



INSTITUTE OF NANO SCIENCE AND TECHNOLOGY, MOHALI

(An autonomous Research Institute of Department of Science and Technology,
Government of India)

Habitat Centre, Sec-64, Phase X, Mohali – 160062, PUNJAB

Phone No: 0172 – 2210073/74/75, Fax No: 0172 – 2210074

Website: www.inst.ac.in

BID DOCUMENT

PRESS TENDER (TWO BID)

Director, INST – Mohali invites tenders from reputed manufacturers in India for the supply of the following items under two bid systems:

Sno	Tender No	Item Description	Qty	EMD (in Rs.)
1	INST/12(34)/2020-Pur	LAB FURNITURE	As per Specs	8,00,000/-

Note: SUPPLIERS WHO HAVE DOWNLOADED THE TENDER DOCUMENTS FROM THE WEBSITE, ARE REQUIRED TO SUBMIT Rs.2,950/- (TWO THOUSAND NINE HUNDRED FIFTY ONLY) FAVOURING DIRECTOR, INST, MOHALI, BEING THE COST OF TENDER DOCUMENTS, FAILING WHICH THE TENDER WILL NOT BE CONSIDERED.

Details of Tender Fee/EMD

Tender fee/EMD is to be obtained from the bidders except those who are registered with the Central Purchase Organisation, National Small Industries Corporation (NSIC) or the concerned Ministry or Department for lab furniture. The tenderer should submit Tender Fee/EMD amount as per tender ref. no. through NEFT/RTGS in INST Account. Account Details are as under:

- Name of Beneficiary:** Institute of Nano Science and Technology (INST)
- Account No.** 2452201001102
- Name of Bank:** Canara Bank, Sector 34, Chandigarh
- IFS Code:** CNRB0002452
- MICR Code:** 160015003
- Swift Code:** CNRBINBBFFC

The detailed Tender Documents with complete terms & conditions with technical specifications are available on our website <http://www.inst.ac.in> and also available at GOI portal www.eprocure.gov.in

Last date of receipt of complete tenders is **Date 10th August, 2020 at 2.30 PM**

The date of opening of technical bids is **Date 10th August, 2020 at 3.00 PM onwards.**

Hard Copy of the Bid to be submitted to:

The Director, INST Mohali, Habitat Center, Phase 10, Mohali

Director, INST invites tenders (Two Bid System) in closed/sealed covers with wax/cello tape/ company seal from the reputed manufacturers in India for the supply of the following item(s):

Sno	Tender No	Item Description	Qty	EMD (in Rs.)
1	INST/12(34)/2020-Pur	LAB FURNITURE	As per Specs	Rs. 8,00,000/-

- PLEASE REFER TO THE DETAILED SPECIFICATION FOR THE RESPECTIVE ITEM AT THE END OF THIS TENDER DOCUMENT (CH.XV).
- EACH ITEM HAS TO BE QUOTED SEPARATELY.

Interested parties are to download the tender documents directly from the website and pay Rs.2,950/- (Rupees Two Thousand Nine Hundred Fifty only) in favour of Director, INST as cost of tender documents. Both the bids i.e. the Technical & Price bids must be submitted on or before 10th August, 2020 at 2.30 pm along with EMD.

IMPORTANT NOTE, DATES & TIME

Tender Fee	Rs. 2,950/-
Earnest Money	Rs. 8,00,000/-
Pre-Bid Meeting	10 th July, 2020 at 11:00 AM to 1:00 PM (Only through skype Video Conferencing)
Institute Skype ID	inst.mohali1
Last Date & Time For Submission	10th August, 2020 at 2.30 pm (IST)
Date / Time of Opening of Bids	10th August, 2020 at 3.00 PM (IST)
Venue of Bid Opening at INST	INST, Habitat Center, Phase 10, Mohali
Tenders to be submitted at	INST, Habitat Center, Phase 10, Mohali

Pre-Bid Meeting (PBM)

- The objective of PBM is to provide a platform for clarifying issues and clearing doubts, if any, about the specifications and other allied technical/commercial details of the bid document. Bidders are requested to submit their bids only after the PBM so as to take care of the changes made in the bidding document, if any.
- The prospective participants should inform their intention to participate and send written queries at the email: purchase@inst.ac.in positively up to 7th July, 2020 to enable us to keep the response ready. Queries after 7th July, 2020 upto 4.00PM will not be entertained.
- Pre-bid queries will be entertained only through **skype video conference** due to COVID-19 we are unable to conduct meeting at INST Mohali.
- Time slot for **skype video conference will be given on receipt of emails regarding pre-bid queries.**
- Change in the technical specifications and terms & conditions if any, for the above item after pre-bid deliberations, will be uploaded on the INST website & CPPP Website. All vendors are requested to quote accordingly.

IMPORTANT NOTE:

☞ PLEASE STRICTLY ADHERE TO THE DATES / TIMES MENTIONED IN THIS DOCUMENT

☞ PLEASE FILL & ENCLOSE THE BRIEF SUMMARY OF QUOTATION & CHECKLIST AS PROVIDED AT THE END OF THIS CHAPTER & ENCLOSE WITH YOUR BID (WITH PRICE BID IN CASE OF TWO BID SYSTEM)

The bids (Technical Bids in case of Two Bid Tenders) will be opened in the presence of representatives of tenderers, if any. If any unscheduled holiday occurs on the date of submission/opening, then next working day shall be the prescribed date of submission/opening. Requests for postponement will not be entertained. Fax/email bids may not be accepted. Late/Delayed tenders shall not be opened. Please send your bids to the INST, Mohali at the address mentioned above.

The Director, INST reserves the right to accept/reject any offer in part or full without assigning any reason.

BRIEF SUMMARY OF QUOTATION & CHECKLIST (Enclose with Price Bid)

(Information provided in this sheet shall not to be used for evaluation/comparison purpose) FOR Rs. QUOTE FILL RELEVANT INFORMATION IN Rs.

(Please Fill It Up. **DON'T Write** 'AS PER QUOTATION' / 'PLEASE REFER TO OUR OFFER' etc.)

Quotation Ref. No.		Date	
01	Name of the Item (Equipment / System etc.)		
02	Main Item Model NUMBER		
03	Total FCA/FOB Value Of The Offered Package (Inclusive of Indian Agency Commission, if any)		
04	Insurance & Airfreight Charges		
05	CIF / CIP/FOR Mohali Value Of The Package		
06	Payment Terms (Conditional Payment Terms Will NOT Be Accepted)		
07	Delivery Time (Weeks/Months)		
08	Warranty (Months/Years)		
09	Validity of Quotation (Days/Months)		
10	Product Import Code* (ITC HS Code of the item / main item) (Please consult any Export / Import / Customs Agent or ITC Handbook)		
11	Country of Origin (product)		
12	Port(s) of Shipment		
13	Approx. Shipment Wt. (Chargeable Wt.) of the Item (kg)		
14	Approx. Dimensions (LXBW)/Vol. of The Packed Consignment		

CHECKLIST

CHECKLIST

CHECKLIST

01	Following Things Are Mentioned On The Main (Outer) Envelope •Item Name •INST Reference No. •Last Date For Submission Of Tender •Date Of Opening Of Tender •Firm's Name & Address	
02	EMD is Enclosed (with Technical Bid Envelope In Case Of Two Bid)	
03	Demand Draft/TDR is in favour Of Centre of Innovative and Applied Bioprocessing , and Payable At Mohali(If Applicable) Bidding Firm's Name / Our Ref. No. etc. has been mentioned on the back side of Demand Draft	

04	Prices have been quoted keeping in view clauses C8, C13, C23 of Chapter II (ITB) and SCC clauses 3,7,8, and 9 of Chapter IV	
05	The Bid Papers Have Been PUNCHED With A Hole On The <u>Top Left Hand Corner Side</u> And <u>Properly Tagged</u> .	
06	Only <u>Relevant</u> Documents (Technical Brochures/Leaflets Etc.) Required In Support Of The Quoted Item Have Been Enclosed. No Irrelevant Papers like ITCC, User Recommendations, and Order Copies etc. Have Been Enclosed Unless Specifically Asked For	
07	Quotation Have Been Duly Signed And Stamped By the Authorized & Competent Person. All Cuttings/Over Writings Have Been Duly Checked, Initialled And Stamped. (If Applicable)	
08	Single Combined Quote Has Not Been Submitted OR 'Price Bid' Has Not Been Enclosed In The Envelope Marked 'Technical Bid'	
09	This Page Will Be Enclosed With The Price Bid	

We have read and understood the tender terms and conditions. The undersigned is competent to sign the tender document including this page on behalf of the quoting firm.

Date

(Signature with Seal)

CHAPTER – II: INSTRUCTION TO BIDDERS

A. INTRODUCTION

1 Eligible Bidders

- 1.1 This Invitation for Bids is open to all manufacturers or their dealers specifically authorised by the manufacturers (see Chapter VII of this document) to quote on their behalf for this tender.
- 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 Bids.

2 Cost of Bidding

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

B. THE BIDDING DOCUMENTS

3 Cost of Bid Document

- 3.1 The complete bid document may be downloaded directly from the INST website <http://www.inst.ac.in> and make online payment of Rs 2,950/- (Two thousand nine hundred fifty only) in favour of The Director, INST as cost of the tender documents.

4 Contents of Bid Document

- 4.1 The goods required, bidding procedures and contract terms are prescribed in this Bid Document which includes the following:

S. No.	Title	Chapter No.
01	Notice Inviting Tender (NIT)	I
02	Instructions to Bidder (ITB)	II
03	General Conditions of Contract (GCC)	III
04	Special Conditions of Contract (SCC)	IV
05	Bid Form	V
06	Bid Security Form	VI
07	Manufacturer’s Authorisation Form	VII
08	Bidder’s Performance Statement Form	VIII
09	Service Support Details	IX
10	Deviation Statement Form (ITB/GCC/SCC)	X
11	Technical Compliance Statement Form	XI
12	Contract Form	XII
13	Performance Security Form	XIII
14	Qualification Requirements	XIV
15	Technical Specifications & Other Important Requirements	XV

- 4.2 The Bidder is expected to examine all instructions, forms, terms (ITB/GCC/SCC etc.), and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or submission of a bid not substantially responsive shall result in rejection of the bid.

5 **Language of Bid**

- 5.1 The Bid prepared by the Bidder and all correspondence and documents relating to the bid exchanged by the bidder and the purchaser shall be written in English language, provided that any printed literature furnished by the bidder may be written in another language but it is to be accompanied by an English translation of its pertinent passage(s) duly signed and verified as true English translation. The responsibility for the correctness of the translation will be solely and completely on the bidder and INST shall not be responsible for any loss/likely loss due to error in translation whatsoever. In such cases, for the purpose of interpretation of the bid, the English translation shall only govern.

6 **Documents Comprising the Bid**

The bid is required to be submitted in TWO PARTS. One part is the Techno-Commercial Unpriced Bid and the other part is the Financial / Price Bid.

- 6.1 The Techno-Commercial Unpriced Bid prepared by the Bidder shall include the following without indicating the price in the Bid Form.
- (i) Bid Security/EMD As Specified In the Invitation to Bids (ITB)
 - (ii) Service Support Details Form
 - (iii) T&C Deviation Statement Form
 - (iv) Technical Specification Compliance Form
 - (v) Performance Statement Form
 - (vi) Manufacturer's Authorization Form
 - (vii) Documentary evidence establishing that the bidder is eligible to bid and is qualified to perform the contract if its bid is accepted as per qualification requirements/criteria
 - (viii) Bid Form
 - (ix) The Comprehensive Annual Maintenance Contract (CAMC) terms & conditions detailing the exclusions, if any and the estimated life of the equipment offered.
 - (x) If demonstration of the goods is deemed essential to ascertain conformity with the tendered specifications, then confirmation reflecting willingness to arrange demonstration of the equipment offered free of charge at INST or any other location on a mutually agreeable date, prior to opening of priced bid.
 - (xi) Pre-installation requirements should be mentioned with the technical bid.
- 6.2 The Price/Financial Bid shall comprise the Techno Commercial Bid with price indicated and the format of BRIEF SUMMARY OF QUOTATION & CHECKLIST included at the beginning of this document.

7 **Bid Prices**

- 7.1 The Bidder shall indicate the unit prices and total bid prices of the goods it proposes to supply under the order and enclose it with the priced bid. INST is a public funded scientific R&D institution (Academic). Please consider quoting special prices applicable to academic institutions as per your company policies.
- 7.2 Prices indicated shall be entered separately in the following manner:
- (i) The price of the goods, quoted (ex-works, ex-factory, ex-showroom, ex-warehouse, or off-the-shelf, as applicable), including all duties and sales and other taxes already paid or payable
 - (ii) Taxes: INST is having exemption of payment of Excise Duty under notification number 10/97 dated 01.03.1997 and Customs Duty under notification No.51/96 dated 23.07.1996. Hence Excise Duty and Customs Duty, if any, should be shown separately. Please mention the applicable taxes (VAT/Service Tax etc.) clearly. We don't issue any 'Form C' or 'Form D'. If there is no explicit mention of taxes in your offer then quoted price will be deemed inclusive of such taxes. No other charges except those mentioned clearly in the quotation will be paid.
 - (iii) Rates should be quoted FOR at INST, Mohali inclusive of packing, forwarding, installation and commissioning charges etc. If ex-works prices are quoted then packing, forwarding, documentation, freight and insurance charges must be clearly mentioned separately. Vague terms like "packing, forwarding, transportation etc. extra" without mentioning the specific amount/percentage of these

charges will NOT be accepted. Such offers shall be treated as incomplete and rejected. Where there is no mention of packing, forwarding, freight, insurance charges, such offers shall be summarily rejected as incomplete.

7.3 Prices quoted by the bidder shall remain fixed during the entire period of contract and shall not be subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected.

