



Tender No:CDACP/LnB-CLASSROOMS/22-23/358, date: 14 November 2022

C-DAC, Pune invites On-Line bids for Turnkey/Composite Works Tender (Civil/Interior, Electrical and Allied, HVAC) for Creation of classrooms & associated infrastructure at C-DAC, SPPU Campus, Pune.

Prospective Bidders may download the Tender Document from www.cdac.in/ <https://eprocure.gov.in/eprocure/app>. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission' before uploading the bids through <https://eprocure.gov.in/eprocure/app> as per terms and conditions given in the Tender Document. The Tender document fee of Rs. 1,500/- (non-refundable) and EMD undertaking needs to be submitted.

Centre for Development of Advanced Computing
A Scientific Society of Ministry of Electronics & Information Technology,
Government of India
Innovation Park, Panchavati, Pashan Road, PUNE- 411008.
Tel: +91-20-25503694/ 675-676
mmg@cdac.in



TENDER SCHEDULE

Tender No CDACP/LnB-CLASSROOMS/22-23/358

Name of the Institute	Centre for Development of Advanced Computing, Innovation Park, Panchavati, Pashan Road, PUNE 411008.
Place of Work & Supply, Installation, Testing & Commissioning, Support etc.	Centre For Development of Advanced Computing, Main building, SPPU campus, PUNE 411007
Date of Release of Tender	14 November 2022
Date of pre-bid meeting	Offline – 21st November 2022 at 1100 hrs.
Last date of submission of bids	12 th December 2022, 1500Hrs
Date of opening of Technical bids	13 th December 2022, 1530 Hrs
Place of opening of technical bids	C-DAC, Pune 411008.
Bank Details for submitting Tender Fee online	BANK NAME : IDBI Bank BRANCH ADDRESS: Gokhale Road, Pune – 411016 Account No: 60010010004258 IFSC / NEFT Code: IBKL0000600 TENDER FEE CAN BE SUBMITTED ONLINE IN ABOVE BANK OR THROUGH DD AS PER DETAILS GIVEN BELOW

Instruction for Online Bid Submission:

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates.

REGISTRATION:

- Bidders are required to enrol on the e-Procurement module of the Central Public Procurement Portal (url: <https://eprocure.gov.in/eprocure/app>).
- As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India with their profile.
- Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others, which may lead to misuse.
- Bidder then logs into the site through the secured login by entering their userID / password and the password of the DSC / eToken.

PREPARATION OF BIDS:

- Bidder should take into account any corrigendum published on the tender document before submitting their bids.



- 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.
- Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100dpi with black and white option.
- To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use 'My Space' area available to them to upload such documents. These documents may be directly submitted from the 'My Space' area while submitting a bid, and need not be uploaded repeatedly. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS:

- Bidder should log into the site well in advance for bid submission so that he/she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- The server time (which is displayed on the bidders' 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,
- The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- Upon the successful and timely submission of bids, the portal will give a successful bid submission message and a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.

ASSISTANCE TO BIDDERS:

Any query relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24*7 CPP Portal Helpdesk on :- 0120-4200 462, 0120-4001 002, 0120-4001 005, 0120-6277 787,
e-mail for Technical - support-eproc@nic.in.



SECTION I: INVITATION FOR BIDS (IFB)

1. Introduction:

Centre for Development of Advanced Computing (C-DAC) - is a scientific society under the administrative control of Ministry of Electronics & Information Technology, Government of India.

To enhance the infrastructure, C-DAC invites the bids from eligible bidders for Civil/Interior, HVAC, Electrical & allied work for Creation of classrooms & associated infrastructure at C-DAC, SPPU Campus, Pune, as per terms and conditions specified in this document. The details technical specifications are given in "Section – IV: Schedule of Requirements" of this document.

2. Contact information:

Mr. Satyabrata Mishra, PTO
Centre for Development of Advanced Computing (C-DAC)
Innovation Park, PANCHAVATI, Pashan Road, PUNE 411008
Tel No.: +91-20-25503675-676/ 694
E-mail: mmg@cdac.in,

3. Two e-bids System:

The two e-bids system will be followed for this tender. In this system, bidder must submit their offer - online in separate packets as explained below:

Online e-Packet No. 1: "Technical e-Bid" shall contain following documents in .pdf format only:

- a. Covering letter, as per **Annexure – A**.
- b. Authority letter, as per **Annexure – B**.
- c. **Tender fees to be submitted through Demand Draft / e-payment. Scanned copy of Demand Draft / e-payment (preferable mode) receipt towards tender fee of Rs.1,500/- (Rupees One thousand five hundred Only) drawn in favour of C-DAC payable at Pune. The original DD must be submitted physically at the place of Opening of the Tender on or before the Due Date & Time of the Tender.**
- d. Undertaking as per **Annexure – C** towards Earnest Money Deposit.
- e. A copy of Certificate of Incorporation, Partnership Deed / Memorandum and Articles of Association / any other equivalent document showing date and place of incorporation, as applicable of the bidder.
- f. Copies of PAN and GST registration certificates.
- g. Duly filled Technical Bid (**as per Section – IV**) with proper seal and signature of the authorised person (with name, designation, email id & contact no.).
- h. The bidder shall have minimum average financial turnover of minimum two (2) crore rupees in last three financial years (2019-20,2020-2021,2021-22). Submit CA certificate along with audited balance sheets in this regards.
- i. The bidder must have successfully completed at least one similar works of Central/State Government Department, PSU or Autonomous institution, each work costing not less than the amount equal to 1.6 Crores in last 5 Years. ("Similar work means- Turnkey/Composite Works comprising Civil/Interior, Electrical & Allied ,HVAC works- Documentary evidence for similar experience is to be furnished of completed works in form of Work order/Satisfactory Work Completion Certificate)
- j. The Bidder shall be a registered company of India as per relevant laws (Submit Copy of ROC)



- k. The Bidder shall be a registered company/firm/Branch office (Address proof to be submitted along with registration certificate) in Pune/ Mumbai area (Attach Proof-Shop Act)
- l. The contractor must not be black listed / debarred from bidding by any Government Department, PSU or Autonomous institution, as on date of submission of bids. (Declaration to be submitted on letterhead)
- m. A photo copy of the commercial bid without prices **(prices blocked)** with line-item break-up of items as you will use for raising the final invoice and the GST % of each item. C-DAC reserves the right to reject the bid if these details are not submitted along with the technical bid document.
- n. Other documents necessary in support of eligibility criteria, product catalogues, brochures etc. whichever applicable.

Note: C-DAC reserves the right to reject the bid if any of the above listed document/s is not submitted.

On-line ePacket 2: “Commercial eBid “ shall contain: (.xls format only)

The Commercial e-Bid completed in all respects as per format given in Section – V of this document.

4. PRE-BID Meeting:

The pre-bid meeting will be held **OFFLINE** as given in schedule to sort out/resolve queries raised by the prospective bidders regarding the scope, technical specifications, terms & conditions etc. The prospective bidders requiring any clarification of the bidding document may send their queries in writing through e-mail at mmg@cdac.in. C-DAC will respond to these queries during the pre-bid meeting. The queries/doubt/clarifications etc. must be sent at least two days prior to the date of pre-bid meeting.

5. Last Date of uploading of ebids and opening of the Technical ebids – Online.

- Last date (DUE DATE) for uploading of ebids through: www.eprocure.gov.in/eprocure/app - against the tender id, as per the '**TENDER SCHEDULE**' above.
- Technical e-bids will be opened 'Online' through www.eprocure.gov.in/eprocure/app against the tender id, as per '**TENDER SCHEDULE**'
- The e-bids must be submitted on-line.
- The Tender Fees must be submitted online through RTGS / NEFT / IMPS Direct Credit / deposited in person or through post/ courier (C-DAC shall not be responsible for any postal delays or any other reason for not submitting the tender fees etc. in the specified time and resulting in disqualification/ rejection of any bid) **so as to reach on or before the due date and time of the uploading of the tender.**
- In case bidder requires any clarifications / information, they may contact C-DAC address given in '**TENDER SCHEDULE**'.

Note: Please do not put "Commercial eBid" (prices quoted) in the technical bid packet. If the price quoted is submitted / leaked with technical ebid the tender will be rejected at the sole discretion of C-DAC.

6. Opening of commercial ebids

- Commercial e-bids of the qualified bidders only will be opened (**ONLINE**), who choose to attend, at the time, place and date to be informed later.
- The bidder's name, bid prices summary and other appropriate details will be displayed at the time of the opening of the commercial ebids.

(END OF SECTION I)



SECTION II: INSTRUCTIONS TO BIDDERS (ITB)

1. Locations for Supply, Installation & Warranty Support etc.:

Centre for Development of Advanced Computing, Main building, SPPU campus, PUNE 411007

2. Delivery Period:

The total complete work as per scope including Civil/Interior, electrical, AC works etc. should be completed within 120 days from the date of placing the work order, positively. Bidder should keep in mind that timely delivery is the essence of project.

3. Order Placement & Release of Payment:

The WorkOrder(s) and payments shall be released by:

Centre for Development of Advanced Computing (C-DAC)

Innovation Park, Panchavati, Pashan Road,
Pune - 411008. INDIA

4. Eligibility Criteria:

The bidders must comply with the eligibility criteria stipulated below.

- a) A copy of Certificate of Incorporation, Partnership Deed / Memorandum and Articles of Association / any other equivalent document showing date and place of incorporation, as applicable of the bidder.
- b) Copies of PAN and GST registration certificates.
- c) The bidder shall have minimum average financial turnover of minimum two (2) crore rupees in last three financial years (2019-20, 2020-2021, 2021-22).
(Submit Auditor certified copy in this regards along with supporting documents)
- d) The bidder must have successfully completed at least one Similar Turnkey/Composite work of Central/State Government Department, PSU or Autonomous institution, each work costing not less than the amount equal to 1.60 Crore in last 5 Years. ("Similar work means- Turnkey/Composite Works comprising Civil/Interior, Electrical & Allied, HVAC works "- Documentary evidence for similar turnkey/Composite experience is to be furnished of completed works in form of Work order & Satisfactory Work Completion Certificate. The work order should be in the name of bidder directly placed by end client)
- e) The Bidder shall be a registered company of India as per relevant laws (Submit Copy of ROC)
- f) The Bidder shall have office presence in form of registered company/firm/Branch office (Address proof to be submitted along with registration certificate) in Pune/ Mumbai area (Attach Proof-Copy of Shop Act/Electricity Bill/Water bill etc.)
- g) The contractor must not be black listed / debarred from bidding by any Government Department, PSU or Autonomous institution, as on date of submission of bids. (Declaration to be submitted on letterhead)

5. Vendor is strictly advised/required to visit site prior to bid submission and understand site conditions.

6. Exemptions:

If in the view of bidder, any exemption / relaxation is applicable to them from any of the eligibility requirements, under any Rules / process/ Guidelines/ Directives of Government of India, bidder may submit their claim for the applicable exemption /relaxation, quoting the valid Rule/ process/ Guidelines/ Directives. In this case the bidder must submit necessary and sufficient documents along with the technical bid, in



support of his claim. The decision about granting the exemption/ relaxation will be taken by the bid evaluation committee which is empowered to grant exemption/relaxation. The relevant and valid certificates in support of claim of exemption must be submitted. The bidders should provide sufficient documentary evidence to support the eligibility criteria. C-DAC reserves the right to reject any bid not fulfilling the eligibility criteria.

7. Amendment to Bidding Documents

- At any time prior to the deadline for submission of bids, C-DAC may, for any reason, whether on its own initiative or in response to the clarification request by a prospective bidder, modify the bid document.
- The amendments to the tender documents, if any, will be notified by release of Corrigendum Notice on www.eprocure.gov.in/eprocure/app / www.cdac.in/tender against the tender id. The amendments/modifications will be binding on the bidders.
- C-DAC at its discretion may extend the deadline/Due Date for the uploading of ebids if it thinks necessary to do so or if the bid document undergoes changes during the bidding period, in order to give prospective bidders time to take into consideration the amendments while preparing their bids.

8. Preparation of eBids

- Documentary / Eligibility checklist as per **ANNEXURE - F** should be submitted and documents should be enclosed in the seriatim as mentioned in the checklist. Proper page numbers should also be mentioned in the attached technical document.
- The product offered should be in compliance with the OM NO. 6/18/2019-PPD & No.P-45021/112/2020-PP(BE-II)(E-43780) and OM & Order (Public Procurement No.1) ref. F.No.6/18/2019-PPD dated 23.07.2020 for the offered products as per **ANNEXURE-E**. Please submit the requisite details as per the certificate / undertaking (ANNEXURE – E) accordingly on your letterhead.
- A neat and clean eBids is expected to be uploaded in the form of pdf. Bidder should avoid, as far as possible, corrections, overwriting, erasures or postscripts in the bid documents.
- In case however, any corrections, overwriting, erasures or postscripts have to be made in the bids, they should be supported by dated signatures of the same authorized person signing the bid documents. However, bidder shall not be entitled to amend/add/delete/correct the clauses mentioned in the entire tender document.
- The Bid documents shall be neatly arranged. They should not contain any terms and conditions, printed or otherwise, which are not applicable to the Bid. The conditional bid will be summarily rejected. Insertions, postscripts, additions and alterations shall not be recognized, unless confirmed by bidder's signature.

9. Earnest Money Deposit (EMD)

- The bidder must submit EMD / bid security declaration, **as given in Annexure-C**, subject to the conditions stipulated therein
- The successful bidder, on award of contract / order, must submit the Performance Bank Guarantee @3%, within 10 days of award of contract/ order, failing which necessary action shall be taken as per the terms of above EMD declaration and the order will be cancelled.

10. Period of validity of bids



- a) **Bids shall be valid for minimum 120 days from the date of submission. A bid valid for a shorter period shall stand rejected.**
- b) **C-DAC may ask for the bidder's consent to extend the period of validity. Such request and the response shall be made in writing only. A bidder agreeing to the request for extension will not be permitted to modify his bid.**
- c) **C-DAC reserves the right to place the order within the mentioned validity period i.e. 120 days from the date of submission of bid.**

11. Deadline for Submission of e-Bids

- Bids must be uploaded before the due date and time as mentioned in the tender document.
- C-DAC will not be responsible for any issues arising/pertaining with the eprocure.gov.in/eprocure/app portal for non-submission, failure in submission of ebids online.
- C-DAC may extend this deadline/Due Date for uploading of bids by amending the bid documents and the same shall be suitably notified.

