Planning, Designing, Execution and Commissioning of Laboratory Infrastructure and allied accessories in the Silver Jubilee Block at NIIST Campus, Trivandrum

EXPRESSION OF INTEREST

JULY 2015

EOI NO: HLL/ID/15/16



HLL LIFECARE LIMITED Infrastructure Development Division "Adarsh" TC 6/1781, Vettamukku, Thirumala Post Office Thiruvananthapuram-695006

DISCLAIMER

HLL Lifecare Limited, India (HLL) has prepared this document as internal consultant to **National Institute for Interdisciplinary Science and Technology, NIIST,** to give bidders, background information on the Project. The information is provided to bidders on the terms and conditions set out in this EOI document and any other terms and conditions subject to which such information is provided. While HLL have taken due care in the preparation of the information contained herein and believe it to be accurate neither NIIST nor HLL Life care Limited, any of its authorities or agencies nor any of their respective officers, employees, agents or advisors gives any warranty or make any representations, express or implied as to the completeness or accuracy of the information contained in this document or any information which may be provided in association with it.

The information is not intended to be exhaustive. Interested parties are required to make their own inquiries and respondents will be required to confirm in writing that they have done so and they do not rely on the information in submitting an EOI. The information is provided on the basis that it is not binding on NIIST or HLL Lifecare Limited, any of its authorities or agencies or any of their respective officers, employees, agents or advisors.

National Institute for Interdisciplinary Science and Technology, NIIST reserves the right not to proceed with the Project or to change the configuration of the Project, to alter the timetable reflected in this document or to change the process or procedure to be applied. It also reserves the right to decline to discuss the Project further with any party expressing interest.

No reimbursement of cost of any type will be paid to persons or entities submitting their Application.

SCHEDULE OF THE QUALIFICATION PROCESS

EVENT	DATE
Sale of EOI document begins	22.07.2015
Last date for sale of document	29.07.2015
Last date for submission of completed EOI document	30.07.2015 at 2.00 pm
Date of Opening of completed EOI document	30.07.2015 at 3.30 pm

The EOI application can be downloaded from the HLL web site <u>www.lifecarehll.com</u> from 22.07.2015 onwards and the cost of EOI application is **Rs.1575/- (Rupees One thousand Five hundred and Seventy Five only)** shall be submitted along with the EOI application in the form of DD taken in favour of HLL Lifecare Limited payable at Thiruvananthapuram.

All queries shall be addressed to and completed Application forms shall be submitted before the specified date and time at the following address:

Deputy Vice President (Tech) HLL Lifecare Limited,Infrastructure DevelopmentDivision, "Adarsh", T.C 6/1718(1),Vettamukku, Thirumala PO, Thiruvananthapuram- 695 006. Phone - 0471 236 5872/73 TeleFax - 0471 236 8144

SECTION I 1. NOTICE INVITING EXPRESSION OF INTEREST

1.1 GENERAL

1.1.1 HLL Lifecare Limited invites The EOI application from reputed Indian Firms for Planning, Designing, Execution and Commissioning of Laboratory Furniture and allied accessories in the Silver Jubilee Block at NIIST Campus, Trivandrum complete in all respects

Approximate Cost of work	3 to 3.5Crs	
Cost of document form (Non-refundable)	Rs.1575/- (Rupees One thousand Five hundred and Seventy Five only) payable by a Demand Draft in favour of "HLL Lifecare Limited" at Thiruvananthapuram	
Completion period of the Work	5 months from the date of issue of letter of acceptance	
EOI documents on sale	From 15.07.2015 to 29.07.2015 (can be Downloaded from Website www.lifecarehll.com)	
Last Date & time of Submission of document	30.07.2015 at 14.00 Hrs	
Date & time of opening of EOI	30.07.2015 at 15.30 Hrs	

1.1.2 HLL invites sealed application for the above-mentioned work (clause 1.1.1).

The EOI Document can also be downloaded from the website of HLL Lifecare Limited at www.lifecarehll.com. The cost of EOI Document in the form of Demand Draft drawn in favour of HLL Lifecare Limited for an amount of is Rs.1575/- (Rupees One thousand Five hundred and Seventy Five only) payable at Thiruvananthapuram must be furnished in a separate envelope along with the EOI Document.

2 <u>ELIGIBLE APPLICANTS AND ELIGIBILITY CRITERIA</u>

01. The intending Bidders must be a Manufacturer or the Manufacturer's authorized Agent.

02. a) In last 5 years ,till the date of document opening, the manufacturer should have supplied and installed, one similar work (Lab Furniture & Allied Accessories) costing not less than Rs 2.16 crore or two similar works each costing not less than Rs 1.25 crore, meeting major parameters of technical specification and is functioning satisfactorily from the client's performance report (for furniture which are consumable in nature, as identified in the list of requirement, proof of delivery /acceptance by consignee/purchaser shall also be considered acceptable).

b) The Bidders quoting as authorized representative of the manufacturer meeting the above Criteria 2(a) should have supplied and installed, one similar work (Lab Furniture & Allied Accessories) costing not less than Rs 2.16 crore or two similar works each costing not less than Rs 1.25 crore, meeting major parameters of technical specification which is functioning satisfactorily, from the client's performance report , anywhere in India of the same manufacturer

03. If necessary, HLL may inspect similar works done by the Manufacturer or the Manufacturer's authorized Agent and will collect the first hand information from the client. In case of any adverse remarks on performance of the Bidders is received, contrary to the certificate produced by the Bidders, or if the works are found to be of a quality not acceptable to HLL, the offer will be rejected without calling for any explanation from the Bidders.

04. The Bidders should have an average annual turnover of not less than Rs. 3 Crs in the last three financial years ending 31st March 2015. The Bidders should not have incurred any loss in more than two years during the immediate last five consecutive financial years. The relevent pages of balance sheet showing annual turnover and profit and loss account duly certified by Chartered Accountant shall be enclosed–Proforma 'A'- I.

05. The Bidders should have a permanent service facility in Kerala /Tamilnadu/Karnataka.

06 The Bidders shall submit the compliance for technical specifications and requirement as given in Section V and VI.

07 The firms should be registered with Income tax , VAT and Service Tax Authorities and copies of PAN , Service Tax Registration, VAT Registration have to be submitted along with application.

2.1 All EOI Application submitted shall include the following information:

General information of the EOI Application shall be furnished in Form. Copies of original documents defining the constitution and legal status, certificate of registration and ownership, principal place of business of the company, corporation, firm or partnership shall also be required to be furnished.

