

NATIONAL CENTRE FOR EARTH SCIENCE STUDIES

(An Institution under the Ministry of Earth Sciences, Govt. of India) P.B. No. 7250, Akkulam, Thiruvananthapuram-695 011, Kerala.

PURCHASE & STORES DIVISION

Our Ref: PUR-PROC/212/2024-PUR-NCESS

(To be quoted in all correspondence)

Dt.28/11/2024

Phone: (0471) 2511531

E-mail: purchase@ncess.gov.in ncesspurchase@gmail.com

website : ncess.gov.in

Sub: e-Procurement Tender

Dear Sirs,

Please send your offer along with descriptive catalogue/ pamphlet for the following items not later than 20/12/2024 at 06.00 PM (Tender Opening at 11.00 AM on 23/12/2024). The terms and conditions governing the tender are given at the bottom.

SI. No	DESCRIPTION	QUANTITY REQUIRED
1	Lab Furniture Supply & Installation in Environmental Geo Chemistry Lab	1 Unit
	(Detailed specification and conditions are given separately)	

INSTRUCTIONS TO THE TENDERERS AND TERMS AND CONDITIONS

- 1. The quotation should be submitted by e-procurement in PDF format by 'logging on' on the website eprocure.gov.in/eprocure/app. The total file size of the documents submitted should not exceed 20 MB.
- 2. In place of a Bid security, the bidders must sign a Bid securing declaration along with the bid stating that "We accept that if we withdraw or modify our Bids during the period of validity, or if we are awarded the contract and we fail to sign the contract, or to submit a performance security before the deadline defined in the request for bids document, we will be suspended for the period of time decided by NCESS from being eligible to submit bids for contracts with NCESS". The bids without this declaration or Udyog Aadhar Memorandum /NSIC will be rejected.
- **3.** Bidders from a country which shares a land border with India will not be eligible to participate in this tender, unless the bidder is registered with Department for Promotion of Industry and Internal Trade (DPIIT) under Order (Public procurement No. 1) issued by Ministry of Finance, Department of expenditure in line with OM No. F.No.6/18/2019-PPD dt 23rd July, 2020 and F.18/37/2020- PPD, dt. 08.02.2021inserting Rule 144 (xi) in GFR 2017.
- **4.** Preference to Make In India: Preference will be given to the eligible Make in India offered products, in accordance with the CVC letter No. 018/VGL/022-377353 dated 20.04.2018, pertaining to Department of Industrial Policy and Promotion (DIPP) in connection with Preference to Make in India, Order 2017'(PPP- MIIOrder) dated15.07.2017 pursuant to rule153(iii) of General Financial Rules 2017. (Declaration may be submitted).
- 5. Startups: To promote make in India and startups, the prior turnover and prior experience for all startups shall be relaxed subject to their meeting of quality, technical specifications and tender conditions as per tender. The bidder

