

Notice Inviting Tender

Construction of Temporary Composite Structure Lab for Applied Mechanics Department between block III & IV in academic area at IIT Delhi.

Sub Head: Civil work, Electrical Work, Fire Alarm System & Networking.

Civil Work : Rs.1,05,82,741/-E & M : Rs.25,85,901/-Total : Rs.1,31,67,901/-

(WORKS DEPARTMENT)

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI

 $C \hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} I \hspace{-0.5cm} -\hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} EE \hspace{0.5cm} (CD \hspace{-0.5cm} -\hspace{-0.5cm} III) \hspace{0.5cm} EE \hspace{0.5cm} (E) \hspace{0.5cm} AE \hspace{0.5cm} (E) \hspace{0.5cm} JE \hspace{0.5cm} (C)$

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI-110016 IITD/WORKS(SP-4039)/2022

INDEX

Name of work: - Construction of Temporary Composite structures Lab for Applied Mechanics Department between Block III & IV in academic area at IIT Delhi.

Sub Head: - Civil work, Electrical work, Fire Alarm system & Networking.

Sl. No.	Description	Page No.
1.	Index	2
2.	Notice Inviting e-tender	3
3.	Part A	
	Information and instructions for bidders for e-tendering	4
	IITD-6 for e-Tendering and Terms & Conditions	8
	Integrity Pact	20
	Form of Earnest Money (Bank Guarantee)	27
	Performance Guarantee	28
	Form-F	29
	Annexure- I, II, III	30
4.	Part B	
	IITD 7/8 e-Tendering	33
	Schedule A-F	36
	Special Condition of Contract	43
	Guarantee Bond for Water Proofing	45
	List of Approved/Acceptable Make	46
	Online Bid Submission	48
5.	Part C	
	Schedule of Quantity	49-69

It is certified that this document contains three parts i.e. Part A, Part B & Part C containing page no. 1 to 69.

EXECUTIVE ENGINEER (E)

EXECUTIVE ENGINEER (CD-III)

NIT approved for Rs. 1,31,67,901/- (Rupees One Crore Thirty-one Lakh Sixty-Seven Thousand Nine Hundred One Only)

INSTITUTE ENGINEER

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI-110016

Notice Inviting e - Tender

The Executive Engineer (CD-III), IIT DELHI, HAUZ KHAS, New Delhi-16 (Phone No 011-26596237) on behalf of Board of Governors invite online Item Rate Tender from Firms/ Contractors Registered in appropriate class and category with CPWD, MES, BSNL, and Railways for Civil work /Building works/ Building & Roads/Composite works of the following work:

NIT No. : **IITD/EE(CD-III)/2022-23**

Name of Work : Construction of Temporary Composite structures Lab

for Applied Mechanics Department between Block III

& IV in academic area at IIT Delhi.

Sub Head: - Civil work, Electrical work, Fire Alarm

system & Networking

Estimated cost : **Rs. 1,31,67,901**/Earnest Money : **Rs. 2,63,358**/-

Performance Guarantee : 3% of Tendered value
Security Deposit : 2.5% of Tendered Value
Warranty : 1 Year for all works.

5 Years for water proofing work.

Period for completion : 4 Months

Late date & time for submission : 19/12/2022 upto15.00 Hrs.

of bids

Date & Time of opening of Bids : 20/12/2022 at 15.00 Hrs.

The bid forms and other details can be obtained from the website www.iitd.ac.in or e-Procure.gov.in free of cost. For more clarification you may visit on above website.

Executive Engineer (CD-III), For & on Behalf of BOG, IIT Delhi

Budget Head: Renovation (Research facility and Housing)/ 35.01.02(IOE) 2021/007/0027

Copy to: -

- 1. Institute Engineer
- 2. Executive Engineer (CD-III) for information.
- 3. D.A. (Works Accounts)
- 4. D.R. (A/Cs) for opening of uploaded documents at 3:00 PM on 20/12/2022 in the office of D.R. Store
- 5. Notice Boards.
- 6. Office Copy
- 7. Web site Administrator, I.I.T.D.

PART 'A'

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS: NEW DELHI – 110016 IITD/WORKS (SP-)/2022

INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING (Tender Notice) The Executive Engineer (CD-III), IIT DELHI, HAUZ KHAS, New Delhi-16 (Phone No 011-26596237) on behalf of Board of Governors invite online Item Rate Tender from Firms/ Contractors Registered in appropriate class and category with CPWD, MES, BSNL, and Railways for Civil work /Building works/ Building & Roads/Composite works of the following work:

SL.	NIT No.	Name of Work	Estimated Cost (Rs.)	Earnest Money (Rs.)	Tender Fees (Rs.)	Time for Completion
1	ITD/EE(CD-III)/2022-2	Construction of Temporary Composite structures Lab for Applied Mechanics Department between Block III & IV in academic area at IIT Delhi. Sub Head: - Civil work, Electrical work, Fire Alarm system & Networking	1,31,67,901/-	2,63,358/-	1000/-	4 Months

Last date and time of submission of financial

& Technical bid : 19/12/2022 up to 3:00 pm (on line)

Date and time of opening of Technical bid : 20/12/2022 at 3.00 pm (office of D.R Store) Price bids of eligible bidders as per NIT shall be opened at a later date after scrutiny of Technical bids.

- 1. The successful bidders shall be required to submit a performance guarantee of 3% of the tendered amount in the form of Bank Guarantee or F.D.R. from a Nationalized/Scheduled Bank within 15 days of issue of letter of intent before award of work. In case of failure by the Contractor to supply the performance guarantee within the specified period, full earnest money will be forfeited, and the tender shall be treated as void. The performance guarantee shall be initially valid up to the date of completion plus 60 (Sixty) days beyond that.
- **2.** Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.
 - i. Firms/Contractors must have completed satisfactorily one similar work of value not less than **Rs.1,05,34,400/-** or Two similar works each of value not less than **Rs.79,00,800/-** or three similar works each of value not less than **Rs.52,67,200/-** during last 7 years ending on date 31/10/2022.
 - ii. **Earnest money of Rs.2,63,358**/-in the form of Banker's cheque or Demand draft or fixed deposit receipt of a schedule bank drawn in favour of **Registrar, I.I.T. Delhi**. No relaxation in EMD will be allowed for MSMEs and MSEs as per CPWD Manual.
- 3. Similar work means Composite works consisting of Civil and E&M works.
- 4. The intending bidder must read the terms and conditions of IITD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.
- 5. Information and Instructions for bidders posted on website shall form part of bid document.
- 6. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website

http://eprocure.gov.in/eprocure/app.in free of cost.

- 7. Completion certificates issued by an officer not below the rank of Executive Engineer of similar works completed by the Agency.
- **8.** Work means, work done only under Government/ Central Public Sector Undertaking / State Public Sector Undertaking / Central Autonomous bodies / State Autonomous bodies / City Development Authority / Municipal Cooperation of City formed under any act by Central / State Government and published in Central / State Gazette.
- 9. The value of executed work shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum calculated from the date of completion to last date of submission of financial bid.
- 10. IITD is committed to follow the principle of transparency, equity, and competitiveness in public procurement. Before submission of bid each bidder should sign integrity pact at respective places and submit the bid, if duly signed integrity pact is not submitted by bidder such bid shall not be considered.
- 11. Those contractors not registered on the website mentioned above, are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website
- 12. The intending bidder must have valid class-III digital signature to submit the bid.
- 13. On opening date, the contractor can login and see the bid opening process. After opening of bids he will receive the competitor bid sheets.
- **14.** Contractor can upload documents in the form of JPG format and PDF format.
- 15. Contractor must ensure to quote rate of each item, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as "0". Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as "0" (ZERO).
- 16. The department reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed suitable by it, if too many bids are received satisfying the laid down criterion.
- 17. In e-Tendering intending bidder can quote his rates in figures only. The rates in words against amount of each item and total is generated automatically. Therefore, the rate quoted by the bidder in figures will be taken as final.
- 18. The bid can only be submitted after uploading the mandatory scanned documents such as Demand Draft or Pay order or Banker's Cheque or Deposit at call Receipt or Fixed Deposit Receipts and towards cost of EMD in favor of **Registrar IIT Delhi** to be deposited with http://eprocure.gov.in/eprocure/app / NEFT facility.
- 19. The physical EMD of the scanned copy of EMD uploaded shall be deposited by the lowest tenderer within a week after opening of financial bid failing which the tender shall be rejected.
- 20. The following undertaking in this regard shall be up-loaded by the intending bidders: "the physical EMD shall be deposited by me / us with the Authority inviting the tender, in case I / we become the lowest tenderer, within a week of the opening of financial bid, otherwise, department may reject the tender and also take action to debar me / us from tendering in any form in IIT Delhi"
- 21. Copy of enlistment order and certificate of work experience and other documents as specified in the Press Notice / web notice shall be scanned and up-loaded to the e-Tendering website within the period of bid submission. However, certified / original copy of all the scanned and up-loaded documents as specified in press notice web / notice shall have to be submitted by the lowest bidder only along with physical EMD of the scanned copy of EMD uploaded within a week physically in the office of e-tendering authority and it shall be sole responsibility of lowest bidder.
- 22. Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited EMD and other documents scanned and uploaded are found in order.
- 23. When bids are invited in two /three stages systems and if it is desired to submit revised financial bid it shall be mandatory to submit revised financial bid. If not submitted then the bid submitted

earlier shall become invalid – Not applicable.

24. The bid submitted shall become invalid if:

- a) The bidder is found ineligible if he fails to upload documents from 1 to 11 on tender notice page 6.
- b) The bidder does not upload all the documents (including GST registration) as stipulated in the bid document including the undertaking about deposition of physical EMD of the scanned copy of EMD uploaded etc.
- c) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest tenderer in the office of tender opening authority.
- **d**) The lowest bidder does not deposit physical EMD within a week of opening of tender.
- e) The Bidder does not upload ESI & EPF Registration.
- 25. Bid validity shall be 75 days from last date of submission of bid.
- **26.** Rate of bidders shall be considered inclusive of GST.

List of Documents to be scanned and uploaded within the period of bid submission:

- 1. Demand Draft/Pay order or Banker's Cheque /Deposit at Call Receipt/FDR of any Scheduled Bank against EMD.
- 2. Enlistment order of contractor.
- **3.** Certificate of work experience.
- 4. Certificate of Registration for GST and acknowledgement of up to date filed return of GST.
- **5.** Affidavit as per Notice Inviting Tender Condition 1.3 at page 8 of NIT. (Affidavit shall be purchased / notarized between date of publishing and last date of submission of bids beside this NIT / Tender ID and name of work must be mentioned on the affidavit.).
- **6.** Acceptance to execute INTEGRITY PACT.
- 7. Undertaking as per 'Sl. No. 20 on page No. 5' on firm's letter head.
 - The physical EMD shall be deposited by me / us with the Authority inviting the tender, in case I / we become the lowest tenderer, within a week of the opening of financial bid, otherwise, department may reject the tender and also take action to debar me / us from tendering in any form in IIT Delhi.
- **8.** ESI & EPF registration.
- **9.** FORM "F" (Duly filled with all required details).
- **10.** Tender Fee of Rs.1000/- in favour of IITD to be deposited in IITD Canara Bank or IITD SBI Bank & receipt copy to be scanned & uploaded in tender (technical bid) or this fees can be directly RTGS to Registrar IITD and its proof to be uploaded in technical bid.
- 11. In case of Partnership firm if all the papers of tender not signed by all the partners than a power of attorney authorizing the person who has signed the tender paper must be uploaded with the tender documents.
- **12.** Annexure-I (duly filled & signed by the bidders)
- **13.** Annexure-II (duly filled & signed by the bidders)
- **14.** Annexure-III (duly filled & signed by the bidders)

Note: - All Documents mentioned S.No. 1 to 11 are mandatory for technically qualifying and document mentioned 12 to 14 are not mandatory.

Executive Engineer (CD-III), For & on Behalf of BOG, IIT Delhi Hauz Khas, New Delhi-110016

Budget Head: Renovation (Research facility and Housing)/ 35.01.02(IOE) 2021/007/0027

Copy to: -

- 1. Executive Engineer (CD-III) for information.
- 2. D.A. (Works Accounts)
- 3. D.R. (A/Cs) for opening of tenders on 20/12/2022 at 3:00 PM in the office of D.R. Store
- 4. Notice Boards.
- 5. Office Copy
- 6. Web site Administrator, I.I.T.D
- 7. NIT: Publicity on Website on Institute as well as on CPP portal http://eprocure.gov.in may be ensured as per instruction issued.
- 8. E-tendering Web. http://eprocure.gov.in/eprocure/app or wwww.iitd.ac.in

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS: NEW DELHI – 110016 IITD-6 FOR e-TENDERING ANDTERM&CONDITIONS

Item rate tenders are invited on behalf of Board of Governors from contractors/firms engaged/ register in appropriate category having completed work in appropriate category for the **work** as per tender notice.

- 1. The enlistment of the contractors should be valid on the last date of submission of tenders. In case the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of tenders.
 - 1.1 The work is estimated to cost **as per tender notice.** This estimate, however, is given merely as a rough guide.
 - 1.2 Details of criteria for eligibility As Indicated in "INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e- TENDERING FORMING PART OF NIT AND TO BE POSTED ON WEBSITE"
 - 1.3 To become eligible for issue of tender, the tenderer shall have to furnish an affidavit as under:
 I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for tendering in IITD in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee. (Scanned copy to be uploaded at the time of submission of bid)
 - 2. Agreement shall be drawn with the successful bidders on prescribed Form No. IITD 8 (or other Standard Form as mentioned) which is available as a Govt. of India Publication. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
 - 3. The time allowed for carrying out the work will be **as per tender notice** from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
 - 4. The site for the work is available.
 - 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site http://eprocure.gov.in/eprocure/app or itd.ac.in or e-procure.gov **free** of cost.
 - 6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
 - 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
 - 8. If it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid.
 - 9. Earnest Money in the form of Demand Draft or Pay order or Banker's Cheque or Deposit at Call Receipt (drawn in favour of Registrar IIT Delhi, Hauz Khas, New Delhi) as specified of any Scheduled/ Nationalized Bank and shall be scanned & uploaded to the e- tendering website within the period of tender submission or through RTGS/ NEFT with UTR details and original should be deposited by lowest bidder within a week after the opening of financial bid in office of Executive Engineer (CD-III), IIT Delhi, Hauz Khas, New Delhi

A part of earnest money is acceptable in the form of bank guarantee also. In such case, 50% of earnest money or Rs.20 lakh, whichever is less, will have to be deposited in shape prescribed above, and balance in shape of Bank Guarantee of any scheduled bank which is to be scanned and uploaded by the intending bidders.

Interested contractor who wish to participate in the bid has also to make following payments in the form of Demand Draft/Pay order or Banker's Cheque of any Scheduled Bank and to be scanned and uploaded to the e-Tendering website within the period of bid submission:

http://eprocure.gov.in/eprocure/app.