8 Bid Currencies

8.1 Prices shall be quoted in Indian Rupees (INR)

9 Documents Establishing Bidder's Eligibility and Qualifications

9.1 Pursuant to ITB 7, the bidder shall furnish, as part of its bid, documents establishing the bidders' eligibility to bid and its qualification to perform the contract if its bid is accepted

9.2 That the bidder meets the Qualification Requirements listed in Chapter XIV and elsewhere in this document.

9.3 BIDDER IS TO INFORM IF ANY SPECIAL CERTIFICATE OR DECLARATION REQUIRED W.R.T THE END USE OF THE ITEM OR FOR SPARES IN COMPLIANCE TO SUPPLIER'S OWN REQUIREMENTS TO EXECUTE THE PURCHASE ORDER. FORMAT TO BE ENCLOSED WITH THE TECHNICAL BID. PURCHASER MAY AT ITS DISCRETION DISQUALIFY THE BIDDER AT THIS STAGE NOTWITHSTANDING THE BID MEETING ALL OTHER CRITERIA.

10 Documents Establishing Goods' Eligibility and Conformity to Bid Document

10.1 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.

10.2 Specifications are basic essence of the product. It must be ensured that the offers are strictly as per our specifications. At the same time it must also be kept in mind that merely copying our specifications in their quotation shall not make firms eligible for consideration. The documentary evidence of conformity of the goods and services to the Bid Document may be in the form of literature, drawings and data, and shall consist of:

- (i) A detailed description of the essential technical and performance characteristics of the goods;
- (ii) A list giving full particulars, including available sources and current prices, of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period of two years, following commencement of the use of the goods by the Purchaser; and
- (iii) 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.

10.3 For purposes of the commentary to be furnished pursuant to above, the Bidder shall note that standards for workmanship, material and equipment, and references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications. Technically unsuitable offers, offers not confirming to tender schedule shall be rejected.

11 Bid Security/EMD

11.1 The Bidder shall furnish, as part of its bid, a bid security for an amount as specified in the Invitation for Bids/NIT. The bid security is required to protect the Purchaser against the risk of Bidder's conduct, which would warrant the security's forfeiture.

11.2 The bid security shall be in Indian Rupees:

- (i) A bank guarantee issued by a Nationalized /Scheduled bank, in the form provided in the Bid Document (Chapter VI) and valid for 45 days beyond the validity of the bid; or
- (ii) A Banker's cheque/demand draft or TDR in favour of the purchaser.
- (iii) By Bank Transfer in to the account of INST

- 11.3 Any bid not secured in accordance with Clauses 12.1 and 12.2 above will be rejected by the Purchaser as non-responsive.
- 11.4 Unsuccessful bidder's bid security will be discharged/returned as promptly as possible but not later than 15 days after the expiration of the period of bid validity or placement of order whichever is later.
- 11.5 The successful Bidder's bid security will be discharged upon the Bidder furnishing the performance security.
- 11.6 The bid security may be forfeited:
- (i) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or
 - (ii) In case of a successful Bidder, if the Bidder fails to furnish order acceptance within 21 days of the order and/or fails to furnish Performance Security in the prescribed format within the time specified.

12 Period of Validity of Bids

- 12.1 Bids must remain valid for at least 120 days after the date of bid opening prescribed by the Purchaser. A bid valid for a shorter period may be rejected by the Purchaser as non-responsive.
- 12.2 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 under Clause 12 shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.
- 12.3 Bid evaluation will be based on the bid prices without taking into consideration the above corrections.

13 Format and Signing of Bid

- 13.1 The Bidder shall submit the bids in two separate envelopes. One envelope shall contain Techno commercial un-priced bid and the other shall contain the priced bid.
- 13.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract. All pages of the bid, except for un-amended printed literature, shall be initialled by the person or persons signing the bid.
- 13.3 Any interlineations, erasures or overwriting shall be valid only if the persons or persons signing the bid initial them.
- 13.4 The Bidder shall furnish information on commissions or gratuities, if any paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract as per the bid form.

D. SUBMISSION OF BIDS

14 Sealing and Marking of Bids

- 14.1 The bidder shall seal the Techno Commercial Unpriced Bid and the Price/Financial Bid in two separate envelopes duly marked as "Techno Commercial Unpriced Bid" and "Price/Financial Bid" respectively. Both the envelopes shall then be sealed in one outer (main) envelope.
- 14.2 The inner and outer envelopes shall:
- (i) Be addressed to the Purchaser at the following address:

The Director,

Institute of Nano Science and Technology, Habitat Center, Phase 10, Mohali

- (ii) Bear the Item Name /Reference No. / Last Date For Submission Of Tender / Date Of Opening Of Tender / Firm's Name & Address and a statement "Do not open before Time hrs (IST) on Date." As per the NIT details.
- 14.3 If the outer envelope is not sealed and marked as required Clause 15.2, the Purchaser will assume no responsibility for the bid's misplacement or premature opening.

14.4 Telex, Cable, Fax or e-mail bids will be rejected.

15 Deadline for Submission of Bids

15.1 Bids must be received by the Purchaser at the address specified under Clause 15.2 no later than the time and date specified in the NIT. In the event of the specified date for the submission of Bids being declared a holiday for the Purchaser, the Bids will be received up to the appointed time on the next working day.

15.2 The Purchaser may, at its discretion, extend this deadline for submission of bids by amending the bid documents in accordance with Clause 5, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

16 Late Bids

16.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser, pursuant to Clause 16, will be rejected and/or returned to the Bidder.

17 Modification and Withdrawal of Bids

17.1 The Bidder may modify or withdraw its bid after the bid's submission; provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bids.

17.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of Clause 15. A withdrawal notice may also be sent by telex or cable or fax or e-mail but followed by a signed confirmation copy, post marked not later than the deadline for submission of bids.

17.3 No bid may be modified subsequent to the deadline for submission of bids.

17.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the bid form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to Clause 12.6.

E. OPENING AND EVALUATION OF BIDS

18 Opening of Bids by the Purchaser

18.1 The Purchaser will open bids (Techno Commercial Unpriced Bids in case of Two Bids), in the presence of Bidders' representatives who choose to attend, as per the schedule given in invitation to bids.

18.2 The Bidders' representatives who are present shall sign the quotation opening sheet evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for the Purchaser, the Bids shall be opened at the appointed time and location on the next working day.

18.3 The bidders' names, bid modifications or withdrawals, specifications, and the presence or absence of requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bid.

18.4 Bids (and modifications sent pursuant to Clause 18.1) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances.

18.5 If in response to our TWO BID enquiry, a single combined bid is submitted, it will be rejected straightway. Similarly if 'PRICE BID' has been found enclosed in the envelope marked 'TECHNICAL BID' the same shall also be rejected summarily.

18.6 The bids of all the parties whose price bid is not in a separate sealed cover or the rates quoted by them find mention in their technical bid shall be rejected. The price quoted for the tender shall be mentioned only in the price bid.

19 Clarification of Bids

19.1 To assist in the examination, evaluation and comparison of bids, the Purchaser may, at its discretion ask the bidder for any clarification(s) of its bid. The request for clarification and the response shall be in writing and no change in the price substance of the bid shall be sought, offered or permitted. However no post Bid clarifications at the initiative of the Bidder shall be entertained.

20 Preliminary Examination

- 20.1 The Purchaser will examine the bids to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order. Bids from suppliers, without proper Authorization from the manufacturers shall be treated as non-responsive and rejected summarily.
- 20.2 Arithmetical errors in the priced bids will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the supplier does not accept the correction of errors, its bid will be rejected. If there is a discrepancy between the price quoted in words and figures, whichever is the higher of the two shall be taken as the bid price for comparison.
- 20.3 The Purchaser may waive any minor informality/deviation in specifications, non-conformity, or irregularity in a bid, which does not constitute a material deviation, provided such a waiver, does not prejudice or affect the relative ranking of any Bidder.
- 20.4 Prior to the detailed evaluation, the Purchaser will determine the substantial responsiveness of each bid to the Bid Document. For purposes of these Clauses, a substantially responsive bid is one, which conforms to all the terms and conditions of the Bid Document without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Bid Security/ Performance Security, Warranty, Force Majeure, Applicable Law and Taxes & Duties will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 20.5 If a 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 non-conformity.
- 20.6 After downloading, the language of standard clauses etc. mentioned in this 'Bid Document' should not be tempered with/ changed/modified in any manner whatsoever. If any such modification etc. comes to our knowledge at any stage, the bid shall be rejected immediately and EMD shall also be forfeited.

21 Evaluation & Comparison Of Bids

- 21.1 For the bids surviving the technical evaluation which have been found to be responsive the evaluation & comparison shall be made on the basis of final landing cost of purchase after all discounts, freight, forwarding, insurance, taxes etc. are taken in to account.
- 21.2 Conditional tenders/discounts etc. shall not be accepted. Rates quoted without attached conditions (viz. Discounts having linkages to quantity, payment terms etc.) will only be considered for evaluation purpose. Thus conditional discounted rates linked to quantities and prompt/advance payment etc, will be ignored for determining inter-se position. The Purchaser however reserves the right to use the discounted rate/rates considered workable and appropriate for counter offer to the successful tenderers.
- 21.3 Where there is no mention of packing, forwarding, freight, insurance charges, taxes etc. such offers shall be rejected as incomplete. Therefore, quotations showing only Ex-Works (EXW) prices shall be rejected summarily.

22 Contacting the Purchaser

- 22.1 Subject to ITB Clause 20, no Bidder shall contact or attempt to contact the Purchaser or anyone related to the Purchaser on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the Purchaser, it should do so in writing.
- 22.2 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 bid.

23 Post Qualification

- 23.1 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 Clauses 10 & 11.
- 23.2 The determination will take into account the Bidder's financial, technical and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clauses 10 & 11, as well as such other information as the Purchaser deems necessary and appropriate.
- 23.3 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 bid.

24 Award Criteria

- 24.1 Subject to ITB Clause 28, the Purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.

25 Purchaser's Right To Vary Quantities At Time Of Award

- 25.1 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.

26 Purchaser's Right To Accept Any Bid And To Reject Any Or All Bids

- 26.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or bidders or any obligation to inform the affected Bidder or bidders of the grounds for the Purchaser's action.

27 Notification of Award

- 27.1 Prior to the expiration of the period of 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 bid has been accepted by way of a Purchase Order.
- 27.2 Upon the successful Bidder's furnishing of performance security pursuant to ITB Clause 30, the Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to Clause 12.

28 Performance Security

- 28.1 Within 21 days of the receipt of notification of award/purchase order from the Purchaser, the successful Bidder shall furnish the performance security (10% of the order value unless mentioned otherwise) in the Performance Security Form provided in the Bid Document.
- 28.2 Failure of the successful bidder to accept the order shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security and call for new bids.

29 Order Acceptance

- 29.1 The successful bidder should submit acceptance of the Purchase Order immediately but not later than 21 days in any case from the date of issue of the Purchase Order failing which it shall be presumed that the vendor is not interested and his bid security is liable to be forfeited pursuant to clause 12. 6 of ITB.

CHAPTER – III: GENERAL CONDITIONS OF CONTRACT (GCC)

1 Definitions

- 1.1 In this Contract, the following terms shall be interpreted as indicated:

- (i) "The Order" means the Purchase Order placed by the Purchaser including all the attachments and appendices thereto and all documents incorporated by reference therein;
- (ii) "The Contract Price" means the price payable to the Supplier under the Order for the full and proper performance of its contractual obligations;
- (iii) "The Goods" means all the equipment, machinery, Furniture and/or other materials, which the Supplier is required to supply to the Purchaser under the Contract;
- (iv) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training and other obligations of the Supplier covered under the Contract;
- (v) "GCC" mean the General Conditions of Contract contained in this section.
- (vi) "SCC" means the Special Conditions of Contract.
- (vii) "The Purchaser" as specified in Special Conditions of Contract.
- (viii) "The Purchaser's country is "India".
- (ix) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract. (x) "Day" means calendar day.

2 Application

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

3 Standards

- 3.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, 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.

4 Use of Contract Documents and Information

- 4.1 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. The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in GCC Clause 4.1 except for purposes of performing the Contract.
- 4.2 Any document, other than the Contract itself, enumerated in GCC Clause 4.1 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.
- 4.3 The purchaser may be under obligation to make any document / information submitted by the bidder in response to this bid public if required under the provision of Indian Right to Information Act 2005. Therefore, bidder may explicitly indicate if any document / information in his tender include information of commercial confidence, trade secrets or intellectual property, the disclosure of which would jeopardize the competitive position of the bidder.

5 Patent Rights

- 5.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

6 Submission of the bids

- 6.1 All bids complete in every respect must reach this office within the last date and time of receipt of bid. No extension shall be allowed for any reason whatsoever. Late tenders, Tenders received without Bid security/Earnest Money, cost of bidding documents, if applicable etc. shall be rejected summarily.

7 Performance Security

- 7.1 Within 21 days of receipt of the notification of contract award/purchase order, the Supplier shall furnish performance security for the amount specified in SCC.
- 7.2 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.
- 7.3 The Performance Security shall be submitted in the form of Bank Guarantee issued by a Nationalized/Scheduled bank located in India on the format provided in the bidding documents.
- 7.4 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.
- 7.5 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.

8 Inspections and Tests

- 8.1 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. SCC and / or Technical Specifications 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.
- 8.2 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.
- 8.3 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.
- 8.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Purchaser's Site 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.
- 8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9 Packing

- 9.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. 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 specialized handling facilities at all points in transit.
- 9.2 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.
- 9.3 The purchaser reserves the rights to arrange to carry out packing and value inspections through their freight forwarding agents particularly in case of high value and sensitive items.

10 Delivery and Documents

- 10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified by the Purchaser in the order within the period as indicated in the SCC. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.