- who intends to participate as "startup" company should enclose the certificate towards startup enterprise registration/recognition issued by Department of Industrial Policy and Promotion, Ministry of Commerce and the certificate should be certified by the Chartered Accountant or should be registered with GeM as startup. Applicable certificate should be enclosed.
- **6.** Fall Clause: An undertaking has to be provided by the bidder that it has not supplied / is not supplying similar product / systems or subsystems at a price lower than that offered in the present bid in respect of any other Ministry / Department of the Government of India or PSU and if it is found at any stage that similar product / systems or sub systems was supplied by the bidder to any other Ministry/Department of the Government of India, or a PSU at a lower price, then that very price, with due allowance for elapsed time, will be applicable to the present case and the difference in the cost would be refunded by the bidder to NCESS, if the contract has already been concluded.
- **7.** MAF: The authorisation from the manufacturer should be tender specific, i.e., tender reference number and date should be mentioned in the certificate. A bidder shall not have conflict of interest with other bidders. In cases, where the manufacturer has submitted the bid, the bids of its authorised dealer will not be considered and in case of violations, both infringing bids will be rejected.
- **8.** Bids are liable to be rejected as nonresponsive if a Bidder fails to provide and/ or comply with the required information, instructions etc., incorporated in the Tender document or gives evasive information/ reply against any such stipulations. Furnishes wrong and/ or misguiding data, statements(s) etc. In such a situation, besides rejection of the bid as nonresponsive, it is liable to attract other punitive actions under relevant provisions of the Tender Document for violation of the Code of Integrity.
- 9. During the evaluation of Techno-Commercial or Financial Bids, NCESS may at its discretion, but without any obligation to do so, seek any shortfall information/documents only in case of historical documents which pre-existed at the time of the tender opening and ask the Bidder to clarify its bid by a specified date. Bidder should answer the clarification with in that specified date (or, if not specified, 7 days from the date of receipt of such request). The request for clarification shall be submitted in writing or electronically. If discrepancies exist between the uploaded scanned copies and the Originals submitted by the bidder, the original copy's text, etc, shall prevail. Any substantive discrepancy shall be construed as a violation of the Code of Integrity, and the bid shall be liable to be rejected as nonresponsive in addition to other punitive actions under the Tender Document for violation of the Code of Conduct.
- 10. From the time of bid submission to awarding the contract, no Bidder shall contact NCESS on any matter relating to the submitted bid. If a Bidder needs to contact NCESS for any reason relating to this tender and/ or its bid, it should do so only in writing or electronically. Any effort by a Bidder to influence the Procuring Entity during the processing of bids, evaluation, bid comparison or award decisions shall be construed as a violation of the Code of Integrity, and bid shall be liable to be rejected as nonresponsive in addition to other punitive actions for violation of Code of Integrity as per the Tender Document.
- 11. After the award of contract, the supplier encounters conditions hindering timely delivery of the Goods, he/she shall promptly inform NCESS in writing about the same and its likely duration. NCESS shall examine the situations and, at its discretion, may agree to extend the delivery Schedule, with or without Liquidated Damages (LD). When the period of delivery is extended due to unexcused delay, the amendment extending the delivery period shall, inter alia, be subject LD to a maximum deduction of the 10% of the delayed Goods contract price (all inclusive) and with and without denial clause. Nevertheless, NCESS shall be entitled to the benefit of any decrease in price on account of reduction in or remission of GST, customs duty or foreign exchange rate variation or any other variation clause which takes place after the expiry of the original delivery date.
- 12. Force Majeure: On the occurrence of any unforeseen event, beyond the control of either Party, directly interfering with the delivery of Goods arising during the currency of the contract, such as war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, or acts of God, the affected Party shall, within a week from the commencement thereof, notify the same in writing to the other Party with reasonable evidence thereof. Unless otherwise directed by the NCESS in writing, the supplier shall continue to perfume its obligations under the contracts far as reasonably practicable and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event, If the force majeure condition(s)mentioned above be in force for 90 days or more at any time, either party shall have the option to

terminate the contract on expiry of 90 days by giving 14 days' notice to the other party in writing. In case of such termination, no damage shall be claimed by either party against the other. None of the Party shall seek any such remedies or damages for the delay and/ or failure of the other party in fulfilling its obligations under the contract if it is the result of an event of Force Majeure.

- 13. The bidder should enclose all relevant documents in a sequential manner as per the tender format.
- 14. The bid should contain the Bid securing declaration, MII / Startup / Land Border declaration, Authorization from manufacturer, Fall Clause, Details of service Centre, Technical details with make, model and specification of each component, Technical Compliance statement, List of Customers, Brochures etc., wherever applicable.
- **15.** Catalogue/Brochure/Manual should be submitted along with the offer wherever necessary.
- **16.** Warranty / Guarantee Clause needs to be mentioned necessarily wherever applicable.
- 17. The material should be delivered at NCESS or installed at the specified location and so the quotation should include all the charges for the delivery at NCESS/installation.
- 18. In INR orders, the Customs Duty Exemption Certificate will be given to the supplier upon request. But the entire responsibility of customs clearance and delivery at NCESS will rest with the supplier. High sea sale is not accepted and should not be quoted.
- 19. The offer should be valid for 180 days from the due date of opening of tender.
- **20.** NCESS reserves right to accept the tender in part or full without assigning any reasons. The enquiry is not a commitment, and the purchaser reserves the right to reject or cancel any or all offers.
- 21. Payment Terms:

If Indian Purchase Order

- a. 90% upon delivery and acceptance of entire system by NCESS and submission of Invoice, applicable Test Certificate, Installation Certificate, Warranty Certificate.
- b. Balance 10% will be paid against submission of performance bank guarantee from a nationalized bank for the applicable amount valid for the warranty period plus 60 days or after successful completion of warranty period.

If Foreign Purchase Order

- a. LC will be established for 100% of order value against which 90% will be released on submission of Order Acceptance, Proforma Invoice, LC details and other shipping documents etc.
- b. Balance 10% will be after submission of performance bank guarantee from a nationalized bank for the applicable amount valid for the warranty period plus 60 days or successful completion of warranty period.

Net payment will be released after statutory deductions. No advance payment will be allowed, and no other payment terms will be considered.

- 22. In the event of placement of order, the successful bidder shall provide a Performance Bank Guarantee from a Nationalised Bank for 3% 5% of the order value (DoE OM No. F.1/2/2023-PPD dated 01.01.2024) wherever applicable. The PBG should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligations.
- 23. Any further changes in the details, like the date of opening or specification, will be posted on our web site only.

