



Central University of South Bihar

(A Central University established under Central Universities Act 2009)

(Notice Inviting Tender)

NIT No.: CUSB/PSD/WorkStation/T/09/2020-21

Dated: 06/11/2020

Sealed item rate tenders are invited from manufactures, Suppliers (or their 'authorized' dealers), Contractors for providing & fixing of the following items for its Permanent Campus site at Panchanpur, Gaya, Bihar- 824236.

Sr. No.	Tender No.	Description of the item	Estimated cost
1.	CUSB/PSD/WorkStation/T/09/2020-21	Part-A & Part-B attached	Rs. 86 Lakhs/- (Approx.) (Rupees Eighty Six Lakhs Only)

The subject tender covers the major scope of furniture for **Supply and Installation of "Laboratory Work Station" for Geology and Pharmacy Departments**. The tender documents (non-transferable) along with detailed specifications and terms & conditions (available on) can be downloaded from the University website www.cusb.ac.in and must reach the office of **Registrar (TENDER DOCUMENT), CENTRAL UNIVERSITY OF SOUTH BIHAR, Administrative Building, Gaya Tekari Road, Panchanpur, Gaya - 824236 (Bihar) by registered post / speed post/ by hand.**

The last date for submission of duly filled tender documents is **28/11/2020**. Application/(s) received after last date of submission will not be considered.

Read carefully the tender documents and also note the following important dates.

S.N.	Important Dates related to Tender	Details
1	Tender Notice No.	CUSB/PSD/WorkStation/T/09/2020-21 Dated : 06/11/2020
2	Name of work	Supply and Installation of "Laboratory Work Station" in Geology and Pharmacy Dept., CUSB, Gaya
3	Tender Fee	Rs. 500/- in shape of DD
4	Earnest Money Deposit	Earnest money of Rs. 4,00,000/- in shape of Demand Draft drawn in favour of Central University of South Bihar, payable at Gaya from any scheduled Bank.
5	Start Date of Tender	06/11/2020
7	Pre-bid Meeting in the office of Tender Inviting Authority; Date and Time	12/11/2020 by 11:00 AM at CUSB Gaya
8	End Date and Time of Submission of Bid	28/11/2020 by 04:00 PM
9	Date & Time of Technical Bid Opening	01/12/2020 by 11:00 AM

(Registrar)

Sealed item rate tenders are invited under Two Bid System from Manufactures, Suppliers (or their 'authorized' dealers), Contractors for providing and fixing the items as mentioned in Annexure '1'.

1.1.1. Eligibility Criteria

1.1.2. Financial

1.1.2.1 The Firm should have Average annual financial turnover of at least 100 % of the estimated cost during the preceding last 3 consecutive financial years.

1.2.1. Physical

1.2.1.1. Three similar works in Central Government/ state Government/ PSU/ Universities/ Reputed Higher Educational Institutions costing not less than 40% of the estimated cost or two similar works costing not less than 60% of the estimated cost or one similar work costing not less than 80% of the estimated cost in the last 7 years ending on the last day of the month previous to the one in which the tenders are invited.

1.2.1.2. Similar Work is defined as Supply of Wooden Furniture in Central Government/ state Government/ PSU/ Reputed Govt Educational/ Higher Educational Institutions or having wood work as item in the composite Civil work of buildings executed with Central Government/ state Government/ PSU/ Reputed Government/Private Educational Institutions.

2.0. Bid Submission: The Tender Documents for items will be on **two-Bid System** consisting of **Technical Bid** and **Price Bid**. The process of evaluation of bids shall be done in two phases as under:

2.1. Technical Bid: Bidders shall be required to submit all documents related with the tender requirement in one Envelope labeling the same as "Technical Bid" as Envelope-A. Applications incomplete in any respect, viz. non-submission of any required document or information, or fee in requisite amount are liable for rejection.

2.1.1. Envelope- A

The sealed envelope containing the Technical BID documents & fee should be clearly super-scribed on the top of the envelope as "**TECHNICAL BID DOCUMENTS** "

2.1.2. The following self-certified essential documents (as applicable) should accompany the Technical Bid Proforma:

1. Check List
2. GST Certificate
3. Income Tax - Permanent Account No. (PAN)
4. Copy of Small Scale Unit/ MSME/ NSIC Registration under relevant items.
(If Registered)
5. Annual Turnover CA certified Certificate for last 3 years & Copy of IT Return for the year (2018-19, 2017-18, 2016-17).
6. Copy of certificate of meeting minimum eligibility criteria (as per Clause No 1.1.2 & 1.2.1)
7. Bank Details.
8. Trade License, Factory License/Excise Registration.
9. Current dealership Agreement /Registration Certificate from the Principal.
10. Memorandum and Article of Association, Certificate of Incorporation, Partnership Deed, Registration Certificate issued by the Registrar of Firms etc.

11. All pages of Tender document except Bill of Quantities.
12. Un-priced copy of Bill of Quantity with "Nil" written in Rate and amount Column.
13. Earnest Money Deposit in form of Bank Draft for an amount of **Rs 4,00,000/-** (Rupees Four Lakhs only) drawn in the Central University of South Bihar payable at Gaya.
14. Price of Tender Document [Non Refundable] in form of Bank Draft for an amount of **Rs 500/-** (Rupees Five Hundred Only) drawn in the favour of Central University of South Bihar, payable at Gaya.
15. A notarized certificate that the Organization hasn't been black listed by any institution of the Central/ State government / any PSU, University, Institute etc. in the past three years.
16. The tender cost and EMD are not required to be submitted by bidders who are exempted in terms of MSME, Govt. of India guidelines. However, they are required to furnish requisite certificate in this regard issued by the Competent Authority. If they are newly Start-up, exemption will be provided as per Govt. notifications. This should be strictly certified by the vendors of requisite authorized valid documents.

2.1.3. Envelope- B: This Contains Price Bid Only: Duly Sealed and signed Bill of Quantity pages to be put in to envelope labeled as "Price Bid" Envelope 'B'.

2.1.4. The duly sealed & signed Tender Documents as stated above to be put in one big envelope and same has to be labeled with "Techno-commercial Bid", Tender Number, Due date of Submission, Name & address of the bidder and has to be submitted with in due time of closure of Technical Bid submission either by **Registered post/ Speed Post/by hand** to the **"Registrar (TENDER DOCUMENT), Central University of South Bihar, Administrative Building, Gaya Tekari Road, Panchanpur, Gaya - 824236 (Bihar)** on or before the due date and time i.e. **28/11/2020 by 4.00 PM.**

2.1.5. Bid Evaluation Criteria: Shall be done after checking of authenticity of documents produced along with Techno-commercial Bid.

Note: *In no case, bidders shall quote prices in any of the document during and with Technical Bid submission. Price bid to be submitted only in separate envelope.*

2.1.6. Site Visit: Bidders are requested to visit the site of Central University of South Bihar, Village- Panchanpur, Gaya, Bihar- 824236. Supply and Installation of items under the subject tender has to be carried out at the above location. Bidders should get themselves satisfied with the site conditions, environment, transportation and other socioeconomic factors etc. before quote. Any afterthought expressions after award of the job shall not be entertained.

2.1.7. Tender Documents: The tender documents (non-transferable) along with detailed specifications and terms & conditions can be obtained from CUSB website www.cusb.ac.in.

2.1.8. Forms can be downloaded and used along with payment of non-refundable tender price as mentioned below. The Tender price may be paid in the form of Bank Draft for an amount of Rs. 500/- (Rupees Five Hundred Only) in favour of Central University of South Bihar payable at Gaya separately along with the demand draft of Earnest Money Deposit of **Rs. 4,00,000/- (Rupees Four Lakhs Only).**

- 2.2. No Tender/ documents shall be accepted after due date and time of bid submission.
- 2.3. Language of Bid shall be English Only.
- 2.4. Canvassing in any form shall be liable to rejection of Bid without assigning any reason by Tender Inviting Authority.
- 2.4.1. The University shall not be responsible for any delay in receiving Bids for what so ever reasons.
- 2.4.2. The University reserves the right to accept or reject any bid, without assigning any reason thereof. No correspondence in this regard will be entertained.
- 2.4.3. This document is treated as a valid contract between CENTRAL UNIVERSITY OF SOUTH BIHAR and Vendor and adherence to all aspects of fair trade practices in executing the work orders placed by the University.
- 2.4.4. In case the vendor is found in breach of any terms & condition(s) of the University or work order, at any stage during the course of supply / installation or warranty period, the legal action as per rules/laws, shall be initiated against the vendor and EMD/Security Deposits shall be forfeited by the University besides debarring and blacklisting the vendor concerned for at least three years for further dealings with the CENTRAL UNIVERSITY OF SOUTH BIHAR.
- 2.4.5. The vendor should not assign or sublet the work or any part of it to any other vendor in any form. Failure to do so shall result in termination of contract.
- 2.4.6. The vendor to whom work order has been issued is expected to maintain absolute integrity, follow a decent standard of business ethics.
- 2.5. **Priced Bid**
- 2.5.1. **Pre-Bid meeting:** A Pre-bid meeting shall be conducted for clarification of queries raised by bidders, if any on technical or commercial requirements related with subject bid. Bidders are requested to email their queries with reference of clauses to following email ids: registrar@cub.ac.in; ee@cusb.ac.in. The last date of receipt of queries shall be 12/11/2020 till 11.00 AM. Pre-bid meeting shall be held on 12/11/2020 at 11.00 AM onwards at Central University of South Bihar, Gaya.
- 2.5.2. Any Corrigendum/ information shall be published and displayed on website only.
- 2.5.3. Bidders should understand the requirement of material/ services as per samples approved and displayed, Design, drawings, Technical specification & Bill of Quantity. Accordingly, rate to be quoted. Scope of supply of vendor and Scope of supply of Owner to be understood thoroughly by the bidders while quoting their rates.
- 2.5.4. Bidder should quote their rates, amount and other details in the prescribed format of "Bill of Quantity". While filling the said Bill of Quantity, rate and amount to be written in numeric as well as in word. Bidders should fill the priced bid format very carefully to avoid any corrections, overwriting etc. Any overwriting and/ or correction on price bid shall be summarily rejected. After quoting the rate in format of "Bill of Quantity", bidders

shall seal the same in an Envelope and same has to be labeled with "Priced Bid" Envelope 'B', Tender Number, Name and address of the Bidder.

