like ESIC, Income Tax, etc.), wherever applicable.**
10	GCC 2.27.1	The penalty shall be 0.5% per week or part of a week towards late delivery and towards delay in installation and commissioning.
	GCC 2.27.1	The maximum amount of penalty shall be 10%
11	GCC 2.34.1	The place of jurisdiction is Lucknow ***(name of the place from where the contract is issued)***
12	GCC 2.35.1	For notices, the Purchaser's address is The Director Attention: Controller of Stores & Purchase(CoSP) Location: CSIR-IITR, Lucknow
13	GCC 2.35.1	Telephone: :+91-_____ EPABX Tel:+91_____ Facsimile number: :+91_____ Electronic mail address _____
14	GCC 2.43.1	The Original integrity pact is to be signed and uploaded along with this NIT and the copy of Original Integrity pact is to be submitted to the CoSP office at CSIR-IITR. Failing to do so the Bid shall be rejected straightaway as Unresponsive.
15	GCC 2.43.2	*The name and contact details of the IEMs are as under:* 1- **Shree Prabhakaran Palaniappan, IAS (Retd)** **Email-pprabakaranias@gmail.com;** 2- **Dr Rajan Katoch, IAS (Retd)** Email- rkatoch@nic.in

CHAPTER-3

Annexure-1

Contract form
(Applicable only to the successful bidder)

Contract No. _____ Date: _____

THIS CONTRACT AGREEMENT is made

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

BETWEEN

(1) The Council of Scientific & Industrial Research registered under the Societies Registration Act 1860 of the Government of India having its registered office at 2, Rafi Marg, New Delhi-110001, India

represented by _____*[insert complete name and address of Purchaser* (hereinafter called "the Purchaser"), 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").

WHEREAS the Purchaser invited online bids for certain Goods and ancillary services, viz., *[insert brief description of Goods and Services]* and has accepted a Online bid by the Supplier for the supply of those Goods and Services in the sum of *[insert Contract Price in words and figures, expressed in the Contract currency(ies)]* (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:

(a) This Contract Agreement

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(b) Special Conditions of Contract

(c) General Conditions of Contract

(d) Technical Requirements (including Schedule of Requirements and Technical Specifications)

(e) The Supplier's Online bid and original Price Schedules

(f) The Purchaser's Notification of Award

(g) *[Add here any other document(s)]*

3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.
4. In consideration of the payments to be made by the Purchaser to the

Supplier as hereinafter mentioned, 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.

5. 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 Council of Scientific & Industrial Research
Signed: *[insert signature]*
in the capacity of *[insert title or other appropriate designation]*
in the presence of *[insert identification of official witness]*
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]*

Annexure-2

Acceptance certificate form
(Applicable only to the successful bidder)

(To be filled: when the equipment is installed at Purchaser's site in the presence of supplier's representatives)

No. Dated:

M/s _____
_____
_____

Sub: Certificate of commissioning of equipment (Computer/Server, etc.)

1. This is to certify that the equipment as detailed below has/have been received in good condition along with all the standard and special accessories (subject to remarks in Para 2).

The same has been installed and commissioned.

(a) Contract No. _____Date_____
(b) Description of the equipment_____
(c) Name of the consignee_____
(d) Scheduled date of delivery of the consignment to the Lab./ Instts._____
(e) Actual date of receipt of consignment by the Lab./ Instts._____
(f) Scheduled date for completion of installation/commissioning_____
(g) Actual date of completion of installation/commissioning_____
(h) Penalty for late delivery (at Lab./ Instts. level)Rs._____
(i) Penalty for late installation (at Lab./ Instts. level Rs._____
Details of accessories/items not yet supplied and recoveries to be made on that account:

Sl. No. Description Amount to be recovered

1. The acceptance test has been done to our entire satisfaction.
The supplier has fulfilled his contractual obligations satisfactorily

or

The supplier has failed to fulfill his contractual obligations with regard to the following:
(a)……
(b) ……..….
(c)……
(d)……...

The amount of recovery on account of failure of the supplier to meet his contractual obligations is as indicated at Sr. No. 3.

For Supplier	
Signature……	For Purchaser
Name…….	Signature
Designation……	Designation
Name of the firm……	Name of the Lab/ Instt
Date…….	Date

Annexure-3

PERFORMANCE SECURITY FORM

(Applicable only to the successful bidder)

To:_____(Name of Purchaser)
WHEREAS_____(Name of Supplier) hereinafter called "the Supplier" has undertaken, in pursuance of Contract No. _____ dated _____ 2007 to supply _____ (Description of Goods and Services) hereinafter called "the Order" AND WHEREAS it has been stipulated by you in the said order that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the order.