TECHNICAL SPECIFICATIONS

<u>Technical Specification for Lab Furniture – Supply & Installation in Environmental Geo Chemistry Lab</u>

Sl.n	Room Name & Item ENVIRONMENTAL GEO CHEMISTRY LAB	Qty(Nos)	
	LAB-01		
1.	L SHAPE BENCH - 5400 + 4750 mm		
	16 mm thick trespa worktop 750mm wide with back splash	4.75 rm	1
	16 mm thick trespa worktop 900mm wide with back splash, special	5.4 rm	
	u/b cabinet with 1 drawer & 1 door 500mm wide with lock	7 no	
	corner support	2 no	
	front + back frame	9.28 rm	1
	Filler panel	0.17 rm	Unit
	middle frame	7 no	Umi
	side frame	2 no	
	side frame, special	2 no	
	knee space panel	8.4 rm	
	16 Amp/220 Volt double electrical pedestal box	7 no	
	Pu seated height adjustable laboratory chair	7 no	
2.	L SHAPE BENCH - 4700 + 1250 mm		
	16 mm thick trespa worktop 750mm wide	1.25 rm	
	16 mm thick trespa worktop 750mm wide with back splash	4.7 rm	
	u/b cabinet with 1 drawer & 1 door 500mm wide with lock	5 no	
	corner support	1 no	
	Carrel Partition 1200mm height from f.f.l	2.77 rm	1
	front + back frame	5.06 rm	1 -
	filler panel	0.1 rm	Unit
	middle frame	4 no	
	side frame	2 no	
			-
	side frames,special	2 no	
	knee space panel	4.72 rm	
	16 Amp/220 Volt double electrical pedestal box	4 no	
	Pu seated height adjustable laboratory chair	4 no	
3.	DISCUSSION TABLE - 3000 mm		
	18mm thick melamine laminated plywood worktop 1200mm wide	3 rm	1
	Filler panel	5.66 rm	Unit
	Pu seated height adjustable laboratory chair	10 no	
١.	BALANCE BENCH	2 no	1
г.	Balance bench ,Size:600x600x900mm (H)	2 110	1
			Unit
5.	WALL CABINET		1
	lockable wall mounted storage cabinet with glass inbuilt doors	4 no	Unit
	size:1000x300x600mm(h)	. 110	
•	LAB 02		
	C-SHAPE BENCH - 2196 + 1110 + 1600 mm		
	18mm thick melamine laminated plywood worktop 600mm wide	3.31 rm	
	with back splash		
	18mm thick melamine laminated plywood corner worktop 1000mm wide	1.6 rm	
	u/b cabinet with 1 drawer,1adjustable shelf & 1 door 500mm wide with lock	1 no	
	cable gromet	1 no]
	corner support	2 no	1

u/b drawer cabinet 500mm wide with lock	3 no	Unit
u/b drawer cabinet 1000mm wide with lock	1 no	
Cpu hanger	1 no	
single computer data outlet	1 no	
executive office chair with arm rest, back rest, chrome base &	1 no	
castors		
Filler panel	2.47 rm	
key board tray	1.89 rm	
knee space panel	1 no	
16 Amp/220 Volt single electrical outlet	1 no	
16 Amp/220 Volt double electrical outlet	1 no	
single telephone outlet	1 no	
wall cabinet with glass inbuilt door 900mm wide with lock	3 no	
7. LAB 03		1
TALL STORAGE		unit
Lockable tall storage cabinet with panel doors	2 no	
size:900x400x2100mm(h), Special		

STANDARD MATERIAL SPECIFICATIONS MELAMINE LAMINATED PLYWOOD WORKTOP

The worktop should be made of $18 (\pm 1)$ mm thick High pressures Melamine laminate boiled water proof plywood. Finish – High quality HPL (High pressure Melamine laminate) of 0.6mm hot pressed on both the sides. The exposed edges of the worktop should be sealed with minimum $3(\pm 1)$ mm thick high quality PVC edges. For strong bonding and durability, the lamination and edging should be machine pressed at high temperature and pressure. The Melamine Laminated plywood conforms to BS, NEMA & BIS Standards. All worktops will have 80mm glued back splash for wall benches, of the same material.

For the floor standing or plinth mounted cabinets, the work top shall be supported by the cabinets which rest on the floor without any additional support of any steel frameworks. Panel supports should be provided if additional supports are needed.