- 2.2 The Applicants to qualify for award of Contract shall submit a written power of attorney authorizing the signatory (ies) of the application to commit the Applicants.
 - 2.3 The authorized signatory of the application shall sign each page of application. Power of Attorney in favour of the signatory will be required to be furnished in detail.
- 2.4 Cancellation or creation of a document such as Power of Attorney, Partnership deed, Constitution of firm etc., which may have bearing on the Contract shall be communicated forthwith in writing by the bidder to HLL LIFECARE LTD
- 2.5 Each applicant, or any associate will be required to confirm and declare in the submittal that no agent, middleman or any intermediary has been, or will be, engaged to provide any services, or any other items of work related to the award and performance of this contract. They will have to further confirm and declare in the submittal that no agency commission or any payment, which may be construed as an agency commission, has been, or will be paid and that price will not include any such amount.
- 2.8 Applicants shall not have a conflict of interest. All applicants found to have a conflict of interest in this prequalification process shall be disqualified. Applicants shall be considered to have a conflict of interest if:

a. Applicants in two different applications have controlling shareholders in common or

b. Submit more than one application in this prequalification process

c. Applicant has participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of this prequalification

- 3. CORRUPT OR FRAUDULENT PRACTICES
- a. HLL requires that Applicants/Suppliers/Contractors under this contract, observe the highest standard of ethics during the procurement and execution of this contract. In pursuance of this policy, HLL

- (a) Defines, for the purpose of these provisions, the terms set forth below as follows:
 - i. "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - ii. "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Employer, and includes collusive practice among Applicants (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Employer of the benefits of free and open competition.
- (b) Will reject a proposal for award of work if it is determined that the Applicant recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- (c) Will declare a Applicant ineligible, either indefinitely or for a stated period of time, to be awarded a contract/ contracts, if it at any time determines that the Applicant/Bidder has engaged in corrupt or fraudulent practices in competing for, or in executing the contract.
- 4. SEALING OF APPLICATION

The Original EOI document including the proposed design shall be sealed in a single large envelope and submitted on or before the last date and time for submission of the EOI.

5. DEADLINE AND ADDRESS FOR SUBMISSION OF APPLICATION

Applications shall be submitted to HLL Lifecare Ltd., by hand or through registered post or courier service at the address given below and not later than 2.00 Hrs on 30.07.2015 .In respect of Applications received by post or courier, HLL shall not assume any responsibility for any delayed delivery

The Application should be addressed to

Deputy Vice President (Tech.), Infrastructure Development Division HLL Lifecare Limited, "Adarsh", T.C 6/1718(1), Vettamukku, Thirumala P.O Thiruvananthapuram - 695 006 All envelopes shall be titled "**Planning, Designing, Execution and Commissioning of Laboratory Furniture and allied accessories in the Silver Jubilee Block at NIIST Campus, Trivandrum.**" and clearly marked in English with name of the Applicant.

HLL may, at its discretion, extend the deadline for the submission of Applications, in which case all rights and obligations of HLL and the Applicants subject to the previous deadline shall thereafter be subject to the deadline as extended.

- 6. LATE APPLICATIONS
- a. Application received after the dead line of submission of Application shall not be considered or opened under any circumstances.
- 7. CLARIFICATIONS OF APPLICATION
 - 7.1 The Applicants shall be evaluated on the basis of the Application and the supporting documents submitted by them. HLL shall not be under any obligation to seek any further information or clarifications.

8.0 <u>EMPLOYER'S RIGHT TO ACCEPT AND TO REJECT ANY OR ALL</u> <u>APPLICATIONS.</u>

8.1 The employer reserves the right, without being liable for any damages or obligation to inform the applicant, to:

- A. Amend the scope and value of contract to the applicant.
- B. Reject any or all of the applications without assigning any reason.
- 8.2 Any effort on the part of the applicant or his agent to exercise influence or to pressurize the employer would result in rejection of his application. Canvassing of any kind is strictly prohibited.

9.0 JURISDICTION

All disputes arising shall be subject to the jurisdiction of the appropriate court at Thiruvananthapuram, India and will be governed by the laws of India.

- 10. APPLICANT'S RESPONSIBILITY
- a. While submitting the Application the Applicant would submit a certification that it has:
 - Made a complete and careful examination of requirements and other information set forth in this EOI Document
 - Made a complete and careful examination of the various aspects of the Project including but not limited to:
 - The Project site
 - Existing facilities and structures
 - The conditions of the access roads and utilities in the vicinity of the Project Site
 - Conditions affecting transportation, access, disposal, handling and storage of the materials.
 - Clearances required for the Project and
 - All other matters that might affect the Bidder's performance during the Construction and Operation of the Project if awarded
- b. HLL shall not be liable for any mistake or error or neglect by the Applicant in respect of the above.

11. VALIDITY OF APPLICATIONS

- a. Application shall be valid for a period of 120 days from the last date of submission of Applications.
- b. HLL retains the right that in exceptional circumstances at its own discretion, it may ask the applicants to extend the validity of their application for a specified period. The Applicant not submitting the letter of extension of the validity period at that time shall not be further considered.

Special Conditions

1) The invoice/ bills shall be raised in the name of "The Director NIIST - A/c HLL Lifecare Ltd" and the same shall be submitted to the HLL Engineer in charge.

2) TIN no. of HLL should not be mentioned in any of the documents as HLL is acting on behalf of the client in the capacity of consultant alone.

3) The warranty of the items has to be given in the name of The Director NIIST 4)The completed works shall be handed over to" The Director NIIST " after due verification by HLL Engineer in Charge.

Regarding the site visits and any other related queries, please contact

Executive Engineer, Engineering & Services Division (Civil) CSIR - National Institute for interdisciplinary Science and Technology, Industrial Estate post, Trivandrum - 695019. KERALA Ph: 0471-2515530, 9446501491

SECTION II

PROJECT DETAILS

Sl	Item	Specification	Qty	Unit
No				
	GROUND FLOOR			
Α	NMR LAB (016)			
	Deleted			
B	INSTRUMENT ROOM - 1 (017)		
				N T
1	Island Benches	3600x1500x900	3	Nos
2	Wall Benches	6000x750x900	1	No
3	Wall Benches	3600x750x900	2	Nos
4	Fume Hood		1	No
С	INSTRUMENT ROOM - 2 (001)		
1	Island Benches	3600x1500x900	3	Nos
2	Wall Benches	6000x750x900	1	No
3	Wall Benches	3600x750x900	2	Nos
4	Fume Hood		1	No
D	INSTRUMENT ROOM - 3 (002)		
1	Wall Benches	6000x750x900	1	No
2	Wall Benches	3600x750x900	2	Nos
E	INSTRUMENT ROOM - 4 (003)		
1	Island Benches	3600x1500x900	3	Nos

2	Wall Benches	5000x750x900	1	No
3	Wall Benches	3600x750x900	1	No
6	Eye wash		1	No
7	Fume Hood		1	No
F	INSTRUMENT ROOM - 7	(011)		
	Ladies Rest Room			
G	INSTRUMENT ROOM - 1() (010)		
1	Island Bonchos	2600×1500×000	2	Nos
1		3000x1300x900	3	1105
2	Wall Benches	6000x750x900	1	No
3	Wall Benches	3600x750x900	1	No
4	Fume Hood		1	No
н	INSTRUMENT ROOM			
	(007)			
1	Laminar Flow		2	Nos
2	Wall Benches	2000x600x900	2	No.s
5	Sink table	950x750x900	1	No
Ι	BOARD ROOM (013)			
1	Conference Table (As per D	rawing)	1	No
2	Executive Chairs		24	No.s
J	Seminar Hall (006)			
1	Sitting chair		120	No.s
2	Podium		1	No
V				
N				
1	Lecture' Table & Chair		1	No
2	Chair with writing pad		48	No.s