2.5.5. Bidders to send their representatives by authorizing them in writing to be present during Pre-bid meeting, opening of Technical bid as well as in Priced Bid.

2.5.6. Work shall be awarded to the vendor who will be over all lowest in price after evaluation of quoted rates in all items.

2.6. Tender Inviting Authority reserves the right to award the job to lowest bidder and or may summarily cancel the Tender.

3.0. Scope of Vendor

3.1. Submission of Performance Guarantee in form of Demand Draft or Bank Guarantee for an amount equivalent to 10% of the awarded value. The Performance Guarantee to be submitted within One month of date of award of the contract. Date of award of the contract shall be reckoned from the date of issue of Letter of Acceptance (LOA).

3.2. Vendor has to execute an agreement within 15 days of the issuance of LOA and must before submission of Bill whichever is earlier.

3.3. Vendors are required to submit Shop drawing for item of the Bill of quantity within 10 days from the date of issue of LOA. Owner/ Engineer In-charge shall check the drawing and ask the vendor to incorporate comments, if any. Vendor shall resubmit the shop drawing after incorporation of all comments so as to satisfy the instruction of Owner/ Engineer-In charge within 7 days of receipt of the comments. Minor variation in specification, drawings related to items may take place and vendor shall be required to execute the same without any additional implication of cost and time.

3.4. Vendor shall construct its own store and fabrication yard fully secured to store and for fabrication of material at site. Owner shall provide open land only adjacent to buildings for construction of temporary store/ fabrication yard. Vendor shall remove the same and make the area good and cleaned from all debris after completion of job at their own. Cost towards construction of such temporary facility and dismantling after completion of work will not be borne by the University. Nothing extra shall be paid on account of above.

3.5. Vendor has to arrange their own security, watch & ward of their assets and materials brought at site for the work. Owner/ Engineer In-charge shall not be responsible for any kind of pilferage, loss, damage & breakage etc on account of any incidence/ act.

3.6. Vendor has to obtain Contractor's All Risk (CAR) Policy for the value of contract till completion of work from competent agency and submit the Notorised copy of the same to Owner/ Engineer In-charge within 15 days of issuance of LOA.

3.7. Vendor has to obtain labor license for fabrication and installation work at site. In addition to above, vendor has to obtain Workmen Compensation Policy from the designated agency for the category and quantum of labors required till completion of the job.

3.8. All labors deployed in work should be covered with Provident Fund scheme and E.S.I as per the directives of Statutory Authority. A copy of submitted challan shall be required with bills submitted by vendor to Owner/ Engineer—In charge for receipt of payment.

3.9. Inspection

(a) Inspection at the source of production of material shall be carried out by the Owner/ Engineer In-charge before dispatch of material. Vendor has to offer such call at least 7 days in advance in writing. However, inspection does not relive vendor from ensuring confirmation of material with agreed specifications, quality, size, texture and finishes etc.

(b) All fabricated materials at site to be inspected by Owner/ Engineer-In-charge before application of paint/ primer and polish. Any material polished/ painted before such inspection shall be rejected and no payment shall be released towards the same.

3.10. Vendor should carry out the job at site in such a manner to avoid any damage to existing facility/ ongoing work in the buildings. Bidders should take utmost care while shifting the assemblies/ members/ fabricated furniture to avoid any rubbing with adjacent walls and floor. Any damage caused to the existing facility, ongoing work must be rectified and made good by the vendor. In event of failure in such rectification/ replacement, the job shall be done by Owner through other agency at the risk and cost of the vendor.

3.11. While installation of furniture in room/ hall, a layout on floor to be provided with location of Anchor/ fasteners by erasable ink to cross check the space plan before installation. A copy of such lay out plan to be kept for record and submitted with (Running Account) RA Bills and As-built drawings in soft as well as hard copy along with final bill.

3.12. Wherever applicable, size and type of Anchor fasteners to be suggested and provided by vendor with their experience and previous installation, so as to ensure no damage to finished flooring which shall be Vitrified tiles of 9/10 mm thick on 20 mm average cement mortar or Granite flooring of 18 mm+/- 1 mm with 20 mm average thickness of cement mortar. Further, vendor shall use Heavy duty zinc plated concrete anchors to withstand a rigid assembly cast iron (C.I.) frame with floor & wall without any gap and vibration after installation. Vendor shall submit Sample of Anchor fastener for obtaining approval of owner/ engineer In-charge.

3.13. All materials brought in site should be fully seasoned and meet technical specifications. All materials should accompany with valid invoices, Excise challans, forest clearance certificates and Manufacture's Test Certificate, if applicable with each lot of materials. Vendor shall submit copy of all documents as stated above with bills. Vendor shall be held responsible for any kind of mischief/ manipulation of documents, if found and action shall be taken against vendor as per law. The University will not be liable in any circumstances due to failure of any legal compliance on the part of vendor.

3.14. Vendor should separately stock the wastages, cut-pieces and other salvage material and shall obtain written permission of Owner/ Engineer In-charge prior to removal/ disposal of the same.

3.15. Vendor and their representative shall strictly ensure Safety while working in site and Personal Protective Equipment to be used while carrying out the work.

3.16. Adequate number of sample of wood material with lot shall be sealed and signed jointly and shall be sent to Third Party Testing Laboratory (Preferably Government Laboratory) for

Physical and Chemical test, if required as per relevant Bureau of Indian Standard (BIS) and code of practices. All material shall only be accepted for acceptance, once test report confirms its authenticity as per specification. All charges towards cost of samples, transportation, sampling and testing to be borne by contractor and cost towards same is deemed to be included in the rate quoted by the vendor.

A. Indemnity

The vendor to whom work order has been issued shall indemnify the CENTRAL UNIVERSITY OF SOUTH BIHAR and user departments against all third party claims of infringement of patent, trademark/copyright or industrial design rights arising from the use of the supplied items and related services or any part thereof.

User department stand indemnified from any claims that the vendor's manpower may opt to have towards the discharge of their duties in the fulfilment of the purchase orders.

B. Termination for Default

a) Default is said to have occurred i) if the vendor fails to deliver any or all of the services within the time period(s) specified in the work order or any extension thereof granted by the University. ii) If the vendor fails to perform any other obligation(s) as mentioned in the tender documents.

b) If the vendor, in either of the above circumstances, does not take remedial steps within a period of 15 days after receipt of the default notice from the University (or takes longer period in spite of what the University may authorize in writing), The University may terminate the work order in whole or in part.

All disputes in this connection shall be settled in Gaya Jurisdiction only.

3.17. Unless and otherwise specified all cost towards material, transportation, all taxes, duties, wastages, labor, insurances, transit insurance, storage, shifting, lead and lift, carriage, staffs, accommodation, welfare measures for staffs and labors, labor wages & benefits and other incidental expenses etc. are deemed to be included in the rate quoted by the vendor. Nothing extra shall be paid on account of above.

3.18. Mode of Measurement: Unit of measurement shall be "Each" and shall be certified on counting the goods.

3.19. Rates are invited for furniture made out of Two kind of Solid hard wood namely, Red Sheesham & 2nd Class Teak wood.

4.0. Payment Terms

Payment shall be made in stages:

1st Stage: 70% of the item rate shall be paid after receipt of raw material at site and joint inspection by Engineer-In charge subjected to submission of mandatory purchase invoices, Quality reports (mandatory).

2nd Stage: 30% of the item rate shall be paid after successful fabrication and final polishing/ painting/ installation of the items subject to satisfactory report by the Engineer-In-Charge.

- 5.0. S.D. Clause :** 10% of the contract value shall be submitted by the vendor as Security Deposit in form of **DD/BG/Bank Deposit in favour of Registrar, Central University of South Bihar payable at Gaya** by any scheduled bank.
- 6.0. Completion Time:** Completion Time for Entire Scope of Work shall be 03 months from the date of issuance of Letter of Award.