11 Insurance

11.1 Wherever required, the Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in SCC.

12 Transportation

12.1 Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within India, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the Contract Price.

13 Incidental Services

13.1 The supplier may be required to provide any or all of the following services, including additional services, specified in SCC, if any:

- (i) Performance or supervision of the on-site assembly and/or start-up of the supplied Goods;
- (ii) Furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (iii) Furnishing of detailed operations and maintenance manual for each appropriate unit of supplied Goods;
- (iv) Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
- (v) Training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance and/or repair of the supplied Goods.

14 Spare Parts

14.1 As specified in the SCC, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- (i) 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 obligations under the Contract; and (ii) In the event of termination of production of the spare parts:
- (iii) Advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
- (iv) Following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if requested.

14.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers, belts etc. Other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

15 Warranty

15.1 The Supplier warrants that the Goods supplied under this Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except when the design and/or material is required by the Purchaser's Specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination. The warranty should be comprehensive and on site.

15.2 This warranty shall remain valid for 3 Years from the date of actual and satisfactory installation of the equipment, unless specified otherwise in the SCC or along with specifications.

15.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall immediately within in 02 days arrange to repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The Supplier shall take over the replaced parts/goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/goods thereafter. The period for correction of defects in the warranty period is 02 days. If the supplier having been notified fails to remedy the defects within 02 days, the purchaser may proceed to

take such remedial action as may be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the purchaser may have against the supplier under the contract.

16 Payment

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

16.2 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 GCC Clause 10, and upon fulfilment of other obligations stipulated in the contract.

16.3 Payments shall be made promptly by the Purchaser normally within sixty days after submission of the invoice or claim by the Supplier.

16.4 Payment shall be made in currency as indicated in the order.

17 Prices

17.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid.

18 Change Orders

18.1 The Purchaser may at any time, by written notice given to the Supplier pursuant to GCC Clause 30, make changes within the general scope of the Contract in any one or more of the following:

- (i) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (ii) The method of shipping or packing;
- (iii) The place of delivery; and/or
- (iv) The Services to be provided by the Supplier. (v) The delivery schedule.

18.2 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.

19 Contract Amendments

19.1 Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

20 Assignment

20.1 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.

21 Subcontracts

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

21.2 Sub-contract shall be only for bought-out items and sub-assemblies.

22 Delays in the Supplier's Performance

22.1 Since time is the essence of the contract, 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 in the Contract.

22.2 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).

22.3 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.

22.4 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of penalty clause.

23 Penalty

23.1 Subject to GCC Clause 25, 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 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 24.

24 Termination for Default

24.1 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:

- (i) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 22; or
- (ii) If the Supplier fails to perform any other obligation(s) under the Contract.
- (iii) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

24.2 For the purpose of this Clause:

- (i) "Corrupt practice" means the offering, giving, receiving or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.
- (ii) "Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;"

24.3 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Purchaser may procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

25 Force Majeure

25.1 Notwithstanding the provisions of GCC Clauses 22, 23 and 24, 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.

25.2 For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26 Termination for Insolvency

26.1 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.

27 Resolution of Disputes

27.1 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.

27.2 If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms specified in the SCC. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication in an agreed national or international forum, and national or international arbitration.

28 Governing Language

28.1 The contract shall be written in English language. Subject to GCC Clause 30, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract, which are exchanged by the parties, shall be written in the same language.

29 Applicable Law

29.1 The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction as specified in SCC.

30 Notices

30.1 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 or e mail and confirmed in writing to the other party's address specified in the SCC.

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

31 Taxes and Duties

31.1 Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser.

CHAPTER – IV: SPECIAL CONDITIONS OF CONTRACT (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the General Conditions is indicated in parentheses. 1 Definitions (GCC Clause 1)

1.1 The Purchaser is 'The Director, Institute of Nano Science and Technology (INST), Mohali (Punjab), INDIA.

2. Performance Security (GCC Clause 7) Substitute clause 7.1 of the GCC by the following:

2.1 Within 21 days after the Supplier's receipt of order, the Supplier shall furnish Performance Security to the Purchaser for an amount of 10% of the contract value, valid upto 60 days after the date of completion of performance obligations including warranty obligations.

2.2 If the performance security is not furnished within the stipulated time as per 2.1 above, the contract shall be deemed terminated in pursuance of GCC Clause 24.

3 Inspection and Tests: Inspection and tests prior to shipment of Goods and at final acceptance are as follows:

- 3.1 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, prior to shipment to check whether the goods are in conformity with the technical specifications attached to the purchase order. Manufacturer's test certificate with data sheet shall be issued to this effect and submitted along with the delivery documents. The purchaser shall be present at the supplier's premises during such inspection and testing if need is felt. The location where the inspection is required to be conducted should be clearly indicated. The supplier shall inform the purchaser about the site preparation, if any, needed for installation of the goods at the purchaser's site at the time of submission of order acceptance.
- 3.2 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 and ascertaining conformity with the ordered specifications and quality. 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.
- 3.3 In the event of the ordered item failing to pass the acceptance test, a period not exceeding one 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.
- 3.4 Successful conduct and conclusion of the acceptance test for the installed goods and equipments shall also be the responsibility and at the cost of the Supplier.

4 Manuals and Drawings

- 4.1 Before the goods and equipments are taken over by the Purchaser, the Supplier shall supply operation and maintenance manuals. 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.
- 4.2 The Manuals shall be in the ruling language (English) in such form and numbers as stated in the contract.
- 4.3 Unless and otherwise agreed, the goods 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.

5 Packing (GCC Clause 9) Add as Clause 9.3 of the GCC of the following:

- 5.1 Packing Instructions: Each package will be marked on three sides with proper paint/indelible ink, the following:
- (i) Item Nomenclature (ii) Order/Contract No.
 - (iii) Place of Origin of Goods
 - (iv) Supplier's Name and Address
 - (v) Consignee details
 - (vi) Packing list reference number

6 Delivery and Documents (GCC Clause 10)

- 6.1 Delivery & installation of the goods should be made within a maximum of 14 weeks from the date of placement of purchase order. Within 24 hours of shipment, the supplier shall notify the purchaser and the insurance company by cable/telex/fax/e mail the full details of the shipment including contract number, railway receipt number/ AAP etc. and date, description of goods, quantity, name of the consignee, invoice etc. The supplier shall mail the following documents to the purchaser with a copy to the insurance company:
- (i) 4 Copies of the Supplier invoice showing contract number, goods' description, quantity, unit price, total amount;
 - (ii) Acknowledgment of receipt of goods from the consignee(s) by the transporter;
 - (iii) Insurance Certificate if applicable;
 - (iv) Manufacturer's/Supplier's warranty certificate;
 - (v) Inspection Certificate issued by the nominated inspection agency, if any, and the Supplier's factory inspection report; and
 - (vi) Certificate of Origin.

- (vii) Two copies of the packing list identifying the contents of each package.
- 6.2 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.

7 Insurance (GCC Clause 11)

- 7.1 For delivery of goods at the purchaser's premises, the insurance shall be obtained by the Supplier in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "All Risks" basis including War Risks and Strikes. The insurance shall be valid for a period of not less than 3 months after installation and commissioning.

8 Incidental services (GCC clause 13) The incidental services also include:

- 8.1 Furnishing of 01 set of detailed operations & maintenance manual.
- 8.2 Arranging the shifting/moving of the item to their location of final installation within INST premises at the cost of Supplier through their Indian representatives.

9 Warranty (GCC Clause 15)

- 9.1 Warranty period shall be 3 Years from date of installation and demonstration of Goods at the INST site of installation. The Supplier shall, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier shall at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as may be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests. The warranty should be comprehensive on site.
- 9.2 If a different period of warranty has been specified in the 'Technical Specifications' Chapter then the period mentioned in Clause 9.1 above shall stand modified to that extent.

10 Payment (GCC Clause 16)

- 10.1 100% payment shall be made by the Purchaser against delivery, inspection, successful installation, commissioning and acceptance of the equipment at INST in good condition and to the entire satisfaction of the Purchaser and on production of unconditional performance bank guarantee as specified in Clause 2.1 of SCC.

11 Penalty Clause (GCC Clause 23)

- 11.1 For delays: GCC Clause 23.1 -- The applicable rate is 1% per week and the maximum deduction is 10% of the contract value / price.

12 Resolution of Disputes (Clause 27): Add as GCC Clause 27.3 the following:

- 12.1 The dispute resolution mechanism to be applied pursuant to GCC Clause 27 shall be as follows:
- (i) In case of Dispute or difference arising between the Purchaser and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof shall apply to the arbitration proceedings. The dispute shall be referred to the Director, Institute of Nano Science and Technology (INST) Mohali and if he is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed shall be final, conclusive and binding on all parties to this order.
 - (ii) The venue of the arbitration shall be the place from where the order is issued.

13 Applicable Law (GCC Clause 29) Add as Clause 29.2 of the GCC the following:

- 13.1 The place of jurisdiction would be Mohali (Punjab) INDIA.

14 **Notices (GCC Clause 30)**

14.1 For the purpose of all notices, the following shall be the address of the Purchaser and Supplier.

(i) Purchaser: The Director, Institute of Nano Science
and Technology (INST), Mohali

(ii) Supplier: (To be filled in by the supplier)

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15 **Progress of Supply, installation commissioning and testing:**

15.1 Wherever applicable, supplier shall regularly intimate progress of supply, in writing, to the Purchaser as under:

- (i) Quantity offered for inspection and date;
- (ii) Quantity accepted/rejected by inspecting agency and date;
- (iii) Quantity dispatched/delivered to consignees and date;
- (iv) Quantity where incidental services have been satisfactorily completed with date;
- (v) Quantity where rectification/repair/replacement effected/completed on receipt of any communication from consignee/Purchaser with date;
- (vi) Date of installation;
- (vii) Date of completion of entire Contract including incidental services, if any; and
- (viii) Date of receipt of entire payments under the

16 **Right to Use Defective Goods**

16.1 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.

17 **Supplier Integrity**

17.1 The Supplier is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state of the art methods and economic principles and exercising all means available to achieve the performance specified in the contract.

18 **Training**

18.1 The Supplier is required to train the designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment.

19 **Installation & Demonstration**

19.1 The supplier is required to done the installation and demonstration of the equipment within one month of the arrival of materials at the INST site of installation, otherwise the penalty clause shall be the same as per the supply of materials.

CHAPTER – V: BID FORM

To
The Director,
Institute of Nano Science and Technology (INST),
Habitat Centre, Mohali - 160062

Sir,

Having examined the bidding document, we the undersigned offer to supply and deliver
_____ (Description of Goods) in conformity with the said bidding documents for a sum or
such other sums as may be ascertained from the bid.

We undertake that if our bid is accepted to deliver the goods in accordance with the delivery schedule specified and
submit the performance security as specified in SCC for the due performance of the contract.

We agree to abide by this bid for requisite period of time after the date fixed for bid opening as per the instructions to
the bidders and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your
notification of award shall constitute a binding contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this _____ day of _____ 20_____

Signature _____

In the capacity of _____

Duly authorized to sign the bid for and on behalf of _____

CHAPTER – VI: BID SECURITY FORM

Whereas¹ (hereinafter called the “tenderer”) has submitted their offer dated (Date of submission of bid) for the supply of (Name and/or description of the goods) (Hereinafter called the “tender”).

KNOW ALL PEOPLE by these presents that WE (Name of bank) of (Name of country), having our registered office at (Address of bank) (Hereinafter called “the Bank”), are bound unto “The Director, Institute of Nano Science and Technology (INST), Mohali (Hereinafter called “the Purchaser”) in the sum of _____ for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this ____ day of _____ 20 ____.

THE CONDITIONS of this obligation are:

1. If the Bidder withdraws its Bid during the period of bid validity specified by the Bidder on the Bid Form; or
2. If the Bidder, having been notified of the acceptance of its bid by the Purchaser during the period of bid validity:
 - (a) Fails or refuses to execute the Contract Form if required; or
 - (b) Fails or refuses to furnish the performance security, in accordance with the Instruction to Bidders.

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This guarantee will remain in force up to and including forty-five (45) days after the period of the bid validity, and any demand in respect thereof should reach the Bank not later than the above date.

(Signature with Seal of the Bank)
(Complete Contact Details with Tel./Fax/email etc)

¹ Name of Bidder

CHAPTER – VII: MANUFACTURERS' AUTHORIZATION FORM

No. _____

Dated _____

The Director,

Institute of Nano Science and Technology,

Habitat Center, Phase 10, Mohali - Punjab

Dear Sir:

We _____ who are established and reputable manufacturers of
having factories at _____ (address of factory) do hereby authorize M/s _____ (Name and address
of Agent) to submit a bid, negotiate and receive the order from you against your tender enquiry.

No company or firm or individual other than M/s _____ is authorized to bid, and conclude the contract
in regard to this business.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract and Clause
9 of the Special Conditions of Contract for the goods and services offered by the above firm.

Yours faithfully,

(Name)

(Name of manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person
competent and having the power of attorney to bind the manufacturer. It should be included by the Bidder in
its techno-commercial unpriced bid.

CHAPTER – VIII: BIDDER’S PERFORMANCE STATEMENT FORM

(For A Period of Last 3 Years)

Name of the Firm.....

Order placed by of (full address purchaser)	Order No. and date	Description and quantity of ordered equipment/Furniture	Price	Date of completion of delivery as per Contract/Actual	Remarks indicating reasons for late delivery, if any	Has the equipment been installed satisfactory? (Attach a certificate from the purchaser/Consignee)	Contact Person alongwith Tel. NO., Fax No. & e- mail address

--	--	--	--	--	--	--	--

Signature
Rubber stamp

Place :
Date :

CHAPTER IX: SERVICE SUPPORT DETAILS FORM

S. N.	List of similar type equipments/Furniture serviced in the past 3 years	Address, Telephone Nos. , Fax and e mail address of the firm located in Chandigarh/Mohali	Value of minimum stock of consumable spares held at all times.