3	Writing Board		1	No
L	RECEPTION			
1	Reception table		1	No
2	Jr.Executive chair		2	No.s
3	CPU Trolly		1	No
4	3-Seater sofa		4	No.s
5	1-Seater sofa		4	No.s
6	Tee-poi		4	No.s
М	COFFEE CORNER			
1	Sink table	950x750x900	1	No
	FIRST FLOOR			
Α	ALL STANDARD LABS			
1	Island Benches	3600x1500x900	14	Nos
2	Wall Benches	3000x750x900	7	Nos
3	Wall Benches	2200x750x900	7	Nos
4	Wall Benches	2000x600x900	7	Nos
5	Sink table	950x750x900	7	Nos
6	Chemical storage	900x400	7	Nos
7	Fume Hood		21	Nos
8	Sitting cubicals with chairs		4	Unit
9	Stool		55	No.s
10	Eye wash		1	No
В	<u>HOD Room (109)</u>			
1	Executive Table with side uni	t	1	No
2	Back Unit		1	No

1	Work station	9000x600x750	2	Nos
C	STUDENTS WORK AREA	(219)		
		210027502700	1	110
3	Wall Benches	2100x750x900	1	No
2	Wall Benches	3600x750x900	2	Nos
D 1	Island Benches	2100x1500x900	2	Nos
R	INSTRUMENT ROOM - 8	(Second Floor - 209)		
10	Eye wash		1	No
9	Stool		55	No.s
8	Island Benches	3600x750x900	1	No
7	Fume Hood		23	Nos
6	Chemical storage	900x400	8	No
5	Sink table	950x750x900	8	No
4	Wall Benches	2000x600x900	8	No
3	Wall Benches	2200x750x900	8	No
2	Wall Benches	3000x750x900	7	No
	regent shelf			
1	Island Benches without	2100x1500x900	1	No
1	Island Benches	3600x1500x900	14	Nos
Α	ALL STANDARD LABS			
	SECOND FLOOR			
9	CPU Trolly		1	No
8	Tee-poi		1	No
7	1-Seater sofa		2	No.s
6	3-Seater sofa		1	No
5	Visitors chair		4	No
4	Jr.Executive Chair		1	No
3	Executive Chair		1	No

2	Work station	7500x1200x750+600	2	Nos
3	Over Head storage	20m	3	No
	(9000X300X600-2No.s and 2000x300x600-1No)			

MATERIAL SPECIFICATION OF

LAB BENCHES AND FUME CUPBOARDS ETC

Name of work: Planning, Designing, Execution and Commissioning of Laboratory Infrastructures and allied accessories in the Silver Jubilee Block at NIIST campus, Trivandrum.

MARK	DESCRIPTION	SIZE (in mm)	QUANTITY (each)	REMARKS
IB-1	ISLAND BENCH	3600(L) X 1500(W) X 900(H)	12	Without sink & Without Reagent
IB-1A	ISLAND BENCH	3600(L) X 750(W) X 900(H)	1	shelf
		TOTAL	13	

ITEM NO -1: ISLAND BENCHWITHOUTSINK & WITOUT REAGENT SHELF

WORK TOP:

- Worktop shall be a self-supporting solid laboratory flat bench panel with an integrated, decorative urethane-acrylic surface and a cellulose fibre reinforced in Phenolicresin core. Surface is processed with Electron Beam Curing (EBC) systems which provide 24 hours chemical resistance against concentrated acid and dyes. The level of scratch resistance is equal or above 4 new ton according to EN438-2:12.
- The panel should be of impermeable to reagents, Non-porous, thermally stable and impact resistance.
- The thickness of the work top should be 16mm .All edges should be fabricated and rounded for smooth finish. The surface colour of the worktop should be black or Grey.
- The TRESPA top of the Island Bench to be projected 50mm in all the sides from the under bench cabinets.
- ➤ (Table top Make: TRESPA or Equivalent)

FRAME WORK:

Frame work is made of different sizes of Mild steel box sections, de-greased and galvanized with epoxy powder coated for smooth finish and protection. Adjustable levelling jacks of tough plastic/nylon will be provided for each leg for the support of the frame. A Front and back frames made of same material should be provided for connecting the entire J frame, C frame, supporting cabinets and complete bench.

UNDER BENCH CABINETS:

DOOR FRONT:

- It should be made of 18 mm thick BWP ply wood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination should be done by hot press with a minimum pressure of 90 tones. All exposed edges are lipped with PVC lipping not less than 3 mm to protect from impacts, moisture and insects. The lipping is of the machine applied with hot melt glue at a temperature of 205 degree Celsius or above.
- The Melamine Laminate should confirm to BS,NEMA &BIS Standards.

CABINET BODY:

- Cabinet body is made out of 18mm thick BWP plywood with factory laminated 0.7mm thick melamine laminates on both sides. The laminations done with hot press with minimum of 90 tones pressure. All exposed edges are lipped not less than 0.5 mm to protect from moisture and insects. The lipping is machine applied with hot melt glue at a temp of 205 degree Celsius or above.
- Bench mounted /Wall mounted Electrical trunk box full length (all accessible sides) and top portion of the cabinet body to be of100 to 150mm wide laminated board below the TRESPA top on front & rear to run the Electrical cable management trunk system with openable Electrical Cable Management duct (Trunk) box full length of size 100 x 50mm PVC (Make: MDS/MK/LEGREND or Equivalent) or any alternate Electrical trunk in built to run the wiring for lighting, power, UPS, LAN, Internet etc. and also to cater the future wiring if any having 10/20A Electrical socket and 6 pin at 300mm center to center. Out of these quantities, 10A Electrical socket and 5pin, 20A Electrical socket and

6pin and 10A switches shall be 40%, 40% & 20% respectively. The Electrical trunk chute fixed up to ceiling of height 3meters on one side of the bench or on the center as per the direction of Engineer-in-charge.

- The Cabinet body is made of permanent case work without any screws and knock down/Mini-fix fittings. Permanent case work shall be made using latest technology such as biscuit joints with necessary adhesives. Inside of the cabinet body there are no any gaps for dust accumulation. All joints are sealed and it should be easily cleanable.
- > Two Adjustable shelves are also made with the same material as above.
- The under bench cabinet to be made in all places except the knee space shown in the key plan.

<u>KNEE SPACEBACK PANEL:</u> (The width of every Knee panel shall be 800mm or nearest)

It shall be made of 9mm BWP ply wood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination should be done with hot press with minimum 90 tonnes of pressure. The knees pace panel shall be slidable wherever necessary to access service utilities.

HINGES, HANDLE/KNOBS:

➢ For the doors are without rust, nickel coated heavy duty, self-closing, and allowing opening up to165 degree.

SERVICE FITTINGS:

Fittings shall be made of brass and should have an epoxide covering in ash grey colour. It should have a working temperature varies from-30 degree Celsiusto+150 degree Celsius.