TRESPA WORKTOP

The worktops a solid laboratory bench panel of minimum 16mm thick where the decorative surface using the proprietary Electron Beam Curing (EBC) technology. With the "Electron Beam Curing" procedure, the panels get an integrated decorative surface. This process guarantees a pore-free, closed surface which is resistant to a multiple of aggressive chemicals and easy to clean, disinfect and maintain. The level of scratch resistance is equal or above 4 Newton according to EN 438. The panel is a self-supporting, flat panel based on thermos hardened resins, homogenous strengthened with wooden based optical fibres which are pressed under high pressure and temperature. The worktops will have minimum joints. For e.g. an island bench of 20ft x 5 ft. will not have more than 1 joint. The worktops should be silver grey or black color uniformly throughout the surface. All worktops will have 80mm glued back splash for wall benches, of the same material. The trespa worktop should be supported by cantilever frame supports

<u>UNDERBENCH CABINETS / TALL STORAGES/</u> <u>WALL CABINETS</u>

The Cabinet Body/Door/Drawer Front/Shelves/Carrel Partition/Filler Panel etc should be made of 18 (± 1) mm thick High pressures Melamine laminate boiled water proof plywood. The exposed edges of the doors/ drawers/ worktop etc. should be sealed with min. 3(± 1) mm thick high quality PVC edges. For strong bonding and durability, the lamination and edging should be machine pressed at high temperature and pressure. For carcass, filler panel etc...The exposed edges should be sealed with

1 mm thick high quality PVC edge tapes. For strong bonding and durability, the lamination and edging should be machine pressed at high temperature and pressure. The back wall of cabinets is 5mm thick.

- Knee space Panel should be made of High pressure laminated plywood (BWP) shall be having a thickness of 9 mm.
- For High Strength and Durability, Permanent case work should be made using latest technology such as biscuit joints with strong adhesives. The joinery construction with biscuit type joints should be clamped to obtain perfect alignment and permanent bonding. The Cabinet body should be made of permanent casework without any screws and knockdown / mini-fix fittings (mini fix and dowel joints not accepted), without any gaps for dust accumulation Inside of the cabinet body. All joints shall be sealed and it should be easily cleanable.
- Doors of all under bench cabinets / wall storage cabinets will have full length extruded anodized aluminium grab rail which are epoxy powder coated to 80-90 micron thickness
- Doors of all tall storage cabinets will have "D" shaped brush finish stainless steel handles
- There shall be minimum of two heavy duty, nickel plated, self-closing concealed alloy hinges for each cabinet door and will open 165 degree and should be with 3 way adjustmentfor perfect finish and correct alignment
- Standard Drawer slides should be meta box type, made of pressed metal, with profiling for added strength, epoxy coated and with nylon wheels to allow smooth and silent sliding.
- The size and layout for benches, cabinets and tall storages should be described in the specific requirement table. Cabinets have drawers as well as doors in different sizes.
- Where specified, tall storages have paneled doors.
- Where specified, wall storages have glass inbuilt doors.
- Where specified good quality locks and keys should be provided for cabinets/tall storages.

SUPPORT FRAME WORK

The support frame design should be of cantilever type, with sliding facility for hanging cabinets on theframework itself.

Worktops should be supported by this heavy duty steel frame work.

The frame should be of heavy duty rectangular box with a minimum wall thickness of 14 gauge and the dimension details of frame work as follows:

Vertical member, Horizontal top member, Horizontal bottom member of minimum 60x40mm

Worktops and under-bench cabinets should be supported by this frame work. The under bench cabinets should be able to slide to create knee space as necessary.

The frame work should be de - greased and epoxy powder coated with the thickness of 80-90 microns forsmooth finish and protection.

The profile ends should be covered and protected with injection moulded ABS end-caps. Adjustable levelingjacks of tough plastic/nylon should be provided for each leg for the support of the frame.

ELECTRICAL FITTINGS

Pedestal box

Sleek, Robust and Small Electrical pedestal boxes should be made of 1.2mm thick CRCA sheets to accommodate, single, double or quadruplet sockets and switches. The pedestal will take only very minimum space on the work table. The Pedestal boxes should be epoxy powder coated to min 80 microns for good finish and aesthetic look.

• Electrical Sockets and switches

Supply should be standard 6/16 Amp/220 Volt single, double or quadruplet electrical sockets which fully conforms to IS-1293-1988. Flame retardant, UV stabilized, unbreakable polycarbonate casing. Connector of phosphor bronze to provide high conductivity, flexibility and contact pressure. Silver plated (7 microns) brass terminals to reduce heating and improve conductivity. To be encased in metal pedestal box, for mounting on to bench work tops or on service pillars. Switches should be Piano type unless otherwise specified. Sockets can be either Crabtree, Legrand, or Northwest.