AND WHEREAS we have agreed to give the Supplier a Guarantee:
THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of _____ (Amount of the Guarantee in Words and Figures) and we undertake to pay you, upon your first written demand declaring the sum or sums within the limit of _____ (Amount Guarantee) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the _____day of _____

Signature and Seal of Guarantors

Date
Address

All correspondence with reference to this guarantee shall be made at the following address:
_____
_
_____
_
_____
(Name & address of the lab)

Chapter-4 (Part-1: online techno-commercial bid&Part-II: Price online bid)

(PART-I)

Company Seal

(Online Techno-commercial bid letter- be given on the bidder/firm's letter head)

The Director

INDIAN INSTITUTE OF TOXICOLOGY RESEARCH
VISH VIGYAN BHAWAN,
MG MARG, LUCKNOW
PIN-226001

File reference No:_____

Subject: Submission of Techno-commercial Online bid for_____.

Sir,

Having examined the online bidding documents and agreeing to the terms and conditions including GCC & SCC mentioned in it, we, the undersigned, hereby submit the **Techno-commercial Online bid** for supply of goods and services as per the schedule of requirements and in conformity with the said online bidding documents.

We hereby offer to supply the **technical details** related to the Goods/Services as sought by the purchaser in this NIT. We do hereby undertake that, in the event of acceptance of our online bid, the supply of Goods/Services shall be made as stipulated in the schedule to the Online bid document and that we shall perform all the incidental services.

In case of any **technical clarification or/ and demonstration** sought by the purchaser to arrive at the clear position, we will provide the same without altering our price online bid and without any monetary/ documentary liability on CSIR-IITR. For clarification purpose, we shall be submitting the historical documents i.e., those documents which exists before the floating of this tender. On demand by CSIR-IITR, we shall furnish the original document/ certificate submitted with this online quotation for the purpose of verification we understand that its mis-match can lead into rejection of our online bid at any level of the concerned procurement process.

We enclose herewith the signed complete Techno-commercial Online bid along with the Techno-commercial Online bid Letter in the prescribed e-tender format as per your requirement. This includes:

(1) Bidder's information form
(2) Manufacturer's authorization form
(3) Online bid securing declaration/ EMD declaration form
(4) Performance statement form
(5) Specifications and allied technical details
(6) Deviation form (technical)
(7) Service support details form
(8) Qualification requirements
(9) Statement for deviations from technical terms and conditions.
(10) Techno-commercial Capability.
(11) Experience and Technical Capacity.
(12) Local Content Certificate (as per attached format).

We agree that our online bid validity is for a period of ***One Hundred Eighty (180) days*** from the date fixed for opening of the online bid documents and that we shall remain bound by a communication of acceptance within that time. If desired by CSIR-IITR we will be extending the same without any change in the Price-bid.

We have carefully read and understood the terms and condition of the online bid document and we do hereby undertake to supply as per these terms and conditions. The Technical Deviation are only those mentioned in the statement of deviation from technical terms and conditions. We have enclosed the check-list.

We do hereby undertake, that until a formal work order is prepared and executed, this online bid, together with your written acceptance thereof and placement of letter of intent awarding the work order, shall constitute a binding contract between us.

1. bidder's Legal Name *[insert bidder's legal name]*
2. In case of JV, legal name of each party: *[insert legal name of each party in JV]*
3. bidder's actual or intended Country of Registration: *[insert actual or intended Country of Registration]*
4. bidder's Year of Registration: *[insert bidder's year of registration]*
5. bidder's Legal Address in Country of Registration: *[insert bidder's legal address in country of registration]*

All corrections/ deletions should invariably be duly attested by the person authorized to sign the online bid document).

Dated this day of_____ Signature of bidder

Details of enclosures

Full Address:
Telephone No.
Telegraphic Address:
E-mail:

COMPANY SEAL

Check List- (Techno-commercial Online bid) Prt-I

Information furnished in requisite formats is correct and updated-

S.N.	Document	Enclosed with the online bid (Yes/ No)	If yes, Page No. in the bid document is-
1.	Bidder's information form		
2.	Manufacturer's authorization form/ warranty Certificate.		
3.	Online bid securing declaration/ EMD Declaration form		
4.	Performance statement form		
5.	Specifications and allied technical details (Technical Brochure of the Equipment's)		
6.	Deviation form (technical)		
7.	Service support details form		
8.	Qualification Requirements-		
(a)	Documentary evidence establishing that the bidder is eligible to online bid and is qualified to perform the contract if its online bid is accepted.		
(b)	Documents establishing goods eligibility and conformity to the online bidding documents		
(c)	Valid registration certificate in case the item(s) under procurement fall(s) under the restricted category of the current export-import policy of government of India (if applicable)		
9.	Statement for deviations from technical terms and conditions.		
10.	Techno-commercial Capability:		
(a)	Copy of the Last Audited Balance Sheet of the company		