12. Late Bids

C-DAC shall not be responsible and liable for the delay in receiving the ebid for whatsoever reason.

13. Bid Opening & Evaluation of eBids

- The bids will be examined based on eligibility criteria stipulated at Pt. 4 of Section – II to shortlist the eligible bidders.
- The technical bids of only the short-listed eligible bidders shall be evaluated based on technical specifications stipulated at Section – IV.
- The bidders whose technical bid is found to meet both the requirements as specified above will qualify for opening of the commercial bid and will be informed about the date and time of the opening of the commercial bid.
- The duly constituted Tender Evaluation Committee (TEC) shall evaluate the bids. The TEC shall be empowered to take appropriate decisions on minor deviations, if any.

14. Comparison of Bids

- Only the short-listed bids from the technical evaluation shall be considered for commercial comparison.

15. Award of Order

- C-DAC shall award the order(s) to the eligible bidder whose technical bid has been accepted and determined as the lowest evaluated commercial bid (excluding GST) based on the price of the Commercial Bid. However, C-DAC reserves the right and has sole discretion to reject the lowest evaluated bid.
- If more than one bidder happens to quote the same lowest price, C-DAC reserves the right to decide the criteria based on turnover of firm and further process for awarding the contract, decision of C-DAC shall be final for awarding the contract.
- In case of conflict or confusion in taxes quoted by the bidders, CDAC reserves the right to compare the commercial bids based on total basic prices exclusive of taxes to finalize the successful L1 bidder.

16. Purchaser's Right to amend / cancel



- C-DAC reserves the right to amend the eligibility criteria, commercial terms & conditions, Scope of Supply, technical specifications etc.
- **C-DAC reserves the right to vary the quantities to the extent of +/- 20% of the quantities mentioned in the BOQ.**
- **C-DAC reserves the right to cancel the entire tender without assigning any reasons thereof.**

17. Corrupt or Fraudulent Practices

- It is expected that the bidders who wish to bid for this project have highest standards of ethics.
- C-DAC will reject bid if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices while competing for this contract;
- C-DAC may declare a vendor ineligible, either indefinitely or for a stated duration, to be awarded a contract if it at any time determines that the vendor has engaged in corrupt and fraudulent practices during the award / execution of contract.

18. Interpretation of the clauses in the Tender Document / Contract Document

In case of any ambiguity/ dispute in the interpretation of any of the clauses in this Tender Document, the interpretation of the clauses by Director General, C-DAC shall be final and binding on all parties.

19. **Retention Money** of 5% will be deducted from each Running Bill and Final Bill, amounting to final capping of 5% of total bill value which will be retained at C-DAC end till the completion of Defect liability period of one year from the date of successful completion of work and certification of Final Bill.

The said retention money of 5% can be released in final bill subject to submission of Bank guarantee of equivalent amount with validity covering the defect liability period plus one month.

(END OF SECTION II)



SECTION III: SPECIAL CONDITIONS OF CONTRACT (SCC)

1. Prices

1.1. The price quoted shall be considered firm and no price escalation will be permitted. (Except Govt levies/Taxes).

1.2. Bidder must offer in INR only.

1.3. The prices quoted must be “F.O.R.C-DAC, Pune” inclusive of Installation, testing, packing, forwarding, freight, insurance, loading/unloading and allied charges till destination site(s) whichever applicable.

1.4. Price should be quoted without GST rate. Lowest bid (L1) shall be calculated on the price exclusive of GST by the bidder. Bidder must fill up the columns in BoQ.xls file that is (Basic Rate, GST %) Non filling of GST % in BOQ.xls file liable for rejection of bid.

- a) The prices excluding GST etc. shall be considered for the purpose of comparison and deciding Lowest responsive bidder.
- b) However, payment of all Duties and cess etc. will be responsibility of Bidder.
- c) **NOTE: CDAC shall not provide any GST Concessional Certificate against the subject supply / works.**
- d) If bidder fails to accept the Work Order (WO) / Purchase Order (PO) or fails to supply the goods as per the same, CDAC reserves the right to take action as stipulated in Undertaking as per ANNEXURE-C.

1. Performance Bank Guarantee:

The successful bidder will be required to furnish the Performance Bank Guarantee (PBG) in INR equivalent to 3% of the order value within 10 days of receipt of Work Order. The PBG should be submitted in the form of Demand Draft / Bank Guarantee / Online Payment RTGS/NEFT/IMPS drawn in favor of C-DAC payable at Pune. The PBG will be valid for the period till completion of work and will be returned upon completion of work of all items.

2. Completeness Responsibility:

Notwithstanding the scope of work, engineering, supply and services stated in bid document, any equipment or material, engineering or technical services which might not be even specifically mentioned under the scope of supply of the bidder and which are not expressly excluded there from but which – in view of the bidder - are necessary for the performance of the equipment in accordance with the specifications are treated to be included in the bid and has to be performed by bidder. The items which are over & above the scope of supply specified in the Schedule of Requirements may be marked as “Optional Items”.

3. Payments:

- a) One Running bill is allowed subject to completion of 50% of work order value.
- b) Remaining 50% payment shall be released only after satisfactory completion of work and acceptance by CDAC & submission of bank guarantee for retention amount.

4. Penalty for delay

C-DAC reserves the right to levy penalty @ of 0.5 % of order value per week of delay beyond the schedule date of completion of work/ execution of the order successfully, subject to maximum of 5% of the order value. The delay in delivery, delay in site preparation, and delay in submission of required documents to C-DAC etc. will be considered for calculating penalties.



5. Jurisdiction:

The disputes, legal matters, court matters, if any shall be subject to Pune jurisdiction only.

6. Force Majeure:

C-DAC may consider relaxing the penalty and delivery requirements, as specified in this document, if and to the extent that, the delay in performance or other failure to perform its obligations under the contract is the result of an Force Majeure. Force Majeure is defined as an event of effect that cannot reasonably be anticipated such as acts of God (like earthquakes, floods, storms etc.), acts of states / state agencies, the direct and indirect consequences of wars (declared or undeclared), hostilities, national emergencies, civil commotion and strikes at successful Bidder's premises or any other act beyond control of the bidder.

7. Arbitration:

In case any dispute arises between the C-DAC and successful bidder with respect to this RFP, including its interpretation, implementation or alleged material breach of any of its provisions both the Parties hereto shall endeavour to settle such dispute amicably. If the Parties fail to bring about an amicable settlement within a period of 30 (thirty) days, dispute shall be referred to the sole arbitrator mutually appointed by both parties. If the sole arbitrator is not appointed mutually by both the parties then the District Court Pune shall have exclusive jurisdiction for appointment of sole arbitrator through court. Arbitration proceedings shall be conducted in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and Rules made there under, or any legislative amendment or modification made thereto. The venue of the arbitration shall be Pune. The language of arbitration shall be English. The common cost of the arbitration proceedings shall initially be borne equally by the Parties and finally by the Party against whom the award is passed. Any other costs or expenses incurred by a Party in relation to the arbitration proceedings shall ultimately be borne by the Party as the arbitrator may decide. Courts in Pune only shall have the exclusive jurisdiction to try, entertain and decide the matters which are not covered under the Arbitration and conciliation Act.

8. Limitation of Liability:

The liability of the supplier arising out of breach of any terms/conditions of the order and addendums/amendments thereto, misconduct, wilful default will be limited to the total contract value.

However, liability of the supplier in case of loss of human life(if any), injury/damage caused to the personnel/property for the reasons attributed to the supplier or to any person deployed by supplier at C-DAC - will be at actuals.

In no event shall Party, its officers, directors, or employees be liable for any form of incidental, consequential, indirect, special or punitive damages of any kind.

9. Indemnity:

The successful bidder shall indemnify, protect and save C-DAC from/against any claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from/arising out of infringement of any Law /Rule by the bidder, pertaining to the Turnkey works for creation of infrastructure of classroom at C-DAC,SPPU Campus, Pune.



10. Assignment:

Selected bidder/ Party shall not assign, delegate or otherwise deal with any of its rights or obligation under this Contract without prior written permission of C-DAC.

However, the selected lowest bidder can sub-contract some of the work / part of the work to suitable vendor with intimation to C-DAC. However, the selected lowest bidder shall be responsible for the quantity, quality and deliverables of the ordered work.

11. Severability:

If any provision of this Contract is determined to be invalid or unenforceable, it will be deemed to be modified to the minimum extent necessary to be valid and enforceable. If it cannot be so modified, it will be deleted and the deletion will not affect the validity or enforceability of any other provision.

13. Right to changescope of work:

C-DAC reserves the right to increase or decrease the scope of work as per C-DAC requirement.

(END OF SECTION III)



SECTION IV – SCHEDULE OF REQUIREMENT

TECHNICAL SPECIFICATION

A) Solid Core Flush door Double leaf:-

1. The factory made solid core flush door shutters in double leaves 32 mm thick, decorative type of exterior grade ,conforming to I.S.:2202–1966(Revised)including approved laminate on both sides including mat finish stainless steel fixtures and fastening ,stoppers and finishing with french polishing for door frame & shutter edges (Sample to be got approved from Engineer before use)Commercial Hard Wood shutter. The Vision Panel with 6mm thick toughened glass of size 300x 300mm to be provided in each door.
2. Adhesive used for bonding various components of flush door shutters namely, core, core frame,lipping, cross-bands, face veneers, plywood etc. and for bonding plywood shall conform to BWP type,phenol formaldehyde synthetic resin adhesive conforming to IS 848.

B)PLASTERING

The following IS apply to this Section:

I.S.No.	Subject
1542-1977	Specification for sand for plaster (First revision)

Definitions

- a) The term 'Plastering' shall cover all type of rough or fair finished plastering, rendering, floating and setting coat or finishing coat, screed, etc., in cement mortar.
- (b) "Dubbing out" shall mean filling in hollows in the surface of wall and roughly leveling up irregular or out of Plumb surface prior to rendering.
- (c) "Rendering" or "rendering out" shall mean the plaster coat, which is applied following the "Dubbing out" or the final coat in case of one coat work.
- (d) "Floating coat" shall mean the second coat in a three coat plaster work, to bring the rendering coat to a true and even surface before the setting or finishing coat is applied.
- (e) 'Setting or Finishing coat' shall mean final coat in a two or three coat Plaster work.
- (f) "Thickness of Plaster" shall mean the minimum thickness at any point on a surface. This dose not include thickness of dubbing out.
- (g) The term "even and fair" as referred to finishing of the plastered surface shall mean a surface finished with a wooden float;
- (h) The term "even and smooth" as referred to finishing of the Plastered surface shall mean a surface leveled with wooden float and subsequently smoothed with a steel trowel.

14.5 Sand

Unless otherwise indicated, sand for plastering and pointing shall conform to IS 1542-1977, Specification for sand for Plaster. Sand shall consist. of natural sand, except where, crushed stone sand or crushed gravel sand or a combination of any of these are indicated. The sand shall be hard, durable, clean and free from adherent coating and organic matter and shall not contain any appreciable amount of clay balls. Sand shall be obtained from approved sources.

14.5.1 Deleterious Materials:

Sand shall not contain any harmful impurities such as iron pyrites, alkalies, salts, coal, mica



shade or similar laminated materials, soft fragments, sea shells and Organic impurities in such quantities as to affect adversely the hardening, the strength and the durability or the appearance of the Plaster or applied decoration or to cause corrosion of metal lathing or other metal in contact with Plaster. The maximum quantities of clay, fine silt, fine dust shall be not more than 5 per cent by weight. Origin impurities in the sand shall not exceed the following limit 'that the colour of the "liquid is low that indicated by comparison with the standard solution specified 6.2.2. of IS 2386 (Part II)-1963'.

14.5.2 The particle size grading of sand for plaster and pointing work shall be as under, unless otherwise specified to conform to the sample maintained by the GE for the purpose.

IS Sieve designation	Percentage Passing by Weight
10mm	100
4.75 mm	95-100
2.36 mm	95-100
1.18mm	90-100
600 microns	80-100
300 microns	20-65
150 microns	0-5

NOTE : Where the grading falls outside the limits of grading zones of sieves other than 600 micron IS sieve by a total amount not exceeding 5 percent, it shall be regarded as falling within the grading. This tolerance shall not be applied to percentage passing the 600 micron IS sieve or to percentage passing any other sieve size on the finer limit.

NOTE :-Sand whose grading falls outside the above limits shall be processed to comply with the standard by screening through a suitably sized sieve and/or blending with required quantities of suitable sizes of sand particles.

14.6 Aggregates

All aggregates other than sand shall conform to IS 383-1970, Specification for coarse and fine aggregates from natural sources for concrete. Refer Section 4-concrete.

14.7 Integral water Proofing Compound

Refer Section 4-Concrete.

14.8 Metal Lathing

Metal Lathing shall be of wire netting or expanded metal as indicated.

14.9 Water

Water used for mixing and curing shall be clean, free from deleterious matter and also from unusual proportions of dissolved salts. Sea water or tidal water or brackish water shall not be used. Water fit for drinking is normally suitable.

WORKMANSHIP Scaffolding

Where possible, independent scaffolding shall be used to obviate the subsequent restoration of masonry in put log and other bricks in the work. Stage scaffolding shall be provided for ceiling plaster.

Preparation of Mortar for Plastering and Pointing Cement and Cement Lime Mortar:

These shall be prepared as described in Section 5-brickwork. These shall quantities as required



and applied within 30 minutes of mixing. .

CEMENT

Unless otherwise indicated, Cement shall be Ordinary Portland cement, 43 grade conforming to IS 8112 of approved make/ brand. Use of any other grade of cement incase of extreme emergency shall be with the specific approval from the consultant and Engineer – in – Charge.

C) WALL CARE PUTTY

1. Provide wall care putty to the specification catered for in the bill of quantity. Approved make of putty shall only be used.
2. **Surface preparation:** Remove all loosely adhering material with a help of emery stone, putty blade or wire brush and clean water. The substrata should be clean, free from dust, grease loose materials. Dry and absorbent surface should be moistened with sufficient quantity of clean water. Mixing of putty shall be done with 33-35% clean water slowly mixing to make a paste till a uniform paste is formed.
3. **Application:** The first coat shall be applied on already moistened wall surface from bottom to upward direction uniformly with help of patty blade after drying of first coat of putty the surface will be gently rubbed with wet sponge or with putty blade in order to remove the loose particle. Allow the surface to dry for at least three hours before applying the second coat of putty after drying of second coat marks if any will be removed with the help of moist sponge or with the putty blade.

