



Notice Inviting Tender

Renovation and Modification of Electric Vehicle Lab in CART in academic area at IIT Delhi.

Sub Head: Civil & Electrical Work.

Civil Work	:	Rs.74,92,884/-
E & M	:	Rs.36,00,882/-
Total	:	Rs.1,10,93,766/-

(WORKS DEPARTMENT)

**INDIAN INSTITUTE OF TECHNOLOGY DELHI
HAUZ KHAS, NEW DELHI**

INDIAN INSTITUTE OF TECHNOLOGY DELHI
HAUZ KHAS, NEW DELHI-110016
IITD/WORKS(SP-4184)/2023

INDEX

Name of work: - Renovation and Modification of Electric Vehicle Lab in CART in academic area at IIT Delhi.

Sub Head : Civil & Electrical Work.

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	49-75

It is certified that this document contains three parts i.e. Part A, Part B & Part C containing page no. **1 to 75**.

EXECUTIVE ENGINEER (E)

EXECUTIVE ENGINEER (CD-III)

NIT approved for Rs. 1,10,93,766/- (Rupees One Crore Ten Lakh Ninety Three Thousand Seven Hundred Sixty Six 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	:	Renovation and Modification of Electric Vehicle Lab in CART in academic area at IIT Delhi. Sub Head: - Civil & Electrical Work
Estimated cost	:	Rs. 1,10,93,766/-
Earnest Money	:	Rs. 2,21,876/-
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	:	5 Months
Late date & time for submission of bids	:	05/04/2023 upto 15.00 Hrs.
Date & Time of opening of Bids	:	06/04/2023 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: Minor New Construction (Research Facilities and Housing)/ 35.01.01 (IOE) 2021/007/0069

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 06/04/2023** 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. No.	NIT No.	Name of Work	Estimated Cost (Rs.)	Earnest Money (Rs.)	Tender Fees (Rs.)	Time for Completion
1	/IITD/EE (CD-III)/2022-23.	Renovation and Modification of Electric Vehicle Lab in CART in academic area at IIT Delhi. Sub Head: - Civil & Electrical Work.	1,10,93,766/-	2,21,876/-	1000/-	5 Months

Last date and time of submission of financial & Technical bid

: 05/04/2023 up to 3:00 pm (on line)

Date and time of opening of Technical bid : 06/04/2023 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.88,75,100/-** or Two similar works each of value not less than **Rs.66,56,300/-** or three similar works each of value not less than **Rs.44,37,600/-** during last 7 years ending on date **28/02/2023**.
 - ii. **Earnest money of Rs.2,21,876/-** 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. Valid Electrical Licence.
13. Annexure-I (duly filled & signed by the bidders)
14. Annexure-II (duly filled & signed by the bidders)
15. Annexure-III (duly filled & signed by the bidders)

Note: - All Documents mentioned S.No. 1 to 12 are mandatory for technically qualifying and document mentioned 13 to 15 are not mandatory.

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

**Budget Head: Minor New Construction (Research Facilities and Housing)/ 35.01.01 (IOE)
2021/007/0069**

Copy to: -

1. Executive Engineer (CD-III) for information.
2. D.A. (Works Accounts)
3. D.R. (A/Cs) – for opening of tenders on **06/04/2023 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 www.iitd.ac.in