Signature and Seal of the manufacturer/Bidder.....

Place :

Date :

CHAPTER – X: DEVIATION STATEMENT FORM (ITB/GCC/SCC)

The following are the particulars of deviations (ITB, GCC, and SCC Clauses) from the requirements of the tender document and specifications:

CLAUSE	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”.

CHAPTER – XI: TECHNICAL COMPLIANCE STATEMENT FORM

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.

S. N.	Name of specifications/ part / Accessories of tender enquiry	Specifications of quoted Model/ Item	Compliance Whether "YES" Or "NO"	Deviation, if any, to be indicated in unambiguous terms
1	2	3	4	5

Please note:

1. Failing in compliance and proof of compliance shall cause cancellation of bid without any further notice/information.

CHAPTER – XII: CONTRACT FORM

THIS AGREEMENT made theday of200....between..... The Director, Institute of Nano Science and Technology (INST), Mohali, India (hereinafter “the Purchaser”) of the one part and(Name of Supplier) of(City and Country of Supplier) (hereinafter called “the Supplier”) of the other part:

WHEREAS the Purchaser invited bids for certain Goods and ancillary services viz.,

.....(Brief Description of Goods and Services) and has accepted a bid by the Supplier for the supply of those goods and services in the sum of(Contract Price in Words and Figures) (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 be deemed to form and be read and construed as part of this Agreement, viz:
 - (a) the Bid Form and the Price Bid submitted by the Bidder;
 - (b) the Technical Specifications;
 - (c) the General Conditions of Contract;
 - (d) the Special Conditions of Contract; and
 - (e) the Purchaser’s Notification of Award/Purchase Order.
3. 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 conformity in all respects with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

Brief particulars of the goods and services which shall be supplied / provided by the Supplier are as under:

ITEM DESCRIPTION & QTY.			AMOUNT
			FOB/FCA/CIF/CIP
Payment Terms		Agency Commission	
Delivery Schedule		[TO BE PAID IN EQUIVALENT INR]	

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, Sealed and Delivered by the

Said.....(For the Purchaser)

In the presence of

Signed, Sealed and Delivered by the

Said.....(For the Supplier)

In the presence of

CHAPTER – XIII: PERFORMANCE SECURITY FORM

The Director,
Institute of Nano Science and Technology,
Habitat Center, Phase 10, Mohali

WHEREAS (Name of Supplier)

Hereinafter called "the Supplier" has undertaken, in pursuance of Contract no..... dated,..... 20... to supply.....(Description of Goods and Services) hereinafter called "the Contract".

AND WHEREAS it has been stipulated by you in the said Contract 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 Contract.

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 Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limit of (Amount of 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 theday of.....20.....

Signature and Seal of Guarantors

(Complete Address/Contact Details with

Tel./Fax/email etc) Date

CHAPTER XIV: QUALIFICATION REQUIREMENTS

- 1 The Bidder should be a manufacturer or their dealer specifically authorised by the manufacturer to quote on their behalf for this tender as per manufacturer authorisation form, if any, who must have designed, manufactured, tested and supplied the Lab Furniture similar to the type specified in the “Technical Specification”.
- 2 A list of 10 installations in India (Particularly Govt of India R&D organisations), provide the name-wise list of Institute/Laboratory with date and value of supply.
- 3 The Vendors / Bidders should have work experience as per following parameters. Supportive documents like copy of P.O., completion certificate etc. should be uploaded in this regard.

One similar completed work costing not less than Rs. 3.2 Crores or two similar completed work costing not less than Rs. 2.4 Crores each or three similar completed work costing not less than 1.60 Crores each in last 5 (Five) years for Centrally Funded Technical Institutes (CFTI) which includes IITs , IISERs, IIMs, NITs, IIITs, NITTTRs, IISc, IIST, CSIR Institutes , Central Universities and /or DAE Institutes (NISER , TIFR) and alike where they have completed the similar works including Fume Hoods , Laboratory Furniture and related accessories in air- conditioned Laboratories.

- 4 If required, the bidder may be asked and should be willing to arrange demonstration of the Lab Furniture offered, free of charge at on a mutually agreeable place and date prior to opening of priced bids to ascertain their conformity with tendered specifications.
- 5 Details of service support facilities that would be provided after the warranty period should be submitted in the Service Support Details Form.
- 6 Adequate and specialized expertise should be available following the execution of the contract to ensure that the support services are responsive and on call.
- 7 The Bidder will assume total responsibility for maintenance during the warranty period and provide necessary maintenance services for five years after end of warranty period if required.
- 8 Bidders who meet the criteria given above are subject to be disqualified, if they have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance, not properly completing the contract, inordinate delays in completion or financial failure, etc.
- 9 The manufacturing firm should be ISO/CE/SEFA Certified.
- 10 Submission of Tender fee of Rs. 2950/- and EMD of Rs. 800000/-
- 11 Any additional bid participation criteria / eligibility conditions etc. mentioned in the Technical Specifications sheet will also form part of the Qualification Requirements along with those mentioned in this chapter.

Content of Tender Documents

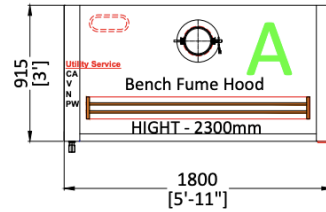
INST MOHALI

1. GENERAL STD SPECIFICATIONS of LAB FURNITURE
2. GENERAL STD SPECIFICATIONS OF FUME HOOD
3. DRAWING LAYOUT OF ALL THE LABORATORIES
4. BILL OF QUANTITIES (BOQ)
5. SCOPE OF VENDOR AND PURCHASER
6. ELIGIBILITY CRITERIA OF VENDOR

LABORATORY FURNITURE & ACCESORIES

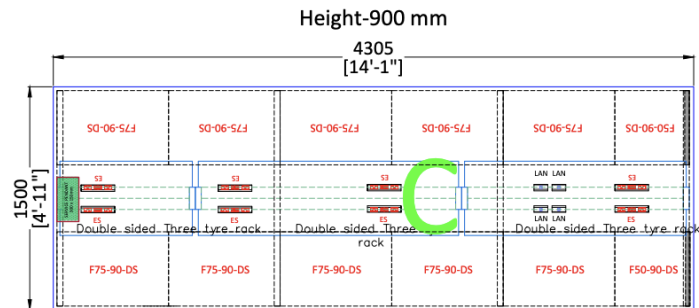
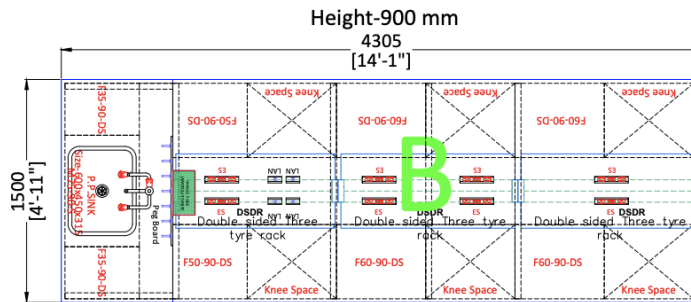
- ❖ The entire laboratory furniture should be tested as per **SEFA-8M standards** in SEFA approved labs with latest **2016 Guidelines** published by SEFA.
- ❖ The laboratory furniture should be modular construction & design made of mainly Skin Passed / Zero Spangle G.I. (Galvanized Iron) duly coated with at least 50-60 micron Epoxy Powder coated in panel form and in CKD (Completely Knocked Down) construction so it can be erected at site as per attached layout. The design should have provision for reconfiguration for change in layout using simple tooling and should provide independent access to the utilities installed, electrical panel & instrumentation panel.
- ❖ All GI sheet components (TATA Steel / SAIL / Jindal Make) should be fabricated by precision shearing, levelling, notching, piercing, machines to achieve consolidated dimensions within close tolerances under the strict quality checks and assembled with the aid of fixtures. Exposed welding marks should be polished smooth to improve aesthetic. Corner intersections of vertical and horizontal members should in the same plane with bolted joints and should be suitably aligned.

Laboratory work-tables:

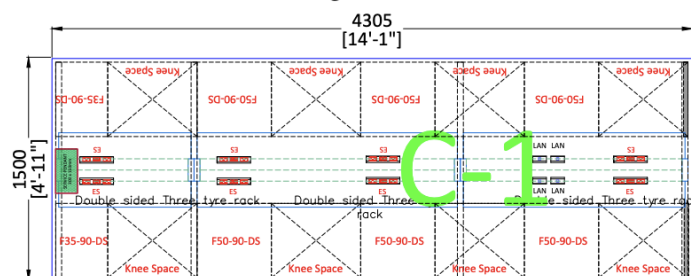


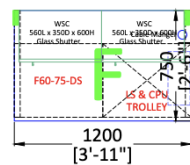
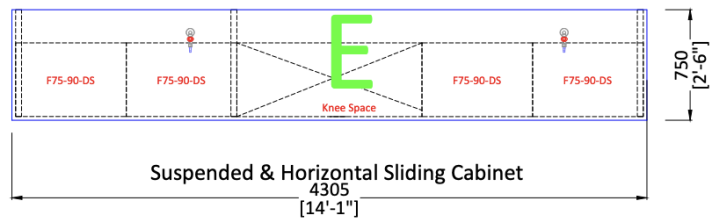
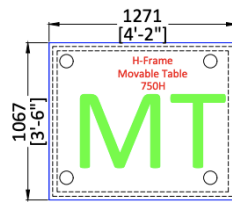
Bench Fume Hood With 2 nos cabinet
as per below.
1- Vacuum Pump Provision cabinet
2- GI powder coated + FRP liner cabinet

Suspended & Horizontal Sliding Cabinet (Only Vacuum Cabinet have plinth design)

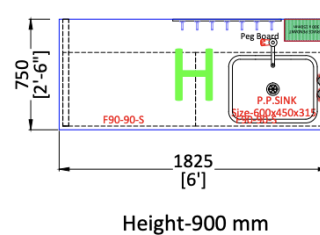
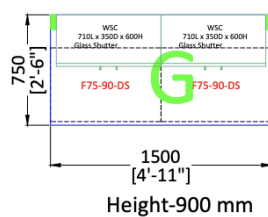


Suspended & Horizontal Sliding Cabinet Height-900 mm

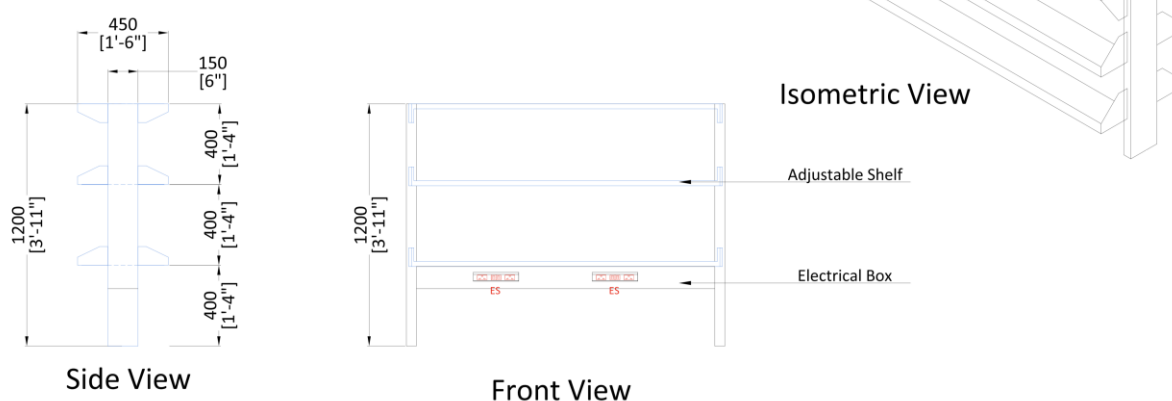




Height-750 mm
Suspended & Horizontal Sliding Cabinet



Double Sided Three Tyre Reagent Rack



Laboratory work tables with a C-frame design provide excellent strength and weight bearing capacity to the work tables. The work top is mounted on a “C” frame structure made of 60 mm x 30 mm x 2 mm pipes welded together and powder coated with pure epoxy powder for high chemical resistance. Laboratory work tables in C-frame design are available in all of the following configurations. Work tables can be manufactured in 2 heights of 900 mm and 750 mm in metallic construction designed to have completely flexible modular system.

Laboratory Moveable work tables with castor wheels provide excellent strength and weight bearing capacity to the work tables. The work top is mounted on a frame structure made of 60 mm x 30 mm x 2 mm pipes welded together and powder coated with pure epoxy powder for high chemical resistance.

❖ Under bench modules for Laboratory work tables:

All modules are to be manufactured from **IS 277 standards Zero Spangle Galvanized Iron sheets** in a **weldless construction**, to ensure excellent corrosion resistance of the base material itself.

Before assembly, each panel is individually powder coated with 50 to 60 micron thickness using pure epoxy powder. In addition to **SEFA-8M certification**, the coating quality and strength is ensured through 1000-hours salt spray test and other physical tests conducted for each batch.

Fabrication of all panels is carried out using CNC punching and folding machines to ensure perfect accuracy and precision which adds to the overall finish of lab furniture. All shutters and drawer fronts are provided in a double skin construction with buffers to eliminate banging sound.

The furniture modules are certified for latest **SEFA-8M standard** which is a proof of quality and rugged construction. The modules are fabricated in standard and tailor-made designs to meet customer's requirements of dimensions and configuration.


Necessary leg space can be provided between two cabinets wherever required. Rear portion of the leg space will be covered with the enclosure panel.

The following table provides general specifications and details related to modules for laboratory work tables.