D) PAINTING

1. All paints & allied materials shall be of quality not inferior to that required by the relevant IS specification. Paints, etc. shall be ready mixed. The colour& tints of paints , unless indicated shall be as approved by the EIC.
2. The contractor shall inform the EIC, well before he places bulk order for the materials ,the names of the brands & manufactures of paints he proposes to use in the works & submit samples thereof & obtain prior written. approval of the EIC.
3. The whole of the materials required for the painting work shall be obtained direct from, approved manufacturers or their authorized agents & shall be brought to the site in makers, drums, k gs, etc. with seals unbroken.
4. **Compatibility of paints :**Before considering the application of undercoats, it shall be made sure that those selected are compatible with each other. The primer, filler, undercoating & finishing paints shall be of paints made by the same manufacturer.
5. **Storage of paints:**All containers of paints, thinners & allied materials shall preferably be stored in well ventilated room free from excessive heat, sparks or flame or direct rays of sun. The containers of paint shall be kept covered or properly fitted with lid & shall be kept open except while using. Materials, which have become stale or fat due to improper & long storage shall not be used or mixed with usable stuff.
6. **Painting Work-Generally :**The type of paint & allied material to be the number of coats to be applied, the preparatory treatment appropriate to the surface & any special process or treatment to be adopted shall be as indicated.
7. Where more than one coat is indicated, each coat shall be approved, in writing, by EIC before the next coat is applied.
8. No painting work shall be carried out in wet & very humid weather when there is danger of dew or weather is otherwise unfavorable. No painting or any other process likely to be damaged by dust shall be carried out in windy weather.
9. Painting except the priming coat shall be taken in hand after all other builder's work is finished
10. The paint in the drum shall be thoroughly mixed prior to application. The materials



shall be mixed, prepared & applied strictly in accordance with the instructions or recommendations 'of the manufacturers except where otherwise directed by the EIC. The paints shall be mixed periodically during brushing.

11. **Addition of Thinners:** Thinners (such as mineral turpentine) shall not be added to paints on the feeling that the consistency of the paint supplied by the manufacturer is too thick. If the paint has been manufactured to conform to the specifications, the paint shall have the correct consistency & shall not require further dilution. If there is any doubt, the viscosity of the paint may be checked. If a slight adjustment of viscosity is necessary thinner, recommended by the manufacturer shall be used after prior approval of EIC. The surface must be thoroughly dry & clean before painting work is proceeded with at all stages or processes of work. All dust, dirt, rust, & grease shall be removed before painting is started. Painting shall follow immediately after pre-cleaning or pre-treatment; any contamination which may occur in the intervening period shall be removed. Every individual coat shall be properly applied, reasonably level smooth & free from runs & holidays (minute uncovered areas).
12. **Drying Time :**For paint film to perform in unison, each coat of paint shall be allowed to dry sufficiently but not excessively before a subsequent coat is applied. Manufacturers' instructions for drying time shall be adhered to properly
13. **Flattening down :**Cutting of primer & undercoat shall be done to provide a key for subsequent coats. The primer coat, with or without putty, shall be dry cut & the undercoat with or without putty for spot work, shall be wet cut with waterproof emery paper No. 220/240. In the case of under coatings without putty, surface prior to finishing coat, shall be wet cut with waterproof emery paper No. 280/320. The surface shall be dry, clean & free from dust before subsequent coat is applied.
14. **Appearance:** The painted surface shall have a clean uniformly coloured appearance. No hair marks from the brush or clogging of paint puddles in the corner of panels, angles of moulding etc. shall be left on the work.
15. **Colour:** Correct colour matching shall be judged against a sample having the same type of surface as that to which the paint has been applied. In painting doors & windows, the putty round the glass panes shall also be painted but care shall be taken to ensure that no paint, stains, etc. are left on the glass. Tops of shutters & surfaces in similar hidden locations shall not' be left out in painting. .
16. **Scaffolding :**The scaffolding as required shall be erected for proper execution of work. If the work can be done safely with a ladder or jhoola these may be permitted in the place of scaffolding.
17. **Brushing of painting :**Clean pliable brushes free from loose bristles shall be used. Paints shall not show objectionable pulling under the brush. The brush shall be such that the paint does not show lapping streaks & works satisfactorily under it. Cleaning of paint containers shall be done only with paint thinners, which are compatible with the paint to be filled.
18. **Brush Application:** While applying. the paint, the brush shall be held at an angle of approximately 45 degree to the vertical surface & several light strokes applied in the area to be painted., so as to. first transfer the paint to the surface. During painting, the brush shall also be turned around 180 degree in order to ensure that the paint on both the faces of bristles is utilized completely. The paints are then spread with gentle pressure so as to hide the surface & produce a uniform coating. Ensure that the ends & not the sides of the bristles come in contact with the surface during painting. The paint shall be applied; first using vertical strokes until the surface are covered, & then brushed crosswise for complete coverage with light strokes, so as to smooth out laps & brush marks, & finally laid off with vertical strokes.
19. **Plastic Emulsion Paint and Enamel Paint:** Plastic (Acrylic) Emulsion Paint and Enamel Paint: Plastic emulsion painting will be of approved brand of paint and colour



conforming to IS: 5411-1991 & will be applied over a coat of primer (including preparation of wall surface). Painting for the doors will be carried out with synthetic enamel paint of approved brand and colour over one coat of primer, all of relevant IS specifications 4511-1993.

E) MINERAL FIBRE CEILING TILE

a. 16 mm Mineral Fibre ceiling Tile

i. Material

Acoustical mineral fiber board (Dune-ML-RH-99) false ceiling of Armstrong/AMF or equivalent make system with 16 mm Silhouette (BR) grid quick hook suspension system having main tee 3000mm long x 38 mm web height x 15mm wide silhouette (BR) sections. The main runner is to be fixed with 4mm thick pre-stretched GI wire with soffit clear & GI Raw plug inserted on the main roof to be fixed at 1200 mm c/c. The last hanger at the end of each main runner should not be greater than 450 mm from the adjacent wall. The main runner will be at the distance of 1200 mm c/c. The 1200 mm x 38 mm x 15 mm silhouette (BR) wide cross tee sections, having an integrally formed hook nose with precise butt cut joint end is to be fit in between the main tee at a distance of 600 mm to make a module of 1200mm x 600mm. Another cross tee having an integrally formed hook nose with precise butt cut joint end of size 600 mm x 38mm x 15mm is to be fitted at 1200 mm sections parallel to main tee at 600mm centre to make a square grid of 600 mm x 600 mm. All base frame material should be made of good quality galvanized steel. It should have a capping of material coated with baked polyester paint. The shadow molding perimeter angle white coloured secured at 450 mm c/c is to run all along the peripheral, Prime Dune, RH-99 per painted tiles, microlook, 15 mm thick suitable for 600mm x 600mm grid to be placed on grid. Tiles should have NRC of 0.50, STC of 34 dB, having light reflection of 85% or more & thermal conductivity K-0.052-0.057W/sq.m/ degrees centigrade. The fire rating of tile should be class 0 for fire propagation & class I for spread of flames as per BS 476 & having humidity resistance of 99% RH. The board should have a density of 240-260 kg/Cubic meter. The rate should include for cutout for AC grills & light fixtures, additional members if required is to be provided into the grid system. The work has to be done as per the direction of Engineer-in-charge.

LIST OF APPROVED MAKE/VENDOR

Sl.No.	Item	Approved / Recommended Make
1	Cement	Ultra Tech, ACC, Century, Grasim, Ambuja
2	False Ceiling	Armstrong, AMF, Indian Gypsum Board, USG India
3	Door Closer	Hardwin, Everite, Dorma, Godrej
4	Paints/Distemper	Asian Paints, Berger, ICI
5	White cement	JK, Birla etc.
6	Stud Anchors, chemical adhesives for rebar fixing	HILTI, FISHER, or any approved
7	Glass for partition	Modi, Asahi, Saint gobain
8	Plywood	Century, Kit ply, Green ply
9	Rock Wool Insulation	UP TWIGA or Equivalent
10	Gypsum board	India Gypsum, Gyproc
11	Flush Door	Indian Plywood, Kit ply, Green ply



12	PVC Carpet	Krishna Vinyle,Rikvin, Armstrong, FORBO Switzerland, LG Floors
13	Any other Material	With approval of Client
14	Furniture-Staff & faculty chair	Godrej, steelcase, featherlite ,Bluebell,Neel kamalor equivalent as per approval of client.

Technical Specifications for HVAC Work-Cassette type air conditioners

Scope:

- 1) Supply, installation as per scope given below, testing and commissioning of cassette type air conditioners including remote, mounting brackets for outdoor and indoor units as given in BOQ.
- 2) Supplier shall bring all tools and tackles required for installation, testing & Commissioning of air conditioner units.
- 3) Down rods with all accessories like washer, bolts etc. for mounting indoor unit of cassette type air conditioners shall be supplied and installed by the bidder and the cost of the same shall be included in the quoted price.
- 4) Hangers required for routing the drain pipe from indoor unit to outdoor unit shall be supplied by the bidder and the cost of the same shall be included in the quoted price.
- 5) Hangers required for routing the Copper tube, cable from indoor unit to outdoor unit shall be supplied by the bidder and the cost of the same shall be included in the quoted price.
- 6) All drilling works required for successful installation of air conditioner units shall be done by the supplier.
- 7) Mounting brackets (as per BOQ) required for installing outdoor unit and indoor unit shall be supplied by the supplier and the cost of these shall be included in quoted price.
- 9) Gas charging if required shall be done by the supplier at the site at free of cost for successful commissioning.
- 10) Installation of the air conditioners shall be carried out using proper tools and procedures as per manufacturer guide lines.
- 11) O&M manual shall be supplied for each set of air conditioner.

The bidder shall send technical catalogue of the air conditioners which they are offering along with offer. Technical catalogue shall contain all technical details, model no., dimensions, weight and GA drawing.

Installation of air conditioners:

1. Supplier shall carry out modifications required in false ceiling for installing air conditioner unit and it shall be fixed back as it is existing.



2. Indoor unit of cassette type air conditioners is to be mounted on mild steel channel provided (by supplier) above false ceiling. Making holes on steel channel as per the requirement for mounting indoor unit shall be done by the supplier.
3. All connections from indoor unit to outdoor unit like copper tube, copper cable connections etc. shall be done by the bidder.
4. Bidder shall take proper care while removing and fixing back false ceiling. If any damage is observed during installation, same is to be rectified/replaced upto the satisfaction of C-DAC.
5. All tools required for installing air conditioner unit shall be brought by the bidder.

Testing to be done after Installation:

1. Compressor current and cooling temperature shall be tested
2. Air conditioners will be switched ON and cooling effect will be checked
3. Air conditioners will be switched ON/OFF 10 times in one hour recommended procedures.
4. Water drain shall be checked by flowing water.
5. Remote operation checking.

Acceptance:

Acceptance shall be based on the testing, performance and satisfactory working of Air Conditioners.

Guarantee:

Material supplied shall be guaranteed against any manufacturing defect or trouble free performance for a period of 12 Months for complete unit and 5 Years on Compressor from the date of commissioning. During this onsite guarantee period of one year servicing shall be carried out at free of cost as per manufacturer standard.

LIST OF APPROVED MAKE/VENDOR

Sl.No.	Item	Approved / Recommended Make
1	Cassette AC	Daikin ,Blue star, Carrier ,Mitsubishi,Hitachi
2	Structural steel	SAIL, Jindal,Tata
3	CPVC Pipes	Prince,Finolex,,Jain, Kisan



TECHNICAL SPECIFICATION FOR ELECTRICAL AND ALLIED WORK

1. GENERAL REQUIREMENTS (SCOPE OF ELECTRICAL INSTALLATION WORKS).

The general character and the scope of work to be carried out under this contract is Illustrated in Specifications and BOQ. The Contractor shall carry out and complete the said work under this contract in every respect in conformity with the contract documents and with the direction of and to the satisfaction of the Owner's site representative.

The Contractor shall furnish all labor, materials and equipment (except those to be supplied by the owner) as listed under Bill of Quantities and specified otherwise, transportation and incidental necessary for supply, installation, testing and commissioning of the complete system as described in the Specifications and as shown on the drawings.

This also includes any material, equipment, appliances and incidental work not specifically mentioned herein or noted on the Drawings/Documents as being furnished or installed, but which are necessary and customary to be performed under this contract.

The Contractor shall Prepare the execution drawings and as built-in- drawings.

Minor civil works like drilling and punching holes and openings in concrete floors, slabs, chasing of brick walls, fabrication of supporting structures, drainage of water from cable trenches, cleaning and clearing of all debris due to electrical installation.

Coordination with other contractors with regard to installation of items in Electrical Contractors scope.

The extent of work services under the contract includes all items shown on the drawings, indicated in companion with specifications, notwithstanding the fact that such items have been omitted from the price schedule. All equipments and services which are required to complete the intent of the contract shall also be deemed to be within the scope of the contract.

Training to Owner's Staff.

COMPLIANCE WITH STANDARDS.

STANDARDS:

Comply with the requirements of all relevant Indian Standards (IS) or equivalent British Standards (BS) regarding equipment manufacture, design and installation whether or not these are specifically mentioned in the Specification.

ALTERNATIVE STANDARDS:

International Standards (ISO) or (IEC) which are equivalent to the appropriate Indian Standard (IS) may be used. Other standards may be offered as an alternative only if submitted for approval along with the equipment manufacturer's written assurance that they are equal to BS, ISO or IEC Standards.

DISCREPANCIES:

In the event of a discrepancy between the Specification and any IS or BS or other approved standard request clarification in writing from the Engineer.



CODE, REGULATIONS AND STANDARDS

The installation shall conform in all respects to Indian Standard Code of Practice for Electrical Wiring Installation I.S.732-1982. It shall also be in conformity with the current Indian Electricity Rules Safety Codes and the Regulations and requirements of the Local Electrical Supply Authority.

Wherever this specification calls for a higher standard of materials and/or workmanship then those required by any of the above regulations, this specification shall take precedence over the said regulations and standards.

In general, the materials, equipments and workmanship not covered by the above shall conform to the following Indian Standards (latest), unless otherwise called for. Nothing in the enclosed specification shall be construed to relieve the contractor of this responsibility.

ASSOCIATED SERVICES WORKS.

The Contractor shall co-ordinate his Working Drawings with required co-ordination of all other works simultaneously going on at site.