7.0. Defect Liability Period: Defect Liability period of the subject job shall be 1 year from the completion of job in all respect subject to issuance of virtual completion certificate by Engineer In-charge. Any defects found during above period shall be brought to the notice of the vendor and same has to be rectified within 7 days. If the vendor fails to rectify the defect during above period, same shall be made good/ rectified by other agency at the risk and cost of the vendor.

8.0. Penalty

8.1. 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 1% per week** and the maximum deduction is **10% of the contract price** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance. Once the maximum is reached, the Purchaser may consider termination of the Contract.

9.0. All disputes in this connection shall be settled in Patna/Gaya Jurisdiction only.

VENDORS / BIDDERS ELIGIBILITY CRITERIA

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

1. COMPANY PROFILE: The vendors/ bidders, Indian / foreign 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 License (If applicable) , Incorporation Certificate , Factory License , 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 in India or abroad should possess the current / valid approval for such items manufacturing facility by a statutory certifying authority, like Factory Inspector etc.

4. 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 .

PART - A (Department of Pharmacy)

Detailed Technical Specification for Supply and Installation of Laboratory Work Station (Deptt. of Pharmacy)

To be read in conjunction with Bill of Quantity, Drawings and Scope of Vendor.

Technical Specification **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. Bidders should submit third party Test certificate of “**BIFMA HCF 8.1**” by approved agency. Detailed documentary evidence for the same must be included in the technical bid.
- ❖ 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 be in the same plane with bolted joints and should be suitably aligned.

Laboratory work tables shall be in Plinth mounted designs:

A. Laboratory work tables with plinth design, is where the worktop is mounted directly on a base of modular plinth mounted cabinets. This type of design provides flexibility in terms of easy change in the configuration of the work table in the future.

Laboratory work tables 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.

Work Table Configurations:

- Wall Benches
- Island Benches
- Peninsular Benches
- Corner Benches
- Sink Units

❖ **Under bench modules for Laboratory work tables:**

All modules manufactured by Industries should 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/ wooden construction.

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.

Furniture modules should be 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 with additional accessories like foot rest, keyboard tray, CPU trolley etc. Rear portion of the leg space will be covered with the enclosure panel.

❖ **Reagent Rack:**

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

- Single sided and Double sided reagent rack for wall benches and island benches respectively
- Single, double or three tier racks depending on storage requirement
- Reagent racks are offered mainly in two design,
In epoxy coated galvanized iron construction with PP lined shelves

OR

Special profile extruded Aluminium construction with hard anodized epoxy powder coated surface. Shelf tops are provided in 6mm phenolic resin or wire reinforced glass construction. This design offers extra ordinary chemical resistance in addition to elegant look. Shelf height shall be adjustable as per requirement.

❖ **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.

❖ **Wall Mounted Storage Cabinet: General Specifications:**

The cabinet should be suitable for mounting on wall. The cabinet shall be fabricated out of galvanized iron sheets. Cabinet should be provided with 1 adjustable shelf. Proper design, stiffening / structural members should be provided for strength and rigidity. Front door of the cabinet shall be in twin door design having glass panel with metallic frame in galvanized iron construction. Dimension and constructional detail of the cabinet is furnished below.

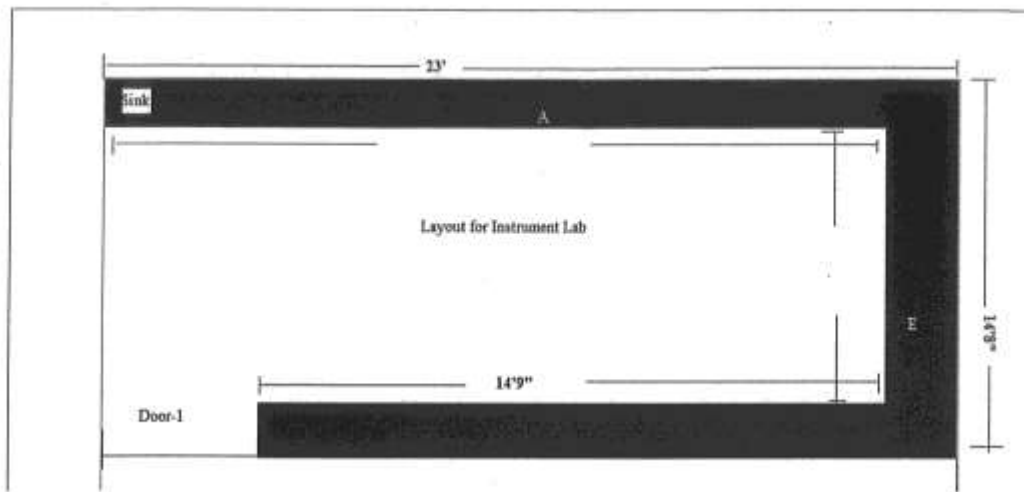
No. of Shelves: - 1 fixed shelf; forming 2 compartments.

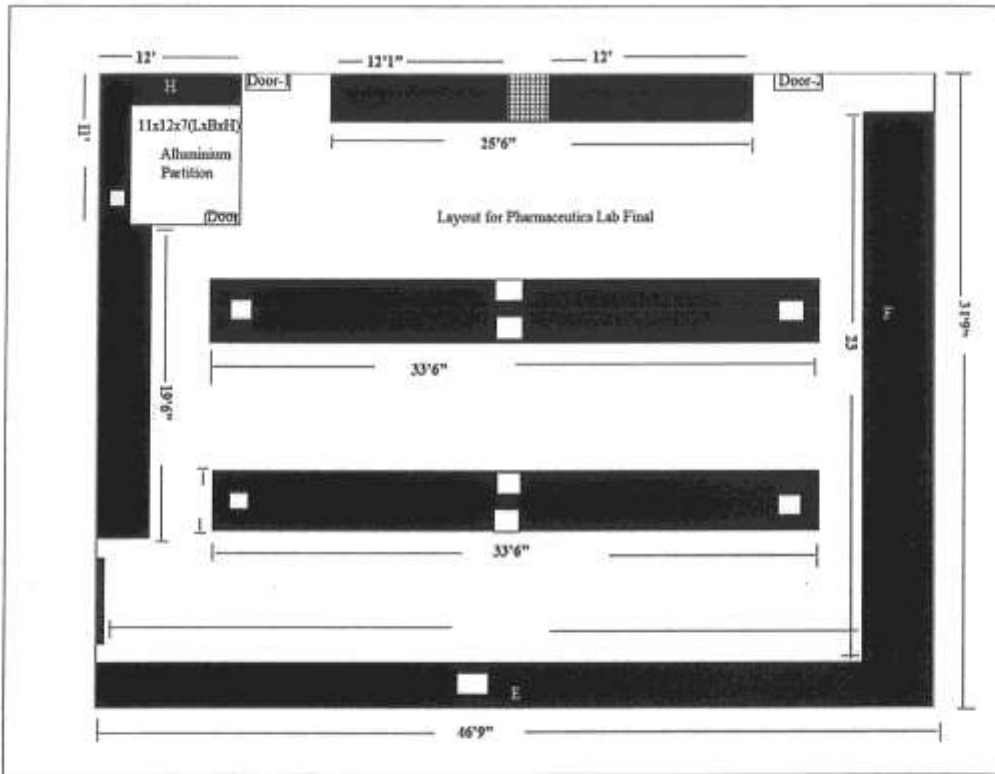
Construction Detail:-

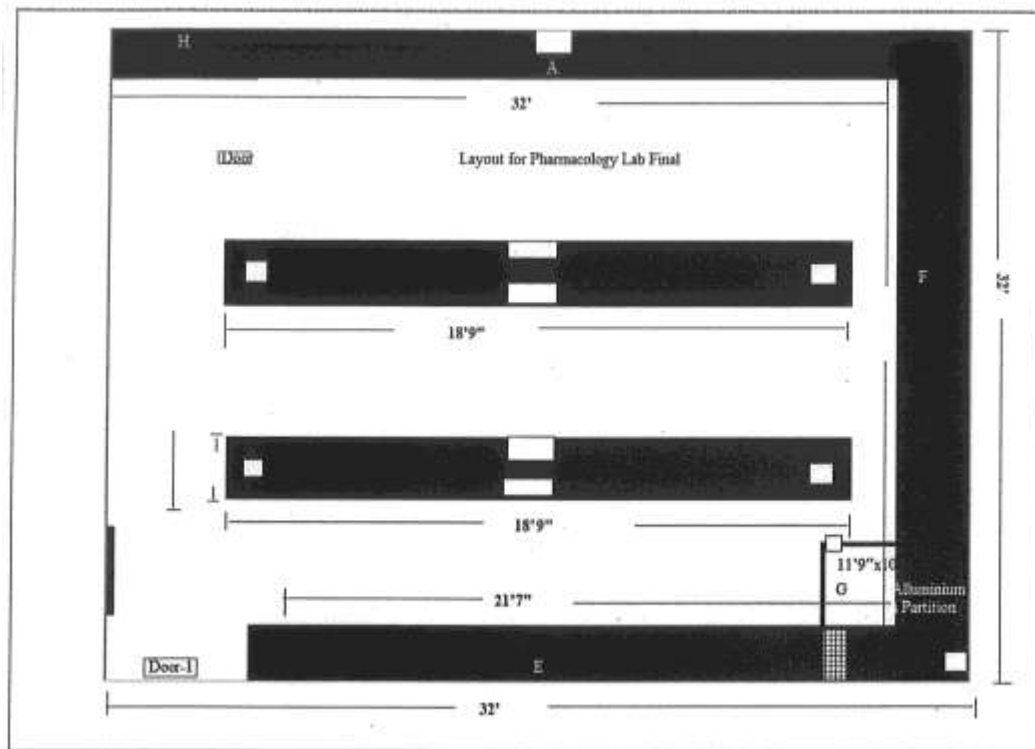
- End Panel, Top Panel & Bottom Panel: - 1 mm thick Galvanized Iron sheet
- Rear panel: - 1 mm Galvanized Iron sheet
- Front door: - 5 mm thick glass with metallic frame in G.I.
- Shelf: - 1 mm thick G.I. sheet
- Door supporting frames: - 1.6 mm thick G.I. sheet
- Door Hinges: - Knuckle and Barrel type SS hinges
- Door Handles: - SS 304 const.
- Lock: - With two keys for doors