- 10. The bid submitted shall become invalid if:
 - (i) The bidders are found not eligible.
 - (ii) The bidders do not upload all the documents (including GST registration/ other documents as per Tender Notice) as stipulated in the bid document.
 - (iii) If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically in the office of tender opening authority.

- (iv) The lowest bidder does not deposit physical EMD within a week of opening of tender.
- 11. The time & date of submission & opening of financial bid of contractors qualifying the **criteria as per Tender Notice** shall be communicated to them at a later date.
- 12. The contractor whose bid is accepted, will be required to furnish performance guarantee of 3% (Three Percent) of the tendered and accepted of the bided amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay order of any Scheduled Bank of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or irrevocable Bank Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
- 13. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 14. The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
- 15. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 16. The competent authority on behalf of Board of Governors reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
- 17. The contractor shall not be permitted to tender for works in the IITD responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the Central Public Works Department or in the Ministry of Urban Development. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of this Department.
- 18. No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as afore said before submission of the tender or engagement in the contractor's service.
- 19. The tender for the works shall remain open for acceptance for a period of seventy five (75) days from last date of submission of bid, if any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.
- 20. This notice inviting Tender shall form a part of the contract document. The successful tenderer / contractor, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:-
 - The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - b) Standard IITD Form 8 or other Standard IITD Form as mentioned.
- 21. In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as submitted physically in the office of Executive Engineer, then the bid submitted shall become invalid.

Executive Engineer (CD-III) IIT Delhi, Hauz Khas New Delhi - 110016

NOTICE INVITING TENDER

INDIAN INSTITUTE OF TECHNOLOGY DELHI

HAUZ KHAS, NEW DELHI-110016

Terms & Conditions

Indian Institute of Technology Delhi is in the process of purchasing following item(s) as per details as given as under.

Details of the item	As per Tender Notice
Earnest Money Deposit to be submitted	Rs. 2,63,358/-
Warranty	As per Tender Notice, NIT & IITD form 8
Performance security	As per Tender Notice, NIT & IITD form 8

Tender Documents may be downloaded from Central Public Procurement Portal http://eprocure.gov.in/eprocure/app. Aspiring Bidders who have not enrolled / registered in e-procurement should enroll / register before participating through the website http://eprocure.gov.in/eprocure/app. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission '.

Tenderers can access tender documents on the website (For searching in the NIC site, kindly go to Tender Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website http://eprocure.gov.in/eprocure/app as per the schedule given in the next page.

No manual bids will be accepted. All quotes (both Technical and Financial should be submitted in the E-procurement portal).

Schedule

Name of Organization		Indian Institute of Technology, Delhi	
Tender Type (Open/Limited/E	OI/Auction/Single)	Open	
Tender Category (Services/Go	ods/works)	Works	
Type/Form of Contract (Work/Supply/ Auction/Service/Buy/Empanelment/ Sell)		Works	
Product Category (Civil Work Works/Fleet Management/ Co		Civil work, Electrical work, Fire Alarm system & Networking	
Source of Fund (Institute/Proje	ect)	Renovation (Research Facility and Housing)/ 35.01.02(IOE) (2021/007/0027)	
Is Multi Currency Allowed		No	
Date of Issue/Publishing		08/12/2022 (15.00 Hrs)	
Document Download/Sale Sta	rt Date	08/12/2022 (15.00 Hrs)	
Document Download/Sale End	l Date	19/12/2022 (15.00 Hrs)	
Date for Pre-Bid Conference		Nil	
Venue of Pre-Bid Conference			
Last Date and Time for Upload	ding of Bids	19/12/2022 (15.00 Hrs)	
Date and Time of Opening of	Technical Bids	20/12/2022 (15.00 Hrs)	
Tender Fee	Rs.1000/	(To be paid through RTGS/NEFT. IIT Delhi Bank details are	
EMD	Rs.2,63,358/-	name of the Bank A/C: Registrar IIT Delhi SBI A/C No. 10773572622 Name of the Bank : State Bank of India, IIT Delhi, Hauz Khas, New Delhi-110016 IFSC Code : SBIN0001077 MICR Code :110002156 Swift No. :SBININBB547 (This is mandatory that UTR Number is provided in the online quotation / bid. Kindly refer to the UTR Column of the Declaration Sheet at Annexure-II) or as per NIT/ Tender notice	
No. of Covers (1/2/3/4)		02	
Bid Validity days (30/75)		75 days (From last date of Submission of bid)	
Address for Communication		Office of the Executive Engineer (Civil Division-III), Room No- MZ-137, Main Building, IIT Delhi, Hauz Khas, New Delhi-110016	
Contact No.		011-26596237	
Fax No.		Nil	
Email Address		a26516@admin.iitd.ac.in	

 $C \hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} I \hspace{-0.5cm} -\hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} EE \hspace{0.5cm} (CD \hspace{-0.5cm} -\hspace{-0.5cm} III) \hspace{0.5cm} EE \hspace{0.5cm} (E) \hspace{0.5cm} AE \hspace{0.5cm} (E) \hspace{0.5cm} JE \hspace{0.5cm} (C)$

Instructions for Online Bid Submission:

As per the directives of Department of Expenditure, this tender document has been published on the Central Public Procurement Portal (<u>URL:http://eprocure.gov.in/eprocure/app)</u>. The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: http://eprocure.gov.in/eprocure/app

REGISTRATION

- 1. Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: http://eprocure.gov.in/eprocure/app) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3. 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.
- 4. 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 (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5. 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.
- 6. Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.

SEARCHING FOR TENDER DOCUMENTS

- 1. There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, organization name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as organization name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP Portal.
- 2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3. 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 100 dpi with black and white option.
- 4. 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 again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

1. 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.

- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3. Bidder has to select the payment option as "on-line" to pay the tender fee / EMD as applicable and enter details of the instrument. Whenever, EMD / Tender fees is sought, bidders need to pay the tender fee and EMD separately on-line through RTGS (Refer to Schedule, Page No.11).
- 4. A standard BoQ format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.

OR

In some cases Financial Bids can be submitted in PDF format as well (in lieu of BOQ).

- 5. 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.
- 6. All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 7. The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 8. Upon the successful and timely submission of bids, the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 9. Kindly add scanned PDF of all relevant documents in a single PDF file of compliance sheet.

ASSISTANCE TO BIDDERS

- 1. Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk. The contact number for the helpdesk is 1800 233 7315.

General Instructions to the Bidders

- 1. The tenders will be received online through portal http://eprocure.gov.in/eprocure/app . In the Technical Bids, the bidders are required to upload all the documents in .pdf format.
- 2. Possession of a Valid Class II/III Digital Signature Certificate (DSC) in the form of smart card/e-token in the company's name is a prerequisite for registration and participating in the bid submission activities through http://eprocure.gov.in/eprocure/app. Digital Signature Certificates can be obtained from the authorized certifying agencies, details of which are available in the web site https://eprocure.gov.in/eprocure/app under the link "Information about DSC".
- 3. Tenderer are advised to follow the instructions provided in the 'Instructions to the Tenderer for the e- submission of the bids online through the Central Public Procurement Portal for e-Procurement at https://eprocure.gov.in/eprocure/app.

Terms & Conditions Details

S.No.	Specification	
1.	Due date : The tender has to be submitted on-line before the due date. The offers received after the due date and time will not be considered. No manual bids will be considered.	
2.	Preparation of Bids : The offer/bid should be submitted in two bid systems (i.e.)	
	Technical bid and financial bid. The technical bid should consist of all technical details	
	along with commercial terms and conditions. Financial bid should indicate item wise	
	price for the items mentioned in the technical bid in the given format i.e BOQ_XXXX.	
	OR	
	Financial Bids to be submitted in Excel.	
	The Technical bid and the financial bid should be submitted Online.	
3.	EMD (if applicable): As per NIT	
4.	Refund of EMD :- As per NIT	
5.	Opening of the tender: As per Tender Notice, NIT & IITD form 8	
6.	Acceptance/ Rejection of bids: The competent authority of IIT Delhi reserves the	
	right to reject any or all offers without assigning any reason.	
7.	Pre-qualification criteria: - Mentioned in Tender notice	
8.	Performance Security:-Mentioned in Tender notice	
9.	Force Majeure :- As per IITD form 8	
10.	Risk & Cost Clause : As per IITD form 8	
11.	Delivery and Documents: As per Tender Notice & NIT & IITD form 8	
12.	Delayed delivery: As per Tender Notice & NIT & IITD form 8	
13.	Prices: As per Tender Notice & NIT & IITD form 8	
14.	Progress of Work :As per Tender Notice & NIT & IITD form 8	
15.	Inspection and Tests: As per Tender Notice & NIT & IITD form 8	
16.	Resolution of Disputes: As per Tender Notice & NIT & IITD form 8	
17.	Applicable Law: As per Tender Notice & NIT & IITD form 8	
18.	Supplier Integrity : As per Tender Notice & NIT & IITD form 8	
19.	Training: As per Tender Notice & NIT & IITD form 8	
20.	Installation & Demonstration : As per Tender Notice & NIT & IITD form 8	
21.	Incidental services: As per Tender Notice & NIT & IITD form 8	
22.	Defect liability Period : As per Tender Notice & NIT & IITD form 8	
23.	Governing Language : As per Tender Notice & NIT & IITD form 8	
24.	Applicable Law : As per Tender Notice & NIT & IITD form 8	
25.	Notices: As per Tender Notice & NIT & IITD form 8	
26.	Taxes : As per Tender Notice & NIT & IITD form 8	
27.	Termination for Default : As per Tender Notice & NIT & IITD form 8	
28.	Disputes and Jurisdiction: As per Tender Notice & NIT & IITD form 8	
29.	Completion certificate: As per Tender Notice & NIT & IITD form 8	

Bid Submission

Online Bid Submission:

The Online bids (complete in all respect) must be uploaded online in two Envelops as explained below:-

Bid Document – 1 (Following documents to be provided as single PDF file)				
Sl. No.	Documents	Content	File Type	
1.		Compliance Sheet as per Annexure – I	.PDF	
2.		Organization Declaration Sheet as per Annexure – II	.PDF	
3.	Technical Bid	List of organizations/ clients where the same products have been supplied (in last two years) along with their contact number(s). (Annexure-III)	.PDF	
4.		Technical supporting documents in support as per Page-6 of NIT	.PDF	
Bid Document – 2				
Sl. No.	Documents	Content	File Type	
1.	Financial Bid	Price bid should be submitted in Excel format.	.xls	

 $C \hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} I \hspace{-0.5cm} -\hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} EE \hspace{0.5cm} (CD \hspace{-0.5cm} -\hspace{-0.5cm} III) \hspace{0.5cm} EE \hspace{0.5cm} (E) \hspace{0.5cm} AE \hspace{0.5cm} (E) \hspace{0.5cm} JE \hspace{0.5cm} (C)$

IITD – 6 FOR E-TENDERING

IITD

INDIAN INSTITUTE OF TECHNOLOGY, DELHI HAUZ KHAS, NEW DELHI - 110016 NOTICE INVITING TENDER

Item rate tenders are invited on behalf of The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 from approved and eligible contractors of CPWD and those of appropriate class of M.E.S., BSNL and Railway dealing with Civil work / Building work/ Building & Road / Composite works for the work of "Construction of Temporary Composite structures Lab for Applied Mechanics Department between Block III & IV in academic area at IIT Delhi.. (Sub. Head: - Civil work, Electrical work, Fire Alarm system & Networking)"

- 1. The enlistment of the contractors should be valid on the last date of submission of tenders. In case only the last date of submission of tender is extended, the enlistment of contractor should be valid on the original date of submission of tenders.
 - **1.1** The work is estimated to cost Rs. 1,31,67,901/- This estimate, however, is given merely as a rough guide.
 - 1.1.1 The authority competent to approve NIT for the combined cost and belonging to the major discipline will consolidate NITs for calling the bids. He will also nominate Division which will deal with all matters relating to the invitation of bids.

For composite bid, besides indicating the combined estimated cost put to tender, should clearly indicates the estimated cost of each component separately. The eligibility of bidders will correspond to the combined estimated cost of different components put to bid.

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

Criteria of eligibility for submission of bid documents.

1.2.1 Criteria of eligibility for CPWD as well as non-CPWD contractors.

Three similar works each of value not less than 40% of estimated cost or two similar work each of value not less than 60% of estimated cost or one similar work of value not less than 80% of estimated cost (rounded to nearest Rs.1000/-) during last 7 years ending on previous day of last day of submission of bids.

The value of executed works shall be brought to current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated during last 7 years ending on previous day of last day of submission of bids.

1.2.2 To become eligible for issue of bid, the bidders shall have to furnish an affidavit as under:

I/We undertake and confirm that eligible similar works(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for bidding in I.I.T.D in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer- in-Charge shall be free to forfeit the entire amount of Performance Guarantee.

IITD - 6 FOR E-TENDERING

HTD

- 2. Agreement shall be drawn with the successful bidders on prescribed Form No. I.I.T.D 7/8 which is available as I.I.T.D. Publication. Bidders shall quote their rates as per various terms and conditions of the said form which will form part of the agreement.
- 3. The time allowed for carrying out the work will be **as per Tender Notice** from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the bid documents.
- 4. The site for the work shall be made available in parts as and when site will be available.
- 5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site www.iitd.ac.in or e-procure.gov.in free of cost.
- 6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
- 7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
- 8. If it is desired to submit revised financial bid then it shall be mandatory to submit revised financial bid. If not submitted then the tender submitted earlier shall become invalid.
- 9. Copy of Enlistment Order and certificate of work experience and other documents as specified in the press notice / web notice shall be scanned and uploaded to the tender website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in press notice / web notice shall have to be submitted by the lowest bidder in the office of tendering authority.
- 10. Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited tender online fees with and earnest money deposit and other documents scanned and uploaded are found in order. The bid submitted shall become invalid &Tender fees shall not be refunded if:
 - i. The bidder is found ineligible.
 - ii. The bidder does not upload all the documents as stipulated in the bid documents.
 - iii. If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted physically by the lowest tenderer in the office of tender opening authority.
- 11. The contractor whose bid is accepted will be required to furnish performance guarantee of 3% (Three Percent) of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of cash (in case guarantee amount is less than Rs. 10000/-) or Deposit at Call receipt of any scheduled bank/Banker's cheque of any scheduled bank/ Demand Draft of any scheduled bank/Pay order of any Scheduled Bank (in case guarantee amount is less than Rs.1,00,000/-) or Government Securities or Fixed Deposit Receipts or irrevocable Bank Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
- 12. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their bids as to the nature of the ground and subsoil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their bid. A bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent on any misunderstanding or otherwise shall be allowed. The bidders shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access,

IITD - 6 FOR E-TENDERING

IITD

- 13. facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a bid by a bidder implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.
- 14. The competent authority on behalf of the Board of Governors does not bind itself to accept the lowest or any other bid and reserves to itself the authority to reject any or all the bids received without the assignment of any reason. All bids in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the bidder shall be summarily rejected.
- 15. Canvassing whether directly or indirectly, in connection with bidders is strictly prohibited and the bids submitted by the contractors who resort to canvassing will be liable to rejection.
- 16. The competent authority on behalf of Board of Governors reserves to himself the right of accepting the whole or any part of the bid and the bidder shall be bound to perform the same at the rate quoted.
- 17. The contractor shall not be permitted to bid for works in the IITD responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any gazetted officer in the IIT Delhi. Any breach of this condition by the contractor would render him liable to be debarred from bidding process in future in IIT Delhi.
- 18. No Engineer of gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the bid or engagement in the contractor's service.
- 19. The bid for the works shall remain open for acceptance for a period of Seventy Five (75) days from the last date of submission of bid, if any bidder withdraws his bid before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the bid which are not acceptable to the department, then the IIT Delhi shall, without prejudice to any other right or remedy, the bidder shall debarred for tendering in IIT Delhi for a period of one year.
- 20. This notice inviting bid shall form a part of the contract document. The successful bidder / contractor, on acceptance of his bid by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:
 - a) The Notice Inviting Bid, all the documents including additional conditions, specifications and drawings, if any, forming part of the bid as uploaded at the time of invitation of bid and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - b) Standard IITD Form –7/8 or other Standard IITD Form as mentioned.
- 21. In case any discrepancy is noticed between the documents as uploaded at the time of submission of the bid online and hard copies as submitted physically in the office of Executive Engineer, then the bid submitted shall become invalid and the IIT Delhi shall without prejudice to any other right or remedy, the bidder shall debarred for tendering in IIT Delhi for a period of one year
- 22. For composite Bid:
 - **22.1** The **Executive Engineer [CD-III]** shall be Engineer-in-charge of the major component and will call the bids for the composite work, Earnest Money will be fixed with respect of the combined estimate cost put to tender for the composite bid.
 - 22.2 The bid document will include following three components: -

IITD - 6 FOR E-TENDERING

IITD

PART A: IITD-6, IITD-7 including schedule A to F for the major component of the work. Standard General Conditions of contract for CPWD 2020 as corrected/modified upto-date.