TESTS:

1. Carry out all tests, adjustments and commissioning described in this Specification in order to give an effective working installation to the satisfaction of the Engineer. The work package contractor shall establish a database of all tests and test results and ensure that this is kept up to date. A record of the test results/ progress shall be recorded at each site meeting.
2. Adequate notice shall be given to allow the engineer to study, assess and review any test procedures to be witnessed. The minimum notice required shall be forty eight (48) hours.
3. The contractor shall submit a full method statement indicating the tests, and testing procedures to be carried out/ witnessed etc. Details of all instrumentation used shall be recorded.
4. The original test sheet of all tests witnessed by the Engineer must be signed and witnessed by the engineer and a copy of the test sheet handed over to the engineer immediately following the test(s). Any unsigned test record shall be rejected by the engineer and the specific equipment/ plant item retested. Any cost associated with this retesting shall be borne by the work package contractor.

WORKMANSHIP:

Carry out all installations in a neat and workmanlike manner to the satisfaction of the Engineer.

WORKING DRAWINGS:

Provide drawings as described in this Specification.

INSTRUCTION MANUALS:

Provide manuals as described in this Specification.



SUPERVISION.

Provide, throughout the whole period in which installation work is being carried out, a suitably qualified site supervision to oversee the complete installation work.

SAMPLES.

Provide samples of any materials to be used on site as and when requested by the Engineer.

Note that the Engineer may require the samples to be subjected to tests to ensure compliance with British Standard and other relevant specifications. The cost of such tests shall be borne by the Contractor. Adequate time shall be given in order to allow the Engineer to study, assess and review any sample offered.

STANDARDS AND CODE OF PRACTICE:-

The work shall be carried out as per the enclosed Specifications of work and the construction drawings to be issued from time to time. These specifications shall be read in conjunction with National Building Code, National Electrical Code 1985, Relevant Codes of Practices and Standards as issued by ISI and Indian Electricity Rules, CPWD specifications for electrical works (all with the latest amendments). The installation shall conform in all respects to Indian Standard code of Practices. Following BIS codes shall be referred –

- a) National Electrical Code
- b) IS: 694 – 1977: PVC insulated cables for working voltage up to and including 1100volts
- c) IS: 732 -1989: Electrical wiring installation
- d) IS: 1225 -1938: Installation and Maintenance of power Cables up to and including 33 KVRating
- e) IS: 1554: PVC insulated heavy-duty electrical cables.
- f) IS: 1860: Installation operation and maintenance of passenger and goods elevator.
- g) IS: 2309 -1989: Protection of building and allied structures against lightning.
- h) IS: 3043 -1987: Earthing
- i) IS: 3646 (Part-1) -1992: Interior Illumination
- j) IS: 3661 (Part-2) -1967: Current rating for cable
- k) IS: 3661 (Part-5) -1968: Current rating for cable
- l) IS: 5216 (Part-1) -1982: Recommendations on safety procedures and practices in electrical work.
- m) IS: 7098 (1 & 2): XLPE insulated cables
- n) IS: 10028 (Part-1) -1985: selection, Installation and Maintenance of Transformers
- o) IS: 10118 (Part-1) -1982: Selection, Installation and Maintenance of switchgear and Control gear

APPROVED MAKES: -

ITEM	Approved / Recommended Make
MCCB/MCB/DB	L&T / SIEMENS / Schneider/ ABB/C&S/Hager/Legrand
TPN Switches & HRC Fuses	L&T/ SIEMENS/ Havells/ Schneider/ ABB/C&S



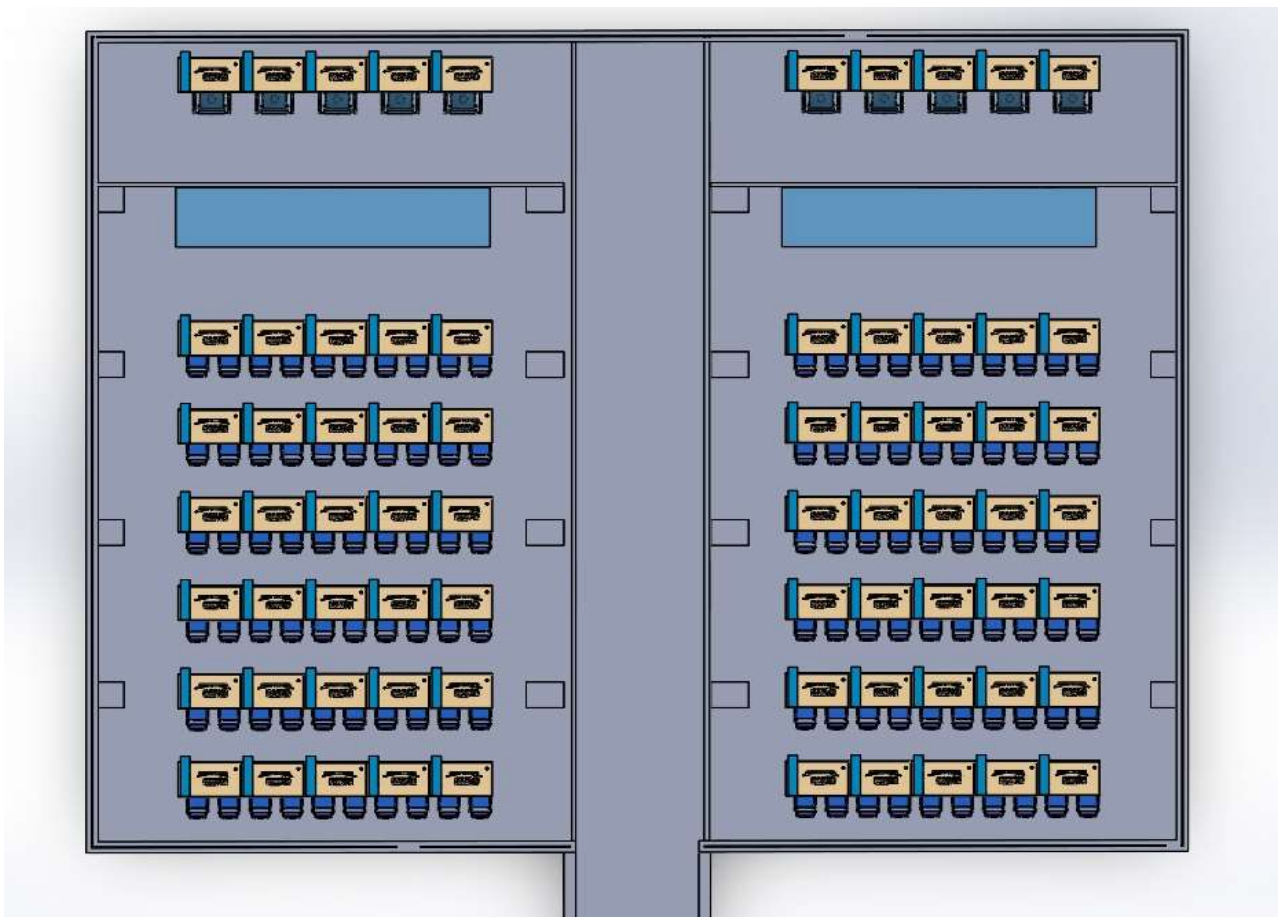
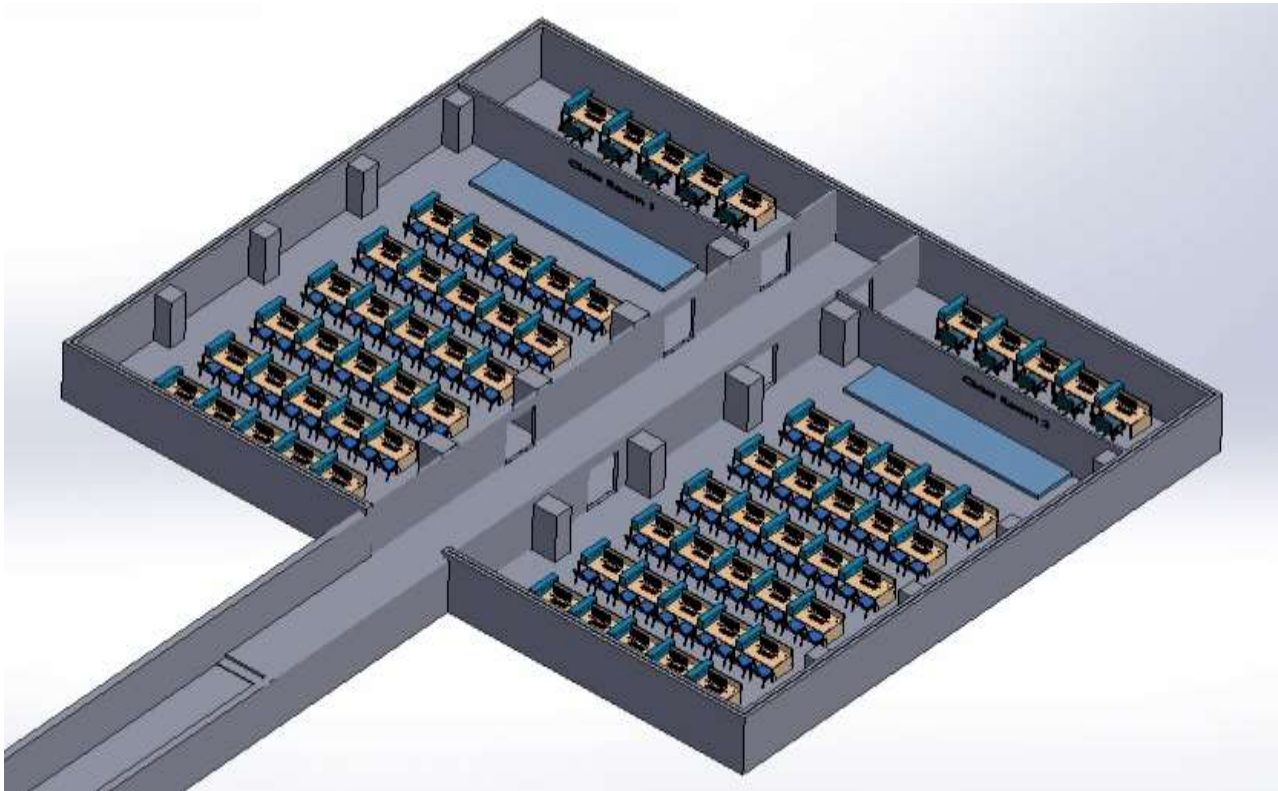
MCBs / Isolators & Distribution Board	L&T / SIEMENS / Schneider/ ABB/C&S/Hager/Legrand
Cables	Polycab / Finolex / Havells /Universal/Asian/ Gloster
PVC insulated copper conductor wire	MK/ Polycab/ Finolex/RR
Lighting Fixtures (LED)	Wipro, Philips, GE,Crompton
DBs	L&T / SIEMENS / Schneider/ ABB/C&S/Hager/Legrand
Switches & Plugs	Roma/ MK/ CG/ Schneider/Legrand
Fire Alarm Control Panel & Smoke Detectors	Secutron / Notifier / Edward / Bosch / Cooper/ Siemens / Morley/Ravel/Apollo/Honeywell
FRLS Armoured Cable	Finolex / Neolex / Polycab / KEI / Ravin / Thermoflex / RPG / RR Kabel / Lapp
BMS	Schneider Electric /Honeywell/ Siemens/ Johnson Controls/Dixell
PA System	BOSCH /AHUJA
ACCESS CONTROL SYSTEM	Honey well, Cisco, Siemens, Technocrat, eSSL
Cassette /Split Air Conditioner	Daikin , Blue Star, Carrier , Hitachi,Mistubishi
Rodent Repellant System	Maser or Equivalent

EXECUTION & HANDING OVER AND TAKING OVER OF WORKS / EQUIPMENT / SYSTEMS.

- 1. The successful Bidder has to submit all working/shop drawings such as Furniture Drawings (Tables, Chairs),False-Ceiling Drawings, Electrical Drawings, Raceway Drawings, Reflected Ceiling Plan, Lighting Drawings, HVAC Drawings etc before starting execution of works. After execution, three (03) sheets of As-Built Drawings has to be submitted for all above mentioned.**
- 2. The Contractor shall hand over and the Owner shall take over the works/equipment's/systems covered under this contract only after they have been completely installed, tested and commissioned in all respects by the Contractor to the entire satisfaction of the Owner. And all relevant test forms/certificates operation and maintenance manual's, as built drawings, etc. Incomplete/partly commissioned works/equipment/system will not be taken over by the Owner. **The on-site warranty of equipment/works/furniture is for one year after successful installation/completion certified by CDAC.****