MARK	DESCRIPTION	SIZE (in mm)	QUANTITY (each)	REMARKS
IB-2	ISLAND BENCH	3600(L) X 1500(W) X 900(H)	28	Without sink & With Reagent shelf
IB-2A	ISLAND BENCH	2100(L) X 1500(W) X 900(H)	3	Without sink & With Reagent shelf
		TOTAL	31	

ITEM NO -2: ISLAND BENCH WITHOUT SINK & WITH REAGENT SHELF

WORK TOP:

- Worktop shall be a self-supporting solid laboratory flat bench panel with an integrated, decorative urethane-acrylic surface and a cellulose fibre reinforced in Phenolicresin core. Surface is processed with Electron Beam Curing(EBC)systems which provide 24 hours chemical resistance against concentrate dacidand dyes. The level of scratch resistance is equal or above 4 Newton according to EN 438-2:12.
- The panel should be of impermeable to reagents, Non-porous, thermally stable and impact resistance.
- The thickness of the work top should be 16mm. All edges should be fabricated and rounded for smooth finish. The surface colour of the worktop should be black or Grey.
- > The TRESPA top of the Island Bench to be projected 50mm in all the sides from the under bench cabinets.
- > (Table top Make: TRESPA or Equivalent)

FRAME WORK:

Frame work is made of different sizes of Mild steel box sections, de-greased and galvanized with epoxy powder coated for smooth finish and protection. Adjustable levelling jacks of tough plastic/nylon will be provided for each leg for the support of the frame. A Front and back frames made of same material should be provided for connecting the entire J frame, C frame, supporting cabinets and complete bench.

UNDER BENCH CABINETS:

DOOR FRONT:

- It should be made of 18 mm thick BWP plywood with factory laminated 0.7mm thick melaminela minates on both sides. The lamination should be done by hot press with a minimum pressure of 90 tones. All exposed edges are lipped with PVC lipping not less than 3m to protect from impacts, moisture and insects. The lipping is of them a chine applied with hot melt glue at a temperature of 205 degree Celsius or above.
- > The Melamine Laminate should confirm to BS, NEMA & BIS Standards.

CABINET BODY:

Cabinet body is made out of 18mm thick BWP plywood with factory laminated 0.7mm thick melamine laminates on both sides. Helamination is done with hot press with minimum of 90 tones pressure. All exposed edges are lipped not less than 0.5mm to protect from moisture and insects. The lipping is machine applied with hot melt glue at a temp of 205 degree Celsius or above.

- Bench mounted /Wall mounted Electrical trunk box full length (all accessible sides)and top portion of the cabinet body to be of 100 to 150mm wide laminated board below the TRESPA top on front & rear to run the Electrical cable management trunk system with openable Electrical Cable Management duct (Trunk) box full length of size 100 x 50mm PVC (Make: MDS/MK/LEGREND or Equivalent) or any alternate Electrical trunk in built to run the wiring for lighting, power, UPS, LAN, Internet etc. and also to cater the future wiring if any having 10/20A Electrical socket and 6 pin at 300mm center to center. Out of these quantities, 10A Electrical socket and 5pin, 20A Electrical socket and 6pin and 10A switches shall be 40%, 40% & 20% respectively. The Electrical trunk chute fixed up to ceiling of height 3meters on one side of the bench or on the center as per the direction of Engineer-in-charge.
- The Cabinet body is made of permanent case work without any screws and knock down/Mini-fix fittings. Permanent case work shall be made using latest technology such as biscuit joints with necessary adhesives. Inside of the cabinet body there are no any gaps for dust accumulation. All joints are sealed and it should be easily cleanable.
- > Two Adjustable shelves are also made with the same material as above.
- The under bench cabinet to be made in all places except the knee space shown in the key plan.

<u>KNEE</u> <u>SPACEBACK PANEL:</u> (The width of every Knee panel shall be 800mm or nearest)

It shall be made of 9mm BWP ply wood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination should be done with hot press with minimum 90 tonnes of pressure. The knee space panel shall be slidable wherever necessary to access service utilities.

HINGES, HANDLE/KNOBS:

➢ For the doors are without rust, nickel coated heavy duty, self closing, and allowing opening up to165 degree.

SERVICE FITTINGS:

Fittings shall be made of brass and should have an epoxide covering in ash grey colour. It should have a working temperature varies from-30 degree Celsius to +150 degree Celsius.

REAGENT RACK:

External frame made out of Epoxy coated and Independent chemical stand (Reagent rack) of 3-Tier, width 300mm and inside panel is made of wired glass which provides stability. Provision for Nitrogen outlet to be given.

MARK	DESCRIPTION	SIZE (in mm)	QUANTITY (each)	REMARKS
WB-1	WALL BENCH	950(L) X 750(W) X	17	
	WITH SINK	900(H)		
		Total	17	

ITEM NO-3 : WALL BENCHES WITH SINK

WORKTOP:

- Work top shall be a self-supporting solid laboratory flat bench panel with an integrated, decorative urethane-acrylic surface and a cellulose fiber reinforced in Phenoli cresin core. Surface is processed with Electron Beam Curing(EBC) systems which provide 24 hours chemical resistance against concentrated acid and dyes. The level of scratch resistance is equal or above 4 new ton according to EN 438-2:12.
- The panel should be of impermeable to reagents, Non-porous, thermally stable and impact resistance.
- The thickness of the work top should be 16mm. All edges should be fabricated and rounded for smooth finish. The surface colour of the worktop should be black or Grey.
- ➤ (Make: TRESPA or Equivalent)

FRAMEWORK:

Frame work is made of different sizes of Mild steel box sections, de-greased and galvanized with epoxy powder coated for smooth finish and protection. Adjustable leveling jacks of tough plastic/nylon will be provided for each leg for the support of the frame. A Front and back frames made of same material should be provided for connecting the entire J frame, C frame, supporting cabinets and complete bench.

UNDERBENCHCABINETS:

DOOR FRONT:

- It should be made of 18 mm thick BWP plywood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination should be done by hot press with a minimum pressure of 90 tones. All exposed edges are lipped with PVC lipping not less than 3 mm to protect from impacts, moisture and insects. The lipping is of the machine applied with hot melt glue at a temperature of 205 degree Celsius or above.
- \triangleright

he Melamine Laminate should confirm to BS, NEMA & BIS Standards.

CABINET BODY:

- Cabinet body is made out of 18mm thick BWP plywood with factory laminated 0.7 mm thick melamine laminates on both sides. The lamination is done with hot press with minimum of 90 tones pressure. All exposed edges are lipped not less than 0.5mm to protect from moisture and insects. The lipping is machine applied with hot melt glue at a temp of 205 degree Celsius or above.
- Bench mounted /Wall mounted Electrical trunk box full length (all accessible sides)and top portion of the cabinet body to be of 100 to 150mm wide laminated board below the TRESPA top on front & rear to run the Electrical cable management trunk system with openable Electrical Cable Management duct (Trunk) box full length of size 100 x 50mm PVC (Make: MDS/MK/LEGREND or Equivalent) or any alternate Electrical trunk in built to run the wiring for lighting, power, UPS, LAN, Internet etc. and also to cater the future wiring if any having 10/20A Electrical socket and 6 pin at 300mm center to center. Out of these quantities, 10A Electrical socket and 5pin, 20A Electrical socket and 6pin and 10A switches shall be 40%, 40% & 20% respectively. The Electrical trunk chute fixed up to ceiling of height 3meters on one side of the bench or on the center as per the direction of Engineer-in-charge.
- The Cabinet body is made of permanent case work without any screws and knock down/ Mini- fix fittings. Permanent case work shall be made using latest technology such as biscuit joints with necessary adhesives. Inside of the cabinet body there are no any gaps for dust accumulation. All joints are sealed and it should be easily cleanable.