PART B: General/Specific conditions, specifications and schedule of quantities applicable to major component of the work.

PART C: Schedule A to F for minor component of the work I.E. (Institute Engineer/EE Engineer-in-charge of major component shall also be competent authority under clause 2 and clause 5 as mentioned as schedule A to F to major components), General/specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.

- 22.3 The bidder must associate himself, with experienced agencies of the appropriate class eligible of bid for each of the minor component individually
- **22.4** The eligible bidders shall quote rate for all items of major component as well as for all items of minor component of work.
- 22.5 After acceptance of the bid by Competent authority, the EE [CD-III] i.e Engineer in charge of the work shall issue letter of award on behalf of the Board of Governors, IIT Delhi, After the work is awarded, the main contractor will have to enter into one agreement with EE [CD-III] and has also to sign two or more copies of agreement. On such signed set of agreement shall be handed over to EE (Elect) in charge of minor component. EE of major component will operate part A and EE(Elect) in charge of minor component shall operate part B along with Part A of the agreement.
- **22.6** Entire work under the scope of composite bid including major and all minor component shall be executed under one agreement.
- 22.7 Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works. The Earnest Money will become part of security deposit of the major component of work.
- 22.8 The main contractor has to associate agency(s) for minor component (s) conforming to eligibility criteria as defined in the bid document and has to submit detail of such agency (s) to Engineer-in-charge of minor component(s) within prescribed time, Name of agency (s) to be associated shall be approved by Engineer-in-charge of minor component(s).
- 22.9 In case the main contractor to change any of the above agency/agencies during the operation of the contract, he shall obtain prior approval of Engineer-in-charge of minor component. The new agency/agencies shall also have agency, he can direct the contractor to change the agency executing such items of work and this shall be binding on the contractor.
- 22.10 The main contractor has to enter into agreement with contractor(s) associated by him for execution of minor components(s) in case the main contractor does not have capability to execute the minor component work. Copy of such agreement shall be submitted to EE [E] and EE (CD-III), in charge of major and minor component. In case of change of associate contractor, the main contractor has to enter into agreement with the new contractor associated by him.
- 22.11 Running payment for the major component shall be processed by EE of major discipline to the main contractor. Running payment of minor components shall be made by EE [E], discipline of minor component directly to the main contractor.
- 22.12 The composite work shall be treated as completed when all the components of the work are complete and certified. The completion certificate of the composite work shall be recorded by Engineers-in-charge of major component after record of completion certificate of all other components.
- 22.13 Final bill of whole work shall be finalized and paid by the EE of major component. EE (E), in charge of minor component(s) will prepare and pass the final bill for their respective component of work and pass on the same to the EE of major component for including in the final bill for composite contractor.

	INT	EGRATY PA	CT E-TENDERING	IITD
То,			.,	
			.,	
	•••••			
		-	uctures Lab for Applied Me	3 for the work of "Construction of chanics Department between Block - Civil work, Electrical work, Fire

Dear Sir,

Alarm system & Networking"

It is here by declared that I.I.T.D is committed to follow the principle of transparency, equity, and competitiveness in public procurement.

The subject Notice Inviting Tender (NIT) is an invitation to offer made on the condition that the Bidder will sign the integrity Agreement, which is an integral part of tender/bid documents, failing which the tenderer / bidder will stand disqualified from the tendering process and the bid of the bidder would be summarily rejected.

This declaration shall form part and parcel of the Integrity Agreement and signing of the same shall be deemed as acceptance and signing of the Integrity Agreement on behalf of the I.I.T.D.

Yours faithfully

Executive Engineer (CD-III)

IITD

(To be signed by bidder and upload the scanned copy)

To,

Executive Engineer (CD- III) IIT Delhi, Hauz Khas, New Delhi – 110016.

Subject: -Submission of Bid for the of Construction of Temporary Composite structures Lab for Applied Mechanics Department between Block III & IV in academic area at IIT Delhi., Sub Head: - Civil work, Electrical work, Fire Alarm system & Networking Dear Sir.

I/We acknowledge that I.I.T.D is committed to follow the principles thereof as enumerated in the Integrity Agreement enclosed with the tender/bid document.

I/We agree that the Notice Inviting Tender (NIT) is an invitation to offer made on the condition that I/We will sign the enclosed integrity Agreement, which is an integral part of tender / bid documents, failing which I/We will stand disqualified from the tendering process. I/We acknowledge that THE MAKING OF THE BID SHALL BE REGARDED AS AN UNCONDITIONAL AND ABSOLUTE ACCEPTANCE of this condition of the NIT.

I/We confirm acceptance and compliance with the Integrity Agreement in letter and spirit and further agree that execution of the said Integrity Agreement shall be separate and distinct from the main contract, which will come into existence when tender/bid is finally accepted by I.I.T.D. I/We acknowledge and accept the duration of the Integrity Agreement, which shall be in the line with Article 1 of the enclosed Integrity Agreement.

I/We acknowledge that in the event of my/our failure to sign and accept the Integrity Agreement, while submitting the tender/bid, I.I.T.D shall have unqualified, absolute and unfettered right to disqualify the tender / bidder and reject the tender/bid is accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

IITD

To be signed by the bidder and same signatory competent / authorized to

sign the relevant contract on behalf of I.I.T.D.

INTEGRITY AGREEMENT

This Integrity Agreement is made at on this day of
BETWEEN
The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 represented through Executive Engineer (E) IIT Delhi.
, (Hereinafter referred as the(Address of
Division)
'Principal/Owner', which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)
AND
Address of the Individual/firm/Company) through (Hereinafter referred to as the (Details of duly authorized signatory) "Bidder/Contractor" and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns) Preamble
WHEREAS the Principal / Owner has floated the Tender (NIT No) (Hereinafter referred to as
"Tender/Bid") and intends to award, under laid down organizational procedure, contract for
(Name of work) hereinafter referred to as the "Contract".
AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter

parties.

referred to as "Integrity Pact" or "Pact"), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the

INTEGRATY PACT E-TENDERING IITD

Now, THEREFORE, in consideration of mutual covenants contained in this Pact, the parties hereby agree as follows and this Pact witnesses as under:

Article 1: Commitment of the Principal/Owner

- 1. The Principal/Owner commits itself to take all measures necessary to prevent corruption and to observe the following principles:
 - a) No employee of the Principal/Owner, personally or through any of his/her family members, will in connection with the Tender, or the execution of the Contract, demand, take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to
 - b) The Principal/Owner will, during the Tender process, treat all Bidder(s) with equity and reason. The Principal/Owner will, in particular, before and during the Tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the Tender process or the Contract execution.
 - c) The Principal/Owner shall endeavour to exclude from the Tender process any person, whose conduct in the past has been of biased nature
- 2. If the Principal/Owner obtains information on the conduct of any of its employees which is a criminal offence under the Indian Penal code (IPC)/Prevention of Corruption Act, 1988 (PC Act) or is in violation of the principles herein mentioned or if there be a substantive suspicion in this regard, the Principal/Owner will inform the Chief Vigilance Officer and in addition can also initiate disciplinary actions as per its internal laid down policies and procedures.

Article 2: Commitment of the Bidder(s)/Contractor(s)

- 3. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or Coercion or Collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 4. The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contract(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner aspart of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.

INTEGRATY PACT E-TENDERING

IITD

- d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.
- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 5. The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 6. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.
- 7. The Bidder(s)/Contractor(s) will not, directly or through any other person or firm use Coercive Practices (means the act of obtaining something, compelling an action or influencing a decision through intimidation, threat or the use of force directly or indirectly, where potential or actual injury may befall upon a person, his/ her reputation or property to influence their participation in the tendering process).

Article 3: Consequences of Breach

Without prejudice to any rights that may be available to the Principal/Owner under law or the Contract or its established policies and laid down procedures, the Principal/Owner shall have the following rights in case of breach of this Integrity Pact by the Bidder(s)/Contractor(s) and the Bidder/ Contractor accepts and undertakes to respect and uphold the Principal/Owner's absolute right:

- 1. If the Bidder(s)/Contractor(s), either before award or during execution of Contract has committed a transgression through a violation of Article 2 above or in any other form, such as to put his reliability or credibility in question, the Principal/Owner after giving 14 days' notice to the contractor shall have powers to disqualify the Bidder(s)/Contractor(s) from the Tender process or terminate/determine the Contract, if already executed or exclude the Bidder/Contractor from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of transgression and determined by the Principal/Owner. Such exclusion may be forever or for a limited period as decided by the Principal/Owner.
- 2. **Forfeiture of EMD/Performance Guarantee/Security Deposit**: If the Principal/Owner has disqualified the Bidder(s) from the Tender process prior to the award of the Contract or terminated/determined the Contract or has accrued the right to terminate/determine the Contract according to Article 3(1), the Principal/Owner apart from exercising any legal rights that may have accrued to the Principal/Owner, may in its considered opinion forfeit the entire amount of Earnest Money Deposit, Performance Guarantee and Security Deposit of the Bidder/Contractor.
- 3. **Criminal Liability**: If the Principal/Owner obtains knowledge of conduct of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

INTEGRATY PACT E-TENDERING

IITD

Article 4: Previous Transgression

- 1. The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2. If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.
- 3. If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

Article 5: Equal Treatment of all Bidders/Contractors/Subcontractors

- 1. The Bidder(s)/Contractor(s) undertake(s) to demand from all subcontractors a commitment in conformity with this Integrity Pact. The Bidder/Contractor shall be responsible for any violation(s) of the principles laid down in this agreement/Pact by any of its Sub-contractors/sub-vendors.
- 2. The Principal/Owner will enter into Pacts on identical terms as this one with all Bidders and Contractors.
- 3. The Principal/Owner will disqualify Bidders, who do not submit, the duly signed Pact between the Principal/Owner and the bidder, along with the Tender or violate its provisions at any stage of the Tender process, from the Tender process.

Article 6- Duration of the Pact

- 1. This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 09 Months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.
- 2. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, I.I.T.D.

Article 7- Other Provisions

- 1. This Pact is subject to Indian Law, place of performance and jurisdiction is the Headquarters of the Division of the Principal/Owner, who has floated the Tender.
- 2. Changes and supplements need to be made in writing. Side agreements have not been made.
- 3. If the Contractor is a partnership or a consortium, this Pact must be signed by all the partners or by one or more partner holding power of attorney signed by all partners and consortium members. In case of a Company, the Pact must be signed by a representative duly authorized by board resolution.
- 4. Should one or several provisions of this Pact turn out to be invalid; the remainder of this Pact remains valid. In this case, the parties will strive to come to an agreement to their original intensions.
- 5. It is agreed term and condition that any dispute or difference arising between the parties with regard to the terms of this Integrity Agreement / Pact, any action taken by the Owner/Principal in accordance with this Integrity Agreement/ Pact or interpretation thereof shall not be subject to arbitration.

IITD

Article 8- LEGAL AND PRIOR RIGHTS

All rights and remedies of the parties hereto shall be in addition to all the other legal rights and remedies belonging to such parties under the Contract and/or law and the same shall be deemed to be cumulative and not alternative to such legal rights and remedies aforesaid. For the sake of brevity, both the Parties agree that this Integrity Pact will have precedence over the Tender/Contact documents with regard any of the provisions covered under this Integrity Pact.

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first above mentioned in the presence of following witnesses:

(For and on behalf of Principal/Owner)
(For and on behalf of
Bidder/Contractor)
WITNESSES:
1
(signature, name and address)
2(signature, name and address)
Place:
Date:

BANK GURANTEE BOND

IITD

Form of Earnest Money Deposit Bank Guarantee Bond

	WHEREAS, contractor (Name of contractor) (hereinafter called "the contractor") has submitted his tender dated (date) for the construction of(name of work) (hereinafter called "the Tender")
	KNOW ALL PEOPLE by these presents that we
	(Name and division of Executive Engineer) (hereinafter called "the Engineer-in-Charge") in the sum of Rs
	SEALED with the Common Seal of the said Bank thisday of
(1)	If after tender opening the Contractor withdraws, his tender during the period of validity of tender (including extended validity of tender) specified in the Form of Tender;
(2)	If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge:
(a)	fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required;
(b)	OR fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor, OR
(c)	fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor,
(d)	OR fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract.
	We undertake to pay to the Engineer-in-Charge either up to the above amount or part thereof upon receipt of his first written demand, without the Engineer-in-Charge having to substantiates his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by his is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions.
	This Guarantee will remain in force up to and including the date*
	DATE SIGNATURE OF THE BANK
	WITNESSSEAL (SIGNATURE, NAME AND
	ADDRESS)
*Date	e to be worked out on the basis of validity period of 6 months from last date of receipt of tender.