DRAWINGS

3D -VIEW OF CLASSROOM



Conceptual Staff L Shape Table:-

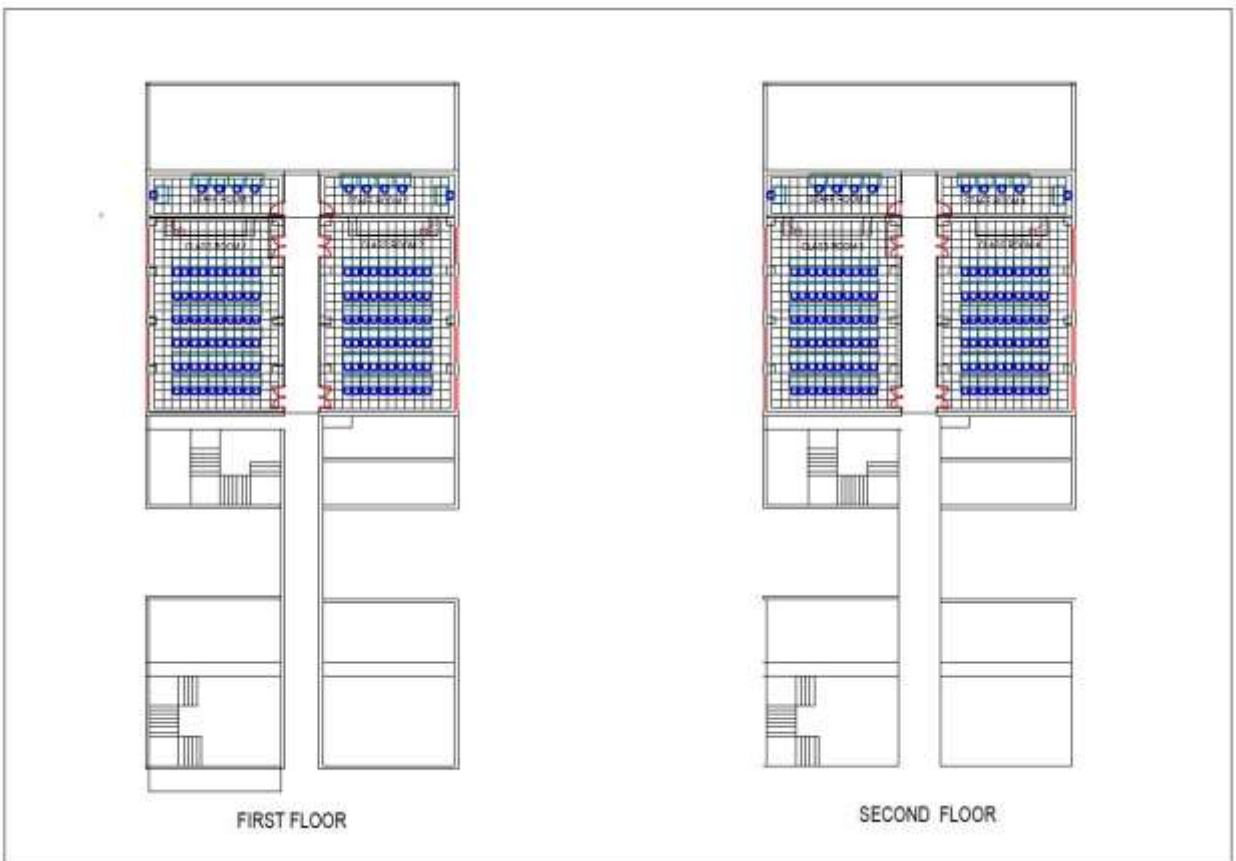
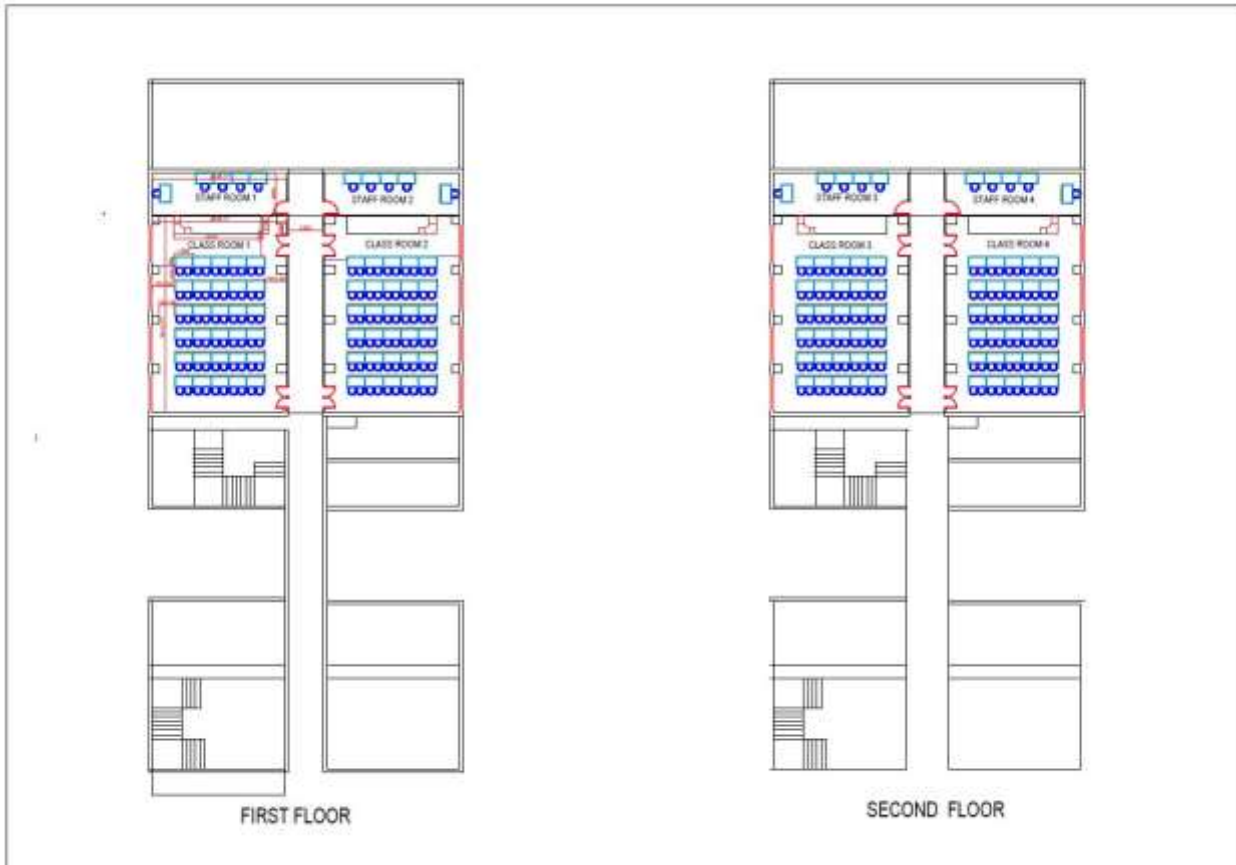
FACULTY TABLE DETAILS	
<p>PLAN</p>	
<p>FRONT VIEW A-A</p>	
<p>FRONT VIEW B-B</p>	



Conceptual Modular Linear Workstation of Size 1200(L)X700(W)



Classroom 2D layout



(END OF SECTION IV)



SECTION V - Price Schedule:

Sl. No.	Item Description	Quantity	Units	GST %
1	CIVIL WORK –Dismantling of old material			
1.01	Dismantling aluminium/ Gypsum partitions: 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	1151	Sqm	
1.02	Removing of PVC carpet from flooring etc complete.	325	Sqm	
1.03	Removing the existing cement plaster of any thickness without causing dust nuisance and stacking the debris upto a distance of 50 metres or spreading in the compound and cleaning the site etc.complete.	152	Sqm	
1.04	Replacement of broken glasses includes replacing the broken glass with new glass, etc completed	26	Sqm	
1.05	Windows repairing : It includes repair shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required etc completed.(Unit : Number of windows)	26	Nos	
1.06	Removing old paint like 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 scaffolding etc. complete.	950	Sqm	
1.07	Cutting and Removing cement tiles or vetrified tiles or marble or polished shahabad floor or dado with out bed concrete as per project requirement including removal of cement mortor, stacking the materials as directed with all leads, lifts etc. complete	97	Sqm	
1.08	Providing and laying vitrified glassy/ mirror finish tiles having size 290mm to 305mm x 305mm of 8 to 10 mm thickness and confirming IS.15622-2006 matching with existing (Group Bla) of approved make, shade and pattern for flooring in required position laid on a bed of 1:4 cement mortar including neat cement float, filling joints, curing and cleaning etc. complete	97	Sqm	
2	CIVIL WORK - Construction & Painting work			
2.01	Providing internal cement plaster 6mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete surface in all positions including scaffolding and curing etc. Complete	152	Sqm	



2.02	Providing and laying Cast in situ/Ready Mix cement concrete in M-20 of trap / granite /quartzite/ gneiss metal for arches including skew backs as per detailed drawing or as directed in superstructure including steel centering, formwork, compacting, finishing with minimum thickness of 1:3 cement plaster to give a smooth and even surface or roughening them if special finish is to be provided and curing and finishing if required complete, with fully automatic micro processor based PLC with SCADA enabled reversible Drum Type mixer. complete, .With fine aggregate (Crushed sand VSI Grade	2.20	Cum	
2.03	Providing and Fixing 12mm bison panel on 48 mm x 32 mm Galvanised steel studs at 610 mm centre to centre to match with existing wall surface etc completed	32	Sqm	
2.04	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	1801	Sqm	
2.05	Providing and applying plastic emulsion (luster) paint of approved quality, colour and shade to old and new surfaces with one coat of primer and two coats of paint including scaffolding, preparing the surface. etc. complete.	920	Sqm	
2.06	Providing and laying telephone black granite stone of 18 to 20 mm thick for door frame /dado /window boxing etc. On C.M.1:6 including filling joints with polymer base filler nosing/ moulding the sharp edges wherever necessary, curing, etc. complete	7	Sqm	
2.07	Providing and fixing 2 mm PVC carpet flooring of imported loopile carpet of Divine/unitex/armstrong or equivalent make required colour in class room complete in all respect including fixing of 5 mm thick poly urethane foam rolls below the carpet; rates quoted should include cost of adhesives, fixing , cutting welding of carpet etc complete (Sample to be final by Engineer In-charge prior execution of work)	325	Sqm	
2.08	Providing & fixing White Vetricious China Waterless Urinal of size 600x330x315mm of hindware/parryware or any other equivalent make etc completed	1	Nos	
2.09	Providing and fixing C.P. Brass angle valve 15 mm dia of Jaguar/ Hindware or equivalent make etc completed	4	Nos	
2.10	Providing & Fixing urinal push cock 15 mm dia of parryware/ Hindware or equivalent make etc complete	2	Nos	
2.11	Providing & Fixing W/C saet cover in white color as per required size and make (Hindware/ Parryware or equivalent) etc completed	1	Nos	



2.12	Providing & Fixing chrome plated bib-cock 15 mm dia of std make like Hindware/ parryware or equivalent etc completed	3	Nos	
2.13	Providing and fixing Chrome plated pillar cock of 15mm dia of std make like Hindware/ parryware or equivalent etc completed	4	Nos	
2.14	Providing and Fixing chrome plated super jet spray with flange 2 in 1 faucet 1.50 metre long of std make like Hindware/ parryware or equivalent etc completed	3	Nos	
2.15	Providing and Fixing chrome plated Flush valve 32mm dia. of std make like Hindware/ parryware or equivalent etc completed	5	Nos	
2.16	Providing and fixing colour coated Zinalume (R) AZ150 (min 150 gms/sq.mt. total on each side) profiled sheets for roofing. The feed material is manufactured out of nominal 0.45mm Base Metal Thickness (BMT) (0.5mmTCT), Hi- strength steel with min.550MPa yield strength, metallic hot dip coated with Aluminium Zinc alloy (55% aluminium 43.4% zinc1.6% silicon) with COLORBOND (R) steel quality super durable polyester paint coat (within organic pigment). The paint shall have a total coating thickness of nominal 35um, comprising of nominal 25um exterior coat on top surface and nominal10 um reverse coat on backsurface.Profile sheets hall have nom. 950-1050mm effective cover width and nominal 25-30 mm deep ribs with subtlesquarefluting in the five panat nominal 180-250mm center-to-center.The end rib shall be designed foranti-capillary groove. and return leg.The feed material should have coil manufacturers product details marke dare gularinterval. Including fasteners with min. fastened with min.25um Zinc-Tinalloy coated, Hexhead, self-drilling screw etc.complete.(weight of profile 4.52 Kilogram / Square Metre) (Note: Sheet to be provided & fixed should match the shape of existing steel frame (dome) structure)	27	Sqm	
3	New partition, ceiling and aligned work			
3.1	Supply & fixing of acoustical mineral fiber board (Dune-ML-RH-99) false ceiling of Armstrong/AMF or equivalent make system with 16 mm Silhouette (BR) grid quick hook suspension system having main tee 3000mm long x 38 mm web height x 15mm wide silhouette (BR) sections. The main runner is to be fixed with 4mm thick pre-stretched GI wire with soffit clear & GI Rawl plug inserted on the main roof to be fixed at 1200 mm c/c. The last hanger at the end of each main runner should not be grater than 450 mm from the adjacent wall. The main runner will be at the distance of 1200 mm c/c. The 1200 mm x 38 mm x 15 mm silhouette (BR) wide cross tee sections, having	649	Sqm	



	<p>an integrally formed hook nose with precise butt cut joint end is to be fit in between the main tee at a distance of 600 mm to make a module of 1200mm x 600mm. Another cross tee having an integrally formed hook nose with precise butt cut joint end of size 600 mm x 38mm x 15mm is to be fitted at 1200 mm sections parallel to main tee at 600mm centre to make a square grid of 600 mm x 600 mm. All base frame material should be made of good quality galvanized steel. It should have a capping of material coated with baked polyester paint. The shadow molding perimeter angle white coloured secured at 450 mm c/c is to run all along the peripheral, Prime Dune, RH-99 per painted tiles, microlook, 15 mm thick suitable for 600mm x 600mm grid to be placed on grid. Tiles should have NRC of 0.50, STC of 34 dB, having light reflection of 85% or more & thermal conductivity K-0.052-0.057W/sq.m/ degrees centigrade. The fire rating of tile should be class 0 for fire propagation & class I for spread of flames as per BS 476 & having humidity resistance of 99% RH. The board should have a density of 240-260 kg/Cubic meter. The rate should include for cutout for AC grills & light fixtures, additional members if required is to be provided into the grid system. The work has to be done as per the direction of Engineer-in-charge.</p>			
3.2	<p>Providing and fixing in position Gypsum board false ceiling with 12.5 mm thick Gypsum boards, screwed/ fixed to the under structure of suspended G.I. Grid constructed and suspended from the main ceiling consisting of ceiling sections of size 25 x 50 mm maximum center to center distance of 600 milimetre perimeter channel and intermediate channels at maximum center to center distance 1200 milimetre galvanized grid should be fixed to reinforced cement concrete slab. The gypsum board should be fixed to galvanized iron grid with necessary screws. The boards should be taped and filled from underside to give smooth, seamless ceiling. The rate should include necessary additional ceiling sections and intermediate channels. Additional intermediate channels should be fixed to strap hangers for additional support to prevent strapping at every 1200 milimetre item to be completed in all respect including necessary sleeves for ducts finishing of joints cut outs, painting including labour, material, lifts etc. all complete.</p>	61	Sqm	
3.3	<p>Providing and fixing tiled false ceiling of specified materials (12.5 mm thick square edge PVC Laminated Gypsum Tile of size 595x595 mm, made of Gypsum plasterboard, manufactured from natural gypsum as per IS 2095 part I and laminated with white 0.16mm</p>	241	Sqm	