(b)	Income Tax Registration Certificate/ PAN No. and latest Income Tax Clearance Certificate		
(c)	Proof of Manufacturer's authorization Photocopy of Warranty Service Provider Agreement between the manufacturer and the Service Provider.		
(d)	Details of Local service centers (Nearest place to the Purchaser)		
(e)	Photocopy duly attested of valid Certificate of Authorization issued to Indian Agents by the foreign principals, if quoting on their behalf.		
11. (a)	<u>Experience and Technical Capacity:</u> Performance statement in enclosed format: Since State of the Art Microbiology Laboratory with Advanced Molecular Analysis Facility is one of its own kind, only those bidders - who have past experience of successfully Establishing at least 02 similar Microbiology Facility and/or at least one statutorily certified BSL 2/3 (of at least ₹3 crore each) in any Government/Semi-Government/DRDO/ICMR/ICAR or Autonomous Bodies of Government of India in the past 03 Years (2021-22, 2022-23, 2023-24) as evidenced with Documentary Proof – shall be eligible to apply for the NIT. While providing documentary evidence, Purchase Order of the same along with successful establishment report has to be submitted by the Bidders to ascertain the genuineness and authenticity of the claim. (This condition has been inserted in compliance of Min. of Finance OM NO: F.20/2/20214- PPD (pt) dated: 20.09.2016.		
(b)	Client list with contact detail, responsive phone No., e-mail & address		
(c)	Product range of **similar** Scientific Equipment/ Plant for research and development process.		
12.	Local Content Certificate for the equipment's		

13.	Firms under MSE, make in India etc. willing for the relaxations in the NIT are required to submit their complete and updated documents. Any false declaration will lead into breach of procurement process/contract and deemed fit action will be taken by the Institute.		
14.	Land Boarder Certificate		
15.	Apart from above, any other relevant document/ information		
16.	Escalation matrix		

Date & Signature of authorised person with Company seal

Technical Online bid Forms

(To be carefully filled by the interested bidders and to be enclosed with the techno-commercial online bid)

List of standard forms-

Table of Contents

Sl. No.	Name
1.	Bidder Information Form
2.	Manufacturers' Authorization Form
3	Online bid Security Form
4.	Performance Statement Form
5.	Specifications and allied technical details Form
6.	Deviation Statement Form
7.	Service Support Detail Form
8.	Qualification Requirements (Pre-qualification criteria)

1. 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. This should be done of the letter head of the firm and signed by the authorized person)

Date: *[insert date (as day, month and year) of Online bid Submission*]
E-tender No.: *[insert number from Invitation for online bids]*

1. bidder's Legal Name *[insert bidder's legal name]*
2. In case of JV, legal name of each party: *[insert legal name of each party in JV]*

3. bidder's actual or intended Country of Registration: *[insert actual or intended Country of Registration]*
4. bidder's Year of Registration: *[insert bidder's year of registration]*
5. bidder's Legal Address in Country of Registration: *[insert bidder's legal address in country of registration]*
6. bidder's Authorized Representative Information- Name: *[insert Authorized Representative's name]* Address: *[insert Authorized Representative's Address]* Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]* Email Address: *[insert Authorized Representative's email address]*
7. Attached are copies of original documents of: *[check the box(es) of the attached original documents]* Articles of Incorporation or Registration of firm named in 1, above in accordance with ITB sub clause 4.1 and 4.2.

Signature of bidder _____
Name _____
Business Address

ANNEXURE-4

MANUFACTURERS' AUTHORIZATION FORM

[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.***

Date: *[insert date (as day, month and year) of Online bid Submission]*
E-tender No.: *[insert number from Invitation for Online bids]*

To: *[insert complete name and address 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 online 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 21 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]*
Duly authorized to sign this Authorization on behalf of: *[insert complete name of bidder]*

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

ANNEXURE-5

ONLINE BID SECURING DECLARATION/ ERNEST MONEY DEPOSIT (EMD) DECLARATION FORM

Bid-Securing Declaration Form(on firm's letter head)

Date: _____

Bid No. _____

To (insert complete name and address of the purchaser)

I/We, The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

a) have withdrawn/ modified/ amended, impairs or derogates from the tender, my/ our Bid during the period of bid validity specified in the form of Bid; or
b) have been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing he Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of : (insert complete name of Bidder)

Dated on _____ day of _____(insert date of signing)

Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid- Please refer to the concerned clause of NIT)

ANNEXURE-6

PERFORMANCE STATEMENT FORM (past performances)
(For a period of last 3 years (2021-22, 2022-23,2023-24)

Name of the Firm…….