O--- NIL C—NIL I----NIL EE (CD-III) EE (E) AE (E) JE (C)

PERFORMANCE GUARANTEE

- The contractor shall submit an irrevocable Performance Guarantee of 3% (Three percent) of 1. the tendered amount in addition to other deposits mentioned elsewhere in the contract for his proper performance of the contract agreement, (not withstanding and/or without prejudice to any other provisions in the contract) within period specified in Schedule 'F' from the date of issue of letter of acceptance. This period can be further extended by the Engineer-in-Charge up to a maximum period as specified in schedule 'F' on written request of the contractor stating the reason for delays in procuring the Performance Guarantee, to the satisfaction of the Engineer-in-Charge. This guarantee shall be in the form of Cash (in case guarantee amount is less than Rs. 10,000/-) or Deposit at Call receipt of any scheduled bank/Banker's Cheque of any scheduled bank/Demand Draft of any scheduled bank/Pay Order of any scheduled bank (in case guarantee amount is less than Rs. 1,00,000/-) or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the form annexed hereto. In case a fixed deposit receipt of any Bank is furnished by the contractor to the Government as part of the performance guarantee and the Bank is unable to make payment against the said fixed deposit receipt, the loss caused thereby shall fall on the contractor and the contractor shall forthwith on demand furnish additional security to the Government to make good the deficit.
- 2. The Performance Guarantee shall be initially valid up to the stipulated date of completion plus 60 Days beyond that. In case the time for completion of work gets enlarged, the contractor shall get the validity of Performance Guarantee extended to cover such enlarged time for completion of work. After recording of the completion certificate for the work by the competent authority, the performance guarantee shall be returned to the contractor, without any interest.
- 3. The Engineer-in-Charge shall not make a claim under the performance guarantee except for amounts to which the BOG is entitled under the contract (not withstanding and/or without prejudice to any other provisions in the contract agreement) in the event of:
 - a) Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which event the Engineer-in-Charge may claim the full amount of the Performance Guarantee.
 - b) Failure by the contractor to pay BOG any amount due, either as agreed by the contractor or determined under any of the Clauses/Conditions of the agreement, within 30 days of the service of notice to this effect by Engineer-in-Charge.
- 4. In the event of the contract being determined or rescinded under provision of any of the Clause/Condition of the agreement, the performance guarantee shall stand forfeited in full and shall be absolutely at the disposal of the BOG.

1. Name & Address of the bidder

FORM "F"

STRUCTURE & ORGANISATION

2.	Telephone no./ Telex no./ Fax no.
3.	Legal status of the bidder (attach copies of original document defining the legal status)
a.	An Individual
b.	A proprietary firm
c.	A firm in partnership
d.	A limited company or Corporation
4.	Particulars of registration with various Government Bodies (attach attested photocopy) Organization/ Place of registration and Registration No.
	1.
	2.
	3.
5.	Name and tiles of Directors & Officers with designation to
	be concerned with this work
	!
6.	Designation of individuals authorized to act for the organization
7.	Has the bidder or any constituent partner in case of partnership firm, ever abandoned the
	awarded work before its completion?
	If so, give name of the project and reasons for abandonment
	!
8.	Has the bidder or any constituent partner in case of partnership
	firm, ever been debarred/ blacklisted for tendering in any organization
	at any time? If so, give details
9	Past work experience in IIT Delhi will be considered in deciding the Technical bid!
	Signature of Bidder(S)
	Digitative of Diagot(b)

 $C \hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} I \hspace{-0.5cm} -\hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} EE \hspace{0.5cm} (CD \hspace{-0.5cm} -\hspace{-0.5cm} III) \hspace{0.5cm} EE \hspace{0.5cm} (E) \hspace{0.5cm} AE \hspace{0.5cm} (E) \hspace{0.5cm} JE \hspace{0.5cm} (C)$

ANNEXURE-I COMPLIANCE SHEET

TECHNICAL SPECIFICATION:

S.No.	Technical Bid Requirement As per Tender Notice & NIT & IITD form 8	Compliance Y/N
1.	Demand Draft / Pay order or Banker`s Cheque / Deposit at Call Receipt / FDR of any Scheduled Bank against EMD.	
2.	Enlistment order of contractor.	
3.	Certificate of work experience.	
4.	Certificate of Registration for GST and acknowledgement of up to date filed return of GST.	
5.	Affidavit as per Notice Inviting Tender Condition 1.3 page 7 of NIT. (Affidavit shall be purchased/ notarized between date of publishing and last date of submission of bids beside this NIT/Tender ID and name of work must be mentioned on the Affidavit.).	
6.	Acceptance to execute INTEGRITY PACT.	
7.	Undertaking as per page-5/ Sl. No. 20' on firm's letter head. "the physical EMD shall be deposited by me / us with the Authority inviting the tender, in case I / we become the lowest tenderer, within a week of the opening of financial bid, otherwise, department may reject the tender and also take action to debar me / us from tendering in any form in IIT Delhi"	
8.	ESI & EPF registration.	
9.	FORM "F" (Duly filled with all required details).	
10.	Tender Fee of Rs.1000/- to be deposited through RTGS to Registrar IIT Delhi as per detail given in schedule page-11 and its proof to be uploaded with technical bid	
11.	Annexure-1 (Dully Filled & signed by the bidders)	
12.	Annexure 2 (Dully Filled & signed by the bidders)	
13.	Annexure 3 (Dully Filled & signed by the bidders)	
14.	In case of Partnership firm if all the papers of tender not signed by all the partners than a power of attorney authorizing the person who has signed the tender paper must be uploaded with the tender documents.	
15.	Any other documents given in NIT	
16.	BOQ	

I have also enclosed all relevant documents in support of my claims, (as above) in the following pages.

	Signature of Bidder(S)
Name:	
Designation:	
Organization	Name:
Contact No. :	

ANNEXURE-II

<< Organization Letter Head >> DECLARATION SHEET

We,_

hereby certify that all the information and data

۲۲ C,	nereby certify that an the information and data
furnished by our organization with regard to the	nis tender specification are true and complete to the best of
our knowledge. I have gone through the specif	fication, conditions and stipulations in details and agree to
comply with the requirements and intent of spe	ecification.
	registered as per Tender Notice & NIT & IITD form
3	tion meets all the conditions of eligibility criteria laid down
in this tender document.	and the conditions of englosing effectia late down
in this tender document.	
We, further specifically certify that our	NAME & ADDRESS of the Vendor/ Manufacturer / Agent
organization has not been Black Listed/De	
Listed or put to any Holiday by any	
Institutional Agency/ Govt. Department/	
Public Sector	
Undertaking in the last three years.	
1. Phone	
2. Fax	
3. E-mail	
5. E-IIIaii	As per Tender Notice & NIT
4. Contact Person Name	•
5. Mobile Number	
6. GST Number	
o. GS1 Number	
7. PAN Number	
8.(In case of on-line payment of Tender Fees)	
UTR No. (For Tender Fee)	
9.(In case of on-line payment of EMD)	
UTR No. (For EMD)	

(Signature of the Tenderer)

Name:

Seal of the Company

 $C \hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} I \hspace{-0.5cm} -\hspace{-0.5cm} -\hspace{-0.5cm} NIL \hspace{0.5cm} EE \hspace{0.5cm} (CD \hspace{-0.5cm} -\hspace{-0.5cm} III) \hspace{0.5cm} EE \hspace{0.5cm} (E) \hspace{0.5cm} AE \hspace{0.5cm} (E) \hspace{0.5cm} JE \hspace{0.5cm} (C)$

List of Govt. Organization/Deptt.

List of Government Organizations for whom the Bidder has undertaken such work As per Tender Notice & NIT & IITD form 8					
Name of the organization	Name of Contact Person	Contact No.			
		7			
AS PER TENDE	CR NOTICE				
		Signature of			
	Bidder Name:				
	Designation:				
	Organization Name:				
	Contact No.:				

PART-B

IITD – 7/8 E-TENDERING IITD

INDIAN INSTITUTE OF TECHNOLOGY DELHI HAUZ KHAS, NEW DELHI - 110016 Item Rate Tender & Contract for Composite Work

Tender for the work of: Name of work: - Construction of Temporary Composite structures Lab for Applied Mechanics Department between Block III & IV in academic area at IIT Delhi., Sub Head: - Civil work, Electrical work, Fire Alarm system & Networking

To be su	bmitted b	-	ender notice							
(i)	To be		n presence						tender	notice
in the of	fice of D. l	R. (Store)								
Issued to	o				 	 	 	 		
Signatur	e of office	er issuing t	he documen	ts	 	 	 	 		
Designa	tion				 	 	 	 		
Date of l	Issue									

TENDER

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

I/We hereby tender for the execution of the work specified for the The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 within the time specified in Schedule 'F' viz., schedule of quantities and in accordance in all respect with the specifications, designs, drawing and instructions in writing referred to in Rule-1 of General Rules and Directions and in Clause 11 of the Conditions of contract and with such materials as are provided for, by, and in respect of accordance with, such conditions so far as applicable.

We agree to keep the tender open for **Seventy Five (75)** days from last date of submission of bid.

A sum of **as per tender notice** is hereby forwarded in Banker Cheque or Demand Draft or Fixed Deposit receipt of a schedule bank drawn in favour of IIT Delhi as earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the said The Board of Governors,

I.I.T. Delhi, Hauz Khas, New Delhi - 16 or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that The Board of Governors, I.I.T. Delhi, Hauz Khas, New Delhi - 16 or the successors in office shall without prejudice to any other right or remedy available in law, be at liberty to forfeit the said earnest money and the performance guarantee absolutely, otherwise the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.5 of the tender form. Further, I/We agree that in case of forfeiture of Earnest Money & Performance Guarantee as aforesaid. I/We shall be debarred for participation in the re-tendering process of the work.

IITD – 7/8 E-TENDERING IITD

I/We undertake and confirm that eligible similar work(s) has/have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/We shall be debarred for tendering in I.I.T.D in future forever. Also, if such a violation comes to the notice of Department before date of start of work, the Engineer-in-Charge shall be free to forfeit the entire amount of Earnest Money Deposit/Performance Guarantee.

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

Dated:

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:

IITD – 7/8 E-TENDERING

IITD

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is
accepted by me for an on behalf of The Board of Governors, I.I.T. Delhi, Hauz Khas, New
Delhi - 16 for a sum of
(Rupees
).
The letters referred to below shall form part of this contract agreement: -
(a)
(b)
(a)
For & on behalf of Board of Governors, IIT Delhi Signature
Dated:
Designation

PROFORMA OF SCHEDULES

IITD

SCHEDULES (A to F)

(For Civil & Electrical Component)

SCHEDULE 'A'

Schedule of quantities for Civil, Electrical & AC work as attached.

SCHEDULE 'B'

Schedule of materials to be issued to the contractor

S.No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue				
1	2	3	4	5				
	NIL							

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S.No.	Description	Hire charges per day	Place of Issue				
1	2	3	4				
NIL							

SCHEDULE 'D'

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

Nil.

SCHEDULE 'E'

Reference to General Conditions of : contract

GCC for Maintenance work 2020 for CPWD works along with correction on slips/amendments issued up to last date

of submission of bid.

Name of Work : Construction of Temporary

Composite structures Lab for Applied Mechanics Department between Block III & IV in academic area at IIT Delhi. (Sub Head: - Civil, Electrical and AC

works).

See below

Estimated cost of work: : Rs.1,31,67,901/-

Earnest Money: : Rs. 2,63,358 /-

Performance Guarantee : 3% of tendered Value

Security deposit : 2.5 % of tendered value

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS:

1. Officer inviting tender : Executive Engineer[CD-III]

2.Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with

Clauses 12.2 & 12.5

Definitions:

2(i) Engineer-in-Charge : Executive Engineer [CD-III]

2(ii) Accepting Authority : Institute Engineer

2(iii) Percentage on cost of materials : 15%

and Labour to cover all overheads

and profits:

2(iv) Standard Schedule of Rates: : DSR 2021 for civil works with 10%

cost index & DSR 2022 for Electrical works with up to date correction slip on date of submission of bid &

Market Rate.

2(v) Department: : Works department at I.I.T Delhi

2(vi) IITD Form & CPWD GCC for Maintenance work 2020, modified & Corrected up to of submission of bid.

Clause 1

(i) Time allowed for submission of : 15 days

Performance Guarantee from the date of issue of letter of

acceptance

(ii) Maximum allowable : 1 to 15 days

extension with late fee @ 0.1 % per day of Performance guarantee amount beyond the period provided in (i) above,

Clause 2

Authority for fixing compensation under : Institute Engineer

clause 2:

Clause 5

Number of days from the date of issue : 10 (Ten) days

of letter of acceptance for reckoning date of start:

MILE STONE CHART

Sl. No.	Description of mile stone (financial terms)	Period for completion from date of start in days/months	Withheld amount for non- achievement of mile stone.
1	1/8 th (of the whole work)	1/4 th (of the whole work)	In the event of not achieving the necessary progress as
2	3/8 th (of the whole work)	1/3 th (of the whole work)	assessed from the running payment, 1% of the Tender
3	3/4 th (of the whole work)	3/4 th (of the whole work)	value of work will be withheld for failure
4	Full	Full	of each milestone.

Allowed for execution of work : 4 Months

Authority to decide:

(i) Extension of Time : Institute Engineer(ii) Rescheduling of mile stones : Institute Engineer

(iii) Shifting of Date of start in case of

Delay in handing over of site : Institute Engineer

Clause (6 or 6A) : Clause 6A

Clause 7

Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment:

Minimum Rs. 25.00 Lakhs

Clause -7A : As per Institute Policy

No running account bill shall be paid for the work till the applicable labour licences, registration with EPFO, ESIC and BOCW Welfare Board, whatever applicable are submitted by the contractor to the Engineer-in-Charge.

Clause 10A

List of testing equipment to be provided by : **Not Applicable**

the contractor at site lab

Clause 10B : Not Applicable

Clause 10C

Component of labour expressed as percent of value of work : 25% for Civil work & 15% for Electrical work

Clause 10CA : Not Applicable

S. No.	Material Covered under this clause	Nearest Materials (other than cement, reinforcement bars and the structural steel) for which All India Wholesale Price Index to be followed	Base Price of all Materials covered under clause 10 CA* (July 2022)			
1.	Cement					
2.	Cement	Not Applic	able			
3.	Reinforcement bars	Titot rippireusie				
4.	Structural steel					

Clause 10CC

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next column

Not Applicable

Clause 11

Specifications to be followed for execution of work

CPWD specifications (Civil)
2019 Vol. I and Vol. II and
CPWD Specification 2013 for
Electrical works corrected slips &
manufacturers Specifications up
to the last date of bid submission /
uploading of tender. Detailed
nomenclature of items &
specifications for market rate
items as per Engineer-in-charge

Clause 12

Type of work

Maintenance work including works of up-gradation, aesthetic, special repair, addition/alteration

12.2 & 12.5 Deviation limit beyond which clauses: 12.2 & 12.5 shall apply for building work

100%

12.5 (I) Deviation Limit beyond which clauses:

100%

12.2 & 12.5 shall applicable for foundation work (Except items mentioned in earthwork subhead of DSR

and related items)

12.5 (II) Deviation Limit for Items in earth work subhead of DSR and related items

100%

Clause 16

Competent Authority for deciding reduced rates : Institute Engineer

Clause 18

List of mandatory machinery, tools & : As per requirement plants to be deployed by the contractor at site

Clause 25

Constitution of Dispute Redressal Committee (DRC)				
Chairman				
Member	NIL			
Member				

Note: The above constitution of Dispute Redressal Committee is subject to change, for which necessary notification shall be issued by the competent authority of the department, if required.