List of recommended make of materials for laboratory furniture:

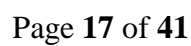
SR. NO.	MATERIAL	RECOMMENDED MAKE
1.	ZERO SPANGLED GALVANIZED IRON (GI) SHEET	TATA STEEL / SAIL / JINDAL MAKE
2.	HINGES	HETTICH / HAFELE /EQUIVALENT MAKE
3.	DRAWER RAILS	HETTICH / HAFELE
4.	LOCKS	HETTICH / HAFELE
5.	LABORATORY FITTINGS	PREMIER POLYMERS
6.	LABORATORY SINKS / DRIP CUPS	PREMIER POLYMERS
7.	LABORATORY ELECTRICAL SOCKET	NORTHWEST / LEGRAND / MK / NORISYS
8.	DATA & VOICE SOCKET	NORTHWEST / LEGRAND / MK / NORISYS
9.	EYEWASH / SHOWER	PREMIER POLYMERS

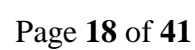


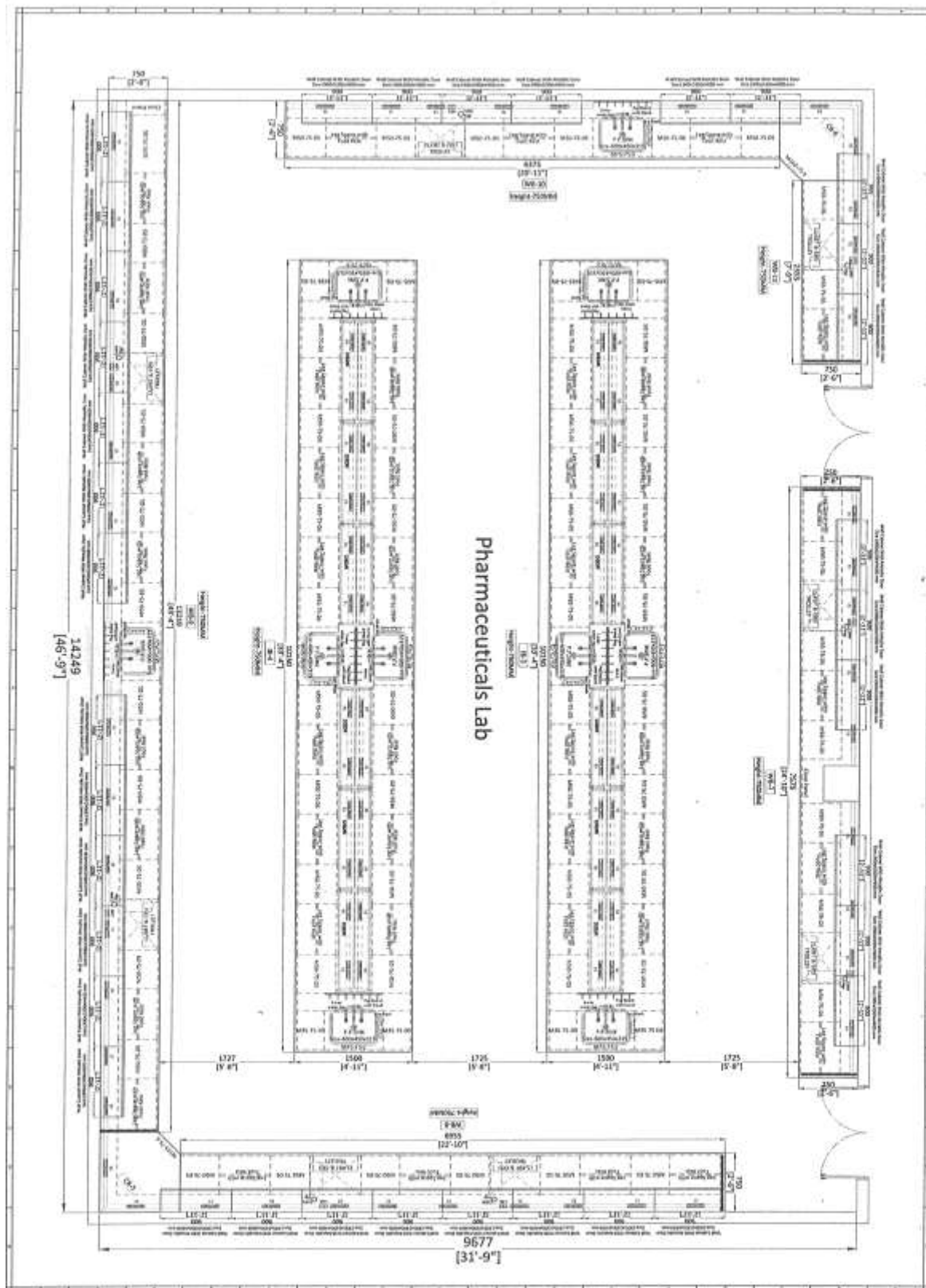




Measurement Sheet of Lab work station for Pharmacology, Pharmaceutical & Instrument Lab			
Sr. No.	Description	Qty.	Unit
Instrument Lab			
1	Wall Bench (WB - 1) Size: L 5980 mm x W 750 mm x H 750 mm	1	Nos.
2	Corner Bench (CB - 1 & 2) Size: L 1030 mm x W 1030 mm x H 750 mm	2	Nos.
3	Wall Bench (WB - 2) Size: L 2409 mm x W 750 mm x H 750 mm	1	Nos.
4	Wall Bench (WB - 3) Size: L 3505 mm x W 750 mm x H 750 mm	1	Nos.
5	Wall Mounted Storage Cabinet with Metallic Door Size: L 900 mm x W 300 mm x H 600 mm	13	Nos.
Pharmacology Lab			
6	Wall Bench (WB - 4) Size: L 8724 mm x W 750 mm x H 750 mm	1	Nos.
7	Corner Bench (CB - 3) Size: L 1030 mm x W 1030 mm x H 750 mm	1	Nos.
8	Wall Bench (WB - 5) Size: L 7694 mm x W 750 mm x H 750 mm	1	Nos.
9	Corner Bench (CB - 4) Size: L 1030 mm x W 1030 mm x H 750 mm	1	Nos.
10	Wall Bench (WB - 6) Size: L 5805 mm x W 750 mm x H 750 mm	1	Nos.
11	Wall Mounted Storage Cabinet with Metallic Door Size: L 900 mm x W 300 mm x H 600 mm	22	Nos.
12	Island Bench (IB - 1 & 2) Size: L 5550 mm x W 1500 mm x H 750 mm	2	Nos.
Pharmaceuticals Lab			
13	Wall Bench (WB - 7) Size: L 7575 mm x W 750 mm x H 750 mm	1	Nos.
14	Wall Bench (WB - 8) Size: L 6955 mm x W 750 mm x H 750 mm	1	Nos.
15	Corner Bench (CB - 5) Size: L 1030 mm x W 1030 mm x H 750 mm	1	Nos.
16	Wall Bench (WB - 9) Size: L 13219 mm x W 750 mm x H 750 mm	1	Nos.
17	Wall Bench (WB - 10) Size: L 6375 mm x W 750 mm x H 750 mm	1	Nos.
18	Corner Bench (CB - 6) Size: L 1030 mm x W 1030 mm x H 750 mm	1	Nos.
19	Wall Bench (WB - 11) Size: L 2355 mm x W 750 mm x H 750 mm	1	Nos.
20	Island Bench (IB - 3 & 4) Size: L 10150 mm x W 1500 mm x H 750 mm	2	Nos.
21	Wall Mounted Storage Cabinet with Metallic Door Size: L 900 mm x W 300 mm x H 600 mm	36	Nos.







