



EOI Document For

Selection of Partner/Original Equipment
Manufacturer (OEM)/ System Integrator (SI) for Pre-
Bid Tie-up participation in Tender issued by “Netaji
Subhas University of Technology, New Delhi” for
Development of Smart Class Rooms at NSUT Main
Campus

EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/

Dated: 14/02/2022

EdCIL (India) Limited

(A Govt. of India ‘Mini Ratna’ Enterprises)

‘EdCIL House’, Plot No. 18A, Sector- 16A

NOIDA – 201301 (UP), INDIA

Tel: 0120-4156001-02, 4154003, 2512004-06, 0120-4310840,

FAX: 0120-2515372

This document is serially numbered from page number 01 to 89.

DISCLAIMER

The information contained in this Tender document (the "TENDER") or subsequently provided to Bidder(s), whether verbally or in documentary or any other form by or on behalf of the Authority or any of its employees or advisors, is provided to Bidder(s) on the terms and conditions set out in this TENDER and such other terms and conditions subject to which such information is provided.

This TENDER is not an Agreement and is neither an offer nor invitation by the Authority to the prospective Bidders or any other person. The purpose of this TENDER is to provide interested parties with information that may be useful to them in making their financial offers (BIDs) pursuant to this TENDER. This TENDER includes statements, which reflect various assumptions and assessments arrived at by the Authority in relation to the Project. Such assumptions, assessments and statements do not purport to contain all the information that each Bidder may require. This TENDER may not be appropriate for all persons, and it is not possible for the Authority, its employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this TENDER. The assumptions, assessments, statements and information contained in the Bidding Documents, especially the Feasibility Report, may not be complete, accurate, adequate or correct. Each Bidder should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this TENDER and obtain independent advice from appropriate sources.

Information provided in this TENDER to the Bidder(s) is on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. The Authority accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The Authority, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Bidder under any law, statute, rules or regulations or tort, principles of restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this TENDER or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the TENDER and any assessment, assumption, statement or information contained therein or deemed to form part of this TENDER or arising in any way for participation in this BID Stage.

The Authority also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Bidder upon the statements contained in this TENDER. The Authority may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this TENDER.

The issue of this TENDER does not imply that the Authority is bound to select a Bidder or to appoint the Selected Bidder, as the case may be, for the Project and the Authority reserves the right to reject all or any of the Bidders or BIDs without assigning any reason whatsoever.

The Bidder shall bear all its costs associated with or relating to the preparation and submission of its BID including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by the Authority, site visits, investigations, studies, or any other costs incurred in connection with or relating to its BID. All such costs and expenses will remain with the Bidder and the Authority shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Bidder in preparation or submission of the BID, regardless of the conduct or outcome of the Bidding Process.

INDEX

CHAPTER	SUBJECT	PAGE NO.
I	EXPRESSION OF INTEREST (EOI)	05-07
II	OFFLINE AND ONLINE BID SUBMISSION DOCUMENTS	08
III	TERMS OF REFERENCE AND DEFINITIONS	09-10
IV	INSTRUCTIONS FOR E-TENDERING	11-17
V	INSTRUCTIONS TO BIDDERS	18-38
VI	ANNEXURE-I TO ANNEXURE- XIV	39-68
VII	FINANCIAL BID	69-89

CHAPTER-1
EdCIL (INDIA) LTD
(A GOVT. OF INDIA MINI RATNA ENTERPRISE)
SECTOR 16A, NOIDA

Subject: Expression of Interest (EOI) for Selection of Partner/Original Equipment Manufacturer (OEM)/ System Integrator (SI) for Pre-Bid Tie-up participation in Tender issued by Netaji Subhas University of Technology, New Delhi for Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus.

EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/

Dated: 14-02-2022

1. Expression of Interest (EOI) is invited from eligible bidders for **Pre-Tender Tie-up** with EdCIL for "Selection of Partner/Original Equipment Manufacturer (OEM)/ System Integrator (SI) for Pre-Bid Tie-up participation in Tender issued by Netaji Subhas University of Technology, New Delhi for Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus".
2. EdCIL (India) Limited, a Mini Ratna Category – I CPSE (Central Public-Sector Enterprise) Company, registered at Vijaya Building, 5th floor, 17- Barakhamba Road, New Delhi – 110001 (India), was incorporated in 1981, under the Ministry of Human Resource Development. It is an ISO 9001:2015 & 14001:2015 Certified Company. It is a continuously dividend paying and profit-making company and the only PSU (Public Sector Undertaking) under Ministry of Human Resource Development to serve the education sector.
3. The EdCIL offers the following solutions in the Education & Human Resource Development space.
 - Educational Infrastructure Services (EIS)/Educational Procurement Services (EPS),
 - Online Testing and Assessment (OTAS),
 - Advisory Services (AS),
 - Digital Education Services (DES),
 - Oversees Education Services (OES)/Study in India Programme,
 - Technical Support Group (TSGs),
4. EdCIL intends to participate in tenders issued by Netaji Subhas University of Technology, New Delhi for Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus as a lead bidder. This EOI is floated for **Selection of Back end Partner ready to work exclusively in the above said project/similar such projects.**

5. The intended agencies/firms are required to submit online bids which are mandatory for this EOI. The prospective bidders are required to submit their bids with most competitive techno-commercial offer for the above-said work. The EOI document is available on EdCIL website (www.edcil.co.in) and E-Tender Wizard (<http://www.tenderwizard.com>).
6. Important Information are given below:

On-site Warranty	One-year Comprehensive warranty from the date of successful Commissioning & Handing over of Civil & Electrical, Furniture and Smart Class rooms etc.
Performance Bank Guarantee	3% of the total work value of the successful bidder. PBG is required to be submitted within 7 days from the date of issue of LOA in favour of EdCIL (India) Limited . 3% Security shall be deducted from Running Bill payment. This guarantee shall be valid for a period of 90 days beyond the period for 1 Year Warranty from the date of final commissioning and handing over to Client
Tender Type (Open/ Limited/ EOI/ Auction/ Single)	Open
Tender Category (Services/ Goods/ works)	Goods
Type/Form of Contract (Work/Supply)	Supply
Product Category (Civil/ Interior Works)	Civil & Electrical , Furniture and Smart Class rooms
Purchaser, Place of delivery	NSUT, New Delhi
and	Twelve Months for Execution of Works and
Duration of supply.	Five Years for Comprehensive Maintenance of VRV/VRF System and Comprehensive Maintenance & Operation of AV System
The Currency in which payment shall be made	Indian Rupees (INR)
Date of Issue/Publishing	14-02-2022
Document Download/ Sale Start Date	14-02-2022
Document Download/ Sale End Date	16-02-2022at 14:00 Hrs.
Last Date and Time for receipts of Bids	16-02-2022 up to 14:30 Hrs.

Date and Time of Opening of Bids	16-02-2022 at 15:00 Hrs.
No. of Covers (1/2/3/4)	01 (Single Packet)
Bid Validity days (180/120/90/60/30)	120 days (From last date of opening of tender)
Address for Communication	Chief General Manager (EIS & EPS) EdCIL (India) Limited, 18 A, Sector-16A, Noida-U.P.-201 301, Ph. No.: 0120-4310840
Contact No.	0120-2512001 to 2512006, 0120-4156001,002,4154003
Email Address	cgm.infracivil@edcil.co.in , eprocure@edcil.co.in mmandeesh@edcil.co.in

7. Tender document shall be downloaded from electronic tender portal link available at EdCIL Tender web page and details mentioned in the tender document. Aspiring bidders who have not get registered in e-procurement should get themselves register/enroll before participating in e-tendering process. Interested bidders are advised to go through instructions provided at "Instructions to Bidders for e-tendering."
8. No manual bids shall be accepted. Bids should be submitted in the E-Tendering mode only.
9. Bidders are advised to visit the EdCIL Web site regularly for getting themselves updated for information on this tender. Corrigendum and addendum may be issued on the changes required. The Corrigendum/addendum are the part of tender documents and Bidders are supposed to upload the same, duly signed as per the guidelines given in the tender document. Bidders are advised to visit EdCIL e-tender web page regularly to update themselves for any notifications for this tender.

Chief General Manager/ (EIS & EPS)
 EdCIL (India) Limited,
 18 A, Sector-16A, Noida-201 301
 Tel: +91120-4156001,0120-4154003,
 0120-2512004,05,06.

CHAPTER- II

Offline and Online Bid Submission Documents

1. Offline Submissions:

1.1 The bidder is requested to submit the following documents offline to the under mentioned address before the start of Public Online Tender Opening Event in a Sealed Envelope at the address.

1.2 The envelope shall bear the project name, the tender number and the words 'DO NOT OPEN BEFORE' (due date & time)

I. Original EMD amount in the form of Demand Draft.

II. Original copy of the power-of-attorney, wherever required.

Note: The Bidder should also upload the scanned copies of all the above-mentioned original documents as Bid-Annexure during Online Bid-Submission.

2. Online Submissions:

2.1 The Online bids (complete in all respect) must be uploaded online in One Envelope as explained below:

Envelope (Following documents to be provided as single PDF file) *file size shall be less than 5 MB each.			
Sl. No.	Documents	Content	File Types
1.	EOI for Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus, New Delhi	Organization Declaration Sheet as per Annexure-I	.PDF
2.		List of organizations/ clients where the same products have been supplied (in last three years) along with their contact number(s). (Annexure-VI)	.PDF
3.		Supporting documents in support of all claims made at Annexure-II, III, IV, V, VII, VIII, IX, XII, XIII	.PDF
4.		Corrigendum/ Addendum are also to be signed and uploaded.	.PDF
5.		As per Financial Bid form	.PDF

CHAPTER-III
TERM OF REFERENCE & DEFINITIONS

Supplier	"Supplier" shall mean the successful agency/ bidder, firm or corporation to whom the Purchase Order is issued for Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus.
Authorized Signatory	The bidder's representative (explicitly, implicitly, or through conduct) with the powers to commit the authorizing organization to a binding agreement. Also called signing officer/ authority having the Power of Attorney from the Competent authority of the respective Bidding firm.
EOI	"EOI" means the Expression of Interest received from the prospective eligible agency/firm.
Contract	"The Contract" means the agreement entered into between EdCIL and the selected bidder(s) in terms of clauses mentioned
Day	"Day" means a normal working day with or without extra hours to work on the designated site of the project/ work.
Client	Netaji Subash University of Technology, New Delhi.
D.D	Demand Draft
EdCIL	EdCIL (India) Limited, Noida (A Govt. of India Enterprise)
TC	Tender Committee
PBG	Performance Bank Guarantee
Security Deposit (SD)	Amount of the Order Value deposited by the Bidder and retained till the successful completion of the project (as long as the bidder fulfils the contractual agreement).
Services	"Services" means the services to be delivered by the successful bidder and as required to run the project successfully as per the Contract.
TENDER	"TENDER" means the Request for Proposals / Bid
Goods and Materials	"Goods and Materials" shall mean the articles, materials, Civil & Electrical Items, Furniture Items, IT Equipments, supplier's drawings, data and other property and all services-including design, delivery, installation, inspection and maintenance support specified or required to complete the order and incidental thereto.
Order	"Order" shall mean the Purchase/ Work Order and its attachments and exhibits.
Purchaser	"Purchaser" shall mean NSUT, New Delhi where the items are to be supplied, installed and commissioned.
Consignee	"Consignee" shall mean Authorized Representative of EdCIL (India) Limited / Authorized representative of Client.
GST	Goods and Services Tax

EPF	Employee Provident Fund
ESI	Employees State Insurance.
MSME	Micro, Small and Medium Enterprises.
NSIC	National Small Industry Corporation.
GOI	Government of India.

CHAPTER-IV

INSTRUCTIONS FOR E-TENDERING

1. **Instructions for Online Bid Submission:**
 - 1.1 E-tendering is new technology for conducting public procurement in a transparent and secured manner. As per Government of India's directives, EdCIL (India) Limited has adopted E-tendering.
 - 1.2 For conducting electronic tendering, EdCIL (India) Limited has decided to use Electronic tender portal link available with detailed information on e-tendering process at EdCIL website. This portal built using Electronic tender's software is referred to as <http://www.tenderwizard.com/EDCIL>.
 - 1.3 The bidders are required to submit soft copies of their bids electronically on <http://www.tenderwizard.com/EDCIL> e-tendering website, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the Tender Wizard E-Tendering Portal, prepare their bids in accordance with the requirements and submitting their bids online on the Tender Wizard E-Tendering Portal.
 - 1.4 The scope of work to be tendered is available in the complete bid documents which can be viewed /downloaded from Tender Wizard E-Tendering Portal of <http://www.tenderwizard.com/EDCIL>. Both Technical Bid and Financial Bid will be submitted concurrently duly digitally signed in the website <http://www.tenderwizard.com/EDCIL>. No claim shall be entertained on account of disruptions of internet service being used by bidders. Bidders are advised to upload their bids well in advance to avoid last minute technical snags.
 - 1.5 All Corrigendum/Amendment/Corrections, if any, will be published on the website <http://www.tenderwizard.com/EDCIL>.
 - 1.6 It is mandatory for all the applicants to have Digital Signature Certificate (in the name of person who will sign the bid document) from any of the licensed certifying.
 - 1.7 To participate in the e-tendering submission, it is mandatory for the applicants to get registered their firm/joint venture with the Tender Wizard E-Tendering Portal of <http://www.tenderwizard.com/EDCIL> to have user ID & Password from Tender Wizard E-Tendering Portal.
 - 1.8 **Register your organization on Tender Wizard E-Tendering Portal by following link <http://www.tenderwizard.com/EDCIL> well in advance of your first tender submission deadline on Tender Wizard E-Tendering Portal for obtaining credentials by paying Annual registration charges. Vendor Registration is Valid for 1year.**
 - 1.9 Get your organization's concerned executives trained on **Tender Wizard E-Tendering Portal** well in advance of your first tender submission

deadline on E-tender Site.

- 1.10 Submit your tender well in advance by relevant documents along with copy of EMD of tender submission deadline on **Tender Wizard E-Tendering Portal** as there could be last minute problems due to internet timeout, breakdown, etc.
- 1.11 Tenders should be submitted only through Tender Wizard E-Tendering Portal and obtain the Tender Acknowledgement copy as a proof of successful submission.
- 1.12 Vendors Training Program: Vendors are requested to contact at Tender wizard Helpdesk for any information regarding E-tendering / training.
 - a) For online registration, intended bidders may write us at harishkumar.kb@etenderwizard.com or contact no. 080-49352000/ 9686115318/ 9650520101/ 8800445981.
 - b) For any further query related to Training Session, Tender Uploading/ downloading or any other query related to tender please contact Tender wizard Helpdesk.
 - Telephone: 080-49352000/9686115318 or write us mail on Email Id:- harishkumar.kb@etenderwizard.com, ambasa@etenderwizard.com, twhelpdesk759@gmail.com, twhelpdesk963@gmail.com

2. Digital Signature Certificates

For integrity of data and authenticity/non-repudiation of electronic records, and to be compliant with IT Act 2000, it is necessary for each user to have a Digital Signature Certificate (DSC). Also referred to as Digital Signature Certificate (DSC) of Class 2 or above, issued by a Certifying Authority (CA) licensed by Controller of Certifying Authorities (CCA) [refer <http://www.cca.gov.in>].

3. Registration

- 3.1 To use the **Tender Wizard E-Tendering Portal**, vendors need to register on the portal by going on the link provided at EdCIL tender webpage as <http://www.tenderwizard.com/EDCIL>. Registration of each organization is to be done by one of its senior persons who will be the main person coordinating for the e-tendering activities. In **Tender Wizard Portal** terminology, this person will be referred to as the Super User (SU) of that organization. For further details, please visit the website/portal, and click on the 'Supplier Organization' link under 'Registration' (on the Home Page) and follow further instructions as given on the site. Pay Annual Registration Fee as applicable.
- 3.2 After successful submission of Registration details and Annual Registration Fee, please contact **Tender Wizard Helpdesk** (as given below), to get your

registration accepted/activated.

3.3 Important Note:

3.3.1 To minimize the problems during the use of **Tender Wizard E-Tendering Portal** (including the Registration process), it is recommended that the user should use as per the instructions given under 'Tender Wizard E-Tendering Portal User-Guidance Centre' located on Home Page, including instructions for timely registration on Portal. The instructions relating to 'Essential Computer Security Settings for Use of Tender Wizard E-Tendering Portal and 'Important Functionality Checks' should be especially taken into cognizance.

3.3.2 Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of users, assigning roles to them, etc.

4. **SEARCHING FOR TENDER DOCUMENTS**

4.1 There are various search options built in the Tender Wizard E-Tendering Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID/ Tender Search Code (TSC), organization name, location, date, value, etc. There is also an option of advanced search for tenders, where in the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other key words etc. to search for a tender published on the Tender Wizard E-Tendering Portal.

4.2 Once the bidders have selected the tenders they are interested in, they may download the required documents/ tender schedules. This would enable the Tender Wizard E-Tendering Portal to intimate the bidders through e-mail alert in case there is any corrigendum issued to the tender document.

4.3 The bidder should make a note of the unique Tender ID/ Tender Search Code (TSC) assigned to each tender, in case they want to obtain any clarification/help from the Help desk.

5. **PREPARATION OF BIDS**

5.1 Bidder should take into account any corrigendum/addendum published on the portal before submitting their bids.

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

- 5.3 Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/ schedule and generally, they can only be in PDF format. Bid documents may be scanned with 100dpi with black and white option.

6. SUBMISSION OF BIDS

- 6.1 Bidder should log into the site well in advance for bid submission and complete all formalities of registration (at least two days in advance of the closing date) so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be sole responsible for any delay in uploading of bid within the stipulated time.
- 6.2 The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 6.3 Bidder has to pay the tender fee/EMD as applicable through demand draft as per tender condition in favour of "EdCIL (India) Ltd" payable at Noida and enter details of the instruments. Original copies of demand draft for EMD/ Tender fees are required to be submitted.
- 6.4 A standard Financial Bid form has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. If the financial bid format is found to be modified by the bidder, the bid will be rejected.
- 6.5 The server time (which is displayed on the bidder's dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 6.6 The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 6.7 Upon the successful and timely submission of bids, the portal will give a successful bid submission message & bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

7. ASSISTANCE TO BIDDERS

- 7.1 Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority. For any other tender related queries bidders are requested to contact on below given numbers/email.

EdCIL / Tender Wizard E-Tendering Portal Helpdesk

Telephone/ Mobile	Customer Support:080-49352000 (Multiple Telephone lines) EmergencyMobileNumbers:9686115318/ 9650520101/8800445981. (Please contact in case of emergency during non-working hours.)
E-mail ID	To Tender Wizard harishkumar.kb@etenderwizard.com ambasa@etenderwizard.com lwhelpdesk759@gmail.com twhelpdesk963@gmail.com & cc to: eprocure@edcil.co.in

8. Offline Submissions: (AS PER TENDER REQUIREMENT)

8.1 The bidder is requested to submit the following documents in a Sealed Envelope to the above-mentioned address (given in EOI) before the start of Public Online Tender Opening Event.

1. **Original copy of the power-of-attorney wherever applicable.**

Note: The Bidder should also upload the scanned copies of all the above-mentioned original documents as Bid-Annexure during Online Bid-Submission.

8.2 The envelope shall bear (the project name), the tender number along with the Name of Bidder firm with address and the words 'DO NOT OPEN BEFORE' (due date & time).

9. Public Online Tender Opening Event (TOE)

- a. Tender Wizard E-Tendering Portal offers a unique facility for 'Public Online Tender Opening Event (TOE)'. Tender Opening Officers, as well as, authorized representatives of bidders can simultaneously attend the Public Online Tender Opening Event (TOE) from the comfort of their offices. Alternatively, one/two duly authorized representative(s) of bidders (i.e. Supplier organization) are requested to carry a Laptop with Wireless Internet Connectivity, if they wish to come to Buyer Organization for the Public Online TOE.
- b. Every legal requirement for a transparent and secure 'Public Online Tender Opening Event (TOE)', including digital counter-signing of each opened bid by the authorized TOE-officer(s). Simultaneous online presence of the participating bidders' representatives for TOE has been implemented on Tender Wizard E-Tendering Portal.

- c. Tender Wizard E-Tendering Portal has a unique facility of 'Online Comparison Chart' which is dynamically updated as each online bid is opened. The format of the chart is based on inputs provided by the Buyer for each Bid-Part of a tender. The information in the Comparison Chart is based on the data submitted by the Bidders. A detailed Technical and / or Financial Comparison Chart enhance Transparency.
- d. Tender Wizard E-Tendering Portal has a unique facility of a detailed report titled 'Minutes of Online Tender Opening Event (TOE)' covering all important activities of 'Online Tender Opening Event (TOE)'. This is available to all participating bidders for 'Viewing/Downloading'.

10. CRITICAL DO'S AND DON'TS FOR BIDDERS

Specifically, for Supplier organizations, the following '**SEVEN KEY INSTRUCTIONS for BIDDERS**' must be assiduously adhered to:

- I. Obtain individual Digital Signing Certificate (DSC or DC) well in advance of your first tender submission deadline on **Tender Wizard E-Tendering Portal**.
- II. Register your organization on **Tender Wizard E-Tendering Portal** well in advance of the important deadlines for your first tender on Tender Wizard E-Tendering Portal viz. 'Date and Time of Closure of Procurement of Tender Documents' and 'Last Date and Time of Receipt of Bids'. Please note that even after acceptance of your registration by the Service Provider, to respond to a tender you will also require time to complete activities related to your organization, such as creation of- Marketing Authority (MA) [i.e. a department within the Supplier/ Bidder Organization responsible for responding to tenders], users for one or more such MAs, assigning roles to them, etc. It is mandatory to create at least one MA. This unique feature of creating an MA enhances security and accountability within the Supplier/ Bidder Organization.
- III. Get your organization's concerned executives trained on Tender Wizard E-Tendering Portal well in advance of your first tender submission deadline on the Portal.
- IV. For responding to any particular tender, the tender (i.e. its Tender Search Code or Tender No) has to be assigned to an MA. Further, an '**Official Copy of Tender Documents**' should be procured/ downloaded before the expiry of Date and Time of Closure of Procurement of Tender Documents.

Note: Official copy of Tender Documents is distinct from downloading 'Free Copy of Tender Documents'. Official copy of Tender Documents is the equivalent of procuring physical copy of Tender Documents with official receipt in the paper-based manual tendering system.

- V. Submit your bids well in advance of tender submission deadline on

Tender Wizard E-Tendering Portal (There could be last minute problems due to internet timeout, breakdown, etc.)

- VI. Tender Wizard E-Tendering Portal will make your bid available for opening during the Online Public Tender Opening Event (TOE) 'ONLYIF' your 'Status pertaining Overall Bid-Submission' is '**Complete**'. For your record, you can generate and save a copy of 'Final Submission Receipt'. This receipt can be generated from 'Bid-Submission Overview Page' only if the 'Status pertaining overall Bid-Submission' is 'Complete'.

11. MINIMUM REQUIREMENTS AT BIDDER'S END

- Computer System having configuration with minimum Windows 7 or above, and Broadband connectivity
- Digital Certificate(s)

Note:

- I. The Bid shall be typed in English and signed by the Bidder or a person duly authorized to bind the Bidder to the Contract. The person(s) signing the Bids shall initial all pages of the Bids.
- II. All envelopes should be securely sealed and stamped.
- III. It is mandatory for the Bidder to quote for all the items mentioned in the tender.

CHAPTER-V INSTRUCTIONS TO BIDDERS

1. SCOPE OF WORK:

- i. The Scope of work shall include the Development of Smart Class rooms in the Academic Block of NSUT, Main Campus and the work shall involve the following:

- Civil and Electrical Works
- Interior Works
- Supply of Furniture Items
- Air-Conditioning Works
- Audio-Video System
- Development of Smart Class Room

The detailed scope of work shall be as per the NSUT, New Delhi Tender enclosed as **Part B**.

- ii. The pre-delivery inspection shall be undertaken as per directions of the EdCIL/EdCIL's Client. In case of any material found not as per specifications, the same would be rejected & no claim would be accepted by EdCIL/EdCIL's Client, for any loss incurred to the bidder. The supplier has to replace the sub-standard material within seven days of written notice from the Authority as per the approved specification for no extra cost. No liability shall be accepted by EdCIL in this regard. In case the rejection is more than 5% of the ordered quantity the supplier order shall be cancelled.
- iii. The supplier has to submit sample of Items wherever specified in the tender document attached conforming approved specification along with the EOI/as directed by EdCIL.
- iv. The successful bidder shall not sub-let the supply order or the part of it, for any other supplier without prior approval of EdCIL.
- v. In case of any dispute regarding specifications, the decision of the EdCIL/EdCIL's Client shall be final.
2. **Due date:** The EOI has to be submitted before the due date & time as mentioned in the EOI or any later notification.
3. **Preparation of EOI:** The offer/ EOI shall be submitted in Single packet system (i.e.) Technical cum Financial EOI. The technical bid shall consist of all technical details along with commercial terms and conditions. Financial bid shall indicate item wise rate for the items mentioned in the technical bid in the given PDF format.
4. **Earnest Money Deposit (EMD)**

The bidders shall sign a Bid Security Declaration (as per format given in EOI / Client's tender document) accepting that if they withdraw or modify their bids during the period of validity etc., they will be suspended for the time specified in the EOI document. The Performa for bid security is attached at Annexure . Further, the agency shall submit the EMD of Rs. 14,54,485/- to EdCIL in case of award of work to EdCIL. The release of EMD and other related terms & conditions shall be governed as per the stipulations given in the NSUT, New Delhi Tender attached along with this tender as **Part B**.

5. Acceptance/ Rejection of EOI:

EdCIL reserves the right to reject any or all offers without assigning any reason. EdCIL based on the requirement without assigning any reason to the Bidder/s may split work/Scope/EOI offer in stages or in parts according to the need of work or for ease of execution of work. EdCIL reserves right to take decision according to requirement and no claim on whatsoever ground shall be entertained from the bidder. Final decision of EdCIL shall be binding on the bidder.

6. Procedure for Bidding:

The bid shall be submitted in Single Packet for the following:

- Item No. A : Civil , Electrical & Miscellaneous Works
- Item No. B : Furniture Items
- Item No. C : Digital Smart Class room

The Evaluation of the EOI shall be undertaken independently for Item A, Item B & Item C and the lowest of the each Head shall be considered for evaluation and for further processing.

7. Pre-Qualification Criteria:

- i. The Bidder may choose to submit the EOI for the work in the **Clause No. 6 specified above**. The agencies who wish to participate for the above said three packages have to submit the relevant qualification documents for each package, separately. The PQ criteria shall be as follows:

ii. **Item No. A :- PQ for Civil , Electrical & Miscellaneous Works:**

S. No.	PQ CRITERIA	Supporting Documents required
I.	The bidder must be a Company/Ltd. Or Pvt. Ltd./LLP/Partnership/Proprietorship registered with Statutory Proprietary Authorities in India for the last five years from the date of EOI.	Copy of certificate of incorporation/ any other legally valid supporting document

<p>II.</p>	<p>Only authorized dealer/ agency of Original Equipment Manufacturer (OEM) or any company having minimum 5 years of experience in execution of such supplies and installation should apply against this invitation for tender. The bidder, offering to the supply of items under the bid, which the bidder does not manufacture or otherwise produce, the bidder has to provide Manufacturer's Authorization Certificate (for furniture items) preferably as per format at Annexure XI. <i>Bids submitted without authorization certificate will be summarily rejected. Authorization certificate from OEM (For furniture items) is essential for supply under scope of work.</i></p>	<p>Latest Authorization letter from OEM (For Furniture items) to the Bidder authorizing him to do business on OEM's Behalf for supplies and services mentioned in this tender, as associate or authorized business partner, for OEM's Manufactured Items. In case of OEM participating as a bidder, a power of attorney issued by the company's Director/ Board of Directors in favour of the authorized signatory for this tender to be submitted along with the bid.</p>
<p>III.</p>	<p>The average annual turnover of the bidder firm should be minimum of Rs. 10 Crores (Rs. Ten Crores only) during the last three financial years (2018-2019, 2019-20 & 2020-21). In this regard, the bidder should submit copies of audited Balance sheets including profit and loss accounts for the last three financial years as above. The agency should have positive profit for all 3 years. A registered CA's certificate indicating turnover statement for the relevant period is also to be accompanied.</p>	<p>Certificate from the Chartered Accountant or a duly self attested by the bidder's authorized signatory. Copy of audited balance sheets/P&L Accounts for the relevant years.</p>
<p>IV.</p>	<p>Authorized agency/ OEM must have successfully executed (during the last five completed financial year 2015-16, 2016-17, 2017-18, 2018-19, 2019-20) at least one or more supply, installation of Laboratory items orders from start to finish of the following:</p> <p>One single order of Supply and Installation of Civil, Electrical & Miscellaneous Items having value of Rs 2.00 Crore (Rs. Two Crore)</p> <p style="text-align: center;">(OR)</p> <p>Two orders of Supply and Installation of Civil, Electrical & Miscellaneous Items having value of Rs. 1.50 Crore (Rs. One Crore Fifty Lakhs)</p> <p style="text-align: center;">(OR)</p> <p>Three orders of Supply and Installation of Laboratory Items having value of Rs. 1.00 Crore (Rs. One Crore)</p>	<p>Copies of work orders and completion/ Installation certificates. In case of non-availability of completion, final bill copy submitted by the bidder to the client can be submitted as proof of completion of work/ Installation.</p>

V.	At Least One Order of value of Rs. 1.00 Crore should be for Supply of Laboratory Items/Furniture Items to Central Govt./ State Govt./ PSU's/ Autonomous bodies/ Govt. Premier Institutions such as IIT's/ NIT's/ IIIT's/ Central Universities/ Govt. Institutions/ CBSE affiliated Schools/ Government schools etc. during last five years.	Copies of work orders and completion/ Installation certificates. In case of non-availability of completion, final bill copy submitted by the bidder to the client can be submitted as proof of completion of work/ Installation.
----	--	--

 iii. Item No. B:- PQ for Furniture Items:

S. No.	PQ CRITERIA	Supporting Documents required
I.	The bidder must be a Company/Ltd. Or Pvt. Ltd./LLP/Partnership/Proprietorship registered with Statutory Proprietary Authorities in India for the last five years from the date of EOI.	Copy of certificate of incorporation/ any other legally valid supporting document
II.	Only authorized dealer/ agency of Original Equipment Manufacturer (OEM) or any company having minimum 5 years of experience in execution of such supplies and installation should apply against this invitation for tender. The bidder, offering to the supply of items under the bid, which the bidder does not manufacture or otherwise produce, the bidder has to provide Manufacturer's Authorization Certificate (for furniture items) preferably as per format at Annexure XI. Bids submitted without authorization certificate will be summarily rejected. Authorization certificate from OEM (For furniture items) is essential for supply under scope of work.	Latest Authorization letter from OEM (For Furniture items) to the Bidder authorizing him to do business on OEM's Behalf for supplies and services mentioned in this tender, as associate or authorized business partner, for OEM's Manufactured Items. In case of OEM participating as a bidder, a power of attorney issued by the company's Director/ Board of Directors in favour of the authorized signatory for this tender to be submitted along with the bid.

<p>III.</p>	<p>The average annual turnover of the bidder firm should be minimum of Rs. 7 Crores (Rs. Seven Crores only) during the last three financial years (2018-2019, 2019-20 & 2020-21). In this regard, the bidder should submit copies of audited Balance sheets including profit and loss accounts for the last three financial years as above. The agency should have positive profit for all 3 years. A registered CA's certificate indicating turnover statement for the relevant period is also to be accompanied.</p>	<p>Certificate from the Chartered Accountant or a duly self attested by the bidder's authorized signatory. Copy of audited balance sheets/P&L Accounts for the relevant years.</p>
<p>IV.</p>	<p>Authorized agency/ OEM must have successfully executed (during the last five completed financial year 2015-16, 2016-17, 2017-18, 2018-19, 2019-20) at least one or more supply, installation of Furniture items orders from start to finish of the following:</p> <p>One single order of Supply and Installation of Furniture Items having value of Rs 1.40 Crore (Rs. One Crore Forty Lakh) (OR) Two orders of Supply and Installation of Furniture Items having value of Rs. 1.00 Crore (Rs. One Crore) (OR) Three orders of Supply and Installation of Furniture Items having value of Rs. 71.00 Lakh (Rs. Seventy One Lakh)</p>	<p>Copies of work orders and completion/ Installation certificates. In case of non-availability of completion, final bill copy submitted by the bidder to the client can be submitted as proof of completion of work/ Installation.</p>
<p>V.</p>	<p>At Least One Order of value of Rs. 71.00 Lakh should be for Supply of Laboratory Items/Furniture Items to Central Govt./ State Govt./ PSU's/ Autonomous bodies/ Govt. Premier Institutions such as IIT's/ NIT's/ IIIT's/ Central Universities/ Govt. Institutions/ CBSE affiliated Schools/ Government schools etc. during last five years.</p>	<p>Copies of work orders and completion/ Installation certificates. In case of non-availability of completion, final bill copy submitted by the bidder to the client can be submitted as proof of completion of work/ Installation.</p>

Notwithstanding anything stated above, the Consignee/ EdCIL reserves the right to assess bidder's capability and capacity to perform the contract, should circumstances warrant such an assessment in the overall interest of the work by EdCIL/ EdCIL's Client.

iii. Item No. C:- PQ for Digital Smart Class Room:

S. No.	PQ CRITERIA	Supporting Documents required
I.	The bidder must be a Company/Ltd. Or Pvt. Ltd./LLP/Partnership/Proprietorship registered with Statutory Proprietary Authorities in India for the last five years from the date of EOI.	Copy of certificate of incorporation/ any other legally valid supporting document
II.	Only authorized dealer/ agency of Original Equipment Manufacturer (OEM) or any company having minimum 5 years of experience in execution of such supplies and installation should apply against this invitation for tender. The bidder, offering to the supply of items under the bid, which the bidder does not manufacture or otherwise produce, the bidder has to provide Manufacturer's Authorization Certificate (for furniture items) preferably as per format at Annexure XI . <i>Bids submitted without authorization certificate will be summarily rejected. Authorization certificate from OEM (For furniture items) is essential for supply under scope of work.</i>	Latest Authorization letter from OEM (For Furniture items) to the Bidder authorizing him to do business on OEM's Behalf for supplies and services mentioned in this tender, as associate or authorized business partner, for OEM's Manufactured Items. In case of OEM participating as a bidder, a power of attorney issued by the company's Director/ Board of Directors in favour of the authorized signatory for this tender to be submitted along with the bid.
III.	The average annual turnover of the bidder firm should be minimum of Rs. 12 Crores (Rs. Twelve Crores only) during the last three financial years (2018-2019, 2019-20 & 2020-21). In this regard, the bidder should submit copies of audited Balance sheets including profit and loss accounts for the last three financial years as above. The agency should have positive profit for all 3 years. A registered CA's certificate indicating turnover statement for the relevant period is also to be accompanied.	Certificate from the Chartered Accountant or a duly self attested by the bidder's authorized signatory. Copy of audited balance sheets/P&L Accounts for the relevant years.
IV.	Authorized agency/ OEM must have successfully executed (during the last five completed financial year 2015-16, 2016-17, 2017-18, 2018-19, 2019-20) at least one or more supply, installation of Digital Smart Class Room items orders from start to finish of the following: One single order of Supply and Installation of Digital Smart Class Room Items having	Copies of work orders and completion/ Installation certificates. In case of non-availability of completion, final bill copy submitted by the bidder to the client can be submitted as proof of completion of work/ Installation.

	<p>value of Rs 2.40 Crore (Rs. Two Crore Forty Lakh)</p> <p>(OR)</p> <p>Two orders of Supply and Installation of Digital Smart Class Room Items having value of Rs. 1.80 Crore (Rs. One Crore Eighty Lakh)</p> <p>(OR)</p> <p>Three orders of Supply and Installation of Digital Smart Class Room Items having value of Rs. 1.20 Crore (Rs. One Crore Twenty Lakh)</p>	
V.	<p>At Least One Order of value of Rs. 1.20 Crore should be for Supply of Digital Smart Class room Items to Central Govt./ State Govt./ PSU's/ Autonomous bodies/ Govt. Premier Institutions such as IIT's/ NIT's/ IIIT's/ Central Universities/ Govt. Institutions/ CBSE affiliated Schools/ Government schools etc. during last five years.</p>	<p>Copies of work orders and completion/ Installation certificates. In case of non-availability of completion, final bill copy submitted by the bidder to the client can be submitted as proof of completion of work/ Installation.</p>

8. Performance Security and Security Deposit:

The successful bidder shall issue undertaking on a **Non-Judicial Stamp Paper** to submit back-to-back PBG/Security Deposit as submitted by EdCIL to the end client in case of award of work to EdCIL.

The Successful Bidder shall deposit the Performance Security amount @3% of the bid amount finalized by EdCIL.

Additional 3% Performance Security/Security Deposit shall be submitted by the successful bidder at the time of award of work

The overall period for the work shall be 06 years which includes first one year for the development of smart class rooms and next 05 years for comprehensive maintenance of Audio Video system and VRV/VRF AC system and operation of audio video system. Further, notwithstanding to any contrary provisions, prescribed in the contract anywhere else, the defect liability period in respect of the following shall be 05 years from the date of completion of the development of smart class rooms:

- a) Furniture
- b) Audio video system
- c) VRV / VRF Air conditioning system
- d) LED fittings

Therefore, the performance security and security deposit will be released only after successful completion of the defect liability period of 05 years.

9. Delivery Schedule:

The delivery of all the items specified in the BOQ should be completed within **Twelve Months** for Execution of Works and **Five Years** for Comprehensive Maintenance of VRV/VRF System and Comprehensive Maintenance & Operation of AV System of issuance of LOA (Letter of Acceptance). The bidder to ensure timely supply of the material to NSUT, New Delhi as specified above. In case of failure, the liquidated damages shall be imposed and the same shall be recovered from the bills/dues.

In case of any delay beyond the purview of the bidder the same to be brought to the notice of EdCIL in writing. Such request would be made by the bidder before the last date of supply. EdCIL reserves the right to accept/reject the request with/without liquidated damages.

10. Payment Terms:

- a) Payment to the supplier shall be made by EdCIL on receipt of the said amount on submission of the bill in triplicate after the satisfactory supply of the Civil, Electrical & Furniture Items and Digital Smart Class rooms' items and after ensuring its supply to the conformity of tender conditions and specifications etc.
- b) The Payment shall be made as per the terms stipulated in the tender at Part B.
- c) The liquidated damages (if any) shall be deducted as per the terms and conditions as mentioned in the tender document.

11. Cost of preparation of Bids:

The bidder shall be solely responsible for the cost of preparation and submitting the bid. Also, the bidder should include the cost of all expenditure for preparation of bid and no payment shall be made whatsoever.

12. Risk Purchase Clause:

In the event of failure of supply of the items/ goods within the stipulated delivery schedule, the consignee has all the right to purchase the items/ goods from the other source on the total risk of the supplier under risk purchase clause. The decision of EdCIL shall be final and binding to the successful bidder. In case of risk coverage, PBG or any bill value due if any on date shall be recovered for completing the supply and installations. No claim on whatsoever grounds shall be entertained by EdCIL.

13. Packing Instructions: Each package will be marked on three sides with proper paint/ indelible ink, the following:

- i. Item Nomenclature
- ii. Order/Contract No.

- iii. Country of Origin of Goods
- iv. Supplier's Name and Address
- v. Consignee details
- vi. Packing list reference number
- vii. All packing should be strong enough to withstand rough handling during loading, unloading and transporting. Fragile articles should be packed with special precaution and should bear the marking like Fragile, handle with care, This side up etc. All delicate surfaces of items/ goods should be carefully protected and painted with protective paint/ compound and wrapped to prevent rusting and damage.
- viii. Attachments and spare parts and all small pieces should be packed with adequate protections and wherever possible should be sent along with the major items. Each item should be tagged so as to identify it with the main item and part number and reference number should be indicated.
- ix. All protection and threaded fittings should be suitably protected and covers should block the openings.

14. Unloading and Unpacking:

Unless specified otherwise in the purchase order, Unloading and storage of the same at the designated place should be undertaken by the supplier. The Unpacking of the materials should also be arranged by Supplier.

15. Delivery Documents:

Till the consignee takes over/ receives the items/ goods, the supplier should be responsible for transportation and to keep the same in safe custody and the charges (if any) to be borne by the supplier. The supplier should mail the following documents to the consignee:

1. 3 Copies of the Supplier invoice showing contract number, goods 'description, quantity unit rate, total amount;
2. Acknowledgment of receipt of goods from the consignee(s) by the transporter;
3. Manufacturer's/ Supplier's warranty certificate, wherever applicable;

The above documents should be received by the Consignee before arrival of the Goods (except where the Goods have been delivered directly to the Consignee with all documents) and, if not received, the Supplier will be responsible for any consequent expenses.

16. Delayed Delivery:

- i. In case, the contractor fails to meet the timeline as prescribed in the said tender or any class room has been kept out of use for a period of more

than 03 months, then a penalty at Rs. 5,000/- per room per day, subject to a maximum of 10% of the overall contract amount, shall be levied and recovered from any amount due to the contractor.

- ii. In case of any condition beyond the control of supplier, the supplier should request the EdCIL to extend the time limit. This request shall be entertained before the due date of supply only. The EdCIL reserves the right to extend the supply period with/without LD or to reject the application on insufficient grounds.

17. Inspection and Tests:

- i. EdCIL reserves the right to inspect the goods and equipments before shipment at supplier's plant/ warehouse to check whether the goods/ equipments are in conformity with the technical specifications as mentioned in tender BOQ.
- ii. The acceptance test (if required) will be conducted by the Consignee, their consultant or other such person nominated by the Consignee at its option after the item is delivered/ installed at consignee's site in the presence of supplier's representatives. The acceptance will involve trouble free operation and ascertaining conformity with the ordered specifications and quality. There should not be any additional charges for carrying out acceptance test. No malfunction, partial or complete failure of any part of the item is expected to occur. The Supplier should maintain necessary log in respect of the result of the test to establish to the entire satisfaction of the Consignee, the successful completion of the test specified.
- iii. In the event of the ordered item failing to pass the acceptance test, a period not exceeding one week will be given to rectify the defects and to clear the acceptance test, failing which the Consignee reserve the right to get the item replaced by the Supplier at no extra cost to the Consignee.
- iv. Successful conduct and conclusion of the acceptance test for the installed goods and item should also be the responsibility and at the cost of the Supplier.