Order placed by (Address of the Purchaser)	Order No. and date	Description And quantity of the ordered equipment	Value of the order	Date of completion of the delivery as per contract	Date of actual completion of delivery	Remarks of late delivery if any	Has the equipment been installed satisfactory? (Documentary evidence)	Details of the Contact person (phone fax, email etc)

Signature and Seal of the manufacturer/ bidder…….
Place:
Date:

Manuals:

Extended Warranty and Comprehensive Annual/Comprehensive Maintenance Contract (AMC/CMC):

Payment Terms:

Please refer to the payment terms (Commercial terms) for the items of abroad and indigenous will be governed by their payment terms mentioned in point 2.22.1 of SCC. For taxation and duties please refer to para 2.36.5 to GCC.

Each set will come under warranty period after its successful installation and commissioning. However, the validity of standard warranty of each set will be extended up to one year from the date of successful installation, commissioning and final acceptance by the user at the fourth site.

Vendor should fill up in the price bid about the main equipment with accessories including standard warranty, year wise CAMC charges and the same should be communicated in the technical bid in un-priced format. Non-compliance of this may lead to summarily rejection of the Bid.

ANNEXURE-7

Delivery Schedule (This may be as per the Purchase order/LoI/contract)

Schedule	Period	
	Purchaser's requirement	Supplier's response
Expected delivery period	08 Weeks from the date of Order/Acceptance	---------- weeks/ months
Expected installation & commissioning period	06 weeks	---------- days/ weeks
Expected Period of Demonstration, observation and training	03 week	---------- ---days/ week

ANNEXURE-8

Allied Technical Details-

S.N.	Allied technical details	bidder's response
1.	Product catalogues/ user manual/ other informative material/ sketches/ drawings etc.	Enclosed (Yes/ No) (Ensure that it should be up to date and page numbered)
2.	Country of origin	
3.	Port of shipment	
4.	Banker's details	
5.	Free Warranty/Guarantee for a period of	
6.	Extended Warranty/Guarantee for a period of	
7.	Installation, commissioning & training,	
8.	Details of service provider for after sales/complaints etc.	
9.	AMC including Visits & breakdown visits	Annual Visit____(to be filled by bidder), Break down Visits- As and When required
10.	Comprehensive AMC including Visits & breakdown visits and spares	Annual Visit____(to be filled by bidder), Break down Visits- As and When required
11.	Details of accessories (if any)	
12.	List of non-consumables (if any)	
13.	List of consumables (if any)	
14.	Any other relevant detail	

ANNEXURE-9

DEVIATION STATEMENT FORM

1) The following are the particulars of deviations from the requirements of the e-tender specifications:

e-tender Clause/specifications	Deviation	Remarks (including justification)

Place:
Date:

Signature and seal of the Manufacturer/ bidder

NOTE:

Where there is no deviation, the statement should be returned duly signed with an endorsement indicating **"No Deviations".**

ANNEXURE-10

SERVICE SUPPORT DETAIL FORM

Sl. No.	Nature of training imparted	List of similar type equipment's serviced in past three years	Details if the Contact person fax, phone, email etc.

*Documentary evidence should be enclosed.

Signature and Seal of the manufacturer/ bidder…….
Place :
Date :

Qualification requirements

(Pre-Qualification/Eligibility Criteria)

(a) Techno-commercial Capability: The bidder shall attach **documentary evidences** that it meets the following financial requirement(s):

i. Copy of the Last Audited Balance Sheet of the company

ii. Income Tax Registration Certificate/PAN No. and latest Income Tax Clearance Certificate

iii. Proof of Manufacturer's authorization

iv. Photocopy of Warranty Service Provider Agreement between the manufacturer and the Service Provider.

v. Details of Local service centers (Nearest place to the Purchaser)

vi. Photocopy duly attested of Certificate of compulsory enlistment of Indian Agents of foreign principals with DGS&D if quoting on their behalf. Date of enlistment must be before the date of opening of e-tenders?

(b) Experience and Technical Capacity: The bidder shall attach the documentary **evidences** to demonstrate that it meets the following experience requirement(s):

Performance statement in enclosed format: Performance statement in enclosed format: Since State of the Art Microbiology Laboratory with Advanced Molecular Analysis Facility is one of its own kind, only those bidders - who have past experience of successfully Establishing at least 02 similar Microbiology Facility and/or at least one statutorily certified BSL 2/3 (of at least ₹3 crore each) in any Government/Semi-Government/DRDO/ICMR/ICAR or Autonomous Bodies of Government of India in the past 03 Years (2021-22, 2022-23, 2023-24) as evidenced with Documentary Proof – shall be eligible to apply for the NIT. While providing documentary evidence, Purchase Order of the same along with successful establishment report has to be submitted by the Bidders to ascertain the genuineness and authenticity of the claim. (This condition has been inserted in compliance of Min. of Finance OM NO: F.20/2/20214- PPD (pt) dated: 20.09.2016.

i. Product rage of **similar** Scientific Equipment/ Plant for research and development process.

ii. Copies of relevant work orders

iii. Details of supplies of identical or similar equipment made to other CSIR labs/ Institutions for the preceding three years together with price eventually or finally paid.