Clause 32

Requirement of Technical Staff(s) & Recovery Rate

Cost of	Requirement of Technical Staff			Designation	Rate at which recovery shall be made from	
Work (Rs. In Crores)	Qualification	Number	Minimum experience (Years)	of the Technical Staff	contractor in the event of not fulfilling the provision of clause 32	
More than 15 lac to 1.5 Crore	Graduate Engineer OR Diploma Engineer	1 (Civil Engineer)	02 OR 05	Project Manager cum planning / quality / site / billing Engineer	Rs.15000/- per month per person	

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

Diploma Holder with minimum 10 years relevant experience with a reputed construction company can be treated at par with graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50 % of requirement of degree Engineer.

Clause 38

i)	Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates 2021with up to date correction printed by C.P.W.D.				
ii)	Variations permissible on theoretical quantities				
a)	Cement:				
	For works with estimated cost put to tender not more than Rs.5 lakh.	3% plus/minus. (Three percent)			
	For works with estimated cost put to tender more than Rs.5 lakh	2% plus/minus. (Two percent)			
b)	Bitumen all works.	2.5% plus & only & nil on minus side			
c)	Steel Reinforcement and structural steel sections for each diameter, section and category	2% plus/minus (Two percent)			
d)	All other materials				
e)	Schedule for determining theoretical consumption of Brick we	ork on the basis of DSR 2021			

SPECIAL CONDITIONS

- 1. Non Judicial stamp paper worth Rs. 10/- (Ten Rupees only) will be submitted by contractor which will have to be signed as token of acceptance.
- 2. No T & P would be supplied by the Institute and contractor will have to make his own arrangement.
- 3. The contractors are advised to get acquitted with the proposed work including specifications & its site and additional conditions carefully before quoting. No claim of any sort shall be entertained or account of any site conditions and ignorance of specifications & additional conditions. The work shall be carried out as per the availability of site.
- 4. The work shall be carried out as per CPWD specifications for civil and electrical work with up to date correction slips unless otherwise specified in the nomenclature of individual item or in the specification, additional conditions where specifications are silent, the decision of Engineer-in-Charge shall be final and binding on contractor.
- 5. The rates quoted by the contractor shall be taken as net and nothing extra shall be paid on any account i.e Royalty, Cartage, GST & stacking of material required at places etc. The rates for different items of work shall apply for Heights & Depths, Leads & Lifts unless otherwise specified in the agreement or specifications applicable in the agreement.
- 6. Any damage done by the contractor to any existing item / any part of the building during the course of execution of work shall be made good by at his own cost.
- 7. Articles manufactured by the reputed firms as per approved make list and as approved by Engineer-in-charge shall only be used at work.
- 8. The sample of material required in the work brought at site shall be submitted prior Technical specification of individual item and got approval of material from Engineer –in-Charge before use in execution of work.
- 9. The sample of material required for Testing shall be provided at free of cost by the contractor. Testing charges if any shall be borne by the IITD if satisfactory report and if test results are unsatisfactory than testing charges shall be deducted from bills of contractor. All other expenditure to be incurred for taking sample, conveyance, packing etc. shall be borne by the contractor.
- 10. The contractor shall submit a detailed program of work within 3 days of the date of award of work. The Engineer in- Charge can modify the program and the contractors have to work accordingly.
- 11. The contractor shall make his own arrangement for getting the permission with respect to trucks from the Traffic Police.
- 12. No payment shall be made to contractor for any damage caused by the rain, snowfall or any other natural causes what so ever during the execution of work.
- 13. Some restrictions may be imposed by the security staff of IIT Delhi etc. on the working and or movement of labour& material. No labour camp/ huts shall be allowed in IIT Campus. The contractor shall make his own arrangement for labour huts outside the campus. However construction of cement godown and Chowkidar's hut in the Campus shall be permitted. The contractor shall be bound to follow all such restrictions/instructions and nothing shall be payable on this account.
- 14. The contractor shall be fully responsible for the safe custody of the material issued or brought at site by him for doing the work.
- 15. The Malba / Garbage generated at site due to construction activities shall be removed from the site immediately & shall be disposed off by the contractor to the approved dumping site of MCD and all statutory approvals from local bodies shall be a sole responsibility of contractor.

- 16. The contractor shall clean the site thoroughly of scaffolding materials, rubbish, equipment's left out of his work & dress the site around the building to the complete satisfaction of the Engineer-in-Charge before the work is treated as completed.
- 17. Contractor has to quote against the item of schedule of credit of material. The contractor cannot quote either minus rate or Zero rate for these items.
- 18. Income tax and other taxes as applicable shall be deducted from the bills of contractor.
- 19. 1% labour cess or as applicable will be deducted from the bills of contractor.
- 20. Water charges @1% and Electricity charges @0.50% of gross work done shall be deducted from bills of contractor if electricity and water provided by IIT Delhi.
- 21. Agency has to take proper safety major during the execution of work.
- 22. GCC form 7/8 shall form part of NIT and the bidder shall go through GCC 2020 CPWD before quoting rates and the same shall be deemed to be accepted by bidder if he participates in the tender.
- 23. ESI & EPF shall be reimbursed as per norms on production of original receipt of ESI & EPF from contractor specific to this work.
- 24. The contractor shall submit the programme of execution of work as per clause 5 of GCC of IIT form 7/8 of NIT including list of workers to be deployed by contractor for this work.
- 25. Contractor shall be responsible for keeping site free of any kind of mosquito breeding. If it is found that breeding is taking place the entire responsibility shall be of contractor to bear challan etc. done by local bodies.
- 26. GST shall considered as inclusive in quoted rate of agency.
- 27. Electrical work will be executed only through the agency who is having valid electrical license and the copy of valid electrical license will be submitted before start of work.

28. Specialized work:

- 28.1.1 HVAC work
- 28.1.2 The Above Specialized work shall be carried out by specialized agencies/ agency on their own if they have experience of
- a) 3 similar work of 40 % value of specialized work component of tendered amount.
- b) 2 similar work of 60 % value of specialized work component of tendered amount.
- c) 1 similar work of 80 % value of specialized work component of tendered amount.

FORM OF WATER PROOFING WORKS GUARANTEE BOND ON STAMP PAPER

This thousand	agreement	made	this	day	of	t w o
	(he			ne one part) and	d the BO	G IIT
datedthe contract	is agreement is sug made between the or inter alia, undert pletely water and lea	e Guarantor of took to render the	he one part and Go	ovt. of the other	r part, wh	nereby
remain wate	s the Guarantor agr erproof for Five yea n the contract expire	ars to be recko				
shall replace other defect the Engineer from the date failing whic Guarantor's	period of guarantee at his risk and cost being found he shall r-in- Charge and shall of issuing notice from the work shall be cost and risk and in the from the Guarantee at his cost and risk and in the from the Guarantee at his shall be cost and risk and in the from the Guarantee at his shall be cost and risk and in the from the Guarantee at his shall be cost and risk and in the firm the	t such members all render the built all commence the commence the commence of the commence got done by the latter case	as may be damage lding waterproof at the works of such remains calling the Department by the decision of the	ed by water and this cost to the ectification with upon him to reconsome other co	in case of satisfact thin sever ctify the dontractor	of any cion of n days lefects at the
Guarantor wo otherwise wo performance damage and	Guarantor fails to ex- vill indemnify princi- hich may be incurre e and observance of for cost incurred by ading on the parties.	pal and his succed by him by reast this supplement	cessors against all l son of any default on tal agreement. As	loss, damage, co on the part of th to the amount	ost, expe ne Guarar of loss a	nse or ntor in and/or
Obligor	whereof of these pr		·			
and	For and or					
SIGNED, SI presence of-2.	EALED and delivered 1.	ed by OBLIGOI	R in			
SIGNED for 1. 2.	r and on behalf of Bo	OG IIT Delhi by	у	in the prese	nce of-	
Blanks to be	filled by Contracto	r/EE(CD-III)				

LIST OF APPROVED MAKES FOR CIVIL & ELECTRICAL WORKS

A Civil Items

S. No.	Description	Approved Makes
1.	EWC Seat Covers	HINDWARE/PARRYWARE/ CERA
2.	C.P Brass Fittings/ Accessories	JAQUAR, MARC, KOHLAR
3.	Cement (Grey) OPC/ PPC Grade-43	ACC/ L&T/ J.K./ BIRLA/ ULTRA TECH/ VIKRAM
4.	Cement (White)	J.K./ BIRLA
5.	Reinforcement Steel	PRIMARY MANUFACTURERS APPROVED BY MINISTRY OF STEEL/ SECONDARY MANUFACTURER HAVING VALID BIS LICENSE (TO BE AS PER LATEST BIS PROVISIONS)
6.	Structural Steel	PRIMARY MANUFACTURERS APPROVED BY MINISTRY OF STEEL/ SECONDARY MANUFACTURER HAVING VALID BIS LICENSE (TO BE AS PER LATEST BIS PROVISIONS)
7.	Stainless Steel (Grade 304)	JINDAL/ SAIL/ SALEM
8.	Bricks	COMMERCIALLY AVAILABLE OR REQUIRED STRENGTH
9.	Aluminum Sections	HINDALCO/ JINDAL/ MAHAVIR
10.	Flush Doors	CENTURY/ MERINO/ DURO BOARD/ GREEN
11.	Laminates	GREENLAM/ DURO/ ARCHID/ MERINO/ DECOLAM/ CENTURY
12.	Glass	SAINT GOBIN/ MODI FLOAT/ ASAHI FLOAT
13.	Ceramic Glazed tiles/ Border tiles	1ST QUALITY KAJARIA / NITCO/ JOHNSON/ ORIENT/ SOMANY
14.	Vitrified Tiles	JOHNSON/ KAJARIA/ ORIENT/ SOMANY
15.	Interlocking precast paver blocks/ Kerb Stone	HINDUSTAN TILES/ SWASTIK/ DALAL JOLLY/ GARG/ AMIT/ ASI/ SUPREME
16.	Stainless Steel Hinges Stainless Steel Nuts bols / Screws	KUNDAN/ PUJA/ ATUL/ GKW
17.	Paint/ Primer/ Oil bound distemper/ Acrylic	
18.	paint/ Plastic paint Plastic paint	1ST QUALITY PAINTS OF ASIAN/ BERGER/ NEROLAC/ SHALIMAR/ DULUX
19.	Water Proof Cement Paint/ Exterior Paint	1ST QUALITY PAINTS OF ASIAN/ BERGER/ NEROLAC/ SHALIMAR/ DULUX
20.	Sanitary ware (Vitreous China) (European Seats, Urinals, Wash Basins, etc.)	HINDWARE/ PARRYWARE/ CERA
21.	G.I. Pipes	TATA/ JINDAL(HISSAR)/ BHUSHAN/ APL APPOLO/ TT SWASTIK
22.	G.I. Fittings	UNIK/ ZOLOTO/ AM
23.	Stainless Steel Sink	NEELKANTH/ JAINA/ KINGSTON (COBRA)/ PRAYAG
24.	Commercial Board/ Ply	MERINO/ DURO/ GREEN/ CENTURY/ KIT (SWASTIK)
25.	CI Pipes/ Fittings & Manhole covers	RIF/ NECO/ BENGAL IRON WORKS/ BC/ SKF
26.	CI Pipes "Class LA"	NICO/ KESORAM/ ELECTRO STEEL/ KAPILANSH
27.	Floor Spring	DOORKING/ EVERITE/ SANDHU
28.	Door Closer	EVERITE/ SANDHU/ HARDWIN
29.	Mirror	ATUL/ MODIGUARD/ SAINT GOBAIN/ AASHI
30.	Vertical Blinds	VISTA/ MAC/ MARVEL DÉCOR/ SAINT GOBAIN
31.	False Ceiling	ARMSTROBG/ SAINT GOBAIN/ META WORTH
32.	Water Proofing Compound	CICO/ FOSROC/ PIDILITE/ ECMAS/ ASIAN
33.	Polymer Compound Particle Board	CICO/ PIDILITE/ FOSROC/ ECMAS/ ASIAN
34.	Rust Remover/ Anticorrosive	NOVA PAN/ BHUTAN BOARD/ ECO BOARD FOSROC/ CICO/ PIDILITE/ ECMAS/ ASIAN
35. 36.	Crystalline Cementious Waterproofing	XYPEX / KRYTONE/ PENETRON
37.	compound Tile Adhesive	PIDILITE/ FERROUSCRETE/ BALLNDURA/ CICO
38.	Wall Putty	BIRLA / JK/ SARA
39.	Epoxy Grout	BALLENDURA/ KERAKOLL/ FERROUSCRETE
40.	PVC Water storage tank (ISI marked)	SINTEC/ UNI PLAST/ POLYWELL
41.	PVC insulated water storage tank Heavy duty 4/5 layer	SINTEX/ UNI PLAST/ POLYWELL/ EURO
42.	Brass Ball Valve/ Gate Valve/ Float Valve	ZOLOTO/ AM/ LEADER/ SANT
43.	Aluminum Door Fittings	CLASSIC/ EVEREST/ ARGENT
44.	Brass Bib/ Stop Cock	AGI/ ELITE/ SHAKTI/ SANT/ LEADER/ PRIMA
45.	Thermoplastic Paint	CBM/ CMS/ S.N. INDUSTRIES
46.	Plaster of Paris Putty	ADHARSHREE/ SHREE RAM/ J.K./ BIRLA
47.	Rcc Pipe	LAKSHMI/ SOOD & SOOD/ JAIN & CO. / DIWAN SPUN PIPES
48.	Pvc Pipe	PRAKASH/ PRINCE/ SUPREME
49.	Sandwich Roof Panel (Puff Panel)	JSW, BHUSHAN, D-META
50.	WPC Board And MPC Board	FLORESTA, ECOSTE, RAJ SHREE