INDIAN INSTITUTE OF TECHNOLOGY DELHI
HAUZ KHAS: NEW DELHI – 110016
IITD-6 FOR e-TENDERING AND TERM & 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/appor iitd.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:-
 - a) 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. 2,21,876/-
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/EOI/Auction/Single)	Open	
Tender Category (Services/Goods/works)	Works	
Type/Form of Contract (Work/Supply/Auction/Service/Buy/Empanelment/ Sell)	Works	
Product Category (Civil Works/Electrical Works/Fleet Management/ Computer Systems)	Civil & Electrical Works	
Source of Fund (Institute/Project)	<u>Minor New Construction (Research Facilities and Housing)/</u> <u>35.01.01 (IOE) 2021/007/0069</u>	
Is Multi Currency Allowed	No	
Date of Issue/Publishing	28/03/2023 (15.00 Hrs)	
Document Download/Sale Start Date	28/03/2023 (15.00 Hrs)	
Document Download/Sale End Date	05/04/2023 (15.00 Hrs)	
Date for Pre-Bid Conference	Nil	
Venue of Pre-Bid Conference	---	
Last Date and Time for Uploading of Bids	05/04/2023 (15.00 Hrs)	
Date and Time of Opening of Technical Bids	06/04/2023 (15.00 Hrs)	
Tender Fee	Rs.1000/	(To be paid through RTGS/NEFT. IIT Delhi Bank details are as under: 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 on-line quotation / bid. Kindly refer to the UTR Column of the Declaration Sheet at Annexure-II) <u>or as per NIT/ Tender notice</u>
EMD	Rs.2,21,876/-	
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	

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 ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)). 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](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.	Technical Bid	Compliance Sheet as per Annexure – I	.PDF
2.		Organization Declaration Sheet as per Annexure – II	.PDF
3.		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

**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 “**Renovation and Modification of Electric Vehicle Lab in CART in academic area at IIT Delhi.. (Sub. Head: - Civil & Electrical Work)**”

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.1,10,93,766/-** 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.

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,

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 be 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 be 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 up-to-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.**

INTEGRITY PACT E-TENDERING	IITD
-----------------------------------	-------------

To,

.....,

.....,

.....

Subject: - NIT No. /IITD/EE (CD-III)/2022-23 for the work of “Renovation and Modification of Electric Vehicle Lab in CART in academic area at IIT Delhi., Sub Head: - Civil & Electrical Work”

Dear Sir,

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)

ACCEPTANCE TO EXECUTE INTEGRITY PACT	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 Renovation and Modification of Electric Vehicle Lab in CART in academic area at IIT Delhi., Sub Head: - Civil & Electrical Work.

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 in accordance with terms and conditions of the tender/bid.

Yours faithfully

(Duly authorized signatory of the Bidder)

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..... 20.....

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

.....(Name 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
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
parties.

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.

- 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.

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 intentions.
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.

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 GUARANTEE 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 of bank) having our registered office at.....(hereinafter called "the Bank") are bound unto.....
(Name and division of Executive Engineer) (hereinafter called "the Engineer-in-Charge") in the sum of Rs. (Rs. in words.....) for which payment well and truly to be made to the said Engineer-in-Charge the Bank binds itself, his successors and assigns by these presents.

SEALED with the Common Seal of the said Bank thisday of 20....
THE CONDITIONS of this obligation are:

- (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;
 - OR
 - (b) 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,
 - OR
 - (d) 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*..... after the deadline for submission of tender as such deadline is stated in the Instructions to contractor or as it may be extended by the Engineer-in-Charge, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE

WITNESSSEAL

SIGNATURE OF THE BANK

(SIGNATURE, NAME AND ADDRESS)

*Date to be worked out on the basis of validity period of 6 months from last date of receipt of tender.

PERFORMANCE GUARANTEE

1. The contractor shall submit an irrevocable Performance Guarantee of 3% (Three percent) of 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.

FORM "F"**STRUCTURE & ORGANISATION**

1. Name & Address of the bidder
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 titles 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)

**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.	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.	Valid Electrical License	
13.	Annexure-1 (Dully Filled & signed by the bidders)	
14.	Annexure 2 (Dully Filled & signed by the bidders)	
15.	Annexure 3 (Dully Filled & signed by the bidders)	
16.	Any other documents given in NIT	
17.	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. : _____

**<< Organization Letter Head >>
DECLARATION SHEET**

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

This is certified that our organization has been registered as per Tender Notice & NIT & IITD form 8Tender. We further certified that our organization meets all the conditions of eligibility criteria laid down in this tender document.