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wo Adjustable shelves are also made with the same material as above.

The under bench cabinet to be made in all places except the knee space shown in the key plan.

KNEE SPACE BACK PANEL: (The width of every Knee panel shall be 800mm or nearest)

It shall be made of 9mm BWP plywood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination should be done with hot press with minimum 90 tons of pressure. The knee space panel shall be slidable when ever necessary to access service utilities.

HINGES, HANDLE/KNOBS:

➢ For the doors are without rust, nickel coated heavy duty, self-closing, and allowing opening upto165 degree.

SERVICE FITTINGS:

Fittings shall be made of brass and should have an epoxide covering in ash grey colour. It should have a working temperature varies from-30 degree Celsius to+150 degree Celsius.

WASHSINKS:

It shall be of poly propylene, molded as one piece. The dimensions of the sink are 60x40x25cm. The sink should not have any sharp corners inside. A pegrack is placed aboves in kunitto dry glassware's. Sink colour shall be black or approved colour. There shall be a pedestal or hand operated swan neck type 3way tap with controls, waste pipe coupling for each sink.

MARK	DESCRIPTION	SIZE (in mm)	QUANTITY (each)	REMARKS
WB-2	WALL BENCH	6000(L) X 750(W) X	4	
		900(H)		
WB-3	WALL BENCH	5000(L) X 750(W) X	1	
		900(H)		
WB-4	WALL BENCH	3600(L) X 750(W) X	10	
		900(H)		
WB-5	WALL BENCH	3000(L) X 750(W) X	14	
		900(H)		
WB-6	WALL BENCH	2200(L) X 750(W) X	15	
		900(H)		
WB-7	WALL BENCH	2100(L) X 750(W) X	1	

ITEM NO-4 : WALLBENCHES WITHOUT SINK

		900(H)		
WB-8	WALL BENCH	2000(L) X 600(W) X	17	
		900(H)		
		Total	62	

WORKTOP:

- Work top shall be a self-supporting solid laboratory flat bench panel with an integrated, decorative urethane-acrylic surface and a cellulose fiber reinforced in Phenolic resin core. Surface is processed with Electron Beam Curing (EBC) systems which provide 24 hours chemical resistance against concentrated acid and dyes. The level of scratch resistance is equal or above 4 New ton according to EN 438-2:12.
- The panel should be of impermeable to reagents, Non-porous, thermally stable and impact resistance.
- The thickness of the work top should be 16mm. All edges should be fabricated and rounded for smooth finish. The surface colour of the worktop should be black or Grey.
- ➢ (Make: TRESPA or Equivalent)

FRAMEWORK:

Frame work is made of different sizes of Mild steel box sections, de-greased and galvanized with epoxy powder coated for smooth finish and protection. Adjustable leveling jacks of tough plastic/nylon will be provided for each leg for the support of the frame. A Front and back frames made of same material should be provided for connecting the entire J frame, C frame, supporting cabinets and complete bench.

UNDERBENCHCABINETS:

DOOR FRONT:

- It should be made of 18 mm thick BWP plywood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination should be done by hot press with a minimum pressure of 90 tones. All exposed edges are lipped with PVC lipping not less than 3 mm to protect from impacts, moisture and insects. The lipping is of the machine applied with hot melt glue at a temperature of 205 degree Celsius or above.
- > The Melamine Laminate should confirm to BS, NEMA & BIS Standards.

CABINET BODY:

Cabinet body is made out of 18mm thick BWP plywood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination is done with hot press with minimum of 90 tones pressure. All exposed edges are lipped not less than 0.5mm to protect from moisture and insects. The lipping is machine applied with hot melt glue at a temp of 205 degree Celsius or above.

- Bench mounted /Wall mounted Electrical trunk box full length (all accessible sides)and top portion of the cabinet body to be of 100 to 150mm wide laminated board below the TRESPA top on front & rear to run the Electrical cable management trunk system with openable Electrical Cable Management duct (Trunk) box full length of size 100 x 50mm PVC (Make: MDS/MK/LEGREND or Equivalent) or any alternate Electrical trunk in built to run the wiring for lighting, power, UPS, LAN, Internet etc. and also to cater the future wiring if any having 10/20A Electrical socket and 6 pin at 300mm center to center. Out of these quantities, 10A Electrical socket and 5pin, 20A Electrical socket and 6pin and 10A switches shall be 40%, 40% & 20% respectively. The Electrical trunk chute fixed up to ceiling of height 3meters on one side of the bench or on the center as per the direction of Engineer-in-charge.
- The Cabinet body is made of permanent case work without any screws and knock down/Mini- fix fittings. Permanent case works hall be made using latest technology such as biscuit joints with necessary adhesives. Inside of the cabinet body there are no any gaps for dust accumulation. All joints are sealed and it should be easily cleanable.
- > Two Adjustable shelves are also made with the same material as above.
- The under bench cabinet to be made in all places except the knee Space shown in the key plan.

KNEE SPACE BACK PANEL: (The width of every Knee panel shall be 800mm or nearest)

It shall be made of 9mmBWP plywood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination should be done with hot press with minimum 90 tons of pressure. The knee space panel shall be slidable whenever necessary to access service utilities.

HINGES, HANDLE/KNOBS:

➢ For the doors are with out rust, nickel coated heavy duty, self-closing, and allowing opening upto165 degree.

SERVICE FITTINGS:

> Fittings shall be made of brass and should have an epoxide covering in ash

grey colour. It should have a working temperature varies from-30 degree Celsius to +150 degree Celsius.

ITEM NO-5 : PEDESTAL TYPEEMERGENCYEYEWASH WITH BODY SHOWER

MARK	DESCRIPTION	SIZE (in mm)	QUANTITY (each)	REMARKS
EYE	Pedestal type	-	3	-
WASH	Emergency eye Wash			
	with Body shower			
		Total	3	

- Wall mounting, straight or 45 degree, simple or double, straight or inclined eye shower
- It should be of Steady and strong structure made out of plastic material and anepoxy coated brass body. Handle provided with stopping lever which allows to keep free hands for better moving.
- Should be provided with an eye protecting antidust rubber cup covers. A stainless steel flexible hose of1.5m long should give to pull out the eye washer.

> Theaeratedwatersloweddownbyanintegratedflowregulator(accordingtoDINEN 246 standard) with water flow should be not less than of 6lit/min for single and12lit/min for double eye wash.

- Minimumwaterpressureis2bars.
- > The bidder has to furnish the brochure of the product.

ITEM NO -6 :CHEMICAL STORAGEUNIT

MAR K	DESCRIPTION	SIZE (in mm)	QUAN TITY (Nos)	REMAR KS
CS	CHEMICAL STORAGE UNIT	900(L) X 400(W) X 2100(H)	15	Or nearest size
		Total	15	

> Chemical storage cabinet unit is completely made of Polypropylene sheets. The

Door and cabinet body is made of 15mm thick Polypropylene Sheets. The back wall is of 6mm thick PP sheets. There is no any exposed part of metal is in the cabinet, even the hinges is made of poly propylene. A stainless steel moon shaped handle is fixed on the door.

All chemical storages have to be connected to an exhaust system having sufficient capacity blower with FRP or suitable ducting system shall be provided.