PART - B (Department of Geology)

Technical Specification **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. Bidders should submit third party Test Certificate of SEFA 8M (2016) by SEFA and third party certificates of **ASHRAE 110-2016** for Laboratory Fume Hoods. Bidders should submit third party Test certificate of **“BIFMA HCF 8.1”** by approved agency. Detailed documentary evidence for the same must be included in the technical bid.

❖ 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 be in the same plane with bolted joints and should be suitably aligned.

Laboratory work tables shall be in Plinth mounted designs:

B. Laboratory work tables with plinth design, is where the worktop is mounted directly on a base of modular plinth mounted cabinets. This type of design provides flexibility in terms of easy change in the configuration of the work table in the future.

Laboratory work tables 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.

Work Table Configurations:

- Wall Benches
- Island Benches
- Peninsular Benches
- Corner Benches
- Sink Units

❖ **Under bench modules for Laboratory work tables:**

All modules manufactured by Industries should 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/ wooden construction.

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.

Furniture modules should be 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 with additional accessories like foot rest, keyboard tray, CPU trolley etc. Rear portion of the leg space will be covered with the enclosure panel.

❖ **Reagent Rack:**

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

- Single sided and Double sided reagent rack for wall benches and island benches respectively
- Single, double or three tier racks depending on storage requirement
- Reagent racks are offered mainly in two design,
In epoxy coated galvanized iron construction with PP lined shelves

OR

Special profile extruded Aluminium construction with hard anodized epoxy powder coated surface. Shelf tops are provided in 6mm phenolic resin or wire reinforced glass construction. This design offers extra ordinary chemical resistance in addition to elegant look. Shelf height shall be adjustable as per requirement.

❖ **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.

❖ **Wall Mounted Storage Cabinet: General Specifications:**

The cabinet should be suitable for mounting on wall. The cabinet shall be fabricated out of galvanized iron sheets. Cabinet should be provided with 1 adjustable shelf. Proper design, stiffening / structural members should be provided for strength and rigidity. Front door of the cabinet shall be in twin door design having glass panel with metallic frame in galvanized iron construction. Dimension and constructional detail of the cabinet is furnished below.

No. of Shelves: - 1 fixed shelf; forming 2 compartments.

Construction Detail:-

- End Panel, Top Panel & Bottom Panel: - 1 mm thick Galvanized Iron sheet
- Rear panel: - 1 mm Galvanized Iron sheet
- Front door: - 5 mm thick glass with metallic frame in G.I.
- Shelf: - 1 mm thick G.I. sheet
- Door supporting frames: - 1.6 mm thick G.I. sheet
- Door Hinges: - Knuckle and Barrel type SS hinges
- Door Handles: - SS 304 const.
- Lock: - With two keys for doors

❖ White Board, Soft Board (Pin Board) & Vertical Glass Partition:

- Pin Board / White Board with Clamp (Soft Board), Height - 400mm
- 12mm Toughened Vertical Glass Partition with Round Edge (on one side) with Clamp, Size : 650mm x 500mm

Technical Specifications of the Fume Hoods

The Fume Hoods should meet following specifications

Type of Hood:	Low Constant Volume type Bench type Fume Hood
Approx. Overall Dimensions:	Width 1200 x Depth 915 x Height 2300
Inner Dimensions:	Width 1000 x Depth 645 x Height 1200

1. Fume Hood Under Structure and cabinets:

Fume Hood should be mounted on C-frame structure made out of Hot deep Galvanized, MS hollow pipes of size not less than 80 mm x 40 mm x 2.5 mm thick. Fume hood under Storage twin cabinets shall be fabricated out of high finished galvanized iron sheets of thickness not less than 1.0 mm. Both, the cabinet and base frame structure shall be coated with pure epoxy through Powder coating process. The components shall, pass through proper pretreatment procedure before coating. The thickness of coating should not be less than 50 microns. Both the cabinets shall be placed side by side and will have total width equivalent to the width of the Fume hood. The cabinets shall be provided with two castor wheels on rear side and plastic bush on the front side. Both cabinets shall have independent plinth in the construction similar as the cabinets. Cabinets shall be provided with exhaust vent with a flexible hose to connect the cabinet with Fume hood exhaust passage. Proper fitment shall be provided at both the ends of flexible hose for proper fixing of hose at both the ends. The under cabinet should be provided with 1 No. removable height shelves and the cabinet should essentially be SEFA certified.

2. Fume hood super structure

Fume hood super structure should consist of

- Frame structure in atleast 1.6 mm thick galvanized iron construction.
- Inner lining, rear baffles and top baffles in 6mm thick fire retardant property **lab grade** Phenolic resin construction of any reputed make.
- Outer panels of the super structure should be in atleast 1.2mm thick high finished GI construction, duly coated with epoxy powder.
- Front post should be broad enough to mount service fittings and should be in fabricated out of atleast 1.2 mm thick high finished GI construction, duly coated with epoxy powder.
- Air Foil should be in Flip-on type design and should be fabricated out of 1.6 mm thick SS 316 construction. Air foil should be with hard Teflon coating for extra ordinary chemical resistant.

- Exhaust outlet should be provided with streamlined shaped duct collar in PP construction.
- The front sash should be in Combination type design, 5 mm thick toughened glass construction with full length sash handle in anodized Al construction duly coated with epoxy powder. .
- Sash movement mechanism should be provided with multi core SS wire having dia. not less than 3.0 mm. The wire pulleys should be provided with ball bearings in SS construction for smooth movement of the sash.
- Super structure should be provided with LED lights of sufficient capacity for proper illumination within the hood chamber. The light intensity at work top level should be atleast 300 lux.

3. **Fume Hood Worktop**

Fume hood work top in vitrified ceramic construction having thickness not less than 16 mm. The wok top shall be provided with raised rails on all 4 sides to prevent spillage and should also be provided with a cup sink in PP construction on rear side corner.

4. **Service Valves**

All the service valves should be in forged brass construction with spindle in SS construction. Valves should be provide with angular shaped serrated nozzles also in brass construction with epoxy powder coating. The valve knobs should be with color sign as per DIN standard. All the valves should be provided with service pipe connection at least 1.5 meter long in following construction.

Services		Tube Construction
Compressed Air (1 no)	-	PU pipe dia. 4 mm id
Nitrogen Gas (1 No.)	-	PU pipe dia. 4 mm id
Vacuum Valve (1 No.)	-	SS braided Teflon Hose id at least 8.0 mm
Potable Water (1 No.)	-	Nylon braided PVC Hose (duly insulated in case of chill water application)

All the service valves shall be mounted on left side vertical post.

5. **Electrical Services** with internal wiring (all in non-FLP const.)

Fume hood should be provided with following services along with internal wiring in FRLS flexible wire construction.

- Touch type Panel for light / Fan On-Off
- 16A, 2 Pole MCB - Legrand or eq. Make
- 5/15A 3-pin Socket with Switch - Legrand or eq. make

6. **Controls:**

Air velocity Monitor with low air alarm, Model AFA/1000 TEL - UK Make

7. **Base Cabinet (For Chemical Storage Purpose):** Detachable design general purpose twin cabinets fabricated out of GI sheet, consisting of,

- Special arrangement for air ventilation inside the cabinet
- Twin doors in double wall const.
- Flushed type recessed handle.
- Heavy duty knuckle-barrel special design door hinges.
- 1 No. removable shelf.
- Recessed base frame in heavy duty GI const.
- FRP Lining inside the chemical storage cabinet
- PP Tray for chemical storage
- Twin castors for easy removal of the cabinet.

8. **Fume Hood fan:** Each Fume hood should be provided with an independent exhaust fan of suitable capacity. Fan should be in construction as explained below.

- Fan Housing in **moulded PP construction**
- Backward curved type Impeller with Aero Foil shape blade in PP Construction for high efficiency performance.
- Fan Motor, direct driven type IP 55 construction suitable for 415 volt, 50 Hz, 3 phase AC power supply. The fans should be provided with Variable frequency drive for precise adjustment of the speed.
- Mounting structure and base frame in heavy guage, steel construction duly hot deep galvanized

9. **Exhaust Ducting:**

Exhaust ducting At least 300mm Dia in PP+FRP construction (3mm + 2mm) complete with necessary bends, reducers, T-connections, supports, flanges, gaskets, nutbolts etc.