51.	WPC Door Frame	FLORESTA, ECOSTE, RAJ SHREE
52.	Self-Closing Hinges	HETTICH, KITCH, PLUM
53.	Poly Carbonate Sheet	GE LEXAN / POLYGAL/ TUFLITE
54.	Acp Panel	ALSTRONG/ ALUCOBOND/ EUROBOND/ ALUDECOR
55.	Acoustic Wooden/ Fabric Paneling	ARMSTRONG/ ANUTONE/CREDENCE/ TOPAKUSTIC
56.	Polyvinyl Flooring	ARMSTRONG / POLY FLOR/ TARKETT
	Glow Stud, Solar Power Stud	ROAD STAR / 3M / DARK EYE /EVERY DENNISON
57.	,	
58.	Wooden Flooring	VISTA/ ACTION TESA/ ARMSTRONG/ PERGO
59.	Sun Control Film	3M/ GARWARE/ SAINT GOBAIN
60.	Insulation	UP TWIGA LTD OR EQUIVALENT
61.	Fire Door	NAVAIR/ SHAKTI/ GODREJ/ RADIANT
62.	Flush Door Shutters Of Various Thickness	MERINO/ DURO/ GREEN/ CENTURY/ KIT (SWASTIK)
63.	Furniture	CODDELINEEDIO/IIAWODEII/GEERI CAGE/WIDDO/
64.	Work Station	GODREJ INTERIO/ HAWORTH/ STEELCASE/ WIPRO/ FEATHERLITE / HERMAN MILLER
65.	Executive Table/ Other Table	GODREJ INTERIO/ HAWORTH/ STEELCASE/ WIPRO/ FEATHERLITE/ HERMAN MILLER
66.	Chair/ Audi Chair	GODREJ INTERIO/ HAWORTH/ STEELCASE/ WIPRO/ FEATHERLITE/ HERMAN MILLER
67.	Lab Furniture's	KEWANEE/ WALDNER/ GODREJ/ WIPRO/ FEATHERLITE
68.	Hostel Beds And Cots	ZUARI/ EVOK/ GODREJ/ WIPRO/ FEATHERLITE
69.	Hospital Beds	HUNTLEY/ STRIKER/ GODREJ/ WIPRO/ FEATHERLITE
70.	Electrical	
71.	MCB(10KA) & MCB DB	Legrand /Havells/ / L&T
72.	MCCB	Legrand /Havells/ / L&T
73.	MCCB BOX	Legrand /Havells/ / L&T
74.	Modular type switch/ socket, TV socket,	Havells Crabtree / L&T/ Wipro North West/ Legrand/ Schneider
75.	Steel conduit pipe and Accessories (ISI)	BEC/ AKG/ NIC
76.	PVC conduit pipe and Accessories(ISI)	BEC/ AKG/ NIC
77.	Junction Boxes/ MS Boxes	Havells Crabtree / Anchor / North West / Legrand
78.	Bushes	PVC/ Nylon
79.	FRLS PVC insulated copper conductor cable	Polycab / Finolex / Havells
80.	Light Fixture	Philips/ Havells/ Wipro
81.	Ceiling Fans (BLDC) & Wall Fan	Havells/ Crompton / Usha / Orient
82.	Exhaust Fan (Double Ball Bearing)	Crompton Greaves / GE / Almonard / Havells/ Orient
83.	Industrial type socket	Schneider / L&T/ ABB / Legrand
84.	DLP U-PVC channel & accessories	Schneider / Legrand
85.	XLPE Aluminium armoured cable up to 100 volt grade	NICCO / Finolex / Havells (ISI Marked)
86.	Modular Plate & Cover Plate	Havells Crabtree / L&T/ Wipro North West / Legrand / Schneider
87.	XLPE Alumium/ Copper conductor Armoured cable	NICCO / Finolex / Havells (ISI Marked)
88.	Multifunction Meter	L&T/ AE/ Universal/ ABB/ Siemens
89.	Ammeter	L&T/ AE/ Universal/ ABB/ Siemens
90.	Voltmeter	L&T/ AE/ Universal/ ABB/ Siemens
91.	Frequency Meter	L&T/ AE/ Universal/ ABB/ Siemens
92.	CT's	L&T/AE/ KAPPA / Matrix
93.	Selector Switches	L&T/AE/ KAPPA
94.	Contractors	L&T/ Crompton/ Havells/ Legrand
95.	Push button & Pilor lamps	L&T/ Vishnoo/ BCH
96.	LED indicating Lights	L&T/ Siemens/ Kaycee/ Crompton/ Vaishno / Schneider
97.	GI Pipe	Jindal Steel/ Jindal Hisar / Prakash / Tata
98.	DW HDPE Pipe	Reliance/ Duraline/ Hasti
99.	Panel Manufacturers (Panel Shall be CPRI approved)	Eva engineering /Milestone /Tricolite / Edlac
100.		D-Link / Polycab / Havells / Legrand
	AC	As per BOQ
	Fire System	As per BOQ
	Cable Tray	Legrand / Milestone / Neptune / OBO / MEM
104.	Telephone Wire	Delton / Finolex / Havells

BID SUBMISSION

ONLINE BID SUBMISSION

The Online bids (complete in all respect) must be uploaded online in two Envelops as explained below: -

Sl. No.	Documents	Content	
1.		Demand Draft/Pay order or Banker`s Cheque /Deposit at Call Receipt/FDR of any Scheduled Bank against EMD.	.PDF
2.		Enlistment order of contractor.	.PDF
3.		Attested certificate of work experience.	.PDF
4.		Certificate of Registration of GST and acknowledgment of up to date field return of GST.	.PDF
5.		Affidavit as per Notice Inviting Tender Condition 1.2.2 page 18 of NIT. (Affidavit shall be purchased/ notarized between date of publishing and last date of submission of bids beside this NIT/Tender ID and name of work must be mentioned on the affidavit.).	.PDF
6.		Acceptance to execute INTEGRITY PACT.	
7.	Technical Bid	Undertaking as per on firm's letter head. "the physical EMD shall be deposited by me / us with the Authority inviting the tender, in case I / we become the lowest tenderer, within a week of the opening of financial bid, otherwise, department may reject the tender and also take action to debar me / us from tendering in any form in IIT Delhi"	
8.		ESI and EPF Registration.	.PDF
9.		FORM "F" (Duly filled with all required details	.PDF
10.		Proof of tender fees	.PDF
11		In case of Partnership firm if all the papers of tender not signed by all the partners than a power of attorney authorizing the person who has signed the tender paper must be uploaded with the tender documents.	.PDF
12		Annexure-I (duly filled & signed by the bidders)	.PDF
13		Annexure-II (duly filled & signed by the bidders)	.PDF
14		Annexure-III (duly filled & signed by the bidders)	.PDF
15		Any other documents specified in NIT	.PDF
		Envelope – 2	
Sl. No.	TYPES	Content	

All above documents shall be as per Tender Notice.

PART 'C' SCHEDULE OF QUANTITY Civil Work

Name of work : Construction of Temporary Composite structures Lab for Applied Mechanics

Department between Block III & IV in academic area at IIT Delhi.,

Sub Head : Civil work, Electrical work, Fire Alarm system & Networking.

S. No	Description	Qty	Unit	Rate	Amount
1	Earth work in excavation by mechanical means (Hydraulic excavator) / manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift upto 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.				
1.1	All kinds of soil.	157	cum		
2	Filling available excavated earth (excluding rock) in trenches, plinth, sides of foundations etc. in layers not exceeding 20cm in depth, consolidating each deposited layer by ramming and watering, lead up to 50 m and lift upto 1.5 m.	91	cum		
3	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	17	cum		
4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level:				
4.1	1:3:6 (1 Cement : 3 coarse sand (zone-III) derived from natural sources : 6 graded stone aggregate 20 mm nominal size derived from natural sources)	52	cum		
5	Making plinth protection 50mm thick of cement concrete 1:3:6 (1 cement: 3 coarse sand (zone-III) derived from natural sources: 6 graded stone aggregate 20 mm nominal size derived from natural sources) over 75mm thick bed of dry brick ballast 40 mm nominal size, well rammed and consolidated and grouted with fine sand, including necessary excavation, levelling & dressing & finishing the top smooth.	16	sqm		
6	Reinforced cement concrete work in walls (any thickness), including attached pilasters, buttresses, plinth and string courses, fillets, columns, pillars, piers, abutments, posts and struts etc. above plinth level up to floor five level, excluding cost of centering, shuttering, finishing and reinforcement:				
6.1	1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natu- ral sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources)	10.5	cum		

7	Reinforced cement concrete work in beams, suspended floors, roofs having slope up to 15° landings, balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases above plinth level up to floor five level, excluding the cost of centering, shuttering, finishing and reinforcement with 1:1.5:3 (1 cement : 1.5 coarse sand(zone-III) derived from natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).	7	cum	
8	Centering and shuttering including strutting, propping etc. and removal of form for			
8.1	Foundations, footings, bases of columns, etc. for mass concrete	69	sqm	
8.2	Suspended floors, roofs, landings, balconies and access platform	92	sqm	
8.3	Lintels, beams, plinth beams, girders, bressumers and cantilevers	241	sqm	
8.4	Columns, Pillars, Piers, Abutments, Posts and Struts	140	sqm	
9	Extra for additional height in centering, shuttering where ever required with adequate bracing, propping etc., including cost of de-shuttering and decentering at all levels, over a height of 3.5 m, for every additional height of 1 metre or part thereof (Plan area to be measured).			
9.1	Suspended floors, roofs, landing, beams and balconies (Plan area to be measured)	92	sqm	
10	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.			
10.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	7213	kg	
11	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.			
11.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	9288	kg	

12	Providing and laying in position ready mixed or site batched design mix cement concrete for reinforced cement concrete work; using coarse aggregate and fine aggregate derived from natural sources, Portland Pozzolana / Ordinary Portland /Portland Slag cement, admixtures in recommended proportions as per IS: 9103 to accelerate / retard setting of concrete, to improve durability and workability without impairing strength; including pumping of concrete to site of laying, curing, carriage for all leads; but excluding the cost of centering, shuttering, finishing and reinforcement as per direction of the engineer-incharge; for the following grades of concrete. Note: Extra cement up to 10% of the minimum specified cement content in design mix shall be payable separately. In case the cement content in design mix is more than 1.10 times of the specified minimum cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.			
12.1	All works upto plinth level			
12.1.1	Concrete of M25 grade with minimum cement content of 330 kg/cum	19	cum	
12.1.2	Concrete of M30 grade with minimum cement content of 350 kg/cum	52	cum	
12.2	All works above plinth level upto floor V level			
12.2.1	Concrete of M25 grade with minimum cement content of 330 kg/cum	24	cum	
13	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:			
13.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	35	cum	
14	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level in all shapes and sizes in:			
14.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	121	cum	
15	Providing and fixing aluminium die cast body tubular type universal hydraulic door closer (having brand logo with ISI, IS: 3564, embossed on the body, door weight upto 35 kg and door width upto 700 mm), with necessary accessories and screws etc. complete.	6	each	
16	Providing and fixing aluminium sliding door bolts, ISI marked anodised (anodic coating not less than grade AC 10 as per IS: 1868), transparent or dyed to required colour or shade, with nuts and screws etc. complete:			
16.1	250x16 mm	3	each	

 $C - NIL \qquad I - - - NIL \qquad \qquad EE \, (CD - III) \qquad \qquad EE \, (E) \qquad \qquad AE \, (E) \qquad \qquad JE \, (C)$

17	Providing and fixing aluminium tower bolts, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:			
17.1	250x10 mm	12	each	
17.2	200x10 mm	76	each	
17.3	150x10 mm	76	each	
18	Providing and fixing aluminium handles, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour or shade, with necessary screws etc. complete:			
18.1	125 mm	76	each	
19	Providing and fixing aluminium hanging floor door stopper, ISI marked, anodised (anodic coating not less than grade AC 10 as per IS: 1868) transparent or dyed to required colour and shade, with necessary screws etc. complete.			
19.1	Twin rubber stopper	6	each	
20	Structural steel work riveted, bolted or welded in built up sections, trusses and framed work, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.	5067	kg	
21	Supplying and fixing rolling shutters of approved make, made of required size M.S. laths, interlocked together through their entire length and jointed together at the end by end locks, mounted on specially designed pipe shaft with brackets, side guides and arrangements for inside and outside locking with push and pull operation complete, including the cost of providing and fixing necessary 27.5 cm long wire springs manufactured from high tensile steel wire of adequate strength conforming to IS: 4454 - part 1 and M.S. top cover of required thickness for rolling shutters.			
21.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	56	sqm	
22	Providing and fixing ball bearing for rolling shutters.	4	each	
23	Extra for providing mechanical device chain and crank operation for operating rolling shutters.			
23.1	Exceeding 16.80 sqm in area	56	sqm	
24	Providing and fixing T-iron frames for doors, windows and ventilators of mild steel Tee-sections, joints mitred and welded, including fixing of necessary butt hinges and screws and applying a priming coat of approved steel primer.			
24.1	Fixing with carbon steel galvanised dash fastener of required dia and size (to be paid for separately)	53	kg	

25	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.			
25.1	Hot finished welded type tubes	6888	kg	
26	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.			
26.1	In stringers, treads, landings etc. of stair cases, including use of chequered plate wherever required, all complete	400	kg	
26.2	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	100	kg	
27	62 mm thick cement concrete flooring with concrete hardener topping, under layer 50 mm thick cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate 20mm nominal size) and top layer 12mm thick cement hardener consisting of mix 1:2 (1 cement hardener mix: 2 graded stone aggregate, 6mm nominal size) by volume, hardening compound mixed @ 2 litre per 50 kg of cement or as per manufacture's specifications. This includes cost of cement slurry, but excluding the cost of nosing of steps etc. complete.	195	sqm	
28	Providing and laying Vitrified tiles in floor in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved brand & manufacturer, in all colours and shade, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) jointing with grey cement slurry @3.3 kg/sqm including grouting the joints with white cement and matching pigments etc. The tiles must be cut with the zero chipping diamond cutter only. Laying of tiles will be done with the notch trowel, plier, wedge, clips of required thickness, levelling system and rubber mallet for placing the tiles gently and easily.			
28.1	Glazed Vitrified tiles Matt/Antiskid finish of size			
28.1.1	Size of Tile 600 x 600 mm	94	sqm	
29	Providing and fixing on wall face unplasticised Rigid PVC rain water pipes conforming to IS: 13592 Type A, including jointing with seal ring conforming to IS: 5382, leaving 10 mm gap for thermal expansion, (i) Single socketed pipes.			
29.1	110 mm diameter	48	metre	

30	Providing and fixing precoated galvanised steel sheet roofing accessories 0.50 mm (+0.05 %) total coated thickness, Zinc coating 120 grams per sqm as per IS: 277, in 240 mpa steel grade, 5-7 microns epoxy primer on both side of the sheet and polyester top coat 15-18 microns using self-drilling/self-tapping screws complete:			
30.1	Ridges plain (500 - 600mm)	18	metre	
30.2	Flashings/ Aprons.(Upto 600 mm)	36	metre	
30.3	Gutter (600 mm over all girth)	36	metre	
31	Providing and fixing Gl Clip in Metal Ceiling System of 600x600 mm module which includes providing and fixing 'C' wall angle of size 20x30x20 mm made of 0.5 mm thick pre painted steel along the perimeter of the room with help of nylon sleeves and wooden screws at 300 mm center to centre, suspending the main C carrier of size 10x38x10 mm made of G.I steel 0.7 mm thick from the soffit with help of soffit cleat 37x27x25x1.6 mm, rawl plugs of size 38x12 mm and C carrier suspension clip and main carrier bracket at 1000 mm c/c. Inverted triangle shaped Spring Tee having height of 24 mm and width of 34 mm made of Gl steel 0.45 mm thick is then fixed to the main C carrier and in direction perpendicular to it at 600 mm centers with help of suspension brackets. Wherever the main C carrier and spring T connectors have to be used. All sections to be galvanized @ 120 gms/sqm (both side inclusive), fixing with clip in tiles into spring T with:			
31.1	GI Metal Ceiling Clip in plain Bevelled edge global white color tiles of size 600x600 and 0.5 mm thick with 25 mm height, made of G I sheet having galvanizing of 100 gms/ sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation.	94	sqm	
32	15 mm cement plaster on the rough side of single or half brick wall of mix :			
32.1	1:6 (1 cement: 6 fine sand)	277	sqm	
33	Pointing on brick work or brick flooring with cement mortar 1:3 (1 cement : 3 fine sand):			
33.1	Flush / Ruled/ Struck or weathered pointing	277	sqm	
34	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :			
34.1	Water thinnable cement primer	277	sqm	
35	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:			