18. Rates:

- i. The rate should be quoted in per unit (with breakup) and must include all packing and delivery charges. The offer/ bid should be exclusive of taxes and duties, which will be paid as applicable. However, the percentage of taxes and duties should be clearly indicated. The inter se merit position of the bids however shall be decided based on the composite rate of the product including taxes, transportation, Warranty with all other incidental expenses indicated.
- ii. The rates must be quoted in the Performa given in Financial Bid failing which the Bid would be treated as unresponsive. Any discount or any other offers affecting the package rate must be mentioned in Financial Bid only. Discount or any other offers affecting the Package rate

mentioned at any other place of the bid other that Financial Bid will not be considered.

19. **Notices:** For the purpose of all notices, the following should be the address :

Consignee:

The Project Manager,
EdCIL India Ltd., Camp office,
NSUT, New Delhi
On Behalf of
EdCIL (India) Limited,
18 A, Sector-16A,
Noida-201 301
Tel: 91-120-2512001 to 2512006

Supplier: (To be filled in by the supplier)

20. **Warranty/Comprehensive Maintenance:**

- I. **Comprehensive Maintenance should be for a minimum period of one (01) year for Execution of works and Five years for VRV/VRF System and Comprehensive Maintenance & Operation of AV System from date of successful delivery, installation, commissioning & handing over of Goods.**
- II. The Supplier should, in addition, comply with the performance and/or consumption guarantees specified under the contract. If for reasons attributable to the Supplier, these guarantees are not attained in whole or in part, the Supplier should at its discretion make such changes, modifications, and/or additions to the Goods or any part thereof as shall be necessary in order to attain the contractual guarantees specified in the Contract at its own cost and expense and to carry out further performance tests.
- III. The warranty should be comprehensive on site with responsibility of the agency to ensure attending the warranty queries/issues received from NSUT, New Delhi. Supplier should give written information (about the Engineers/ technical representative name and cell numbers) before handing over of the Goods to the Consignee and to the end client's nominated representative/s to attend the issues related to the warranty of the goods supplied under the contract.
- IV. The Consignee should promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier should immediately within 02 days arrange to repair or replace the defective goods or parts thereof free of cost at the ultimate destination. The Supplier should take over the replaced parts/goods at the time of their replacement. No claim whatsoever should lie on the Consignee for the replaced parts/goods thereafter. The period for correction of defects in the

warranty period is 02 days. If the supplier having been notified fails to remedy the defects within 02 days, the consignee should proceed to take such remedial action as should be necessary, at the supplier's risk and expenses and without prejudice to any other rights, which the consignee should have against the supplier under the contract.

21. Resolution of Disputes: The dispute resolution mechanism to be applied pursuant should be as follows:

- i. In case of Dispute or difference arising between the Consignee and a domestic supplier relating to any matter arising out of or connected with this agreement, such disputes or difference should be settled in accordance with the Indian Arbitration & Conciliation Act, 1996, the rules there under and any statutory modifications or re-enactments thereof should apply to the arbitration proceedings.
- ii. The dispute should be referred to the Competent Authority, EdCIL and if he/she is unable or unwilling to act, to the sole arbitration of some other person appointed by him willing to act as such Arbitrator. The award of the arbitrator so appointed should be final, conclusive and binding on all parties to this order.
- iii. In the case of a dispute between the consignee and a Foreign Supplier, the dispute should be settled by arbitration in accordance with provision of sub-clause (i) & (ii) above. But if this is not acceptable to the supplier then the dispute should be settled in accordance with provisions of UNCITRAL (United Nations Commission on International Trade Law) Arbitration Rules.
- iv. The venue of the arbitration should be the place from where the order is issued.

22. Right to Use Defective Goods

- i. If after delivery, acceptance and installation and within the guarantee and warranty period, the operation or use of the goods proves to be unsatisfactory, the Consignee should have the right to continue to operate or use such goods until rectifications of defects, errors or omissions by repair or by partial or complete replacement is made without interfering with the Consignee's operation.
- ii. Replacement of Goods broken, damaged or short: In the event of any material or part thereof found broken or damaged or received short during transit or during installation or Commissioning or testing at site, before commissioning in service the suppliers should replace the same free of cost. However, Vidyalayas/ EdCIL will recover amount equivalent to the cost of such damaged / broken / short supplied materials and will repay when actual replacement is given.
- iii. Substitution and Wrong Supplies: Unauthorized substitution or materials delivered in error of wrong description or quality or supplied

in excess quantity or rejected goods should be returned to the supplier at their own cost and risk.

23. Supplier Integrity

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

24. Training and demonstration

The Supplier is required to provide training to the designated Consignee's technical and end user personnel to enable them to effectively operate the total item.

The supplier is required to undertake the demonstration of the items within 15 days of the arrival of materials at vidyalayas.

25. Insurance

- I. The Supplier should make all arrangements towards safe and complete delivery at Vidyalayas. Such responsibility on part of the supplier will include taking necessary transit insurance and erection policy, freight, octroi, state level permits etc. as applicable on the items of this tender.
- II. It is the total responsibility of supplier to complete all formalities to transit of goods from the place of dispatch to Vidyalayas.
- III. The transportation of goods through unregistered common carrier is illegal. The bidder should ensure to comply the carriage by latest Road Act and any other relevant.
- IV. The supplier will keep EdCIL informed about various stages of deliveries & installation.

26. Incidental Services: The incidental services also include:

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

27. Force Majeure:

The Supplier should not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

- For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence

and not foreseeable. Such events shall include, but are not limited to, acts of the Consignee either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

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

28. Governing Language

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

29. Applicable Law

The Contract should be interpreted in accordance with the laws of the Union of India and all disputes should be subject to place of jurisdiction.

30. Notices

- Any notice given by one party to the other pursuant to this contract/order should be sent to the other party in writing or FAX or e mail and confirmed in writing to the other party's address.
- A notice should be effective when delivered or on the notice's effective date, whichever is later.

31. Taxes

Suppliers should be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Consignee/ Vidyalayas. EdCIL shall not make any payment towards any taxes or any other incidental charges payable by the supplier for supply of material up to the place of delivery.

32. User list: Brochure/ documents in printed form duly signed and stamped detailing technical specifications and performance, list of industrial and educational establishments where the items have been supplied must be provided.

33. Manuals and Drawings

- I. At the time of goods and items are taken over by the Consignee/ client, the Supplier should provide the operation and maintenance manuals. These should be in such details as will enable the Consignee to operate,

maintain, adjust and repair all parts of the works as stated in the specifications.

- II. The Manuals should be in English language in such form and numbers as stated in the contract.
 - III. Unless and otherwise agreed, the goods/ items should not be considered to be completed for the purpose of taking over until such manuals and drawing have been supplied to the Consignee/Client.
34. **Application Specialist:** The Tenderer should mention in the Techno-Commercial bid the availability and names of Application Specialist and Service Engineers in the nearest regional office.

35. **Site Preparation:**

- I. The supplier should visit the Schools and see the site where the items is to be installed and should offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements.
- II. The supplier should inform to the Consignee/Client about the site preparation, if any, needed for the installation of items, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the items, which the Institute should arrange before the arrival of the items to ensure its timely installation and smooth operation thereafter.
- III. Vidyalayas shall be providing electricity for installation of items. However, bidder is advised to make own arrangement/ DG set to avoid any delay.

36. **Spare Parts**

The Supplier should be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- I. Such spare parts as the Consignee/Client should elect to purchase from the Supplier, providing that this selection should not relieve the Supplier of any warranty obligations under the Contract; and
- II. In the event of termination of production of the spare parts:
 - Advance notification to the Consignee/Client of the pending termination, in sufficient time to permit the Consignee to procure needed requirements; and following such termination, furnishing at no cost to the Consignee/Client, the blueprints, drawings and specifications of the spare parts, if requested.
- III. Supplier should carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods, such as gaskets, plugs, washers,

belts etc. Other spare parts and components should be supplied as promptly as possible but, in any case, within six months of placement of order.

37. Defective supply of items

- I. If any of the items supplied by the Tenderer is found to be substandard, refurbished, un-merchantable or not in accordance with the description/specification or otherwise faulty, the committee will have the right to reject the items or its part. The rates of such items should be refunded by the Tenderer with 18% interest if such payments for such items have already been made.
- II. All damaged or unapproved goods should be returned at suppliers cost and risk and the incidental expenses incurred thereon should be recovered from the supplier. Defective part in items, if found before installation and/or during warranty period, should be replaced within 45 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, EdCIL INDIA LTD should consider "Banning" the supplier.

38. Termination for Default

The Consignee should, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part:

- I. If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the order, or within any extension thereof granted by the Consignee; or
- II. If the Supplier fails to perform any other obligation(s) under the Contract.
- III. If the Supplier, in the judgment of the Consignee has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
- IV. For the purpose of this Clause:
 - **"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.
 - **"Fraudulent practice"** means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid rates at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;"
 - In the event the Consignee terminates the Contract in whole or in part,

the Consignee should procure, upon such terms and in such manner, as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier should be liable to the Consignee for any excess costs for such similar Goods or Services. However, the Supplier should continue the performance of the Contract to the extent not terminated.

39. **Disputes and Jurisdiction:** Any legal disputes arising out of any breach of contract pertaining to this tender should be settled in the court of competent jurisdiction located within New Delhi.

40. **Compliance:** The bidder to comply with the technical specifications as given in the BOQ.

41. **Award of Contract:**

I. EdCIL reserves the right to accept or reject any proposal and to annul the bidding process and reject all proposals at any time prior to award of contract, without thereby incurring any liability to the Bidders. In case of annulment, all proposals submitted and specifically, proposal securities shall be promptly returned to the Bidder.

II. EdCIL has the right to review at any time prior to award of contract that the qualification criteria, as specified in Clause: 6 of Chapter: V are still being met by the Bidder whose offer has been determined as first rank. A proposal shall be rejected if the qualification criteria, as specified in Clause: 6 are no longer met by the Bidder whose offer has been determined as first rank.

42. **Negotiations:**

Normally Negotiations are not allowed. However, if required, negotiations may be held at the address indicated in the Data Sheet. Representatives conducting negotiations on behalf of the Bidder must have written authority to negotiate technical, financial, and other terms and conclude a legally binding agreement.

43. **Rates in Figures and Words:**

Rates Quoted by the Bidder in tender in figures and words shall be accurately filled in so that there is no discrepancy in the rates written in figures and words. However, if a discrepancy is found, the rates which correspond with the amount worked out by the contractor shall unless otherwise proved be taken as correct. If the amount of an item is not worked out by the contractor or it does not correspond with the rates written either in figures or in words then the rates quoted by the contractor in words shall be taken as correct. Where the rates quoted by the bidder in figures and in words tally but the amount is not worked out correctly, the rates quoted by the Bidder will unless otherwise proved be taken as correct and not the amount. In event no rate has been quoted for any item(s), leaving space both in figure(s), word(s) and amount blank, it will be presumed that the Bidder has included the cost of this/these item(s) in other items and rate for such item(s) will be considered as

zero and work will be required to be executed accordingly.

- In the case of any tender where unit rate of any item/items appear unrealistic, such tender / item(s) will be considered as unbalanced and in case the tender is unable to provide satisfactory explanation such a tender/ item(s) is liable to be disqualified and rejected.

44. **Certifications:** For furniture items, the bidder/ OEM should comply with the ISO 9001 and 14001 certifications. The certification in this regard should be enclosed with the bid. In case the bidder has submitted the OEM authorization for furniture items, the ISO 9001, ISO 14001 certificates from respective OEM should be enclosed.

45. **Acknowledgement:** It is hereby acknowledged that bidders have gone through all the conditions mentioned above and bidders agree to abide by them.

46. **Submission of forged documents**

Bidders should note that EdCIL may verify authenticity of all the documents/certificate/information submitted by them against the EOI. In case at any stage of this process, if it is established that bidder has submitted forged documents/certificates/information towards fulfillment of any of the EOI/contract conditions, EdCIL shall immediately reject the bid of such bidder(s) or cancel/terminate the contract and forfeit bid security / Performance Security submitted by the bidder and debar them from participation in future tenders of EdCIL for two years.

47. The bidder must ensure that their bid is complete in all respects and conforms to EOI terms and conditions, EOI specifications etc. including client specifications, failing which the bids are liable to be rejected without seeking any clarifications on any exception/deviation taken by the bidder in their bid.

48. **Restrictions on procurement from a bidder of a country which shares a land border with India**

Bidders shall submit the following certificate for sourcing products and services in tender

"We have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. We certify that bidder M/s (name of the bidder) is not from such a country or if from such a country, has been registered with the Competent Authority. We hereby certify that bidder M/s. (Name of bidder) fulfills all the requirement in this regard and is eligible to be considered against this EOI. The bidder will not source those products & services whose beneficial owner is from such countries "

[wherever applicable the bidder must submit evidence of valid registration by Competent Authority]

49. Guidelines for eligibility of a Bidder from a country which shares a land border with India:

As per Order dated 23.07.2020, issued by Department of Expenditure, Ministry of Finance, Govt, of India in this regard, the following guidelines have been issued by DoE for tenders:-

1. Any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority.

Competent Authority for the purpose of registration shall be the Registration Committee constituted by the Department for Promotion of Industry and Internal Trade (DPIIT), as mentioned under Annex I of the Order (Public Procurement No.1) dated 23.07.2020.

2. "Bidder" (including the term 'tenderer', 'consultant' or 'service provider' in certain contexts) means any person or firm or company, including any member of a consortium or joint venture (that is an association of several persons, or firms or companies), every artificial juridical person not falling in any of the descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participating in a procurement process.
3. "Bidder from a country which-shares a land border with India" for the purpose of this Order means; -
 - i. An entity incorporated, established or registered in such a country; or
 - ii. A subsidiary of an entity incorporated, established or registered in such a country; or
 - iii. An entity substantially controlled through entities incorporated, established or registered in such a country; or
 - iv. An entity whose beneficial owner is situated in such a country; or
 - v. An Indian (or other) agent of such an entity; or
 - vi. A natural person who is a citizen of such a country; or
 - vii. A consortium or joint venture where any member of the consortium or joint venture falls under any of the above.

4. The beneficial owner for the purpose of (3) above will be as under:-

- i. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person (s), has a controlling ownership interest or who exercises control through other means.

Explanation-

- a. "Controlling ownership interest" means ownership of or entitlement to, more than twenty-five per cent, of shares

or capital or profits of the company;

- b. "Control" shall include the right to appoint majority of the directors or to control the management or policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;
- ii. In case of a partnership firm, the beneficial owner is the natural persons) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;
- iii. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;
- iv. Where no natural person is identified under (i) or (ii) or (iii) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;
- v. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership.
- vi. An Agent is a person employed to do any act for another, or to represent another in dealings with third person.

50. Repeat /Add-On Order

- i. In exceptional situation where the requirement is of an emergent nature, the purchaser reserves the right to place repeat order up to 50% of the value of goods and services contained in the running tender/contract within a period of twelve months from the date of commissioning/ commercialization of the project (date of acceptance of APO of the items procured in case where no installation, commissioning is involved) at the same rate or a rate negotiated (downwardly) with the existing vendors considering the reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc.
- ii. Further if required, an additional order for 50% of the value of the goods & services limited to 100% of the value of goods and services contained in the running tender/contract may be placed within a period of twelve months from the date of commissioning/ commercialization of the project (date of acceptance of APO of the items procured in case where no installation, commissioning is involved) on the existing vendors at the same rate or a rate negotiated (downwardly) considering the

reasonability of rates based on prevailing market conditions and the impact of reduction in duties and taxes etc.(with due approval of the Board).

Add-On order upto 50% quantity shall be placed with approval of concerned Director and Add-On order for more than 50% quantity shall be placed with approval of CMD EdCIL.

CHAPTER VI
ANNEXURE-I
<< Bidder's Organization Letter Head >>
DECLARATION SHEET

We, _____ hereby certify that all the information and data furnished by our organization with regard to this tender specification are true and complete to the best of our knowledge. I have gone through the specification, conditions and stipulations in details and agree to comply with the requirements and intent of specification.

This is certified that our organization has been authorized (Copy attached) by the OEM to participate in Tender. We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document. Moreover, OEM has agreed to support on regular basis with technology / product updates and extend support for the warranty.

The rates quoted in the financial bids are subsidized due to academic discount given to EdCIL INDIA LTD.

We, further specifically certify that our organization has not been Black Listed/ De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.	NAME & ADDRESS OF THE Vendor/ Manufacturer/ Agent
1 Phone	
2 Fax	
3 E-mail	
4 Contact Person Name	
5 Mobile Number	
6 TIN Number	
7 PAN Number	
(In case of on-line payment of Tender Fees) 8 UTR No. (For Tender Fee)	
(In case of on-line payment of EMD) 9 UTR No. (For EMD)	

10 Kindly provide bank details of the bidder in the following format: a) Name of the Bank	
b) Account Number	
c) Kindly attach scanned copy of one Cheque book page to enable us to return the EMD to unsuccessful bidder	

(Signature of the Tenderer)

Name: _____

Seal of the Company

LETTER OF UNDERTAKING
(ON THE LETTER HEAD OF THE BIDDER)

To

Chief General Manager (EIS & EPS)
EdCIL (India) Limited (EdCIL)
EdCIL House, 18 A, Sector-16 A,
NOIDA – 201301 (U.P.), India

Sir,

SUBJECT- Expression of Interest (EOI) for Selection of Partner/Original Equipment Manufacturer (OEM)/ System Integrator (SI) for Pre-Bid Tie-up participation in Tender issued by Netaji Subhas University of Technology, New Delhi for Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus.

This bears reference to EdCIL NIT No. **EdCIL/EIS & EPS/PROC/NSUT/2022/** Dated 14.01.2022. We, hereby, accept all the terms and conditions for submitting bid as mentioned in this Bid Document.

We hereby certify that no terms and conditions have been stipulated by us in the Financial Bid.

We warrant that the services do not violate or infringe upon any patent, copyright, trade secret or other property right of any other person or other entity. We agree that we shall not prevent EdCIL from any claim or demand, action or proceeding, directly or indirectly resulting from or arising out of any breach or alleged breach of any of the terms & conditions of bid document and contract.

The above document is executed on ___/___/2022 at (place) _____ and we accept that if anything out of the information provided by us is found wrong, our bid/work order shall be liable for rejection.

Thanking you,

Yours faithfully,

Name of the Bidder _____

Authorized Signatory _____

Seal of the Organization _____

Date:

Place:

ANNEXURE III

UNDERTAKING

This is to confirm that we M/s _____ (give full address) have not been declared neither **failed to perform on any Agreement, nor have been expelled from any project or Agreement nor any Agreement terminated** for breach by the us (Agency) in any of the government department and public sector undertaking /enterprise or by any other Client in India, in last five year before release of advertisement.

If the above information found false at any stage after the placement of Work Order / Agreement, EdCIL (India) Limited (Ed.CIL), 18-A, Sector 16-A, Noida will have full right to cancel the Contact and forfeit the Performance Guarantee. All the direct and indirect cost related to the cancellation of the order will be borne by us besides any legal action by Ed.CIL which shall be deemed fit at that point of time.

Authorized Signatory

Note: *The undertaking regarding the non-blacklisting of firm is to be submitted on a non-judicial stamp paper of Rs. 100/- (Rupees Hundred only).*

ANNEXURE IV**Annual Average Turn Over: -**

Sl. No.	Financial Year	Annual Turn over
1.	2018-19	
2.	2019-20	
3.	2020-21	
	Average of past three F.Y.	

Note: Certificate from Statutory Auditor/ Chartered Accountant certifying balance sheet only for all three years to be attached.

ANNEXURE-V
Details of Projects Completed During Last 5 years
Name of the Firm:

S. No.	Name of the Projects	Order No. & Date	Description & Quantity of ordered items	Value of Order	Date of Start	Scheduled Date of Completion	Actual Date of Completion	Reason for Delay, if any
1.								
2.								
3.								
4.								
5.								
6.								
7.								

Signature with Seal

ANNEXURE-VI

List of Order executed for Govt. Organization/ Department/ University/ Govt. Schools/ CBSE affiliated schools:

List of Organizations for whom the Bidder has undertaken such work during last three years (must be supported with work orders)			
Name of the organization	Year of Procurement	Total Value	Name of Client's Contact Person and other details

Signature of Bidder

Name: _____

Designation: _____

Organization Name: _____

Contact No. : _____

ANNEXURE-VII

POWER OF ATTORNEY

Know all men by these presents, we..... (name of firm and address of the registered office) do hereby constitute, nominate appoint and authorize Mr./Ms.....son/daughter/wife of and presently residing at....., who is presently employed with /retained by us and holding position of.....as our true and lawful attorney

(hereinafter referred to as the "Authorized Representative") to do in our name and on our behalf, all such acts, deeds and things are as necessary or required in connection with or incidental to submission of our proposal for and selection as the <project title> for the <name of the client>.....project, proposed to be developed by the

..... (the "client") including but not limited to signing and submission of all applications, proposals and other documents and writings, participating in pre bid and other conferences and providing information /responses to the client, representing us in all matters before the Client, signing and execution of all contracts and undertakings consequent to acceptance of our proposal and generally dealing with the client in all matter in connection with or relating to or arising out of our Proposal for the said project /or upon award thereof to us till the entering into of the Agreement with the client.

AND, we do hereby agree to ratify and confirm all acts, deeds and things lawful done or caused to be done by our said Authorized Representative pursuant to and in exercise of the powers conferred by this power and Attorney and that all acts, and things done by our said Authorized Representative in exercise of the powers hereby conferred shall and shall always be deemed to have been done by us.

[IN WITNESS WHEREOF WE.....THE ABOVE NAMED PRINCIPAL HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS DAY OF 2022.

For (Name and registered address of client)

(Signature, name, designation, and address)

Witness:

1. (Signature, name and address)
2. (Signature, name and address)

Notarized

Accepted

.....

(Signature, name, designation, and address of the attorney)

Notes:

1. The mode of the execution of the power of Attorney shall be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (s) and when it is so required the same should be under seal affixed in accordance with the required procedure.
2. Wherever required, the applicant should submitted for verification the extract of the charter documents and other documents such as a resolution/Power of Attorney in favor of the person executing this Power of Attorney for delegation of power hereunder on behalf of the applicant.
3. For a Power of Attorney executed and issued overseas, the document will also have to be legalized by the Indian Embassy and notarized in the jurisdiction where the Power and Attorney is being issued. However, the Power of Attorney provided by the applicants from countries that have signed The Hague Legislation Convention, 1961 are not required to be legalized by the Indian Embassy it is carries a conforming Apostle certificate.

ANNEXURE-VIII

LETTER OF BID SUBMISSION

To,

Chief General Manager,
EIS & EPS
EdCIL (India) Limited,
Ed.CIL House, 18A, Sector- 16A,
NOIDA- 201 301 (U.P)

SUBJECT- Expression of Interest (EOI) for Selection of Partner/Original Equipment Manufacturer (OEM)/ System Integrator (SI) for Pre-Bid Tie-up participation in Tender issued by Netaji Subhas University of Technology, New Delhi for Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus.

-Submission of Bid -

Sir,

Having examined the details given in Press Notice, Notice Inviting Bid & Bid Document for the above work, I/we hereby submit the relevant information.

1. I/We hereby certify that all the statements made and information supplied in the enclosed form _____ and accompanying statements are true and correct.
2. I/We have furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/We submit the following **certificates** in support of our suitability, technical knowledge and capability for having successfully completed the following works:

S. No.	Name of Work	Certificate From

4. Earnest Money Deposit amounting to Rs. _____ in the form of DD/Pay Order No. _____ dated _____ issued by _____ Bank is submitted.

Enclosures:

Date of Submission :

Name of the Bank: _____

To

EdCIL (India) Limited, Noida

PERFORMANCE BANK GUARANTEE FORMAT

In consideration of the Chairman and Managing Director, EdCIL acting through _____ (Designation & address of Contract Signing Authority), (hereinafter called "EdCIL (India) Limited" having agreed under the terms and conditions of agreement/ Contract Acceptance letter No. _____ dt _____ Made between _____ (Designation & address of contract signing Authority) and _____ (here in after called "the said Agency" for the work _____ (here in after called "the said agreement") having agreed for submission of a irrevocable Bank Guarantee Bond for ₹ _____ (₹ _____ only) as a performance security Guarantee from the Agency for compliance of his obligations in accordance with the terms & conditions in the said agreement.

1. We _____ (Indicate the name of the Bank) hereinafter referred to as the Bank, undertake to pay to the EdCIL (India) Limited an amount not exceeding ₹ _____ (₹ _____ only) on demand by the EdCIL (India) Limited.
2. We _____ (Indicate the name of the bank, further agree that (and promise) to pay the amounts due and payable under this guarantee without any demur merely on a demand from the EdCIL (India) Limited through the CGM, EdCIL (India) Limited or _____ (Designation & Address of contract signing authority), stating that the amount claimed is due by way of loss or damage caused to or would be caused or suffered by the EdCIL (India) Limited by reason of any breach by the said Agency of any of the terms of conditions contained in the said agreement or by reason of the Agency failure to perform the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding ₹ _____ (₹ _____ Only).
3. (A) We _____ (indicate the name of Bank) further undertake to pay to the EdCIL (India) Limited any money so demanded notwithstanding any dispute or dispute raised by the Agency in any suite or proceeding pending before any court or Tribunal relating to liability under this present being absolute and

unequivocal.

- a. The payment so made by us under this Performance Guarantee shall be a valid discharge of our liability for payment there under and the Agency shall have no claim against us for making such payment.
4. We _____ (Indicate the name of bank) to further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the EdCIL (India) Limited under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged by _____
- (Designation & Address of contract signing authority) on behalf of the EdCIL (India) Limited certify that the terms and conditions of the said agreement have been fully and properly carried out by the said Agency and accordingly discharges this guarantee.
- 5 (a) Notwithstanding anything to the contrary contained herein the liability of the bank under this guarantee will remain in force and effect until such time as this guarantee is discharged in writing by the EdCIL (India) Limited or until (date of validity/ extended validity) whichever is earlier and no claim shall be valid under this guarantee unless notice in writing thereof is given by the EdCIL (India) Limited within validity/ extended period of validity of guarantee from the date aforesaid.
- (b) Provided always that we _____ (indicate the name of the Bank) unconditionally undertakes to renew this guarantee or to extend the period of guarantee form year to year before the expiry of the period or the extended period of the guarantee, as the case shall be on being called upon to do so by the EdCIL (India) Limited If the guarantee is not renewed or the period extended on demand, we _____ (indicate the name of the Bank) shall pay the EdCIL (India) Limited the full amount of guarantee on demand and without demur.
6. We _____ (indicate the name of Bank) further agree with the EdCIL (India) Limited that the EdCIL (India) Limited shall have the fullest liberty without our consent and without effecting in any manner out of obligations hereunder to vary any of the terms and conditions of the said contract from time to time or to postpone for any time or from time to time any to the powers exercisable by the EdCIL against the said Agency and to forbear or enforce any of the terms and conditions of the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Agency for any bearance act or omission on the part of the EdCIL (India) Limited or any indulgence by the EdCIL (India) Limited to the said Agency for by any such matter or thing whatsoever under the law relating to sureties for the said



EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 14/02/2022

reservation would relive us from the liability.

7. This guarantee will not be discharged by any change in the constitution of the Bank or the Agency.
8. We, _____ (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the EdCIL (India) Limited in writing.
9. This guarantee shall be valid up to (Date of Completion plus Handholding Period). Unless extended on demand by EdCIL (India) Limited Notwithstanding anything to the contrary contained hereinbefore, our liability under this guarantee is restricted to Rs..... (Rs.....only) unless a demand under this guarantee is made on us in writing on or before..... we shall be discharged from our liabilities under this guarantee thereafter.

Dat
ed: the Day of For

(indicate the name of bank)

Signature of Banks Authorized
official

Wit
nes
s

(Name)_____

Designation with Code No. -----

Full Address-----

1

2.

PROFORMA PRE CONTRACT INTEGRITY PACTGENERAL

This pre-contract Agreement (hereinafter called the Integrity Pact) is made on ____ day of the month of 2022, between, on one hand, acting through Shri/Smt. _____, Designation, EdCIL (India) Limited (hereinafter called the "BUYER"/ "EdCIL" interchangeably, which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part

AND

M/s _____ represented by Shri _____, Chief Executive Officer (hereinafter called the "BIDDER/Seller" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the EdCIL proposes to procure services towards "Expression of Interest (EOI) for Selection of Partner/Original Equipment Manufacturer (OEM)/ System Integrator (SI) for Pre-Bid Tie-up participation in Tender issued by Netaji Subhas University of Technology, New Delhi for Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus." for its clients and BIDDER/Seller is willing to offer the said services and related items as referred to in the Bid document no. / 2022 Dated 2022.

WHEREAS the BIDDER is a private company /public company / Government undertaking / partnership / registered expert agency, constituted in accordance with the relevant law in the matter and the EdCIL is a Public Sector Undertaking under Ministry of Human Resource Development performing its functions.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence / prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to:

Enabling the EdCIL to obtain the desired services as referred to in the Bid document no. dated2022 at a competitive rate in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement and Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the EdCIL will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

1. Commitments of the EdCIL

1.1 The EdCIL undertakes that no official of the EdCIL, connected directly or indirectly with the contract, will demand, take a promise for or accept, directly or through intermediaries, any bribe, consideration, gift, reward, favour or any material or immaterial benefit or any other advantage from the BIDDER, either for themselves or for any person, organization or third party related to the contract in exchange for an advantage in the bidding process, bid evaluation, contracting or implementation process related to the contract.

1.2 The BUYER will, during the pre-contract stage, treat all BIDDERS alike, and will provide to all BIDDERS the same information and will not provide any such information to any particular BIDDER which could afford an advantage to that particular BIDDER in comparison to other BIDDERS.

1.3 All the officials of the EdCIL will report to the appropriate Government office any attempted or completed breaches of the above commitments as well as any substantial suspicion of such a breach.

2. In case any such preceding misconduct on the part of such official(s) is reported by the BIDDER to the EdCIL with full and verifiable facts and the same is prima facie found to be correct by the EdCIL, necessary disciplinary proceedings, or any other action as deemed fit, including criminal proceedings shall be initiated by the EdCIL and such a person shall be debarred from further dealings related to the contract process. In such a case while an enquiry is being conducted by the EdCIL the proceedings under the contract would not be stalled.

3. Commitments of Bidders

The BIDDER commits itself to take all measures necessary to prevent corrupt practices, unfair means and illegal activities during any stage of its bid or during any pre-contract or post-contract stage in order to secure the contract or in furtherance to secure it and in particular commit itself to the following:

3.1 The BIDDER will not offer, directly or through intermediaries, any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the EdCIL, connected directly or indirectly with the bidding process, or to any person, organization or third party related to the

contract in exchange for any advantage in the bidding, evaluation, contracting and implementation of the contract.

- 3.2 The BIDDER further undertakes that it has not given, offered or promised to give, directly or indirectly any bribe, gift, consideration, reward, favour, any material or immaterial benefit or other advantage, commission, fees, brokerage or inducement to any official of the EdCIL or otherwise in procuring the Contract or forbearing to do or having done any act in relation to the obtaining or execution of the contract or any other contract with the Government for showing or forbearing to show favour or disfavor to any person in relation to the contract or any other contract with the Government.
- 3.3 Bidders shall disclose the name and address of agents and representatives and Indian BIDDERS shall disclose their foreign principals or associates.
- 3.4 BIDDERS shall disclose the payments to be made by them to agents/brokers or any other intermediary, in connection with this bid/contract.
- 3.5 The BIDDER further confirms and declares to the EdCIL that the BIDDER is the original manufacturer/integrator/authorized government sponsored export entity and has not engaged any individual or firm or company whether Indian or foreign to intercede, facilitate or in any way to recommend to the EdCIL or any of its functionaries, whether officially or unofficially to the award to the contract to the BIDDER, nor has any amount been paid, promised or intended to be paid to any such individual, firm or company in respect of any such intercession, facilitation or recommendation, as the case shall be for satisfactory performance of the proposed terms of Bidder.
- 3.6 The BIDDER, either while presenting the bid or during pre-contract negotiations or before signing the contract, shall disclose any payments he has made, is committed to or intends to make to officials of the EdCIL or their family members, agents, brokers or any other intermediaries in connection with the contract and the details of services agreed upon for such payments.
- 3.7 The BIDDER will not collude with other parties interested in the contract to impair the transparency, fairness and progress of the bidding process, bid evaluation, contracting and implementation of the contract.
- 3.8 The BIDDER will not accept any advantage in exchange for any corrupt practice, unfair means and illegal activities.

- 3.9 The BIDDER shall not use improperly, for purposes of competition or personal gain, or pass on to others, any information provided by the EdCIL as part of the business relationship, regarding plans, technical proposals and business details, including information contained in any electronic data carrier. The BIDDER also undertakes to exercise due and adequate care lest any such information is divulged.
- 3.10 The BIDDER commits to refrain from giving any complaint directly or through any other manner without supporting it with full and verifiable facts.
- 3.11 The BIDDER shall not instigate or cause to instigate any third person to commit any of the actions mentioned above.
- 3.12 If the BIDDER or any employee of the BIDDER or any person acting on behalf of the BIDDER, either directly or indirectly, is a relative of any of the officers of the EdCIL, or alternatively, if any relative of an officer of the EdCIL has financial interest / stake in the BIDDER's firm, the same shall be disclosed by the BIDDER at the time of filing of Bid.
- 3.13 The BIDDER shall not lend to or borrow any money from or enter into any monetary dealings or transactions, directly or indirectly, with any employee of the EdCIL.
4. **PREVIOUS TRANSGRESSION**
- 4.1 The BIDDER declares that no previous transgression occurred in the last three years immediately before signing of this integrity pact, with any other company in any country in respect of any corrupt practices envisaged hereunder or with any Public Sector Enterprise in India or any Government Department in India that could justify BIDDER's exclusion from the bid process.
- 4.2 The BIDDER agrees that if it makes incorrect statement on this subject, BIDDER can be disqualified from the Bid process or the contract, if already awarded, can be terminated for such reason.
5. **EARNEST MONEY DEPOSIT**
- 5.1 While submitting Technical bid, the BIDDER shall deposit an amount of Rs. as Earnest Money with the EdCIL through Account Payee Bank Draft or a Pay Order in favour of EdCIL (India) Limited.
- 5.2 The instrument for Security Deposit made shall be valid up to the specified period and the bidder shall be liable to keep the said instrument valid for such extended period as the case shall be for satisfactory

performance of the terms of Bidder above referred till the complete conclusion of the contractual obligations to the complete satisfaction of both the BIDDER and the EdCIL, including warranty period, whichever is later.

5.3 In case of the successful BIDDER a clause would also be incorporated in the Article pertaining of Performance Bond in the corresponding Contract governing such agreement that the provisions of Sanctions for Violation shall be applicable for encashment of Performance Bank Guarantee deposited towards forfeiture of said amount in case of a decision by the EdCIL to forfeit the same without assigning any reason for imposing such sanction.

5.4 No interest shall be payable by the EdCIL to the BIDDER on Earnest Money Deposit for the period of its currency.

6. SANCTIONS FOR VIOLATIONS

6.1 Any breach of the aforesaid provisions by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER) shall entitle the EdCIL to take all or any one of the following actions, wherever required:

- i. To immediately call off the pre contract negotiations without assigning any reason or giving any compensation to the BIDDER. However, the proceedings with the other BIDDER(s) would continue.
- ii. The Earnest Money Deposit (in pre-contract stage) and/or Security Deposit / Performance Bond (Bank Guarantee) (after the contract is signed) shall stand forfeited either fully or partially, as decided by the EdCIL and the BUYER (EdCIL) shall not be required to assign any reason therefore.
- iii. To immediately cancel the contract, if already signed, without giving any compensation to the BIDDER.
- iv. To recover all sums already paid by the EdCIL, and in case of an Indian BIDDER with interest thereon at 2% higher than the prevailing Prime Lending Rate of State Bank of India, while in case of a BIDDER from a country other than India with interest thereon at 2% higher than the LIBOR as the case shall be. If any outstanding payment is due to the BIDDER from the EdCIL in connection with any other contract for any other stores or on any account whatsoever and by whatsoever name called, such outstanding payment could also be utilized to recover the aforesaid sum and interest thereto.

v. To encash the advance bank guarantee and performance

bond/warranty bond, if furnished by the BIDDER, in order to recover the payments, already made by the EdCIL, along with interest.

- vi. To cancel all or any other Contracts with the BIDDER. The BIDDER shall be liable to pay compensation for any loss or damage to the EdCIL resulting from such cancellation/rescission and the EdCIL shall be entitled to deduct the amount so payable from the money(s) due to the BIDDER.
 - vii. To debar the BIDDER from participating in future bidding processes of the Government of India for a minimum period of five years, which shall be further extended at the discretion of the EdCIL.
 - viii. To recover all sums paid in violation of this Pact by BIDDER(s) to any middleman or agent or broker with a view to securing the contract.
 - ix. In cases where irrevocable Letters of Credit have been received in respect of any contract signed by the EdCIL with the BIDDER, the same shall not be opened.
 - x. Forfeiture by way of encashment of Performance Bond in case of a decision by the EdCIL to forfeit the same without assigning any reason for imposing sanction for violation of this Pact.
- 6.2 The EdCIL will be entitled to take all or any of the actions mentioned at Para 6.1(i) to (x) of this Pact also on the Commission by the BIDDER or any one employed by it or acting on its behalf (whether with or without the knowledge of the BIDDER), of any offence as defined in Chapter IX of the Indian Penal code, 1860 or Prevention of Corruption Act, 1988 or any other statute enacted for prevention of corruption.
- 6.3 The decision of the EdCIL to the effect that a breach of the provisions of this Pact has been committed by the BIDDER shall be final and conclusive on the BIDDER. However, an Independent Monitor(s) shall be appointed by EdCIL, in case of breach of the provisions of the pact.

7. INDEPENDENT MONITORS

- 7.1 An Independent monitor (s) shall be appointed by EdCIL, in case of breach of the provisions of the pact.
- 7.2 The task of the Monitors shall be to review independently and objectively, whether and to what extent the parties comply with the obligations under this Pact.
- 7.3 The Monitors shall not be subject to instructions by the representatives of the parties and perform their functions neutrally and independently.
- 7.4 Both the parties accept that the Monitors have the right to access all the

documents relating to the project / procurement, including minutes of meetings.

- 7.5 As soon as the Monitor notices, or has reason to believe, a violation of this Pact, he will so inform the Authority designated by the EdCIL.
- 7.6 The BIDDER(s) accept that the Monitor has the right to access without restriction to all Project documentation of the EdCIL including that provided by the BIDDER. The BIDDER will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to Sub-bidders. The Monitor shall be under contractual obligation to treat the information and documents of the BIDDER/Sub-bidder(s) with confidentiality.
- 7.7 The EdCIL will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the parties. The parties will offer to the Monitor the option to participate in such meetings.
- 7.8 The Monitor will submit a written report to the designated Authority of BUYER/Secretary in the Department/within 8 to 10 weeks from the date of reference or intimation to him by the EdCIL / BIDDER and, shall the occasion arise, submit proposals for correcting problematic situations.

8. FACILITATION OF INVESTIGATION

In case of any allegation of violation of any provisions of this Pact or payment of commission, the EdCIL or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

9. LAW AND PLACE OF JURISDICTION

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the EdCIL.

10. OTHER LEGAL ACTIONS

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that shall follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

11. VALIDITY

- 11.1 The validity of this Integrity Pact shall be governed by the terms of the NIT No. **EdCIL/EIS & EPS/PROC/ODISHA/2022 dated 14/01/2022** towards complete execution of the contract to the satisfaction of both the EdCIL and



EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 14/02/2022

the BIDDER/Seller, including warranty period, whichever is later. In case BIDDER is unsuccessful, this Integrity Pact shall expire after six months from the date of the signing of the contract awarding the Bidder with successful bidder.

- 11.2 Shall one or several provisions of this Pact turn out to be invalid; the remainder of this Pact shall remain valid. In this case, the parties will strive to come to an agreement to their original intentions.
12. The parties hereby sign this Integrity Pact at _____ on _____.

EdCIL (India) Limited
Name of the Officer :
OFFICER
Designation:

BIDDER
CHIEF EXECUTIVE

Witness:

2. _____

3. _____

Witness

1. _____

2. _____

(The Pre Contract Integrity Pact shall be modified based in line with the conditions of the Bid Documents).



MANUFACTURER AUTHORIZATION FORM

No. _____ dated _____

To

Dear Sir:

Bid No. _____

We _____ who are established and
reputed _____ manufacturer _____ of
_____ (name and
description of goods offered) having factories at _____ (address of
factory) with factory registration no. _____ do hereby
authorize M/s _____ (Name and address of Agent)
to submit a bid, and sign the contract with you for the goods manufactured by us
against the above bid.

We hereby extend our full warranty as per Clause 3 of the Conditions of
Contracts, for the goods and services offered for supply by the above firm against
this Invitation for Bid. We further certify that we shall support vendor with all related
spares and maintenance during the entire contract period including the period of
warranty/AMC.

Yours faithfully,

(Name): _____

(Name of manufacturers): _____

Note: This letter of authority should be on the letterhead of the manufacturer or
OEM and should be signed by a person competent and having the power of
attorney to legally bind the manufacturer.

CONTRACT FORM
(at the time of award of work)

THIS AGREEMENT made the day of 2022 between (Name of Procurement Consultant (hereinafter "the Procurement Consultant") on behalf of **ODISHA** of the one part and (Name & address of Supplier) (Hereinafter called "the Supplier") of the other part:

WHEREAS the Purchase is desirous that certain Goods and ancillary services viz. (Brief Description of Goods and Services) and has accepted a bid by the Supplier for the supply of those goods and services in the sum of (Contract Prize in words and Figures) (Hereinafter called "the Contract Rate")

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
2. The following documents shall be deemed to form and be read and constructed as part of this Agreement, viz.,
 - [a] The Rate Schedule submitted by the Bidder;
 - [b] The Schedule of Requirements;
 - [c] The Terms & Conditions
 - [d] The Consignee's Notification of Award/ Purchase Order
3. In consideration of the payments to be made by the Consignee to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Consignee to provide the goods and services and to remedy defects herein in conformity in all respects with the provisions of the Contract.
4. The Consignee hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract rates or such other sum as shall become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

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



S. No.	Brief Description of Goods & Services	Quantity to be supplied	Unit Rate	Total Rate	Delivery Terms

TOTAL VALUE:

DELIVERY SCHEDULE:

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

Signed, Sealed and Delivered by the

said (For the Consignee)

in the presence of

Signed, Sealed and Delivered by the

said (For the Supplier)

in the presence of



EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 14/02/2022

ANNEXURE – XIII

Format of Memorandum of Understanding
(*Format when backend partner is a single bidder)

This Memorandum of Understanding (MoU) is made on _____ the day of _____ at New Delhi by and between:

.. M/s EdCIL India Limited hereinafter referred to as "EdCIL", which expression shall include its successors and its permitted assigns, of one part.