• Electrical wires

The single core and multi core sheathed cables should be manufactured as per IS 694: 1990, these carry the prestigious ISI mark and duly approved by FIA/TAC. The conductors, drawn from 99.97% bright electrolytic grade copper with more than 100% conductivity, annealed and bunched together. The conductors should be insulated with a PVC compound with high insulation resistance and dielectric. Strength formulated and manufactured inhouse. In case of multi core cables, the insulated cores will laid up to form the core assembly. The inner cores should be coded for ease of identification as per National/International coding practices. The sheathing should be provided with a specially formulated PVC compound to facilitate not only ease in stripping but also to withstand mechanical abrasion while in use. These PVC compounds used for insulation and sheathing have a high oxygen and temperature index. These properties help in restricting the spread of fire even at very high temperatures. The wires can be either VGuard or Finolex.

CABLE GROMET

The cable gromet on the work surface should be quality flexible plastic component for easyand safe passage of wires

CPU HOLDER

Made up of steel, and used to Stores C.P.U. under the table for saving space and it has a safe load carrying capacity of 20kg. Soft anti-vibration pads may also to be provided.

Width adjustment from 145 mm to 225 mm. Height adjustment from 310 mm to 530 mm.

KEY BOARD TRAY

Ergonomic Key Board trays should be molded and made of ABS material.

BALANCE BENCH

Fabricated with heavy duty metal tube section of size 100 x 50 x 2mm. Heavy Granite platform of 30 mm thick should be placed on highly sensitive anti vibration pads independently attached to the frame work. These pads will individually adjustable for precise leveling. The complete bench rests on special vibrationdampening, leveling feet in order to install even at unleveled site conditions. The

frame work should be de - greased and epoxy powder coated with the thickness of minimum 80 - 90 microns for smooth finish and protection.

ERGONOMIC PU LAB CHAIR WITH FOOT REST LAB CHAIR



Features:

- Multi lock with seat sliding mechanism.
- Height adjustable armrest.
- Net-based fabricated cushion.
- Chrome plated base with castors.

Conditions:

- The offer should be submitted by manufacturer or their exclusive agent with certificate of exclusivity.
- The scope of work includes design of the furniture, procurement of materials, production, supply and installation at NCESS, Trivandrum.
- All the modular laboratory furniture shall be designed and manufactured as per international standards.
- The supplier/Brand shall be an ISO 9001:2015 certified
- The supplier/brand shall have minimum 15 years of experience in the industry and shall have a proven record in NCESS or other Central Government Academic & Research Organizations. Bidders previous heritage with Central Government Academic & Research organizations shall be considered for general assessment of product quality and service competence. Details of the projects executed withsupporting documents bearing customer address with contact number shall be included in the quote.
- Purchase Order copies and work completion certificates shall be submitted along with the offer showing the experience of having successfully completed the laboratory furniture projects at other Central Govt. Research / Academic organizations.
- The supplier shall have their manufacturing facilities in Kerala and a local office in Trivandrum for the smooth co-ordination and after sales support.
- Wherever the term firm/bidder is mentioned in the terms & conditions, which includes the principle manufacturer, subsidiary company and branch office.
- Provide user list of similar laboratory furniture systems installed within

- India/abroad (Clientele list should include at least five recent installations in Govt./public undertaking labs in India).
- Original catalogue must be provided. All technical specifications should be printed on the catalogue. Separate sheet will not be acceptable.
- Detailed specification of the furniture along with dimensional and 3D drawings shall be submitted along with quote.
- Complete laboratory furniture should be provided with **2 years warranty** from the date of installation.
- Detailed **AMC conditions** with price details should be furnished **for consecutive three years after the warranty period.**
- After sales, support in terms of availability of spares/consumables and maintenance should be guaranteed for a period of minimum 10 years from the date of supply.
- Bidders should have the capability to attend repairs and maintenance work within 24 hours.
- The firms should be registered with Income tax and GST Tax Authorities and copies of PAN, Service Tax Registration, GST Registration have to be submitted along with thetender.
- The bidder should have an average annual turnover of Rs. 4 Crores for the last three completed financial years. The proof of the same shall be submitted along with the offer.
- Tenders who have been blacklisted / debarred by Tender Inviting Authority
 or blacklisted /debarred by any State Government or Central Government
 department/Organization should not participate in the tender during the
 period of blacklisting.
- Required size, model, type & design shall be approved by concerned officer/Engineer-incharge.
- All the electrical sockets, cable grommets, locks, handles etc for the furniture shall be provided by the supplier.
- Materials / accessories shall be sourced from a single party to maintain the uniformity, colourcombination and overall aesthetics.
- Wherever the worktop 16mm thick TRESPA is mentioned should be TRESPA Top Lab PLUS® and acertificate to this effect should be furnished.
- Material property data sheet, Quality Standard Certificate, Environmental Certificate, Fire retardant Certificate etc. of the offered product have to be submitted along with the quotation.
- The colour options shall be confirmed with NCESS before production.
- Site Measurements shall be taken before production and approvals shall be taken from NCESS beforestarting the production.
- All the necessary accessories/required items should be provided at the time of insta