	C-Frame Modules
<i>MOC</i>	IS 277 standard, Zero Spangle GI
<i>Module sheet thickness</i>	1 to 1.6 mm
<i>Cabinet mounting</i>	Fixed on C-frame structure
<i>Width/ Length</i>	500 mm, 750 mm and 1000 mm
<i>Height</i>	Varying from 450 mm to 600 mm depending upon table height
<i>Depth</i>	500 mm
<i>Hinges</i>	Knuckle-Barrel type hinges in SS construction for extra-ordinary strength & full 270 degree opening (exposed type)
<i>Drawer rails</i>	Telescopic channel; up to load bearing capacity 45 kg (100 lbs)
<i>Handles</i>	Aluminium flush handles; pure epoxy powder coated

Locks	Lock with two keys for drawers only
	OR
	Lock with two keys for drawers and shutters

❖ Worktop options for work tables:

	Worktop	Colour	Thickness	Properties & Application
	Granite with chamfered edges and drip groove	Jet black or other colors of natural granite	18(±1mm) mm	Reasonably good chemical and stain resistance, good scratch resistance, flat but slightly porous surface, most economical; Natural marks and slight variation in thickness

❖ Reagent Rack:

Reagent racks are useful for easy access and small storage of daily use. These are available in different configurations as per requirement:

- Double sided reagent rack for wall benches and island benches respectively
- three tier racks to take care of storage requirement
- Reagent racks to be in Galvanized Iron sheet with epoxy powder coated surface. This design offers extra ordinary chemical resistance in addition to elegant look. Shelf height shall be adjustable as per requirement.

❖ Overhead Storage Cabinets:

Overhead storage cabinets can be provided for file storage or general purpose storage in island as well as wall benches. Overhead storage cabinets are to be mounted on a frame structure constructed with the support of the bench structure itself instead on wall for modularity point of view.

❖ Electrical Raceways:

Electrical raceways are offered in triangular or rectangular box type design in 1 mm thick GI construction finished with epoxy coating. Internal wiring is carried out using reliable make copper conductors with FRLS insulation. Raceways are mounted on vertical members of reagent racks or on work surface of the table when not provided with reagent rack.

❖ Vertical Service Pendants (Droppers):

Various services such as gas or liquid lines, electrical or data cables are laid through vertical service pendants when such services are to be drawn from overhead lines. The pendants are generally fabricated out of galvanized iron sheets and provided with service covers on one side to access service valves and other fittings. The size of the service droppers depends upon number of services to be drawn through. Electrical Switches / Sockets - Legrand or Equivalent make.

Other electrical accessories:

- 6A/16A multi-plug sockets and switches
- 20A industrial sockets and MCBs
- Data points for network cabling
- Spark proof sockets and switches
- Other electrical accessories as required

❖ Sink:

In one piece, molded sink in Polypropylene (PP) construction. Sink outlet shall be provided with or without a large bottle trap in PP construction. Sink size shall be L 600 mm x W 450 mm x H 315 mm.

❖ Peg Board:

Peg Board in Phenolic Resin or SS construction with 20 Nos. PP Pegs.

❖ Emergency Shower and Eye Wash:

Floor standing, overhead emergency shower with eyewash unit, main frame in S.S fabrication.

Worktop mounted, hand held type, single/double outlet eye wash with SS braided flexible hose.

Other Laboratory Furniture

Spot Extractor:

General Specifications:

- Size: 1500mm X 75mm
- MOC: Pipe – PP in Milky White Color
- Joints – Polypropylene
- Dome - (Dia 385mm) Polypropylene
- Inbuilt Damper
- Bracket: Wall Mounted / Ceiling Mounted
- Ceiling Mounted Bracket Standard Length: 1 Feet Long (Extra Long size available on request)
- MOC for Bracket: Aluminum Powder Coated

List of recommended make of materials for laboratory furniture:

SR. NO.	MATERIAL	RECOMMENDED MAKE
1.	ZERO SPANGLED GALVANIZED IRON (GI) SHEET	TATA STEEL / SAIL / JINDAL MAKE
2.	HINGES	IKEA / HETTICH / HAFELE
3.	DRAWER RAILS	HETTICH / HAFELE
4.	LOCKS	HETTICH / HAFELE
5.	LABORATORY FITTINGS	WATER SAVER / BROEN / FAG/ TOF / FAR / PREMIER POLYMERS
6.	LABORATORY SINKS / DRIP CUPS	WATER SAVER / BROEN / ALLOYPLAS / K L LAB MALAYSIA / PREMIER POLYMERS
7.	LABORATORY ELECTRICAL SOCKET	NORTHWEST / LEGRAND / MK / NORISYS
8.	DATA & VOICE SOCKET	NORTHWEST / LEGRAND / MK / NORISYS
9.	EYEWASH / SHOWER	WATER SAVER / BROEN / FAG/ TOF / FAR / PREMIER POLYMERS
10.	SPOT EXTRACTOR	FUMEX / ALSIDENT / NEDERMANN / PREMIER POLYMERS
11.	FLAMMABLE STORAGE TALL CABINET	JUSTRITE / SECURALL / ASECOS / LABOR SECURITY / DUPERTHAL

Technical Specifications for Laboratory Fume Hood & Accessories

LABORATORY FUME HOODS

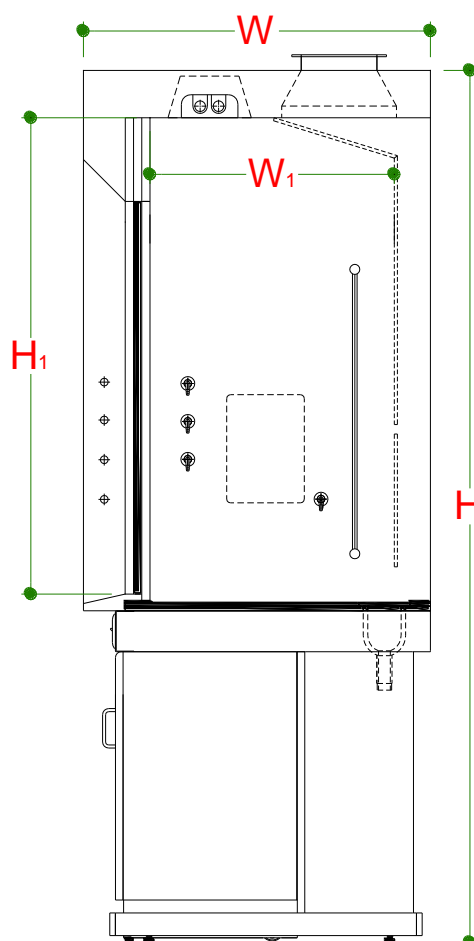
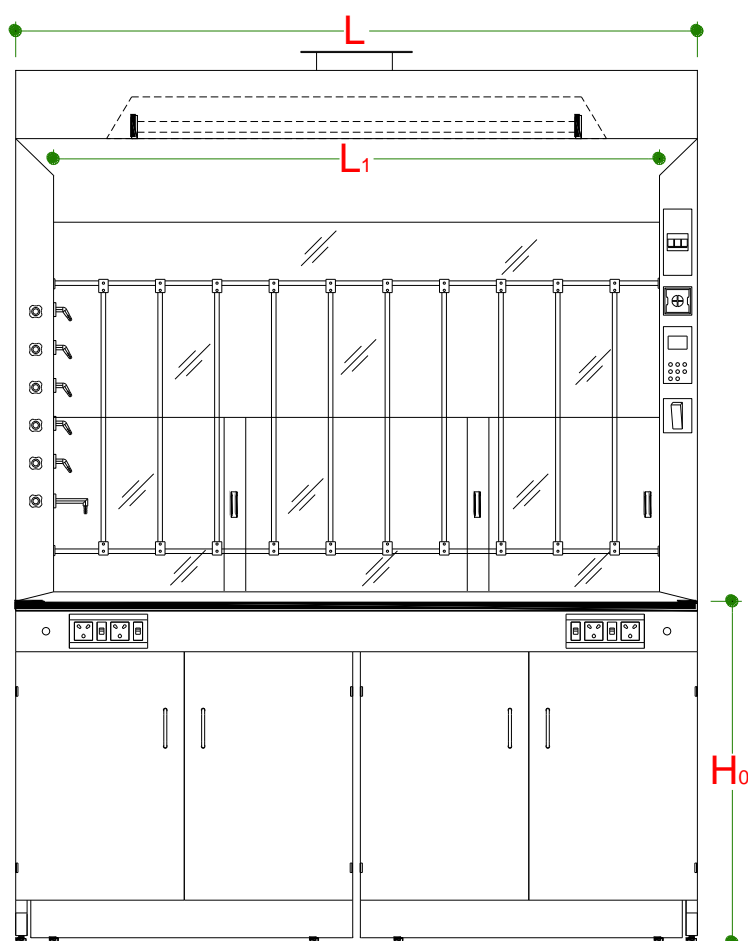
1. FUME HOOD SUPERSTRUCTURE:

A. DESIGN AND CONSTRUCTION DETAIL:

Type of Fume Hood: LOW CONSTANT VOLUME (LCV) BENCH TYPE FUME HOOD.

Hood Construction: Structure bearing type, i.e. inner and outer panels fixed on rigid frame structure.

DIMENSIONS OF FUME HOOD.



Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet	Overall dimension			Inner dimension			Worktop height
	L	W	H	L₁	W₁	H₁	H₀
	1800	915	2300	1600	645	1250	900

Baffle Design	3 point suction, fix type baffle arrangement for effective suction of light, medium and heavy fumes
Sash Arrangement	Vertical rising / Horizontal / Combination type
Cup Sink	Oval Shaped, size approx. 130x80mm – 1 No. per hood
Service Valves	Panel mounted valves with color coded as per DIN/ BS standard remote knobs fitted on front vertical post
Valve Tubing	Flexible tubes 1.5m long provided
Front Vertical Post	Aero Dynamic Design
Air Foil	Flip on Type Design
Exhaust Outlet	Streamlined exhaust outlet with suitable size Volume Control damper
Electrical Panel Box	Provided below the fume hood in GI construction

B. MATERIAL OF CONSTRUCTION / MAKE OF COMPONENT:

Fume Hood Inner Panels & Baffles: 6mm thick panels made of laboratory grade Phenolic Resin / Compact Laminate to have property of excellent chemical & heat resistance and fire retardant. These panels are in rigid construction with smooth finish and easy clean ability.

Fume Hood External Panels: Outer panels in 1.2mm thick front posts in durable, Zero Spangle / Skin Past Galvanized Iron steel from Tata, Jindal or equivalent make, finished with epoxy powder coating of at least 50-60 micron thickness applied through twin electrode method.

Fume Hood Super Structure: 2.0 mm thick Galvanized Iron (GI) powder coated construction.

Fume Hood Work Surface: 18 to 20 mm thick telephone black natural granite in standard offering with raised railing in same material on 4 sides for containment. The worktops can also be offered in Solid Epoxy/ Phenolic Resin/ Vitrified Ceramic etc. as per end user requirement on request.

Cup Sink: Oval shaped, Single piece molded polypropylene (PP) in standard offering. Solid Epoxy cup sinks can also be provided as per end user requirement on request.

Air foil: SS 316 L & in "Flip On" type in Aerodynamic design.

Scaffolding (Lattice): in vertical rod design, fabricated out of 12.0mm dia. Epoxy Rods, having 150mm pitch between two rods in standard offering. These can be offered in Stainless Steel as per end user requirement on request.

Fume Hood Sash: 5 mm thick toughened glass in frameless const. and vertical rising type and combination type arrangements. Fume Hood sash works with a pulley & counter weight mechanism with SS 316, multi wire flexible sash rope.

Sash Pulleys: Nylon pulleys with ball bearings.

Service Valves: Pre piped valves having body in forged brass construction, extended spindle in Aluminum construction, color coded knobs as per DIN/BS in plastic construction. Angular shaped serrated nozzles in epoxy coated forged brass construction with 1.5mtr. long flexible tubing with end fittings.

Lighting: Vapor proof light fitting with twin LED type light with fluorescent lamps.

Duct Collar: Molded Polypropylene (PP) construction.

Damper: Molded Polypropylene (PP) construction suitable for motorized operation.

Fume Hood Plumbing Service Line:

For Air & Nitrogen Service: 4mm Bore Polyurethane Tube

For Vacuum Service: SS Braided Teflon Hose

For Water Service: Nylon Braided PVC Hose

For Chilled Water: Duly Insulated Nylon Braided PVC Hose

Electrical Fittings: Legrand or Equivalent

Cables/ Wires: ICI/ Finolex/ Gloster / Anchor make or Equivalent

2. BASE CABINET:

Overall Dimension: W 1800 mm x H875mm x D600mm.

Twin cabinets – 1 No. Vacuum provision base cabinet with Sliding Tray for Mounting vacuum pump in one cabinet only & 1 No. Flammable Storage base cabinet for acid –base FIRE RESISTANCE TYPE 90 - 90 MIN. Cabinets are mounted on a common base frame with castor wheels. Each cabinet to have twin door in double skin construction. Each cabinet shall have one adjustable shelf & with detachable rear panels in segmented construction.

Material of Construction:

Cabinet Body: 1.0mm thick Galvanized Iron (GI) construction.

Cabinet Shutter: 0.8mm thick Galvanized Iron (GI) construction.

Handles: Flush type; Anodized Aluminum construction; duly powder coated.

Hinges: Heavy duty Knuckle-Barrel type special designed door hinges.

Hardware: SS 304 construction

Cabinet Finish: Inner and Outer surface of the cabinet, shelf and drawer type plate shall be coated with pure epoxy powder coating applied through twin electrode process.