We, further specifically certify that our organization has not been Black Listed/De Listed or put to any Holiday by any Institutional Agency/ Govt. Department/ Public Sector Undertaking in the last three years.	NAME & ADDRESS of the Vendor/ Manufacturer / Agent
1. Phone	As per Tender Notice & NIT
2. Fax	
3. E-mail	
4. Contact Person Name	
5. Mobile Number	
6. GST 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

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: - Renovation and Modification of Electric Vehicle Lab in CART in academic area at IIT Delhi., Sub Head: - Civil work, Electrical work, Fire Alarm system & Networking**

To be submitted by **as per tender notice** to

.....
(i) To be opened in presence of bidders who may be present at **as per tender notice**
.....
in the office of **D.R. (Store)**

Issued to

Signature of officer issuing the documents

Designation.....

Date of 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 : **Renovation and Modification of Electric Vehicle Lab in CART in academic area at IIT Delhi. (Sub Head: - Civil & Electrical Work.)**

Estimated cost of work: : **Rs.1,10,93,766/-**

Earnest Money: : **Rs. 2,21,876 /-**

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 : See below

Definitions:

- 2(i) Engineer-in-Charge : Executive Engineer [CD-III]
- 2(ii) Accepting Authority : Institute Engineer
- 2(iii) Percentage on cost of materials and Labour to cover all overheads and profits: : 15%
- 2(iv) Standard Schedule of Rates: : DSR 2021 for civil works with 7% 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 Performance Guarantee from the date of issue of letter of acceptance : 15 days
- (ii) Maximum allowable extension with late fee @ 0.1 % per day of Performance guarantee amount beyond the period provided in (i) above, : 1 to 15 days

Clause 2

Authority for fixing compensation under clause 2: : Institute Engineer

Clause 5

Number of days from the date of issue of letter of acceptance for reckoning date of start: : 10 (Ten) days

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 assessed from the running payment, 1% of the Tender value of work will be withheld for failure of each milestone.
2	3/8 th (of the whole work)	1/3 th (of the whole work)	
3	3/4 th (of the whole work)	3/4 th (of the whole work)	
4	Full	Full	

Time Allowed for execution of work : **5 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. 22.00 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 the contractor at site lab : **Not Applicable**

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	Not Applicable	
2.	Cement		
3.	Reinforcement bars		
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 : 12.2 & 12.5 shall applicable for foundation work (Except items mentioned in earthwork subhead of DSR and related items)	100%
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 & plants to be deployed by the contractor at site : As per requirement

Clause 25

Constitution of Dispute Redressal Committee (DRC)	
Chairman	NIL
Member	
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 Work (Rs. In Crores)	Requirement of Technical Staff		Minimum experience (Years)	Designation of the Technical Staff	Rate at which recovery shall be made from contractor in the event of not fulfilling the provision of clause 32
	Qualification	Number			
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 2021 with 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 work 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 acquainted 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 agreement made this.....day of t w o thousand...

.....
between

M/s.....(hereinafter called the Guarantor of the one part) and the BOG IIT Delhi (hereinafter called the Govt. of the other part).

Whereas this agreement is supplementary to the contract (hereinafter called the Contract) dated..... made between the Guarantor of the one part and Govt. of the other part, whereby the contractor inter alia, undertook to render the Buildings and structures in the said contract recited completely water and leak proof.

And whereas the Guarantor agreed to give a guarantee to the effect that the said structure will remain waterproof for **Five years** to be reckoned from the date after the maintenance period prescribed in the contract expires.

During this period of guarantee the Guarantor shall make good all defects and for that matter, shall replace at his risk and cost such members as may be damaged by water and in case of any other defect being found he shall render the building waterproof at his cost to the satisfaction of the Engineer-in- Charge and shall commence the works of such rectification within seven days from the date of issuing notice from the Engineer-in-Charge calling upon him to rectify the defects failing which the work shall be got done by the Department by some other contractor at the Guarantor’s cost and risk and in the latter case the decision of the Engineer-in-charge as to the cost, recoverable from the Guarantor shall be final and binding.