1. Technical Compliance Statement.

	Required Specification			Spec offered (with make and model)	Wheth er compli ed	Brochur Page No
	<u>cal Specification for Lab Furniture – Su</u> nmental Geo Chemistry Lab.	pply & Instal	<u>lation in</u>			
11 / 11 01	micrear Geo Gremistry 200					
Sl.no	Room Name & Item ENVIRONMENTAL GEO CHEMISTRY LAB	Qty(Nos)				
	LAB-01					
1.	L SHAPE BENCH - 5400 + 4750 mm		T			
	16 mm thick trespa worktop 750mm wide with back splash	4.75 rm	1			
	16 mm thick trespa worktop 900mm wide with back splash, special	5.4 rm				
	u/b cabinet with 1 drawer & 1 door 500mm wide with lock	7 no				
	corner support	2 no	Unit			
	front + back frame	9.28 rm				
	Filler panel	0.17 rm				
	middle frame side frame	7 no 2 no				
	side frame, special	2 no				
	knee space panel	8.4 rm				
	16 Amp/220 Volt double electrical pedestal box	7 no				
	Pu seated height adjustable laboratory chair	7 no				
2.	L SHAPE BENCH - 4700 + 1250 mm					
	16 mm thick trespa worktop 750mm wide	1.25 rm	1			
	16 mm thick trespa worktop 750mm wide with back splash	4.7 rm				
	u/b cabinet with 1 drawer & 1 door 500mm wide with lock	5 no	1			
	corner support	1 no	7 - 1			
	Carrel Partition 1200mm height from f.f.l	2.77 rm	Unit		1	
	front + back frame	5.06 rm	7		1	
	filler panel	0.1 rm	7		1	
	middle frame	4 no	7			
	side frame	2 no	7		1	
	side frames, special	2 no	╡			
	knee space panel	4.72 rm	-		1	
	16 Amp/220 Volt double electrical pedestal box	4 no				
	Pu seated height adjustable laboratory chair	4 no	7		1	
3.	DISCUSSION TABLE - 3000 mm					
3.	18mm thick melamine laminated plywood worktop 1200mm wide	3 rm	1 Unit			
	Filler panel	5.66 rm	VIIII		1	
	Pu seated height adjustable laboratory chair	10 no	7		1	
	BALANCE BENCH	2 no	1 1			

4.	Balance bench ,Size:600x600x900mm (H)		Unit
5.	WALL CABINET		1
	lockable wall mounted storage cabinet with glass inbuilt doors size:1000x300x600mm(h)	4 no	Unit
6.	LAB 02		
	C-SHAPE BENCH - 2196 + 1110 +		1
	1600 mm		
	18mm thick melamine laminated plywood worktop 600mm wide with back splash	3.31 rm	
	18mm thick melamine laminated plywood corner worktop 1000mm wide	1.6 rm	
	u/b cabinet with 1 drawer,1adjustable shelf & 1 door 500mm wide with lock	1 no] 1
	cable gromet	1 no	Unit
	corner support	2 no	
	u/b drawer cabinet 500mm wide with lock	3 no	-
	u/b drawer cabinet 1000mm wide with lock	1 no	
	Cpu hanger	1 no	
	single computer data outlet	1 no	
	executive office chair with arm rest, back rest, chrome base & castors	1 no	
	Filler panel	2.47 rm	
	key board tray	1.89 rm	
	knee space panel	1 no	
	16 Amp/220 Volt single electrical outlet	1 no	
	16 Amp/220 Volt double electrical outlet	1 no	
	single telephone outlet	1 no	
	wall cabinet with glass inbuilt door 900mm wide with lock	3 no	
7.	LAB 03		1
	TALL STORAGE		unit
	Lockable tall storage cabinet with panel	2 no	
	doors size:900x400x2100mm(h), Special		

STANDARD MATERIAL SPECIFICATIONS MELAMINE LAMINATED PLYWOOD WORKTOP

The worktop should be made of $18~(\pm 1)$ mm thick High pressures Melamine laminate boiled water proof plywood. Finish – High quality HPL (High pressure Melamine laminate) of 0.6mm hot pressed on boththe sides. The exposed edges of the worktop should be sealed with minimum $3(\pm 1)$ mm thick high quality PVC edges. For strong bonding and durability, the lamination and edging should be machine pressed at high temperature and pressure. The Melamine Laminated plywood conforms to BS, NEMA & BIS Standards. All worktops will have 80mm glued back splash for wall benches, of the same material.