	<p>thick fire retardant PVC film on the face side and 12micron metalized the face side PVC film which goes around and wraps the edges and is bonded to the edges and the back side metalized polyester film so as to make the tile a completely sealed unit.) polyester on the back side with all edges sealed with of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.</p>			
3.4	<p>Providing and fixing partition of 75mm overall thickness partition with 12.5 mm thick double skin tapered edged plain Gypsum plaster board conforming to IS: 2095: (part I): 2011 (Board with BIS certification marks)upto ceiling height consisting of G.I. frame and required board and having of 800gsm synthetic wool 50mm thick in between, including providing and fixing of frame work made of special section power pressed/ roll form G.I. sheet with zinc coating of 120 gms/sqm(both side inclusive), consisting of floor and ceiling channel 50mm wide having equal flanges of 32 mm and 0.50 mm thick, fixed to the floor and ceiling at the spacing of 610 mm centre to centre with dash fastener of 12.5 mm diameter 50 mm length or suitable anchor fastener or metal screws with nylon plugs and the studs 48 mm wide having one flange of 34 mm and other flange 36 mm and 0.50 mm thick fixed vertically within flanges</p>	446	Sqm	



	of floor and ceiling channel and placed at a spacing of 610 mm centre to centre by 6 mm dia bolts and nuts, including fixing of studs along both ends of partition fixed flush to wall with suitable anchor fastener or metal screws with nylon plugs at spacing of 450 mm centre to centre, and fixing of boards to both side of frame work by 25 mm long dry wall screws on studs, floor and ceiling channels at the spacing of 300 mm centre to centre. The boards are to be fixed to the frame work with joints staggered to avoid through cracks, M.S. fixing channel of 99 mm width (0.9 mm thick having two flanges of 9.5 mm each) to be provided at the horizontal joints of two boards, fixed to the studs using metal to metal flat head screws, including jointing and finishing to a flush finish with recommended jointing compound, jointing tape, angle beads at corners (25 mm x 25 mm x 0.5 mm), joint finisher and two coats of primer suitable for board as per manufacture's specification and direction of engineer in charge all complete.			
3.5	Providing and applying plastic emulsion (luster) paint on of approved quality, colour and shade to old and new surfaces , gypsum sheet with one coat of primer and two coats of paint including scaffolding, preparing the surface. etc. complete.	881	Sqm	
3.6	Providing and fixing White board with matt finish of size-8' x 4 ' with an heavy duty aluminium frame of size for class room	4	Nos	
3.7	Providing and fixing Platform inside classroom of size 6m x 1.2m x .2m (height) with 18mm plywood (supported by plywood vertical support in-between as required etc. complete)laid over it as directed by Engineer-in-charge	30	Sqm	
3.8	Providing and fixing carpet (Yarn Type: Bulk Continious Filament) of 2.5mm thick of Divine/unitex/armstrong make of required colour on wooden flatrom in classroom complete in all respect, rates quoted should include cost of adhesives, fixing, cutting welding of carpet etc complete (Sample to be final by Engineer In-charge prior execution of work)	30	Sqm	
3.9	Providing and Fixing Vertical Blinds of approved Make and shade of 100mm regular fabric with powder coated aluminium channel with telting PVC chain & bottom weight plate with all necessary fixtures and fitting etc. complete. (Sample to be final by Engineer In-charge prior execution of work)	72	Sqm	
4.0	Providing and fixing Hydraulic door closers of approved make etc complete.	18	Nos	
4.10	Providing and fixing 12mm toughened glass door with required fixtures and fittings etc completed	11	Sqm	



4.11	Providing and fixing 12 mm Toughen glass inside Acoustic Partition with beading with PU paint matching in color at Video recording area (Old conference room)	2	Sqm	
4.12	Providing and fixing solid core flush door shutter in double leaf 32mm thick decorative type of exterior grade as per detailed drawings approved laminate of 1mm thick on both faces or as directed, all necessary beads, mouldings and lipping, wrought iron hold fasts, chromium plated fixture sand fastenings, with brass mortise lock, stainless steel handle and fitting on both sides, and finishing with vision panel of 6mm thick toughened glass of 300 x 300 mm size etc. complete, all complete as per directions of Engineer- in-charge etc completed	28	Sqm	
4.13	Providing and fixing frame with /without ventilator of size as specified with Country non teak wood for doors and windows including chamfering, rounding, rebating, iron hold fast of size 300mmx40mmx5mmwith oil painting, etc. complete.	0.50	Cum	
5	FURNITURE			
5.1	Modular Linear Workstation of Size 1200(L)X700(W): Supply and installation of above workstations with minimum 70 mm thick 950 mm high panels as partition(Sample Drawings are attached). With combination of two separate metal raceways for data and power at bottom, two intermediate fabric blocks, top tile - fabric tackable, white board, fabric magnetic.. The table should be complete with suitable keyboard holder tray. The cutouts for Raw Power +6 Module for power UPS and 2 Module for network point has to be there .The 25mm thick Pre- laminated particle board support for top resting at both end of workstation shall be provided.The sample shop drawing has to be approved by client before delivery. Note:- 1)Material of table top:- Work top should be made of 25mm thick Pre-laminated particle board. 2)Material for tiles fortop: Fabric magnetic (over GI sheet) plus white board 3)Material of bottom tile: Metal tile (GI Sheet) 4)Plain edge banded with 2mm PVC tape 5)Frame of the workstation: Powder coated extruded Aluminium sections	120	Nos	
5.2	Providing &fixing Student chair -Made up of round pipe with na Black powder coating.The seat and back support with cushion with standard fabric.The seating cushion 2 inch and back support width 1 inch cushion.Sample to be approved by CDAC engineer before delivery.	240	Nos	



5.3	Providing staff L shape table for class rooms of (1200mm + 1200mm) length x 600mm (width) x 725mm (height of table top) with storage units as shown in attached drawings, laminates color has to be approved etc completed.	4	Nos	
5.4	Providing and fixing Motion Mid back office chair with suitable caster wheels, Contact-Tilt Mechanism , Seat Height Adjustable, Adjustable arm rest, Mesh back fabric, lumbar back support. Finish colour – Black. PU foam cushion seat. Note -The chair should be from the same OEM of modular workstation	24	Nos	
5.5	Modular Linear Workstation of Size 1200(L)X700(W): Supply and installation of above workstations with minimum 70 mm thick 950 mm high panels as partition(Sample Drawings are attached). With combination of two separate metal raceways for data and power at bottom, two intermediate fabric blocks, top tile - fabric tackable, white board, fabric magnetic.. The table should be complete with suitable keyboard holder tray. The cutouts for Raw Power +6 Module for power UPS and 2 Module for network point has to be there .The 25mm thick Pre- laminated particle board support for top resting at both end of workstation shall be provided.The sample shop drawing has to be approved by client before delivery. Note:- 1)Material of table top:- Work top should be made of 25mm thick Pre-laminated particle board. 2)Material for tiles fortopy: Fabric magnetic (over GI sheet) plus white board 3)Material of bottom tile: Metal tile (GI Sheet) 4)Plain edge banded with 2mm PVC tape 5)Frame of the workstation: Powder coated extruded Aluminium sections	20	Nos	
5.6	Supply and installation of Top supporting pedestal with flat metal front of total size 390w x 585d x 700 ht, 3dr = 2 box + 1 file, central locking. Note - 1)The top supporting pedestal should be from the same OEM of modular workstation. 2)The material of pedestal shall be CRCA / GI sheet of minimum 0.6mm thickness in power coated finish as per approved colour.	20	Nos	



6	ELECTRICAL & ALLIED WORKS - MAIN LT PANEL / DB'S			
6.1	Supply and installation of 12 ways VTPN DB, Metal type, Double Door (As approved by client / consultant / architect), RAW+AC+ Lighting Panel or UPS Panel , surface / flush mounted on wall, with ,Copper Bus bar,, all accessories completed ,interconnected wiring complete with earthing lugs, including DB wiring dressing with ferruling, termination of circuits with ping type copper lugs, blank plates, etc. housing following switchgears : (Schneider / Hager / Siemens / Legrand make as approved by client / consultant)(Note :- DB size & type selection shall be done with reference to the total number of modules / poles available in the DB which shall be suitable for housing of below mentioned switchgears & components forming a complete set.)1 no., 160A, FP MCCB, "C" curve type 25kA, MCCB with Thermal Magnetic release, of approved make with over load (O/L), short circuit (S/C) & Earth Fault (E/F) protection. The Breaker shall be suitable for 415 Volts 50 Hz., AC supply. The breaker shall have breaking capacity of 25kA for 1 Sec. as required. (Schneider / Hager / Legrand / Siemens make)as incomer.10 nos, 63A, 4P, MCB, "C" curve type as outgoing.Full Set as above	4.00	Nos	
6.2	Supply and installation of 6-way, TPN, Metal type, Double Door (As approved by client / consultant / architect), Raw/Light/AC/UPS OUTGOING SUB - DB, surface / flush mounted on wall, interconnected wiring complete with earthing lugs, including DB wiring dressing with ferruling, termination of circuits with ping type copper lugs, blank plates, etc. housing following switchgears : (Schneider / Hager / Siemens / Legrand make as approved by client / consultant)(Note :- DB size & type selection shall be done with reference to the total number of modules / poles available in the DB which shall be suitable for housing of below mentioned switchgears & components forming a complete set.) a. 1 no., 63A, FP MCB, "C" curve type as incomer b. 18nos, 16/25/32A, SP, MCB, "C" curve type as outgoing Full Set as above	16.00	Nos	
6.3	Supply and installation of 8-way,SPN, Metal type, Double Door (As approved by client / consultant / architect) UPS /Raw Power Distribution Board, surface / flush mounted on wall, interconnected wiring complete with earthing lugs, including DB wiring dressing with ferruling, termination of circuits with ping type copper lugs, blank plates, etc. housing	2.00	Nos	



	following switchgears : (Schneider / Hager / Siemens / Legrand make as approved by client / consultant),I/C-32 A DP MCB,6 Numbers 10/16 AMP SP MCB as Outgoings			
6.4	Supply & Installation of 25/32A, DP, MCB, box with 20A, metal clad / modular plug-socket including power circuit of (4/6 sq.mmX3core) copper flexible wires directly taken from the relevant Raw/AC DB through PVC conduits for room CASSETTE /SPLIT A/C including all necessary hardware & accessories, etc. (Schneider / Hager / Legrand / Siemens / L&T make)	24.00	Nos	
7	ELECTRICAL & ALLIED WORKS - CABELS / MAINS			
7.1	Supply & Installation of 1100V grade armoured cable having sector / circular shaped aluminium / copper conductor PVC insulated cores, laid up, PVC tape wrapped inner sheathed, GI strip / wire armoured and overall extruded PVC sheathed conforming to IS: 1554, laid on wall / ceiling using GI clamps & spacers as per route shown at site and further as directed by Consultant at site in the following sizes :- (Make - Polycab / Finolex / RR / Havells) NOTE :- All Armoured cables shall be provided with temporary labelling at every 5mtrs & then finally with metal identification tags showing the size & the location from/to the respective Panel / DB, at both the ends.The rate should include terminations at both ends with suitable lugs and glands as applicable			
7.2	4C x 10 Sq.mm Copper Armoured cable with 2 runs of 12 SWG GI bare wire(Main VTPN DB to Classroom RAW/LIGHT/UPS DB)	446	Mtrs	
7.3	3C x 6 Sq.mm Copper Armoured cable with 2 runs of 12 SWG GI bare wire(UPS/Light DB)	26	Mtrs	
7.4	4C x 50 Sq.mm Aluminium Armoured cable with 2 runs of 12 SWG GI bare wire (Ground floor Electrical room to Main Panel /DB)	168	Mtrs	
8	ELECTRICAL & ALLIED WORKS - WORKSTATION UPS POWER WIRING			
8.1	Supply & Installation of concealed / recessed UPS point wiring using 600V 3R (P+N+E) x 1.5 Sq.mm copper conductor PVC insulated wires (with proper R, Y, B color code) pulled through already laid PVC raceway on walls and through table partition including 3R (P+N+E) x 2.5 Sq.mm circuit wires from the relevant DB and also including 2.5 sqmm green color copper earth wire and approved make modular type switch plate, switches, MS concealed back box, etc. as required & as approved by the			



	<p>consultant. (The item rate shall include Lighting / Raw / UPS Power Circuit wiring from relevant DB to the switch board with 3Rx2.5 Sq.mm wires & from switch board to next switch board OR to the first light point / primary point / full point) NOTE :- 1. Only PVC insulated wire shall be used; 2. Conduit carrying circuit wiring should not carry point wiring and Conduit carrying point wiring should not carry submain/circuit wiring; 3. Flexible conduits & Elbows are not allowed; 4. The wires from ceiling junction to light points / light fixture shall be drawn in flexible PVC conduit with adaptor & cover for junction box & crimp type lugs at both the ends along with necessary hardware & accessories, etc. as required; 5. Proper ferrules, lugs, must be used in all cabling and wiring on both load / source end; 6. Each switch board must be provided with respective ferrules representing the respective DB, Phase & Circuit numbers; 7. Looping of Neutral / Earth wire between two separate Primary / Full Points is strictly not allowed; 8. Looping of Neutral / Earth wire between two separate circuits on similar or other phase is strictly not allowed; 9. Ferruling / numbering / tagging to wires with circuit number & db name for all lighting & raw / ups power shall be strictly followed at both DB & switch board / switch socket boards ends.</p>			
8.2	<p>Supply & Installation of primary UPS point wiring for UPS or stabilized power plug points on workstations / table for computers using 3C X 2.5 Sqmm copper conductor PVC sheathed white color flexible cable pulled through already laid Surface PVC Box raceway and table/workstation partition raceways and taken upto table top using PVC rigid or flexible conduits run within wooden/metal partitions. Each point consisting of 2 nos of 5A , 3 pin sockets above table top/bottom & 1 No., 15A Switch above table top, wired together forming one point. The earth wire of 3 core flexible cable to be of yellow-green color only. (Maximum 3 no.s desks served by one circuit from DB)</p>	75.00	Nos	
8.3	<p>Supply & Installation of Secondary UPS point wiring for UPS or stabilized power plug points on workstations / table for computers using 3C X 1.5 Sqmm copper conductor PVC sheathed white color flexible cable pulled through already laid table partition raceways and taken upto table top using PVC rigid or flexible conduits run within wooden/metal partitions. Each point consisting of 2 nos of 5A , 3 pin sockets above table top/bottom & 1 No., 10/15A Switch above table top, wired together forming one point. The earth wire of 3 core flexible cable to be of yellow-green color only.</p>	100.00	Nos	