(c) **Usage Requirement:** (By the Purchaser)- The bidder shall attach documentary evidence to demonstrate that the GOODS it offers meet the usage requirement.

(d)The bidder should be a manufacturer/authorized representative of a manufacturer who must have designed, manufactured, tested and supplied the equipment(s) similar to the type specified in the "Technical Specification". The MAF must be enclosed with the technical online bid. Such equipment's must be of the most recent series/models incorporating the latest improvements in design. The models should be in successful operation for at least one year as on date of Online bid Opening.

(e) The Indian Agents of foreign manufacturers/ suppliers quoting directly on behalf of their principals for items appearing in the restricted list of the current EXIM policy of the Govt. of India are registered with DGS&D.

(f) To maintain sanctity of e-tendering system one Indian agent cannot represent two different foreign principals in one e-tender.

ANNEXURE-11

Local Content Certificate

----------Letter Head of Bidder----------

No: Date:

Sub:- Local Content Certificate

Ref:- (i) Order. P-45021/2/2017 PP (BE-II) dated 04.06.2020 of DPIIT, Ministry of Commerce and Industry, Govt. of India.

(ii) CSIR-IITR NIT Ref No…… Date……

(iii) Bid Ref No. (E-tender ID)…..…….Date...……

Sir,

As per the Public Procurement (Preference to Make in India), Order 2017 available on website of the Department for Promotion of Industry and Internal Trade (DPIIT) at http://dipp.gov.in, the bidder is required to submit a self-declared certificate about the percentage of Local Content available in its product. Accordingly, we are declaring the following as required in your Tender.

Sr No	Name of Item/Brand	% of Local Content of value addition	Location at which value Addition is made	*Status of the bidder.	The manner in which the value addition has been done in the product.

***Status of the bidder:** Whether Class I, II or Non-Local supplier

We are aware that the bidders offering imported products will fall under the category of non-Local suppliers. They can't claim themselves as Class-I/II local supplier by claiming profit, warehousing, marketing, logistics, freight etc. as local value addition.

I hereby undertake that the content of the certificate is true in all respect.

Note- Local content certificate has to be submitted for all the Instruments.

(Signature)
Name & Designation…….
For M/s……..
(Seal)
strike off which is not applicable.

ANNEXURE-12

Land Border Declaration Undertaking

LAND BORDER DECLARATION UNDERTAKING
(To be given on the letter Head of the Bidder to be attached with techno-commercial bid)

No. Dated:

Sub:- Land Border certificate
Ref: (i) Ministry of Finance, department of Expenditure, Public Procurement Division OM F.No.6/18/2019-PPD dated 23rde July 2020
(ii) CSIR-IITR NIT Ref. No……..Date……

Procurement of ……

Certificate for the Land Border Declaration

"I have read the clause regarding restrictions on procurement from the bidder of a country which shares a land border with India.

*I certify that this Bidder is not from Land border country as stipulated in the aforesaid OM of Ministry of Finance a country, department of Expenditure, Public Procurement Division OM F.No.6/18/2019-PPD dated 23rde July 2020.

OR

**I hereby certify that this bidder is from land border country stipulated in the aforesaid OM of Ministry of Finance a country, department of Expenditure, Public Procurement Division OM F.No.6/18/2019-PPD dated 23rde July 2020 and fulfils all requirements in this regard and is eligible to be considered for this procurement The valid registration certificate issued by the Competent Authority is attached.

I hereby undertake that the content of the certificate is true in all respect.

(Signature)
Name & Designation…….
For M/s……..
(Seal)
*/**strike off which is not applicable.

ANNEXURE-13

INTEGRITY PACT

Between

Council of Scientific & Industrial Research (CSIR) a Society registered under the Indian Societies Act 1860 represented by CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH, VISHVIGYAN BHAWAN-31, MG MARG, LUCKNOW hereinafter referred to as "The Principal".

And M/s _____ herein referred to as "The Bidder/ Contractor."

Preamble

The Principal intends to award, under laid down organizational procedures, contract/s for
State of the Art Microbiology Laboratory with Advanced Molecular Analysis facility on Turn Key basis. The Principal values full compliance with all relevant laws of theland, rules, regulations, economic use of resources and of fairness/ transparency in its relations with its Bidder(s) and/or Contractor(s).

In order to achieve these goals, the principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliancewith the principles mentioned above.

Section 1 – Commitments of the Principal

(1) The principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:

(a) No employee of the principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.

(b) The principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provideto all Bidder(s) the same information and will not provide to any Bidder(s) confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.