AND

M/s (vendor name), registered under the Indian Companies Act 1956/2013 (whichever is applicable), with its registered office at-----, hereinafter referred to as "-----", which expression shall include its successors and permitted assigns, of the other part.

"EdCIL" and "-----" are individually referred to as "Party" and collectively as "Parties".

WHEREAS EdCIL, a Government of India Enterprise under the Ministry of Education, is a leading company in Education Department and has to its credit successful execution of many consultancy and turnkey projects in the fields of Telecom, IT and Civil both in India and abroad and it also acts as procurement consultant/agent/executing agency/implementing agency for number of Government of India enterprises/undertaking.

WHEREAS _____ (vendor name) is in the business of _____.

WHEREAS _____ (Client Name) (herein after called "") issued TENDER No. _____ dated _____

_____ for '_____', hereinafter referred to as "_(Client Name) tender" /"Work"/"Project".

WHEREAS EDCIL published EOI No. _____ dated _____ (hereinafter referred as EdCIL EOI) for selection of back-end partner for _____ (Client Name) tender.

AND WHEREAS _____ (Vendor Name) submitted their offer and pursuant to the same was selected by E as back-end partner for _____ (Client Name) Tender.

Now, therefore, it is agreed between the Parties as under:

1. The Parties wish to work together with the understanding that EDCIL shall act as the bidder (lead bidder) and _____(vendor name) (partner for _____) for participating in the _____(client name) Tender.
**Please note that the term "Lead bidder" shall be mentioned only when EDCIL shall bid in consortium with backend partner.*
2. _____(vendor name) shall not participate directly in _____(client name) Tender and shall not quote rates to any other party participating/pre-qualified for _____(client name) Tender directly or indirectly through its subsidiary, partnership, ownership, individual firm etc.
3. On award of the work of the _____(client name) Tender to EDCIL, EDCIL will enter into a detailed agreement with (vendor name) based on the terms & conditions of this MoU, EDCIL EOI and _____(client name) Tender.
4. The term of this MoU shall be for Two (02) months ("Term") from the date of signing of this MoU ("Effective Date") or till the completion of the project & release of all payments thereof whichever is later. All obligations hereunder shall only apply during the Term of this MoU and to such obligations and commitments in relation to the Tender/Work/Project under the scope of EDCIL EOI & _____(Client name) tender, as may have been undertaken by the Parties during the Term with validity exceeding the Term. The Term of this MoU can be extended by mutual agreement between the Parties, depending upon the requirement.
5. After mutual consultation, a joint team consisting of representatives of the parties will be formed for various activities like, technical discussions, deciding the preparation of final Bid/offer, terms & conditions and demonstration of functionality required in the _____(Client name) Tender/Work/Project.
6. EDCIL and _____(vendor name) hereby mutually agree that both of them shall remain as irrevocable members of this tie-up for the complete execution and completion of _____(client name) Tender/Work/Project (as per scope of EDCIL EOI & _____(Client name) tender).
7. Expenses towards bid preparation would be borne by the individual Parties viz. EDCIL and _____(vendor name) for their respective work. EDCIL will not reimburse any such expenses to _____(vendor name) towards preparation and submission of the bid.
8. All technical, financial and commercial terms and conditions of the Tender, except pricing, risk purchase, limitation of liability, advance payment & termination, will apply on back-to-back basis between EDCIL and _____(vendor name), for their respective part/scope of work. However, if _____(vendor

name) fails to fulfill its part of the work to the satisfaction of EDCIL, then EDCIL shall have the right to terminate the contract with (vendor name) and get the same executed departmentally or by other agencies at the risk and cost of (vendor name).

9. Notwithstanding anything contained in any other agreement, document, correspondence, arrangement between the parties in respect of (Client name) Tender/ Works / Projects, the (vendor name) understands, agrees and undertakes that:
- a) _____(vendor name) participated in EdCIL EOI and that all terms & conditions of the EdCIL EOI shall apply to _____(vendor name).
 - b) Prices quoted by (vendor name) shall remain firm and fixed till the execution of the Tender.
 - c) The payments terms between EdCIL & _____(vendor name) are on back to back basis and the payment shall be released to (vendor name) by EDCIL only if and when received by EDCIL from _____(Client name) and subject to submission of complete documents and invoices etc. by it.
 - d) _____(vendor name) will not demand or make any claim under any law with respect to the pending payment till the time corresponding payment is received by EDCIL from _____(Client name). EDCIL shall not be responsible in any manner whatsoever for any delay in releasing the payments or withholding of payments by _____(Client name).
 - e) the (day) date of delivery of goods and/or rendering of services by the (vendor name) shall be the date of realization of payment from the client once the goods and/or services are accepted by the client.
 - f) if in the instant contract, _____(vendor name) is acting only as trader / reseller / distributor/authorized agents and/or is engaged in a WORKS contract, no benefits under MSME Act 2006 and PPP Policy 2012 as per MSE Guidelines issued by Ministry of MSME would be applicable to it on account of acceptance of back to back payment terms as above. By agreeing to the terms of _____(client name) Tender, the _____(vendor name) agrees to forgo its rights under this Act and Policy.
 - g) _____(vendor name) hereby agrees to ensure timely GST compliances as per the statutory requirements. All the costs pertaining to any GST non-compliance including but not limited to any loss of eligible input tax credit due to non-payment/non-filing of GST

return and applicable interest/penalties shall be borne/indemnified by (vendor name). Further ___ (vendor name) hereby agrees that EDCIL reserves the right for reimbursement of any such cost incurred out of the aforesaid non-compliance(s). ___ (vendor name) will provide payment of GST proof i.e. GSTR-1, GSTR-3B, cash ledger and challan for taking GST payment from EDCIL against invoices.

- h) Any deductions by the _____ (Client name) towards LD/penalties/contingencies shall be borne by ___ (vendor name) in terms of EDCIL EOI.
 - i) At any given point of time, _____ (vendor name) may not assign or delegate its rights, duties or obligations under this MOU without prior written consent of EDCIL.
 - j) On award of work of the Tender/Work/Project, (vendor name) shall provide its GeM Seller id to EDCIL (not applicable for "works" contract or non-Indian vendor).
 - k) In the event of breach of any of the terms & conditions of this MOU or in case of any default of any terms & conditions of this MOU, on the part of the _____ (vendor name), EDCIL reserves the right to take necessary steps / action as per available documents, including but not limited to, termination of contract, forfeiture of BG / EMD, blacklisting / banning etc. and execute the work at their risk & cost.
10. EDCIL and ___ (vendor name) agree to keep confidential all information shared with each other and disclose to third party only after taking prior written consent of each other. This clause excludes information available in public domain. The confidentiality provisions of this MoU shall remain in full force and effect during the term of this MoU and 12 months thereafter.
11. Any sum of money (including refundable security deposit) due and payable to the (vendor name), under this contract or any other contract entered between the parties herein whether continuing or completed may be appropriated by EDCIL and set off against any claim of EDCIL of any nature whatsoever, arising under this contract or any other contract entered into between the parties, herein whether continuing or completed.
12. Nothing in this MoU shall constitute, create or give effect or recognize a JV, partnership or business entity of any kind.
13. This MoU shall be construed and governed by the laws of India and the parties hereby submit to the exclusive jurisdiction of the Delhi Courts of Law.

14. Any matter, which is not stipulated in the MoU, shall be settled in good faith by discussion among the parties in the spirit of understanding and cooperation.
15. All disputes or differences whatsoever arising among the parties under and/or in connection with and/or in respect of this MoU shall be referred to and decided by a sole arbitrator, who shall be nominated by the CMD, EDCIL. The arbitration shall be conducted in accordance with Arbitration and Conciliation Act of 1996, as amended from time to time, and the venue of the arbitration shall be in New Delhi.
**Please Note that in case of agreement/MoU with Government Organisation, the following clause shall be applicable:*
In the event of any dispute or difference relating to the interpretation and application of the provisions of this contract, such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013-DPE (GM)/FTS-1835 dated 22.05.2018.
Any party aggrieved with the decision of the committee at the 1st level (tier) may prefer an appeal before the Cabinet Secretary at the Second level (tier) within 15 days from the date of receipt of decision of the committee at First level, through its Administrative Ministry/ Deptt in terms of para 4, 5 and 7 of above DPE OM dated 22.05.2018, whose decision will be final and binding on all concerned.
16. During its Term, this MOU will be terminated in the event of
 - a. Client withdrawing the Tender provided it does not create any financial obligation on EDCIL.
 - b. Tender not awarded to EDCIL
 - c. Mutual agreement between the "Parties"
 - d. As per EDCIL EOI
17. Notices and other communications under this MoU shall be in writing and communicated through post, courier, fax, email or any other recognized mode of such communication. All such notices and communications shall be directed to the address as mentioned in the MoU.
18. By signing this MoU, the "Parties" acknowledge that it correctly records the understanding they have reached with regard to the Project.
19. EOI document, technical / financial bid, any further negotiations, all correspondences with or from (vendor name) till EOI finalization shall be an integral of this MOU.

IN WITNESS WHEREOF, each party hereto has caused this MoU to be executed in duplicate to be effective as of the Effective Date, by its duly authorized representative.



(For

EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 14/02/2022
(For _____ Private Limited)

Signature:
Name:
Designation:
Date:
Witness:

Signature:
Name:
Designation:
Date:
Witness:



Annexure XIV

Bid Security Declaration

To,

.....
.....

Ref: Our Bid No. -----dtd.

I/We,..... Irrevocably declare as under:

I/We understand that, as per Clause of Tender/bid conditions, bids must be supported by a Bid Security Declaration in lieu of Earnest Money Deposit.

I/We hereby accept that I/We may be disqualified from bidding for any contract with you for a period of Three Years from the date of disqualification as may be notified by you (without prejudice to NSUT, New Delhi rights to claim damages or any other legal recourse) if,

- 1) I am/We are in a breach of any of the obligations under the bid conditions.
- 2) I/We have withdrawn or unilaterally modified/amended/revised, my/our Bid during the bid validity period specified in the form of Bid or extended period, if any.
- 3) On acceptance of our bid by NSUT, New Delhi, I/we failed to deposit the prescribed Security Deposit or fails to execute the agreement or fails to commence the execution of the work in accordance with the terms and conditions and within the specified time.

Signature

Name & designation of the authorized person signing the Bid-Securing Declaration Form:

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

Dated on-----day of -----month-----year.

(Note: In case of a Joint venture, the Bid Security Declaration must be in the name

of all partners to the Joint Venture that submits the bid).

CHAPTER-VII

FINANCIAL BID Instructions to Bidders

1. Financial Bid shall be submitted with full price details.

Financial Bid shall contain only the prices duly filled in as per the format given in Schedule of Rates provided in the tender document.
2. The Bidder may quote for either Part A or Part B or Part C or any combination [Eg: - Part A & B or Part B & C or Part C & A or Part (A,B &C).]

The Evaluation of the EOI shall be undertaken for each part separately and the agency shall be considered for the said EOI on the basis of individual part i.e. Part A, Part B & Part C.
3. The Bidder should quote for all the items listed in each part i.e. Part A, Part B & Part C of this document. In case, the Bidder/s does not quote for all the items of each of Part A or Part B or Part C, the Bid shall be treated as incomplete and shall be rejected summarily.
4. The Items to be supplied/ delivered/ installed/ commissioned to NSUT, New Delhi as per the Tender Part B. The rate shall be inclusive of all charges including octroi, transportation (as per the location), packing, loading and unloading (at designated location), Insurance etc. and nothing shall be paid extra.
5. The bid shall be evaluated on individual part i.e. Part A, Part B & Part C as given in the Financial Bid and the supply order shall be placed to a bidder as a separate Item.
6. The prices quoted by the bidder shall be fixed for the quantity mentioned for the duration of the contract and shall not be subject to adjustment on any account. Price should be firm for any positive or negative variation in quantities up to 100%.
7. Price bid has to be filled online on EdCIL's E-tendering Portal. In case, the financial bid documents are not complete in all respect the same should be treated as incomplete at financial bid stage and shall be considered non-responsive.
8. The supply shall be undertaken as per the requirement of the client given in Part B of Tender.

Performa for Financial Bid

With respect to the EOI dated ____ and after studying given specifications & all other conditions of the bid document etc., we hereby submit our financial bid as under:

S.No.	Particulars	Price Bid quoted %age above/below the price indicated (%age)
A. Civil, Electrical & Miscellaneous Items		
	Civil, Electrical & Miscellaneous Works (Refer Page No. 85 of this Tender Document) (%age)
B. Furniture Items		
	Furniture (Refer Page No. 86 of this Tender Document) (%age)
C. Digital Smart Class Rooms		
	Smart Class Rooms (Refer Page No. 88 of this Tender Document) (%age)
	Total (%age)

A) Civil, Electrical & Miscellaneous Items:

Sl. No.	Item Description	Qty	Units	Estimated Rate (Rs.)	TOTAL AMOUNT Inclusive all Taxes (Rs.)
1	2	3	4	5	6
A	CIVIL WORKS				
1	1 Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level Cement mortar 1:4 (1 cement :4 coarse sand)	26.00	sqm	932.10	24,234.60
2	2 Brick work with common burnt clay machine moulded modular bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand). Above plinth level upto floor V level	2.00	cum	7423.70	14,847.40
3	3 Stone work for wall lining upto 10 m height with special adhesive over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand), including pointing in white cement with an admixture of pigment to match. 18 mm thick Granite of any colour and shade	275.00	sqm	3771.65	1,037,203.75
4	4 Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels. Granite of any colour and shade Area of slab over 0.50 sqm	21.00	sqm	4007.65	84,160.65
5	5 Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge. Granite work	510.00	mtr	376.25	191,887.50
6	6 Stone (polished) work for wall lining over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement all complete as per the directions of Engineer-in-charge. 18 mm thick Granite of any colour and shade	166.00	sqm	4161.07	690,737.62
7	7 Providing and fixing fire resistant door frame of section 143 x 57 mm having built in rebate made out of 16 SWG G.I. sheet (zinc coating not less than 120 gm/sqm) duly filled with vermiculite based concrete mix, suitable for mounting 60 minutes fire rated door shutters. The frame is filled with intumescent fire seal strip of size 10x4 mm (minimum) around the frame and fixing with dash fastener of approved size and make, including applying a coat of approved brand fire resistant primer etc. complete as per direction of Engineer-in-charge (Dash fastener to be paid for separately).	26.00	mtr	1444.30	37,551.80

8	8 Providing and fixing 50 mm thick glazed fire resistant door shutters of 60 minutes fire rating conforming to IS:3614 (Part-II), tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, lock rail, top rail 100 mm wide, bottom rail 200 mm wide, made out of 16 SWG G.I. sheet (zinc coating not less than 120 gm/m ²) duly filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coat of approved fire resistant primer etc. all complete as per direction of Engineer-in-charge (panneling to be paid for separately).	13.00	sqm	6166.00	80,158.00
9	9 Providing and fixing factory made uPVC white colour sliding glazed window above 1.50 m in height dimension comprising of uPVC multi-chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads, uPVC extruded interlocks and uPVC extruded Inline sash adaptor (if required), EPDM gasket, wool pile, zinc alloy (white powder coated) handle on one side of extreme panel along with zinc plated mild steel multi point locking having transmission gear with keeps, zinc alloy (white powder coated) touch lock with hook (if required for wire mesh panel), stainless steel (SS 304 grade) body with adjustable double nylon rollers (weight bearing capacity to be 120 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealant shall be paid separately). Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made. Two track two panels sliding window made of (big series) frame 67 x 50 mm & sash 46 x 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 2.50 sqm upto 4.00 sqm.)	80.00	sqm	6861.60	548,928.00
10	10 Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing, curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge. Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	915.00	sqm	3526.60	3,226,839.00
11	11 12 mm cement plaster of mix 1:4 (1 cement: 4 fine sand)	50.00	sqm	266.85	13,342.50
12	12 15 mm cement plaster on the rough side of single or half brick wall of mix 1:4 (1 cement: 4 fine sand)	50.00	sqm	307.90	15,395.00

13	13 Providing and Fixing factory made uPVC door frame, made of uPVC extruded section, of size 65 mm x 55 mm with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be mitred cut and jointed with plastic brackets and stainless steel screws, reinforcing hinge side vertical of the frames with PVC profile of Size 28 mm x 30 mm having wall thickness 2 mm (± 0.2 mm), including providing & fixing 3 nos of 125 mm long stainless steel hinges to the frame, fixing the frame with jamb with required number & size of anchor dash fastners, all complete as per manufacturer's specification and direction of Engineer-in-charge.	145.00	mtr	588.55	85,339.75
14	14 Providing and fixing factory made uPVC white colour casement/ Casement cum fixed glazed door comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key, G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws, etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealant shall be paid separately). Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made. Casement door with top hung ventilator with 3D and S.S. friction hinges (400 x 19 x 1.9 mm) made of (big series) frame 67 x 64 mm, sash 67 x 110 mm & mullion 67 x 80 mm all having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door upto 2.50 sqm)	46.00	sqm	9328.30	429,101.80
15	15 Providing and fixing 12 mm thick prelaminate particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Pre-laminated particle board with decorative lamination on both sides.	31.00	sqm	1046.90	32,453.90
16	16 Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification. Two or more coats on new work	125.00	SQM	87.15	10,893.75
17	17 Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water thinnable cement primer	125.00	sqm	60.00	7,500.00
18	18 Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.	125.00	SQM	115.15	14,393.75
19	19 Distempering with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour. Two coats	50.00	sqm	81.90	4,095.00

20	20 Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	125.00	sqm	18.25	2,281.25
21	21 Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per direction of Engineer-in-Charge.	15.00	sqm	932.45	13,986.75
22	22 Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge. In cement mortar	7.00	CUM	1469.90	10,289.30
23	23 Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured): From brick work in cement mortar	1700.00	1000 NOS	4.88	8,297.53
24	24 Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area 3 sq. metres and below	47.00	each	274.50	12,901.50
25	25 Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	825.00	sqm	54.85	45,251.25
26	26 Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	275.00	sqm	39.00	10,725.00
27	27 Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	345.00	sqm	42.00	14,490.00
28	28 Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	65.00	cum	138.85	9,025.25
29	29 Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5 mm thickness (weight not less than 12.50 kg/ sqm)	80.00	sqm	1296.40	103,712.00
30	30 Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. With stainless steel cover plate minimum 1.25 mm thickness	2.00	each	2412.50	4,825.00
31	31 Providing and fixing stainless steel grill ss grade 304 of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	120.00	kg	455.65	54,678.00



EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 14/02/2022

32	32 Providing and fixing 18 mm thick moulded granite 60 mm wide over the wall lining etc. all complete as per the directions of Engineer-in-charge.	240.00	mtr	434.45	104,268.00
33	33 Deduct on account of issue of old aluminium sections etc. to the contractor as buy-back material.	200.00	kg	40.00	8,000.00
34	34 Deduct on account of issue of old MS Grill, MS Angle etc. to the contractor as buy-back material.	700.00	kg	20.00	14,000.00
35	35 Deduct on account of issue of old doors etc. to the contractor as buy-back material.	13.00	each	400.00	5,200.00
36	36 Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and square edges of the board with recommended jointing compound, jointing tapes, finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with: 12.5 mm thick tapered edge Glass Reinforced Gypsum (GRG) board conforming to IS: 2095- (Part 3) : 1996 (Board with BIS certification marks)	515.00	sqm	1237.05	637,080.75
37	37 Providing & fixing false ceiling at all heights with GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having moisture content less than 2%, humidity resistance of 99%, NRC0.50 to 0.75 as per IS 8225:1987, Non combustible as per BS 476 (part 4)-1970 and light reflectance of 85% (minimum) to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanized iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 15x32 mm of length 3000 mm, cross - T of size 15x32 mm of length 1200 mm and secondary intermediate cross-T of size 15x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanized mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanized iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall wood screws. The work shall be carried out as per specifications, drawing and as	392.00	sqm	1699.30	666,125.60

	per directions of the Engineer-in-Charge. With fully perforated 12 mm thick micro tegular edged or 10 mm thick square edged GRG false ceiling tiles.				
38	38 Providing and fixing GI Gyp steel ultra frame work for wall panelling as per design drawing consisting of floor channel of size 50x32x32 x0.5mm thick at bottom and top fixed with 35 mm nylon sleeves and 35 mm screw. Further fixing GI stud 48x34x36x0.5 mm thick @600mm C/C vertically. The framework to be filled with 50mm 1000GSM non-woven thermal bonded polyester wadding (Make Dupont/ nowofill/Gyptech) held in position with 18 mm GI checken mesh of 24SWG with drywall screws and oversize washers. Finally fixing over it horizontally 80x26x51x0.5 mm thick G.I. Gyp ceiling section placed @600mm C/C or wherever required as per design drawings with drywall philips screws and angle cleats 27x37x25x1.6 mm as required. The frame to be fixed to the walls by means of angle holdfasts or cleats of required size complete with expandable anchor fasteners of 65x10mm dia fixed on each vertical member @1000mm C/C etc. as required all complete as per the directions of Engineer-in-Charge.	670.00	sqm	1193.00	799,310.00
39	39 Providing and Fixing of Acoustical Wall Panel (Armstrong / Gyptech / Himalaya) with square edges made of fibre glass substrate 25mm thick, wrapped on the front side with an acoustically transparent Fire retardant fabric of RSWM/Nextgen as per the approved shade . The fibre glass substrate shall have a recycle content of 85%. The panel shall be classified for Fire Class A. The Acoustical Wall Panel shall be of sizes 600x1200mm and shall achieve an NRC > 0.80 (Average value of Absorption Co-efficient) to be fixed to wall on a existing GI framework (payable in item3) and using Wall panel Impalers and adhesives wherever required . The Impalers shall be fixed to the ply using self-tapping screws. Silica based construction adhesive to be dabbed on to the projecting elements (spikes) of the Impalers. Wall Panels shall be pierced through the spikes of the Impalers ensuring the line and level of the panels are maintained. Specification and execution of item at all heights and as per approved drawings and directions of Engineer-in-charge	369.00	sqm	3353.44	1,237,419.36
40	40 Providing and Fixing Wood slatted panel perforated panels of width 128-192mm, thickness of 15mm and length 2400 mm, made of a Moisture resistant fibre board substrate with a laminated facing as per the approved shade . The boards shall have a special perforation pattern where the reverse surface has a fluted perforation with consecutive 2-3mm wide groove followed by 13_14 mm of visible pane. The edges of the panel shall be "longue-and-grooved" to fix special clips for installation and seamless visual. The back of the perforated panel shall have sound absorbing non-woven acoustical fleece hot pressed to achieve NRC of 0.6. and Humidity Resistance (RH) of 70% .The panels shall be mounted on special aluminium splines (keel) using inside clips provided by Manufacturer and approved by the Architect/ Engineer-in-Charge. The panel shall be mounted by tongue and groove mechanism using inside clip on GI extruded keel . The supply shall be backed by a Manufacturing Test Certificate . The panel to be fixed over the existing GI framework payable in item 4. Install Keel vertically using screws and plugs at spacing of not more than 600mm centre-to-centre. Trim the tongue of the first bottom panel and install using headless nail with groove side upward. Subsequent panels are installed with tongue side downward by engaging with each other using tongue and groove mechanism and secured by inside clip. Continue this process until required height is achieved. Shorter butt edges need to be joined using industrial/wood glue. Finish off the edges using wooden moulding of matching colour all complete. Installation should be carried out as per Manufacturer recommended procedure.. The work to be done complete as per	300.00	sqm	3733.70	1,120,110.00



	drawings and specifications, and directions of engineer in charge.				
41	41 Providing and fixing 2nd class teak wood plain lining tongued and grooved, including wooden plugs complete with necessary screws and priming coat on unexposed surface. 20MM THICK	68.00	sqm	3291.15	223,798.20
42	42 Melamine polishing on wood work (one or more coat).	68.00	sqm	110.75	7,531.00
43	43 Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete : 50 x 20 mm	100.00	mtr	232.15	23,215.00
44	44 Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour, Two Coats.	515.00	sqm	113.90	58,658.50
45	<p>45 Providing and fixing sun screen roller blinds with following specifications:</p> <p>Hardware Specification :-</p> <p>Control unit: The Control unit is made of high strength reinforced plastic. The clutch is of wrap spring design. High carbon steel springs are provided to transmit motion from driving to driven members of clutch mechanism. Clutch is operated directionally by the use of endless beaded chain. Clutch never needs any adjustment.</p> <p>Idler: Idler is of high strength reinforced plastic, consisting of a centre shaft. The idler is mounted on the bracket by using a plastic lock. The metal sleeve inside the plastic lock provides bearing surface for the centre shaft, which rotates freely, providing smooth, quiet and long wearing operation.</p> <p>Head rail: It is an aluminum extruded rail Powder coated in white. Control unit and Idler are mounted on the Head rail with powder coated M.S. brackets.</p> <p>Roller tube: It is an anodized extruded tube of high strength alloy. Control unit and Idler are fixed to the either ends of the tube. The fabric of the blind is fitted to the tube with heavy duty adhesive tape.</p> <p>Bottom rail: It is an aluminum extruded rail with a groove for fixing the fabric and power coated in white. It is fixed to the bottom of the fabric and the purpose of it is, to keep the fabric in tension and straight. The fabric is fitted to the tube using plastic insert. The end caps of the tube are ABS.</p> <p>Operating chain: This is made of 4.5mm plastic beads molded on 2.2mm thick polyester chord. The pitch of the beads is 6mm. The chain drives the sprockets of the control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation.</p> <p>Fixing brackets & clamps: These are used to fix the blind to the wall or ceiling. 'L' bracket is made of mild steel and zinc plated. The clamp is made up of spring steel of thickness 0.7mm and zinc plated.</p> <p>Roller tube: It is Aluminum alloy Extruded grooved tube, which is anodized. Size- 32mm- O.D.; weight - 0.27 kg/mtr Size- 38mm- O.D.; weight - 0.38 kg/mtr Size- 50mm- O.D.; weight - 0.60 kg/mtr Alloy & temp- 6063-T6 Fabric is fitted on the tube with double sided tape.</p> <p>Bottom Rail: Extruded Aluminum grooved section- powder coated in white Size: 21mm O.D. Alloy-HE9WP Weight-0.28 Kg/mtr. Fabric is fitted to the bottom rail with plastic insert. Bottom rail end cap- made of ABS.</p> <p>Fabric : Construction 3 Ply PVC + 1 Ply Fiber Glass Blackout Polyester, Fabric Thickness 0.36 Mm, Fabric Weight +5% 520 GSM, Fabric Width 244 cms, Tearing Strength 64 N Warp, 57 N Weft, Tensile Strength 260 ON/ 5 Cm-Warp 212 ON/ 5 Cm-Weft, Fire Resistance NFPA 701 AATCC 16-2003 4.5, Environmental Certification Green Guard Certified, Other Properties Anti Fungal & Anti Bacterial Fabric etc. all complete as per the directions of Engineer-in-charge.</p>	115.00	sqm	1443.25	165,973.75

EL	ELECTRICAL WORK				
51	51 Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required. a) Group C	212.00	point	990.00	209,880.00
52	52 Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required. a) Group C	110.00	point	555.00	61,050.00
53	53 Supply and fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 6 pin , 15/16 Amps modular socket outlet and 15/16 Amps modular switch , connection etc . as required .	68.00	each	495.00	33,660.00
54	54 Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	3890.00	mtr	265.00	1,030,850.00
55	55 Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	4160.00	mtr	308.00	1,281,280.00
56	56 Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. a) 2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	500.00	mtr	167.00	83,500.00
b)	b) 2 X 10 sq. mm + 1 X 6 sq. mm earth wire	1140.00	mtr	328.00	373,920.00
57	57 Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel conduit as required (For computer power in Furniture) a) 3 x 4 sqmm	2760.00	mtr	117.00	322,920.00
b)	b) 6 x 4 sq. Mm	1860.00	mtr	221.00	411,060.00
58	58 Supplying and fixing modular blanking plate ,on the existing modular plate & switch box excluding modular plate etc. as required.	32.00	each	32.00	1,024.00
59	59 Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required. a) 5/6 A switch	730.00	each	85.00	62,050.00
b)	b) 3 pin 5/6 A socket outlet	730.00	each	111.00	81,030.00



EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 11/02/2022

60	60 Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required. a) 3 Module	730.00	each	128.00	93,440.00
61	61 Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted a) 4 way (4 + 12), Double door	8.00	each	3068.00	24,544.00
62	62 Supplying and fixing following way, single pole and neutral, sheet steel MCB DISTRIBUTION BOARD 240 volts on surface/ recess complete with, tinned copper bus bar, neutral link, earth bar, din bar, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator) a) 12 way double door	50.00	each	2053.00	102,650.00
63	63 Supplying and fixing 5 amps to 32 amps, rating, 240/415 volts, 'C' Curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. a) Single Pole	496.00	each	199.00	98,704.00
b)	b) Double pole	50.00	each	556.00	27,800.00
c)	c) Triple pole and neutral	8.00	each	1092.00	8,736.00
64	64 Supplying and fixing following rating double pole 240volts, Residual current Circuit Breaker (RCCB) , having sensitivity of 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required. a) 25 amp DP RCCB	50.00	each	1927.00	96,350.00
65	65 Dismantling the existing worn out / defective fittings from the ceiling and SITC of minimum 36 watt Aluminium slim energy efficient LED Panel light fitting having system efficacy minimum 100 lumen/watt LM79, color temp 6500 deg K, recess mounting suitable for fitting in the 600mm x 600mm square existing space having symmetric glare free illumination in the false ceiling complete with all standard accessories including drivers etc. complete as required	230.00	each	3197.88	735,512.40
66	66 Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CMM/W) minimum 6.85, Air delivery minimum 215 CMM, 350 RPM (tolerance as per IS : 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required.	90.00	each	2688.00	241,920.00
67	67 Earthing with copper earth plate 600mm X 600mm X 3mm thick including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 mtr long etc with charcoal, coke and salt as required.	8.00	set	11794.00	94,352.00
68	68 Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	444.00	mtr	1009.00	447,996.00
69	69 Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required.	48.00	mtr	1224.00	58,752.00



EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 14/02/2022

70	70 Supply and installing following size of under floor GI (hot dip galvanized) raceways made out of 1.6mm thick sheet steel, standard length 2.5 meters, 1/2/3 compartment complete with jointing sleeves and other accessories under floor installation including cutting and chasing the floor, making good the same, placing in position and cleaning from inside complete of following sizes etc. as required.(50mm x 38mm x 1.6mm)	330.00	mtr	1227.96	405,226.80
71	71 Supply & installing following size of under floor access outlet made out of 1.6 mm thick pre-galvnised GI sheet with all accessories including necessary cutting and chasing of floor and making good the same, placing in position, cleaning from inside etc. as required.(150mm x 150mm x 1.6mm with 75 mm thick metallic lid)	32.00	nos	2663.07	85,218.24
72	72 Supplying and fixing of UPVC trunking of size 100 x 50 along with accessories on surface complete as required.	120.00	mtr	984.00	118,080.00
73	73 Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface / recessed steel / PVC Conduit as required. 1 Run of Cable	350.00	mtr	49.00	17,150.00
74	74 Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.	220.00	mtr	90.00	19,800.00
	a) 25 mm				
	b) 40 mm	10.00	mtr	130.00	1,300.00
75	75 Supply Installation, Testing & Commissioning of modular type Variable Refrigerant Flow/Variable Refrigerant Volume aircooled Outdoor units suitable for cooling and heating, having all hermetically sealed inverter type Scroll Compressor(s),minimum two compressors for above 14HP modules, microprocessor based Controller, top discharge type condensing unit(s),with R410A Refrigerant, vibration isolators with suitable foundation etc. complete as required. The unit shall deliver the rated capacity at AHRI Conditions and work even at 50°C ambient temperature without tripping. The unit shall be suitable to work on 400V±10%,3Phase,50Hz AC power supply. The unit shall be filled with first charge of the refrigerant and ready for use as required. The COP at AHRI conditions shall not be less than 3.1 and IEER not less than 6.5 .(ODU Unit should be anti corrosive coated from factory)	87.00	per hp	16415.00	1,428,105.00
76	76 Supply, installation, testing and commissioning of following minimum capacity 4-way flow VRV/VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cordless remote control etc., suitable for operation on single phase 230V±10%,50Hz AC supply, complete, as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at airinlet conditions of 27 Degree CDB and 19 Degree CWB temperature.	6.00	each	31453.00	188,718.00
	a) 2.4 TR				
	b) 2.8 TR	4.00	each	32015.00	128,060.00
	c) 3.2 TR	6.00	each	32787.00	196,722.00
	d) 3.6 TR	6.00	each	33209.00	199,254.00
	e) 4.0 TR	4.00	each	33981.00	135,924.00

77	77 Supply, Installation, testing and commissioning including vacuumization and Nitrogen testing of following nominal sizes of soft/hard drawn copper refrigerant piping for VRV/VRF system, complete with fittings with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastomeric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc. as required : a) 38.1mm dia (OD) (Hard drawn) with tube thickness 1.62mm with 19mm thick insulation	80.00	mtr	1265.00	101,200.00
b)	b) 34.9 mm O.D. (Hard drawn) with tube thickness 1.62mm with 19 mm thick insulation	90.00	mtr	1230.00	110,700.00
c)	c) 28.58 mm O.D. (Hard drawn) with tube thickness 1.2mm with 19 mm thick insulation	100.00	mtr	1108.00	110,800.00
d)	d) 22.2 mm O.D. (Hard drawn) with tube thickness 1.2mm with 19 mm thick insulation	130.00	mtr	865.00	112,450.00
e)	e) 19 mm O.D. (Hard drawn) with tube thickness 1.2mm with 19 mm thick insulation	90.00	mtr	707.00	63,630.00
f)	f) 15.86 mm O.D. (Soft drawn) with tube thickness 1.2mm with 19 mm thick insulation	170.00	mtr	588.00	99,960.00
g)	g) 12.7 mm O.D. (Soft drawn) with tube thickness 1.2mm with 19 mm thick insulation	130.00	mtr	466.00	60,580.00
h)	h) 9.5 mm O.D. (Soft drawn) with tube thickness 1.2mm with 19 mm thick insulation	180.00	mtr	331.00	59,580.00
78	78 Supply Installation Testing and Commissioning Providing and fixing rigid PVC piping complete with fittings, supports as per specifications and duly insulated with 9 mm thick closed cell nitrile rubber insulation. a) 32 mm	200.00	mtr	134.00	26,800.00
b)	b) 40 mm	120.00	mtr	185.12	22,214.40
79	79 Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required. 2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	500.00	mtr	146.00	73,000.00
80	80 Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	560.00	mtr	44.00	24,640.00
81	81 Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. a) 300 mm width X 50 mm depth X 1.6 mm thickness	70.00	mtr	875.00	61,250.00
82	82 Cutting holes of required size in brick masonry wall for passing of copper pipes, Drain pipes, cable removing of false ceiling and re-fixing/placing back if required etc. and making good the same etc. complete as per direction of Engineer-in-charge. (The hole shall be made by core cutter)	30.00	each	2500.00	75,000.00



Education • Innovation • Transformation

EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 14/02/2022

83	<p>83 Supplying, Installation, Testing and Commissioning of cubical type outdoor LT panel suitable for 415 V, 3 phase, 4 Wire 50 Hz AC supply system fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2 mm thick for frame work and covers, 3 mm thick for gland, plates i/c cleaning & finishing complete with 7 tank process from powder coating in approved shade, having 600Amps. capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC / SMC bus bars of high conductivity, DMC / SMC bus bars supports, with short circuit withstand capacity of 31 MVA for 1 Sec. bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick fabrication shall be done in transportable sections, entire panel shall have a common copper earth bar of size 25 mm x 5 mm at the rear with 2 nos. earth stud. solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring with 2.5sq mm. PVC insulated copper conductor S/C cable, cable alleys, cable gland plates in two half, i/c. providing switch gears: - (Panel shall be TTA approved)</p> <p>INCOMING 400A 4P Adjustable MCCB 36 kA,415 volts , 50Hz, with door interlocking with all connected accessories - 1 no. 0-500 Amp. Ammeter with selector switch. 1 no. Volt meter with selector switch 0-500volts. 3 nos. RYB Led indication lamps.</p> <p>OUTGOING 80A FP Adjustable MCCB 25kA -4 Nos. for outdoor units 25A FP MCB - 4 nos. for indoor units D.B</p>	2.00	each	450000.00	900,000.00
84	<p>84 Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface / recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks tinned copper bus bar, neutral link, earth bar din bar, detachable gland plate, interconnections, powder coated painted including earthing etc, as required.(Panel shall be TTA approved)</p> <p>INCOMING a. 25 A 4P MCB --- 01 Set. b. RYB LED type indication lights --- 01 Set.</p> <p>OUTGOING 6 A SP MCB --- 18 Set.</p>	4.00	each	200000.00	800,000.00
85	<p>85 Supply of XLPE insulated Copper conductor, armoured 1.1 KV grade cable of following size complete as required. a) 4C x 16 Sq mm</p>	90.00	rmt	1122.01	100,980.90
	b) 4C X 10 Sq mm	100.00	rmt	758.36	75,836.00
	c) 3C x 1.5sqmm	550.00	rmt	141.03	77,566.50
86	<p>86 Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required. a) Upto 35 sq. mm (clamped with 1mm thick saddle)</p>	740.00	rmt	33.00	24,420.00
87	<p>87 Supply of one number XLPE insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size complete as required a) 3.5C x 95 sqmm Aluminium armoured cable</p>	90.00	mtr	682.08	61,387.20
88	<p>88 Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required. a) Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)</p>	90.00	mtr	104.00	9,360.00



EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 14/02/2022

89	89 Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. a) 4 X 10 sq. mm (25mm)	10.00	each	219.00	2,190.00
b)	b) 4 X 16 sq. mm (28mm)	10.00	each	250.00	2,500.00
c)	c) 3½ X 95 sq. mm (45mm)	8.00	each	473.00	3,784.00
90	90 Comprehensive Annual maintenance of VRV/VRF Air conditioning system provided and installed under this contract with all parts/components i.e compressor, gas charging, fan motor etc(one year free defect liability period and thereafter paid) a) For 1st Year (During defect liability period)	87.00	hp	0.00	0.00
b)	b) For 2nd Year	87.00	hp	2800.00	243,600.00
c)	c) For 3rd Year	87.00	hp	2940.00	255,780.00
d)	d) For 4th Year	87.00	hp	3087.00	268,569.00
e)	e) For 5th Year	87.00	hp	3240.00	281,880.00
Total in Figures					24,926,413.20

B) Furniture Items:

Sl. No.	Item Description	Quantity	Units	Estimated Rate (Rs.)	TOTAL AMOUNT Inclusive all Taxes (Rs.)
1	2	3	4	5	6
46	46 Supplying and Placing in position Faculty Table of following Specifications, Overall Dimension of the Main Desk Shall be - 1500mm x 600mm The system shall be a desk-based system with a platform understructure made up of a combination of MS Tubes and plates. Understructure - The slanted legs are connected to the understructure with the help of FDC Connectors to provide a stable and sturdy base for the worktops. Modesty panel shall be of Acrylic (8 mm thick Acrylic both side frosted) or of Metal 1.2 mm thick CRCA. Worktop - Worktop shall be made of 25MM thick Pre-Laminated Board conforming to IS: 12823. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The worktop shall be complete with provisions for screen mousing as well as for wire management on the workstation. Provisions for fixing of the switches shall be on the wire tray/channel. A Wire Management - It shall be a part of the understructure and can be in the form of enclosed metal tray or 2 level enclosed channel to provide concealed wire management throughout the cluster formation. Wire user tray or independent wire risers shall be provided as per the layout structure.access flaps with soft closing technology shall be provided on the table tops to access the switch points on the tray. Pedestal having 3 Drawers Unit having flat metal front and top with Central locking. The Drawer Unit consists of 2Box and 1File Drawers. The Overall size of the Drawer Units is 450mm(W) X 435mm(D) X 640mm(H). Construction & Material of Drawer Unit - Welded Assembly of 0.8mm thick CRCA for Body Shell, Drawer Front & tray, Front Side Stiffener, Rear Side Stiffener & Bottom, 1.2mm thick CRCA Top Stiffener, Bottom stiffener, Drawer Fronts & Metal Front Straight Edge. All Drawers with Double extension precision ball slide shall be provided. For Drawer pulling, side wise tapered recess provided in shell behind Drawer Fronts. Locking:10 lever Cam Lock & Central RH locking with actuator & lock channel mechanism. Top Panel : 0.8mm thick Metal Straight Edge Top. Castors : Swiveling non-lockable 4Nos Castors mounted below the body shell. The Total drawer unit is finished with Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10). The product should be complete and as per approved sample and as per the directions of Engineer-in-charge. (Make: GODREJ, HERMANNILLER, STEELCASE, DELIFORM, VITRA)	8.00	nos	41442.00	331,536.00
47	47 Supplying and placing executive chair as per the following specifications: The cushioned seat assembly consists of seat base moulded in glass-filled Polyamide, moulded Polyurethane foam & upholstered with high stretch knitted polyester fabric. The cushioned back assembly consists of back inner moulded in Polypropylene in-situ moulded with Polyurethane foam & upholstered with high stretch knitted polyester fabric." Full Back Size - 45.5 cm, (W) x 53.0 cm, (H) "Seat Size -49.5 cm, (W) x 47.0 cm, (D)The HR polyurethane foam used in seat and back custom is moulded in Density 45±2 kg/m3, and hardness load 16 = 2 kg/ as per 15.7886 for 25% compression.The seat and back are firmly connected to the base frame and are cantilevered in such a way that it gives a multi-dimensional movement possibility just with a simple lean on the sides or back without need for complex manual adjustments. The cantilevered seat offers impact cushioning while sitting and synchronises with the back movement during posture changes. The "S" shaped spines moulded in high strength glass-filled Polyamide and the spine connector moulded in glass-filled Polyamide form the back-spine structure involved in multi-dimensional rectine motion.The variable tilt angle recline motion can be adjusted with 3 position Tilt Limit feature which is inbuilt in seat base and the tension (alum force) is user weight dependent. The assembly consists of armrest housing sliding over the armrest structure, both moulded in glass-filled Polyamide. The height adjustment feature is button operated having adjustment of 6.6±0.5cm. The Armrest Top is made up of integral skin PU moulded over plastic inner moulded in glass-filled Polyamide.The seating height can be adjusted with a pneumatic gas-lift having an adjustment stroke of 9.2 ± 0.3 cm The pedestal is injection moulded in glass-filled Polyamide and fitted with 5 nos. in wheel castors. The pedestal is 69.0±0.5 cm, pitch centre diameter and 76.0±1.0 cm, with castors,5 nos. twin wheel castors are injection moulded in Polyamide having 5.0±0.1cm heel diameter and assembled to the pedestal, etc. all complete as per the directions of Engineer-in-charge. (Make: GODREJ, HERMANNILLER, STEELCASE, DELIFORM, VITRA)	8.00	nos	10428.00	83,424.00