9	WORKSTATION RAW POWER WIRING			
9.1	<p>Supply & Installation of concealed / ressed RAW point wiring using 600V 3R (P+N+E) x 1.5 Sq.mm copper conductor PVC insulated wires (with proper R, Y, B color code) pulled through already laid PVC raceway on walls and through table partition including 3R (P+N+E) x 2.5 Sq.mm circuit wires from the relevant DB and also including 2.5 sqmm green color copper earth wire and approved make modular type switch plate, switches, MS concealed back box, etc. as required & as approved by the consultant. (The item rate shall include Lighting / Raw / UPS Power Circuit wiring from relevent DB to the switch board with 3Rx2.5 Sq.mm wires& from switch board to next switch board OR to the first light point / primary point / full point)NOTE :- 1. Only PVC insulated wire shall be used; 2. Conduit carrying circuit wiring should not carry point wiring and Conduit carrying point wiring should not carry submain/circuit wiring; 3. Flexible conduits & Elbows are not allowed; 4. The wires from ceiling junction to light points / light fixture shall be drawn in flexible PVC conduit with adptor& cover for junction box & crimp type lugs at both the ends alongwith necessary hardware & accessories, etc. as required; 5. Proper ferrules, lugs, must be used in all cabling and wiring on both load / source end; 6. Each switch board must be provided with respective ferrules representing the respective DB, Phase & Circuit numbers; 7. Looping of Neutral / Earth wire between two seperate Primary / Full Points is strictly not allowed; 8. Looping of Neutral / Earth wire between two seperate circuits on similar or other phase is strictly not allowed; 9. Ferulling / numbering / taggning to wires with circuit number & db name for all lighting & raw / ups power shall be strictly followed at both DB & switch board / switch socket boards ends.</p>			
9.2	<p>Supply & Installation of primary raw point wiring for raw power plug points on workstations / table using 3C X 2.5 Sqmm copper conductor PVC sheathed white color flexible cable pulled through already laid Surface PVC Box raceway and table/workstation partition raceways and taken upto table top using PVC rigid or flexible conduits run within wooden/metal partitions. Each point consisting of 2 nos of 5A , 3 pin Modular sockets above table top/bottom & 1 No., 15A Modular Switch above table top, wired together forming one point. The earth wire of 3 core flexible cable to be of yellow-green color only. (Maximum 3 no.s desks served by one circiut from DB)</p>	67	Nos	



9.3	Supply & Installation of Secondary raw point wiring for raw power plug points on workstations / table using 3C X 1.5 Sqmm copper conductor PVC sheathed white color flexible cable pulled through already laid tablepartition raceways and taken upto table top using PVC rigid or flexible conduits run within wooden/metal partitions. Each point consisting of 2 nos of 5A , 3 pin Modular sockets above table top/bottom & 1 No., 15A Modular Switch above table top, wired together forming one point. The earth wire of 3 core flexible cable to be of yellow-green color only.	95	Nos	
10	LIGHTING POINTS IN ROOM,			
10.1	Supply & Installation of concealed / ressed / surface light point / fan point / call bell point wiring using 600V FRLS grade 3R (P+N+E) x 1.5 Sq.mm copper conductor PVC insulated wires (with proper R, Y, B color code) pulled through heavy gauge PVC conduits laid concealed over false ceiling or in wall chases or on the ceiling in case of an open ceiling including 3R (P+N+E) x 2.5 Sq.mm circuit wires from the relevant DB and also including 2.5 sqmm green color copper earth wire and approved make modular type switch plate, switches, MS concealed back box, etc. as required & as approved by the consultant. (Each circuit shall not feed more than 8 points OR 800 watts as per following configuration.) (The item rate shall include Lighting / Raw / UPS Power Circuit wiring from relevent DB to the switch board with 3Rx2.5 Sq.mm FRLS wires & from switch board to next switch board OR to the first light point / primary point / full point)			
10.2	Primary light points including the cost of 5A switch	50	Nos	
10.3	Secondary light points looped from the above point(maximum 3 points looped from one primary)	150	Nos	
10.4	Supply & Installation of (26-32W) (2' X 2') full lit panel type LED Lightfixture.,CRI>80,The fitting shall be suitable for grid / plain ceiling type & surface mounted / to be hanged from the ceiling at the height approved by architect. (CGL , PHILIPS WIPRO , GE or equivalent category & model as approved by client / architect / consultant.)	156	Nos	
10.5	Supply & Installation of (12 W) LED Spotlight/Down light flush mounted Light fixture. (CGL , PHILIPS WIPRO , GE or equivalent category & model as approved by client / architect / consultant.)	48	Nos	
11	DATA NETWORKING			
11.1	Supply & Installation of Modular Data point including approved make Cat - 6 UTP cable through already laid trenches, and new flexible conduit in table	160	Nos	



	partition ,RJ45 information outlet face plate, etc. with Termination, Testing and Documentation of UTP Points complete as required.(D-Link or equivalent)			
11.2	Supply & installation of 24 Port 1 Gbps(Minimum) Unmanage switch including crimping complete in all respect etc. with both ports for Ethernet and Fibre Uplinking(D-Link or equivalent)	10	Nos	
11.3	Supply & installation of 24 port jack panel in existing network rack(D-Link or equivalent)	10	Nos	
11.4	Supply of mounting patch cord (3 feet')	160	Nos	
11.5	Supply of mounting patch cord (7 feet')	160	Nos	
11.6	Supply & Installation of 12 U floor/wall mounted network rack including all necessary hardware, accessories, etc. in classrooms	6	Nos	
11.7	Supply & Installation of 42U floor mounted network rack including all necessary hardware, accessories, etc. in server room	1	Nos	
11.8	Supply & laying of approved make Cat - 6 UTP cable through PVC conduits,with Termination, Testing and Documentation complete as required for uplinking(D-Link or equivalent)	29	Mtrs	
11.9	Supply & laying of approved make LC to LC Duplex MMF OM3(50/125) Fibre Patch Cord through PVC conduits, with Termination, Testing and Documentation complete as required for uplinking(Commescope or equivalent)	268	Mtrs	
12	PA SYSTEM			
12.1	SITC of Speaker wire(copper) (through separate PVC conduit) from amplifier upto speaker	430	Mtrs	
12.2	SITC OF Speaker 6 watt (make-BOSCH / AHUJA) or equivalent make	24	Nos	
12.3	Supply, Installation & Testing of Amplifier ,60-80 watt,for Classroom Address System suitable to operate on 230V A.C. / 12V D.C. supply with two low impedance microphone input, tone control, protection circuit complete for the speakers output lines. (Ahuja / approved equivalent make)	4	Nos	
12.4	A compact & reliable single channel VHF Wireless Microphone AWM-520VL. It features a tie-clip microphone with a VHF high band body-pack transmitter and a sensitive noise squelch receiver. Single channel VHF wireless microphone available in six different frequencies. Electret condenser unidirectional microphone. Transmitter has an ON/OFF switch and a LED for ON indication. Stylish table-top receiver with a telescopic antenna & noise squelch circuitry.Power ON/OFF switch and output volume control on the front panel.1/4" (6.3mm) phone jack for audio output on the rear panel of the receiver. Microphone operates with 1A—9V	4	Nos	



	battery. Receiver operates on 9V DC through an AC adaptor, supplied along with the microphone.			
13	FIRE ALARM SYSTEMS			
13.1	SITC OF Fire alarm panel [Zone - 2] - Conventional (make- Ravel/Honeywell/APOLLO OR EQUIVALENT) Primary Power 120 – 220VAC , 50 Hz,IP Rating : IP50,The microprocessor based 2 Zone CE mark conventional fire alarm control panel is a standalone system, with 16 X 2 LCDcharacter, 2 zones detection circuit,3 common potential free contacts & a common NAC sounder output, wall/ceiling mounted, Switch mode power supply-SMPS & Battery polarity & Deep discharge protection.	2	Nos	
13.2	SITC OF Smoke Detectors- conevetional type with base (Ravel make/Honeywell/APOLLO OR EQUIVALENT) Above False ceiling with Response indicator below ceiling	65	Nos	
13.3	SITC OF Smoke Detectors- conevetional type with base (Ravel make/Honeywell/APOLLO OR EQUIVALENT) below False ceiling	65	Nos	
13.4	Supply, installation, testing and commissioning of Conventional Single action Manual pull station having an integrally mounted addressable moudle that monitors and reports contact status. (Ravel make/Honeywell/APOLLO OR EQUIVALENT)	8	Nos	
13.5	SITC OF Hooter with strobe lighting -Conventional type with required Hooter operating voltage 12V/24V/220 volt, wiring And allied required accessories.(Ravel make/Honeywell/APOLLO OR EQUIVALENT)	9	Nos	
13.6	SITC OF FRLS Fire CABLE 2 X 1.5 Cu armoured cable	1911	Mtrs	
13.7	Supply & installation of Fire Extinguisher 5 Kg ABC Type	8	Nos	
14	LCD Projector			
14.1	SITC of LCD Projector with ceiling mounting stand ,Contrast Ratio:15,000:1,Light Output of 3,300 lumens,HDMI&USB Ports,EPSON-EB series or equivalent as approved by client	5	Nos	
14.2	SITC of 4K HDMI Cable as approved by client for projectors	84	Mtrs	
15	TRENCHING / FLOOR -RACEWAYS			
15.1	Supply and laying Raceways / Conduits (for under floor trenches / On trays) on existing flooring. Raceways / conduits shall be fixed to the flooring with GI clamps for finished levels as per the site conditions or through partitions with all accessories. The rate shall include preparation of trenches of required sizes by carefully removing the malwa on			



	existing floor for laying Raceways/conduits for power, data, telephone cables etc. The depth of the trenches shall be at least 2 inches from the finished floor level or upto RCC of the slab. The rate shall include the cost of the Raceways/conduits. The rate shall also include the activity of clearing the debris generated from the preparation of trenches			
15.2	300 x 40 x 1.6mm thick GI Raceways	16	Mtrs	
15.3	150 x 40 x 1.6mm thick GI Raceway	236	Mtrs	
16	Supply & Installation of floor junction boxes without top cover for above raceways, of following sizes, fabricated out of M.S. sheets, fully powder coated with provision for removable M.S. / S.S. screwed cover plates on all four sides for blocking the entry into the junction box. All the junction boxes to be (with stud) 'properly earth - bonded with the raceways pipe using 12 SWG Copper bare wire as directed at site.			
16.1	Junction Box of size (200mm x 200mm x 50mm x 2.5mm thick)	72	Nos	
16.2	Junction Box of size (350mm x 350mm x 50mm x 2.5mm thick)	5	Nos	
17	Supply & Installation of suitable sizes 2mm thick removable cover plate screwed on all four sides of M.S. sheet, fully powder coated, for blocking the entry into the floor junction box for following sizes of junction boxes with rounded corners as per the instruction given & sample approved by the client / architect / consultant at site. Cover plate shall have required no.s of 1' dia knockouts for flexible conduit outlets as per the requirement.			
17.1	Junction Box removable cover plate of size (200mm x 200mm x 50mm x 2.5mm thick)	72	Nos	
17.2	Junction Box removable cover plate of size (350mm x 350mm x 50mm x 2.5mm thick)	5	Nos	
18	Supplying & fixing of 2mm thick G.I. Perforated type cable Trays of Asian / ProfabEngineers approved make. The cable tray shall be fixed to the ceiling / wall with MS angle support with 35mmx2mm thick GI slotted 'C' channel patti at an interval of 1 meter or the MS angle iron fabricated support depending upon the location. The rate shall include the cost of Supports, hardware & accessories, etc. complete as required.			
18.1	Cable Tray :- 150 mm wide x 50 mm height x 2mm thick.	89	Mtrs	
18.2	Cable Tray :- 75 mm wide x 50 mm height x 2mm thick.	47	Mtrs	
18.3	Supply and laying PVC Raceways with cover, & two cable compartment for UPS Power Circuit Cable and Data cables 75 x 75 x 1.6mm thick PVC Raceways with cover	25	Mtrs	



19	VOICE/TELEPHONE NETWORKING			
19.1	Supply & Installation of Telephone /Voice point including approved make Cat - 6 UTP cable through already laid trenches / conduits, RJ45 information outlet, in single face plate, in workstation partition wall etc. with Termination, Testing and Documentation of UTP Points complete as required.	75	Nos	
19.2	Supply, installation, testing and commissioning of indoor type telephone 200 pair Main Distribution Frame (MDF) / Box with Krone modules with suitable S.S. frame for mounting tag module, cable, wires and incorporated in 16 SWG MS box with proper lockable cover. The box should be fixed on wall with suitable fasteners including painting & earthing. This also includes fixing the cable, distribution chart sufficient space for the cables, wires etc.to be provided in the box	1	Nos	
19.3	Supply & Installation of and commissioning of indoor type telephone 50 pair MDF with Krone module including all hardware & accessories, etc. complete as required. with suitable S.S. frame for mounting tag module, cable, wires and incorporated in 16 SWG MS box with proper lockable cover. The box should be fixed on wall with suitable fasteners including painting & earthing. This also includes fixing the cable, distribution chart sufficient space for the cables, wires etc.to be provided in the box	4	Nos	
19.4	Supply & Laying of 20 pair telephone cable through heavy gauge pvc conduit including all necessary hardware & accessories, etc.	158	Mtrs	
20	HVAC WORK - HIGH SIDE WORK			
20.1	FOR STAFF ROOM -Supply of Cassette AC of 2TR (minimum 2star non inverter model) with onsite One year Comprehensive warranty.	5.00	No	
20.2	FOR CLASS ROOM -Supply of Cassette AC of 3TR with onsite One year Comprehensive warranty.	16.00	No	
20.3	FOR HUB ROOM-Supply of Split AC of 2TR (minimum 2 star non inverter model) with timer for auto sequencing/auto change over (4/8 hrs). The unit shall have onsite One year comprehensive warranty.	2	Nos	
20.4	DRAIN PUMP for Split AC-Supply, Installation, Testing & Commissioning of On Line Type Condensate drain pump for Hi-wall units complete with water level sensor and accessories as required. Quoted price shall be inclusive of controller, NRVs & water sensors and associated wiring etc. to make installation complete. Drain pump shall be suitable for operation on 220+6% volts 50 Hz 1phase AC power supply. Drain pumps shall automatically On/Off based on water level.	2	Nos	



21	HVAC WORK - LOW SIDE WORK			
21.1	Cassette AC/Split AC Indoor and outdoor unit Installation,testing, commissioning charges	23.00	Nos	
21.2	REFREGERENT PIPING,POWER/CONTROL CABLING:-Supply, Installation, Testing & Commissioning of copper piping complete with copper fittings & charge of refrigerant gas for the above units(including drilling through wall), Piping associated with Cassette AC/Split AC units shall be insulated with 13 mm thick closed cell elastomeric insulation .Quoted price shall be inclusive of UV protection paint for all exposed pipes. Note:- 1)The required copper pipe size shall be as recommended by OEM of the AC. 2)Price shall be comprise of suitable perforated tray for refrigerant pipe laying with adequate supports & copper power cabling from indoor to outdoor unit as required.	1232.00	Rft	
21.3	CONDENSATE DRAIN PIPING-Supply, Installation Testing and Commissioning of 25 mm dia. Chlorinated Polyvinyl Chloride (CPVC) pipes, including all CPVC plain fittings, including fixing the pipes with pipes clamps & hanging supports to be taken from ceiling/wall at 1.00 m spacings. This includes joints of pipes & fittings with one step CPVC solvent cement and testing of joints complete as per direction of Engineer in Charge. Supporting arrangement in accordance with the approved shop drawings and specification. Pipes shall be insulated with 9mm thick closed cell elastomeric insulation in tubing form.	1355.00	Rft	
21.4	MS FRAME FOR ODU OF CASSETTE AC'S-Steel work welded in built up sections/ framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer using structural steel etc. as required. (MS base frame duly applied with red-oxide primer & followed by black enamel paint for mounting of outdoor units.)In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	4650	Kgs	

The above quoted prices are including freight, insurance, loading, un-loading, handling and allied charges to be incurred till installation at site.