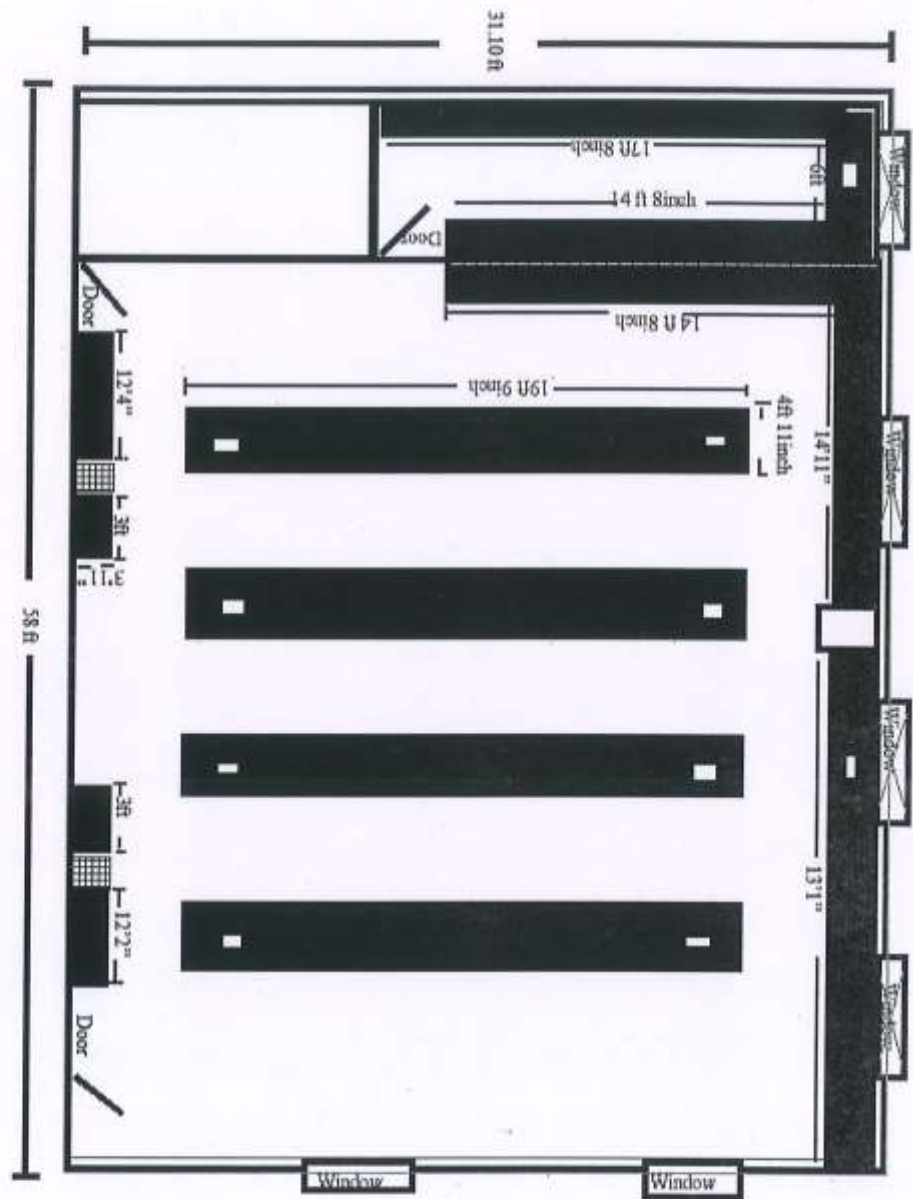
10. **Accessories:** Fume hood should also be provided with following accessories

- a. **200 mm dia. Duct damper** in PP const. complete with pre drilled flanges on both sides, manual operation handle and extended spindle, suitable for manual as well as motorized drive.
- b. **Scaffold Grill (1030 x 750mm)** in Vertical rod design, fabricated out of 12.0mm dia., Epoxy rods, having 150mm pitch between two rods.
- c. **Ceiling enclosure panels** in GI powder coated construction up to false ceiling height.

List of recommended make of materials for laboratory furniture:

SR. NO.	MATERIAL	RECOMMENDED MAKE
10.	ZERO SPANGLED GALVANIZED IRON (GI) SHEET	TATA STEEL / SAIL / JINDAL MAKE
11.	HINGES	HETTICH / HAFELE /EQUIVALENT MAKE
12.	DRAWER RAILS	HETTICH / HAFELE
13.	LOCKS	HETTICH / HAFELE
14.	LABORATORY FITTINGS	PREMIER POLYMERS
15.	LABORATORY SINKS / DRIP CUPS	PREMIER POLYMERS
16.	LABORATORY ELECTRICAL SOCKET	NORTHWEST / LEGRAND / MK / NORISYS
17.	DATA & VOICE SOCKET	NORTHWEST / LEGRAND / MK / NORISYS
18.	EYEWASH / SHOWER	PREMIER POLYMERS