That if the Guarantor fails to execute the waterproofing or commits breaches hereunder then the Guarantor will indemnify principal and his successors against all loss, damage, cost, expense or otherwise which may be incurred by him by reason of any default on the part of the Guarantor in performance and observance of this supplemental agreement. As to the amount of loss and/or damage and/or cost incurred by the Government the decision of the Engineer-in-charge will be final and binding on the parties.

In witness whereof of these presents have been executed by the Obligor...

.....
and

by..... For and on behalf of the BOG IIT Delhi on the day, month and year first above written.

SIGNED, SEALED and delivered by OBLIGOR in presence of- 1.
2.

SIGNED for and on behalf of BOG IIT Delhi by in the presence of- 1.
2.

Blanks to be filled by Contractor/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
16.	Stainless Steel Hinges	JOLLY/ GARG/ AMIT/ ASI/ SUPREME
17.	Stainless Steel Nuts bolts / Screws	KUNDAN/ PUJA/ ATUL/ GKW
18.	Paint/ Primer/ Oil bound distemper/ Acrylic 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	CICO/ PIDILITE/ FOSROC/ ECMAS/ ASIAN
34.	Particle Board	NOVA PAN/ BHUTAN BOARD/ ECO BOARD
35.	Rust Remover/ Anticorrosive	FOSROC/ CICO/ PIDILITE/ ECMAS/ ASIAN
36.	Crystalline Cementitious Waterproofing compound	XYPEX / KRYTONE/ PENETRON
37.	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
57.	Glow Stud, Solar Power Stud	ROAD STAR / 3M / DARK EYE /EVERY DENNISON
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	
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 / Wipro / Bajaj / Panasonic
81.	Ceiling Fans (BLDC) & Wall Fan	Havells/ Crompton / 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 / Precision
100.	Cat 6 LAN Cable	D-Link / Legrand
101.	AC	As per BOQ
102.	Fire System	As per BOQ
103.	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: -

Envelope – 1 (Following documents to be provided as single PDF file)			
Sl. No.	Documents	Content	File Types
1.	Technical Bid	Demand Draft/NEFT/RTGS 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.	.PDF
7.		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”	.PDF
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.		Valid Electrical License	.PDF
13.		Annexure-I (duly filled & signed by the bidders)	.PDF
14.		Annexure-II (duly filled & signed by the bidders)	.PDF
15.		Annexure-III (duly filled & signed by the bidders)	.PDF
16.		Any other documents specified in NIT	.PDF
Envelope – 2			
Sl. No.	TYPES	Content	
1.	Financial Bid	Price bid should be submitted in BOQ format.	.Xls

All above documents shall be as per Tender Notice.

PART 'C'
SCHEDULE OF QUANTITY

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 Work.**

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.	31	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.	11	cum		
3	Supplying and filling in plinth with sand under floors, including watering, ramming, consolidating and dressing complete.	21	cum		
4	Surface dressing of the ground including removing vegetation and in- equalities not exceeding 15 cm deep and disposal of rubbish, lead up to 50 m and lift up to 1.5 m.				
4.1	All kinds of soil	1391	sqm		
5	Excavating holes more than 0.10 cum & upto 0.5 cum including getting out the excavated soil, then returning the soil as required in layers not exceeding 20cm in depth, including consolidating each deposited layer by ramming, watering etc, disposing of surplus excavated soil, as directed within a lead of 50 m and lift upto 1.5 m.				
5.1	All kinds of soil	10	each		
6	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level :				
6.1	1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20 mm nominal size derived from natural sources)	4.41	cum		
7	Providing and laying damp-proof course 50mm thick with cement concrete 1:2:4 (1 cement : 2 coarse sand (zone-III) derived from natural sources : 4 graded stone aggregate 20mm nominal size derived from natural sources).	13	sqm		