3. EXHAUST FAN:

Construction, Design and MOC detail:

- Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction.
- Corrosive resistant PP Impeller with extra strength, high efficiency properties which produces lower noise and power consumption.
- 415V, 50Hz. TEFC Class B insulation, in Non-FLP/FLP const. induction motor with IP55 enclosure
- 16A, 3Ph MCB for Fan - Legrand or eq. Make
- DOL starter for motor / Electrical panel with necessary internals and VFD for fan

4. ACCESSORIES:

Airflow Monitor: This Face Air Velocity monitor gives digital display of face velocity in m/sec or fpm with on screen display for Safe and Alarm conditions with audible alarm and LED indication. It has a feature of Push-button calibration and configuration; along with Plug-in connections for power supply and airflow sensor. It also got 3 programmable output relays, 3 configurable inputs; Com port for local or PC network connection. 3 configurable push buttons.

List of recommended make of materials for laboratory Fume Hood:

SR. NO.	MATERIAL	RECOMMENDED MAKE
12.	ZERO SPANGLED GALVANIZED IRON (GI) SHEET	TATA STEEL / SAIL / JINDAL MAKE
13.	HINGES	IKEA / HETTICH / HAFELE
14.	LOCKS	HETTICH / HAFELE
15.	LABORATORY FITTINGS	WATER SAVER / BROEN / FAG/ TOF / FAR / PREMIER POLYMERS

16.	LABORATORY SINKS / DRIP CUPS	WATER SAVER / BROEN / ALLOYPLAS / K L LAB MALAYSIA / PREMIER POLYMERS
17.	LABORATORY ELECTRICAL SOCKET	NORTHWEST / LEGRAND / MK / NORISYS
18.	FLAMMABLE STORAGE CABINET	JUSTRITE / SECURALL / ASECOS / LABOR SECURITY / DUPERTHAL

DRAWING LAYOUT OF ALL THE LABORATORIES (attached in NIT document)

BOQ for Laboratory Furniture in "C Frame design" and Laboratory Bench type Fume Hoods

Technical Specifications:

A) C-Frame Structure:

Frame Structure: Fabricated out of heavy gauge hollow pipes size 60 x 30 x 2 mm and 1.6 mm thick steel plates as shown in the G.A. drawings. The structure will be provided with necessary leveling bolts suitable for ± 5 mm level adjustment. Open ends of the pipe will be provided with elegant finish plastic caps. The structure shall be duly treated for the rust prevention and coated with epoxy powder through fair practice of powder coating.

B) SEFA-8 standards Heavy Duty Under Cabinets & Drawers :

SEFA-8 standards Heavy Duty Under Module, comprising of one drawer, one cabinet with shutter and adjustable height shelf. Cabinet shutter will be in double skin construction and shall be provided with heavy duty, knuckle and barrel type SS hinges and positive catch arrangement. The under module shall be fabricated out of heavy gauge special grade Galvanized Iron sheet in weldless construction and shall be finished with pure epoxy coating for extra ordinary corrosion resistance.

C) Electrical Trunk Box - G.I construction; duly powdercoated

D) Electrical Sockets - Legrand or Equivalent make

E) Prices should be quoted with 5% GST against exemption certificate.

Sr. No.	Description	Qty.	Rate	Amount (INR)
Ground Floor				
X Ray Lab		1.00 Nos.		
1	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt.) - Work top in 18 \pm 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
2	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt.) - Work top in 18 \pm 1 mm thick BWP Construction with lamination (0.90 Sqm.) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) <p>Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.)</p> <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			

Sr. No.	Description	Qty.	Rate	Amount (INR)
Electron Microscopy		1.00 Nos.		
3	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt.) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm.) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
4	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt.) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm.) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
Femtosecond lab		1.00 Nos.		
5	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	2.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm)) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			

Sr. No.	Description	Qty.	Rate	Amount (INR)
ATC Lab		4.00 Nos.		
6	Wall Bench (WB - I) Size: L 1225 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.23 Rmt.) - Work top in 18 ± 1 mm thick Black Granite construction (0.92 Sqm) - 600 mm wide storage module with one drawer one shutters (2.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.23 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
Physical Property Measurement Deposition Facility		1.00 Nos.		
7	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.)) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
NMR Lab Double Height		1.00 Nos.		
8	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt.) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (7 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amount (INR)
9	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	2.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt.) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm.) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
Mass Specs Lab		1.00 Nos.		
10	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt.) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
11	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amount (INR)
12	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt.) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neckspout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
First Floor				
Corridor				
13	Emergency Safety Shower	6.00 Nos.		
	Floor standing, overhead emergency shower with eyewash unit, main frame in S.S fabrication			
Bio Lab				
14	ISLAND Bench (IB -B) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 750 mm wide storage module with one drawer two shutters (8.00 Nos.) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with two shutters (1.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted three way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (3.85 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
15	ISLAND Bench (IB - C1) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 500 mm wide storage module with one drawer one shutters (6.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Leg space (8.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (4.31 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amount (INR)
16	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
17	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt.) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm.) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
18	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt.) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm.) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			

Sr. No.	Description	Qty.	Rate	Amount (INR)
19	Wall Bench (WB - G) Size: L 1500 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.50 Rmt.) - Work top in 18 ± 1 mm thick Black Granite construction (1.13 Sqm) - 750 mm wide storage module with one drawer two shutter (2.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.50 Rmt.) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 710mm x W 350 mm x H 600 mm (2.00 Nos.) <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
20	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	1.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			
21	Exhaust Fan (315 mm Dia) - one fan for 1 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 600 to 700 - Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. - Drive - 1.5 HP, 2840 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
Dark RM Optical		1.00 Nos.		
22	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt.) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm.) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
23	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	3.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt.) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
Chem Lab		2.00 Nos.		
24	ISLAND Bench (IB -B) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 750 mm wide storage module with one drawer two shutters (8.00 Nos.) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with two shutters (1.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted three way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (3.85 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
25	ISLAND Bench (IB - C) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with one drawer two shutters (10.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
26	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
27	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.	Nos.	
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
28	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
29	Wall Bench (WB - G) Size: L 1500 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.50 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.13 Sqm)) - 750 mm wide storage module with one drawer two shutter (2.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.50 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 710mm x W 350 mm x H 600 mm (2.00 Nos.) <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
30	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	2.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			
31	Exhaust Fan (400 mm Dia) - one fan for 2 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 1200 to 1400 - Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. - Drive - 2 HP, 1400 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
Phy Lab		4.00 Nos.		
32	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	1.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			
33	Exhaust Fan (315 mm Dia) - one fan for 1 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 600 to 700 - Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. - Drive - 1.5 HP, 2840 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			
34	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 	1.83 1.37 2.00 1.00 1.00 1.00 1.00 2.00		
35	Service Pendent Size: L 300 mm x W 750 mm	2.00 Nos.		

Sr. No.	Description	Qty.	Rate	Amt. (INR)
36	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
37	H Frame Moveable table Size: L 1271 mm x W 1067 mm x H 750 mm	6.00 Nos.		
	<ul style="list-style-type: none"> - H-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction with castor wheel (1.27 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.36 Sqm) 			
38	Electrical Raceway	1.00 Lot		
	<ul style="list-style-type: none"> - Worktop mounted electrical raceway in GI powder coated construction (7.32 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (12.00 Nos.) - Data Socket (6.00 Nos.) - 240 V 32 Amp Industrial Socket with Plug top and MCB single phase (2.00 Nos.) - 440 V 32 Amp Industrial Socket with Plug top and MCB three phase (2.00 Nos.) 			
39	Raw water Valve fitting	1.00 Lot		
	<ul style="list-style-type: none"> - One way Raw water Valve (1.00 Nos.) - Service Pendant (1.00 Nos.) 			
Second Floor				
Corridor				
40	Emergency Safety Shower	6.00 Nos.		
	Floor standing, overhead emergency shower with eyewash unit, main frame in S.S fabrication			
Bio Lab				
41	ISLAND Bench (IB -B) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 750 mm wide storage module with one drawer two shutters (8.00 Nos.) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with two shutters (1.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted three waywater tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (3.85 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
42	ISLAND Bench (IB - C1) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 500 mm wide storage module with one drawer one shutters (6.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Leg space (8.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
43	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
44	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
45	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) <p>Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.)</p> <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
46	Wall Bench (WB - G) Size: L 1500 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.50 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.13 Sqm) - 750 mm wide storage module with one drawer two shutter (2.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.50 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 710mm x W 350 mm x H 600 mm (2.00 Nos.) <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
47	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	1.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			
48	Exhaust Fan (315 mm Dia) - one fan for 1 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 600 to 700 - Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. - Drive - 1.5 HP, 2840 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			
Advance Bio Research Facility Lab		1.00 Nos.		
49	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	2.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
50	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	2.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
General Physical Science Lab		1.00 Nos.		
51	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	2.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
52	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	2.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
Chem Lab		5.00 Nos.		
53	ISLAND Bench (IB -B) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 750 mm wide storage module with one drawer two shutters (8.00 Nos.) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with two shutters (1.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted three way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (3.85 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
54	ISLAND Bench (IB - C) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with one drawer two shutters (10.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
55	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
56	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
57	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
58	Wall Bench (WB - G) Size: L 1500 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.50 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.13 Sqm) - 750 mm wide storage module with one drawer two shutter (2.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.50 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 710mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
59	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	2.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			
60	Exhaust Fan (400 mm Dia) - one fan for 2 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP constuction with suitable stand in MS powder coated construction, CFM 1200 to 1400 - Corrosive resistant PP Impeller with extra strength,high efficiency, properties which produces lower noise and power consumption. - Drive - 2 HP, 1400 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			
Phy Lab		2.00 Nos.		
61	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	1.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
62	Exhaust Fan (315 mm Dia) - one fan for 1 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 600 to 700 - Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. - Drive - 1.5 HP, 2840 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			
63	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
64	Service Pendent Size: L 300 mm x W 750 mm	2.00 Nos.		
65	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
66	H Frame Moveable table Size: L 1271 mm x W 1067 mm x H 750 mm	6.00 Nos.		
	<ul style="list-style-type: none"> - H-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction with castor wheel (1.27 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.36 Sqm) 			
67	Electrical Raceway	1.00 Lot		
	<ul style="list-style-type: none"> - Worktop mounted electrical raceway in GI powder coated construction (7.32 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (12.00 Nos.) - Data Socket (6.00 Nos.) - 240 V 32 Amp Industrial Socket with Plug top and MCB single phase (2.00 Nos.) - 440 V 32 Amp Industrial Socket with Plug top and MCB three phase (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
68	Raw water Valve fitting	1.00 lot		
	- One way Raw water Valve	1.00 Nos.		
	- Service Pendant	1.00 Nos.		
Third Floor				
Corridor				
69	Emergency Safety Shower	5.00 Nos.		
	Floor standing, overhead emergency shower with eyewash unit, main frame in S.S fabrication			
Bio Lab				
70	ISLAND Bench (IB -B) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 750 mm wide storage module with one drawer two shutters (8.00 Nos.) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with two shutters (1.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted three waywater tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (3.85 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
71	ISLAND Bench (IB - C1) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 500 mm wide storage module with one drawer one shutters (6.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Leg space (8.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
72	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
73	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
74	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
75	Wall Bench (WB - G) Size: L 1500 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.50 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.13 Sqm) - 750 mm wide storage module with one drawer two shutter (2.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.50 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 710mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
76	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	1.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
77	Exhaust Fan (315 mm Dia) - one fan for 1 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 600 to 700 - Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. - Drive - 1.5 HP, 2840 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			
Synthesis Lab & Material Research Lab				
78	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
79	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	2.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
Advance Material Science research				
80	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	2.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
81	ISLAND Bench (IB - C) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with one drawer two shutters (10.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
Chem Lab		4.00 Nos.		
82	ISLAND Bench (IB -B) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 750 mm wide storage module with one drawer two shutters (8.00 Nos.) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with two shutters (1.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted three way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (3.85 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
83	ISLAND Bench (IB - C) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with one drawer two shutters (10.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
84	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
85	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
86	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
87	Wall Bench (WB - G) Size: L 1500 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.50 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.13 Sqm) - 750 mm wide storage module with one drawer two shutter (2.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.50 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 710mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
88	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	2.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
89	Exhaust Fan (400 mm Dia) - one fan for 2 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 1200 to 1400 - Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. - Drive - 2 HP, 1400 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			
Comp Lab 1		3.00 Nos.		
90	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	14.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
91	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
92	H Frame Moveable table Size: L 1271 mm x W 1067 mm x H 750 mm	2.00 Nos.		
	<ul style="list-style-type: none"> - H-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction with castor wheel (1.27 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.36 Sqm) 			
Fourth Floor				
Corridor				
93	Emergency Safety Shower	5.00 Nos.		
	Floor standing, overhead emergency shower with eyewash unit, main frame in S.S fabrication			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
Chem Bio Lab 4		4.00 Nos.		
94	ISLAND Bench (IB -B) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 750 mm wide storage module with one drawer two shutters (8.00 Nos.) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with two shutters (1.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted three waywater tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (3.85 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
95	ISLAND Bench (IB - C1) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 500 mm wide storage module with one drawer one shutters (6.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Leg space (8.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
96	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
97	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
98	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.) Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks			
99	Wall Bench (WB - G) Size: L 1500 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.50 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.13 Sqm) - 750 mm wide storage module with one drawer two shutter (2.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.50 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 710mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks			
100	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	1.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			
101	Exhaust Fan (315 mm Dia) - one fan for 1 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 600 to 700 - Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. - Drive - 1.5 HP, 2840 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			