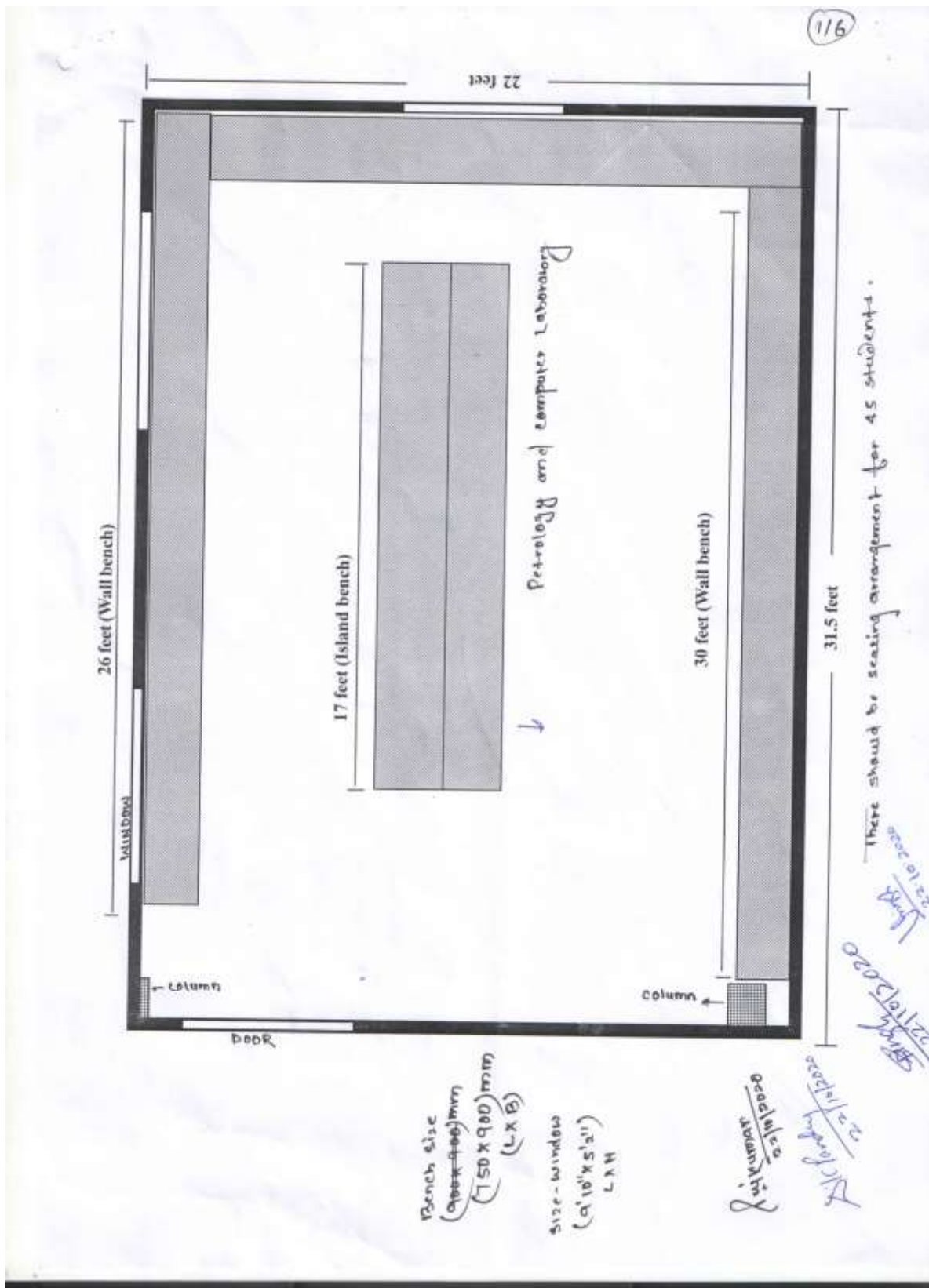
GEOLOGY

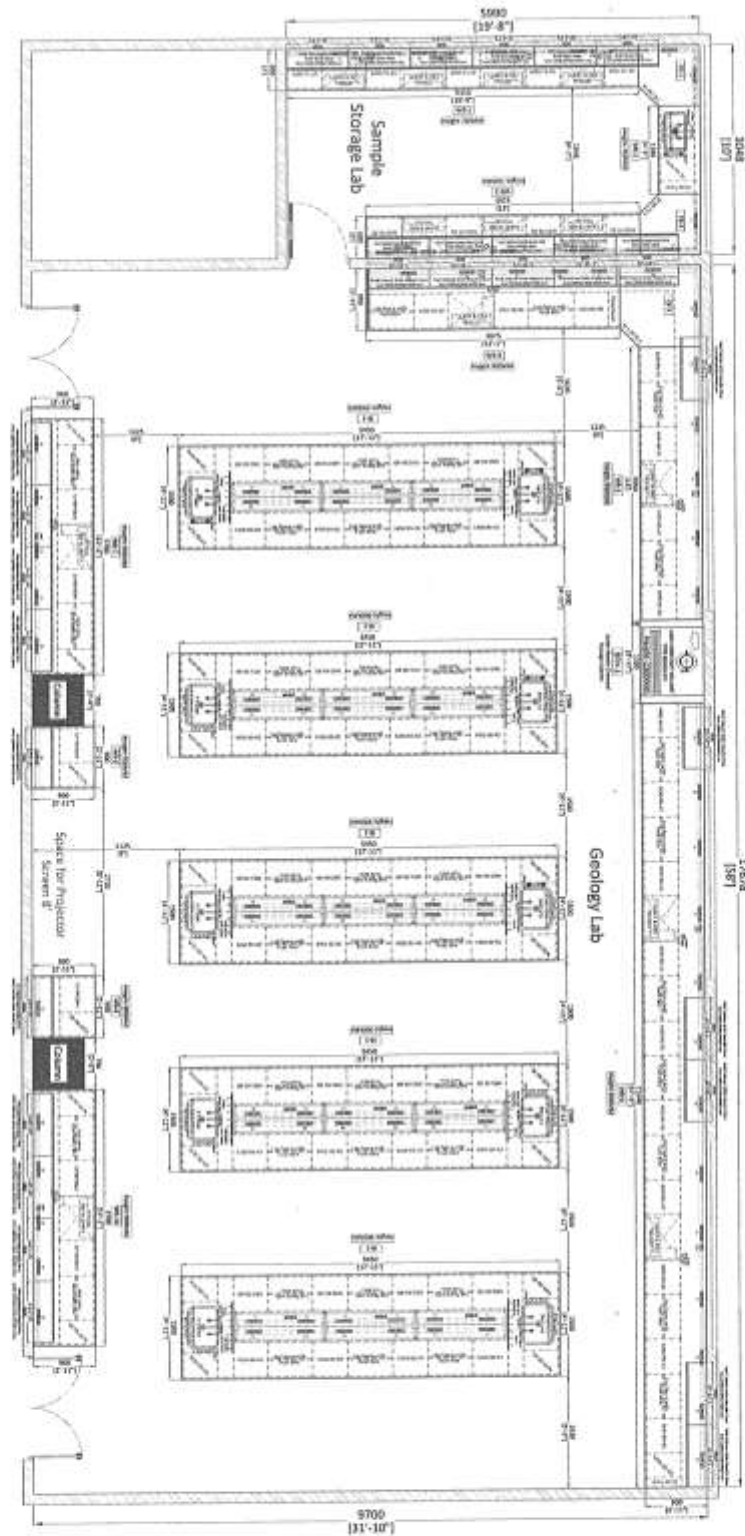


Central University of South Bihar, Gaya
Department of Geology

Measurement Sheet of Lab work station for Geology main lab & Computer/optics Lab

Sr. No.	Description	Qty.	Unit
Sample Storage Lab			
1	Wall Bench (WB - 1) Size: L 5110 mm x W 600 mm x H 750 mm	1.00	Nos.
2	Corner Bench (CB - 1) Size: L 0880 mm x W 0880 mm x H 750 mm	1.00	Nos.
3	Wall Bench (WB - 2) Size: L 1288 mm x W 600 mm x H 750 mm	1.00	Nos.
4	Corner Bench (CB - 2) Size: L 0880 mm x W 0880 mm x H 750 mm	1.00	Nos.
5	Wall Bench (WB - 3) Size: L 3975 mm x W 600 mm x H 750 mm	1.00	Nos.
6	Wall Mounted Storage Cabinet with Glass Door Size: L 900 mm x W 300 mm x H 600 mm	11.00	Nos.
Geology Lab			
7	Wall Bench (WB - 4) Size: L 3675 mm x W 900 mm x H 900 mm	1.00	Nos.
8	Corner Bench (CB - 3) Size: L 1180 mm x W 1180 mm x H 900 mm	1.00	Nos.
9	Wall Bench (WB - 5) Size: L 3950 mm x W 900 mm x H 900 mm	1.00	Nos.
10	Low Constant Volume (LCV) type Bench Fume Hood (Size: L 1200 x D 915 x H 2300 mm) (For AC Lab)	1.00	Nos.
	Consisting of following Fume Hood Superstructure Fume Hood Worktop Service Valves Electrical Fittings Controls Fume Hood Understructure Fume Hood Under-Cabinet (Chemical Storage Purpose) Accessories		
11	Exhaust Fan (315 mm Dia) - one fan for 1 Nos. 1200 mm wide Fume Hood	1.00	Nos.
11.1	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 (Amount for ducting work shall be payable as per actual measurement)	1.00	Sq. Mtr
12	Wall Bench (WB - 6) Size: L 11348 mm x W 900 mm x H 900 mm	1.00	Nos.
13	Wall Bench (WB - 7) Size: L 3700 mm x W 900 mm x H 900 mm	1.00	Nos.
14	Wall Bench (WB - 8) Size: L 0900 mm x W 900 mm x H 900 mm	1.00	Nos.
15	Wall Bench (WB - 9) Size: L 0900 mm x W 900 mm x H 900 mm	1.00	Nos.
16	Wall Bench (WB - 10) Size: L 3700 mm x W 900 mm x H 900 mm	1.00	Nos.
17	Wall Mounted Storage Cabinet with Mettalic Door Size: L 900 mm x W 300 mm x H 600 mm	21.00	Nos.
	- Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Mettalic doors and Locks		
18	ISLAND Bench (IB - 1) Size: L 5450 mm x W 1500 mm x H 900 mm	5.00	Nos.
Optics Laboratory			
19	Wall Bench (WB - 11) Size: L 3355 mm x W 750 mm x H 750 mm	1.00	Nos.
20	Wall Bench (WB - 12) Size: L 5840 mm x W 750 mm x H 750 mm	1.00	Nos.
21	Wall Bench (WB - 13) Size: L 3355 mm x W 750 mm x H 750 mm	1.00	Nos.
22	Wall Mounted Storage Cabinet with Glass Door Size: L 600 mm x W 300 mm x H 600 mm	18.00	Nos.
	- Wall mounted cabinets in G.I. construction with epoxy powder coated one no. adjustable self with double skin Glass doors and Locks		
Computer Laboratory			
23	Wall Bench (WB - 14) Size: L 3355 mm x W 750 mm x H 750 mm	1.00	Nos.
24	Wall Bench (WB - 15) Size: L 5610 mm x W 750 mm x H 750 mm	1.00	Nos.
25	Wall Bench (WB - 16) Size: L 4290 mm x W 750 mm x H 750 mm	1.00	Nos.
26	Wall Mounted Storage Cabinet with Glass Door Size: L 600 mm x W 300 mm x H 600 mm	14.00	Nos.





Additional Scope of Work

Painting

i) Painting priming coat of wood surface Primer for wood work shall be as specified in the description of the item otherwise shall be as per relevant IS Code and CPWD's specification. Surface to be primed shall be dry and thoroughly cleaned. All unevenness shall be rubbed down smooth with sand paper and shall be well dusted, knots, if any, shall be covered with preparation of red lead made by grinding red lead in water and mixing with strong glue sized and used hot. Appropriate wood filler material with same shade as paint shall be used where so specified.

The surface treated for knotting shall be dry before primer is applied. After the primer is applied the holes and indentation on the surface shall be stopped with glaziers putty or wood putty, stopping shall not be done before the priming coat.

ii) Painting priming coat on Iron & Steel surfaces

All rust and scales shall be removed by scrapping or by brushing with steel wire brushes. Hard skin of oxide formed on the surface of wrought iron during raking which becomes loose by rushing, shall be removed. All dust and dirt shall be thoroughly wiped away from the surface.

iii) The surface to be painted shall have received the approval of the Engineer In-charge after inspection, before painting is commenced. Application The number of coats including the under coat shall be stipulated in the item.

a) Under Coat

One coat of specified paint of shade suited to the shade of the top coat shall be applied and allowed to dry overnight. It shall be rubbed next day with the finest grade of wet abrasive paper to ensure a smooth and even surface, free from brush marks and all loose particles dusted off.

b) Top Coat

Top coats of specified paint of desired shade shall be applied. Each coat shall be allowed to dry for not less than 24 hours and lightly rubbed down smooth with finest wet abrasion paper to get an even glossy surface. If, however, the surface is not satisfactory additional coats as required.

Painting on New Surface

SYNTHETIC ENAMEL PAINT

Synthetic Enamel Paint (conforming to IS: 1932 –1964) of approved brand and manufacture and of the required colour shall be used for the top coat and an undercoat of shade to match the top coat as recommended by the manufacturer shall be used.

Preparation of surface

a) Wood work

The surface shall be cleaned and all unevenness removed. Knots if available, shall be covered with a preparation of red lead. Holes and indentations on the surface shall be filled in with glazire's putty or wood putty and rubbed smooth before painting is done. The surface should be thoroughly dry before painting.

b) Iron and steel work

The priming coat shall have dried up completely before painting is started. Rust and scaling shall be carefully removed by scraping or by brushing with steel wire brushes. All dust and dirt shall be carefully and thoroughly wiped away.