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<u>UNDERBENCH CABINETS / TALL STORAGES/</u> <u>WALL CABINETS</u>

The Cabinet Body/Door/Drawer Front/Shelves/Carrel Partition/Filler Panel etc should be made of 18 (±1) mm thick High pressures Melamine laminate boiled water proof plywood. The exposed edges of the doors/ drawers/ worktop etc. should be sealed with min. 3(±1) mm thick high quality PVC edges. For strong bonding and durability, the lamination and edging should be machine pressed at high temperature and pressure. For carcass, filler panel etc...The exposed edges should be sealed with 1 mm thick high quality PVC edge tapes. For strong bonding and durability, the lamination and edging should be machine pressed at high temperature and pressure. The back wall of cabinets is 5mm thick.

- Knee space Panel should be made of High pressure laminated plywood (BWP) shall be having a thickness of 9 mm.
- For High Strength and Durability, Permanent case work should be made using latest technology such as biscuit joints with strong adhesives. The joinery construction with biscuit type joints should be clamped to obtain perfect alignment and permanent bonding. The Cabinet body should be made of permanent casework without any screws and knockdown/minifix fittings (mini fix and dowel joints not accepted), without any gaps for dust accumulation Inside of the cabinet body. All joints shall be sealed and it should be easily cleanable.

- Doors of all under bench cabinets / wall storage cabinets will have full length extruded anodized aluminium grab rail which are epoxy powder coated to 80-90 micron thickness
- Doors of all tall storage cabinets will have "D" shaped brush finish stainless steel handles
- There shall be minimum of two heavy duty, nickel plated, selfclosing concealed alloy hinges for each cabinet door and will open 165 degree and should be with 3 way adjustment for perfect finish and correct alignment
- Standard Drawer slides should be meta box type, made of pressed metal, with profiling for added strength, epoxy coated and with nylon wheels to allow smooth and silent sliding.
- The size and layout for benches, cabinets and tall storages should be described in the specific requirement table. Cabinets have drawers as well as doors in different sizes.
- Where specified, tall storages have paneled doors.
- Where specified, wall storages have glass inbuilt doors.
- Where specified good quality locks and keys should be provided for cabinets/tall storages.

SUPPORT FRAME WORK

The support frame design should be of cantilever type, with sliding facility for hanging cabinets on theframework itself.

Worktops should be supported by this heavy duty steel frame work.

The frame should be of heavy duty rectangular box with a minimum wall thickness of 14 gauge and the dimension details of frame work as follows:

Vertical member, Horizontal top member, Horizontal bottom member of minimum 60x40mm

Worktops and under-bench cabinets should be supported by this frame work. The under bench cabinets should be able to slide to create knee space as necessary.

The frame work should be de – greased and epoxy powder coated with the thickness of 80 - 90 microns for smooth finish and protection.

The profile ends should be covered and protected with injection moulded ABS end-caps. Adjustable leveling jacks of tough plastic/nylon should be provided for each leg for the support of the frame

ELECTRICAL FITTINGS

Pedestal box

Sleek, Robust and Small Electrical pedestal boxes should be made of 1.2mm thick CRCA sheets to accommodate, single, double or quadruplet sockets and switches. The pedestal will take only very minimum space on the work table. The Pedestal boxes should be epoxy powder coated to min 80 microns for good finish and aesthetic look.

• Electrical Sockets and switches

Supply should be standard 6/16 Amp/220 Volt single, double or quadruplet electrical sockets which fully conforms to IS-1293-1988. Flame retardant, UV stabilized, unbreakable polycarbonate casing. Connector of phosphor bronze to provide high conductivity, flexibility and contact pressure. Silver plated (7 microns) brass terminals to reduce heating and improve conductivity. To be encased in metal pedestal box, for mounting on to bench work tops or on service pillars. Switches should be Piano type unless otherwise specified. Sockets can be either Crabtree, Legrand, or Northwest.

• Electrical wires

The single core and multi core sheathed cables should be manufactured as per IS 694: 1990, these carry prestigious ISI mark and duly approved by FIA/TAC. The conductors, drawn from 99.97% bright electrolytic grade copper with more than 100% conductivity, annealed and bunched together. The conductors should be insulated with a PVC compound with high insulation resistance and dielectric. Strength formulated and manufactured in-house. In case of multi core cables, the insulated cores will laid up to form the core assembly. The inner cores should be coded for ease of identification as per National/International coding practices. The sheathing should be provided with a specially formulated PVC compound to facilitate not only ease in stripping but also to withstand mechanical abrasion while in use. These PVC compounds used for insulation and sheathing have a high oxygen and temperature index. These properties help in restricting the spread offire even at very high temperatures. The wires can be either VGuard or Finolex.