(c) The Principal will exclude from the process all known prejudiced persons.

(2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief

Vigilance Officer and in addition can initiatedisciplinary action.

Section 2 – Commitments of the Bidder(s)/Contractor(s)

(1) The Bidder(s)/Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the tender process and during the contract execution.

(a) The Bidder(s)/Contractor(s) will not, directly or through any other Person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.

(b) The Bidder(s)/Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, Certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process.

(c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

(d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/representatives in India, if any. Similarly the Bidder(s)//Contractors(s) ofIndian Nationality shall furnish the name and address of the foreign principals, if any.Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s)/Contractor(s). Further, as mentioned inthe Guidelines all the payments made to the Indian agent/representative have to bein Indian Rupees only. Copy of the "Guidelines on Indian Agents of Foreign Suppliers"is annexed and marked as Annexure.

(e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or anyother intermediaries in connection with the award of the contract.

(2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

(3) The person signing IP shall not approach the courts while representing the matters toIEMs and he/she will await their decision in the matter.

Section 3 – Disqualification from tender process and exclusion from future Contracts

(1) If the Bidder(s)/Contractor(s), before award or during execution has committed a transgression through a violation of Section 2, above or in any other form such as toput his reliability or credibility in question, the principal is entitled to disqualify the Bidder(s)/Contractor(s) from the tender process or take action as per the procedure mentioned in the "Guidelines on Banning of business dealings". Copy of the "Guidelines on Banning of business dealings" is annexed and marked as Annex -"B".

Section 4 – Compensation for Damages

(1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.

(2) If the Principal has terminated the contract according to Section 3, or if the principalis entitled to terminate the contract according to Section 3, the principal shall be entitled to demand and recover from the Contractor liquidated damages of the contract value or the amount equivalent to Performance Bank Guarantee.

Section 5 – Previous transgression

(1) The Bidder declares that no previous transgressions occurred in the last 3 Years withany other Company in any country conforming to the anti-corruption approach or withany other Public Sector Enterprise in India that could justify his exclusion from the tender process.

(2) If the Bidder makes incorrect statement on this subject, he can be disqualified fromthe tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings."

Section 6 – Equal treatment of all Bidders / Contractors/ Sub-contractors

(1) The Bidder(s)/Contractor(s) undertake(s) to demand from all Subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the principal before contract signing.

(2) The principal will enter into agreements with identical conditions as this one with allBidders, Contractors and Subcontractors.

(3) The principal will disqualify from the tender process all bidders who do

not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidders / Contractors/ Subcontractors

(1) If the Principal obtains knowledge of conduct of a bidder, Contractor or Subcontractor or of an employee or a representative or an associate of a bidder, Contractor or Subcontractor which constitutes corruption, or if the principal has substantive suspicion in this regard, the principal will inform the same to the Chief Vigilance Officer.

Section 8 - Independent External Monitors

(1) The principal appoints competent and credible Independent External Monitor for thisPact. The task of the Monitor is to review independently and objectively, whether andto what extent the parties comply with the obligations under this agreement.

(2) The Monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the JS (A), CSIR.

(3) The Bidder(s)/Contractor(s) accepts that the Monitor has the right to access withoutrestriction to all Project documentation of the principal including that provided by theContractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to hisproject documentation. The same is applicable to Subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Subcontractor(s) with confidentiality.

(4) The principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.

(5) As soon as the Monitor notice, or believes to notice, a violation of this agreement, hewill so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.

(6) The Monitor will submit a written report to the JS(A), CSIR within 8 to 10 weeks fromthe date of reference or intimation to him by the principal and should the occasion arise, submit proposals for correcting problematic situations.

(7) Monitor shall be entitled to compensation on the same terms as being extended to/provided to Independent Directors on the CSIR.

(8) If the Monitor has reported to the JS(A), CSIR, a substantiated suspicion of an offence under relevant IPC/PC Act, and the JS(A), CSIR has not, within the reasonable time taken visible action to proceed against such offence or reported it tothe Chief Vigilance Officer, the Monitor may also transmit this information directly tothe Central Vigilance Commissioner.

(9) The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

This Pact begins when both parties have legally singed it. It expires for the Contractor10 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.

If any claim is made/lodged during this time, the same shall be binding and continueto be valid despite the lapse of this pact as specified above, unless it is discharged/determined by JS(A), CSIR.

Section 10 – Other provisions

(1) This agreement is subject to Indian Law. Place of performance and Jurisdiction is theRegistered Office of the Principal, i.e., New Delhi

(2) Changes and supplements as well as termination notices need to be made in writing.Side agreements have not been made.

(3) If the Contractor is a partnership or a consortium, this agreement must be signed byall partners or consortium members.