48	48 Supplying and placing Visitor Chair of following Specifications. Overall Dimensions of Chair-Seat Height - 46.5cm, Seat Height - 93.5cm, Width & Depth of Chair as measured from pedestal - Width-81.0 cm and Depth-64.5 cm, SEAT ASSEMBLY: The seat assembly should be made up of 1.2 ±0.1cm, thick hotpressed plywood, upholstered with fabric upholstery covers and moulded Polyurethane foam. SEAT SIZE: 47.0 cm. (W) x 48.0 cm. BACK ASSEMBLY: The back assembly should be made of powder coated (OFT 40-60 microns) tubular frame of 0 2.54 ±0.03cm. x 0.2 ±0.015cm.thk. MS ERW tube designed with contoured lumbar support for extra comfort. The back should be upholstered using double layer spacer mesh fabric with high tenacity yarn. BACK SIZE : 46.5 cm. (W) x 60.5cm. HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam should be moulded with density =45±1.2 kg/m ³ and hardness load 16 ± 2 kgf for 25% compression. ARMRESTS: The one-piece armrests should be injection moulded from black Copolymer Polypropylene. TUBULAR FRAME: The powder coated (OFT 40-60 microns) tubular frame should be cantilever type & made of 02.54 ±0.03cm. x 0.2 ±0.015cm thick M.S.E.R.W. Tube. The product should be complete and as per approved sample and as per the directions of Engineer-in-charge. (Make: GODREJ, HERMANNMILLER, STEELCASE, DELLFORM, VITRA)	16.00	nos	6379.00	102,064.00
49	49 Supplying and placing classrooms desk cum bench of following specifications. Product Specification A) Legs-Legs are made of MS ERW tube section (IS:7138) of size 75 X 25 X 2 mm thick oval tube with 5 mm thk HR brackets as per IS:2062 and 2mm thk CRCA brackets as per IS:513 welded on to the tubes. Assembly is powder coated with epoxy polyester. -Leg height varies from 705 to 1005 in pitch of 50 as per layout.-Sturdy anchoring by anchor bolts on to base of 8mm thk plate for proper seating of Leg.-Shoe made of ultramid -Nylon are provided at the bottom for covering the base plate. B) Side clads:-Two side clads made of 18 mm thk plate with 0.8mm thk pvc lipping and on the outside covered with welded metal structure made of 2 mm thk CRCA as per IS:513 powder coated with Epoxy polyester C) Worktop:-Worktop are made of 25 mm thick Pre-Laminated Board of E1-P2 Grade and approved shade conforming to IS:12923. All the edge of work surface are provided with machine pressed 2mm thick pvc edge band glued with hot melt glue. D) Seat :-Seat has self closing mechanism which will operate by means of dead weight. Seat understructure is made from combination of welded fabricated structure of 5mm Thk HR as per IS:2062 and 8mm thk ply as per IS:303 with moulded PU foam of density 55 kg/cu.mtr. on top which in turn is covered with stitched upholstery. Seat assembly is covered on bottom side by means of seat cover made of CRCA (IS:513). E) Seat Back-Seat back is made from combination of 6mm thk ply as per IS:303 with foam on top which in turn is covered with stitched upholstery. F) Seat Support Frame :-Seat support frame is made from combination of MS ERW tube section (IS:7138) of size 80 X 40 X 2.5 mm thick rectangular tube and MS ERW tube section (IS:7138) of size 48 X 19.1 X 2 mm thick oval tube welded together. Assembly is powder coated with Epoxy polyester. CAP made of ultramid are provided from front to cover the oval tubes. G) Modesty:-Modesty is made of 25mm thick pre-laminated twin board of E1-P2 Grade and approved shade conforming to IS:12923. All the edge of modesty are provided with machine pressed 2 mm thick pvc edge band glue with hot melt glue etc. all complete as per the directions of Engineer-in-charge. (Make: GODREJ, HERMANNMILLER, STEELCASE, DELLFORM, VITRA)	716.00	nos	23720.00	16,983,520.00
50	50 Supplying and fixing of storage cabinet of following specifications: Storage shall have an overall size of 916mm (W) x 486mm (D) x 1980mm (H) with welded construction. It should have the shelf thickness of 0.7 mm, Back thickness of 0.8mm, Door thickness of 0.8mm (high yield strength) and all other components shall have a thickness of 0.9mm. These components shall be made of CRCA 'D' grade high yield strength as per IS:513. The Storvel Plain should have a Mazak handle and Three way locking mechanism with Shooting Bolts. It should have a height wise adjustable shelf mounting which shall have a Uniformly Distributed Load Capacity of max 40 Kg. It should also have a M10 Screw type Leveller with Hex plastic base. The finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10). Plenty of colour options and shelving options shall be available all complete as per the directions of Engineer-in-charge. (Make: GODREJ, HERMANNMILLER, STEELCASE, DELLFORM, VITRA)	8.00	nos	24338.00	194,704.00
Total in Figures					17,695,248.00

C) Digital Smart Class room:

Sl. No.	Item Description	Quantity	Units	Estimated Rate (Rs.)	TOTAL AMOUNT Inclusive all Taxes (Rs.)
1	2	3	4	5	6
117	91 SITC of Ultra Short Throw Projector with minimum Specification /Features i.e. Brightness: Minimum 4000 Lumens or better. Projection Technology: 3LCD Technology, Light Source: Laser. Resolution: WXGA. Contrast Ratio minimum 2000000:1. Interface: VGA, HDMI & Base-T, wireless LAN, Wi-fi Direct, Miracast, Horizontal and vertical keystone correction, Image Shift, Instant on/off, A/V mute complete with installation as per site requirement.	10.00	each	166569.20	1,669,692.00
118	92 SITC of Projector mounting kit to mount the above projector complete with installation as per site requirement.	10.00	each	6843.00	68,430.00
119	93 SITC of Motorized Tab Tensioned Projection Screen with minimum size of 113" Diagonal with Aspect Ratio of 16:10 complete with installation as per the site requirement.	10.00	each	46760.50	467,605.00
120	94 SITC of Digital Podium with minimum Specification /Features i.e. in Metallic Frame and wooden top, powder coated with castor wheels & brakes. Drawer for keyboard, mouse and document camera. Provision of 19" Rack inside podium to fit in international standard equipment. Access doors for servicing both from front and back side of the podium. Interactive Display: Interactive Panel Size of 21.5" Diagonal, Full HD Panel, Touch Technology: (Electromagnetic + Capacitive) Touch Digitizer and supplied with Electromagnetic Stylus. Provision for gooseneck microphone and button control panel, connectivity Ports- HDMI, VGA, audio, Network, USB, etc. complete with installation as per the site requirement.	8.00	each	236083.50	1,888,668.00

121	95 SITC of 4K Portable Document Camera with minimum Specification /Features i.e. 13 MP CMOS Sensor, minimum 30x Zoom with HDMI In & HDMI Out, USB Output, Inbuilt Storage of minimum 100 images, Inbuilt microphone for audio video recording, Image rotation 0° / 90° / 180° / 270° / Flip / Mirror, CE, FCC and RoHS Certified etc. complete with installation as per site requirement.	8.00	each	51322.50	410,580.00
122	96 SITC of Camera to capture the presenter with minimum Specification /Features i.e. Full HD 1080p, minimum 20X Optical Zoom, min 100 Presets, 60 Frames per Second, Ethernet Out, HDMI Out, 3G-SDI Out, Audio In, RS232/422 Controls, -170° ~ +170° Panning angle, -30° ~ +90° Tilting angle, Should support PoE+, CE, FCC and RoHS Certified etc. complete with installation as per site requirement.	8.00	each	240075.25	1,920,602.00
123	97 SITC of HDMI to USB Converter with HDMI loop output. complete with installation as per site requirement.	8.00	each	76413.50	611,308.00
124	98 SITC of 50 feet HDMI cables with installation as per site requirement.	16.00	each	13606.00	218,976.00
125	99 SITC of 6 feet HDMI cables with installation as per site requirement.	40.00	each	2851.25	114,050.00
126	100 SITC of Digital Matrix Switcher with minimum Specification /Features i.e. 4 HDMI Input & 2 HDMI output ports, 4 USB 2.0 Host switching layer for multiple USB hosts and 4 USB for Peripheral devices, HDMI1.4, Audio, Ethernet, 2 RS-232 Ports, IR extension, 3D formats, and 4K / UHD (30Hz RGB 4:4:4, 60Hz YCbCr 4:2:0) supported, Audio embedding and de-embedding, Built-in Event Manager, command injection, Auto select modes, EDID Management etc. all complete with installation as per the site requirement.	8.00	each	330745.00	2,645,960.00
127	101 SITC of Smart room control system with minimum Specification /Features i.e. programmable keypad, a volume knob, and a processor running Event Manager with 2x Ethernet connectivity with PoE reception and transmission; 1x RS-232 for peripheral device control; 3x GPIO for motorized screen and shades control etc. all with installation as per site requirement.	8.00	each	111769.00	894,152.00
128	102 SITC of Standalone Recorder with minimum Specification /Features i.e. should have HDMI inputs & minimum 1 TB HDD (storage) in it, with installation as per site requirement.	8.00	each	63868.00	510,944.00
129	103 SITC of 4 port relay with installation as per site requirement.	8.00	each	11405.00	91,240.00
130	104 SITC of 8-Port Ethernet Switch etc. complete with installation as per site requirement.	8.00	each	17107.50	136,860.00
131	105 SITC of Condenser gooseneck microphone (cardioid) for Podium with minimum Specification /Features i.e. Frequency response: 50 - 15,000 Hz or better, black, length 500 mm (20") or better, LED ring, 3-pin XLR male, programmable button, phantom power driven, support RFI shielding alongwith Shock Mount etc. complete with installation as per the site requirement.	8.00	each	36496.00	291,968.00
132	106 SITC of Wireless handheld Microphone System with minimum Specification /Features i.e. bandwidth up to 40 MHz, Transmission range up to 120 m, Audio frequency response 45 - 15 kHz, Audio dynamic range complete with installation as per the site requirement.	8.00	each	43339.00	346,712.00
133	107 SITC of Wireless Lapel Microphone System with minimum Specification /Features i.e. Switching bandwidth up to 40 MHz, Transmission range up to 120 m, 16 per frequency band simultaneously active channels, Audio frequency response 45 - 15 kHz, Audio dynamic range 106 dB (A-weighted with UHF Bellpack Transmitter & Microphone Frequency response 20 - 20,000 Hz, Open circuit voltage: 40 mV/Pa, Max. SPL 126 dB at 1 kHz, S/N ratio: 51 dB, Equivalent SPL 32 dB etc. complete with installation as per the site requirement.	8.00	each	43339.00	346,712.00
134	108 SITC of Audio digital Signal processor Unit with minimum specification / features i.e. USB Audio Interface, Minimum 8 Input Processing Unit with AEC Enable, Input Channel: Minimum 6 or more, 3 x Line Output or more, Frequency Response: 20 Hz to 20 kHz, THD 0.1% or better, SNR: 90dB or better, Channel Separation: -60dB or less, USB audio interface for soft codec application, Digital Network Link Port for future expansion, IP / RS232 port for third-party control, with complete installation as per site requirement.	8.00	each	347852.50	2,782,820.00
135	109 SITC of Power amplifiers with minimum specification / features i.e. Type: Class D, RMS Power: 900W @ 4 ohm, Frequency Response 20 Hz- 20 kHz, Distortion <0.2%, Signal to Noise Ratio >100 dB or better etc. complete with installation as per the site requirement.	10.00	each	119752.50	1,197,525.00
136	110 SITC of Wall Mount Speaker with minimum specification / features i.e. 8" Passive Loudspeaker, 2 Way full range-High Output 8" or better Loudspeaker, Driver: 1 x 8" LF driver or better, 1" HF driver or better, Peak Power: 350-400 Watt or better, Impedance: 8 Ohm, Frequency Range 90Hz-20kHz or better, Dispersion: 70-90 X 50-60 or better, Sensitivity 95dB or better etc. complete with installation as per the site requirement.	20.00	each	25091.00	501,820.00
137	111 SITC of Standard AV Rack of size 12U to keep the equipments with necessary power points.	8.00	each	28512.50	228,100.00

138	112 Supplying and laying all type of cables for healthy functioning of above system in one smart class room i.e. shielded twisted pair cable, HDMI patch cord, USB cable, audio cable, speaker cable 2 core 1.5 sqmm PVC insulated shielded cable all completed as per the directions of Engineer-in-charge.	8.00	job	285125.00	2,281,000.00
139	113 Comprehensive maintenance including repair/ replacement of damaged item/part/system with all accessories, spare parts, software, hardware and other related equipments as required for smooth functioning of Audio Video system covered under item no. 91 to 112. a) For 1st Year (During defect liability period)	1.00	job	0.00	0.00
140	b) For 2nd Year	1.00	job	785028.96	785,028.96
141	c) For 3rd Year	1.00	job	981286.20	981,286.20
142	d) For 4th Year	1.00	job	1177543.44	1,177,543.44
143	e) For 5th Year	1.00	job	1373800.68	1,373,800.68
144	114 Providing services for operation of the AV systems, in 8 no. Smart Class Room at NSUT Dwarka with operators (technical) from 6 AM to 7 PM, six days a week. (1 no. operator from 6 AM to 2 PM and 1 no. operator from 11 AM to 7 PM. The timing can be changed as per the requirement of department or direction of Engineer in charge). Job is not limited to operation of AV only, it also include the following work: 1. Operators will unlock the rooms daily at 6:00 AM & lock the room at 7:00 PM daily. 2. Operators will prepare the class/ lecture hall ready by putting the system on & ready for use by the teachers and students as the case may be. 3. Job also includes taking up any issues/query of installed IT equipment for LAN switch, Wi-Fi, internet etc. 4. Job also includes cleaning of the surface of display & Wacom touch monitor. 5. Job also includes to interchange any faulty AV unit with the standby units provided by NSUT. 6. Job also includes to keep all AV equipments up & running, regular maintenance, software/firmware upgrade etc. a) For 1st Year	12.00	months	98627.00	1,183,524.00
145	b) For 2nd Year	12.00	months	101092.68	1,213,112.16
146	c) For 3rd Year	12.00	months	103558.35	1,242,700.20
147	d) For 4th Year	12.00	months	106024.02	1,272,288.24
148	e) For 5th Year	12.00	months	108497.45	1,301,969.40
Total in Figures					30,156,977.28



EOI No.: EdCIL/EIS & EPS/PROC/NSUT/2022/ Dt. 14/02/2022

FINANCIAL BID SUBMISSION FORM

To:

Chief General Manager (EIS & EPS)
EdCIL (India) Limited
EdCIL House, 18 A, Sector-16 A
NOIDA – 201301 (U.P.), India

Dated: ___/___/2022

Dear Sir,

We, the undersigned, offer to provide "Expression of Interest (EOI) for Selection of Partner/Original Equipment Manufacturer (OEM)/ System Integrator (SI) for Pre-Bid Tie-up participation in Tender issued by Netaji Subhas University of Technology, New Delhi for Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus.". In accordance with your request for proposal dated ___/___/2022.

Our attached Financial Bid is for the amount of _____ [Indicate the corresponding to the amount(s), currency(ies) {Insert amount(s) in words and figures}].

Please note that all amounts shall be the same as in Price Bid. Our Financial Bid shall be binding upon by us subject to the modifications resulting from Contract negotiations, if any, up to expiration of the validity period of the Proposal.

Yours sincerely,

Authorized Signature {In full and initials};
Name and Title of Signatory:
In the capacity of:
Address:
E-mail:

PART B
Additional Terms and Conditions

INDEX

Sl. NO.	PARTICULARS	PAGE NO.
1.	Index	1
2.	Corrigendum to Form CPWD-7	2
3.	Tender Notice (e-procurement)	3
4.	NIT (Form CPWD-6	4 to 11
5.	Tender Form CPWD-7	12 to 20
6.	List of Approved Makes – Civil Work as per Annexure-A	21 to 31
7.	List of Approved Makes – Electrical Work as per Annexure-B	32 to 34
8.	List of Approved Makes for Audio Video System as per Annexure-C	35
9.	Additional Specifications – Civil Work as per Annexure-D	36 to 37
10.	Additional Specifications – Electrical Work as per Annexure-E	38 to 39
11.	Special Terms & Conditions as per Annexure-F	40 to 43
12.	Terms & Conditions for SITC Part VRV/VRF Air conditioning as per Annexure-G	44 to 48
13.	Scope of Work for Comprehensive Maintenance for VRV/VRF System as per Annexure-H	49 to 50
14.	Additional Conditions – Civil Work as per Annexure-I	51 to 52
15.	Additional Conditions – Electrical Work as per Annexure-J	53 to 54
16.	Terms and Conditions for Operation & Maintenance of AV System) as per Annexure-K	55 to 57
17.	Schedule of Payment as per Annexure-L	58
18.	Statement of Material (Buy Back items) as per Annexure-M	59
19.	Details of Bidder as per Annexure-N	60
20.	Bank Details of Bidder as per Annexure-O	61
21.	Letter of Transmittal as per Annexure-P	62
22.	Form of Performance Security as per Annexure-Q	63 to 64
23.	Affidavit as per Annexure-R	65
24.	Schedule of Quantities (Civil + Electrical) as per Annexure-S	66 to 89
25.	Drawings as per Annexure-T	90 to 98
26.	Photographs (New Desks/Benches) as per Annexure-U	99 to 100
27.	Photographs (Old Desks/Benches/Chairs) as per Annexure-V	101 to 104
	This NIT contains pages 1 to 104	

CORRIGENDUM TO Form-7 (CPWD)

SI. NO.	FOR	READ
1.	Govt. of India	Govt. of National Capital Territory of Delhi.
2.	President of India	B.O.M., Netaji Subhas University of Technology
3.	Superintending Engineer/Chief Engineer.	V.C., Netaji Subhas University of Technology
4.	Department	Netaji Subhas University of Technology
5.	Administrative Head	V.C., Netaji Subhas University of Technology
6.	Ministry of Works & Housing	Govt. of National Capital Territory of Delhi.

**TENDER NOTICE (e-
procurement)**

The Executive Engineer (C) invites online percentage rate tenders on behalf of Board of Management, NSUT from approved and eligible contractors of CPWD and those of appropriate list of M.E.S., BSNL, Railways and other specialized agencies fulfilling the eligibility criteria given in tender document for the following work through e-procurement solution only:-

Sl. No.	Name of work	Estimated cost (Rs.)	Earnest Money (Rs.)	Time Allowed	Date of release of tender through e-procurement solution	Date and Time for Pre-bid meeting	Last Date and time of receipt of tenders through e-procurement solution	Date and time of opening of Technical Bids of the Tenderers	Date and Time of opening of Financial Bids of the Tenderers
1.	NIT No-79/VC/2021-22/NSUT Tender ID No. :- Name of work: Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus (Composite Work).	Rs. 7,27,24,238.00	Rs. 14,54,485.00	Twelve Months for Execution of Works and Five Years for Comprehensive Maintenance of VRV/RF System and Comprehensive Maintenance & Operation of AV System	28.01.2022	04.02.2022 at 1600 hrs	18.02.2022 at 1500 hrs	18.02.2022 at 1530 hrs	18.02.2022 at 1600 hrs

Further details of the tender can be seen at: <http://govtprocurement.delhi.gov.in>.

E – TENDERING

1. Online Percentage rate bids are invited on behalf of Board of Management, NSUT from approved and eligible contractors of CPWD and those of appropriate list of M.E.S., BSNL, Railways and other specialized agencies fulfilling the eligibility criteria for the following Work:-

Name of work: Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus (Composite Work).

The work is estimated to cost Rs 7,27,24,238/-. This estimate, however, gives merely a rough guide.

Intending bidder shall be eligible to submit the bid provided he has definite proof from the appropriate authority, which shall be to the satisfaction of the competent authority, of having satisfactorily completed similar works of magnitude specified below :-

Criteria of eligibility for submission of bid documents for Non- CPWD (i.e. M.E.S, BSNL and Railways) registered bidders and other specialized agencies:-

Experience of having successfully completed works in any Government Departments/ Autonomous Body/ Public Sector Undertaking during last seven years ending on previous day of last day of submission of tender.

Three similar works each of value not less than 40% of the estimated cost put to tender.

Or

Two similar works each of value not less than 60% of the estimated cost put to tender.

Or

One similar works each of value not less than 80% of the estimated cost put to tender.

Similar work means: Development of Studio/ Auditorium/ Smart Class Rooms/ Labs/ Computer Centre/ Offices etc. comprising of Factory Made Modular Furniture, Audio-Video System, Air-Conditioning and Other Misc. Works.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to the last date of submission of bid.

To become eligible for issue of bid, the bidders shall have to furnish an undertaking on the letter head as under:-

Name of work: Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus (Composite Work).

I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in NSUT for next five years. Also, if such a violation comes to the notice of Department after award of contract, the Engineer-in-Charge shall be free to rescind the contract and forfeit the Performance Guarantee absolutely.

When bids are invited from bidder as per provisions of Clause 1.2.1 above, it will be mandatory for Non- CPWD (i.e. M.E.S, BSNL and Railways) registered bidders and other specialized agencies to upload the work experience certificate(s) and an undertaking on the letter head as per the provisions of Clause 1.2.1.

2. Agreement shall be drawn with the successful bidders on prescribed Form No. **CPWD 7** (or other Standard Form as mentioned) which is available as a Govt. of India Publication and also available on website www.cpwd.gov.in. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. The time allowed for carrying out the work will be **Twelve Months for Execution of Works and Five Years for Comprehensive Maintenance of VRV/VRF System and Comprehensive Maintenance & Operation of AV System** from the date of start as defined in schedule 'F' or from the first date of handing over of the site.
4. The site for the work is available.
5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract can be seen on the following website free of cost: <http://govtprocurement.delhi.gov.in>.

General Conditions of Contract for Maintenance Works, 2020 with upto date correction slips are available on CPWD Website www.cpwd.gov.in and are also available in printed form with Jain Book Agency (CENTRAL), 4574/15, 2ND Floor, Padamchand Marg, Near Happy School, Daryaganj, New Delhi - 110002. Phone: 011-43513689, 43513570 Mob.: 9667274446, 9810666810 and shall also be integral part of the agreement.

6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of bid as notified.
7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of bid as notified.

8. The bids are invited in two stage system. The technical bid shall be opened on due date and time as notified hereinafter. The time and date of opening of financial bids of contractors qualifying the technical bid shall be communicated to them at a later date.
9. If the bidder has not obtained GST registration of Delhi then in such a case the bidder shall upload following undertaking on the letter head along with other bid documents.

If work is awarded to me, I/we shall obtain GST Registration Certificate of Delhi within one month from the date of receipt of award letter or before release of any payment by NSUT, whichever is earlier, failing which I/we shall be responsible for any delay in payments which will be due towards me/us on account of the work executed and/or for any action taken by NSUT or GST department in this regard.

10. Each bid must carry EMD as specified below in the Tender document. EMD as mentioned in the tender document must be submitted through ECS/RTGS/NEFT mode only to following Bank Account. This amount shall be refunded in case of rejection of the bid or alternatively adjusted/refunded:

Bank details for submission of EMD through RTGS/NEFT: -	
NSUT EMD ACCOUNT No.	133010029900005 (REGISTRAR NSUT, NEW DELHI)
Name of the NSUT Bank	UNION BANK OF INDIA
IFSC CODE	UBIN0813303
MICR CODE	110026196
BANK ADDRESS	NSUT Branch, NSUT Campus, Sector – 3, Dwarka, New Delhi - 110078

11. List of self attested documents to be scanned and uploaded within the period of bid submission:
- (i) Bidders must upload their details in the format given in Annexure – N on their letter head.
 - (ii) Proof of EMD payment deposited in the Union Bank of India Account prescribed at Clause 10 of CPWD - 6.
 - (iii) Bank details of Bidders as per Annexure – O (Optional).
 - (iv) Registration certificate of appropriate class/category in CPWD, M.E.S., BSNL and Railways, as applicable.
 - (v) Registration certificate under Goods and Services Tax (GSTIN) of Delhi. If the bidder has not obtained GST registration of Delhi then in such a case the bidder shall upload the undertaking on the letter head as per Clause 9 of CPWD - 6.
 - (vi) PAN Card.
 - (vii) An Affidavit on non-judicial stamp paper of Rs. 10.00 that the bidder shall furnish the undertakings from the approved OEMs of the audio-video, furniture and air-conditioning alongwith the Performance Guarantee as per Clause 13A of CPWD 6. Further, in case of non-submission of above referred undertaking, the bidder shall be debarred from participation in the tenders in NSUT for a period of three years.
 - (viii) Soft copy of the Power Point Presentation (PPT) as provided at Clause 32 of CPWD 6 in PDF format.
 - (ix) Letter of Transmittal as per Annexure-P.

- (x) An undertaking on the letter head in accordance with the requirements of Clause 1.2.1 of CPWD – 6 (Applicable for Non – CPWD Contractors i.e. M.E.S, BSNL and Railways and Specialized Agencies only).
- (xi) Similar Work Completion Details for Non – CPWD Contractors i.e. M.E.S, BSNL and Railways and Specialized Agencies:- Completion certificate issued by the officers of the client department of the rank of Executive Engineer or equivalent. Incomplete certificates shall be summarily rejected. The completion certificate must clearly indicate the following:
 - i) Name of work, ii) Value of work done, iii) The date of completion of work, iv) Nature of work & v) That the work has been completed satisfactorily (Applicable for Non – CPWD Contractors i.e. M.E.S, BSNL and Railways only).

Note. 1: However, certified copy of all the scanned and uploaded documents as specified in CPWD 6 shall have to be submitted by the lowest bidder only after opening the financial bid within a week physically in the office of EE (C), NSUT, New Delhi, along with original documents for verification, If certified copies are not submitted within above mentioned period, then their bid will be disqualified and be debarred for one year from participating in bids in NSUT.

The bid submitted shall be opened at 03:30 PM on

12. The bid submitted shall become invalid if:-

- a) The bidder is found ineligible.
- b) The bidder does not upload scanned copies of all the documents stipulated in the bid document.
- c) The bidder does not submit EMD.
- d) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest bidder in the office of bid opening authority.
- e) If a tenderer quotes nil rates against each item in item rate tender or does not quote any percentage above/below on the total amount of the tender or any section / sub head in percentage rate tender, the tender shall be treated as invalid and will not be considered as lowest tenderer.

Note: The Bidder shall be suspended for one year and shall not be eligible to bid for NSUT tenders from the date of issue of suspension order in case any bid becomes invalid due to either 'c', 'd' and / or 'e' above.

13. The contractor whose bid is accepted will be required to furnish performance guarantee of 3% (Three Percent) of the bid amount within the period as specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/ Pay order of any Scheduled Bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Bidder shall be suspended for one year and shall not be eligible to bid for NSUT tenders from the date of issue of suspension order. The contractor whose bid is accepted will also be required to furnish either copy of applicable

licenses/ registrations or proof of applying for obtaining labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No., if applicable and also ensure the compliance of aforesaid provisions by the sub contractors, if any engaged by the contractor for the said work within the period as specified in Schedule F.

- 13 A The lowest bidder shall submit an undertaking alongwith the performance guarantee from the OEMs regarding:
- (a) The OEM shall unconditionally support the lowest tenderer technically throughout the execution of contract as well as for Maintenance/Comprehensive Maintenance Contract for the useful life of the system, and
 - (b) OEM shall provide all the spares required for healthy functioning of the equipment for the useful life of equipment.

Note: The Undertaking shall be from the approved OEMs of the following:

- (i) Audio-Video Works BOQ Item No.91,94 to 97,100 to 102,105 to 110.
- (ii) VRV/VRF Air-conditioning works.
- (iii) Modular furniture works.

In case, the lowest bidder fails to furnish the required Undertaking within the stipulated period, he shall be disqualified for participation in bids at NSUT for three years.

14. The description of the work is as follows: As per BOQ attached.

Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

15. The competent authority on behalf of the Board of Management, NSUT does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidders shall be summarily rejected.
16. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable for rejection.

17. The competent authority on behalf of Board of Management, NSUT reserves to himself the right of accepting the whole or any part of the bid and the bidders shall be bound to perform the same at the rate quoted.
18. The contractor shall not be permitted to bid for works in NSUT if his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any officer in NSUT or in the DTTE (Department of Training and Technical Education). Any breach of this condition by the contractor would render him liable to be debarred from participation in tenders at NSUT in future.
19. No Engineer of Gazetted Rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of two years after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
20. The bid for the works shall remain open for acceptance for a period of sixty (60) days from the date of opening of technical bid. If any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the NSUT shall, without prejudice to any other right or remedy, be at liberty to suspend the bidder for one year and such bidder shall not be eligible to bid for NSUT tenders from the date of issue of suspension order.
21. This notice inviting Bid shall form a part of the contract document. The successful bidder/contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
 - (a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - (b) Standard C.P.W.D. Form 7/8 or other Standard C.P.W.D. Form as applicable.
 - (c) CPWD General Conditions of Contract 2020 (**Maintenance work**) with correction slips upto the last date of receipt of tenders.
22. The bid document will include following two components:-

Part A:- CPWD-6, CPWD-7/8 including schedule A to F, Standard General Conditions of Contract for CPWD 2020 as amended/ modified up to last date of submission of bids. However, Standard General Conditions of contract for CPWD 2020 shall not be uploaded on tender portal.

Part B:- Additional Specifications, Additional Conditions, Special Conditions and Schedule of Quantity.

23. For Composite Bids:

The bidders must associate himself, with agencies of the appropriate class eligible to bid for each of the minor component individually.

The eligible bidders shall quote rates for all items of major component as well as for all items of minor components of work.

24. In case of any difference / ambiguity between English & Hindi version, English version shall prevail.
25. The department shall deduct tax at source under Income Tax, GST, Labour Cess etc. as applicable on the value of work done from each bill of the contractor as per prevailing Government instructions / orders. In lieu, the department shall issue a certificate of deduction of the tax at source to the contractor, in relevant forms.
26. If any information furnished by the applicant found incorrect at later stage, such bidder will be liable to debar from tendering/taking up work in NSUT for next five years. The department reserves the right to verify the particulars furnished by the applicant independently.
27. Before tendering the bidders are advised to read carefully General Condition of Contract for CPWD 2020 (Maintenance work) with amendments and correction slips issued upto last date of uploading of bid which is available on CPWD Website www.cpwd.gov.in and are also available in printed form with Jain Book Agency (CENTRAL), 4574/15, 2ND Floor, Padamchand Marg, Near Happy School, Daryaganj, New Delhi - 110002 Phone : 011-43513689, 43513570 Mob. : 9667274446, 9810666810.
28. No Running Account Bill shall be paid for the work till the applicable registration with EPFO and ESIC, whatever applicable are submitted by the contractor to the Engineer-in-Charge.
29. The quoted rates of all items shall be inclusive of all taxes including Goods and Services Tax, labour cess etc. and nothing extra shall be payable on this account.
30. General Conditions of Contract CPWD 2020 (Maintenance work) as amended upto last date of submission of tenders shall be integral part of Contract agreement.
31. No payment to the work will be made unless contract is signed by the contractor.
32. Evaluation of the bids
- (i) Prequalification shall be done on the basis of the documents uploaded by the bidders as required at Clause 11 of CPWD-6. The bidders who qualify the pre-qualification stage will be invited for a presentation about their planning to carry out the work in professional and time bound manner and observance of applicable labour laws, as required.
- (ii) Technical qualification: Technical qualification shall be made on the basis of power point presentation given by the bidders who would have qualified the prequalification criteria. The prequalified bidders will be intimated the date and time for the power point presentation to be conducted by the bidders in the office of Executive Engineer (C) Room N. 301, Admin. Block, NSUT Sector-3, Dwarka, New Delhi. Such bidders shall give presentation on their planning as per details at Sl. No. (v) below.

- (iii) The presentation will be for a period of 15 minutes and another 15 minutes for discussion on the presentation. The bidders shall bring their own laptop for giving presentation.
- (iv) The presentation will be given by the bidders in front of Committee constituted by Vice Chancellor, NSUT. The Complete proceedings of the presentation shall be video recorded having absolute rights of NSUT over the recordings.
- (v) The Technical qualification shall be based exclusively on the basis of presentation and discussion:

Sl. No.	Evaluation Criteria	Marks
A.	Technical experience and competence for planning to execute various items/activities in such manner that overall work is completed within stipulated period:	
i)	Procurement plan for various material, fittings and fixtures etc.	20
ii)	Time and sequence required to be taken for execution of different items/activities such as Civil/Electrical/Furniture/Audio-Video/Air-Conditioning works etc.	40
iii)	Daily manpower required, category wise, to be deployed for each activity.	10
B.	Tools & plants required to deployed activity wise.	10
C.	Compliance of labour laws such as payment of wages, EPF, ESI, Bonus, Gratuity, Leave, etc.	10
D.	Deployment of experienced technical representative for smooth & timely execution of work.	10
Total		100

To qualify technically, any bidder must secure minimum 50% marks in each of the four categories and minimum 60% marks overall.

**GOVERNMENT OF INDIA
CENTRAL PUBLIC WORKS DEPARTMENT**

STATE	DELHI	CIRCLE	ENGG.
BRANCH	NSUT	DIVISION	ENGG. DIVISION/NSUT
ZONE		SUB-DIVISION	CIVIL

Percentage Rate Tender & Contract for Works

(A) Tender for the work of:-

Name of work: Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus (Composite Work).

(i) To be submitted by (to be filled by EE Office) hours on (to be filled by EE office) to
(time) (date)

(ii) To be opened in presence of tenderers who may be present at (to be filled by EE Office) hours on (to be filled by EE Office) in the office of EE (C), NSUT.

Issued to: (to be filled by EE Office)
contractor

Signature of officer issuing the documents _____

Designation EE (C), NSUT

Date of issue _____

T E N D E R

I/We have read and examined the notice inviting tender, schedule, A, B, C, D, E & F. Specifications applicable, Drawings & Designs, General Rules and Directions, Conditions of Contract, clauses of contract, Special conditions, Schedule of Rate & other documents and Rules referred to in the conditions of contract and all other contents in the tender document for the work.

I/We hereby tender for the execution of the work specified for the President of India within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respects in accordance with, such conditions so far as applicable.

We agree to keep the tender open for Sixty (60) days from the due date of submission thereof and not to make any modifications in its terms and conditions.

If I/we, fail to furnish the prescribed performance guarantee within prescribed period. I/we agree that the said President of India or his successors in office shall without prejudice to any other right or remedy, be at liberty to suspend the bidder for one year and such bidder shall not be eligible to bid for NSUT tenders from the date of issue of suspension order. Further, if I/we fail to commence work as specified, I/we agree that President of India or his successors in office shall without prejudice to any other right or remedy available in law, be at liberty to suspend the bidder for one year and such bidder shall not be eligible to bid for NSUT tenders from the date of issue of suspension order and his Performance Guarantee shall be forfeited absolutely. Further, I/We agree that in case of forfeiture of Performance Guarantee as aforesaid. I/We shall be debarred for participation in the re-tendering process of the work.

I/We hereby declare that I/we shall treat the tender documents drawings and other records connected with the work as secret/confidential documents and shall not communicate informations derived there from to any person other than a person to whom I/we am/are authorized to communicate the same or use the information in any manner prejudicial to the safety of the State.

Signature of Contractor

Postal Address

Dated

Witness:

Address:

Occupation:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the President of India for a sum of Rs. _____ (Rupees

_____).

The letters referred to below shall form part of this contract Agreement:-

- a)
- b)
- c)

For & on behalf of the President of India.

Signature _____

Designation _____

Dated

PROFORMA OF SCHEDULES (CIVIL WORK)

SCHEDULE 'A'

Schedule of quantities (as per PWD-3)

As per Schedule attached

SCHEDULE 'D'

Extra schedule for specific requirements/document for the work, if any.

1. LIST OF APPROVED MAKES OF MATERIALS (CIVIL, ELECTRICAL WORK & AUDIO-VIDEO).
2. ADDITIONAL SPECIFICATIONS (CIVIL & ELECTRICAL WORK).
3. ADDITIONAL CONDITIONS (CIVIL & ELECTRICAL WORK).
4. SPECIAL TERMS & CONDITIONS (CIVIL WORK)
5. TERMS & CONDITIONS FOR SITC PART VRV/VRF AIR CONDITIONING.
6. TERMS & CONDITIONS FOR OPERATION & MAINTENANCE OF AV SYSTEM.
7. ANNEXURES "A" to "V".
8. SCHEDULE OF QUANTITY (CIVIL & ELECTRICAL)
9. DRAWINGS
10. PHOTOGRAPHS

SCHEDULE 'E'

Reference to General Conditions of contract.

Name of work: Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus
(Composite Work).

Estimated cost of work : **Rs. 7,27,24,238.00**

- i) Earnest Money : **Rs. 14,54,485.00**
ii) Performance Guarantee : **3% of tendered value.**
iii) Security Deposit : **2.5% of tendered value**

SCHEDULE 'F'

GENERAL RULES:
& DIRECTIONS

Officer inviting tender
Maximum percentage for quantity of
items of work to be executed beyond
which rates are to be determined in
accordance with Clauses 12.2 & 12.3

Executive Engineer,
NSUT

See below

Definitions		
2(v)	Engineer-in-Charge	<i>Executive Engineer, NSUT</i>
2(viii)	Accepting authority	Vice Chancellor, NSUT
2(x)	Percentage on cost of materials and labour to cover all overheads and profits.	15%
2(xi)	Standard Schedule of Rates	<i>DSR 2018 (Civil & Electrical)/ Market Rates</i>
2(xii)	Department	<i>NSUT</i>
9(ii)	Standard CPWD contract Form G.C.C 2020, CPWD form-7/8 as modified & corrected upto	<i>Last date of submission of bid</i>
Clause 1		
	i) Time allowed for submission of Performance Guarantee, programme chart (Time and progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare board or proof of applying thereof from the date of issue of letter of acceptance.	<i>10 days</i>
	ii) Maximum allowable extension with late fee @ 0.1% per day of Performance Guarantee amount beyond the period provided in (i) above (Late fee to be furnished in form of Pay order/ D.D. in favour of Registrar, NSUT).	<i>05 days</i>
Clause 2	Authority for fixing compensation under clause 2/ Clause 2A	<i>Vice Chancellor, NSUT</i>
Clause 2A	Applicable clause 2/ Clause 2A	<i>Clause 2</i>
Clause 5	Number of days from the date of issue of letter of acceptance for reckoning date of start Mile stone(s) as per table given below:-	<i>15 days or date of award whichever is earlier.</i>

Table of Mile Stone(s)

Sl. No.	Description of Milestone (Physical)	Time Allowed in days (from date of start)	Amount to be with-held in case of non achievement of milestone
1.	Rooms (3 Nos.)	1 to 180	Rs. 5,00,000
2.	Rooms (3 Nos.)	181 to 270	Rs. 5,00,000
3.	Rooms (2 Nos.)	271 to 365	Rs. 5,00,000

Time allowed for execution of work.	Twelve Months for Execution of Works and Five Years for Comprehensive Maintenance of VRV/VRF System and Comprehensive Maintenance & Operation of AV System
--	---

Authority to decide :

- | | | |
|--|---|-----------------------|
| (i) Extension of Time | : | Vice Chancellor, NSUT |
| (ii) Rescheduling of mile stones | : | Vice Chancellor, NSUT |
| (i) Shifting of date of start in case of delay in handing over of site : | : | Vice Chancellor, NSUT |
| (ii) | | |

PROFORMA OF SCHEDULE Clause 5 Schedule of handing over of site :

Part	Portion of Site	Description	Time period for handing over reckoned from date of issue of letter of intent.
Part A	Portion without any hindrance		Complete site is available for handing over to the contractor on award of contract.
Part B	Portions with encumbrances		
Part C	Portions dependent on work of other agencies		

Clause 5/5A	Applicable clause 5/ Clause 5A	Clause 5
Clause 7	Gross work to be done together with net payment/adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment	Rs. 70.00 Lakh or as decided by the Engineer-in-charge and Schedule of Payment as per Annexure – "L".
Clause -7 A	Whether clause 7A shall be applicable	As applicable

Clause 10A	List of testing equipment to be provided by the contractor at site lab.	{As per Annexure – 53 of Standard Operating Procedures for CPWD Work Manual – 2019} Note: In case the contractor is unable to provide the equipment as stated above, the testing of material will be carried out from outside laboratories approved by Engineer-in-charge at the cost of the contractor. Frequency of testing shall be as specified in CPWD Specifications.
Clause 10C	Component of labour expressed as percent of value of work:	Not Applicable
Clause 10CC	Not Applicable	
Clause 11	Specifications to be followed for execution of work :	<i>CPWD specifications with upto date correction slips and additional conditions & additional specifications and Special Terms & Conditions enclosed.</i>
Clause 12	Type of work	Maintenance works
	Authority to decide deviation upto 1.5 times of tendered amount	Vice Chancellor, NSUT
12.2 & 12.3	Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for building work.	50%
12.5	(i) Deviation Limit beyond which clauses 12.2 & 12.3 shall apply for foundation work (except items mentioned in earth work subhead in DSR and related items) (ii) Deviation limit for items mentioned in earth work subhead of DSR and related items	100%
Clause 16	Competent Authority for deciding reduced rates	Vice Chancellor, NSUT.
Clause 18	List of mandatory machinery, tools & plants to be deployed by the contractor at site. 1. 2.	As directed by the Engineer-in-charge for smooth and timely execution of work.

	3.	
Clause 19 C	Authority to decide penalty for each default :	Vice Chancellor, NSUT
Clause 19 D	Authority to decide penalty for each default :	Vice Chancellor, NSUT
Clause 19 G	Authority to decide penalty for each default :	Vice Chancellor, NSUT
Clause 19 K	Authority to decide penalty for each default :	Vice Chancellor, NSUT
Clause 25	Construction of Dispute Redressal Committee (DRC) Chairman- Member- Member-	To be constituted by the Vice-Chancellor, NSUT at the time of arisen of dispute, if any.

Clause 32

Requirement of Technical Representative(s) and recovery Rate

Agreement amount of work (Rs. In Crores)	Requirement of Technical		Minimum experience (Years)	Designation Technical Staff	Rate at which recovery shall be made from the contractor in the event of not fulfilling	Applicable
	Qualification	Number of Major + Minor component				
More than 5 to 10	Graduate Engineer, Graduate Engineer or Diploma Engineer	1 1+1	5 (and having experience of one similar nature of work) 2 or 5 respectively	Project Manager Project/ Planning/ quality/ Billing Engineer	Rs. 25,000/- Per month Rs. 15,000/- Per month per person	
More than 1.5 to 5	Graduate Engineer or Diploma Engineer	1+1	2 or 5 respectively	Project Manager cum planning/quality /Site/ billing Engineer	Rs. 15,000/- per month per person	
More than 15 Lac to 1.5 Crore	Graduate Engineer or Diploma Engineer	1 of major component	2 or 5 respectively	Project Manager cum planning/quality /Site/billing Engineer	Rs. 15,000/- per month per person	

Assistant Engineers retired from Government services that are holding Diploma will be treated at par with Graduate Engineers.