35.1	New work (Two or more coats applied @ 1.43 ltr/10 sqm over and including priming coat of exterior primer applied @ 2.20 kg/10 sqm)	277	sqm	
36	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :			
36.1	Two or more coats on new work	277	sqm	
37	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade:			
37.1	Two or more coats on new work	157	sqm	
38	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.	277	sqm	
39	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.			
39.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	15	cum	
40	Disposal of building rubbish / malba / similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge, beyond 50 m initial lead, for all leads including all lifts involved.	15	cum	
41	Providing and laying at or near ground level factory made kerb stone of M-25 grade cement concrete in position to the required line, level and curvature, jointed with cement mortar 1:3 (1 cement: 3 coarse sand), including making joints with or without grooves (thickness of joints except at sharp curve shall not to more than 5mm), including making drainage opening wherever required complete etc. as per direction of Engineer-in-charge (length of finished kerb edging shall be measured for payment). (Precast C.C. kerb stone shall be approved by Engineer-in-charge).	5.04	cum	

42	Providing and laying factory made chamfered edge Cement Concrete paver blocks in footpath, parks, lawns, drive ways or light traffic parking etc, of required strength, thickness & size/ shape, made by table vibratory method using PU mould, laid in required colour &pattern over 50mm thick compacted bed of sand, compacting and proper embedding/laying of inter locking paver blocks into the sand bedding layer through vibratory compaction by using plate vibrator, filling the joints with sand and cutting of paver blocks as per required size and pattern, finishing and sweeping extra sand. complete all as per direction of Engineer-in-Charge.			
42.1	80 mm thick C.C. paver block of M-30 grade with approved color design and pattern.	117	sqm	
43	Providing and fixing aluminium work for doors, windows, ventilators and partitions with extruded built up standard tubular sections/ appropriate Z sections and other sections of approved make conforming to IS: 733 and IS: 1285, fixing with dash fasteners of required dia and size, including necessary filling up the gaps at junctions, i.e. at top, bottom and sides with required EPDM rubber/ neoprene gasket etc. Aluminium sections shall be smooth, rust free, straight, mitred and jointed mechanically wherever required including cleat angle, Aluminium snap beading for glazing / paneling, C.P. brass / stainless steel screws, all complete as per architectural drawings and the directions of Engineer-in-charge. (Glazing, paneling and dash fasteners to be paid for separately):			
43.1	For fixed portion			
43.1.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	898	kg	
43.2	For shutters of doors, windows & ventilators including providing and fixing hinges/ pivots and making provision for fixing of fittings wherever required including the cost of EPDM rubber / neoprene gasket required (Fittings shall be paid for separately)			
43.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	470	kg	
44	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade l Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-incharge.			

44.1	Pre-laminated particle board with decorative lamination on both sides	39	sqm	
45	Providing and fixing glazing in aluminium door, window, ventilator shutters and partitions etc. with EPDM rubber / neoprene gasket etc. complete as per the architectural drawings and the directions of engineer-in-charge. (Cost of aluminium snap beading shall be paid in basic item):			
45.1	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	69	sqm	
46	Providing and fixing Brass 100mm mortice latch and lock with 6 levers without pair of handles (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete.	2	each	
47	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge			
47.1	Powder coated minimum thickness 50 micron aluminium	8	each	
48	Providing and fixing 50mm thick sandwich roof panel (factory made) as per specification as follow. a) Outer sheet; 0.50mm (TCT) precoated galvanized trapezoidal steel sheet having minimum 30mm crest depth, polyester top coat & alkyd backer. Zinc coating shall be 120 gsm as per IS-277. Top coat polyester 15-18 microns over 5-7 micron epoxy primer. b) Insulation: High density puff insulation. c) Inner Sheet: Colour coated galvanized, slightly ribbed. Thickness 0.50mm (TCT) minimum 15-18 micron top coat polyester coating, Zinc coating 120g/sqm as per IS-277 Grade of steel: Minimum 240Mpa (both sheets). Sheet should have protective guard film of 25 micron minimum to avoid scretches during transportations and should be supplied in single length upto 12 meter or as desired by Engineer-In-Charge. The sheet shall be fixed using self drilling / self tapping screws with EPDM seal, completed upto any pitch in horizontal / vertical or curved surfaces excluding the cost purlins, rafters and trusses and including cutting to size and shape wherever required. Work to be executed as per the instructions of Engineer-In-Charge.	288	sqm	
49	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required. (Note: At Double height Area)			
49.1	Group C	8.0	Point	

50	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.			
50.1	Group C	25.0	Point	
51	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable in surface/recessed steel conduit, and earthing the point with 1.5 sq. mm FRLS PVC insulated copper conductor single core cable etc. as required.			
51.1	Group C	40.0	Point	
52	Wiring for light/ power plug with 2X4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No 4 sq.mm FRLS PVC insulated copper conductor single core cable for loop earthing as reqd. Wire Make Havells/Finolex/Polycab.	100.0	Meter	
53	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required. Wire Make Havells/Finolex/Polycab.	80.0	Meter	
54	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. Wire Make Havells/Finolex/Polycab.			
54.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	60.0	Meter	
54.2	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	50.0	Meter	
54.3	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	50.0	Meter	
54.4	4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire	50.0	Meter	
54.5	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	50.0	Metre	
55	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. Make Havells/Finolex/Polycab.			
55.1	3 x 2.5 sq. mm	50.0	Meter	
55.2	6 x 2.5 sq. mm	50.0	Meter	
55.3	3 x 4 sq. mm	80.0	Meter	
55.4	6 x 4 sq. mm	80.0	Meter	
56	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmoured telephone cable in the existing surface/recessed steel/ PVC conduit as required.			

56.1	2 Pair	20.0	Meter	
	Supplying and fixing of following sizes of steel			
	conduit along with accessories in surface/recess			
57	including painting in case of surface conduit, or			
	cutting the wall and making good the same in case of			
57.1	recessed conduit as required. Make BEC/AKG/NIC 20 mm	40.0	Meter	
57.1	25 mm	40.0	Meter	
31.2	Supplying and fixing following modular switch/	40.0	Meter	
	socket on the existing modular plate & switch box			
58	including connections but excluding modular plate			
	etc. as required. Make: Legrand/Crabtree / Wipro			
	north west/Schneider.			
58.1	5/6 A switch	10.0	Each	
58.2	15/16 A switch	24.0	Each	
58.3	3 pin 5/6 A socket outlet	10.0	Each	
58.4	6 pin 15/16 A socket outlet	24.0	Each	
58.5	Telephone socket outlet	2.0	Each	
	Supplying and fixing two module stepped type			
	electronic fan regulator on the existing modular plate			
59	switch box including connections but excluding	10.0	Each	
	modular plate etc. as required. Make:			
	Legrand/Crabtree / Wipro north west/Schneider. Supplying and fixing following size/ modules, GI box			
	alongwith modular base & cover plate for modular			
60	switches in recess etc. as required. Make:			
	Legrand/Crabtree / Wipro north west/Schneider.			
60.1	3 Module (100mmX75mm)	12.0	Each	
60.2	12 Module (200mmX150mm)	6.0	Each	
	Supplying and fixing suitable size GI box with			
	modular plate and cover in front on surface or in			
61	recess, including providing and fixing 6 pin 5/6 &	5.0	Each	
	15/16 A modular socket outlet and 15/16 A modular		2	
	switch, connections etc. as required. Make: Legrand/Crabtree / Wipro north west/Schneider.			
	Supplying and drawing of UTP 4 pair CAT 6 LAN			
	Cable in the existing surface/ recessed steel/ PVC			
62	conduit as required. (Make: Havells/ Beldon/ D-Link/			
	Polycab)			
62.1	1 run of Cable	50.0	Meter	
62.2	2 run of Cable	40.0	Meter	
	Providing and fixing M.S. Fan clamp type I or II of			
	16 mm dia M.S. bar, bent to shape with hooked ends			
63	in R.C.C. slabs or beams during laying, including	10.00	Each	
	painting the exposed portion of loop, all as per standard design complete as required. Rate to be			
	taken			
	Providing and fixing following rating and breaking			
C A	capacity and pole MCCB with thermomagnetic			
64	release and terminal spreaders in existing cubicle			
	panel board including drilling holes in cubicle panel,			

	making connections, etc. as required. Make; Havells /L&T/legrand/Schneider			
64.1	125 A, 16 kA,TPMCCB	1.0	Each	
64.2	150 A, 16 kA,TPMCCB	1.0	Each	
65	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator) Make; Havells /L&T/legrand/Schneider			
65.1	12 way, Double door	1.0	Each	
66	Supplying and fixing of following ways surface/recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A, tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note: Vertical type MCB TPDB is normally used where 3 phase outlets are required.) (MCCB as a incomer) Make; Havells /L&T/legrand/Schneider			
66.1	8 way (4+24), Double door	1.0	Each	
66.2	12 way (4 + 36), Double door	1.0	Each	
67	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required. Make; Havells /L&T/legrand/Schneider			
67.1	Single pole	40.0	Each	
67.2	Triple pole	5.0	Each	
68	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 A, "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required. Make; Havells /L&T/legrand/Schneider	5.0	Each	
69	Supplying and fixing 30 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top along with 30 A "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required. Make; Havells /L&T/legrand/Schneider	4.0	Each	
70	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient			

	sections, joined with connectors, suspended from the			
	ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.			
70.1	225 mm width X 50 mm depth X 1.6 mm thickness	40.0	Meter	
71	Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts &	1010	112001	
	nuts, etc. as required.			
71.1	225 mm width X 50 mm depth X 1.6 mm thickness	2.0	Each	
72	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	2.0	Each	
73	Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.	10.0	Metre	
74	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	10.0	Metre	
75	Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	360.0	Metre	
76	Supplying, Installation, Testing and Commissioning of 1200 mm sweep, 32 Watt BEE 5 star rated, ceiling fan with brush less Direct current (BLDC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, power factor not less than 0.9, service Value (CMM/W) minimum 6.85, Air delivery minimum 215 CMM, 350 RPM (tolerance as per IS: 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts; washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required. (Make: Havells/ Crompton/ USHA/ Bajaj/ Orient/)	10.0	Each	
77	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required.	540.0	Metre	
78	Supplying and making end termination with brass compression gland and aluminium and copper lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.			
78.1	3½ X 50 sq. mm (35mm)	12	Each	
78.2	3½ X 150 sq. mm (50mm)	4	Each	

 $C - NIL \qquad I - - - NIL \qquad \qquad EE \, (CD - III) \qquad \qquad EE \, (E) \qquad \qquad AE \, (E) \qquad \qquad JE \, (C)$

78.3	4 X 16 sq. mm (28mm) (copper)	18	Each		
	Providing, laying and fixing following dia G.I. pipe				
79	(medium class) in ground complete with G.I. fittings				
	including trenching (75 cm deep)and re-filling etc. as				
79.1	required 100 mm dia	10.0	Metre		
17.1	Supplying, installation, testing & commissioning of	10.0	Wictic		
	smoke detector with built-in LED and mounting base				
	complete with all connections etc. as required. (Make:				
80	Mather and Platt/ Meltron/ Steelage industries/	12.0	Each		
	Safeway Security System, Mumbai/ Carmel and				
	Ravel Electronic Co. Chennai) Note: At Double				
	Height.				
	Supplying, installation, testing & commissioning of smoke detector with built-in LED and mounting base				
	complete with all connections etc. as required. (Make:				
81	Mather and Platt/ Meltron/ Steelage industries/	28.0	Each		
	Safeway Security System, Mumbai/ Carmel and				
	Ravel Electronic Co. Chennai)				
	Supplying, installation, testing & commissioning of				
	manual call box of ABS type in surface/recess with				
82	stainless steel chain & hammer assembly complete with glass and push button etc. as required. (Make:	2.0	Each		
02	Mather and Platt/ Meltron/ Steelage industries/	2.0	Lacii		
	Safeway Security System, Mumbai/ Carmel and				
	Ravel Electronic Co. Chennai)				
	Supplying, installation, testing & commissioning				
	response indicator on surface/recess MS box having				
83	two LEDs metallic cover complete with all connections etc. as required. (Make: Mather and Platt/	2.0	Each		
0.5	Meltron/ Steelage industries/ Safeway Security	2.0	Lacii		
	System, Mumbai/ Carmel and Ravel Electronic Co.				
	Chennai)				
	Supplying, installation, testing & commissioning fire				
	alarm sounder with facility to make announcement, mounted in A.B.S. box with hinged cover plate &				
	suitable for operation with amplifier i/c line matching				
84	transformer etc. complete as required. (Make: Mather	2.0	Each		
	and Platt/ Meltron/ Steelage industries/ Safeway				
	Security System, Mumbai/ Carmel and Ravel				
	Electronic Co. Chennai)				
	Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed				
85	copper conductor having XLPE insulation, steel wire	180.0	Metre		
	armouring & FRLS outer sheath complete as	100.0	Wietre		
	required. (Make: Havells/ Finolex/ Polycab)				
	Supplying, installation, testing & commissioning of				
	main fire alarm control panel made out of 16 SWG				
86	MS sheet to accommodate the following items duly	1.0	Each		
00	powder coated in approved colour with louvers for ventilation, locking arrangement, audio and visual	1.0	Lacii		
	connections, interconnections etc. complete as				
	indication for fire alarm monitoring system including				
	,		I	I	

	required. 6 zone panel for fire alarm system 100 watt amplifier racks suitable for operation on 230V AC/24V DC supply conforming to IEC-268-3 complete with all accessories as required. Battery charger trickle cum boost to take complete load of fire alarm system complete with all accessories including providing & fixing of 2 nos. 12 volt, 42 AH each sealed maintenance free batteries -1 set. (Make: System-Tek/Morley/Agni/Ravel/Safeway Security System)			
87	15.86 mm (5/8 inch) dia (OD) (Soft drawn) with tube thickness 1.2 mm with class - 1 nitrile rubber tube (foam) insulation of not less than 9 mm thick.	30.0	Meter	
88	9.5 mm (3/8 inch) dia (OD) (Hard drawn) with tube thickness 1.2 mm with class - 1 nitrile rubber tube (foam) insulation of not less than 9 mm thick.	50.0	Meter	
89	Supplying and fixing following rating, double pole, 240 volts, MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required. Make; Havells /L&T/legrand/Schneider			
89.1	63 Amp	1.0	Each	
90	Supplying and fixing following rating, Triple pole, 415 volts, MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required. Make; Havells /L&T/legrand/Schneider			
90.1	63 amps	5.0	Each	
91	Supplying and fixing 63A, 415 V, 5 pin Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top along with 63A "C" curve, TPNMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required. Make; Havells /L&T/legrand/Schneider	3.0	Each	
92	Providing and fixing FR PVC DLP adaptable trunking without cover of (150 mm x 50 mm) size with provision of internal partition separation for Power & LAN on surface on existing wall etc. as required. (Make: Legrand)	30.0	Meter	
93	Providing and Fixing following accessories on the existing FR DLP PVC trunking (150mm x 50mm) etc. as required. (Make: Legrand)			
94	Providing and Fixing of FR PVC trunking cover width 40 mm + full cover width 85 mm for Power + LAN component	30.0	Meter	
95	Providing and fixing of Clip on partition - Plastic (Make: Legrand)	30.0	Meter	
96	Providing and fixing of Separation on partition - Plastic (Make: Legrand)	30.0	Meter	
97	Providing and fixing of End caps for 150 mm x 50 mm trunking (Make: Legrand)	4.0	Each	
98	Providing and fixing of Internal angle for 150 mm x 50 mm trunking (Make: Legrand)	4.0	Each	