No.	Description	Qty.	Rate	Amt. (INR)
Chem Lab		3.00 Nos.		
102	ISLAND Bench (IB -B) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 750 mm wide storage module with one drawer two shutters (8.00 Nos.) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with two shutters (1.00 Nos.) - 350 mm wide storage module with one drawer one shutter (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted three way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (3.85 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
103	ISLAND Bench (IB - C) Size: L 4305 mm x W 1500 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (6.46 Sqm) - 500 mm wide storage module with one drawer one shutters (2.00 Nos.) - 750 mm wide storage module with one drawer two shutters (10.00 Nos.) - Double sided triple tier reagent rack with electrical raceway (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one wayswitch (16.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
104	Wall Bench (WB - H) Size: L 1825 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.83 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.37 Sqm) - 900 mm wide storage module with two shutters (2.00 Nos.) - Single piece molded PP sink (L 600 x W 450 x D 315) (1.00 Nos.) - Worktop mounted one way water tap with swan neck spout (1.00 Nos.) - Peg Board in Phenolic resin construction with 20 Nos. PP Pegs (1.00 Nos.) - Worktop mounted, hand held type, double outlet eye wash with SS braided flexible hose (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
105	Wall Bench (WB - E) Size: L 4305 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (4.31 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (3.23 Sqm) - 500 mm wide storage module with one drawer one shutters (1.00 Nos.) - 750 mm wide storage module with one drawer two shutters (5.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (4.31 Rmt) - 6/16 Amp electrical sockets and 16 Amp one wayswitch (7.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Worktop mounted one way gas valve (2.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) 			
106	Wall Bench (WB - F) Size: L 1200 mm x W 750 mm x H 750 mm	5.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.20 Rmt) - Work top in 18 ± 1 mm thick BWP Construction with lamination (0.90 Sqm) - 600 mm wide storage module with two drawer (1.00 Nos.) - Leg space and Cable Manager (1.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.20 Rmt) - 6/16 Amp electrical sockets and 16 Amp one wayswitch (2.00 Nos.) - Data Socket (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) <p>Over Head Storage Cabinet Size: L 570mm x W 350 mm x H 600 mm (2.00 Nos.)</p> <ul style="list-style-type: none"> - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			

Sr. No.	Description	Qty.	Rate	Amt. (INR)
107	Wall Bench (WB - G) Size: L 1500 mm x W 750 mm x H 900 mm	1.00 Nos.		
	<ul style="list-style-type: none"> - C-Frame Structure in 60 x 30 x 2 mm thick hollow pipe construction (1.50 Rmt) - Work top in 18 ± 1 mm thick Black Granite construction (1.13 Sqm) - 750 mm wide storage module with one drawer two shutter (2.00 Nos.) - Worktop mounted electrical raceway in GI powder coated construction (1.50 Rmt) - 6/16 Amp electrical sockets and 16 Amp one way switch (2.00 Nos.) - Data Socket (1.00 Nos.) - 32 Amp Industrial Socket with Plug top and MCB (1.00 Nos.) - Filler Panel in G.I. Construction (2.00 Nos.) Over Head Storage Cabinet Size: L 710mm x W 350 mm x H 600 mm (2.00 Nos.) - Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks 			
108	Low Constant Volume (Type A) Bench Fume Hood with Vacuum and Flame proof cabinet (Size: L 1800 x D 915 x H 2300 mm) (For AC Lab)	2.00 Nos.		
	Consisting of following : (As specified in Annexure - III) Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet Accessories			
109	Exhaust Fan (400 mm Dia) - one fan for 2 Nos. Fume Hood	1.00 Nos.		
	<ul style="list-style-type: none"> - Single piece molded UV treated chemical resistant SISW direct driven centrifugal fan in PP construction with suitable stand in MS powder coated construction, CFM 1200 to 1400 - Corrosive resistant PP Impeller with extra strength, high efficiency, properties which produces lower noise and power consumption. - Drive - 2 HP, 1400 RPM, 415V, 50Hz., TEFC Class B insulation induction motor with IP55 enclosure, in Non- FLP const. - 16A, 3Ph MCB for Fan - Legrand or eq. Make - DOL Starter for Motor. 			
Commercial Offer for PP / FRP Ducting (Round Shape)				
Sr. No.	Description	Qty.	Rate	
A	Supply & Installation of exhaust ducting in PP/ FRP (Round Shape) construction (3mm + 2mm) complete with necessary bends, reducers, T-connections, supports, flanges, gaskets, nutbolts etc.	1 Sq. Mtr		
Note:	- Amount for ducting work shall be payable as per actual measurement			

Annexure - I (6 Foot)				
Technical Specification of Fume Hood with Vacuum and cabinets for storing Flammables				
Type of Hood:		Low Const. Volume type Bench Fume Hood		
Overall Dimension:		Width 1800 x Depth 915 x Height 2300mm		
Inner Dimension:		Width 1600 x Depth 645 x Height 1200mm		
Sr. No.	Description	Qty (Nos)	Rate	Amount (INR)
1	Fume Hood Superstructure as per the drawing provided consisting of <ul style="list-style-type: none"> - Structure frame in 2.0 mm thick GI construction - Inner lining, rear baffles and top baffles in 6 mm thick. Phenolic resin construction - Outer panels in 1.2 mm thick GI construction. - Aerodynamic Shape front posts, in GI construction - Flip-on type Airfoil in 1.6 mm thick SS construction - Streamlined shaped exhaust duct collar in PP const. - Combination type, frameless design sash in toughened glass const. with full length sash handle in anodized Al const. - Sash movement mechanism with counter weight. - Twin LED tube type light with fittings - Working height to inner ceiling of the fume hood should be 1250 mm (See details in Fume hood annexure) 	1		
2	Fume Hood Worktop In telephone black natural granite construction, having raised rails on all four sides, with 1 No. oval shaped cup sink, in PP const., on left rear side.	1		
3	Service Valves Having body in forged brass const., extended spindle in Aluminum construction, color coded knobs in plastic const. angular shaped serrated nozzles, in epoxy coated forged brass const. 1.5mt. long flexible tubing with end fittings for following services: <div style="display: flex; justify-content: space-between;"> <div> Services Compressed Air Vacuum Nitrogen Potable Water </div> <div> Tube Construction - PU-4 - SS braided Teflon Hose - PU-4 - Nylon braided PVC Hose </div> </div>	1 1 1 1		
4	Electrical Services with internal wiring (all in non-FLP const.) <ul style="list-style-type: none"> - Controller for Blower & light (Touch Pad) - 16A, 2 Pole MCB - Legrand or eq. Make - 5/15A 3-pin Socket with switch/ MCB - Legrand or eq. Make 	1 1 4		
5	Controls Air velocity Monitor with low air alarm, Model AFA/1000 TEL - UK Make or Equivalent	1		
6	Fume Hood Understructure Fabricated out of heavy gauge rectangular shape hollow pipes in MS construction, duly finished with corrosion resistant specialty coatings.	1		



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7	<p>Fume Hood Under-Cabinet</p> <p>Detachable design general purpose cabinets fabricated out of GI sheet, consisting of,</p> <ul style="list-style-type: none"> - Special arrangement for air ventilation inside the cabinet - Twin doors in double wall const. - Flushed type recessed handle. - Heavy duty knuckle-barrler special design door hinges. - 1 No. adjustable shelf. - Recessed base frame in heavy duty GI const. <p>- FRP Lining inside the chemical storage cabinet</p> <p>- PP Tray for chemical storage</p> <ul style="list-style-type: none"> - Twin castors for easy removal of the cabinet. - Sliding Tray for Mounting vaccum pump in one cabinet only <p>SAFETYBOX FOR FLAMMABLES</p> <p>SAFETYBOX AC900/50 CM</p> <p>dim. mm 900 x 510 x 600/620 h</p> <p>CERTIFIED BY TUV, FIRE RESISTANCE</p> <p>TYPE 90 - 90 MIN IN COMPLIANCE</p> <p>WITH EN 14470-1, EN 16121, EN 16122</p> <p>FOR THE STORAGE OF 25 LITERS OF LIQUID AND SOLID FLAMMABLEPRODUCTS</p> <p>Underbench cabinet 2 doors and bottom basin with drilled sheet, automatic door's closing system</p>	1		
8	<p>Accessories</p>			
a	<p>300 mm dia. Duct damper in PP const. complete with pre drilled flanges on both sides, manual operation handle and extended spindle, suitable for motorized drive.</p>	1		
b	<p>Scaffold Grill (1630 x 750mm) in Vertical rod design, fabricated out of 12.0 mm dia., Epoxy rods, having 150mm pitch between two rods.</p>	1		
c	<p>Ceiling Enclosure Panels in GI const; duly powder coated</p>	1 set		



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SCOPE OF VENDOR AND PURCHASER

FOLLOWING SCOPE SHALL BE UNDER VENDOR'S SCOPE

- The scope of work includes Design, Supply, Installation & Commissioning of Laboratory Furniture, Fume Hood, electrical accessories and GDS.
- The scope includes supply & installation of under bench cabinets including worktop, raceway, sink, water tap, peg board, eyewash, Leg Space, Cable Manager, Filler Panels, Close Panels, etc, complete in all respect, which are completely parts of Laboratory furniture
- The scope also includes internal wiring of Electrical Switch & Sockets located at the triangular raceway provided above the worktop of Laboratory Furniture and the same should be connected to the DB nearest to the position of the item.
- Vendor should quote the price basis up to FOR door delivery of INST, Mohali inclusive of Packing Charges, Loading Charges, Freight Charges, Unloading & Internal Shifting Charges, Installation Charges and Commissioning Charges up-to the installation area
- Removal of all the debris and dirt accumulated during the installation of Laboratory Furniture, Fume Hood etc.

FOLLOWING SCOPE SHALL BE UNDER PURCHASER'S SCOPE

- Provision of safe storage area for Fume Hood, Lab Furniture, Ducting etc.
 - Clear passage to bring Fume Hood fully assembled in the Lab:(Ideal 1000 mm/40 inch min.)
 - Clear false ceiling height: (for fume hood Ideal 2800 mm/110 inch min.)
 - Clear ceiling height: (for ducting Ideal 3000 mm/118 inch min.)
 - Provision of Electrical supply to the respective Wall Table, Island Table, Fume Hood.
 - Provision for Electrical points - 230 V, 50 Hz, single phase AC with necessary ELCB, near the junction box at top of the hood shall be under purchaser's scope
-



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VENDORS / BIDDERS ELIGIBILITY CRITERIA

Vendors / Bidders of appropriate class of those who have carried out similar work in Govt., Semi Govt. Institutes/PSUs who are eligible as per the minimum requirements defined below :

1. **COMPANY PROFILE:** The vendors/ bidders should be registered as per the Company norms in India having a place of business in India. Clear supportive documents in this regard should be uploaded. Vendor / Bidder must upload the scanned copy of PAN Card , Trade Licence (If applicable) , Incorporation Certificate , Factory Licence , Income Tax Return of the last 3 (Three) Financial Years. GST Registration Certificate and Certificate of Registration with EPF and ESI.

2. This being a prestigious Project, we invite the Vendors / Bidders who should be registered in India and manufacturing plant should be 100% subsidiary in India of parent Company if any.

3. **INFRASTRUCTURE** : The Vendor / Bidder or its parent company should have a well – established (their own) in – house manufacturing unit for the steel Laboratory Furniture and Fume Hoods, quality management system as per International Standards providing the products and services on the continuous basis at least for the last 15 years.

The Vendors/ Bidders or its parent company should possess the current / valid approval for such items manufacturing facility by a statutory certifying authority, like Factory Inspector etc.

4. The Vendors / Bidders should have some permanent establishment at North India and proof of the existing authorized representative / agent at Chandigarh / Mohali with documentary evidence.

5. **CERTIFICATIONS** : OEMs (Vendors/Bidders) should have valid i) ISO – 9001: 2015 ; ISO – 14001:2015 ; OHSAS 18001:2007 certification / certified company; ii) should submit third party Test certificate of “BIFMA HCF 8.1” by approved agency ; IGBC CERTIFICATE in technical bid and iii) should also have valid SEFA Membership for minimum 9 (Nine) consecutive years and valid ASHRAE Membership certificate for Fume Hoods.

6. **WORK EXPERIENCE:** The Vendors / Bidders should have work experience as per following parameters. Supportive documents like copy of P.O., completion certificate etc. should be uploaded in this regard.

One similar completed work costing not less than Rs. 3.2 Crores or two similar completed work costing not less than Rs. 2.4 Crores each or three similar completed work costing not less than 1.60 Crores each in last 5 (Five) years for Centrally Funded Technical Institutes (CFTI) which includes IITs , IISERs, IIMs, NITs, IIITs, NITTTRs, IISc, IIST, CSIR Institutes , Central Universities



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(An autonomous Research Institute of Department of Science and Technology,
Government of India)

Habitat Centre, Sec-64, Phase X, Mohali – 160062, PUNJAB

Phone No: 0172 – 2210073/74/75, Fax No: 0172 – 2210074

Website: www.inst.ac.in

and /or DAE Institutes (NISER , TIFR) and alike where they have completed the similar works including Fume Hoods , Laboratory Furniture and related accessories in air- conditioned Laboratories.

7. FINANCIAL TURNOVER : Vendors / Bidders should have had an average annual financial turnover of Rs.30 Crs. (Thirty Crores) in last 3 (three) years i.e. 2016-17 ; 2017 -18 ; 2018 - 19 ending 31st March ,2020 .The Group turnover of any other business other than Fume Hoods, Exhaust Systems , Gas distribution Systems (GDS), Electrical work and Laboratory Furniture cannot be included. Latest audited financial statement with CA certificate to this effect may be submitted.

8. Vendor / Bidder should submit valid certificate of SEFA 8 and SEFA 10. Vendors / Bidders should submit third party Test Certificate of SEFA 8M (2016) by SEFA as well as SEFA 10 – 2016 by SEFA approved Laboratory for Laboratory Furniture and third party certificates of ASHRAE 110-2016 for Laboratory Fume Hoods. Detailed documentary evidence for the same must be included in the technical bid.

9. Vendors/ Bidders should have in – house test facility for SEFA 8M and ASHRAE 110 in their own factory. Documentary evidence of the same should be submitted in the technical bid.