Diploma holder with the minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineer for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineer.

<p>Clause 38</p>	<p>(i) Schedule / statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates printed by C.P.W.D :</p> <p>(ii) Variations permissible on theoretical quantities:</p> <p>(a) Cement</p> <p>(i) For works with estimated cost put to tender not more than Rs. 25 lakh :</p> <p>(ii) For works with estimated cost put to tender more than Rs. 25 lakh :</p> <p>(b) Bitumen All Works.</p> <p>(c) Steel Reinforcement and structural steel sections for each diameter, section and category :</p> <p>(d) All other materials</p>	<p>3% plus / minus.</p> <p>2% plus / minus.</p> <p>2% plus / minus.</p> <p>2.5% plus & Nil on minus side.</p> <p>Nil</p>	<p>DSR – 2018 (Civil)</p> <p><i>Applicable</i></p>
-------------------------	--	--	---

LIST OF APPROVED MAKES OF MATERIALS [CIVIL WORK]

S. NO.	MATERIAL	MANUFACTURERS NAME
	CIVIL ITEMS	
1.	CEMENT	ACC, ULTRATECH, VIKRAM, SHREE, AMBUJA, JAYPEE, J.K., LAFARGE, L&T, BIRLA, CCI, BINANI, JK LAKSHMI, ORIENT
2.	REINFORCEMENT STEEL-TMT BARS-FE-500D GRADE	SAIL, TATA STEEL, RINL, JSW, JSPL
3.	STRUCTURAL STEEL SECTIONS	SAIL, TISCO, RINL, JSW, JINDAL STEEL & POWER, JINDAL, TATA
4.	STRUCTURAL STEEL TUBES/PIPES	JINDAL, TATA, APL APOLLO, ELECTRO STEEL, G.S.F., PRAKASHSURYA, LLOYDS
5.	LGSF VENDORS	M/S INTERARCH BUILDING PRODUCTS PVT. LTD., M/S TATA BLUESCOPE STEEL LTD., M/S MGI INDIA PVT. LTD., M/S JSPL, M/S EVEREST INDUSTRIES LTD., M/S WOOTZ BUILDSYS LLP., M/S EPACK POLYMERS.
6.	READY MIXED CEMENT CONCRETE	ACC, LAFARGE, ULTRATECH, SHREE, ALCHON, L&T GRASIM, NSCONCRETE, RMC READYMIX (INDIA), SHAILA ENTERPRISES, RDC CONCRETE, TECHNO PRIME RMC PVT LTD, VK READY MIX CONCRETE, ASHTECH, SHRI RAM READY MIX CONCRETE
7.	ANTI-TERMITE TREATMENT AGENCY	PEST CONTROL INDIA LTD, GODREJ PEST CONTROL, CAPITAL PEST CONTROL (INDIA)
8.	CHEMICAL TO BE USED FOR 20% E.C.ANTI-TERMITE TREATMENT	DE-NOCIL AND BAYER
9.	SHUTTERING PLY	GREENPLY SHUTTERING PLY, ARCHID SHUTTERING PLY, EURO SHUTTERING PLY
10.	SUPERPLASTICIZERS	MC BAUCHEMIE/FOSROC/SIKA/BASF/CHRYSO/VELOSIT/PIDILITE
11.	WHITE CEMENT	BIRLA WHITE, J.K. WHITE, TRAVANCORE
12.	AAC BLOCK	SHREE, INSTABLOCK, BILTECH, MAGICRETE, SIPROX, BIRLA AEROCON, J.K., CLAVECON INDIA PVT. LTD., J.K. LAKSHMI, B.G. SHIRKE/ INDO BHUTANCONSTRUCTION SOLUTION, ULTRATECH XTRALITE,
13.	BLOCK JOINTING MORTAR	JK LAKSHMI, BIRLA AEROCON SMARTFIX, MYK SCHOMBURG, ULTRATECH, FERROUSCRETE, ARDEX
14.	GLAZED CERAMIC TILES	RAK CERAMICS, SOMANY, KAJARIA, NITCO, ORIENT BELL, JOHNSON, ASIAN (AGL)
15.	VITRIFIED TILES	RAK CERAMICS, SOMANY, KAJARIA, ORIENT BELL, JOHNSON, ASIAN(AGL), RESTILE
16.	WALL PUTTY	JK WHITE, BIRLA WHITE, SARA PUTTY, STP LTD., SHALIMAR, ASIAN, BERGER, BIRLA AEROCON SMARTPUTTY, SAKARNI WALL GUARD

17.	PLASTER OF PARIS	JK LAKSHMI, SAKARNI, SHRIRAM, NIRMAN
18.	GYPSUM PLASTER	SAINT GOBAIN, SAKARNI, J.K. LAKSHMI
19.	ANCHOR PLUG SOIL/ ROCK ANCHOR	BBR, VSL, FREYSSINET
20.	PORCELAIN TILES	JOHNSON, ASIAN(AGL)
21.	CHEQUERED TILE	NITCO, ULTRA, UNISTNOE, MODERN
22.	CC PAVERS, PRECAST CC KERB STONE, CC TILES,RCC SLAB	NITCO, BHARAT, HINDUSTAN, ULTRA, KJS CONCRETE, DURACRETE, KK MANHOLE & COVERS, TERRA FIRMA, PAVER INDIA, DALAL, UNISTONE, CECO, S&S, MOON LIGHT, SWASTIK, ECOCRETE
23.	GRASS PAVER	UNISTONE, ULTRA, HINDUSTAN, KK. KJS
24.	SFRC/PRECAST C.C. COVERS	KK MANHOLE & COVERS, JAIN, PRAGATI, HINDUSTAN
25.	FLYASH BRICKS	POWER BRICK, YBW PROJECT, ASHTECH INDUSTRIES PVT. LTD.
26.	GLASS MOSAIC TILES	PALLADIO, CORAL, MRIDUL, BISAZZA, MMG TILES
27.	INSULATION FOR PIPE, RUBBER INSULATION	KAIFLEX, ARMAFLEX, CAREFLEX, VIDEOFLEX AFLEX
28.	COPPER TUBES/ PIPES	RAJCO, MEXFLOW, DELHI METAL, ABC
29.	READY MIX PLASTER	BIRLA AEROCON, ULTRATECH, RAMCO, WEBER, LATICRETE
30.	RAISED / CAVITY FLOORING	UNI FLOOR, UNITILE INDIA, TATE, ZTFLOOR, ACCESS FLOOR SYSTEMS
31.	DECK SHEET	JSW, TATA BLUESCOPE, INTERARCH, JSPL, ROOFCLAD
32.	SELF-DRILLING SCREWS	TW BUILDEX & BOUSTED, CORROSHIELD, ATUL FATERNERS LTD.
	CONSTRUCTION CHEMICALS	
1	WATERPROOFING COMPOUND	VELOSIT , FOSROC, PIDILITE, SIKA, SUNANDA SPECIALITY COATINGS, MYK SCHOMBERG, STP LTD, X-CALIBUR CONSTRUCTION SYSTEMS INC, SUPREME BITUCHEM INDIA PVT LTD, MC BAUCHEMIE, RACHTR CHEMICALS, CHOWGULE, FIRESTONE, ARDEX ENDURA
2	ADMIXTURES	FOSROC, SIKA, VELOSIT, CICO, BASF, STP LTD., SUNANDA SPECIALITY COATINGS, MYK SCHOMBURG, HEADWAY CHEMICALS INDIA PVT LTD, SUPREME BITUCHEM INDIA PVT. LTD, MC BAUCHEMIE, CHOWGULE, ARDEX ENDURA
3	TILE ADHESIVE	ARDEX ENDURA, LATICRETE, FOSROC, SUNANDA SPECIALITY COATINGS, MAGICRETE, VELOSIT, HEADWAY CHEMICALS INDIAPVT LTD, SUPREME BITUCHEM INDIA PVT LTD, RACHTR CHEMICALS, CHOWGULE, STP LTD.
4	GROUTING COMPOUND	ARDEX ENDURA, PIDILITE, LATICRETE, SUNANDA SPECIALITY COATINGS, FOSROC, CICO, STP LTD. VELOSIT, WEBBER, MYK SCHOMBURG, HEADWAY CHEMICALS INDIA PVT LTD, SUPREMEBITUCHEM INDIA PVT. LTD, RACHTR CHEMICALS, CHOWGULE, STP LTD.

5	EPOXY MORTAR	FOSROC, VELOSIT, SIKA, SUNANDA SPECIALITY COATINGS, CICO, HEADWAY CHEMICALS INDIA PVT LTD, SUPREME BITUCHEM INDIA PVT LTD, MYK SCHOMBURG, RACHTR CHEMICALS, CHOWGULE, STP LTD.
6	HIGH PERFORMANCE EPOXY BASED RESIN ANCHORSYSTEM	BASF, FOSROC, HILTI, SUNANDA SPECIALITY COATINGS, X CALIBUR CONSTRUCTION SYSTEMS INC, SUPREME BITUCHEMINDIA PVT LTD, RACHTR CHEMICALS, CHOWGULE, STP LTD.
7	POLYSULPHIDE / SILICON SEALANT	GE, DOW CORNING, PIDILITE, WACKER, SUNANDA SPECIALITY COATINGS, CONSTRUCTION PRODUCTS INDIA LTD, HEADWAY CHEMICALS INDIA PVT LTD, SUPREME BITUCHEM INDIA PVT. LTD, BENGAL BITUMEN, MYK SCHOMBURG, STP LTD.
8	SOLVENT BASED SILICONE REPELLENT COATING	PIDILITE, GE, MC BAUCHEMIE, WACKER, VELOSIT, SUNANDA SPECIALITY COATINGS, X CALIBUR CONSTRUCTION SYSTEMS INC, RACHTR CHEMICALS, CHOWGULE, MYK SCHOMBURG, STP LTD.
9	FLOOR HARDENER	PIDILITE, FOSROC, SIKA, MC BAUCHEMIE, VELOSIT, MYK SCHOMBURG, X CALIBUR CONSTRUCTION SYSTEMS INC, SUPREME BITUCHEM INDIA PVT LTD, RACHTR CHEMICALS, STP LTD., ARDEX ENDURA
10	FIRE RETARDANT PAINT	SUNANDA SPECIALITY COATINGS, AKZONOBEL, PROMAT
11	APP MEMBRANE WATERPROOFING	PIDILITE, SIKA, STP LTD., TEXSA BITUMAT CO. LTD., SUNANDASPECIALITY COATINGS, HEADWAY CHEMICALS INDIA PVT LTD, SUPREME BITUCHEM INDIA PVT LTD, BENGAL BITUMEN, CHOWGULE, MYK SCHOMBURG
12	A. INTEGRAL CRYSTALLINE ADMIXTURE FOR CONCRETE WATERPROOFING TREATMENT	VELOSIT, PENETRON, KRYTON, SUNANDA SPECIALITY COATINGS, X CALIBUR CONSTRUCTION SYSTEMS INC, MC BAUCHEMIE, CHOWGULE, MYK SCHOMBURG, STP LTD., ARDEX ENDURA
	B. CRYSTALLINE POWDER WATERPROOFING COATING	VELOSIT, PENETRON, KRYTON, SUNANDA SPECIALITY COATINGS, X CALIBUR CONSTRUCTION SYSTEMS INC, BENGAL BITUMEN, CHOWGULE, MYK SCHOMBURG, STP LTD., ARDEX ENDURA
13	ADHESIVES	FEVICOL, ANCHOR, DUNLOP, 3M, PIDILITE, SIKA, THERMOSHIELD, VAMORGANIC, MYK SCHOMBURG, VELOSIT, XCALIBUR CONSTRUCTION SYSTEMS INC, RACHTR CHEMICALS, CHOWGULE, STP LTD.
14	WEATHER SILICON SEALANT	WACKER, DOW CORNING, MCCOY, SOUDAL, SUNANDASPECIALITY COATINGS, RACHTR CHEMICALS, STP LTD.
15	BACKER ROD	SUPREME IND.LTD., SYSTRANS POLYMERS, RACHTR CHEMICALS

16	BITUMEN, CRMB-55, CRMB-60, PMB	INDIAN OIL, HINDUSTAN PETROLEUM, BHARAT, PETROLEUM, SWASTIK, SHIVA ASPHALT, OOMS PMR PVT LTD, BENGAL BITUMEN, STP LTD.
17	NON METALIC SURFACE HARDNER	FORSOC, SIKA, VELOSIT, MC BAUCHEMIE, SUNANDA SPECIALITY COATINGS, X CALIBUR CONSTRUCTION SYSTEMS INC, SUPREME BITUCHEM INDIA PVT LTD, MYK SCHOMBURG, RACHTR CHEMICALS, STP LTD.
18	SUNKEN PORTION / TERRACE WATERPROOFING CEMENTITIOUS TREATMENT	VELOSIT, FORSOC, SIKA, MC BAUCHEMIE, SUNANDA SPECIALITY COATINGS, X CALIBUR CONSTRUCTION SYSTEMS INC, SUPREME BITUCHEM INDIA PVT LTD, MYK SCHOMBURG, BENGAL BITUMEN, CHOWGULE, FIRESTONE, STP LTD.
19	PVDF COATING	RADIANT, ANODIZERS, AKZONOBLE, VALSPAR
20	CURING COMPOUND	FORSOC, VELOSIT, SUNANDA SPECIALITY COATINGS, SIKA, BASF, MC BAUCHEMIE, SUPREME BITUCHEM INDIA PVT LTD, MYK SCHOMBURG, RACHTR CHEMICALS, STP LTD., ARDEX ENDURA
21	ACCESS FLOOR SYSTEM	KEBAO, COMFLOOR, M-FLOOR, MC BAUCHEMIE
22	PVC WATER STOPS	FOXOPAM, MARUTI RUBBER, VELOSIT, X CALIBUR CONSTRUCTION SYSTEMS INC.
23	CORROSION INHIBITING ADMIXTURE (ASTM G1, ASTM G3, ASTM G 109)	SUNANDA SPECIALITY COATINGS, BASF, FOSROC, SIKA, MYK SCHOMBURG, VELOSIT, STP LTD.
24	LIQUID APPLIED MODIFIED PU WATERPROOFING MEMBRANE FOR BRIDGE DECK WATERPROOFING / TERRACE WATERPROOFING	VELOSIT, SUNANDA SPECIALITY COATINGS, BASF, X CALIBUR CONSTRUCTION SYSTEMS INC, BENGAL BITUMEN, CHOWGULE, MYK SCHOMBURG, FIRESTONE, STP LTD., ARDEX ENDURA
25	ANTICARBONATION COATINGS	SUNANDA SPECIALITY COATINGS, VELOSIT, BASF, FOSROC, ICI LTD, HEADWAY CHEMICALS INDIA PVT LTD, SUPREME BITUCHEM INDIA PVT LTD, MC BAUCHEMIE, CHOWGULE, ICI LTD, NEROLAC, BERGER, ASIAN PAINTS, MYK SCHOMBURG, STP LTD., ARDEX ENDURA
26	FOOD GRADE EPOXY COATING	SUNANDA SPECIALITY COATINGS, SIKA, BASF, VELOSIT, X CALIBUR CONSTRUCTION SYSTEMS INC, RACHTR CHEMICALS, CHOWGULE, MYK SCHOMBURG, STP LTD., ARDEX ENDURA
27	EPOXY FLOORING	SUNANDA SPECIALITY COATINGS, SIKA, BASF, RACHTR CHEMICALS, CHOWGULE, MYK SCHOMBURG, STP LTD., ARDEX ENDURA
28	PU FLOORING	SUNANDA SPECIALITY COATINGS, SIKA, BASF, VELOSIT, X CALIBUR CONSTRUCTION SYSTEMS INC, RACHTR CHEMICALS, CHOWGULE, MYK SCHOMBURG, STP LTD., ARDEX ENDURA
29	INTUMESCENT FIRE COATINGS FOR STEEL STRUCTURE	SUKRI, NEWCHEM, SAPC INDIA, PROMAT, AKZO NOBEL, FSI LTD,

30	PU COATINGS FOR STRUCTURAL STEEL	SUNANDA SPECIALITY COATINGS, SIKA, VELOSIT, X CALIBUR CONSTRUCTION SYSTEMS INC, CHOWGULE, STP LTD
31	EPOXY COATINGS FOR STRUCTURAL STEEL	SUNANDA SPECIALITY COATINGS, SIKA, X CALIBUR CONSTRUCTION SYSTEMS INC, RACHTR CHEMICALS, STP LTD.
32	EPDM & SILICON GASKET	HANU, ANAND, RAVEN, ZERO, ROOP, LESCUYER, BENGAL BITUMEN, AMEE RUBBER, OSAKA, ELTECH, AVIGIRI
	PAINTS	
1	WATER-PROOFING CEMENT PAINT	ASIAN, ICI LTD, BERGER, NEROLAC, SNOWCEM, RACHTR CHEMICALS, CHOWGULE, STP LTD
2	TEXTURED EXTERIOR PAINT	ASIAN, BERGER, NEROLAC, SUNANDA SPECIALITY COATINGS, ICI, CHOWGULE, STP LTD
3	SYNTHETIC ENAMEL PAINT	ASIAN, ICI LTD, BERGER, NEROLAC
4	PLASTIC/ACRYLIC EMULSION PAINT	ASIAN, ICI LTD, BERGER, NEROLAC, SUNANDA SPECIALITY COATINGS, MYK SCHOMBURG, STP LTD
5	OIL BOUND DISTEMPER/ACRYLIC DISMTEMPER	ASIAN, ICI LTD, BERGER, NEROLAC,
6	CEMENT PRIMER	ASIAN, ICI LTD, BERGER, NEROLAC, SNOWCEM INDIA LTD.
7	PREMIUM ACRYLIC SMOOTH EXTERIOR PAINT EMULSION	BERGER, ASIAN, SUNANDA SPECIALITY COATINGS, NEROLAC, ICILT D
8	STEEL/ WOOD PRIMER	ASIAN, ICI LTD, BERGER, NEROLAC,
9	EPOXY PAINT	ASIAN, ICI LTD, BERGER, NEROLAC, SNOWCEM INDIA LTD, SUNANDA SPECIALITY COATINGS, RACHTR CHEMICALS
10	WOOD FINISH (MELAMINE & PU POLISH)	ASIAN, ICI LTD, BERGER, NEROLAC, PIDILITE, WEMBLEY, STP LTD.
11	THERMOPLASTIC PAINTS	ASIAN PAINTS, BERGER, RELIANCE THERMOPLAST, S.N. IND. OSCAR, AUTOMARK (INDIA) INDUSTRIES LTD, STP LTD
12	ROAD MARKING PAINT	NEROLAC, ASIAN, SHALIMAR, BERGER, STP LTD.
13	VACUUM DEWATERING SYSTEM	SWITECH INDIA PVT LTD, TREMIX FLOORING,
	WOOD WORK	
1	PLY BOARD, PLYWOOD	GREEN PLY/ GREEN PANEL, DURO, CENTURY, ARCHID, MERINO, NATIONAL, KITLAM
2	LAMINATE	ARCHID, MERINO, GREEN, CENTURY, KITLAM, FORMICA, NATIONAL
3	VENEER PLY, NATURAL WOOD VENEERS	MERINO, GREEN LAM, DURO, CENTURY, SONEAR, TRU-WOOD, MAYUR, ARCHID, KITLAM
4	PRELAMINATED PARTICLE BOARD	CENTURY, KITLAM, MERINO, ACTION TESA, ARCHID, NATIONAL, ECOBOARD, ANCHOR, BHUTAN BOARD, GREEN LAM
5	FLUSH DOOR	CENTURY, ARCHID, MERINO, KITLAM, NATIONAL, SWASTIK, CORBETT, KUTTY FLUSH DOOR, DURO, GREEN

6	GYPSUM BOARD	LAFARGE, SAINT GOBAIN GYPROC INDIA PVT. LTD, USG BORAL, AMF
7	LOCKS, LETCH	GODREJ, HARRISON, PLAZA, YALE, HETTICH, HARDWYN, DORMA
8	FRICTION STAY HINGES, BALL BEARING HINGES & SPRING HINGES	EARL-BIHARI, EBCO, GODREJ, DORMA, HAFELE, GEZE
9	NUTS, BOLTS & SCREWS	GKW, KUNDAN, PRIYA, ATUL, PUJA
10	DASH, ANCHORING FASTENERS & CRAMP	HILTI, FISCHER, TRIXEL FROM AXELINDIA, CANON, BOSCH
11	MDF/HDF BOARD	NIJWOOD, DURATUFE BAJAJ, MERINO, CENTURY, GREENPANEL
12	FRAME SYSTEM FOR INTERNAL PARTITION	SAINT GOBAIN GYPROC INDIA PVT. LTD, GYPROC, USG BORAL, AMF
13	WALL PAPER	ROSELLE, EGOWALL PAPERES VESCOM
14	ACOUSTIC MINERAL FIBRE CEILING AND GRIDSYSTEM	USG BORAL, AMF, ARMSTRONG
15	THERMAL INSULATION BOARDS	U.P TWIGA FIBERGLASS LTD, LLOYD, ROCKWOOL INDIA, TWIGAINSLATING INDIA
16	PREMIXED FORMULATED GYPSUM LIGHTWEIGHTPLASTER	ELITE-90 - GYPROC GOBAIN, FERRO - 700 GYPSUM PLASTER - FERROUS CRETE, RED TOP - USG BORAL BUILDING PRODUCTS (I) PRIVATE LIMITED,
17	IPE WOOD PANELS	TIMBER TRENDZ, KBJ INTERIORS, GRID FLOORS PVT LTD
18	PU POLISH FOR WOOD WORKS	ICA, ASIAN PAINTS, DULUX
19	TOILET CUBICLES	GREENLAM, MERINO, CENTURY
	ALUMINIUM, STEEL, FALSE CEILING, ROOF AND GLASS WORK	
1.	STAINLESS STEEL HARDWARE FITTINGS (HEAVYDUTY)	DORMA, OZONE, GODREJ, GEZE, HAFELE, BLUM, DORSET,PERGO
2.	ALUMINIUM SECTIONS FOR DOORS, WINDOWS&PARTITIONS ETC.	JINDAL , HINDALCO, INDALCO, NALCO, BHORUKA, INDAL,
3.	ALUMINUM SHEET	NOVELIS, EURAMAX
4.	ANODISED/POWDER COATED ALUMINIUM HARDWARE (HEAVY DUTY)	NU-LITE, SARGENT, EVERITE, GODREJ, HARDIMA, HARDWARE,CLASSIC,ALKA, JINDAL, PULSE
5.	CLEAR/FLOAT/ FROSTED GLASS	MODI, SAINT GOBAIN, ASAHI, PILKINGTON, GOLD PLUS,GLAVERBEL (BELGIUM)
6.	FIRE RETARDANT ALUMINIUM COMPOSITE PANEL	ALSTRONG, REYNOBOND, ALPOLIC, ALUDECOR, ALUCOBOND, ALSTONE, CROSS BOND, ALUBOND DACS
7.	STAINLESS STEEL SECTION	JINDAL, KICH, ESSAR, NSTYLE-D-LINE, FABRINOX, SALES STEEL, DORMA, GEZE, OZONE
8.	HIGH PERFORMANCE SOLAR TOUGHENED GLASS	SAINT GOBAIN, ASAHI, PILKINGTON
9.	REFLECTIVE GLASS/LACQUE RED GLASS	SAINT GOBAIN , ASAHI, PILKINGTON, GLAVERBEL (BELGIUM),MODIGUARD, ATUL
10.	FALSE CEILING- GYPSUM	SAINT GOBAIN GYPROC INDIA PVT. LTD., LAFARGE, GYROC/BORAL
11.	FALSE CEILING- METAL WITH SUPPORTING GRID	SAINT GOBAIN, ARMSTRONG, DEXUNE, USG BORAL, ECOPHONE,DECOSONIC, DAIKEN, UNI-MAT

12.	ACOUSTICAL FALSE CEILING SYSTEM	ARMSTRONG, AMF, USG BORAL, SAINT GOBAIN, KNAUF DANOLINE
13.	AXIOMS	ARMSTRONG, AMF, USG BORAL, SAINT GOBAIN
14.	METAL MODULAR FALSE CEILING SYSTEM	ARMSTRONG, HUNTER DOUGLAS, TECHNO ACOUSTICS
15.	WOODEN METAL BAFFLE CEILING SYSTEM	ARMSTRONG, HUNTER DOUGLAS, TECHNO ACOUSTICS, DURLUM
16.	CALCIUM SILICATE FALSE CEILING SYSTEM	RAMCO HILUX, AEROLITE
17.	FIRE RATED GLASS/ HARDWARE	ST. GOBAIN, PILKINGTON, SCHOTT, SUKRITI
18.	TWO HOUR FIRE RATED METAL GLASS DOOR/HARDWARE	ST. GOBAIN, PILKINGTON, SCHOTT, SUKRITI
19.	UPVC WINDOW/DOORS	FENESTA, REHAU, ALUPLAST, PRIZMA, DUROPLAST, WINTECH, VEKA INDIA, KOMMERLING, APARNA PROFILES PVT LTD (OKOTECH)
20.	FIRE DOOR/HARDWARE	GODREJ, SHAKTI, NAVAIR, SUKRITI, PROMAT, KUTTY DOOR, BECKER FIRE SOLUTION
21.	PVC DOORS	RAJSHREE, FINOLEX PLASTICS, E-PLANTA, POLYLINE, DUROPLAST, SINTEX, FIBREWAYS, JAYNA
22.	FRP DOOR	FIBREWAYS, ASHOO MODEL ARTS, NAVIER, SUKARI PROMAT, KUTTY, JINDAL STAINLESS, BHATT FIBREWAYS, JAYNA, SELECTED
23.	FACTORY MADE SECTION WINDOW	(I) M/S UNITED ENGG. WORKS, RAM NAGAR (II) M/S METAL WINDOW CORP. ROHTAK (III) M/S SKS STEEL INDUSTRIES PIRGARHI (IV) ANY OTHER ISI MARKED FACTORY MADE (V) JANGID ENGINEERING WORKS (JAIPUR)
24.	PUFF INSULATED PANEL	LLOYD INSULATION, JINDAL, METECNO, SYNERGY, ROOFCLAD
25.	ANTI STATIC HIGH PRESSURE LAMINATE	FORMICA, MERINO, ANALCO, CENTURY, BAKELITE HYLAM, DECOLAM, SUNMICA (AICA)
26.	MIRROR	SAINT GOBAIN, MODIGUARD, AIS, ATUL, GOLDEN, PILKINGTON
27.	ROCKWOOL/GLASSWOOL INSULATION	TWIGAFIBER, LLOYD INSULATION, SUPREME, SIPLA, UNIFEB
28.	FRAME SYSTEM FOR INTERNAL	SAINT GOBAIN GYPROC, BOROL, AMS
29.	WIRE MESH	HAYER STANDARD, GRAND METAL, STRELING, TRIMURTYWELDED MESH, TIGER
30.	HYDRAULIC DOOR CLOSURE/FLOOR SPRING	HARDWYN, GODREJ, YALE, EVERITE, DOORKING, KELWIN, DORMA HAFELE, GEZE, DORSET, BECKER FIRE SOLUTION
31.	S.S. RAILING	JINDAL, ICICH, ESSAL, DORMA, CONNECT ARCHT., FABRINOX, STEEL N STYLE
32.	G.I. SHEET	SAIL, TATA, JINDAL, ISPAT, ROOFCLAD
33.	FIBRE GLASS SHEET	SIMCRYL(SIMBA), FIBREWAYS, ADVANCE FIBRE, ROOFCLAD

34.	ROLLING SHUTTER	RAMA ROLLING SHUTTER, JYOTI ROLLING SHUTTER, ANANDINDST. SHRI RAM ROLLING SHUTTER
35.	M.S. DOOR, FITTINGS	ASHISH, OFFORD, GRAG, ADARSH
36.	SMOKE SEAL STRIP	IMPORTED PROMAT, ASTRO FLAME
37.	DOOR CLOSE LOCK	INGEROLL RAND, DORMA, DORSET, BECKER FIRE SOLUTION
38.	PANIC EXIT DEVICE	INGEROLL RAND, MONARCH, BECKER FIRE SOLUTION
39.	DOOR COORDINATOR	UL-LISTED, MONARCH
40.	TEMPERED GLASS	MODIFLOAT, SAINT GOBAIN, ASAHI, GLAVERBEL
41.	DOORS & WINDOW FIXTURE	EVERITE, GODREJ, HARDIMA, HARDWARE, KLASSIC, ALKA, JINDAL
42.	METAL FIRE CHECK DOORS	NAVAIR, SHAKTI-MET, GODREJ
43.	STEEL WINDOW	(I) M/S UNITED ENGG. WORKS, RAM NAGAR (II) M/S METAL WINDOW CORP ROHTAK (III) M/S SKS STEEL INDUSTRIES PIRGARHI (IV) ANY OTHER ISI MARKED FACTORY MADE (V) JANGID ENGINEERING WORKS (JAIPUR)
44.	MS PRECOATED ROOFING SHEET	TATA BLUESCOPE, INTERRARCH MULTICOLOR STEEL, LLYODSTEEL, ISPAT STEEL, ROOFCLAD, FIBREWAYS, JSW
45.	FIBRE CEMENT BOARD (FLEX-O-BOARD)	HYDERABAD INDUSTRY LTD., VISHAKHA, EVEREST INDUSTRYLTD., JAMES HARDIE, SHERA
46.	LGSF FRAME	TATA BLUE SCOPE, J.S.W, ESSAR, ISPAT STEEL
47.	FABRICATORS FOR ALUMINIUM GLAZING, STRUCTURAL GLAZING, ALUMINIUM DOOR & WINDOWS, ACP WORK.	ALUMAX, WINDORZ INDIA PVT. LTD, JANGID ENGINEERINGWORKS (JAIPUR)
48.	STAINLESS STEEL FABRICATORS	VETERAN INDUSTRIES (INDIA), KANZ, D LINE, EARL BEHARI, ANAND
49.	GALVANISING	JENCO/STEEL LINE, LITE, KARAMTARA
50.	LAMINATE FLOORING	ARMSTRONG, PERGO, FLORENCE, ACTION TESA
51.	PVC FLOORING & VINYL WALL	ARMSTRONG, FORBO, GERELOR, INPROCORP
52.	WELDING ELECTRODE	RAAJRATNA ELECTRODES, ESAB INDIA, ADORE WELD LTD, HONAVAR ELECTRODE
53.	GLASS DOOR FITTINGS	DORSET, OZONE, HARDWYN, DORMA, HETTICH
54.	PVB OR SGP LAMINATION	DUPONT KURARRAY, SOLUTIA
55.	SPACER TAPE (OPEN PU CELL)	NORTON, TREMCO, BOW
56.	SPANDREL INSULATION	U.P TWIGA FIBERGLASS LTD, LLOYD, ROCKWOOL INDIA, TWIGA INSULATING INDIA
57.	ROCK WOOL (FIRE STOP)	ROCKWOOL INDIA, ROXUL ROCKWOOL.
58.	SMOKE SEAL INTUMUSCENT	HILTI, SIKA
59.	SMOKE SEAL SEALANT	HILTI, SIKA, DOW CORNING
60.	REVOLVING DOORS	DORMA, GEZE, KONE, BOONEDAM
61.	GLASS RAILING	Q RAIL, NEKI, KICH, FAÇADE ONE, ALLY DZINE SERVICES PVT. LTD
62.	CASEMENT WINDOW HINGES	GIESSE, ALUALPHA, LAVAL, SAVIO

63.	SS FRICTION HINGES	GIESSE, COTSWOLD, SECURISTYLE
64.	MULTIPOINT LOCKING SETS	GIESSE, ALUALPHA, LAVAL, SAVIO
65.	FLUSH LOCK FOR SLIDING'S	GIESSE, LAVAL, SOTRALU, ROTO, SAVIO
66.	ROLLERS FOR SLIDING'S WINDOWS / DOORS	GIESSE, LAVAL, SOTRALU, ROTO, SAVIO
67.	GLASS REINFORCE FIBRE CONCRETE MANUFACTURES AND INSTALLERS	SHENISHA CORPORATION, ARK INTERIOR AND CONSTRUCTION SOLUTIONS, YOGI GRC PRODUCTS PVT LTD
68.	FAÇADE CLEANING SYSTEM	CRADLE RUNWAYS INDIA PVT. LTD, APPLETREE
69.	GYPSUM PARTITION SYSTEM	SAINT GOBAIN GYPROC, USG BORAL
70.	INSULATION	U.P TWIGA FIBERGLASS LTD, LLOYD, ROCKWOOL INDIA
71.	MODULAR GLASS INTERIOR PARTITION SYSTEM	JEB, OTIC PARTITION, KUBIK, CETTERIO, DAMIAN
72.	TOUGHENED GLASS FOR PARTITIONS	SAINT GOBAIN, ASAHI INDIA GLASS, SCHOTT
73.	2HR FIRE RATED GLASS AND PARTITION SYSTEM	VETROTECH SAINT GOBAIN, SCHOTT TGS FIRE-RATED GLASS
74.	FIRE COATING FOR STEEL STRUCTURE	SUKRI. NEWCHEM
75.	WOODEN DOOR FRAME (FACTORY MADE)	KUTTY, DS DOOR, JAYNA, GOYALA INDUSTRIAL, GREEN
	WATER SUPPLY AND SANITARY WORKS	
1	FIRECLAY SINKS & DRAIN BOARDS	PARRY, SANFIRE
2	G.I. FITTING (MALLAEBLE CAST IRON)	UNIK, ICS, AMCO, KS, NVR
3	C.I. DOUBLE FLANGED NON-RETURN VALVES	KIRLOSKAR, SANT, KARTAR
4	PTMT FITTINGS	PRYAG, POLYTUF
5	KITCHEN LOFT TANK	SINTEX, TIRUPATI, KMS, PLANET, SRI KAMAKSHI, SREYAH NOVEL
6	PLASTIC SEAT COVER	HINDWARE, CERA, PARRYWARE, KOHLER, NYCER, JOHNSON PEDDAR, JAQUAR, ESSCO
7	PVC CISTERN	HINDWARE, CERA, PARRYWARE, KOHLER, NYCER, JOHNSON PEDDAR, JAQUAR, ESSCO
8	C.I. MANHOLES COVERS	BIC, KAPILANSH DHATU UDHYOG, NEECO, RIF, BCM,SKF, HIF
9	BRASS STOP & BIB COCK	ZOLOT, SANT, L&K, JAQUAR, ESSCO
10	BRASS BALL VALVE WITH FLOATS	ZOLOTO, LEADER, SANT
11	SS HINGED GRATING	GMGR, NEER, CHILLY
12	SANITARY ACCESSORIES	JAQUAR, KIMBERLY, CLARKE, DLINE, EURONICS, CARL-F, KOHLERSNEARLING, KEROVIT, PARKO, KINGSTON, PARK, PRAYAG, HINDWARE, ESSCO
13	BACK UP ROD	SUPREME INDUSTRIES
14	MASKING TAPES	SUNCONTROL, WONDER POLYMER
15	TREATMENT ON MS BRACKETS	GALVANISED BRACKETS AS PER IS :4759-1996,610
16	PVC CONTINUOUS FILLET FOR PERIPHERY PACKINGOF GLAZING CURTAIN WALL	ROOP, ANAND, FOREX PLASTIC
17	C.P. ACCESSORIES	GEM, PARKO, KINGSTON, HINDWARE, CERA, JAQUAR, ESSCO,
18	MOISTURE RESISTANT BOARD	ST-GOBAIN, GYPROC, USG BORAL,
19	STAINLESS STEEL MESH	GKD/WMW
20	FLOOR TRAP	JAINA, CHILLY, NIRALE

21	VITREOUS CHINA SANITARYWARE AND FITTINGS	HINDWARE, CERA, PARRYWARE, KOHLER, NYCEER, JOHNSONPEDDAR, SOMANY, JAQUAR, ESSCO
22	STAINLESS STEEL SINKS	NEELKANTH, JAYNA, FRANKE, ANUPAM, NIRALI, COBRA, ALEX, JAYNA, AMC, PRAYAG, CERA, KINGSTONE
23	C.P. BRASS FITTINGS	JAQUAR, SOMANY, PARRYWARE, GROHE, KOHLER, GEM, PARKO, KINGSTON, PARK, PRAYAG, HINDWARE, JOHNSON, ESSCO
24	CENTRIFUGALLY CAST (SPUN) IRON PIPES & FITTINGS	NECO, RIF, SKF, ACL, HEPSCO, MARC, GEM, BIC, HIF, JAISWAL, BC
25	CENTRIFUGALLY CAST (SPUN) IRON PIPES (CLASS LA)	RIF, NECO, SKF, ACL, HIF
26	CPVC PIPES & FITTINGS	ASTRAL, PRINCE, SUPREME, FINOLEX, PRAKASH, AJAY, ASHIRWAD, BIRLA AEROCON, KISAN, APL APOLLO
27	G. I. PIPES	TATA, JINDAL (HISSAR), ZENITH, PRAKASH SURYA, G.S.T., KALINGA,
28	G. I. FITTINGS	UNIK, ZOLOTO, KS, ICS, R, K.S, NVR, JINDAL, R BRAND, AMCO
29	UPVC PIPES & FITTINGS	ASTRAL, PRINCE, SUPREME, FINOLEX, PRAKASH, AJAY, ASHIRWAD, BIRLA AEROCON, KISAN, APL APOLLO
30	GUNMETAL VALVES	LEADER, SANT, ZOLOTO, KIRLOSKAR, CASTLE, KARTAR, KILBURN
31	BALL VALVES	LEADER, SANT, ZOLOTO, CASTLE, IBP, ARCO
32	BUTTERFLY VALVES	LEADER, SANT, ZOLOTO
33	C.I. SLUICE VALVES	KIRLOSKAR, IVC, BURN
34	SFRC MANHOLE COVER	KK, JAIN, PRAGATI, BIC, KAPILANSH DHATU UDHYOG, NECO, RIF, BCM, S.S. & CO.
35	RCC PIPES	JAIN, PRAGATI, KK, LAKSHMI, SOOD & SOOD, JAIN & CO., USHA, DIWAN SPUN PIPE,
36	LA (CI) PIPES	RIF, NEECO, ELECTRO STEEL, IISCO, NEECO, KAPLANSH
37	PPR PIPES	SFMC, SAFE, PIONEER INDST., SUPREME, RELIANCE
38	DUCTILE IRON PIPE (WATER SUPPLY)	ELECTRO STEEL, KESSO, KDUPL, ELECTRO SPUN
39	SEWERAGE & DRAINAGE PUMPS	KIRLOSKAR, KSB, CROMPTON GREARES
40	HDPE PIPES & FITTINGS	JAIN, ORIPLAST, KISAN
41	G.I. PIPE JOINTING MATERIALS	LOCTITE 55/DR. FIXIT, MC BAUCHEMIE
42	STONWARE PIPES AND GULLY TRAPS	PERFECT, BURN, ANAND, PARRY, SKINS GROHE, HIND
43	WATER PUMPS	KIRLOSKAR, KSB, HARRISON
44	ELECTRICAL MOTORS	SIEMENS, KIRLOSKAR, NGEF
45	PVC WATER TANK	SFMC/SINTEX/SPL, UNITEK, SHEETAL, POLYCON ELECTRO PLAST, STAR, LOTUS
46	SEWAGE WATER/RAIN WATER PIPES	ASTRAL, PRINCE, SUPREME, FINOLEX, PRAKASH, AJAY, ASHIRWAD, BIRLA AEROCON, KISAN
47	FIRE FIGHTING PIPES	JINDAL, TATA, APL APOLLO, PRAKASH SURYA

STONE AND OTHER WORKS		
1	CLAMP SYSTEM FOR DRYSTONE CLADDING	HILTI, FISCHER, BOSCH, TRIXEL FROM AXEL INDIA
2	FRP CHAJJA, SHEET & DOORS, FRP SHUTTERS, RAILINGS, COVERS	FIBREWAYS, ASHOO MODEL ARTS, NAVIER, SUKARI PROMAT, KUTTY, JINDAL STAINLESS, BHATT FIBREWAYS
3	GRC/FRP SCREENS/RAILING/JALI/CORNICES/STATUES/PANELS/MOULDING	TERRA FIRMA, JINDAL STAINLESS
4	POLY CARBONATE SHEET	SABIC LEXAN, BAYER, COXABELL, ROOFCLAD, MNF METALS
5	STONE SEALER	AQUA MIX SEALER FROM CHOICE GOLD, LATECRETE, ARDEX ENDURA, KERAKOLL, FOSROC
MISCELLANEOUS ITEMS		
1	SIGNAGES	PROLITE, GLOLITE, VISTA
2	MODULAR FURNITURE ITEMS	GODREJ, HERMANMILLER, STEELCASE, DELLFORM, VITRA

Note: The materials not covered in above list of approved make of materials shall be ISI Mark and / or approved by Engineer-in-charge.

LIST OF ELECTRICAL MATERIALS OF APPROVED MAKES

The materials of first / standard quality from the following approved makes, or as specified in the particular item of work in the schedule of quantity are to be used. In case it is established that the brands specified below are not available in the market, the contractor shall submit alternative proposal for the approval of the Engineer-in-Charge.