MAR K	DESCRIPTIO N	SIZE (in mm)	QUANTITY (each)	REMARKS
FC-1	FUME CUPBOARD	1500(W) x 900(D) x 2400(H)	45 (14Labs @ 3No.s per Lab = 42 and 1 Lab @2No.s = 2No.s; Total = 44No.s)	1. Suitable PP-FRP ducting to be designed by the bidders for the FC-1 &Suitable dedicated independent blower to be designed by the
FC-2	FUME CUPBOARD	1500(W) x 900(D) x 2400(H)	4 (4Labs @ 1No per Lab = 4)	 bidders for one set of three FC-1 in standard labs. 2. Suitable ducting pipe & required blower for each FC-2 to be designed by the bidders.
		Total	48	

ITEM NO - 7: FUME CUPBOARD:

FC-FRAMEWORK:

- Heave duty frame work with the sections of 80x40x3mm thick mild steel, degreased and galvanized. Epoxy powder coated with adjustable leveling jacks for each legs of the support frame. Front and back frames will be provided for supporting cabinets and complete bench
- Access opening: the service behind shall be easily accessible for the repairs/ maintenances. The area of access opening to be covered with same material with a arrangements of closing/opening whenever necessary.

FC-UNDERBENCHCABINETS:

DOOR FRONT:

- It should be made of 18 mm thick BWP plywood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination should be done by hot press with a minimum pressure of 90 tones. All exposed edges are lipped with PVC lipping not less than 3 mm to protect from impacts, moisture and insects. The lipping is of the machine applied with hot melt glue at a temperature of 205 degree Celsius or above.
- > The Melamine Laminate should confirm to BS,NEMA &BIS Standards.

CABINETBODY:

- Cabinet body is made out of 18mm thick BWP plywood with factory laminated 0.7mm thick melamine on both sides. The lamination is done with hot press with minimum of 90 tones pressure. All exposed edges are lipped not less than 0.5mm to protect from moisture and insects. The lipping is machine applied with hot melt glue at a temp of 205 degree Celsius or above.
- The Cabinet body is made of permanent case work without any screws and knock down /Mini-fix fittings. Permanent case works hall be made using latest technology such as biscuit joints with necessary adhesives. Inside of the cabinet body there are no any gaps for dust accumulation. All joints are sealed and it should be easily cleanable.
- Two Adjustable shelves are also made with the same material as above.

<u>FC-</u> WORKTO

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- Work top made of 19mm thick Solid Epoxy resin. Material shall be monolithic, modified epoxyres in product and material formulated to provide a work surface with high chemical resistance characteristics. Surfaces shall have a uniform low-sheen surface and the finished.
- Materials shall be extremely hard and resistance to scratches and abrasion. All edges fabricated and rounded for smooth finish. Adrip-cup (CupSink) is provided at the corner to drain any liquid spillage. The drip cup is chemical resistant and moulded as single piece in Polypropylene.

FC-EXTRACTIONCHAMBER:

- Exterior of extraction Chamber is made of melamine laminated body. Inside baffles is made with thick chemical & dry heat resistant compact laminate. Inside body is laminated with 3.0mm thick compact laminate. The Baffles confirm with BSEN 438, NEMALD-3 & ISO 4586. The fronts as his vertical smoothly sliding and made of 6mm thick toughened glass, with counter weight. A fluorescent light is provided at the top in a separate sealed chamber covered with wired glass for safety purposes.
- Four valves are provided for cold water, Argongas, Compressed Air and Nitrogen. A dripcup is provided and connected to drain.4 no's10/20 Asockets and switches for blower and light is provided.
- ➢ Make of Service Outlets: TOF, Italy
- > One 3/3 scaffolding iron[Titration rack] is attached to the back wall.
- All the plumbing services connecting to the valves & to header line should be Brass only.

FCBLOWER:

> Blower housing is of strong 'high density UV treated Polypropylene' for maximum corrosion resistance, the impeller is completely made of Polypropylene with **noiselevelless than62 dB**. The motors shall be designed by the bidders. All exposed part of the blower is made of polypropylene to protect from chemicals. Provision to be made for rain protection of the blower motor. Required electrical wiring inside conduits to be provided for the three blowers. 6mm thick PP-FRP Ducting is provided for exhausting. Ducting size & Number of blowers required etc may be as per the site condition. The length for each Fume extraction pipe would be assessed by the bidders before quoting the item.(The materials specification, size of the Fume extraction pipes and blower capacity are to be designed by the bidders. The cost includes necessary making of holes for running the exhaust pipes, Dismantling the existing false ceiling etc and making good the same etc after completion of works and also civil foundation for the blowers. The bidders have to furnish the technical specifications & brochures of the three blowers).

ITEM NO- 8: LAMINAR FLOW FUME CUPBOARD

MAR K	DESCRIPTIO N	SIZE (in mm)	QUANTITY (each)	REMARKS
LFC-	LAMINAR			Suitable ducting pipe
1	FLOW FUME		2	& required blower for
	COLDOARD			LIC-I to be designed

			by the bidders.
	Total	2	

FC-FRAMEWORK:

- Heave duty frame work with the sections of 80x40x3mm thick mild steel, degreased and galvanized. Epoxy powder coated with adjustable leveling jacks for each legs of the support frame. Front and back frames will be provided for supporting cabinets and complete bench
- Access opening: the service behind shall be easily accessible for the repairs/ maintenances. The area of access opening to be covered with same material with a arrangements of closing/opening whenever necessary.

FC-UNDERBENCHCABINETS:

DOOR FRONT:

- It should be made of 18 mm thick BW P plywood with factory laminated 0.7mm thick me laminelaminates on both sides. The lamination should be done by hot press with a minimum pressure of 90 tones. All exposed edges are lipped with PVC lipping not less than 3 mm to protect from impacts, moisture and insects. The lipping is of them a chine applied with hot melt glue at a temperature of 205 degree Celsius or above.
- > The Melamine Laminate should confirm to BS,NEMA &BIS Standards.

CABINETBODY:

- Cabinet body is made out of 18mm thick BWP plywood with factory laminated 0.7mm thick melamine on both sides. The lamination is done with hot press with minimum of 90 tones pressure. All exposed edges are lipped not less than 0.5mm to protect from moisture and insects. The lipping is machine applied with hot melt glue at a temp of 205 degree Celsius or above.
- The Cabinet body is made of permanent case work without any screws and knock down / Mini-fix fittings. Permanent case work shall be made using latest technology such as biscuit joints with necessary adhesives. Inside of the cabinet body there are no any gaps for dust accumulation. All joints are sealed and it should be easily cleanable.
- > Two Adjustable shelves are also made with thes a material as above.

FC-WORKTOP:

- Worktop made of 19mm thick Solid Epoxy resin. Material shall be monolithic, modified epoxyresin product and material formulated to provide a work surface with high chemical resistance characteristics. Surfaces shall have a uniform low-sheen surface and the finished.
- Materials shall be extremely hard and resistance to scratches and a brasion. All edges fabricated and rounded for smooth finish. A drip-cup (CupSink) is provided at the cornertodrain any liquid spill age. The drip cup is chemical resistant and moulded as single piece in Polypropylene.