The product shall be tested in the Manufacturer's own test facility for it's evaluation as per ASHRAE – 110 -2016 (USA Standards)

10. SOLVENCY CERTIFICATE: Considering the size of the Project , the Vendors / Bidders should have solvency of minimum of Rs. 2 Crs. (Two Crores) . The Vendor / Bidder shall produce the Solvency certificate for Rs.2 Crs. from the Nationalized / Scheduled Bank not older than three months from the last date of submission of tender.

11. The Vendors / Bidders should not have incurred any loss during the last 3 (three) years as of 31st March, 2020. Profit after Tax should be positive for the above mentioned period.

12. SERVICE : The vendor/Bidder is required to furnish the list of in – house SERVICE TEAM who would have executed at least 2 (two) AMC of sizeable value.

The Vender / Bidder must furnish an undertaking that they will attend physically a service call or any emergency call within 24 hours.

The vendors / Bidders shall be selected on the basis of the above mentioned eligibility criteria provided in the technical bid. Price bids of the successful vendors / bidders who have qualified in the Technical bid, will only be opened.



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Besides the above Vendors / Bidders eligibility criteria, there should be following activities:

- i) Sample / Mock up of Laboratory Furniture & Fume Hood
- ii) Factory visit to Technically selected vendors before opening of Price Bid.
- iii) Visit to a place of Installation.

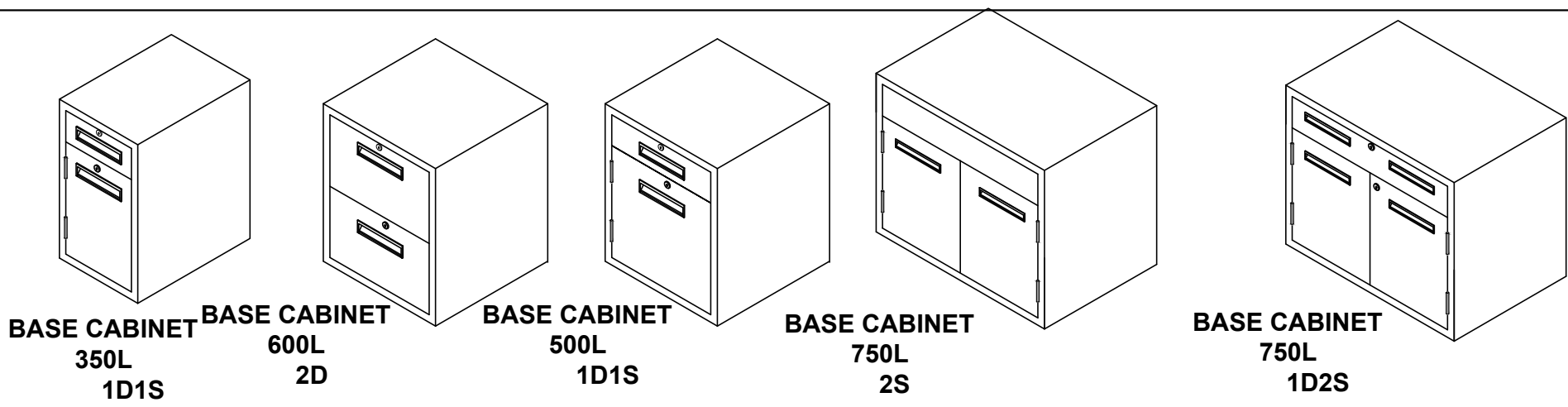
Any other items (BOQ) which have not mentioned above in the tender for the proper functioning of Lab furniture (which includes Cables, Electrical Items, other consumable items, civil work etc.) should be quoted separately.

Ground Floor

Note :-

- All Dimensions are in "mm"
- C-Frame System
- Handle in Flush type
- Single Piece Molded P.P.Sink
Size : L600mm xW450mm xD315mm
- Worktop in 18 ±1 mm thick Black Granite Construction.

CABINET DETAILS



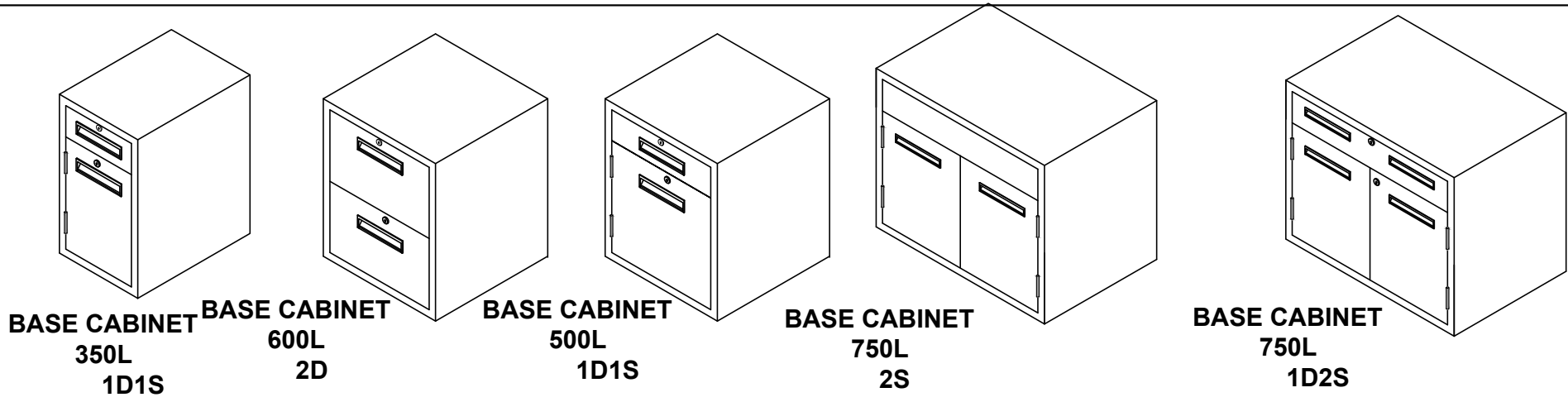
NAME		DESCRIPTION:	
Prepared & Checkby		PROPOSED LAYOUT OF LABORATORY WORKSTATIONS IN C-FRAME DESIGN	
Dewang Mistry		M/s, Institute of Nano Science and Technology (INST), Mohali	
		SCALE : N.T.S.	Rev. No.
		SHEET NO. 1 OF 01	R0

1st Floor

Note :-

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- Handle in Flush type
- Single Piece Molded P.P.Sink
Size : L600mm xW450mm xD315mm
- Worktop in 18 ±1 mm thick Black Granite Construction.

CABINET DETAILS



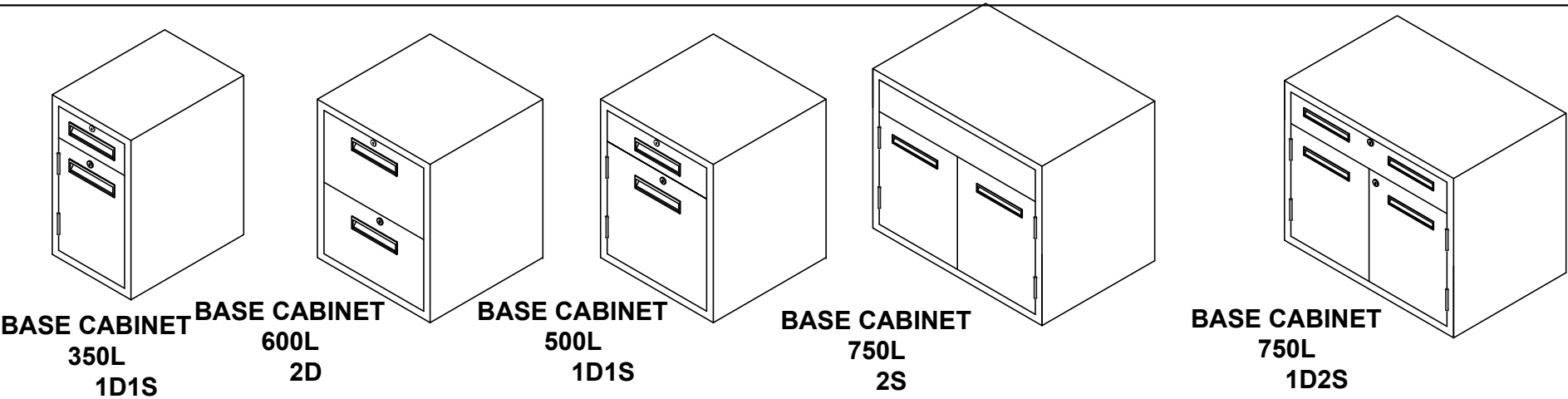
NAME		DESCRIPTION:	
Prepared & Checkby		PROPOSED LAYOUT OF LABORATORY WORKSTATIONS IN C-FRAME DESIGN	
Dewang Mistry		M/s, Institute of Nano Science and Technology (INST), Mohali	
SCALE : N.T.S.		Rev. No.	
SHEET NO. 1 OF 01		R0	

2nd Floor

Note :-

- All Dimensions are in "mm"
- C-Frame System
- Handle in Flush type
- Single Piece Molded P.P.Sink
Size : L600mm xW450mm xD315mm
- Worktop in 18 ±1 mm thick Black Granite Construction.

CABINET DETAILS

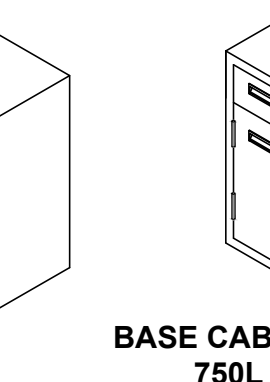
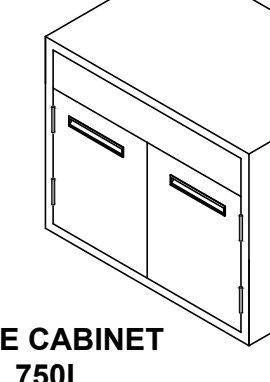
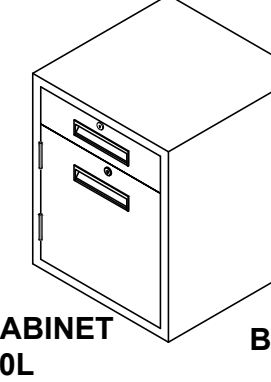
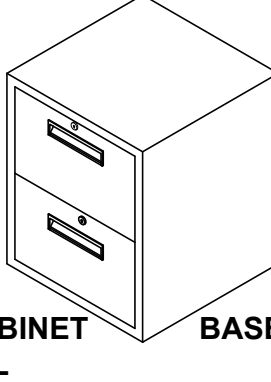
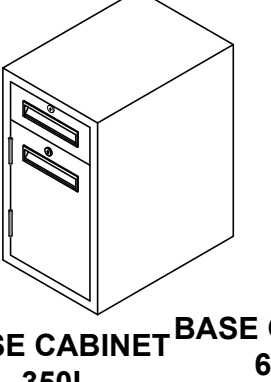


NAME	DESCRIPTION:
Prepared & Checkby <i>Dewang Mistry</i>	PROPOSED LAYOUT OF LABORATORY WORKSTATIONS IN C-FRAME DESIGN
	M/s, Institute of Nano Science and Technology (INST), Mohali
SCALE : N.T.S.	Rev. No.
SHEET NO. 1 OF 01	R0

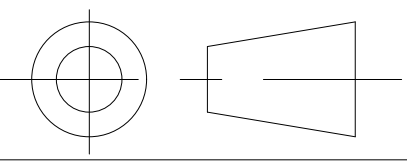
3rd Floor

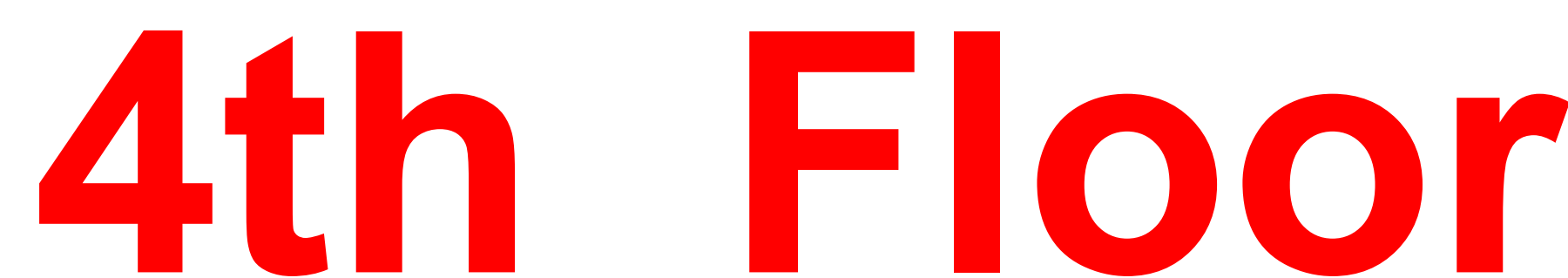
- Note :-**
- All Dimensions are in "mm"
 - C-Frame System
 - Handle in Flush type
 - Single Piece Molded P.P.Sink
Size : L600mm xW450mm xD315mm
 - Worktop in 18 ±1 mm thick Black Granite Construction.

CABINET DETAILS



BASE CABINET 350L 1D1S BASE CABINET 600L 2D BASE CABINET 600L 1D1S BASE CABINET 750L 2S BASE CABINET 750L 1D2S

NAME		DESCRIPTION:	
Prepared & Checkby		PROPOSED LAYOUT OF LABORATORY WORKSTATIONS IN C-FRAME DESIGN	
Dewang Mistry		M/s, Institute of Nano Science and Technology (INST), Mohali	
		SCALE : N.T.S.	Rev. No.
		SHEET NO. 1 OF 01	R0



- All Dimensions are in "mm"
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