CABLE GROMET

The cable gromet on the work surface should be quality flexible plastic component for easyand safe passage of wires

CPU HOLDER

Made up of steel, and used to Stores C.P.U. under the table for saving space and it has a safe load carrying capacity of 20kg. Soft antivibration pads may also to be provided.

Width adjustment from 145 mm to 225 mm. Height adjustment from 310 mm to 530 mm.

KEY BOARD TRAY

Ergonomic Key Board trays should be molded and made of ABS material.

BALANCE BENCH

Fabricated with heavy duty metal tube section of size $100 \times 50 \times 2$ mm. Heavy Granite platform of 30 mm thick should be placed on highly sensitive anti vibration pads independently attached to the frame work. These pads will individually adjustable for precise leveling. The complete bench rests on special vibrationdampening, leveling feet in order to install even at unleveled site conditions. The frame work should be de – greased and epoxy powder coated with the thickness of minimum 80 - 90 microns for smooth finish and protection.

ERGONOMIC PU LAB CHAIR WITH FOOT REST LAB CHAIR



Features:

- Multi lock with seat sliding mechanism.
- Height adjustable armrest.
- Net-based fabricated cushion.
- Chrome plated base with castors.

Conditions:

- The offer should be submitted by manufacturer or their exclusive agent with certificate of exclusivity.
- The scope of work includes design of the furniture, procurement of materials, production, supply and installation at NCESS, Trivandrum.
- All the modular laboratory furniture shall be designed and manufactured as per international standards.
- The supplier/Brand shall be an ISO 9001:2015 certified

- The supplier/brand shall have minimum 15 years of experience in the industry and shall have a proven record in NCESS or other Central Government Academic & Research Organizations. Bidders previous heritage with Central Government Academic & Research organizations shall be considered for general assessment of product quality and service competence. Details of the projects executed with supporting documents bearing customer address with contact number shall be included in the quote.
- Purchase Order copies and work completion certificates shall be submitted along with the offer showing the experience of having successfully completed the laboratory furniture projects at other Central Govt. Research / Academic organizations.
- The supplier shall have their manufacturing facilities in Kerala and a local office in Trivandrum for the smooth co-ordination and after sales support.
- Wherever the term firm/bidder is mentioned in the terms & conditions, which includes the principle manufacturer, subsidiary company and branch office.
- Provide user list of similar laboratory furniture systems installed within India/abroad (Clientele list should include at least five recent installations in Govt./public undertaking labs in India).
- Original catalogue must be provided. All technical specifications should be printed on the catalogue. Separate sheet will not be acceptable.
- Detailed specification of the furniture along with dimensional and 3D drawings shall be submitted along with quote.
- Complete laboratory furniture should be provided with 2 years warranty from the date of installation.
- Detailed **AMC conditions** with price details should be furnished **for consecutive three years after the warranty period.**
- After sales, support in terms of availability of spares/consumables and maintenance should be guaranteed for a period of minimum 10 years from the date of supply.
- Bidders should have the capability to attend repairs and maintenance work within 24 hours.

- The firms should be registered with Income tax and GST Tax Authorities and copies of PAN, Service Tax Registration, GST Registration have to be submitted along with thetender.
- The bidder should have an average annual turnover of Rs. 4 Crores for the last three completed financial years. The proof of the same shall be submitted along with the offer.
- Tenders who have been blacklisted / debarred by Tender Inviting Authority or blacklisted / debarred by any State Government or Central Government department/Organization should not participate in the tender during the period of blacklisting.
- Required size, model, type & design shall be approved by concerned officer/Engineer-in-charge.
- All the electrical sockets, cable grommets, locks, handles etc for the furniture shall be provided by thesupplier.
- Materials / accessories shall be sourced from a single party to maintain the uniformity, colour combination and overall aesthetics.
- Wherever the worktop 16mm thick TRESPA is mentioned should be TRESPA Top Lab PLUS® and acertificate to this effect should be furnished.
- Material property data sheet, Quality Standard Certificate, Environmental Certificate, Fire retardant Certificate etc. of the offered product have to be submitted along with the quotation.
- The colour options shall be confirmed with NCESS before production.
- Site Measurements shall be taken before production and approvals shall be taken from NCESS beforestarting the production.
- All the necessary accessories/required items should be provided at the time of installation