(4) Should one or several provisions of this agreement turn out to be invalid, theremainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(For & On behalf of the Principal) (Office Seal)	(For & On behalf of Bidder/Contractor) (Office Seal)
Place,_____	Place……
Date- _____	Date……..
Witness1: (Name & Address): _____	Witness 2: (Name & Address):

PART-II

Financial Online bid Forms

(On the Letter Head of the firm submitting the Online bid Document) (to be submitted in a separate envelope mentioning the details on it)

List of standard forms-

(1) Financial Online bid Letter

(2) Price Schedule-
(i) For abroad items
(ii) For indigenous items

(2) Statement for deviations from financial terms and conditions.

1. Financial Online bid Letter

The Director
INDIAN INSTITUTE OF TOXICOLOGY RESEARCH
VISH VIGYAN BHAWAN
MG MARG, LUCKNOW-226001

e-tender Reference No:
File reference No:

Subject: Price Online bid for_____.

Sir,

Having examined the online bidding documents and having submitted the technical online bid for the same, we, the undersigned, hereby submit the Financial Online bid for supply of goods and services as per the schedule of requirements and in conformity with the said online bidding documents.

We hereby offer to supply the Goods/Services at the prices and rates mentioned in the Financial Online bid in INR.

We do hereby undertake that, in the event of acceptance of our online bid, the supply of Goods/Services shall be made as stipulated in the schedule to the Online bid document and that we shall perform all the incidental services.

The prices quoted are inclusive of all charges including installation and commissioning charges in the Indian Institute of Toxicology Research, Lucknow or its units.

We enclose herewith the complete Financial Online bid in the prescribed e-tender format as per your requirement in accordance with provisions contained under Para 1.11. This includes:

(1) Price Schedule- (Enclose whichever is applicable)
(i) Price Schedule for Goods being offered within INDIA
(2) Statement for deviations from financial terms and conditions.

We agree to a online bide by our offer for a period of ***One Hundred Eighty (180)*** days from the date fixed for opening of the online bid documents and that we shall remain bound by a communication of acceptance within that time.
We have carefully read and understood the terms and condition of the online bid document and we do hereby undertake to supply as per these terms and conditions. The Financial Deviation are only those mentioned in the statement of deviation from financial terms and conditions.

We do hereby undertake, that until a formal work order is prepared and executed, this online bid, together with your written acceptance thereof and placement of letter of intent awarding the work order, shall constitute a binding contract between us.

1. bidder's Legal Name *[insert bidder's legal name]*
2. In case of JV, legal name of each party: *[insert legal name of each party in JV]*
3. bidder's actual or intended Country of Registration: *[insert actual or intended Country of Registration]*
4. bidder's Year of Registration: *[insert bidder's year of registration]*
5. bidder's Legal Address in Country of Registration: *[insert bidder's legal address in country of registration]*

All corrections/deletions should invariably be duly attested by the person authorized to sign the online bid document).

Dated this day of_____ Signature of bidder

Details of enclosures

Full Address:
Telephone No.
Telegraphic Address:
E-mail:

COMPANY SEAL

2. Price Schedule Form

PRICE SCHEDULE FOR GOODS BEING OFFERED WITHIN INDIA

Name of the bidder_____
NIT Reference No._____
File Reference No._____

Price Bid Format: The Price Bid Format is given below and Bidders are required to fill this up correctly with full details, as required under. Incomplete Bid shall be disqualified.

PART- A (LABORATORY INSRUMENTS / EQUIPMENTS)

	SR NO	EQUIPMENT NAME	MAKE/ MODEL	QTY	UNIT PRICE	GST	TOTAL COST
PART – A	1.	CLASS II B2 TYPE BIOSAFETY CABINET		02			
	2.	CLASS II A2 TYPE BIOSAFETY CABINET		02			
	3.	REFRIGERATED INCUBATOR		02			
	4.	REFRIGERATED INCUBATOR SHAKER		04			
	5.	CO_2 INCUBATOR REFRIGERATED		02			
	6.	UPRIGHT PHASE CONTRAST & DARK FIELD, FLUORESCENCE MICROSCOPE WITH IMAGE ANALYSIS SYSTEM		01			
	7.	INVERTED MICROSCOPE		01			
	8.	REFRIGERATED HIGH SPEED CENTRIFUGE		02			
	9.	REFRIGERATED MICROFUGE		03			
	10	LIQUID NITROGEN CAN – 47L CAPACITY WITH RACKS		02			
	11.	LIQUID NITROGEN CAN – 33L CAPACITY		02			
	12.	LIQUID TRANSPORT CONTAINER		01			
	13.	WATER PURIFICATION SYSTEM		01			
	14.	AUTOCLAVES (STEAM JACKETED & VERTICAL)		01			
	15.	FULLY AUTOMATIC HIGH PRESSURE HIGH VACUU		01			