POLISHING NEW SURFACE

Preparation of surface

a) The surface shall be cleaned. All unevenness shall be rubbed down smooth with sand paper and well dusted. Knots if visible shall be covered with a preparation of red lead and glue size laid on while hot. Holes and indentations on the surface shall be stopped with glazier's putty. The surface shall then be given a coat of wood filler made by mixing whiting (ground chalk) in methylated spirit at the rate of 1.5kg of whiting per litre of spirit. The surface shall again be rubbed down perfectly smooth with glass paper and wiped clean.

Application

The number of coats of polish to be applied to achieve the desired shade / finish. A pad of woollen cloth covered by a fine cloth shall be used to apply the polish. The pad shall be moistened with the polish and rubbed hard on the wood, in a series of overlapping circles applying the mixture sparingly but uniformly

over the entire area to give an even level surface. A trace of linseed oil on the face of the pad facilitates this operation. The surface shall be allowed to dry and the remaining coats applied in the same way. To finish off, the pad shall be covered with a fresh piece of clean fine cotton cloth slightly dampened with methylated spirit and rubbed lightly and quickly with circular motions. The finished surface shall have a uniform texture and high gloss.

MELAMINE POLISH/FINISH

Timber works shall be finished by the application of two coats and catalysed clear lacquer (melamine) wherever it is indicated in the drawing/specified. The finish shall be a stain semi-gloss finish and shall be carried out as follows:

The base shall be sand papered to the desired finish and coated with a colour tints to give it shade. This shade shall be sealed with a coat of spirit finish. After the base, first coat of melamine shall be applied evenly by spray to give an even coat to the veneer/wood surface.

After the first coat has fully dried, the surface shall be rubbed down in the direction of the veneer/ wood grain with very fine glass paper and left completely smooth and clean before the second coat is applied.

When the second coat of melamine is fully dry, the surface shall be rubbed down in the direction of veneer grain with very wire dipped in a petroleum based wax to give lubrication. Twenty four hours after completion of this process the melamine veneer/wood surface shall be finished by burnishing a soft cloth to an approved texture.

TECHNICAL BID PROFORMA

NIT No. :	CUSB/PSD/WorkStation/T/09/2020-21 Dated: 06/11/2020				
Tender for the Supply and Installation of “Laboratory Work Station” for Deptt. of Geology and Pharmacy at Central University of South Bihar, Gaya					
1.	Name of the Organization				
2.	Head Office / Registered Office				
	Telephone No/mobile No.				
	Fax No.				
	Email				
	Web site (if any)				
	Date of Establishment				
	Branch Office in Gaya , if any				
	(Provide Complete Address)				
	Telephone No.				
	Fax No./Email				
3.	Name of Chief Executive/ Proprietor / Partners with Designation				
	Telephone No./Mobile No.				
	Fax No./ Email				
4.	Name of Contact Person				
	Telephone No./Mobile No				
	Fax No./Email				
5.	Type of Organization		Certified Documents to be enclosed		
a.	Proprietary		Trade License		
b.	Partnership		Partnership Deed, Trade License		
c.	Private Limited Company		Memorandum of Article		
d.	Public Limited Company		Certificate of Registration		
e.	Public Sector		Trade License		
6.	Nature of Business (tick the relevant)				
Manufacturing			Service		
Dealership			Indian Agent		
Stockiest			Indian Branch Office		
Others Pl. Specify					

7.	Class / Type of Product / Materials Manufactured / Sold / Serviced/ Fabricated				
Scientific Equipment		Electronics		Lab Consumables & Chemicals	
Electrical Items		Computer Peripherals		Computers	
Laboratory Equipments		Office Automation Product		Electrical Works	
Sport Materials		Water Coolers		Air-conditioners	
AV Equipments		Boards		Other, please specify.....	
Audited Annual Turnover during last 3 years (Rs. In Lakhs) (enclose Chartered Accountant's certification & Income Tax Return Copy)					
Year		Rupees (in Lakhs)		Annexure (Number)	
2017-18					
2016-17					
2015-16					
MSME Entrepreneur				Comments	
Is the bidder MSME Entrepreneur					
If yes, the category (GEN/OBC/SC/ST/Women)					

8.	Commercial Information (enclose Attested Copy wherever Applicable)			
S. No.	Information	Details		Annexure (Number)
a.	GST Registration Number			
b.	Excise Registration Number Trade / Factory License Number			
c.	PAN No.			
d.	Details of Registration Certificate with DGS&D/NCCF			
e.	MSME/SSI/NSIC Certificate			
f.	Current dealership agreement with Principal Letter No. / Date / Valid upto			
g.	Relevant IISI/ SO Certificate, if any			
h.	<u>Bank Details :</u> Account No.			
i.	Name of Bank & Branch			
j.	IFSC Code			
k.	Details of Tender Fee	Amount:	DD Details:	Name of the issuing Bank & Branch
l.	Details of EMD	Amount:	DD Details:	Name of the issuing Bank & Branch
m.	Details of Previous Supply in Govt. Organisations/ Govt. Educational Institutions (Enclose Supply order & Performance report. If required enclose separate sheets)	Name of the organization	Item Supplied / Qty.	Total Value (Rs in lakhs)
I/ We hereby give an undertaking that the information provided are true to the best of my knowledge and belief. If anything found to be false at any stage my tender will be liable to be rejected and EMD amount will be forfeited.				
Signature of authorized representative:				
Date:				



Central University of South Bihar

(A Central University established under Central Universities Act 2009)

Bill of Quantities

for

Supply and Installation of “Laboratory Work Station” for Deptt. of Geology and Pharmacy

Financial Bid

Note : This is to be kept in **Envelope ‘C’** sealed and it should be written on envelop that **Supply and Installation of “Laboratory Work Station” for Deptt. of Geology and Pharmacy at Central University of South Bihar Gaya.**



Central University of South Bihar

(A Central University established under Central Universities Act 2009)

(Price Bid)

(It should be kept in separate sealed envelope super scribed Price BID)

Bill of Quantity

Name of Work: Supply and Installation of “Laboratory Work Station” for Deptt. of Geology and Pharmacy at permanent campus of Central University of South Bihar, Panchanpur, Gaya (Bihar)

NIT No.: CUSB/PSD/WorkStation/T/09/2020-21,

Dated: 06/11/2020

Sl. No.	Item Description	Qty. (Nos.)	Rate/Unit	Total Amount (Inclusive of GST Charges)
1.	Supply and Installation of “Laboratory Work Station” for Deptt. of Geology and Pharmacy	02		
Amount Total F.O.R. CUSB Gaya (INR)				

Total Amount in Figure inclusive of all Taxes/GST/Others

Total percentage of GST already considered in above rate =.....%

Total Amount inclusive of all taxes in Words

Date :

Seal & Sign of Vendor

Note : No Overwriting or use of Fluid/ Eraz-x is permitted. If done is liable to be rejected.

CERTIFICATE
(to be provided on letter head of the firm)

I hereby certify that the above firm has not been ever blacklisted by any Central/State Government/Public Undertaking/Institute on any account.

I also certify that the above information is true and correct in all respect and in any case at a later date, if it is found that any details provided above are incorrect, then the contract given to the above firm may be summarily terminated and the firm may be blacklisted.

Date:
Place:

Authorized Signatory
Name:
Seal
Designation:
Contact No.:

AFFIDAVIT

(on ₹ 100/- Non Judicial Stamp Paper duly attested by Magistrate/ Notary)

1. I/We the undersigned do hereby certify that all the statements made in the required attachments are true and correct.
2. The undersigned also hereby certifies that neither our firm M/s _____ have abandoned any work/supply nor any contract awarded to us for such works/supplies have been rescinded, during last three years prior to the date of this bid.
3. The undersigned hereby authorize and request any bank, person, firm or Corporation to furnish pertinent information deemed necessary as requested by the Central University of South Bihar, to verify this statement or regarding my (our) competence and general reputation.
4. The undersigned understands and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Central University of South Bihar.

(Signed by an Authorized Officer of the Firm)

Title of Officer

Name of Firm

Date:



CENTRAL UNIVERSITY OF SOUTH BIHAR

SH-7, Gaya- Panchanpur Road, Village- Karhara,
Post- Fatehpur, P.S- Tekari,
District- Gaya (Bihar) PIN- 824 236

UNDERTAKING

[by Tenderer(s)]

Name of the work : _____

Tender No. : _____

We confirm that we have quoted the rates in the tender considering Inter-alia the

1. Tender Document(s) with all Annexures, Scope of Vendor
2. Additional Document(s), if any
3. BOQ Document (Price Bid Format)
4. Corrigendum, if any
5. Pre Bid Meeting Minutes, if any

Signed for and on behalf of
Tenderer(s)

Name of Tenderer(s)

Date : __/__/____

Place :

Seal & Signature of Tenderer

Note :

This declaration should be signed by the Tenderer's authorized representative on COMPANY LETTERHEAD who is signing the Bid and to be submitted with tender.