FC-EXTRACTIONCHAMBER:

- Exterior of extraction Chamber is made of melamine laminated body. Inside baffles is made with thick chemical & dry heat resistant compact laminate. Inside body is laminated with3.0mm thick compact laminate. The Baffles confirm with BSEN 438, NEMALD-3&ISO4586. The front sash is vertical smoothly sliding and made of 6mm thick toughened glass, with counter weight. A fluorescent light is provided atthetopin a separate sealed chamber covered with wired glass for safety purposes.
- Four valves are provided for cold water, Argongas, Compressed Air and Nitrogen. Adripcup is provided and connected to drain. 4no's 10/20 A socket sands witches for blower and light is provided.
- Make of Service Out lets: TOF, Italy
- > One 3/3 scaffolding iron[Titration rack] is attached to the back wall.
- All the plumbing services connecting to the valves & to header line should be Brass only.

FCBLOWER:

Blower housing is of strong 'high density Uv treated Poly propylene 'for maximum corrosion resistance, the impeller is completely made of Polypropylene with noiselevellessthan62 dB. The motors shall be designed by the bidders. All exposed part of the blower is made of polypropylene to protect from chemicals. Provision to be made for rain protection of the blower motor. Required electrical wiring inside conduits to be provided for the three blowers. 6mm thick PP-FRP Ducting is provided for exhausting. Ducting size & Number of blowers required etc may be as per the site condition. The length for each Fume extraction pipe would be assessed by the bidders before quoting the item. (The materials specification, size of the Fume extraction pipes and blower capacity are to be designed by the bidders. The cost includes necessary

making of holes for running the exhaust pipes, Dismantling the existing false ceiling etc and making good the same etc after completion of works and also civil foundation for the blowers. The bidders have to furnish the technical specifications & brochures of the three blowers.

ITEM NO- 9: TEAK WOOD LABORATORYSTOOLS WITHOUT BACK/ HAND REST

MAR K	DESCRIPTION	SIZE (in mm)	QUAN TITY (Nos)	REMAR KS
-	LABORATORY STOOLS	-	110	-
		Total	110	

SPECIFICATION:

Teak wood Laboratory stool having the height of 85cm height, Legs at four corners of size 45x45mm with bracing member of size 40x20mm in top & Bottom. Seating size 20mm thick of teak wood planks having the dimensions of 30x30cm in size. Teak wood members shall be finished with high gloss wooden polish as per the direction of Engineer-in-charge.

ITEM NO-10: WORK STATIONBENCHES (Without under bench cabinets)

MAR K	DESCRIPTION	SIZE (in mm)	QUAN TITY (Nos)	REMAR KS
WS-1	WORK STATION BENCHES	9000(L) X 600(W) X 750(H)	2	
WS-2	WORK STATION BENCHES	7500(L) X 1200(W) X 750(H) + 600(H)	2	With separato r
		Total	4	

WORKTOP:

It shall be made of 24mm thick BWP(Boiled water Proof) plywood factory laminated with 0.7mm thick melamine on both sides. The lamination should be done by hot press with a minimum pressure of 90 tonnes. All exposed edges are lipped with PVC lipping not less than 3mm to protect from impacts, moisture and insects. The lipping is of the machine applied with hot melt glue at a temperature of 205 degree Celsius or above. A back side splash board of 24mm

thick, height 600mm on the back & side only for the Island Work station – WS-2.

CABINETBODY:

- The vertical support at every 900mm centre to centre shall be made out of 18mm thick BWP plywood with factory laminated 0.7 mm thick melamine laminates on both sides. The lamination is done with hot press with minimum of 90 tones pressure. All exposed edges are lipped not less than 0.5mm to protect from moisture and insects. The lipping is machine applied with hot melt glue at a temp of 205 degree Celsius or above.
- Bench mounted /Wall mounted Electrical trunk box full length (all accessible sides)and top portion of the cabinet body to be of 100 to 150mm wide laminated board below the TRESPA top on front & rear to run the Electrical cable management trunk system with openable Electrical Cable Management duct (Trunk) box full length of size 100 x 50mm PVC (Make: MDS/MK/LEGREND or Equivalent) or any alternate Electrical trunk in built to run the wiring for lighting, power, UPS, LAN, Internet etc. and also to cater the future wiring if any having 10/20A Electrical socket and 6 pin at 300mm center to center. Out of these quantities, 10A Electrical socket and 5pin, 20A Electrical socket and 6pin and 10A switches shall be 40%, 40% & 20% respectively. The Electrical trunk chute fixed up to ceiling of height 3meters on one side of the bench or on the center as per the direction of Engineer-in-charge.
- The Cabinet body is made of permanent case work without any screws and knock down/Mini-fixfittings. Permanent case work shall be made using latest technology such as biscuit joints with necessary adhesives. Inside of the cabinet body there are no any gaps for dust accumulation. All joints are sealed and it should be easily cleanable.

<u>KNEE SPACE BACK PANEL:</u> (The width of every Knee panel shall be 800mm to 900mm or nearest)

It shall be made of 9mm BWP plywood with factory laminated 0.7mm thick melamine laminates on both sides. The lamination should be done with hot press with minimum 90 tonnes of pressure. The knee space panel shall be slidable whenever necessary to accessservice utilities.

CPUCABINET:

> It is made out of 18 mm thick BWP plywood with factory laminated 0.7mm

thick melamine laminates on both sides. The lamination should be done by hot press with a minimum pressure of 90 tones. All exposed edges are lipped with PV Clipping not less than 3mm to protect from impacts, moisture and insects. The lipping is of them a chine applied with hot melt glue at a temperature of 205 degree Celsius or above.

> Keyboard & CPU stand provision to be provided in every sitting place.

ITEM NO-11 :WALL MOUNTED OVERHEADSTORAGEUNIT

MARK	DESCRIPTION	SIZE (in mm)	QUANTITY (Nos)	REMARKS
OSU-1	OVER HEAD	9000(L) X 300(D) X	2	20M
	STORAGE	600(H)		LENGTH
OSU-2	OVER HEAD	2000(L) X 300(D) X	1	
	STORAGE	600(H)		
		Total	3	

CABINETBODY:

- It *is* made of 18mm BWP plywood for top, bottom & middle shelf, vertical at every 800mm to 900mm or nearest and 4mm for back side with factory laminated 0.7mm thick melamine laminates on both sides. The cabinet shutters are openable of width 450 to 500mm or nearest. The lamination is done with hot press with minimum of 90 tones pressure. All exposed edges are lipped with PVC lipping not less than 0.5mm to protect from impacts, moisture and insects. The lipping is of them a chine applied with hot melt glue at a temperature of 205 degree Celsius or above. The top panel of the cabinet is made of 18mm BWP plywood, laminate as above.
- The Cabinet body is made of permanent case work without any screws and knock down / Mini-fixfittings. Permanent case work shall be made using latest technology such as biscuit joints with necessary adhesives. Inside of the cabinet body there are no any gaps for dustaccumulation.Alljointsaresealedanditshouldbeeasilycleanable.
- Middle shelves are also made with the same material as above.

HINGES, HANDLE/KNOBS:

> The Fittings for the cabinets are without rust, nickel coated heavyduty, self-closing, and allowing opening up to 165 degree.