S. No.	Description	Approved manufacturer/Brand name
1.	M.S. Conduit	- B.E.C./ A.K.G./ Steelcraft/ N.I.C.
2.	PVC Insulated Copper Conductor Wire	- Finolex / Havells / Polycab / Skytone / RR Kable.
3.	PVC Insulated Al./Copper Conductor Armoured Cable / Control Cables	- Finolex / Havells / Polycab / RR Kable / Legrand
4.	Piano Type Switch, Socket	- Anchor/ Cona/ SSK / Havell's
5.	Phenolic Laminated Sheet	- Super Hylam/ Anchor / Formica
6.	Power Contactors / Starters	- L & T / Siemens/ GE/ Crompton Greaves/ Havell's/ HPL
7.	Timers	- L & T / Siemens/ GE/ Havell's / HPL
8.	MCB/Isolator/ RCCB	- Havell's/Standard/ Legrand / ABB / L & T / Crompton Greaves
09.	Indicating Light	- Vaishno/L & T /AE
10.	Lighting Fixtures with accessories/ (Except Pole Lighting Fixtures)	- Bajaj / Crompton Greaves / Havells / Philips / Wipro / Electrocine
11.	MCB DB	- Havell's /Standard / Legrand /ABB /GE / Siemens / L & T / Crompton Greaves
12.	Thimbles/ Lugs & Glands	- Jonson / Dowell's / Action/ Comet/ Polycab/ Schneider
13.	Fuse Switch Units	- L&T / Siemens / GE / Havell's
14.	Changeover Switch	- HH-ELCON / HPL / L & T/ Havell's / GE
15.	Telephone Wire/ Cable	- Delton / National / Plaza / Havells / CCI / Polycab
16.	Flat Submersible Cable	- Plaza / Finolex / Havell's / Delton
17.	Ceiling Fan/Wall Fan/Exhaust Fan	- Bajaj / Khaitan / Crompton Greaves / Orient / USHA / Almonard
18.	Motor & Pumps	- Kirloskar / Crompton Greaves / KSB / GE / Alstom
19.	Poles & Its Lighting Fixtures	- Wipro / Philips / Bajaj / Crompton Greaves / Electrocine / Polycab / GE
20.	Active Components Switches (for Networking)	- CISCO/ HP / Netgear / Delink
21.	Passive Components Cables & Accessories (for Networking)	- Avaya / AMP / PC Net / Delink

- | | |
|---|--|
| 22. Window / Split / Cassette type A. C. | - Blue Star/ Daikin/ Toshiba/ Mitsubishi/ O' General/ Hitachi/ Voltas. |
| 23. Pole Boxes | - Sintex / Hensel / Havells / Stenlac |
| 24. Cable Joint (Heat Shrinkable) | - Raychem /Denson / M-Seal |
| 25. Modular Switch, Socket, Fan regulator
GI Box | - Crabtree / MK / Legrand / C & S/ North-West |
| 26. Heat & Smoke Detectors | - Apollo / System sensor / Edward |
| 27. P.T. | - BHEL / CROMPTON / AREVA |
| 28. GI / CI Valves | - Kirloskar / Sant / Zoloto |
| 29. Pressure Gauge | - FIEBIG / H Guru |
| 30. Pressure Switch | - Indofos / Switzer |
| 31. PVC Conduit | - BEC / AKG / PLAZA / NIC |
| 32. PVC Insulation Tape | - Dollar / PLAZA / Kinjal |
| 33. Electronic Choke | - Havells / Crompton Greaves / Osram / Electrocine / Bajaj. |
| 34. Lamps of all Types | - Havells / GE/ Osram / Crompton Greaves / Surya Roshani |
| 35. G. I. Pipe | - Jindal (Hissar) / Surya / Prakash / Tata |
| 36. MCCB | - Siemens / L & T/ ABB/ C&S(Gold Star)/ Crompton Greaves/ Havell's / Schnieder/ Legrand |
| 37. Current Transformer | - Kappa/ AE / Siemens / Crompton / Matrix |
| 38. Digital type Voltmeter / Ammeter | - Syntron / AE / konzerv / Rishab / Siemens / L & T / HPL |
| 39. Selector Switches | - Daspas/ AE /konzerv / Rishab/Syntron / Siemens / L & T / HPL / Kaycee / SALZER |
| 40. End termination cable glands | - Comet / Dowells / Action / Johnson |
| 41. Aluminium Lugs | - Comet / Dowells / Action / Johnson |
| 42. MS Cable trays | - SECO / venus / Durga / Murphy |
| 43. Transformer (Dry Type) | - BHEL / Kirloskar / Crompton Greaves / Alstom |
| 44. Air Circuit Breaker | - L&T/ ABB/ Siemens / Telemechanique (Control & Switchgear) |
| 45. Protective Relays | - Alstom / S.E.G.C. / ABB / BCH/ GE / L&T/ Siemens/ Havells / HPL |
| 46. Capacitors | - EPCOS / USHA / Asean / Shakti / Domain/ L & T. |
| 47. L.T. Panels / Capacitor Panels | - Milestones / ADLEC / SPC / Advance / Amptech / C & S / ASPL (Associated Switchgears & Projects Ltd.) / AVON/ Neptune / Maheshwari / AVM/ Schneider/ L & T. |

- | | |
|--|---|
| 48. Control MCB | - Havells / Standard / Schneider / ABB / L & T /
Legrand / Crompton |
| 49. Engine for DG Set | - Cummins / Caterpillar / Koel Green |
| 50. Alternator | - Cummins / Caterpillar / Koel Green |
| 51. M. S. Pipes | - Tata / Jindal Hissar / Prakash |
| 52. Anti Vibration mountings | - Dunlop or as per manufacturer's standard. |
| 53. Batteries | - Exide / Panasonic / Quanta / Rocket / Okaya. |
| 54. Changeover Switch (On-line) | - HH - Elcon / HPL / L&T |
| 55. AMF Panel | - As per manufacturer's standard |
| 56. High Masts | - Philips / Bajaj / Crompton Greaves / Volmont / PE
/ Utkarsh. |
| 57. Decorative Umbrella of the High Mast | - Any of the makes of high masts or any other make
in the open market as per specifications. |
| 58. LED Fittings | - Philips / GE/ Havells / C & S / Bajaj/ Halonix |
| 59. UPS | - ABB GE/ Toshiba Mitsubishi/APC Schneider / Vertiv /
Delta / Eaton/ Numeric Legrand/ Socomec/ Pegasus
(AAL)/ Riello/ Consul Neowatt (Fuji Electric). |
| 60. Switches and Switchgears | - Legrand / Schneider / ABB / L &T. |
| 61. VRV / VRF AC | - Blue Star/ Daikin/ Toshiba/ Mitsubishi/ O' General |
| 62. Refrigerant Piping | - Totaline/ Jindal Refrigeration/ Mandev/ Maxflow |
| 63. Refrigerant Piping Insulation | - Supreme/ Armaflex/ Armacell/ Superlone/ Paramount/ Kflex/
Twiga. |
| 64. Condensate Drain Pipe | - Polycab/ Supreme/ Prince/ Finolex/ Polypack/ Astral. |

LIST OF APPROVED MAKES FOR AUDIO VIDEO SYSTEM		
SL. NO.	DESCRIPTION	MAKES
1	Ultra Short Throw Projector	Panasonic / Christie /NEC/Barco
2	Projector mounting kit	Customized
3	Motorized Projection Screen	Draper / Da-lite / Milan
4	Digital Podium	UNI / AHA / ILS / Tecomm
5	4K Portable Document Camera	Lumens / Elmo / Wolfvision
6	Tracking Camera	Lumens/ Sony/ Vaddio
7	HDMI to USB Converter with HDMI	Cypress / Inogeni / Magewell/Extron
8	HDMI cables	Extron / Falcon / Belden /Klotz
9	Digital Matrix Switcher	Extron / AMX / Lightware
10	Smart room control system	Extron / AMX / Lightware
11	Recorder with minimum 1TB HDD Storage	Extron / Lumens /Atnet
12	4 port relay	AMX / Extron / Milestone
13	8-Port Ethernet Switch	Dlink / Netgear / Cisco
	Audio System	
14	Condenser gooseneck microphone	AudioTechnica / Beyerdynamic /Shure
15	Wireless handheld Microphone System	AudioTechnica / Beyerdynamic / Mipro
16	Wireless Lapel Microphone System	AudioTechnica / Beyerdynamic / Mipro
17	Audio digital Signal processor	Music Tribe / Bose / Biamp
18	Power amplifiers	Music Tribe / Bose / Powersoft
19	Wall Mount Speaker	Music Tribe / Bose / Martin Audio
20	AV Rack	WQ / Valrack / MiddleAtlantic
21	Shielded twisted pair cable, HDMI patch cords, USB Cable, audio cable, speaker cable etc. With Neutrik / Amphenol connectors	Extron / Falcon / Belden /Klotz

ADDITIONAL SPECIFICATIONS (CIVIL WORK)

1. In case of any difference or discrepancy between descriptions of items as give in the schedule of quantities, particular specification for individual items of work (including special conditions) and I.S. Code etc., the following order of preference shall be observed.
 - (i) Description (Nomenclature) of the item or as per schedule of quantities.
 - (ii) Particular Specifications, if any.
 - (iii) CPWD Specification including correction slips issued up to the last date of uploading/ submission of tender.
 - (iv) Indian Standard Specifications of BIS Code
 - (v) Manufacturer's specifications and/or as decided by the Engineer-in-charge.
 - (vi) Sound Engineering practices or well established local construction practices.
2. The contractor shall be required to produce samples of all materials sufficiently in advance to obtain approval of the Engineer-in-Charge. The materials to be used in actual execution of the work shall strictly conform to the quality of samples approved. In case of variation, such materials shall be rejected.
3. The contractor shall be required to provide testing appliances at site, such as weighing scale, graduated cylinder, standard sieves, thermometer, slump cone etc. in order to enable the Engineer-in-Charge to conduct field tests to ensure that the quality is consistent with the prescribed specifications and nothing extra shall be paid on this account.
4. (i) The contractor shall, at his own cost, make all arrangement and shall provide such facilities as the Engineer-in-Charge may require for collecting, preparing and forwarding the required number of samples for tests at such time and to such places, as directed by the Engineer-in-Charge. Nothing extra shall be paid for the above including cost of sample material, testing charges, transportation, collection charges etc. The necessary tests shall be conducted in the laboratory approved by the Engineer-in-charge.

(ii) The contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case, he or his authorized representative is not present or does not associate himself, the result of such test and consequences thereon shall be binding on the contractor.
5. Wherever any reference to any Indian Standard Specifications occurs in the documents related to this contract, the same shall be inclusive of all amendments issued there to or revision thereof, if any, up to the date of opening of tenders.
6. Any cement slurry added over base surface or added for continuation of concreting for better bond is considered to have been included in the item (unless otherwise explicitly stated) and nothing extra shall be payable or extra cement considered in consumption on this account.

7. Preference shall be given to those articles which bear ISI certification marks. In case articles bearing ISI certification marks are not available, the quality of samples brought by the contractor shall be judged by the standards laid down in the relevant ISI specifications/CPWD Specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved, which shall be preserved till the completion of the work. However, such articles which bear ISI mark but banned by CPWD will not be used.
8. The structural and architectural drawings of the work shall at all times be properly correlated by the contractor before executing any work and no claim whatsoever shall be entertained for failing to do so. However, in case of any discrepancy in the item given in the schedule of quantities appended with the tender and architectural drawings relating to the relevant item, the former shall prevail unless otherwise given in writing by the Engineer-in-Charge.
9. Contractors may be required to execute the work under foul condition. The decision of the Engineer-in-Charge whether the condition is foul or not shall be final and binding on the contractor and nothing extra for executing the work in foul condition shall be payable beyond what is provided in the schedule of quantities.
10. Transparent sheet glass conforming to IS:1761-1960 shall be used, thickness being governed as under unless otherwise specified in the item.

Area of glazing	Thickness	Maximum unsupported length
For glazing area upto 0.5 sqm	4 mm	120 cm
For glazing area more than 0.5 sqm	5 mm	180 cm

11. The contractor shall give a performance test of the entire water supply, sanitary installations, and drainage work as per standard specifications before the work is finally accepted, and nothing extra whatsoever shall be payable to the contractor for the test.
12. Payment for work at different floors, and extra payment for the items of RCC work, brick work, concrete work and stone masonry above different floor levels shall be made at the rates provided for these items. For operation of these rates, the floor level shall be considered as the top of main structural RCC slab in that floor viz. top of RCC slab in main room and not the top of any sunk or depressed floor in laboratory.
13. Nothing extra shall be paid for making holes in walls/RCC members etc. for fixing suspenders and frame works and making good the same to restore the original surface.
14. The pig lead to be used in jointing 100 mm and 75 mm SCI pipe joints shall not be less than 0.98 kg and 0.88 kg per joint respectively.
15. Apart from above, all the amendments in the "CPWD Specifications" issued upto the date of the opening of tenders shall be applicable.

ADDITIONAL SPECIFICATIONS (ELECTRICAL WORK)

1. In case of any variation between different applicable specifications, the following order of precedence shall be followed:
 - (i) Description (Nomenclature) of the item or as per schedule of quantities.
 - (ii) Particular Specifications, if any.
 - (iii) CPWD Specification including correction slips issued up to the last date of uploading/ submission of tender.
 - (iv) Indian Standard Specifications of BIS Code
 - (v) Manufacturer's specifications and/or as decided by the Engineer-in-charge.
 - (vi) Sound Engineering practices or well established local construction practices.
2. The contractor shall be required to produce samples in advance to obtain approval of the Engineer-in-Charge. The materials to be used in actual execution of the work shall strictly conform to the quality of samples approved. In case of variation, such materials shall be rejected.
3. (i) The contractor shall, at his own cost, make all arrangement and shall provide such facilities as the Engineer-in-Charge may require for collecting, preparing and forwarding the required number of samples for tests at such time and to such places, as directed by the Engineer-in-Charge. Nothing extra shall be paid for the above including cost of sample material, testing charges, transportation, collection charges etc. The necessary tests shall be conducted in the laboratory approved by the Engineer-in-charge.
 - (ii) The contractor or his authorized representative shall associate in collection, preparation, forwarding and testing of such samples. In case, he or his authorized representative is not present or does not associate himself, the result of such test and consequences thereon shall be binding on the contractor.
4. Wherever any reference to any Indian Standard Specifications occurs in the documents related to this contract, the same shall be inclusive of all amendments issued there to or revision thereof, if any, up to the date of opening of tenders.
5. Preference shall be given to those articles which bear ISI certification marks. In case articles bearing ISI certification marks are not available, the quality of samples brought by the contractor shall be judged by the standards laid down in the relevant ISI specifications/CPWD Specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved, which shall be preserved till the completion of the work. However, such articles which bear ISI mark but banned by CPWD will not be used.
6. All the materials used in the work shall comply with the requirements of Engineer-In-Charge and shall pass all the tests and analysis required by him as per particular specifications as applicable or such recognized specifications as acceptable to the Engineer-In-Charge.

7. The rate for all items of work, unless clearly specified otherwise, shall include the cost of all labour, materials and other inputs etc. involved in the execution of the items and thus nothing extra on any account will be paid to the agency other than his quoted rates.
8. Where no approved brand is mentioned against any item, the material strictly confirming to C.P.W.D. specifications shall only be supplied.
9. Apart from above, all the amendments in the "CPWD Specifications" issued upto the date of the opening of tenders shall be applicable.

Special Terms & Conditions

1. NSUT is a premier institution of Technical Education in Delhi. There are more than 6000 students in the main campus and every class room generally remains occupied for conducting classes. Sparing class rooms for execution of this work for long time cannot be permitted. Therefore, the work will be carried out in phase manner as given below:

Sl. No.	Particulars	Maximum time allow (in days)
1.	Rooms (3 Nos.)	1 to 180
2.	Another Rooms (3 Nos.)	181 to 270
3.	Rooms (2 Nos.)	271 to 365

From the above table, it is evident that 06 months have been given for development of first 03 smart class rooms and 03 months for subsequent 3 class rooms and 03 months for last 02 class rooms. The purpose for giving 06 months to first 03 class rooms is to accommodate the time required for the procurement of various material / equipment, which may take time. The contractor must ensure that development of the class rooms must be completed within the time prescribed above. No room can be allowed to be kept out of use for a period of more than 03 months. Therefore, the contractor must ensure that he has procured all material, equipment, T&P, manpower etc as may be required for completion of work, before starting the dismantling work, so that once the dismantling is started, the work must get completed in such rooms within a period of 03 months at all costs.

2. In case, the contractor fails to meet the timeline as prescribed in clause 1 above or any class room has been kept out of use for a period of more than 03 months, then a penalty at Rs. 5,000/- per room per day, subject to a maximum of 5% of the overall contract amount, shall be levied and recovered from any amount due to the contractor.
3. Some activities such as dismantling / demolition of old desk and benches, flooring, doors, windows etc are likely to produce noise and dust which will disturb the academic activities in adjoining rooms. Therefore, the contractor shall execute all such activities, which create noise or produce dust, during nights and / or on Sunday and holidays. The contractor must plan his work meticulously and equip himself with all necessary resources required for the smooth execution of such activities during nights and / or on Sundays and holidays. However, these restrictions shall not be considered as hindrance in the execution of work and the contractor shall have to complete the development of smart class rooms strictly in accordance with the provisions of clause 1 above.
4. The overall period for the work shall be 06 years which includes first one year for the development of smart class rooms and next 05 years for comprehensive maintenance of Audio Video system and VRV/VRF AC system and operation of audio video system. Further, notwithstanding to any contrary provisions, prescribed in the contract anywhere else, the defect liability period in respect of the following shall be 05 years from the date of completion of the development of smart class rooms:

- a) Furniture
- b) Audio video system
- c) VRV / VRF Air conditioning system
- d) LED fittings

Therefore, the performance security and security deposit will be released only after successful completion of the defect liability period of 05 years.

- 5. In case, the contractor fails to rectify any defect even after 7 days from the receipt of a notice from the Engineer-in-charge, the Engineer-in-charge shall have absolute right to get such defect rectified at the risk and cost of the contractor, during the defect liability period.
- 6. All material and equipment brought at site by the contractor or consumed in the execution of work shall be considered to be the property of NSUT, if any payment has been made, whether full or part payment. Such material shall not be removed or taken away by the contractor from the site of work without approval from the Engineer-in-charge in writing. However, all such material equipment etc, whether paid or unpaid, shall be under the watch and ward of the contractor till such time and work in such class room / rooms for the development of smart class room has been completed. The risk and reward in respect of all such material, equipment etc will transfer from the contractor to NSUT only after successful completion of the development work and handing over of the rooms to the Engineer-in-charge or his authorized representative in a phased manner as per the time prescribed in clause 1 above. Therefore, the contractor must make all necessary arrangement of watch and ward, lock and key etc. for keeping all such material, equipment in safe custody till the same are handed over to the NSUT on completion of development work in the rooms as prescribed above.
- 7. The contractor shall ensure that building materials/rubbish, water etc. are not allowed to spread here and there in the campus and all efforts are made to keep the surroundings clean.
- 8. The contractor shall make his own arrangement for lighting etc. required for proper illumination of the site for carrying out the work in night.
- 9. The work shall be executed as per the description of items and the directions of Engineer-in-charge.
- 10. The contractor must ensure that no damage is done to any NSUT properties due to any negligence of the contractor or his workers. In case of damage to NSUT property, the loss shall be made good by recovery of such amount from any amount due to the contractor. The decision of the Vice-Chancellor NSUT shall be final and binding on the contractor in this regard.
- 11. Termination of Contract: NSUT can terminate the contract after issuing a notice of 07 days in case the contractor is found violating the provisions of this contract. No claim for compensation on account of loss of profit due to termination of contract shall be admissible.
- 12. The contractor shall abide by all Labour Laws as applicable to him time to time.
- 13. The contractor shall indemnify NSUT against any claim due to any compensation allowed by any court or tribunal in case of any accident causing loss of life, disability, injury etc. to any of his staff/workers deployed in relation to this contract.

14. The Contractor shall take full responsibility for the adequacy, stability and safety of all site operations, of all methods of construction, manufacture, and of all the Works, irrespective of any approval or consent by the department.
15. The Contractor shall comply with all Applicable Laws and Applicable Permits of Central Govt. and Delhi Govt. (including renewals as required) in the performance of its obligations under this Contract. Nothing extra will be paid to Contractor on these accounts.

16. Contractor's care of the Works:

The Contractor shall bear full risk in and take full responsibility for the care of the Works and of the Materials, goods and equipment for incorporation therein from the Commencement Date until the Completion Certificate is issued, except to the extent that any loss of / or damage to the same shall have arisen from any default or neglect of the department. The Contractor shall throughout the execution of Works including carrying out of any testing, commissioning (including Integrated Testing and Commissioning), or remedying of any defect:

- a) Take full responsibility for the adequacy, stability, safety and security of the Works, Plant, Goods, Contractor's Equipment, Temporary Works, operations on Site and methods of manufacture, installation, construction and transportation;
- b) Have full regard for the safety of all persons on or in the vicinity of the Site (including without limitation persons to whom access to the Site has been allowed by the Contractor), comply with all relevant safety regulations, including provision of safety gear, and insofar as the Contractor is in occupation or otherwise is using areas of the Site, keep the Site and the Works (so far as the same are not completed and occupied by the Employer) in an orderly state appropriate to the avoidance of injury to all persons and shall keep the Employer indemnified against all injuries to such persons.
- c) Where any work would otherwise be carried out in darkness, ensure that all parts of the Site where work is being carried out are so lighted as to ensure the safety of all persons on or in the vicinity of the Site and of such work.

17. Particular condition for Maintaining by Laws of NGT and Housekeeping work

- a) General Housekeeping shall be carried out by the contractor and ensured at all times at Work Site, Fabrication Yard, Workshop, Labour Camp, Stores, Offices and toilets/urinals etc.
- b) The contractor shall be responsible to provide segregated containers for disposal of debris at required places and regular cleaning of the same.
- c) Proper and safe stacking of material are of paramount importance at yards, stores and such locations where material would be unloaded for future use. The storage area shall be well laid out with easy access and material stored / stacked in an orderly and safe manner.

- d) The contractor shall arrange all necessary measures to prevent dust pollution in and around the working site and strictly follow the guidelines of Hon'ble NGT. In case of any notice/penal action by NGT for any violation the cost of penalty shall be borne by the contractor.

In case, any penalties are levied on NSUT due to violation by the contractor of any orders, directions, or guidelines issued by any Court, NGT, DPCC or any other statutory body, the same shall be recovered from the contractor.

18 SPECIFIC CONDITIONS OF CONTRACT TO GREEN BUILDING PRACTICE

The contractor shall strictly adhere to the following conditions as part of his contractual obligations:-

- a) The Contractor should follow the construction plan as proposed by the Architect / Engineer-in-Charge to minimize the site disturbance.
- b) The contractor shall provide potable water for all workers at his own cost.
- c) The contractor shall comply with the safety procedures, norms and guidelines (as applicable) as outlined in the document Part 7 Constructional practices and safety, 2005, National Building code of India-2016, Bureau of Indian Standards. A copy of all pertinent regulations and notices concerning accidents, injury and first-aid shall be prominently exhibited at the work site. Depending upon the scope & nature of work, a person qualified in first-aid shall be available at work site to render and direct first-aid to casualties. A telephone may be provided to first-aid assistant with telephone numbers of the hospitals displayed. Complete reports of all accidents and action taken thereon shall be forwarded to the competent authorities.
- d) The contractor shall provide O & M Manuals wherever applicable.

19. Force Majeure:-

If at any time during the currency of the contract, either party is subject to force majeure, which can be termed as civil disturbance, riots, strikes, tempest, acts of God etc. which may prevent either party to discharge the obligation, the affected party shall promptly notify the other party about the happening of such an event. Neither party shall by reason of such event be entitled to terminate the contract in respect of such non-performance of their obligations. The performance of any obligations under the contract shall be resumed as soon as practicable after the event has come to an end or ceased to exist. If the performance of any obligation under the contract is prevented or delayed by reason of the event beyond a period mutually agreed to, if any, or seven days, whichever is more; either party may at its option terminate the contract.

20. JURISDICTION OF COURT:-

The courts at Delhi/New Delhi shall have the exclusive jurisdiction to try all disputes, if any, arising out of this agreement between the parties.

Terms & Conditions for SITC Part VRV/VRF Air conditioning.

1. The payment for the outdoor unit shall be made for the quantity in HP calculated on the basis of heat load calculations at full load. For example, the indoor tonnage for any set of rooms is calculated to the 27.6 TR on the basis of the design criteria. The corresponding HP for outdoor unit will be 34.5 HP. Now, the value of outdoor unit will be rounded to nearest higher number. In this case, it will be 35 HP. The contractor shall be free to propose any combination of outdoor unit which deliver 35 HP or above at full design load. The payment shall be made for 35 HP only even if the combined value of the proposed/installed outdoor unit exceeds 35 HP. To ascertain the capacity of the ODU at full load, the contractor shall furnish a copy of the Capacity Rating Chart of proposed ODUs.
2. A diversity factor of 20% on the capacity calculated, on the basis of heat load calculations, will be applied. The ODU proposed by the contractor must deliver the capacity calculated, after applying diversity factor, on full load conditions. For example, calculated capacity of ODU on full load conditions is 20 HP, the ODU proposed by the contractor must deliver at least 16 HP on full load conditions even after applying a diversity factor of 20%.
3. SITC of VRV/ VRF air- conditioning system shall be carried out and completed in all respect, including removal of old AC units etc, within the stipulated period of four months to complete the work. Time is the essence of contract.
4. The contractor shall plan the work in such manner that:
 - (i) Drawings & Heat Load Calculations for all rooms are submitted by the contractor to the Engineer-in-charge within 15 (fifteen) days of start of work for approval.
 - (ii) Factory inspection for testing is arranged by the contractor within maximum one month from the start of work.
 - (iii) Dismantling of old ACs in any room will be carried out after arranging new equipment, T&P and manpower for the SITC of new AC system for such labs so that Air conditioning does not remain suspended for more than 5 (Five) days.

5. The work shall be carried out in accordance with CPWD Specifications for Heating, Ventilation, Air-conditioning (HVAC) Works 2017 with upto date correction slips/amendments. However, where the specifications in the nomenclature of items are found to be superior to CPWD Specifications, the nomenclature of such items shall prevail.
6. SITC of VRV/VRF AC system shall be considered to have been finally completed when the contractor completes the requirements under Para 1.15, 1.18, 1.20, 17.4 & 17.5 of CPWD Specifications for HVAC Works-2017 as applicable.
7. No drawings are available for the Air-Conditioning System covered under this tender. The contractor shall prepare the drawings at his own cost and get approved from the Engineer-in-Charge as specified in CPWD Specifications. Nothing extra shall be payable on this account.
8. The contractor shall arrange the factory inspection (within India) for the testing of COP and capacity of the outdoor units at NABL / AHRI certified Laboratory at his own cost before dispatch of units.
9. Noise level of the ODU shall not exceed 67 db at a distance 1.5 m from the unit.
10. The contractor shall arrange the onsite testing of temperature and CFM of IDU.
11. The AC units must confirm the following parameters in laboratory testing as well as during on site testing:
 - (i) Ambient Temperature : 43° C
 - (ii) Indoor Temperature : 25° C \pm 1° C when ambient temperature is 43° C
 - (iii) Relative Humidity : Not Exceeding 55% under any weather conditionsThe Contractor shall arrange the above required tests including all necessary equipment /instruments at his own cost and nothing extra shall be payable on this account.
12. In case of any contradiction in the contract, nomenclature of item shall prevail over any other provisions elsewhere.
13. The bidder shall submit the OEM rating chart of the quoted outdoor unit physically to Executive Engineer, NSUT alongwith drawing and heat load calculations.

14. The quantities in the Schedule of Quantities are approximate and likely to vary according to the actual heat load calculations and approved air-conditioning drawings. Soon after award of contract, the contractor shall conduct thorough survey of the rooms required to be air-conditioned and carry out heat load calculations. Based on such heat load calculations, he shall prepare and submit to the Engineer-in-charge combination of outdoor unit modules. The Engineer-in-charge will examine the proposal and communicate his decision regarding approval/rejection of the proposal within a period of seven days from the date of submission of the proposal by the contractor. The contractor shall act according to the decision of the Engineer-in-charge.

15. The COP at AHRI conditions for various loads less than the values given below shall not be accepted:

100% load	:	3.1
70% load	:	5.0
50% load	:	6.5

21. The scope of this section comprises the design, supply, erection, testing and commissioning of Air Cooled 100% Inverter Scroll compressor based Variable Refrigerant Flow type air-conditioning system conforming to these specification. The prices quoted shall include all the equipment ancillary material as specified and all such items whatsoever and which may be required to fulfill the intent and purpose as laid down in the specification. The tenderer shall also include all necessary civil work MS frame work for installation of outdoor and indoor units in VRF based air condition system. The cost quoted by tenderer shall also include the refrigerant gas R-410A & its charging for proper & specified functioning of air conditioning system.

Civil work/ MS frame work for indoor and outdoor units related to VRF equipments, all cuttings should be properly finished as existing surrounding. The installation of outdoor unit on the terrace of building should be safe for the outdoor unit to ensure in such a way that after installation.

- i. Cutting of walls and floors/ ceiling.
- ii. Making holes.
- iii. Sleeves.
- iv. Foundation

22. While designing the system care should be taken to select outdoor units of suitable capacity based on design data provided below & to economize on available floor area for installation of outdoor units as well as optimum utilization of outdoor units and type of indoor unit taken into considerations. The indoor units should be designed based upon the heat load calculations for individual rooms/ areas to be air-conditioned and over capacities should be avoided. The designing of HVAC PC based BMS (Building Management System) shall be done in such a way so that complete system is monitored & controlled from one location for optimum utilization of system & for keeping monthly as well continuous log of important parameters/ events of complete air conditioning system. The design should also specifically take care of disposal of condensate drain water so that there is no leakage of condensate water inside the room as well in the route of condensate water pipe line. The layout of refrigerant piping is to be designed in such a way so that it should not disturb the aesthetic of the building/ room, inadvertent damage in the route of pipe should not occur in future & optimum length of pipe line for efficient air conditioning.

23. Notwithstanding the technical details as specified in the tender, the manufacturers may offer/ indicate systems and necessary design & features applicable for the offered products at the tendering stage.

24. At NSUT, Delhi it is proposed to install outdoor unit at terrace or suitable place depending upon space availability of site.

25 PC based central controller:

The contractor has to provide PC based central controller for controlling (ON/OFF, scheduling, lock/unlock, swing control, temperature setting, error detection) all indoor units (256) and monitoring of corresponding outdoor units from one central location. PC based central controller should be BMS (like Bacnet, Lan works, Modbus) compatible. It must show the status of all indoor units along with outdoor unit.

26 VARIOUS SIZES PVC INSULATED COPPER CONDUCTOR WIRING CABLES:

- i. PVC insulated multi stranded sheathed copper conductor wiring cable for working voltage upto and including 1100 Volts, ISI marked conforming to IS 694/1990 (Latest Version).
- ii. Wiring of installation shall be in conformity with IS 732/1989 (Latest Version), IS 4648/1968 (Latest Version).

27 RIGID PVC CONDUIT PIPE:

- i Laying conduit shall be in conformity with IS: 732/1989 (Latest Version), IS 4648/1968 (Latest Version).
- ii Fitting for rigid non-metallic conduit shall conform to IS 3419/1989 (Latest Version) and accessories shall conform to relevant IS.

28 GENERAL:

NSUT will not be responsible for any accident to the staff by any reasons whatsoever. The contractor will ensure that the staff employed by him on site is duly insured for liability in case of any accident, strikes, riots, civil commotion, etc. NSUT will not be liable for any damage caused due to any reasons.

29 Attending to complaints:

All defects and deficiencies under guarantee period should be rectified promptly after lodging of complaint. The complaint can be lodged through telephonic message or through complaint register kept in the office of Engineer-in-charge. For expeditious disposal of complaint, contractor will keep sufficient reserve of unit exchange spare quantity & item to be kept as unit spares shall be jointly decided with Engineer-in-charge. The contractor will furnish Telephone No. and his contact person to whom the complaint has to be lodged.

SCOPE OF WORK FOR COMPREHENSIVE MAINTENANCE FOR VRV/VRF SYSTEM

(A) Comprehensive Maintenance Contract:-

1. The following services shall be provided and parts replaced free of cost as and when required and in case of any breakdown during the AMC period for smooth functioning of A.C. plant.
 - a) Services
 - (i) 4 (Four) routine services in a year on quarterly basis.
 - (ii) Immediate attendance of breakdown, if any.
 - (iii) Refrigerant Gas charging (as and when required and felt necessary).
 - b) Any defective parts or components, including the following but not restricted to, shall be replaced free of cost in case of any breakdown during the AMC period:
 - (1) Compressor (2) Motor (3) PCB (4) Magnetic Switch
 - (5) Transformer (6) Other Electrical parts of A.C. (7) Air Filter
 - (8) MCCB's or MCB wherever provided for the plant (indoor or outdoor)
 - (9) Voltage Stabilizer (if any) and Scanner
 - (10) VRV/VRF units (outdoor)As installed in the work by the firm.
 - (11) All Electrical Panels and their accessories installed in it including cable thimbles etc. i/c main incoming cables.
2. The breakdown shall be attended within 24Hrs.
3. The AMC is not transferable.
4. The equipments shall be handed over to the NSUT or its authorized representative in complete running position with all parts working, after completion of the contract.

(B) Routine Maintenance:-

- (1) Routine Maintenance and proper operation of the air conditioning units including regular cleaning of all parts shall be ensured by the firm.
- (2) The preventive maintenance of all equipments shall be carried out of the system. It should be carried out in engineering like manner and as per the standard practice and recommendations of the equipment manufacturer.
- (3) All type of routine maintenance works are included in the scope of work. Some of which are as under:-
 - i) Checking the condition of the compressors and other equipments / machinery installed in the system.
 - ii) Checking and setting of all the controls and protective devices such as MCBs, scanner, contactors & power guard etc. as per requirements.
 - iv) Cleaning & removing dust from the filters.
 - v) Charging of refrigerant gas R-410A in the A.C. system as & when required.
 - vi) Replacing of defective parts of the A.C. systems including electrical panels and drain pipe line as and when required.

- vii) Cleaning of all equipments.
 - viii) Checking temperature and air flow in the air conditioned area and regulating the system as per requirement.
 - ix) Carrying out leak test in the refrigeration system and doing required rectification as per standard practice.
- (4) A Recovery of @ Rs. 500.00 per room per day shall be made from the contractor in case the AC units remain out of order for any period beyond 24 hours. The recovery shall be made for the period beyond 24 hours.
 - (5) No advance payment shall be admissible against this contract.
 - (6) In case the contractor fails to perform his contractual obligations, the contract may be terminated and performance guarantee will be forfeited absolutely in such a situation. However, before termination of the contract the Engineer-in-Charge will issue a show Cause Notice of 07 days to the contractor. In case, the contractor fails to reply the notice within a period of 07 days or the reply is found to be unsatisfactory, the Engineer-In-Charge shall have absolute right to terminate the contract and forfeit the performance Guarantee absolutely.
 - (7) The contractor / firm will provide emergency call back service at no extra charge.
 - (8) The contractor / firm will not take out any part of the system from the premises of the University without written permission of the engineer in charge or his representatives.
 - (9) The contractor will take full responsibility for the safety of all equipments of the A.C. system.
 - (10) All Rates are including GST.
 - (11) The firm shall have to arrange small items like cotton waste, old dhoties, soaps, PVC tape and tools for their staff for routine cleaning / maintenance of the equipments.
 - (12) Nothing shall be issued by the University including T&P.
 - (13) No T & P shall be issued to the contractor.
 - (14) The Engineer-in-charge or his authorized representative shall register the complaint with the contractor through physical letter or telephone calls etc. The contractor shall furnish valid E-mail ID, Mobile Number having incoming calls & WhatsApp facility and postal address for this purpose.

ADDITIONAL CONDITIONS (CIVIL WORK)

1. In interpreting the terms & conditions of the contract the following order of decreasing importance shall be followed in case of contradictions:-
 - i. Special Terms & Conditions
 - ii. CPWD 6/7/8
 - iii. Applicable General Conditions of Contract
 - iv. In absence of above, directions of Engineer-in-charge.
2. The work shall be carried out in such a manner so as not to interfere or effect or disturb other works being executed by other agencies, if any.
3. Any damage done by the contractor to any existing work shall be made good by him at his own cost, failing which the same shall be got done at his risk and cost.
4. The work shall be carried out in a manner complying in all respects with the requirement of relevant bye-laws of the local bodies under the jurisdiction of which the work is to be executed and nothing extra shall be paid on this account.
5. The contractor shall make his own arrangements for obtaining electric connections, if required, and make necessary payments directly to the authority concerned. The department will, however, make reasonable recommendations to the authority concerned in this regard.
6. In case Department found that either Contractor or his labour is involved in theft of Electricity & Water from NSUT source, the contractor shall be liable to pay the fine as decided by Engineer-in-charge.
7. The contractor or his authorized representative should always be available at the site of work to take instructions from departmental officers, and ensure proper execution of work. No work should be done in the absence of such authorized representative.
8. No payment will be made to the contractor for damage caused by rains, or other natural calamities during the execution of the work and no such claim on this account will be entertained.
9. Royalty at the prevalent rates and all other incidental expenditure shall have to be paid by the contractor for the boulders, stone aggregate, shingle, earth, sand, bajri etc. collected by him for the execution of the work direct to the concerned Revenue Authority of the State or Central Govt. His rates are deemed to include all such expenditure and nothing extra shall be paid.

10. Any building rubbish or Malba generated during execution of this work shall be disposed of by the contractor at any of the dumping sites as approved by the municipal bodies, at his own costs and expenses. Dumping of building rubbish/ malba inside NSUT Campus is not allowed.
11. The contractor shall construct suitable godown at the site of work for storing the materials safe against damage due to sun, rain, dampness, fire, theft etc. He shall also employ necessary watch and ward establishment for the purpose and no extra claim whatsoever shall be entertained on this account.
12. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued to him by the department.
13. Apart from above, all the amendments in the “General Condition of Contract 2020 for CPWD (Maintenance Works)” issued upto the date of opening of tenders shall form part of the agreement.

ADDITIONAL CONDITIONS (ELECTRICAL WORK)

1. Work shall be carried out as per CPWD specification for Internal works 2013 and external works 1994 and HVAC 2017 with amendment up to date.
2. Contractor shall get the samples/models of luminaires/fans/fittings approved from the Engineer-in-charge before bringing at site for execution.
3. The work shall be carried out in a manner complying in all respects with the requirement of relevant bye-laws of the local bodies under the jurisdiction of which the work is to be executed and nothing extra shall be paid on this account.
4. The contractor or his authorized representative should always be available at the site of work to take instructions from departmental officers, and ensure proper execution of work. No work should be done in the absence of such authorized representative.
5. The contractor shall be required to produce samples of all building materials sufficiently in advance to obtain approval of the Engineer-in-Charge. The materials to be used in actual execution of the work shall strictly conform to the quality of samples approved. In case of variation, such materials shall be rejected.
6. The contractor must study the specifications and conditions carefully before tendering.
7. The work shall be carried out in such a manner so as not to interfere / or effect or disturb other works being executed by other agencies, if any.
8. Any damage done by the contractor to any existing work shall be made good by him at his own cost, failing which the same shall be got done at his risk and cost.
9. The contractor shall maintain in good condition all work executed till the completion of entire work allotted to the contractor.
10. All work and materials brought and left upon the ground by the contractor or by his orders for the purpose of forming part of the works, are to be considered to be the property of the NSUT and same are not to be removed or taken away by the contractor or any other person without the special license and consent in writing of the Engineer-in-charge, but the NSUT is not to be in any way responsible for any loss or damage which may happen to or in respect of any such work of materials either by the same being lost or damaged by whether or otherwise.
11. No payment will be made to the contractor for damages caused by rains, or other natural calamities during the execution of the works and no such claims on this account will be entertained.

12. For completing the work in time, the contractor might be required to work in two or more shifts including night shifts and no claims whatsoever shall be entertained on this account, notwithstanding the fact that the contractor will have to pay extra amount to the labourers and other staff engaged directly or indirectly on the work according to the provisions of the labour regulation and/or for any other reason.
13. The contractor shall make his own arrangements for obtaining electric and water connections, if required, and make necessary payments directly to the authority concerned. The department will, however, make reasonable recommendations to the authority concerned in this regard. Alternatively, NSUT may allow electricity to the contractor for execution of work on paid basis. The contractor shall arrange his own energy meter. NSUT will charge @ commercial rates plus administrative charges @ 10%.
14. In case Department found that either contractor or his labour is involved in theft of Electricity & Water from NSUT source. The contractor shall be liable to pay the fine as decided by Engineer in charge.
15. Any building rubbish/ Malba generated during execution of this work shall have to be disposed of by the contractor at any of the dumping sites as approved by the municipal bodies, at his own costs and expenses.
16. The LED fittings shall be covered under comprehensive warranty for a period of five years from the date of successful SITC/ replacement of such light. The contractor shall furnish such warranty from the OEM. However, ultimate responsibility for the warranty shall rest on the contractor and in case of any complaint the user department shall contact the contractor only who shall attend the defect within a period of 7 (seven) days of the complaint. In case of delay in attending the complaints, a penalty @ Rs. 100/- per day per light shall be levied and recovered from any amount due to the contractor. Decision of the Vice-Chancellor, NSUT shall be final and binding on the contractor in respect of the levy of such penalty. Payment for LED fittings shall be made only after the contractor furnishes the Warranty of five years from the OEM.
17. The contractor shall construct suitable godown at the site of work for storing the materials safe against damage due to sun, rain, dampness, fire, theft etc. He shall also employ necessary watch and ward establishment for the purpose and no extra claim whatsoever shall be entertained on this account.
18. The contractor shall bear all incidental charges for cartage, storage and safe custody of materials issued to him by the department.
19. In case, the contractor fails to fulfill his contractual obligation and as a result of which the contract gets rescinded, then, notwithstanding to any other provisions, penalties or remedies as may be provided in the contract, the contractor may also be blacklisted for participation in tenders for any works at NSUT in future.

Terms and Conditions for Operation & Maintenance of AV System

1. The operators deployed under this contract must possess required skills and experience to perform their duty efficiently and promptly. Any disruption of classes due to failure of AV System shall be viewed seriously and the contractor shall be liable for a penalty as given below:

The penalties for break down/ failure in A.V. System:

- (i) A.V. System:
 - a). @ Rs. 1000.00 per instance in case any class has been disrupted.
 - b) @ Rs. 5000.00 per day per Lecture Hall in case classes remained disrupted for whole day in any Lecture Hall.

2. No T & P shall be issued to the Contractor from NSUT.

3. Minimum staff is required to be deployed is as under:-

One Operator is required for six days in a week from 6.00 AM to 2.00 PM and One Operator is required for six days in a week from 11.00 AM to 7.00 PM.

4. Qualification of workers deployed:-

Sl. No.	Designation	Minimum Qualification	Minimum work Experiences
1	AV Operator	The person should have experience in similar field and should be highly skilled to handle the sophisticated AV System preferably trained by OEM.	3 years

5. Payments of wages to all the employees/workers for each month shall have to be made by the contractor through ECS by 7th of the next month. Subsequently, the contractor shall submit his Bill for that quarter along with documentary evidence of the payment of wages made to the employees for each month of such quarter. The contractor shall furnish the copy of the Statement of the Bank Account through which payment of wages had been made to the employees' alongwith self attested copies of monthly EPF & ESI Challans/ECR deposited with the concerned authorities in respect of each month. The contractor shall also highlight all the entries in that Bank Statement which are related to the payment of wages to his employees [employee wise] deployed by him at NSUT. This is essential to cross check the payment of actual wages to all the employees. After submission of the Bill, Bank Statement and other relevant documents/Challans>Returns by the Contractor, NSUT will process the release of payment to the contractor for such quarter.