		VERTICAL AUTOCLAVE					
	16.	FUME HOOD		01			
	17.	THERMOCYCLERS (PCR) MACHINE		02			
	18.	HORIZONTAL GEL ELECTROPHORESIS SYSTEM		02			
	19.	VERTICLA GEL ELECTROPHORESIS APPARATUS WITH WESTERN BLOTTING SYSTEM		01			
	20.	CHEMILUMINESCENCE AND GEL IMAGING AND ANALYSIS SYSTEM		01			
	21.	**High throughput Real- Time(Q) RT-PCR**		02			
	22.	**Electronic multichannel pipettes set**		02 SETS			
	23.	**Uni-channel Pipetteset**		43 SETS			
	24.	**Analytical Balance(200 gm)**		02			
	25.	**Analytical Balance(500 gm)**		02			
	26.	- 20° Vertical DeepFreezer		06			
	27.	Freezer -80 (-80°C Ultra-low Freezer)		02			
	28.	Ultra-Low Temperature -86 Deep Freezer		01			
	29.	Refrigerator		06			
	30	Benchtop Freezdryer/ Lyophillizer		01			
	31.	Cold Storage		01			
	32.	Microvolume Spectrophotometer		01			
	33.	Double Beam UV-VIS Spectrophotometer		02			
	34.	Anaerobic workstation with gascylinder complete		02			
	35.	Refrigerated Vacuum Concentrator		01			
	36.	Automatic colonycounter		01			

	37.	Automated microbial identification system		01			
	38.	Bio-fermenter unit		01			
	39.	High PerformanceLiquid Chromatography (HPLC) System		01			
	40.	Bioburden analyzer online		01			
	41.	BOD Incubator		01			
	42.	Ice-making machine		01			
	43.	Hot air oven		02			
	44.	Electrical Conductivity meter		02			
	45.	pH Meter		03			
	46.	Digital hot platestirrer		02			
	47.	Vortex Mixer		04			
	48.	Refrigerated and heating circulating Water bath		02			
	49	Hot plate		02			
	50	Microwave oven		02			
	DISCRIPTION			**COST**	**GST**	**TOTAL COST**	
PART-B	CLEAN ROOM FINISHES AND ASSOCIATED CIVIL WORK (FOR THE COMPLETE MICROBIOLOGY FAILITY), HEATING VENTILATION & AIR- CONDITIONING (HVAC) SYSTEM, COMPLETE ELECTRICAL WORK OF THE MICROBIOLOGY FACILITY AS PER SPECFICATION ALONG WITH POWER BACKUP SYSTEM, BUILDING ANGEMENT SYSTEMS (BMS) AND CONTROL, CLEAN ROOM EQUIPMENTS AND FURNITURE (AS PER SPECIFICATION), UTILITY WORK. (Please quote the total price of Microbiology facility except equipment's mentioned in Part-A) and submit the Bill of Quantity (BOQ) for the entire project in the technical bid without mentioning the Price).						
		TOTAL COST					

Note:

a. **The Bidders are requested to submit the Price Bid in xls. as well as pdf format (a separate**

cover for uploading the pdf quotation has been provisioned in the NIT). The detailed price Bid has to be prepared after taking in to account the complete Technical Specification of the NIT. Since this is a turnkey project, the LQ-1 shall be decided on the basis of final cost for all the requirement.

b. The financial bid has to be punched on .xls file provided in CPP Portal and has to be signed by the authorized representative of the bidder with full name designation and seal. **The price of each equipment has to be quoted separately, whereas, the total price of Part-B should be quoted separately.** The above quote should include Clearing and Transportation charges and Installation and Commissioning at CSIT-IITR Designated Place on FOR Basis.

c. **This is a turnkey project.** The bidder has to quote price for all the items mentioned above. In case bidder fails to quote price for all the items his bid will not be considered for evaluation.

d. **The Bill of quantity (BOQ) for the entire project (As per part-B of the Price Schedule Form) has to be submitted in the Technical Bid without mentioning the Price.**

e. Explanatory notes, if so desired, can be separately submitted along with the financial bid but financial bid in the above format is required to be submitted.

f. Please indicate separately any duties/ taxes etc.

Signature of bidder_____
Name in Block letter _____
Date_____

Capacity in which Signed_____

(iii) STATEMENT OF FINANCIAL DEVIATIONS

Following are the financial deviations and variation(s) from the exceptions to the specifications and documents for the online bid document. These deviation(s) and variation(s) are exhaustive.
Except these deviation(s) and variation(s), the entire work shall be performed as per your specifications and documents.

Sl No.	Section No.	Clause No.	Statement of Deviations / Variations

S. No. Section No. Clause No. Statement of deviation(s) and variation(s)

Signature of the bidder
Name:
Place:
Date:
Address:
Company Seal