ITEM NO-12 : COMPUTER LAB

MARK	DESCRIPTION		QUANTITY (Units)
-	SITTING CUBICALS WITH CHAIRS - 4x4	Required size, model type & design shall be approved by Engineer-in-charge	4
		Total	4 UNITS

ITEM NO-13 : LECTURE HALL

MARK	DESCR	QUANTITY (Nos)	
-	LECTURE'S TABLE WITH CHAIR		1
		Required size, model type	
-	LECTURE HALL CHAIRS WITH WRITING BOARD	& design shall be approved by Engineer-in-charge	48
-	WRITING (WHITE) BOARD – 3000X1500MM		1
		Total	50

ITEM NO-14 : BOARD ROOM

MARK	DESCR	QUANTITY (Nos)	
-	CONFERENCE TABLE	Required size, model type	1
		& design shall be approved	
		by Engineer-in-charge	24
-	EXECUTIVE CHAIR		
		Total	25

ITEM NO-15 : SEMINAR HALL

MARK	DESCR	QUANTITY (Nos)	
-	SITTING CHAIRS with back / hand rest - without rolling/rotating type	Required size, model type & design shall be approved by Engineer-in-charge	120
-	PODIUM		1

	Total	121
	10001	141

ITEM NO-16 : RECEPTION

MARK	DESCR	QUANTITY (Nos)	
-	RECEPTION TABLE		1
-	JR. EXECUTIVE CHAIRS		2
-	CPU TROLLY	Required size, model type	1
-	3-SEATER SOFA	& design shall be approved by Engineer-in-charge	4
-	1-SEATER SOFA		4
-	TEE-POI		4
		Total	16

ITEM NO-17: HOD ROOM

MARK	DESCR	QUANTITY (Nos)	
-	EXECUTIVE TABLE WITH SIDE UNIT		1
-	BACK UNIT		1
-	EXECUTIVE CHAIR		1
-	JR. EXECUTIVE CHAIR	Required size, model type	1
-	VISITORS CHAIR	by Engineer-in-charge	4
-	3-SEATER SOFA		1
-	1-SEATER SOFA		2
-	TEE-POI		1

-	CPU TROLLY		1
		Total	13

Section III - PROFORMA APPLICATION FORMS

LETTER OF TRANSMITTAL

From:

To Deputy Vice President (Technical) HLL Lifecare Limited, Infrastructure Development Division, "Adarsh", T.C 6/1718(1), Vettamukku, Thirumala P.O, Thiruvananthapuram- 695 006 **Subject**: Planning, Designing, Execution and Commissioning of Laboratory Furniture and allied accessories in the Silver Jubilee Block at NIIST Campus, Trivandrum.

Sir,

Having examined the details given in the EOI press notice and Qualification documents for the above work, I/we hereby submit the qualification document and other relevant information.

- 1. I/We hereby certify that all the statements made and information supplied in the enclosed forms A to F and accompanying statements are true and correct.
- 2. I/We have furnished all information and details necessary for pre-qualification and have no further pertinent information to supply.
- 3. I/We authorize HLL Lifecare Limited to approach individuals, employers, firms and corporation to verify out competence and general reputation
- 4. I/We submit the documentary evidence in support of our suitability, technical know-how and capability for having successfully completed the following works and for the details furnished by us in the proforma attached below:

Name of work

Seal of applicant Date of submission

FORM 'A'

FINANCIAL INFORMATION

- I. Financial Analysis Details to be furnished duly supported by figures in balance sheet/. The balance sheet and profit & loss account for the last five years duly certified by the Chartered Accountant shall be submitted on provisional prequalification by HLL.
- A. Gross Annual turnover on similar works.

Years

2011-12	2012-2013	2013-2014	2014-15	

B. Profit/Loss

Years

100.10				
2010-11	2011-12	2012-13	2013-14	2014-15

II.Financial arrangements for carrying out the proposed work.

III. The following certificates will be enclosed:

1. PAN & Service tax registration

Signature of Chartered Accountant with Seal

FORM 'B'

DETAILS OF ALL WORKS OF SIMILAR CLASS COMPLETED DURING THE LAST FIVE YEARS ENDING LAST DAY OF THE MONTH OF JULY 2014

1	SL.NO
2	Name of work/ project and location
3	Owner or sponsor
4	Cost in Crores with breakup for components as in para 3. section I
5	Date of commencement as per contract
6	Stipulated date of completion
7	Actual date of completion
8	Litigation / arbitration pending / in progress with details*
9	Name and address /telephone number of officer to whom reference may be made
10	
	Remarks

* Indicate gross amount claimed and amount awarded by the Arbitrator.

FORM 'C'

PROJECTS UNDER EXECUTION OR AWARDED

1 2	location SL.NO
3	Owner or sponsor Name of work/ project and
4	Cost in Crores with breakup for components as in para 3. section I
5	Date of commencement as per contract
6	Stipulated date of completion
7	Actual date of completion
8	Litigation / arbitration pending / in progress with details*
9	Name and address /telephone number of officer to whom reference may be made
10	
	Remarks

FORM 'D'

PERFORMANCE REPORT OF WORKS REFERRED TO IN FORM "C" & "D"

- 1. Name of work / Project & Location.
- 2. Name of Contractor
- 3. Agreement No.
- 4. Estimated Cost.
- 5. Tendered Cost
- 6. Final Cost on completion of the project :
- 7. Date of start
- 8. Date of completion
 - (i) Stipulated date of completion
 - (ii) Actual date of completion
- 9. Amount of compensation levied for delayed completion, if any
- 10. Amount of reduced rate items, if any.
- 11. Performance Report
 - 1) Quality of work
 - 2) Financial soundness
 - 3) Technical Proficiency
 - 4) Resourcefulness
 - 5) General behavior

Very Good/Good/Fair/Poor Very Good/Good/Fair/Poor Very Good/Good/Fair/Poor Very Good/Good/Fair/Poor Very Good/Good/Fair/Poor

Executive Engineer or Equivalent

Dated:

FORM 'E'

STRUCTURE & ORGANIZATION

- 1. Name & Address of the applicant
- 2. Telephone No./Fax No.
- 3. Legal status of the applicant (attach copies of original document the legal status).
 - (a) An individual
 - (b) A proprietary firm
 - (c) A firm in partnership
 - (d) A limited company or Corporation
- 4. Particulars of registration with various Government bodies (attach attested photocopy).

Organization/Place of registration

Registration No.

- 1.
- 2.
- 3.
- 5. Names and Titles of Directors & Officers with designation to be concerned with this work.
- 6. Designation of individuals authorized to act for the organization.
- 7. Was the applicant ever required to suspend construction for a period of more than six months continuously after you commenced the construction? If so, give the name of the project and reasons of suspension of work.
- 8. Has the applicant, or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.
- 9. Has the applicant, or any constituent partner in case of partnership firm, even been debarred/black listed for tendering in any organization at any time? If so, give details.
- 10. Has the applicant, or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details.
- 11. In which field of Civil Engineering construction the applicant has specialization and interest?
- 12. Any other information considered necessary by not included above.

FORM 'F' DETAILS OF TECHNICAL & ADMINISTRATIVE PERSONNEL TO BE EMPLOYED FOR THE WORK

S.	Designation	Number	Name	Qualificat	Professional	Respons	Remar
No		available		ion	experience	ibility	ks
		for this			and details of		
		work			work carried		
					out		
1	2	3	4	5	6	7	8