6. In case the release of the payment to the contractor is delayed due to any deficiency on the part of the contractor in furnishing the requisite documents/information, still the contractor shall ensure that the payment of wages to the employees shall be made by him for the subsequent month/months by 7th of every next relevant month without any default. The payment of wages shall be made in full for each month and any part payment to the employees shall not be accepted by the NSUT.
7. **Leave:** The leave shall be allowed to operators deployed in accordance with applicable labour laws. However, the contractor shall timely inform the JE-in-charge about authorized leave of any operators. Further, the contractor shall ensure that work does not suffer at all due to any leave to operators. The contractor has to deploy the deployed substitute for the operator on leave as the rates are inclusive of the cost of the deployed substitute due to leave to the regular operator. If the contractor fails to provide appropriate substitute for the operator on leave / absence from duty, a penalty shall be levied on the contractor for such absence of worker at the following rates:-

AV Operator	: @ Rs.2000/- per day. The penalty shall be in addition to the penalty under Clause-1 above.
-------------	--
8. The contractor will arrange at his own cost a complaint register to be maintained by his operators for keeping record of each complaint received /attended.
9. Payment to the operators shall ordinarily be made through ECS only. Any other mode may be approved by the Engineer-in-charge in writing in case of necessity.
10. The attendance of the operators will be marked through Biometric machine in Campus of NSUT or as per Govt. Directives.
11. Each operator shall wear proper uniform having the contractor's logo/badge on it. Such uniform shall have to be got approved from the Engineer-in-charge. **Any operator found not wearing the approved uniform is liable to a penalty @ Rs. 50 per person per day.**
12. The contractor shall issue Identity Cards to his operators deployed by him at NSUT. The operators shall always keep their ID Cards with them while on duty. **If any worker is ever found not keeping the ID card a penalty @ Rs. 50 per person per day shall be levied.**
13. If any money shall, as the result of any instructions from the labour authorities or claim or application made under any of the Labour Laws, or Regulations, be directed to be paid by NSUT, such money shall be deemed to be payable by the contractor to NSUT within seven days. NSUT shall be entitled to recover the amount from the contractor by deduction from money due to the contractor or from the Performance Guarantee or Security Deposit.
14. No residential accommodation shall be provided to the operators in NSUT Campus. The contractor shall have to make proper transportation arrangements so that the operators can reach for day to day operation of AV System in time..
15. The persons deployed at main campus of NSUT through outsourcing shall be employees of the Contractor and they shall not have any claim or right on any University's post in any regard.

16. During the course of contract, if any of contractor's personnel are found to be indulging in any corrupt practices causing loss of revenue to main campus of NSUT, the contractee shall be entitled to terminate the contract forthwith duly forfeiting the Performance Guarantee and Security Deposit.

SCHEDULE OF PAYMENT FOR VRV/VRF AIR CONDITIONING

1. Schedule of Payment for SITC of VRV/VRF Air Conditioning:

S. No.	Stage of Work	Machinery & Equipment	All other Items
1.	After initial inspection and delivery at site in good condition (on prorata basis).	70%	Nil
2.	On completion of SITC of VRV/VRF AC System i.e. after completion of successful running in period (on prorata basis).	20%	90%
3.	On final Completion and after compliance of the provisions under Para 1.15, 1.18, 1.20, 17.4 & 17.5 of CPWD Specifications for Heating, Ventilation & Air-Conditioning (HVAC) Works-2017 as applicable.	10%	10%

Note: Payment for the Outdoor unit of the VRV/VRF unit shall be made for the lower of the value in HP directly corresponding to the Tonnage calculated on the basis of heat load and not on the basis of capacity of the unit actually supplied by the contractor.

2. Schedule of Payment for Comprehensive Maintenance of VRV/VRF Airconditioning:

The payment shall be made on quarterly basis.

3. Schedule of Payment for Operation and Maintenance of A V System:

The payment shall be made on quarterly basis.

DETAILS OF BIDDER

Name of Bidder firm	
Constitution of Bidder : Proprietorship/ Partnership/ Company	
Name of the Authorized Signatory	
Status of the Authorized Signatory: Proprietor/ Partner/ Director or Any other Person	
Correspondence Address	
Telephone No. (Landline)	
Mobile No. of the Authorized Signatory	
e-mail ID of Bidder firm	
e-mail ID of the Authorized Signatory	

BANK DETAILS OF BIDDER

S. No.	Particulars	Required Details
1.	NAME OF THE FIRM	
2.	PARTICULAR OF ACCOUNT	
A	Bank Name	
B	Branch Name	
	Address	
	Telephone Number	
C	IFS Code	
D	09 Digit Code no. of the Bank and Branch appearing of the M. I. C. R. Cheque issued by the bank.	
E	Account Type (SB/Current Account or Cash Credit) With code10/11/13	
F	Ledger No./ Ledger Folio No	
G	Account No.(As appearing on the Cheque Book) (in lieu of the bank certificate to be obtained as under please attach a blank cancelled cheque, or photocopy of a cheque or front page of your bank pass book issued by your bank for verification of the above particulars)	
3.	<p>DATE OF EFFECT</p> <p>I, hereby declare that the particulars given above are correct and complete. If the transaction is delayed or not effected at all for reasons of incomplete or incorrect information, I would not hold the user institution responsible. I have read the option invitation letter and agree to discharge the responsibility expected of me as a participant under the scheme.</p> <p>Date: _____ (Signature of Supplier)</p> <p>Certified that the particulars furnished above are correct as per our record.</p> <p>Bank's Stamp</p> <p>Dated: _____ (Signature of the Authorized Officer from the bank)</p>	

LETTER OF TRANSMITTAL

To,

The Executive Engineer,
NSUT, Dwarka, Sector-3,
New Delhi-110078

Name of work: Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus (Composite Work).

Sir,

Having examined the details given in the bid document for the above work, I/we hereby submit the relevant information.

1. I/we hereby certify that all the statement made and information supplied in the tender and accompanying statements are true and correct.
2. I/we furnished all information and details necessary for eligibility and have no further pertinent information to supply.
3. I/we submit the following certificates in support of our suitability, technical knowledge and capability for having successfully completed the following eligible similar works:

Name of work	Certificate from
<p>Certificate: It is certified that the information given in the enclosed eligibility bid are correct. It is also certified that I/we shall be liable to be debarred, disqualified/cancellation of enlistment in case any information furnished by me/us is found to be incorrect.</p> <p>Seal of Bidder</p> <p>Date of Submission:</p> <p>Signature (s) of Bidder (s).</p>	

FORM OF PERFORMANCE SECURITY BANK GUARANTEE BOND

In consideration of the Board of Management, NSUT (hereinafter called "The NSUT") having offered to accept the terms and conditions of the proposed agreement between NSUT and _____ (Hereinafter called "the said contractor(s)") for the work _____ (hereinafter called "the said agreement") having agreed to production of an irrevocable bank guarantee for Rs. _____ (Rupees _____ only) as a security / guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and conditions in the said agreement.

1. We, _____ (indicate the name of the bank) (hereinafter referred to as "the Bank") hereby undertake to pay to the NSUT an amount not exceeding Rs. _____ (Rupees _____ only) on demand by the NSUT.
2. We, _____ (indicate the name of the bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the NSUT stating that the amount claimed as required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs. (Rupees..... only).
3. We, the said bank further undertake to pay to the NSUT any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the contractor(s) shall have no claim against us for making such payment.
4. We, _____ (indicate the name of the bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the NSUT under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till engineer-in-charge on behalf of the NSUT certified that the terms and conditions of the said agreement have been fully and properly carried out by the said contractor(s) and accordingly discharges this guarantee.

5. We, _____ (indicate the name of the bank) further agree with the NSUT that The NSUT shall have the fullest liberty without our consent and without effecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the NSUT against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said contractor(s) or for any forbearance, act of omission on the part of the NSUT or any indulgence by the NSUT to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the contractor(s).
7. We, _____ (indicate the name of the bank) lastly undertake not to revoke this guarantee except with the previous consent of the NSUT in writing.
8. This guarantee shall be valid upto _____ unless extended on demand by NSUT. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs. _____ (Rs. _____ only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the _____ day of _____ for
_____ (indicate the name of bank).

AFFIDAVIT

I / We have submitted a bank guarantee for the work _____
_____.

(Name of work)

Agreement No. _____ dated _____ from _____ to _____

(Name of the Bank with full address) _____

In the name of Registrar, NSUT _____

with a view to seek exemption from payment of security deposit in cash. This bank guarantee expires on _____ I / We undertake to keep the validity of the bank guarantee intact by getting it extended from time to time at my / our own initiative upto a period of _____ months after the recorded date of completion of the work or as directed by the engineer-in-charge.

I / We also indemnify the NSUT against any losses arising out of non – encashment of the bank guarantee if any.

Note :- The affidavit is to be given by the executants before a Notary Public.

Schedule of Quantity

Name of work: Development of Smart Class Rooms in the Academic Blocks at NSUT Main Campus (Composite Work).

Sl. No	Descriptions of Item	Qty	Unit	Rate	Amount (In Rs)
A	Civil Work				
1	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level				
	Cement mortar 1:4 (1 cement : 4 coarse sand)	26.00	sqm	932.10	24234.60
2	Brick work with common burnt clay machine moulded modular bricks of class designation 12.5 in exposed brick work including making horizontal and vertical grooves 10 mm wide 12 mm deep complete in cement mortar 1:6 (1 cement : 6 coarse sand).				
	Above plinth level upto floor V level	2.00	cum	7423.70	14847.40
3	Stone work for wall lining upto 10 m height with special adhesive over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand), including pointing in white cement with an admixture of pigment to match.				
	18 mm thick Granite of any colour and shade	275.00	sqm	3771.65	1037203.75
4	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing to edges to give high gloss finish etc. complete at all levels.				
	Granite of any colour and shade				
	Area of slab over 0.50 sqm	21.00	sqm	4007.65	84160.65
5	Providing edge moulding to 18 mm thick marble stone counters, Vanities etc., including machine polishing to edge to give high gloss finish etc. complete as per design approved by Engineer-in-Charge.				
	Granite work	510.00	metre	376.25	191887.50
6	Stone (polished) work for wall lining over 12 mm thick bed of cement mortar 1:3 (1 cement : 3 coarse sand) and cement slurry @ 3.3 kg/sqm including pointing in white cement all complete as per the directions of Engineer-in-charge.				
	18 mm thick Granite of any colour and shade	166.00	sqm	4161.07	690737.62

7	Providing and fixing fire resistant door frame of section 143 x 57 mm having built in rebate made out of 16 SWG G.I. sheet (zinc coating not less than 120 gm/sqm) duly filled with vermiculite based concrete mix, suitable for mounting 60 minutes fire rated door shutters. The frame is fitted with intumescent fire seal strip of size 10x4 mm (minimum) around the frame and fixing with dash fastener of approved size and make, including applying a coat of approved brand fire resistant primer etc. complete as per direction of Engineer-in-charge (Dash fastener to be paid for separately).	26.00	metre	1444.30	37551.80
8	Providing and fixing 50 mm thick glazed fire resistant door shutters of 60 minutes fire rating conforming to IS:3614 (Part-II), tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, lock rail, top rail 100 mm wide, bottom rail 200 mm wide, made out of 16 SWG G.I. sheet (zinc coating not less than 120 gm/m ²) duly filled FR insulation material and fixing with necessary stainless steel ball bearing hinges of approved make, including applying a coat of approved fire resistant primer etc. all complete as per direction of Engineer-in-charge (panneling to be paid for separately).	13.00	sqm	6166.00	80158.00
9	Providing and fixing factory made uPVC white colour sliding glazed window above 1.50 m in height dimension comprising of uPVC multi-chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads, uPVC extruded interlocks and uPVC extruded Inline sash adaptor (if required), EPDM gasket, wool pile, zinc alloy (white powder coated) handle on one side of extreme panel along with zinc plated mild steel multi point locking having transmission gear with keeps, zinc alloy (white powder coated) touch lock with hook (if required for wire mesh panel), stainless steel (SS 304 grade) body with adjustable double nylon rollers (weight bearing capacity to be 120 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealent shall be paid separately).				
	Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but	80.00	sqm	6861.60	548928.00

	no extra payment on this account shall be made.				
	Two track two panels sliding window made of (big series) frame 67 x 50 mm & sash 46 x 62 mm both having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of window above 2.50 sqm upto 4.00 sqm.)				
10	Providing and laying Polished Granite stone flooring in required design and patterns, in linear as well as curvilinear portions of the building all complete as per the architectural drawings with 18 mm thick stone slab over 20 mm (average) thick base of cement mortar 1:4 (1 cement : 4 coarse sand) laid and jointed with cement slurry and pointing with white cement slurry admixed with pigment of matching shade including rubbing , curing and polishing etc. all complete as specified and as directed by the Engineer-in-Charge.				
	Polished Granite stone slab jet Black, Cherry Red, Elite Brown, Cat Eye or equivalent.	915.00	Sqm	3526.60	3226839.00
11	12 mm cement plaster of mix : 1:4 (1 cement: 4 fine sand)	50.00	Sqm	266.85	13342.50
12	15 mm cement plaster on the rough side of single or half brick wall of mix : 1:4 (1 cement: 4 fine sand)	50.00	Sqm	307.90	15395.00
13	Providing and Fixing factory made uPVC door frame, made of uPVC extruded sections, of size 65 mm x 55 mm with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be mitred cut and jointed with plastic brackets and stainless steel screws, reinforcing hinge side vertical of the frames with PVC profile of Size 28 mm x 30 mm having wall thickness 2 mm (±0.2 mm), including providing & fixing 3 nos of 125 mm long stainless steel hinges to the frame, fixing the frame with jamb with required number & size of anchor dash fasteners, all complete as per manufacturer's specification and direction of Engineer-in-charge.	145.00	meter	588.55	85339.75

14	<p>Providing and fixing factory made uPVC white colour casement/ Casement cum fixed glazed door comprising of uPVC multi-chambered frame, sash and mullion (where ever required) extruded profiles duly reinforced with 1.60 ± 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), uPVC extruded glazing beads of appropriate dimension, EPDM gasket, zinc alloy (white powder coated) 3D hinges and one handle on each side of panels along with zinc plated mild steel multi point locking having transmission gear, cylinder with keeps and one side key, G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws, etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, mullion (if required) shall be also fusion welded including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealent over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes and silicon sealent shall be paid separately). Note: For uPVC frame, sash and mullion extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Variation in profile dimension in higher side shall be accepted but no extra payment on this account shall be made. Casement door with top hung ventilator with 3D and S.S. friction hinges (400 x 19 x 1.9 mm) made of (big series) frame 67 x 64 mm, sash 67 x 110 mm & mullion 67 x 80 mm all having wall thickness of 2.3 ± 0.2 mm and single glazing bead / double glazing bead of appropriate dimension. (Area of door upto 2.50 sqm)</p>	46.00	SQM	9328.30	429101.80
15	<p>Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade I Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge. Pre-laminated particle board with decorative lamination on both sides.</p>	31.00	SQM	1046.90	32453.90
16	<p>Distempering with 1st quality acrylic distemper (ready mixed) having VOC content less than 50 gms/litre, of approved manufacturer, of required shade and colour complete, as per manufacturer's specification. Two or more coats on new work</p>	125.00	Sqm	87.15	10893.75
17	<p>Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface : Water thinnable cement primer</p>	125.00	Sqm	60.00	7500.00
18	<p>Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacturer, over the plastered wall surface to prepare the surface even and smooth complete.</p>	125.00	Sqm	115.15	14393.75

19	Distemping with 1st quality acrylic distemper, having VOC (Volatile Organic Compound) content less than 50 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required, to achieve even shade and colour. Two coats	50.00	Sqm	81.90	4095.00
20	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	125.00	Sqm	18.25	2281.25
21	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per direction of Engineer-in-Charge.	15.00	Sqm	932.45	13986.75
22	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
	In cement mortar	7.00	cum	1469.90	10289.30
23	Removing mortar from bricks and cleaning bricks including stacking within a lead of 50 m (stacks of cleaned bricks shall be measured):				
	From brick work in cement mortar	1700.00	1000 Nos.	4880.90	8297.53
24	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead : Of area 3 sq. metres and below	47.00	Each	274.50	12901.50
25	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
	For thickness of tiles 10 mm to 25 mm	825.00	sqm	54.85	45251.25
26	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	275.00	sqm	39.00	10725.00
27	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and stacking of serviceable material with in 50 meters lead as directed by Engineer-in-charge.	345.00	Sqm	42.00	14490.00
28	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	65.00	cum	138.85	9025.25

29	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item): With float glass panes of 5 mm thickness (weight not less than 12.50 kg/ sqm)	80.00	Sqm	1296.40	103712.00
30	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge. With stainless steel cover plate minimum 1.25 mm thickness	2.00	Each	2412.50	4825.00
31	Providing and fixing stainless steel grill ss grade 304 of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles all complete as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).	120.00	Kg.	455.65	54678.00
32	Providing and fixing 18 mm thick moulded granite 60 mm wide over the wall lining etc. all complete as per the directions of Engineer-in-charge.	240.00	metre	434.45	104268.00
33	Deduct on account of issue of old aluminium sections etc. to the contractor as buy-back material.	200.00	Kg.	-40.00	-8000.00
34	Deduct on account of issue of old MS Grill, MS Angle etc. to the contractor as buy-back material.	700.00	Kg.	-20.00	-14000.00
35	Deduct on account of issue of old doors etc. to the contractor as buy-back material.	13.00	Each	-400.00	-5200.00

36	<p>Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS : 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval, including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush</p>				
	<p>finish of tapered and square edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 150 mm on both sides of joint and two coats of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with: 12.5 mm thick tapered edge Glass Reinforced Gypsum (GRG) board conforming to IS: 2095- (Part 3) : 1996 (Board with BIS certification marks)</p>	515.00	Sqm.	1237.05	637080.75

37	<p>Providing & fixing false ceiling at all heights with GRG (Glass Fibre Reinforced Gypsum) false ceiling tiles of Size 595x595 mm of approved texture, design and patterns having moisture content less than 2%, humidity resistance of 99%, NRC0.50 to 0.75 as per IS 8225:1987, Non combustible as per BS 476 (part 4)-1970 and light reflectance of 85% (minimum) to be laid in true horizontal level suspended on inter-locking metal T-Grid of hot dipped galvanised iron section of 0.33mm thick (galvanized @ 120 grams per sqm including both sides) comprising of main-T runners of size 15x32 mm of length 3000 mm, cross - T of size 15x32 mm of length 1200 mm and secondary intermediate cross-T of size 15x32 mm of length 600mm to form grid module of size 600 x 600 mm, suspended from ceiling using galvanised mild steel items (galvanizing @ 80 grams per sqm) i.e. 50 mm long, 8 mm outer diameter M-6 dash fasteners, 6 mm dia fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm. Galvanised iron perimeter wall angle of size 24x24x0.40 mm of length 3000 mm to be fixed on periphery wall / partition with the help of plastic rawl plugs at 450 mm center to center and 40 mm long dry wall wood screws. The work shall be carried out as per specifications, drawing and as per directions of the Engineer-in-Charge. With fully perforated 12 mm thick micro tegular edged or 10 mm thick square edged GRG false ceiling tiles.</p>	392.00	Sqm.	1699.30	666125.60
38	<p>Providing and fixing GI Gyp steel ultra frame work for wall panelling as per design drawing consisting of floor channel of size 50x32x32 x0.5mm thick at bottom and top fixed with 35 mm nylon sleeves and 35 mm screw. Further fixing GI stud 48x34x36x0.5 mm thick @600mm C/C vertically. The framework to be filled with 50mm 1000GSM non-woven thermal bonded polyester wadding (Make Dupont/ nowofill/Gyptech) held in position with 18 mm GI checken mesh of 24SWG with drywall screws and oversize washers. Finally fixing over it horizontally 80x26x51x0.5 mm thick G.I. Gyp ceiling section placed @600mm C/C or wherever required as per design drawings with drywall philips screws and angle cleats 27x37x25x1.6 mm as required. The frame to be fixed to the walls by means of angle holdfasts or cleats of required size complete with expandable anchor fasteners of 65x10mm dia fixed on each vertical member @1000mm C/C etc. as required all complete as per the directions of Engineer-in-Charge.</p>	670.00	Sqm.	1193.00	799310.00

39	<p>Providing and Fixing of Acoustical Wall Panel (Armstrong / Gyptech / Himalaya) with square edges made of fibre glass substrate 25mm thick, wrapped on the front side with an acoustically transparent Fire retardant fabric of RSWM/Nextgen as per the approved shade . The fibre glass substrate shall have a recycle content of 85%. The panel shall be classified for Fire Class A. The Acoustical Wall Panel shall be of sizes 600x1200mm and shall achieve an NRC > 0.80 (Average value of Absorption Co-efficient) to be fixed to wall on a existing GI framework (payable in item3) and using Wall panel Impalers and adhesives wherever required . The Impalers shall be fixed to the ply using self-tapping screws. Silica based construction adhesive to be dabbed on to the projecting elements (spikes) of the Impalers. Wall Panels shall be pierced through the spikes of the Impalers ensuring the line and level of the panels are maintained. Specification and execution of item at all heights and as per approved drawings and directions of Engineer-in-charge</p>	369.00	Sqm.	3353.44	1237419.36
40	<p>Providing and Fixing Wood slatted panel perforated panels of width 128-192mm, thickness of 15mm and length 2400 mm, made of a Moisture resistant fibre board substrate with a laminated facing as per the approved shade . The boards shall have a special perforation pattern where the reverse surface has a fluted perforation with consecutive 2-3mm wide groove followed by 13_14 mm of visible pane. The edges of the panel shall be "tongue-and-grooved" to fix special clips for installation and seamless visual. The back of the perforated panel shall have sound absorbing non-woven acoustical fleece hot pressed to achieve NRC of 0.6. and Humidity Resistance (RH) of 70% .The panels shall be mounted on special aluminium splines (keel) using inside clips provided by Manufacturer and approved by the Architect/ Engineer-in-Charge. The panel shall be mounted by tongue and groove mechanism using inside clip on GI extruded keel . The supply shall be backed by a Manufacturing Test Certificate . The panel to be fixed over the existing GI framework payable in item 4. Install Keel vertically using screws and plugs at spacing of not more than 600mm centre-to-centre. Trim the tongue of the first bottom panel and install using headless nail with groove side upward. Subsequent panels are installed with tongue side downward by engaging with each other using tongue and groove mechanism and secured by inside clip.</p>				
	<p>Continue this process until required height is achieved. Shorter butt edges need to be joined using industrial/wood glue. Finish off the edges using wooden moulding of matching colour all complete. Installation should be carried out as per Manufacturer recommended procedure.. The work to be done complete as per drawings and specifications, and directions of engineer in charge.</p>	300.00	Sqm.	3733.70	1120110.00

41	Providing and fixing 2nd class teak wood plain lining tongued and grooved, including wooden plugs complete with necessary screws and priming coat on unexposed surface. 20MM THICK	68.00	Sqm.	3291.15	223798.20
42	Melamine polishing on wood work (one or more coat).	68.00	Sqm.	110.75	7531.00
43	Providing and fixing wooden moulded beading to door and window frames with iron screws, plugs and priming coat on unexposed surface etc. complete : 50 x 20 mm	100.00	Metre	232.15	23215.00
44	Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. Two Coats.	515.00	Sqm.	113.90	58658.50
45	Providing and fixing sun screen roller blinds with following specifications:				
	<p>Hardware Specification :-</p> <p>Control unit: The Control unit is made of high strength reinforced plastic. The clutch is of wrap spring design. High carbon steel springs are provided to transmit motion from driving to driven members of clutch mechanism. Clutch is operated directionally by the use of endless beaded chain. Clutch never needs any adjustment.</p> <p>Idler: Idler is of high strength reinforced plastic, consisting of a centre shaft. The idler is mounted on the bracket by using a plastic lock. The metal sleeve inside the plastic lock provides bearing surface for the centre shaft, which rotates freely, providing smooth, quiet and long wearing operation.</p> <p>Head rail: It is an aluminum extruded rail Powder coated in white. Control unit and Idler are mounted on the Head rail with powder coated M.S. brackets.</p> <p>Roller tube: It is an anodized extruded tube of high strength alloy. Control unit and Idler are fixed to the either ends of the tube. The fabric of the blind is fitted to the tube with heavy duty adhesive tape.</p> <p>Bottom rail: It is an aluminum extruded rail with a groove for fixing the fabric and powder coated in white. It is fixed to the bottom of the fabric and the purpose of it is, to keep the fabric in tension and straight. The fabric is fitted to the tube using plastic insert. The end caps of the tube are ABS.</p> <p>Operating chain: This is made of 4.5mm plastic beads molded on 2.2mm thick polyester chord. The pitch of the beads is 6mm. The chain drives the sprockets of the control unit to close and open the blind. The pitch of the chain corresponds to the sprocket in perfect match for trouble free operation.</p>				

	<p>Fixing brackets & clamps: These are used to fix the blind to the wall or ceiling. 'L' bracket is made of mild steel and zinc plated. The clamp is made up of spring steel of thickness 0.7mm and zinc plated.</p> <p>Roller tube: It is Aluminum alloy Extruded grooved tube, which is anodized. Size- 32mm- O.D.; weight - 0.27 kg/mtr Size- 38mm- O.D.; weight - 0.38 kg/mtr Size- 50mm- O.D.; weight - 0.60 kg/mtr Alloy & temp- 6063-T6 Fabric is fitted on the tube with double sided tape.</p> <p>Bottom Rail: Extruded Aluminum grooved section- powder coated in white Size: 21mm O.D. Alloy-HE9WP Weight-0.28 Kg/mtr. Fabric is fitted to the bottom rail with plastic insert. Bottom rail end cap- made of ABS.</p> <p>Fabric : Construction 3 Ply PVC + 1 Ply Fiber Glass Blackout Polyester, Fabric Thickness 0.36 Mm, Fabric Weight +5% 520 GSM, Fabric Width 244 cms, Tearing Strength 64 N Warp, 57 N Weft, Tensile Strength 260 ON/ 5 Cm-Warp 212 ON/ 5 Cm-Weft, Fire Resistance NFPA 701 AATCC 16-2003 4.5, Environmental Certification Green Guard Certified, Other Properties Anti Fungal & Anti Bacterial Fabric etc. all complete as per the directions of Engineer-in-charge.</p>	115.00	Sqm.	1443.25	165973.75
46	<p>Supplying and Placing in position Faculty Table of following Specifications. Overall Dimension of the Main Desk Shall be - 1500mm x 600mm The system shall be a desk-based system with a platform understructure made up of a combination of MS. Tubes and plates. Understructure - The slanted legs are connected to the understructure with the help of PDC Connectors to provide a stable and sturdy base for the worktops. Modesty panel shall be of Acrylic (8 mm thick Acrylic both side frosted) or of Metal 1.2 mm thick CRCA. Worktop - Worktop shall be made of 25MM thick Pre-Laminated Board conforming to IS: 12823. All the edges of work surface shall be provided with machine pressed 2 mm thick PVC lipping glued with hot melt EVA glue. The worktop shall be complete with provisions for screen mounting as well as for wire management on the workstation. Provisions for fixing of the switches shall be on the wire tray/channel. A Wire Management - It shall be a part of the understructure and can be in the form of enclosed metal tray or 2 level enclosed channel to provide concealed wire management throughout the cluster formation. Wire riser leg or independent wire risers shall be provided as per the layout structure. Access flaps with soft closing technology shall be provided on the table tops to access the switch points on the tray. Pedestal having 3 Drawers Unit having flat metal front and top with Central locking. The Drawer Unit consists of 2Box and 1File Drawers.</p>				

	<p>The Overall size of the Drawer Units is 450mm(W) X 435mm(D) X 646mm(H). Construction & Material of Drawer Unit :Welded Assembled of 0.8mm thick CRCA for Body Shell, Drawer Front & tray, Front Side Stiffener, Rear Side Stiffener & Bottom, 1.2mm thick CRCA Top Stiffene, Bottom stiffener, Drawer Fronts & Metal Front Straight Edge. All Drawers with Double extension precision ball slide shall be provided. For Drawer pulling, side wise tapered recess provided in shell behind Drawer Fronts. Locking:10 lever Cam Lock & Central RH locking with actuator & lock channel mechanism. Top Panel : 0.8mm thick Metal Straight Edge Top. Castors : Swiveling non-lockable 4Nos Castors mounted below the body shell. The Total drawer unit is finished with Epoxy Polyester Powder coated to the thickness of 50 microns (+/-10). The product should be complete and as per approved sample and as per the directions of Engineer-In-charge. (Make: GODREJ, HERMANMILLER, STEELCASE, DELLFORM, VITRA)</p>	8.00	No's	41442.00	331536.00
47	<p>Supplying and placing executive chair as per the following specifications: The cushioned seat assembly consists of seat base moulded in glass-filled Poly-amide, moulded Polyurethane foam & upholstered with high stretch knitted polyester fabric. The cushioned back assembly consists of back inner moulded in Polypropylene in-situ moulded with Polyurethane foam & upholstered with high stretch knitted polyester fabric.* Full Back Size : 45.5 cm. (W) x 53.0 cm. (H) *Seat Size :48.5 cm. (W) x 47.0 cm. (D)The HR polyurethane foam used in seat and back cushion is moulded in Density 45±2 kg/m³, and hardness load 16 ± 2 kgf as per 15:7888 for 25% compression.The seat and back are firmly connected to the base frame and are cantilevered in such a way that it gives a multi-dimensional movement possibility just with a simple lean on the sides or back, without need for complex manual adjustments. The cantilevered seat offers impact cushioning while sitting and synchronises with the back movement during posture changes. The "5" shaped spines moulded in high strength glass-filled Poly-amide and the spine connector moulded in glass-filled Poly-am)de form the back-spine structure involved in multi-dimensional recline motion.The variable tilt angle recline motion can be adjusted with 3 position Tilt Limit feature which is inbuilt in seat base and the tension (return force) is user weight dependent. The assembly consists of armrest housing sliding over the armrest structure, both moulded in glass-filled Poly-amide.</p>				

	<p>The height adjustment feature is button operated having adjustment of 6.6 ± 0.5 cm. The Armrest Top is made up of integral skin PU moulded over plastic inner moulded in glass-filled Poly-amide. The seating height can be adjusted with a pneumatic gas-lift having an adjustment stroke of 9.2 ± 0.3 cm. The pedestal is injection moulded in glass-filled Poly-amide and fitted with 5 nos. in wheel castors. The pedestal is 66.0 ± 0.5 cm. pitch centre diameter and 76.0 ± 1.0 cm. with castors. 5 nos. twin wheel castors are injection moulded in Poly-amide having 5.0 ± 0.1 cm heel diameter and assembled to the pedestal. etc. all complete as per the directions of Engineer-in-charge. (Make: GODREJ, HERMANMILLER, STEELCASE, DELLFORM, VITRA)</p>	8.00	No's	10428.00	83424.00
48	<p>Supplying and placing Visitor Chair of following Specifications. Overall Dimensions of Chair-Seat Height - 46.5cm. Height - 93.5cm Width & Depth of Chair as measured from pedestal - Width-61.0 cm and Depth-64.5 cm. SEAT ASSEMBLY: The seat assembly should be made up of 1.2 ± 0.1 cm. thick hotpressed plywood, upholstered with fabric upholstery covers and moulded Polyurethane foam. SEAT SIZE: 47.0 cm. (W) x 48.0 cm. BACK ASSEMBLY: The back assembly should be made of powder coated (OFT 40-60 microns) tubular frame of 0.254 ± 0.03 cm. x 0.2 ± 0.016 cm. thk. MS ERW tube designed with contoured lumbar support for extra comfort. The back should be upholstered using double layer spacer mesh fabric with high tenacity yarn. BACK SIZE : 46.5 cm. (W) x 60.5cm. HIGH RESILIENCE (HR) POLYURETHANE FOAM: The HR polyurethane foam should be moulded with density $=45 \pm 2$ kg/m³ and hardness load 16 ± 2 kgf for 25% compression. ARMRESTS: The one-piece armrests should be injection moulded from black Copolymer Polypropylene. TUBULAR FRAME: The powder coated (DFT 40-60 microns) tubular frame should be cantilever type & made of $\varnothing 2.54 \pm 0.03$ cm. x 0.2 ± 0.016 cm thick M.S.E.R.W. Tube. The product should be complete and as per approved sample and as per the directions of Engineer-In-charge. (Make: GODREJ, HERMANMILLER, STEELCASE, DELLFORM, VITRA)</p>	16.00	No's	6379.00	102064.00

49	<p>Supplying and placing classrooms desk cum bench of following specifications. Product Specification</p> <p>A) Legs:-Legs are made of MS ERW tube section (IS:7138) of size 75 X 25 X 2 mm thick oval tube with 5 mm thk HR brackets as per IS:2062 and 2mm thk CRCA brackets as per IS:513 welded on to the tubes. Assembly is powder coated with epoxy polyester. -Leg height varies from 705 to 1005 in pitch of 50 as per layout.-Sturdy anchoring by anchor bolts on to base of 8mm thk plate for proper resting of Leg.-Shoe made of ultramid -Nylon are provided at the bottom for covering the base plate.</p> <p>B) Side clads:-Two side clads made of 18 mm thk plate with 0.8mm thk pvc lipping and on the outside covered with welded metal structure made of 2 mm thk CRCA as per IS:513 powder coated with Epoxy polyester</p> <p>C) Worktop:-Worktop are made of 25 mm thick Pre-Laminated Board of E1-P2 Grade and approved shade conforming to IS:12823. All the edge of work surface are provided with machine pressed 2mm thick pvc edge band glued with hot melt glue.</p> <p>D) Seat: -Seat has self closing mechanism which will operate by means of dead weight. Seat understructure is made from combination of welded fabricated structure of 5mm Thk HR as per IS:2062 and 8mm thk ply as per IS:303 with moulded PU foam of density 55 kg/cu.mtr. on top which in turn is covered with stitched upholstery. Seat assembly is covered on bottom side by means of seat cover made of CRCA (IS:513).</p>				
	<p>E) Seat Back:-Seat back is made from combination of 8mm thk ply as per IS:303 with foam on top which in turn is covered with stitched upholstery.</p> <p>F) Seat Support Frame :-Seat support frame is made from combination of MS ERW tube section (IS:7138) of size 80 X 40 X 2.5 mm thick rectangular tube and MS ERW tube section(IS:7138) of size 48 X 19.1 X 2 mm thick oval tube welded together . Assembly is powder coated with Epoxy polyester. CAP made of ultramid are provided from front to cover the oval tubes.</p> <p>G) Modesty:-Modesty is made of 25mm thick pre-laminated twin board of E1-P2 Grade and approved shade conforming to IS:12823. All the edge of modesty are provided with machine pressed 2 mm thick pvc edge band glue with hot melt glue etc. all complete as per the directions of Engineer-in-charge. (Make: GODREJ, HERMANMILLER, STEELCASE, DELLFORM, VITRA)</p>	716.00	No's	23720.00	16983520.00

50	Supplying and fixing of storage cabin of following specifications: Storage shall have an overall size of 916mm (W) x 486mm (D) x 1980mm (H) with welded construction. It should have the shelf thickness of 0.7 mm, Back thickness of 0.8mm, Door thickness of 0.8mm (high yield strength) and all other components shall have a thickness of 0.9mm. These components shall be made of CRCA 'D' grade high yield strength as per IS:513. The Storvel Plain should have a Mazak handle and Three way locking mechanism with Shooting Bolts. It should have a height wise adjustable shelf mounting which shall have a Uniformly Distributed Load Capacity of max 40 Kg. It should also have a M10 Screw type Leveller with Hex plastic base. The finishing shall include Epoxy powder coated to the thickness of 50 microns (+/- 10). Plenty of colour options and shelving options shall be available all complete as per the directions of Engineer-in-charge. (Make: GODREJ, HERMANMILLER, STEELCASE, DELLFORM, VITRA)	8.00	No's	24338.00	194704.00
B	Electrical Work				
51	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
a)	Group C	212.00	Point	990.00	209880.00
52	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.				
a)	Group C	110.00	Point	555.00	61050.00
53	Supply and fixing suitable size GI box with modular plate and cover in front on surface or in recess including providing and fixing 6 pin , 15/16 Amps modular socket outlet and 15/16 Amps modular switch , connection etc . as required	68.00	Each	495.00	33660.00
54	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit along with 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	3890.00	Meter	265.00	1030850.00
55	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium class PVC conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	4160.00	Metre	308.00	1281280.00

56	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
a)	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	500.00	Metre	167.00	83500.00
b)	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	1140.00	Metre	328.00	373920.00
57	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel conduit as required (For computer power in Furniture)				
a)	3 x 4 sqmm	2760.00	Metre	117.00	322920.00
b)	6 x 4 sq. mm	1860.00	Metre	221.00	411060.00
58	Supplying and fixing modular blanking plate ,on the existing modular plate & switch box excluding modular plate etc. as required.	32.00	Each	32.00	1024.00
59	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
a)	5/6 A switch	730.00	Each	85.00	62050.00
b)	3 pin 5/6 A socket outlet	730.00	Each	111.00	81030.00
60	Supplying and fixing following Modular base & cover plate on existing modular metal boxes etc. as required.				
a)	3 Module	730.00	Each	128.00	93440.00
61	Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted				
a)	4 way (4 + 12), Double door	8.00	Each	3068.00	24544.00
62	Supplying and fixing following way, single pole and neutral, sheet steel MCB DISTRIBUTION BOARD 240 volts on surface/ recess complete with, tinned copper bus bar, neutral link, earth bar, din bar, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)				
a)	12 way double door	50.00	Each	2053.00	102650.00
63	Supplying and fixing 5 amps to 32 amps, rating, 240/415 volts, 'C' Curve , miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
a)	Single Pole	496.00	Each	199.00	98704.00
b)	Double pole	50.00	Each	556.00	27800.00
c)	Triple pole and neutral	8.00	Each	1092.00	8736.00
64	Supplying and fixing following rating double pole 240volts, Residual current Circuit Breaker (RCCB) , having sensitivity of 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.				

a)	25 amp DP RCCB	50.00	Each	1927.00	96350.00
65	Dismantling the existing worn out / defective fittings from the ceiling and SITC of minimum 36 watt Aluminium slim energy efficient LED Panel light fitting having system efficacy minimum 100 lumen/watt LM79, color temp 6500 deg K, recess mounting suitable for fitting in the 600mm x 600mm square existing space having symmetric glare free illumination in the false ceiling complete with all standard accessories including drivers etc. complete as required	230.00	Each	3197.88	735512.40
66	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CMMW) minimum 6.85, Air delivery minimum 215 CMM, 350 RPM (tolerance as per IS : 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required.	90.00	Each	2688.00	241920.00
67	Earthing with copper earth plate 600mm X 600mm X 3mm thick including accessories and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 mtr long etc with charcoal, coke and salt as required.	8.00	set	11794.00	94352.00
68	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	444.00	Metre	1009.00	447996.00
69	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required.	48.00	Metre	1224.00	58752.00
70	Supply and installing following size of under floor Gi (hot dip galvanized) raceways made out of 1.6mm thick sheet steel, standard length 2.5 meters, 1/2/3 compartment complete with jointing sleeves and other accessories under floor installation including cutting and chasing the floor, making good the same, placing in position and cleaning from inside complete of following sizes etc. as required.(50mm x 38mm x 1.6mm)	330.00	mtr	1227.96	405226.80
71	Supply & installing following size of under floor access outlet made out of 1.6 mm thick pre-galvanised GI sheet with all accessories including necessary cutting and chasing of floor and making good the same, placing in position, cleaning from inside etc. as required.(150mm x 150mm x 1.6mm with 75 mm thick metallic lid)	32.00	Nos.	2663.07	85218.24
72	Supplying and fixing of UPVC trunking of size 100 x 50 along with accessories on surface complete as required.	120.00	Metre	984.00	118080.00

73	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface / recessed steel / PVC Conduit as required. 1 Run of Cable	350.00	Metre	49.00	17150.00
74	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/ recess including cutting the wall and making good the same in case of recessed conduit as required.				
a)	25 mm	220.00	Metre	90.00	19800.00
b)	40 mm	10.00	Metre	130.00	1300.00
75	Supply Installation, Testing & Commissioning of modular type Variable Refrigerant Flow/Variable Refrigerant Volume aircooled Outdoor units suitable for cooling and heating, having all hermetically sealed inverter type Scroll Compressor(s), minimum two compressors for above 14HP modules, microprocessor based Controller, top discharge type condensing unit(s), with R410A Refrigerant, vibration isolators with suitable foundation etc. complete as required. The unit shall deliver the rated capacity at AHRI Conditions and work even at 50°C ambient temperature without tripping. The unit shall be suitable to work on 400V+/-10%, 3Phase, 50Hz AC power supply. The unit shall be filled with first charge of the refrigerant and ready for use as required. The COP at AHRI conditions shall not be less than 3.1 and IEER not less than 6.5 .(ODU Unit should be anti corrosive coated from factory)	87.00	Per HP	16415.00	1428105.00
76	Supply, installation, testing and commissioning of following minimum capacity 4-way flow VRV/VRF Cassette Type Indoor ceiling mounted unit equipped with synthetic washable media pre-filter, fan section with low noise fan/dynamically balanced blower, multispeed motor, coil section with DX Copper coil, electronic expansion valve, outer cabinet, drain pump, grill, necessary supports, vibration isolation, cordless remote control etc., suitable for operation on single phase 230V±10%, 50Hz AC supply, complete, as required. The unit shall have automatic force shut down provision in case of fire on receiving signal from BMS System. The cooling capacity of indoor unit will be at airinlet conditions of 27 Degree CDB and 19 Degree CWB temperature.				
a)	2.4 TR	6.00	Each	31453.00	188718.00
b)	2.8 TR	4.00	Each	32015.00	128060.00
c)	3.2 TR	6.00	Each	32787.00	196722.00
d)	3.6 TR	6.00	Each	33209.00	199254.00
e)	4.0 TR	4.00	Each	33981.00	135924.00