The rates (%) of GST for each line item shall be as given in un-priced commercial bid submitted along with the technical bid.

Only work/item details along with qty and units with GST % are mentioned above, all other information needs to be filled in the BOQ.

(End of Section – V)



ANNEXURE – A: COVERING LETTER

Date:

To:

**The Executive Director,
Centre for Development of Advanced Computing (C-DAC)
Innovation Park, Panchavati, Pashan Road,
Pune - 411008 Maharashtra, INDIA**

Subject: Submission of bid for Turnkey Work Tender (Civil/Interior, HVAC, Electrical & allied work) for **Creation of classrooms & associated infrastructure at C-DAC, SPPU Campus, Pune.**

Dear Sir,

We, the undersigned, offer to provide Civil/Interior, HVAC, Electrical & allied work for **Creation of classrooms & associated infrastructure at C-DAC, SPPU Campus, Pune** in response to your Tender No. We hereby submit our proposal for same, comprising of Technical bid and the Financial Bid, through www.eprocure.gov.in

We hereby declare that all the information and statements made in this bid are true and we accept that any misinterpretation contained in it, may lead to our disqualification.

We undertake that the products offered are not nearing end-of-life / end-of-support five /three years down the line from the date of bidding, from OEM.

We undertake, that a Security Deposit BG of 3% of the each order(s) value will be submitted in case C- DAC decides to place any Purchase Order(s).

We hereby certify that my/ our firm has not been disqualified and / or blacklisted by any Office/ Department/ Undertaking of the State Government / Central Govt. of India, PSU/ Autonomous Body of Government of India, at the time of submission of this bid.

We agree to abide by all the terms and conditions of the tender document, including corrigenda. We would hold the terms of our bid valid for 120 days as stipulated in the tender document.

We understand you are not bound to accept any Proposal you receive.

The undersigned is authorized to sign this bid document. The authority letter to this effect is enclosed.

Yours sincerely,

Authorized Signatory:

Name and Title of Signatory:

e-mail:

Mobile No:



ANNEXURE – B: AUTHORITY LETTER

Date:

To:

**The Executive Director,
Centre for Development of Advanced Computing (C-DAC)
Innovation Park, Panchavati, Pashan Road,
Pune - 411008 Maharashtra, INDIA**

Subject: Authority Letter

Reference: Tender No

Dear Sir,

We, M/s _____ (Name of the bidder) having registered office at _____ (address of the bidder) herewith submit our bid against the said tender document.

Mr./Ms. _____ (Name and designation of the signatory), whose signature is appended below, is authorized to sign and submit the bid documents on our behalf against said RFP

Specimen Signature:

The undersigned is authorised to issue such authorisation on behalf of us.
For M/s _____ (Name of the bidder)

Signature and company seal

Name

Designation

Email

Mobile No.



Annexure – C: Undertaking for EMD

Date:

To:

The Director General,
Centre for Development of Advanced Computing (C-DAC)
Innovation Park, Panchavati, Pashan Road,
Pune - 411008 Maharashtra, INDIA

Subject: Undertaking as per GFR – 2017, Rule 170(iii)

Dear Sir,

We, the undersigned, offer to Supply the -----as per tender at C-DAC Pune, in response to your Tender No-----.

We are hereby submitting our proposal for same, which includes Technical bid and the Financial Bid. As a part of eligibility requirement stipulated in said tender document, we hereby submit a declaration in lieu of Earnest Money Deposit (EMD), as given below:

1. Our bid shall remain valid for 120-days from the date of submission and that we will not withdraw or modify our bid during the validity period,
2. In case, we are declared as successful bidder and an order is placed on us, we will submit the acceptance in writing within 7 days of placement of order on us.
3. In case, we are declared as successful bidder and an order is placed on us, we undertake, to submit a Performance Bank Guarantee of 3% of the order value, as per terms stipulated in the tender.
4. In case, the bidder fails to accept the Work Order (WO) / Purchase Order (PO) or fails to supply the material as per the said Work Order (WO) / Purchase Order (PO).
5. In case of failure on our part to comply with any of the above said requirements, we are aware that we shall be declared as un-eligible for said tender and /or debarred from any **future bidding process of C-DAC for a period of minimum one year.**
6. The undersigned is authorized to sign this undertaking.

Yours sincerely,

Authorized Signatory:

Name and Title of Signatory:

e-mail:

Mobile No:



ANNEXURE D - PROFORMA OF SECURITY DEPOSIT BANK GUARANTEE

To,

Centre for Development of Advanced Computing

Innovation Park, Panchavati, Pashan Road,
Pune- 411008. INDIA.

BANKS GUARANTEE NO:

DATE:

Dear Sir(S)

This has reference to the Purchase Order No. _____ Dated _____ been placed by Centre for Development of Advanced Computing(C-DAC), Pune on M/s _____ (Name & Address of vendor) for supply, installation, commissioning and warranty of _____ (description of items) at C-DAC/client's site.

The conditions of this order provide that the vendor shall,

1. Arrange to deliver the items listed in the said order to the consignee, as per details given in said order, and
2. Arrange for the comprehensive warranty service support towards the items supplied by vendor at sites anywhere in India, as per the warranty clause in said purchase order.

M/s (Name of Vendor) has accepted the said purchase order with the terms and conditions stipulated therein and have agreed to issue the performance bank guarantee on their part, towards promises and assurance of their contractual obligations vide the Supply Order No. _____ M/s. _____ (name of vendor) holds an account with us and has approached us and at their request and in consideration of the promises, we hereby furnish such guarantees as mentioned hereinafter.

C-DAC shall be at liberty without reference to the Bank and without affecting the full liability of the Bank hereunder to take any other undertaking of security in respect of the suppliers obligations and / or liabilities under or in connection with the said contract or to vary the terms vis-a – vis the supplier or the said contract or to grant time and or indulgence to the supplier or to reduce or to increase or otherwise vary the prices or the total contract value or to forebear from enforcement of all or any of the obligations of the supplier under the said contract and/or the remedies of C-DAC under any security (ies) now, or hereafter held by C-DAC and no such dealing(s) with the supplier or release or forbearance whatsoever shall have the effect of releasing the bank from its full liability of C-DAC hereunder or of prejudicing right of C-DAC against the bank.

This undertaking guarantee shall be a continuing undertaking guarantee and shall remain valid and irrevocable for all claims of C-DAC and liabilities of the supplier arising up to and until _____ (date)

This undertaking guarantee shall be in addition to any other undertaking or guarantee or security whatsoever that C-DAC may now or at any time have in relation to its claims or the supplier's obligations/liabilities under and / or in connection with the said contract and C-DAC shall have the full authority to take recourse to or enforce this undertaking guarantee in preference to the other undertaking or security (ies) at its sole discretion and no failure on the part of C-DAC in enforcing or requiring enforcement of any other undertaking or security shall have the effect of releasing the bank from its full liability hereunder.



We _____ (Name of Bank) hereby agree and irrevocably undertake and promise that if in your (C-DAC's) opinion any default is made by M/s _____ (Name of Vendor) in performing any of the terms and /or conditions of the agreement or if in your opinion they commit any breach of the contract or there is any demand by you against M/s _____ (Name of Vendor), then on notice to us by you, we shall on demand and without demur and without reference to M/s _____ (Name of Vendor), pay you, in any manner in which you may direct, the amount of Rs. _____/- (Rupees _____ Only)or such portion thereof as may be demanded by you not exceeding the said sum and as you may from time to time require. Our liability to pay is not dependent or conditional on your proceeding against M/s _____ (Name of Vendor) and we shall be liable & obligated to pay the aforesaid amount as and when demanded by you merely on an intimation being given by you and even before any legal proceedings, if any, are taken against M/s _____ (Name of Vendor)

The Bank hereby waives all rights at any time inconsistent with the terms of this undertaking guarantee and the obligations of the bank in terms hereof shall not be anywise affected or suspended by reason of any dispute or disputes having been raised by the supplier (whether or not pending before any arbitrator, Tribunal or Court) or any denial of liability by the supplier or any order or any order or communication whatsoever by the supplier stopping or preventing or purporting to stop or prevent payment by the Bank to C-DAC hereunder.

The amount stated in any notice of demand addressed by C-DAC to the Bank as claimed by C-DAC from the supplier or as suffered or incurred by C-DAC on the account of any losses or damages or costs, charges and/or expenses shall as between the Bank and C-DAC be conclusive of the amount so claimed or liable to be paid to C-DAC or suffered or incurred by C-DAC, as the case may be and payable by the Bank to C-DAC in terms hereof.

You (C-DAC's) shall full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contact with the said M/s _____ (Name of Vendor) and to enforce or to forbear from endorsing any power or rights or by reason of time being given to the said M/s _____ (name of Vendor) which under law relating to the sureties would but for the provisions have the effect of releasing us.

You will have full liberty without reference to us and without affecting this guarantee, postpone for any time or from time to time the exercise of any of the powers and rights conferred on you under the contract with the said M/s _____ (Name of Vendor) and to enforce or to forbear from endorsing any power or rights or by reason of time being given to the said M/s _____ (Name of Vendor) which under law relating to the sureties would but for the provisions have the effect of releasing us.

Your right to recover the said sum of Rs. _____/- (Rupees _____ only) from us in manner aforesaid will not be affected/or suspended by reason of the fact that any dispute or disputes have been raised the said M/s _____ (Name of Vendor) and/or that any dispute or disputes are pending before any officer, tribunal or court or Arbitrator.

The guarantee herein contained shall not be determined or affected by the liquidation or winding up, dissolution or change of constitution or insolvency of the said M/s _____ (Name of Vendor) but shall in all respects and for all purposes be binding and operative until payment of all dues to C-DAC in respect of such liability or liabilities.



Our liability under this guarantee is restricted to Rs. _____/- (Rupees _____ Only). Our guarantee shall remain in force until unless a suit action to enforce a claim under guarantee is filed against us within six months from (which is date of expiry of guarantee) all your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there under.

We have power to issue this guarantee in your favour under Memorandum and Articles of Association of our Bank and the undersigned has full power to do under the power of Attorney dated.

Notwithstanding anything contained herein:

- A. Our liability under this guarantee shall not exceed Rs _____ (in words)
- B. This bank guarantee shall be valid up to _____ & unless a suit for action to enforce a claim under guarantee is filed against us within six months from the date of expiry of guarantee. All your rights under the said guarantee shall be forfeited and we shall be relieved and discharged from all liabilities there after i.e. after six months from the date of expiry of this Bank guarantee
- C. We are liable to pay the guaranteed amount or any parts thereof under this bank guarantee only and only if you serve upon us a written claim or demand or before _____
- D. The Bank guarantee will expire on (Min 37 months from the date of successful installations of the items in the order) _____

Granted by the Bank

(SEAL)

For (Name of Bank)
Yours faithfully,

SEAL OF THE BANK
Authorised Signatory



UNDERTAKING
(ON COMPANY'S LETTERHEAD)

Name of Bidder:
Detailed Address:
Contact Person:
Mobile No:

Tender Ref. NO., for

DETAILS OF BROAD DEVICES / ITEMS TO BE SUPPLIED (ALL MAKE & MODEL)

Sr. No.	Description / Item	Make/ Model No	Declaration as per 6/18/2019-PPD & No.P-45021/112/2020-PP(BE-II)(E-43780) (Of OEM +Bidder)		(% Make in India contents (F. No. W-43/4/2019-IPHW-MeitY)
			Country of Origin of OEM	Country of Manufacture	
1					
2					
3					
..					

Bidder may add rows for the items required to cover the entire scope as per the Schedule of Requirements.

**ANNEXURE – F****DOCUMENTARY / ELIGIBILITY CHECKLIST**

Sr. No.	DOCUMENTARY / ELIGIBILITY	Details (if any)	Enclosed (Yes / No)	Page No.
1.	Checklist			
2.	Tender Fees (Rs. 1,500/-)	RTGS/IMPS/DD No.		
3.	EMD Declaration (As per Annexure – C)			
4.	Covering Letter			
5.	Authorisation Letter			
6.	A copy of Certificate of Incorporation, Partnership Deed / Memorandum and Articles of Association / any other equivalent document showing date and place of incorporation, as applicable of the bidder.			
7.	Copies of PAN and GST registration certificates.	PAN – GST -		
8.	The bidder shall have minimum average financial turnover of minimum two (2) crore rupees in last three financial years (2019-20,2020-2021,2021-22).			
9.	The bidder must have successfully completed at least one Similar Turnkey/composite work of Central/State Government Department, PSU or Autonomous institution, each work costing not less than the amount equal to 1.60 Crore in last 5 Years. (“Similar work means-Turnkey Works comprising Civil/Interior, Electrical & Allied, HVAC works “- Documentary evidence for similar turnkey experience is to be furnished of completed works in form of Work order/Satisfactory Work Completion Certificate. The work order should be in the name of bidder directly)			
10.	The Bidder shall be a registered company of India as per relevant laws (Submit Copy of ROC)			
11.	The Bidder shall be a registered company/firm/Branch office (Address proof to be submitted along with registration certificate) in Pune/ Mumbai area (Attach Proof-Shop Act copy etc.)			
12.	The contractor must not be black listed / debarred from bidding by any Government Department, PSU or Autonomous institution, as on date of submission of bids. (Declaration to be submitted on letterhead)			
13.	Undertaking/ Declaration as per annexure E			
14.	Agreeing for bid validity of 120 days from bid submission date.			

(End of Document)