99	Providing and fixing of External angle for 150 mm x 50 mm trunking (Make: Legrand)	4.0	Each	
100	Providing and fixing of 90° Flat angle for 150 mm x 50 mm trunking (Make: Legrand)	4.0	Each	
101	Supplying and Fixing DLP U-PVC trunking of 105mm x 50mm on surface etc. as required.	15.0	Meter	
102	Supplying and Fixing Full Flexible cover of width 85mm on existing DLP U-PVC trunking etc. as required.	15.0	Meter	
103	Supplying and Fixing of internal angle for 105mm x 50mm existing DLP U-PVC trunking etc. as required.	4.0	Each	
104	Supplying and Fixing of external angle for 105mm x 50mm existing DLP U-PVC trunking etc. as required.	4.0	Each	
105	Providing and fixing of 90° Flat angle for 105 mm x 50 mm trunking (Make: Legrand)	2.0	Each	
106	Supplying and Fixing of End cap for 105mm x 50mm on existing DLP U-PVC turnking etc as required.	4.0	Each	
107	Supplying and Fixing 1 module arteor frame for 40 mm cover (Make: Legrand)	10.0	Each	
108	Supplying and fixing of 3 module arteor frame for 85 mm cover (Make: Legrand)	10.0	Each	
109	Supplying and fixing of 6 module arteor frame for 85 mm cover (Make: Legrand)	12.0	Each	
110	Supplying and fixing following modular switch/socket on the existing 1/3/6 module frame / U-PVC trunking system including connections etc. as required.			
110.1	Information socket - category 6-UTP - 1 module (Make: Legrand)	8.0	Each	
110.2	6 Amp switch	10.0	Each	
110.3	20 Amp switch	24.0	Each	
110.4	6 Amp switch-2/3 pin universal socket outlet	10.0	Each	
110.5	6 pin 20 Amp socket outlet/6 pin 6/16 A universal socket	24.0	Each	
111	S/I/T/C of 80watt LED high bay fixture at 8.0 Mtr height (Double Height) equipped with pressure die cast aluminium housing, power coated with weather proof gasket ensuring IP66, heat resistant with PC/PMMA highbay lences toughened glass suitable for surface /suspended / ceiling mounting arrangement and excellent heat dissipation for long life, inbuilt surge protection 4kV, power factor > 0.95 toughened glass with silicon gasket for IP66 protection. Suitable for operation 230 volt, 50Hz and output lumens not less than 150lm/watt on existing angle / bracket i/c connections etc. as required. Make Havells / Philips / Wipro	8	Each	
112	S/I/T/C of recess mounting LED luminaire with chain & hook equipped with CRCA powder coating housing, anti-glare polycarbonate diffuser with energy efficient electronic driver with following features: - suitable for operation voltage and frequency: 130-300 V AC, 50 Hz; wattage 36 watts,	25.0	Each	

	Output lumens not less than 120lm/watt; CCT not less than 6500K; Dimension in mm (595x595); Normal surge protection 2.5kV; power factor not less than 0.9; Minimum IP protection 20. including dismantling of existing lights (Make: Philips/Wipro/Havells)			
113	S/I/T/C of surface mounting LED luminaire equipped with CRCA powder coating housing, anti-glare polycarbonate diffuser with energy efficient electronic driver with following features:- suitable for operation voltage and frequency: 130-300 V AC, 50 Hz; wattage 36 watts, Output lumens not less than 1201m/watt; CCT not less than 6500K; Dimension in mm (595x595); Normal surge protection 2.5kV; power factor not less than 0.9; Minimum IP protection 20. including dismantling of existing light (Make: Philips/ Wipro/ Havells)	20.0	Each	
114	S/I/T/C of surface mounting round/square LED luminaire equipped with CRCA powder coating housing, anti-glare polycarbonate diffuser with energy efficient electronic driver with following features:- suitable for operation voltage and frequency: 130-300 V AC, 50 Hz; wattage 12 watts, Output lumens not less than 1001m/watt; CCT not less than 5700K; slim profile surface mounted down light square/ round type; Normal surge protection 2.5kV; power factor not less than 0.9; Minimum IP protection 20. (Make: Philips/ Wipro/ Havells)	4.0	Each	
115	S/I/T/C of surface mounting hexagon bulk head backlit LED luminaire equipped with CRCA powder coating housing, anti-glare polycarbonate diffuser with energy efficient electronic driver with following features:- suitable for operation voltage and frequency: 130-300 V AC, 50 Hz; wattage 10 watts, Output lumens not less than 1001m/watt; CCT not less than 6500K; slim profile surface mounted suitable for outdoor, surge protection 2.5kV; power factor not less than 0.9; Minimum IP protection 66. (Make: Philips/ Wipro/ Havells/)	8	Each	
116	S/I/T/C of high speed wall mounting fan 400 mm sweep, copper winding, capacitor start, suitable for operation on 230V, 50 Hz, AC supply with inbuilt speed regulator etc. complete with all standard accessories such as motor, blades clamp etc. as required. (Make: Havells/Crompton/USHA/Orient) Colour of fan shall be finalized by Engineer-incharge)	10.0	Each	
117	S/I/T/C of 24"(600mm) size,900rpm,copper wound, heavy duty metallic Exhaust Fan of double ball bearing capacitor start, suitable for 230 volt,50 Hz, single phase A.C. supply and complete with accessories such as motor, legs, frame, loober and Nut & bolts etc. complete as required Make Crompton / GE / havells	3.0	Each	

 $C - NIL \qquad I - - - NIL \qquad \qquad EE \, (CD - III) \qquad \qquad EE \, (E) \qquad \qquad AE \, (E) \qquad \qquad JE \, (C)$

118	S/I/T/C of 10"(250mm) size, copper wound, ventiling fresh air fan of double ball bearing capacitor start, suitable for 230 volt,50 Hz, single phase A.C. supply and complete with accessories such as motor, legs, frame, loober and Nut & bolts etc complete as required Make Crompton Greaves / GE /Havells Ventil Air-DX White.	2.0	Each	
119	Providing and fixing 160A,36kA,FP MCCB rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders with SS Enclosure box(1 & T make) suitable for 415 volt,3 phase,4 wire,50 Hz A.C supply system including drilling holes in SS enclosure box, making cable connections, etc. as required. Note: SS Enclosure is include in this item) Make L&T/Legrand/Schneider	5.0	Each	
120	Supplying and Laying of one number PVC insulated and PVC sheathed / XLPE Aluminium armoured power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required. Make: Havells/Finolex/NICOO			
120.1	Above 95 sq. mm and upto 185 sq. mm (3.5C x 150 sq.mm)	10.0	Metre	
121	Supplying and Laying of one number additional PVC insulated and PVC sheathed / XLPE Aluminium armoured power cable of 1.1 KV grade of following size direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc as required. Make: Havells/Finolex/NICOO			
121.1	Above 35 sq. mm and upto 95 sq. mm (3.5C x 50 sq.mm)	10.0	Metre	
122	Supplying & Laying and fixing of one number PVC insulated and PVC sheathed / XLPE Aluminium power cable of 1.1 kV grade of following size on wall surface as required. Make: Havells/Finolex/NICOO			
122.1	Above 35 sq. mm and upto 95 sq. mm (3.5C x 50 sq.mm) (clamped with 25x3mm MS flat clamp)	80.0	Metre	
122.2	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp) (3.5C x 150 sq.mm)	80.0	Metre	
123	Supplying, Laying and fixing of one number PVC insulated and PVC sheathed / XLPE Aluminium and copper power cable of 1.1 KV grade of following size on cable tray as required. Make: Havells/Finolex/NICOO			
123.1	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp) (3.5C x 50 sq.mm)	90.0	Metre	
123.2	Upto 35 sq. mm (4C x 16 sq.mm) copper cable (clamped with 1mm thick saddle)	180.0	Metre	
124	Providing and fixing 400A,36kA,FP MCCB rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders with	1.0	Each	

	SS Enclosure box(1 & T make) suitable for 415 volt,3 phase,4 wire,50 Hz A.C supply system including			
	drilling holes in SS enclosure box, making cable			
	connections, etc. as required. Note: SS Enclosure is			
	included in this item) Make L&T/Legrand/Schneider			
	Supplying, Installation, Testing & Commissioning i/c			
	making solid foundation of brick, cement concrete			
	(0.50Mtr above the ground level) of cubical type			
	Feeder Pillar Double Door Outdoor Type suitable for			
	415V, 3 Phase, 4 wire 50 Hz AC supply system,			
	fabricated in compartmentalized (preferably) design from CRCA sheet steel of 2mm thick for frame work			
	and covers, 3mm thick for gland plates i/c cleaning			
	& finishing complete with for powder coating for			
	prickling and degreasing in approved shade, having			
	500 amp capacity extensible type TPN Aluminium			
125	Alloy bus bars of high conductivity, DMC/SMC bus			
	bars supports with short circuit withstand capacity of			
	31 MVA for 1 sec., bottom base channel of MS			
	section not less than 100mm x 50mm x 5mm thick,			
	fabrication shall be done in transportable sections,			
	entire panel shall have a common copper earth bar of			
	size 25mm x 5mm at the rear with 2 Nos. earth stud,			
	solid connections from main bus bar to switch gears with required size of AL. bus bars and control wiring			
	with 2.5 sq.mm PVC insulated copper conductor S/C			
	cable, cable alleys, cable gland plates in two half, i/c			
	providing following switch gears.			
	INCOMER			
• ` `	1 Nos. 400 Amps. FP MCCB of 36 KA with inbuilt			
i)	protection.			
	MAIN BUS BARS			
	TPN aluminium bus bars of minimum of 500 Amps			
	capacity with heat shrinkable coloured sleeves and i/c			
	DMC/SMC bus bars supports at required intervals			
	complete for cross section, size supports & their			
	spacing etc. for withstanding fault level of 31 MVA			
	for 1 sec.			
	METERING			
i)	1 nos. 0-500V Digital type Voltmeter with selector			
	switch.& protection MCB 1 nos. 0-400A Digital type Ammeter with selector			
ii)	switch with CT's 400/5A			
	3 Nos. phase indication lights LED type with			
ii)	protection MCB.			
	OUTGOINGS			
	1 Nos. 250 Amps. FP MCCB of 36 KA with inbuilt			
i)	protection.			
::>	6 Nos. 160 Amps. FP MCCB of 36 KA with inbuilt			
ii)	protection.			
	Total Panel Cubical Type Feeder Pillar AS	1	Set	
	DESCRIBED ABOVE.	1	Bet	

126	Supplying, Installation, Testing and Commissioning of Split Inverter type Air Conditioner unit for cooling comprising factory built evaporator and condenser unit with other kits (remote controller with battery, suction & discharge copper pipe of length not less than 3 m each, copper cable for power connection, etc.) for installation as per following specification: Rated cooling capacity: 1.5 TR (not less than 5250 watts); Star Rating 5 star; Compressor: Rotary type inverter inbuilt for variable speed operation; Refrigerant: Eco-friendly; Material of evaporator & Condenser refrigerant pipe: Copper; Suitable for operation on 230 volt, 50 Hz, AC supply Make (Hitachi / Blue Star/ LG/ Voltas/ Haier/ Daikin/ Mitsubishi/ O General)	9.0	Each	
127	Supply, Installation, testing and commissioning including vaccumiazation and nitrogen testing of following nominal sizes of soft drawn copper refrigerant piping for split AC unit, complete with fittings, with suitable adjustable ring type hanger supports (wherever required), jointing / brazing including accessories, insulated with nitrile rubber tube sleeves sections of specified thickness as given below for Suction and Liquidlines, all accessories as per specifications etc. as required: [Acceptable make of copper pipes: Uniflow / Manibhadra / Ganpati / Mexflow / Mandev / Indigo / Godrej / Visiaro]; [Acceptable make of tubular insulation: Visiaro / Marshland / Avi Global / Armaflex / Aajjo / Dynamic / Uttam]			
	NOTE: (1) The copper piping and piping circuit should be with minimum number of joints, which shall be attained by: (a) Using one end expanded tubes (b) bending the tubes instead of using elbow joints wherever 90 degree bending is required (2) Piping should be routed at site in such a manner, that brazed joints in the refrigeration piping are kept to a minimum (3) The thickness of fittings used shall be same as that of the pipe			
128	Supplying and laying ISI marked 25 mm dia pvc pipe (flexible & braided type) for drain line, including providing insulation wherever necessary, proper saddling, etc. complete as required. (Acceptable make: Astral / Supreme / Finolex / Prince / Savera / Ashirvad / Apollo)	20.0	Meter	
129	Supplying and laying of ISI marked hard CPVC pipe of 25 mm dia for draining of sweated water from AC evaporator unit including all accessories providing tee, joints, elbows, insulation wherever necessary etc. complete as required. (Acceptable make: Astral / Supreme / Finolex / Prince / Savera / Ashirvad / Apollo)	30.0	Meter	
130	Supplying and laying of ISI marked FRLS 4 core x 2.5 sqmm PVC insulated industrial flexible copper	30.0	Meter	

	conductor cable of 1.1 kV grade conforming to IS 694:2010 including making connections etc. as required. (Acceptable make: Havells / Finolex / Polycab / Universal)			
131	Supplying and fixing of prototype adjustable readymade stand made of steel for resting condenser unit either on flat surface(Floor mounted) or on wall [as per site requirement - either floor mounted or wall mounted], duly pre painted with anticorrosive paint, nuts, bolts, fasteners, grouting / properly securing from accidental fall, fasteners, etc. complete as required.	9.0	Each	

Special Conditions:

- No labour huts shall be allowed in IIT Campus and nothing shall be paid extra on this account. 1.
- The contractor must visit the site of work /buildings before quoting the rates. No labour to stay in IIT Campus nothing shall be paid extra on this account.
- Site shall be available as per directions of Engineer in Charge.
- Quoted rates of participating agencies shall be inclusive of GST.

JE (C)