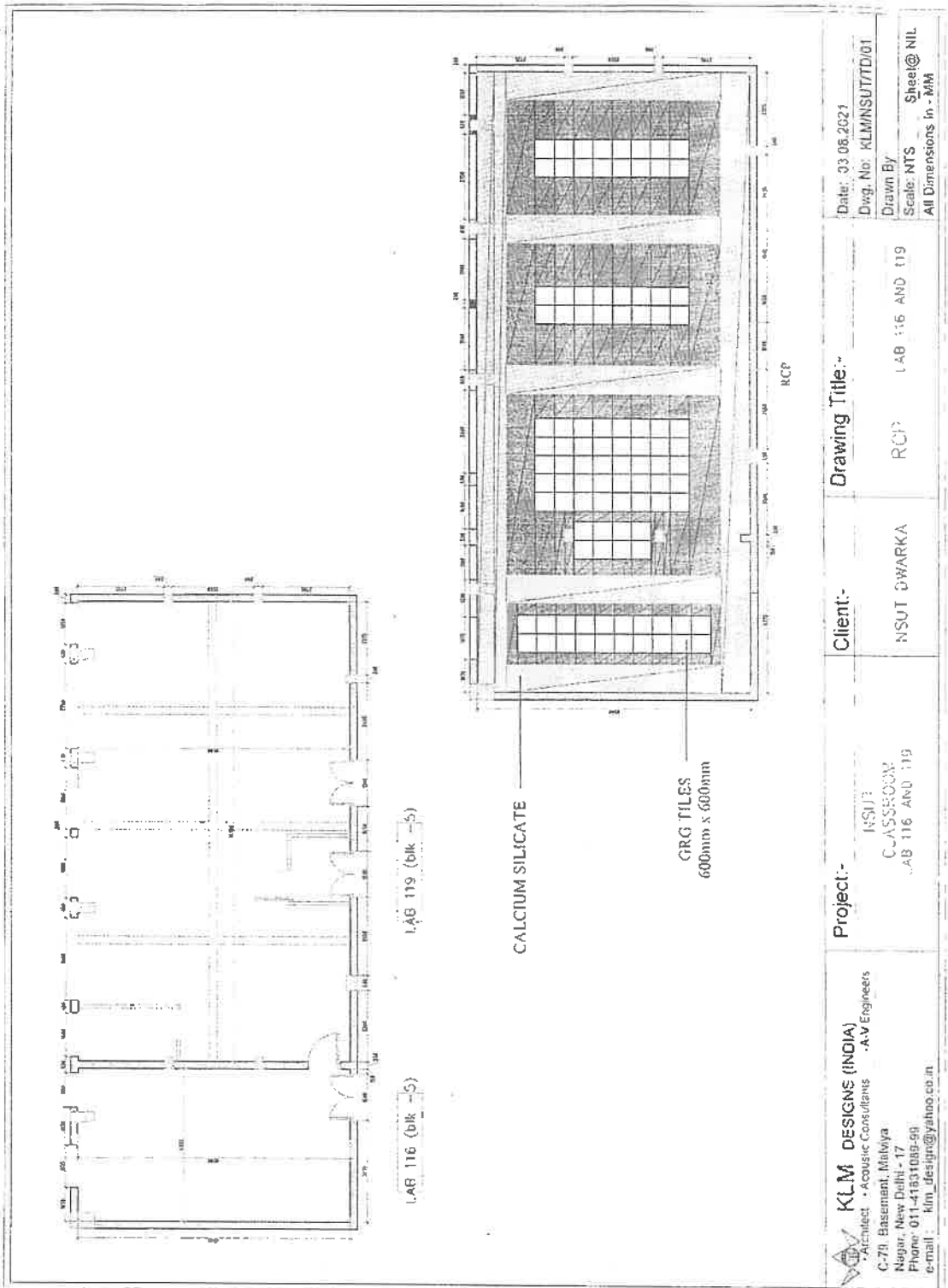
77	Supply, Installation, testing and commissioning including vaccumiazation and Nitrogen testing of following nominal sizes of soft/hard drawn copper refrigerant piping for VRV/VRF system, complete with fittings with suitable adjustable ring type hanger supports, jointing/brazing including accessories, insulated with XPLE Class-O tubular insulation/with Class-O closed cell elastometric nitrile rubber tubular sleeves sections of specified thickness as given below for Suction and Liquid lines, all accessories as per specifications etc. as required :				
a)	38.1mm dia(OD)(Hard drawn)with tubethickness 1.62 mm with 19mm thick insulation	80.00	Meter	1265.00	101200.00
b)	34.9 mm O.D. (Hard drawn)with tube thickness 1.62mm with 19 mm thick insulation	90.00	Meter	1230.00	110700.00
c)	28.58 mm O.D. (Hard drawn)with tube thickness 1.2mm with 19 mm thick insulation	100.00	Meter	1108.00	110800.00
d)	22.2 mm O.D. (Hard drawn)with tube thickness 1.2mm with 19 mm thick insulation	130.00	Meter	865.00	112450.00
e)	19 mm O.D. (Hard drawn)with tube thickness 1.2mm with 19 mm thick insulation	90.00	Meter	707.00	63630.00
f)	15.86 mm O.D. (Soft drawn)with tube thickness 1.2mm with 19 mm thick insulation	170.00	Meter	588.00	99960.00
g)	12.7 mm O.D. (Soft drawn)with tube thickness 1.2mm with 19 mm thick insulation	130.00	Meter	466.00	60580.00
h)	9.5 mm O.D. (Soft drawn)with tube thickness 1.2mm with 19 mm thick insulation	180.00	Meter	331.00	59580.00
78	Supply Installation Testing and Commissioning Providing and fixing rigid PVC piping complete with fittings, supports as per specifications and duly insulated with 9 mm thick closed cell nitrile rubber insulation.				
a)	32 mm	200.00	Meter	134.00	26800.00
b)	40 mm	120.00	Meter	185.12	22214.40
79	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	500.00	Meter	146.00	73000.00
80	Supplying and laying 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	560.00	Meter	44.00	24640.00
81	Supplying and installing following size of perforated Hot Dipped Galvanised iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.				
a)	300 mm width X 50 mm depth X 1.6 mm thickness	70.00	Meter	875.00	61250.00
82	Cutting holes of required size in brick masonry wall for passing of copper pipes, Drain pipes, cable removing of false ceiling and re-fixing/placing back if required etc. and making good the same etc. complete as per direction of Engineer-in-charge. (The hole shall be made by core cutter)	30.00	Each	2500.00	75000.00

83	<p>Supplying, Installation, Testing and Commissioning of cubical type outdoor LT panel suitable for 415 V, 3 phase, 4 Wire 50 Hz AC supply system fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2 mm thick for frame work and covers, 3 mm thick for gland, plates i/c cleaning & finishing complete with 7 tank process from powder coating in approved shade, having 600Amps. capacity extensible type TPN aluminium alloy bus bars of high conductivity, DMC / SMC bus bars of high conductivity, DMC / SMC bus bars supports, with short circuit withstand capacity of 31 MVA for 1 Sec. bottom base channel of MS section not less than 100 mm x 50 mm x 5 mm thick fabrication shall be done in transportable sections, entire panel shall have a common copper earth bar of size 25 mm x 5 mm at the rear with 2 nos. earth stud. solid connections from main bus bar to switch gears with required size of Al. bus bars and control wiring with 2.5sq mm. PVC insulated copper conductor S/C cable, cable alleys, cable gland plates in two half, i/c. providing switch gears: - (Panel shall be TTA approved)</p> <p>INCOMING</p> <p>400A 4P Adjustable MCCB 36 kA, 415 volts, 50Hz, with door interlocking with all connected accessories - .</p> <p>1 no. 0-500 Amp. Ammeter with selector switch.</p> <p>1 no. Volt meter with selector switch 0-500volts.</p> <p>3 nos. RYB Led indication lamps.</p> <p>OUTGOING</p> <p>80A FP Adjustable MCCB 25kA -4 Nos. for outdoor units</p> <p>25A FP MCB – 4 nos. for indoor units D.B</p>	2.00	Each	450000.00	900000.00
84	<p>Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface / recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks tinned copper bus bar, neutral link, earth bar din bar, detachable gland plate, interconnections, powder coated painted including earthing etc, as required. (Panel shall be TTA approved)</p> <p>INCOMING</p> <p>a. 25 A 4P MCB --- 01 Set.</p> <p>b. RYB LED type indication lights --- 01 Set.</p> <p>OUTGOING :</p> <p>6 A SP MCB --- 18 Set.</p>	4.00	Each	200000.00	800000.00
85	<p>Supply of XLPE insulated Copper conductor, armoured 1.1 KV grade cable of following size complete as required.</p>				
a)	4C x 16 Sq mm	90.00	RMT	1122.01	100980.90
b)	4C X 10 Sq mm	100.00	RMT	758.36	75836.00
c)	3C x 1.5sqmm	550.00	RMT	141.03	77566.50

86	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.				
a)	Upto 35 sq. mm (clamped with 1mm thick saddle)	740.00	RMT	33.00	24420.00
87	Supply of one number XLPE insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size complete as required				
a)	3.5C x 95 sqmm Aluminium armoured cable	90.00	Meter	682.08	61387.20
88	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
a)	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	90.00	Meter	104.00	9360.00
89	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
a)	4 X 10 sq. mm (25mm)	10.00	Each	219.00	2190.00
b)	4 X 16 sq. mm (28mm)	10.00	Each	250.00	2500.00
c)	3½ X 95 sq. mm (45mm)	8.00	Each	473.00	3784.00
90	Comprehensive Annual maintenance of VRV/VRF Air conditioning system provided and installed under this contract with all parts/components i.e compressor, gas charging, fan motor etc(one year free defect liability period and thereafter paid)				
a)	For 1st Year (During defect liability period)	87.00	HP	0.00	0.00
b)	For 2nd Year	87.00	HP	2800.00	243600.00
c)	For 3rd Year	87.00	HP	2940.00	255780.00
d)	For 4th Year	87.00	HP	3087.00	268569.00
e)	For 5th Year	87.00	HP	3240.00	281880.00
91	SITC of Ultra Short Throw Projector with minimum Specification /Features i.e. Brightness: Minimum 4000 Lumens or better, Projection Technology: 3LCD Technology, Light Source: Laser, Resolution: WXGA , Contrast Ratio minimum 2000000:1, Interface: VGA, HDMI & Base-T, wireless LAN, Wi-fi Direct, Miracast, Horizontal and vertical keystone correction, Image Shift, Instant on/off, A/V mute complete with installation as per site requirement.	10.00	Each	166969.20	1669692.00
92	SITC of Projector mounting kit to mount the above projector complete with installation as per site requirement.	10.00	Each	6843.00	68430.00
93	SITC of Motorized Tab Tensioned Projection Screen with minimum size of 113" Diagonal with Aspect Ratio of 16:10 complete with installation as per the site requirement.	10.00	Each	46760.50	467605.00

94	SITC of Digital Podium with minimum Specification /Features i.e. in Metallic Frame and wooden top, powder coated with caster wheels & brakes. Drawer for keyboard, mouse and document camera. Provision of 19" Rack inside podium to fit in international standard equipment. Access doors for servicing both from front and back side of the podium. Interactive Display: Interactive Panel Size of 21.5" Diagonal, Full HD Panel, Touch Technology: (Electromagnetic + Capacitive) Touch Digitizer and supplied with Electromagnetic Stylus. Provision for gooseneck microphone and button control panel, connectivity Ports- HDMI, VGA, audio, Network, USB. etc. complete with installation as per the site requirement.	8.00	Each	236083.50	1888668.00
95	SITC of 4K Portable Document Camera with minimum Specification /Features i.e. 13 MP CMOS Sensor, minimum 30x Zoom with HDMI In & HDMI Out, USB Output, Inbuilt Storage of minimum 100 images, inbuilt microphone for audio video recording, Image rotation 0° / 90° / 180° / 270° / Flip / Mirror, CE, FCC and RoHS Certified etc. complete with installation as per site requirement.	8.00	Each	51322.50	410580.00
96	SITC of Camera to capture the presenter with minimum Specification /Features i.e. Full HD 1080p, minimum 20X Optical Zoom, min 100 Presets, 60 Frames per Second, Ethernet Out, HDMI Out, 3G-SDI Out, Audio In, RS232/422 Controls, -170° ~ +170° Panning angle, -30° ~ +90° Tilting angle , Should support PoE+, CE, FCC and RoHS Certified etc. complete with installation as per site requirement.	8.00	Each	240075.25	1920602.00
97	SITC of HDMI to USB Converter with HDMI loop output, complete with installation as per site requirement.	8.00	Each	76413.50	611308.00
98	SITC of 50 feet HDMI cables with installation as per site requirement.	16.00	Each	13686.00	218976.00
99	SITC of 6 feet HDMI cables with installation as per site requirement.	40.00	Each	2851.25	114050.00
100	SITC of Digital Matrix Switcher with minimum Specification /Features i.e. 4 HDMI Input & 2 HDMI output ports , 4 USB 2.0 Host switching layer for multiple USB hosts and 4 USB for Peripheral devices. HDMI1.4, Audio, Ethernet, 2 RS-232 Ports, IR extension, 3D formats, and 4K / UHD (30Hz RGB 4:4:4 , 60Hz YCbCr 4:2:0) supported, Audio embedding and de-embedding, Built-in Event Manager, command injection, Auto select modes, EDID Management etc. all complete with installation as per the site requirement.	8.00	Each	330745.00	2645960.00
101	SITC of Smart room control system with minimum Specification /Features i.e. programmable keypad, a volume knob, and a processor running Event Manager with 2x Ethernet connectivity with PoE reception and transmission ; 1x RS-232 for peripheral device control ; 3x GPIO for motorized screen and shades control etc. all with installation as per site requirement.	8.00	Each	111769.00	894152.00

102	SITC of Standalone Recorder with minimum Specification /Features i.e. should have HDMI inputs & minimum 1 TB HDD (storage) in it, with installation as per site requirement.	8.00	Each	63868.00	510944.00
103	SITC of 4 port relay with installation as per site requirement.	8.00	Each	11405.00	91240.00
104	SITC of 8-Port Ethernet Switch etc. complete with installation as per site requirement.	8.00	Each	17107.50	136860.00
105	SITC of Condenser gooseneck microphone (cardioid) for Podium with minimum Specification /Features i.e. Frequency response: 50 - 19,000 Hz or better, black, length 500 mm (20") or better, LED ring, 3-pin XLR male, programmable button, phantom power driven, support RFI shielding alongwith Shock Mount etc. complete with installation as per the site requirement.	8.00	Each	36496.00	291968.00
106	SITC of Wireless handheld Microphone System with minimum Specification /Features i.e. bandwidth up to 40 MHz, Transmission range up to 120 m, Audio frequency response 45 – 15 kHz, Audio dynamic range complete with installation as per the site requirement.	8.00	Each	43339.00	346712.00
107	SITC of Wireless Lapel Microphone System with minimum Specification /Features i.e. Switching bandwidth up to 40 MHz, Transmission range up to 120 m, 16 per frequency band simultaneously active channels, Audio frequency response 45 – 15 kHz, Audio dynamic range 106 dB (A-weighted with UHF Beltpack Transmitter & Microphone Frequency response 20 - 20,000 Hz, Open circuit voltage: 40 mV/Pa, Max. SPL 126 dB at 1 kHz, S/N ratio: 51 dB, Equivalent SPL 32 dB etc. complete with installation as per the site requirement.	8.00	Each	43339.00	346712.00
108	SITC of Audio digital Signal processor Unit with minimum specification / features i.e. USB Audio Interface, Minimum 8Input Processing Unit with AEC Enable, Input Channel: Minimum 6 or more, 3 x Line Output or more, Frequency Response : 20 Hz to 20 kHz, THD: 0.1% or better, SNR : 90dB or better, Channel Separation : -80dB or less, USB audio interface for soft codec application, Digital Network Link Port for future expansion, IP / RS232 port for third-party control, with complete installation as per site requirement.	8.00	Each	347852.50	2782820.00
109	SITC of Power amplifiers with minimum specification / features i.e. Type: Class D, RMS Power: 900W @ 4 ohm, Frequency Response 20 Hz- 20 kHz, Distortion <0.2%, Signal to Noise Ratio >100 dB or better etc. complete with installation as per the site requirement.	10.00	Each	119752.50	1197525.00
110	SITC of Wall Mount Speaker with minimum specification / features i.e. 8" Passive Loudspeaker, 2 Way full range-High Output 8" or better Loudspeaker, Driver : 1 x 8" LF driver or better, 1"HF driver or better , Peak Power: 350-400 Watt or better, Impedance : 8 Ohm, Frequency Range: 90Hz-20kHz or better, Dispersion : 70-90 X 50-60 or better, Sensitivity 95dB or better etc. complete with installation as per the site requirement.	20.00	Each	25091.00	501820.00



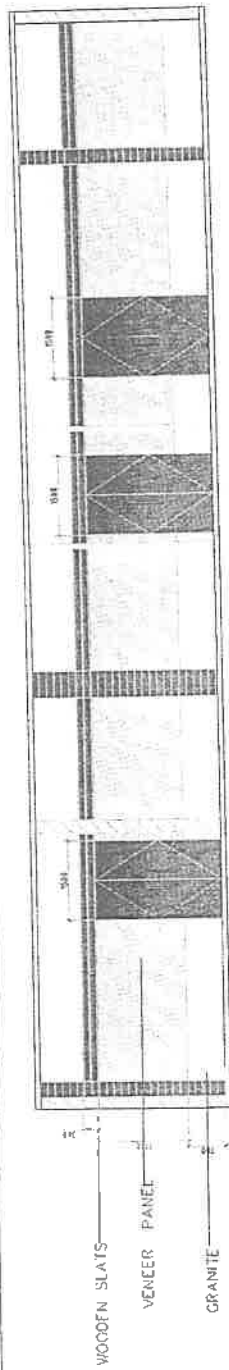
Date: 03.08.2021
 Dwg. No: KLMNSUTTD/01
 Drawn By: _____
 Scale: NTS
 Sheet@NIL

Drawing Title:-
 RCP LAB 116 AND 119

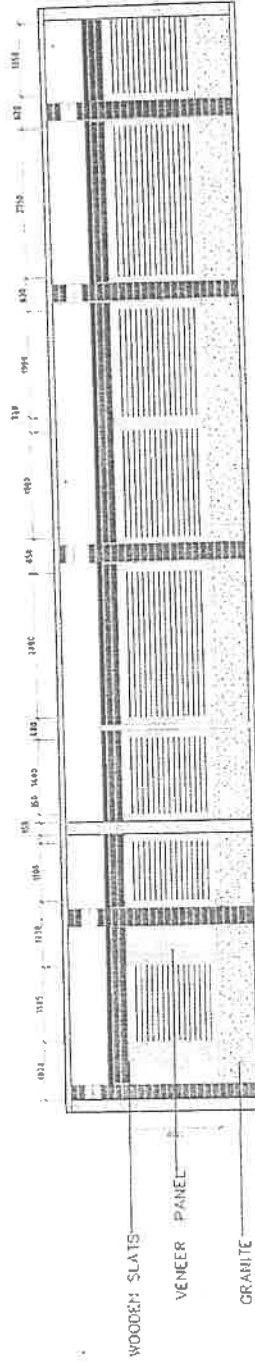
Client:-
 NSUT DWARKA

Project:-
 NSUT
 CLASSROOM
 LAB 116 AND 119

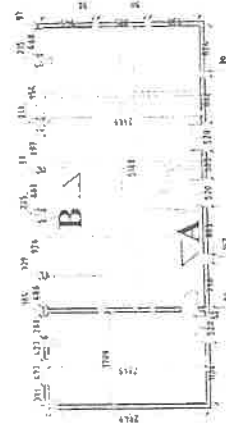
KLM DESIGNS (INDIA)
 Architect - Acoustic Consultants - A.V Engineers
 C-79, Basement, Mitiviya
 Nagar, New Delhi - 17
 Phone: 011-41834089-99
 e-mail: klm_design@yahoo.co.in



ELEVATION A

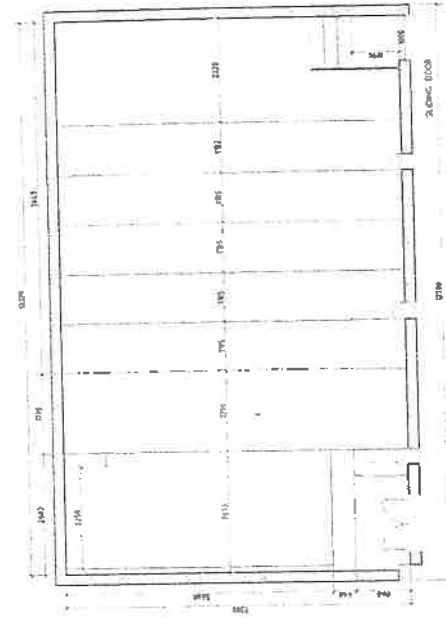
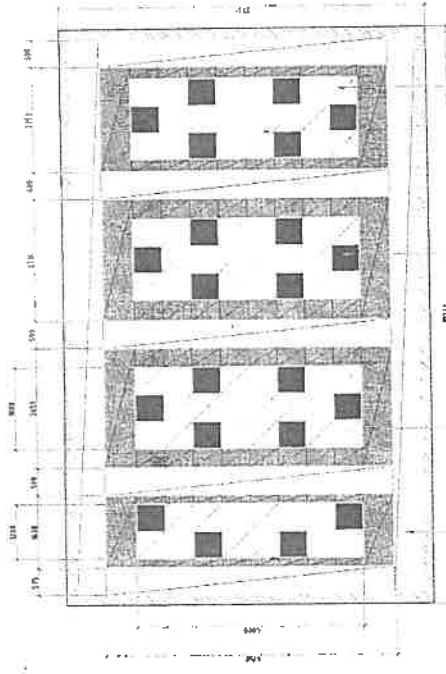


ELEVATION B



KEYPLAN LAB 116 & LAB 119

<p>KLM DESIGNS (INDIA) Architect - Acoustic Consultants - AAV Engineers C-79, Basement, Malaya Nagar, New Delhi - 17 Phone: 011-41831088-99 e-mail: klm_design@yahoo.co.in</p>	<p>Project:- NILE CLASSROOM LAB 116 AND 119</p>	<p>Client:- MSUT DWARKA</p>	<p>Drawing Title:- ELEVATION LAB 116 AND 119</p> <p>Date: 03.08.2021 Dwg. No: KLM/NSUT/ID02 Drawn By: Scale: NTS All Dimensions In - MM Sheet: NIL</p>
---	--	--	---



Date: 03.08.2021
 Dwg. No: KLMSUTTD/03
 Drawn By:
 Scale: NTS
 Sheet: NIL
 All Dimensions In - MM

Drawing Title:-

RCP CR 002 & CR 003

Client:-

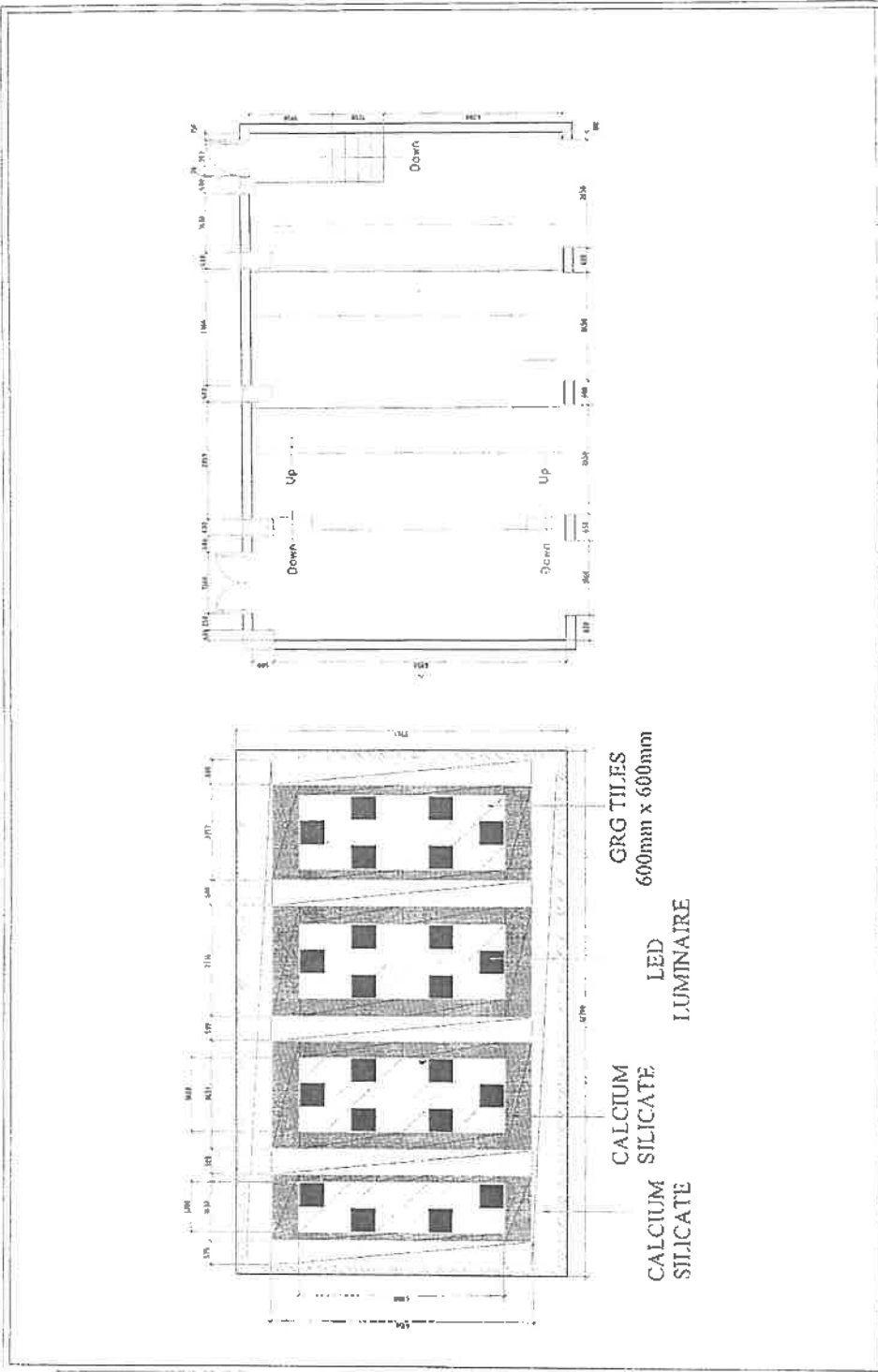
NSUT DWARKA

Project:-

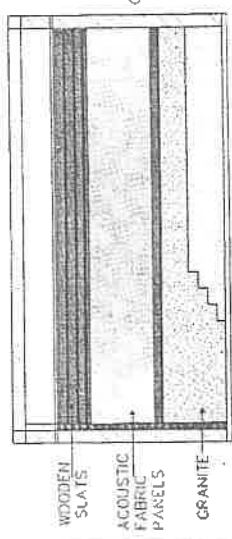
NSUT
 CLASSROOM
 CR 007 & CR 003

KLM DESIGNS (INDIA)
 Architect - Acoustic Consultants - AV Engineers

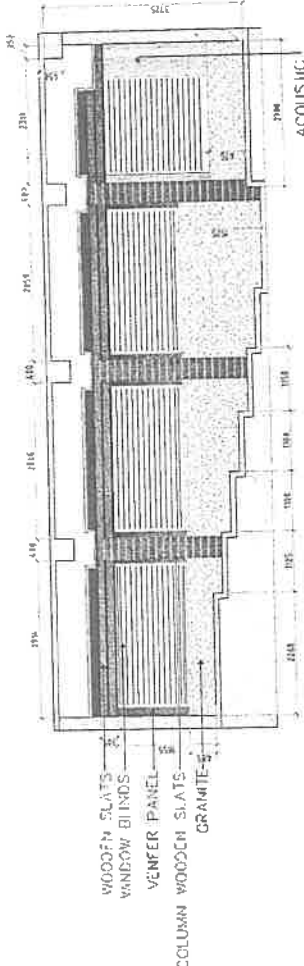
C-79, Basement, Mayapuri
 Nagar, New Delhi - 17
 Phone: 011-41831089-99
 e-mail: klm_design@yahoo.co.in



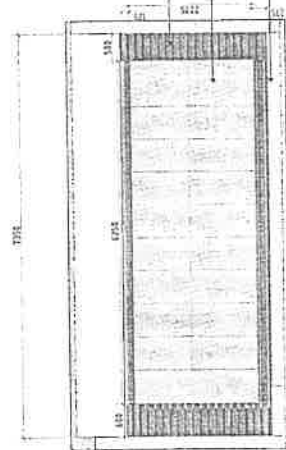
<p>KLM DESIGNS (INDIA) Architect - Acoustic Consultants - A.V Engineers C-79, Basement, Mahadya Nager, New Delhi - 17 Phone: 011-41631089-98 e-mail: klm_designs@yahoo.co.in</p>	<p>Project:- HSJT CLASSR 200M CR 102 & CR 103</p>	<p>Client:- NSJT DVARKA</p>	<p>Drawing Title:- RCP CR 102 & CR 103</p>	<p>Date: 03.08.2021 Dwg. No: KLM/NSJT/10/05 Drawn By: _____ Scale: NTS Sheet@ N.L. All Dimensions In - MM</p>
---	--	--	---	---



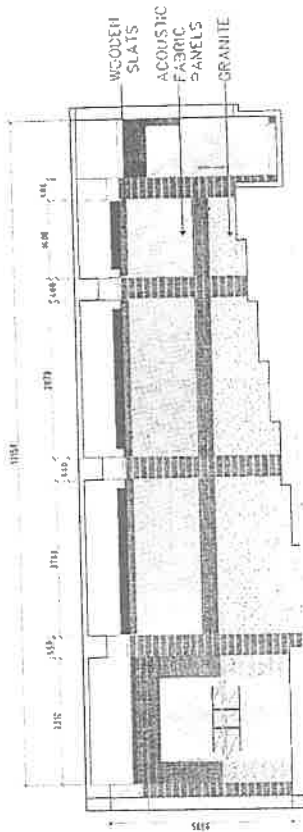
REAR ELEVATION



SIDE ELEVATION



FRONT ELEVATION



SIDE ELEVATION

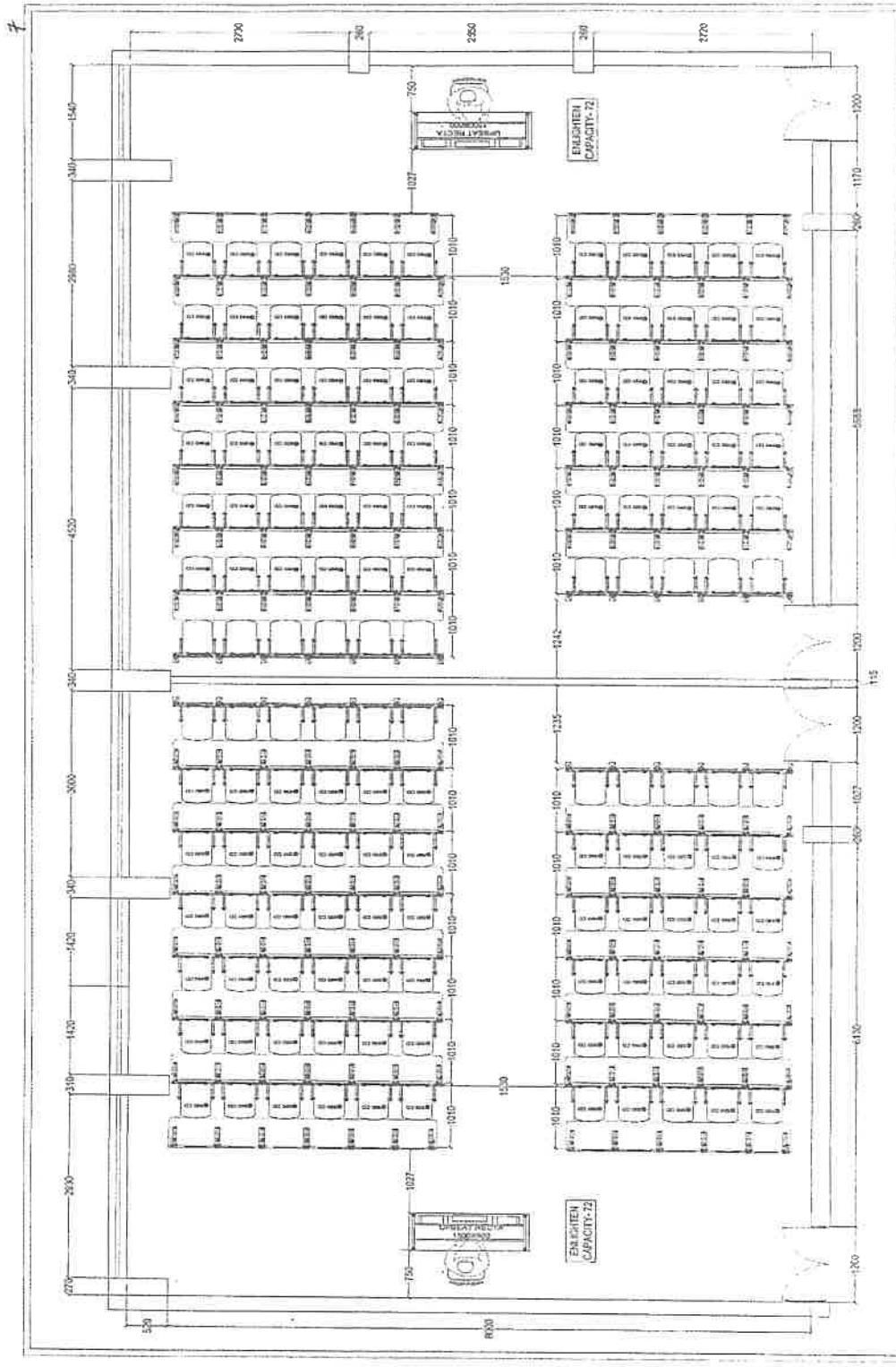
KLM DESIGNS (INDIA)
Architect - Acoustic Consultants - A/V Engineers
C-79, Basement, Malviya Nagar, New Delhi - 17
Phone: 011-41831089-99
e-mail: klm_design@yahoo.co.in

Project:-
RESIDENT
CLASSROOM
CR 102 & CR 103

Client:-
SRI SIVAMURTHY

Drawing Title:-
ELEVATION CR 102 & CR 103

Date: 03.08.2021
Dwg. No: KLM/INSUITD/06
Drawn By:
Scale: NTS
Sheet: @ NIL
All Dimensions In - MM



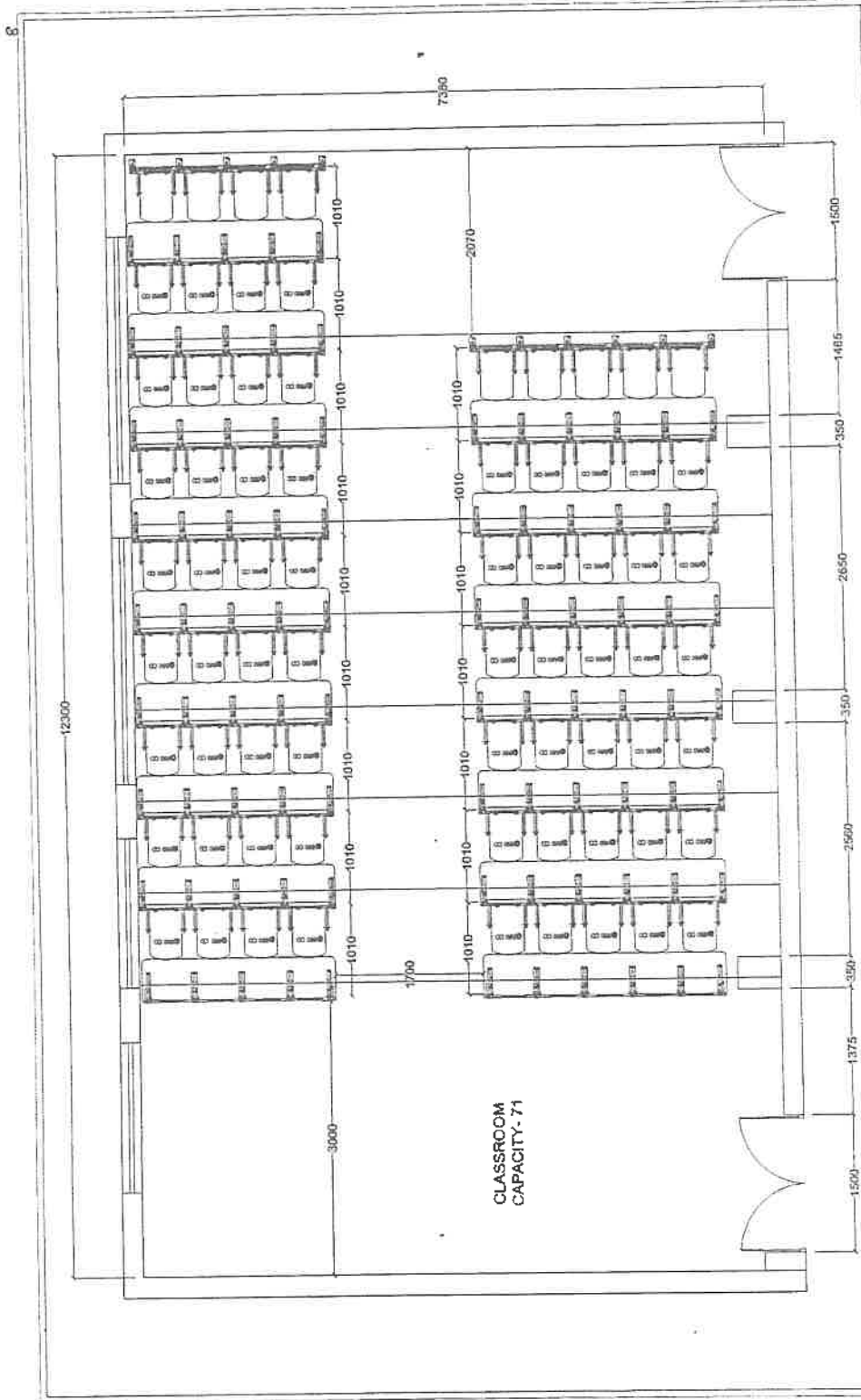
Date: 03.08.2021
 Dwg. No: KLMNSUT/107
 Drawn By:
 Scale: NTS
 Sheet: NI_
 All Dimensions in - MM

Drawing Title:-
 SEATING LAYOUT

Client:-
 NSUT DWARKA

Project:-
 CLASSROOM LAYOUT AND 115

KLM DESIGNS (INDIA)
 Architects Acoustic Consultants AV Engineers
 C-79, Basement, Malviya Nagar, New Delhi - 17
 Phone: 011-41931089, 99
 e-mail: klm_design@yahoo.co.in



Date: 03.08.2021
 Dwg. No: KLMNSUITD/09
 Drawn By:
 Scale: NTS
 Sheet@ NL
 All Dimensions In - MM

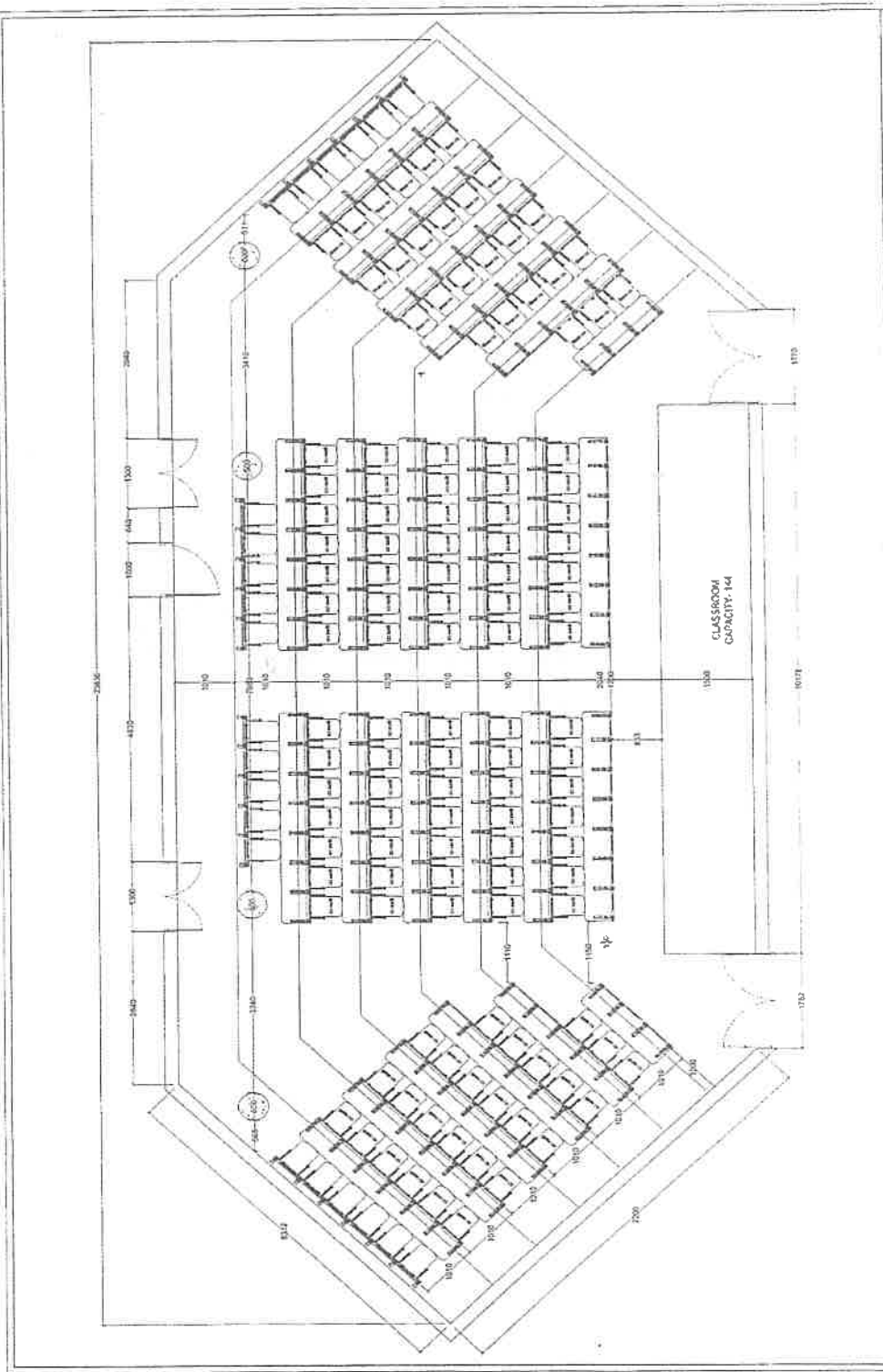
Drawing Title:-
 SEATING
 LAYOUT

Client:-
 NSUT DWARKA

Project:-
 NSUT
 CLASSROOM

KLM DESIGNS (INDIA)
 Architectural / Acoustic Consultants / A.V Engineers
 C-79, Basement, Malviya
 Nagar, New Delhi - 17
 Phone: 011-41831085-99
 e-mail: klm_design@yahoo.co.in

9.



Date: 03.08.2021 Dwg. No: KL/INSUTTD/010 Drawn By: Scale: NTS Sheet: R/L	Drawing Title:- SEATING LAYOUT	Client:- NSUT DWARKA	Project:- NSUT CLASSROOM	KLM DESIGNS (INDIA) Architect - Acoustic Consultants - A.V. Engineers C-79, Basement, Malviya Nagar, New Delhi - 17 Phone: 011-41831089-99 e-mail: klm_design@yahoo.co.in
--	--------------------------------------	-------------------------	--------------------------------	---



Seating system



Screen design



Accessories



Light design idea



Materials