8	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.	38	sqm		
9	Providing and laying in position ready mixed or site batched design mix cement concrete for plain 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 and finishing as per direction of the engineer-in-charge; 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 110% of the minimum specified cement content, the contractor shall have discretion to either re-design the mix or bear the cost of extra cement.				
9.1	All works upto plinth level :				
9.1.1	Concrete of M10 grade with minimum cement content of 220 kg /cum	49	cum		
10	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 :				
10.1	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)	4.32	cum		
11	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	0.58	cum		

	natural sources : 3 graded stone aggregate 20 mm nominal size derived from natural sources).				
12	Centering and shuttering including strutting, propping etc. and removal of form for				
12.1	Foundations, footings, bases of columns, etc. for mass concrete	29	sqm		
12.2	Shelves (Cast in situ)	6	sqm		
12.3	Lintels, beams, plinth beams, girders, bressumers and cantilevers	2	sqm		
13	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete upto plinth level.				
13.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	540	kg		
14	Steel reinforcement for R.C.C. work including straightening, cutting, bending, placing in position and binding all complete above plinth level.				
14.1	Thermo-Mechanically Treated bars of grade Fe-500D or more.	70	kg		
15	Brick work with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in foundation and plinth in:				
15.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	16	cum		
16	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 :				
16.1	Cement mortar 1:6 (1 cement : 6 coarse sand)	3	cum		
17	Half brick masonry with common burnt clay F.P.S. (non modular) bricks of class designation 7.5 in superstructure above plinth level up to floor V level.				
17.1	Cement mortar 1:4 (1 cement :4 coarse sand)	27	sqm		
18	Extra for providing and placing in position 2 Nos 6mm dia. M.S. bars at every third course of half brick masonry.	27	sqm		
19	Providing and fixing 18 mm thick gang saw cut, mirror polished, premoulded and prepolished, machine cut for kitchen platforms, vanity counters, window sills, facias and similar locations of required size, approved shade, colour and texture laid over 20 mm thick base cement mortar 1:4 (1 cement : 4 coarse sand), joints treated with white cement, mixed with matching pigment, epoxy touch ups, including rubbing, curing, moulding and polishing of edges to give high gloss finish etc. complete at all levels.				
19.1	Granite stone slab of colour black, Cherry/Ruby red				
19.1.1	Area of slab over 0.50 sqm	6	sqm		

20	Extra for fixing marble /granite stone, over and above corresponding basic item, in facia and drops of width upto 150 mm with epoxy resin based adhesive, including cleaning etc. complete.	8	metre		
21	Extra for providing opening of required size & shape for wash basin/ kitchen sink in kitchen platform, vanity counter and similar location in marble/ Granite/ stone work, including necessary holes for pillar taps etc. including moulding, rubbing and polishing of cut edges etc. complete.	2	each		
22	Deduct for not providing hinges in doors, windows or clerestory window shutters with :				
22.1	ISI marked Stainless steel butt hinges with stainless steel screws :				
22.1.1	For 2nd class teak wood and other class of wood shutters	8	sqm		
23	Providing and fixing ISI marked flush door shutters conforming to IS : 2202 (Part I) non-decorative type, core of block board construction with frame of 1st class hard wood and well matched commercial 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters:				
23.1	35 mm thick including ISI marked Stainless Steel butt hinges with necessary screws	15	sqm		
24	Providing and fixing ISI marked oxidised M.S. sliding door bolts with nuts and screws etc. complete : (copper oxidized as per IS: 1378)				
24.1	250x16 mm	6	each		
25	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 :				
25.1	250x16 mm	3	each		
26	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 :				
26.1	300x10 mm	24	each		
26.2	150x10 mm	84	each		
27	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 :				
27.1	125 mm	66	each		

28	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.				
28.1	Twin rubber stopper	12	each		
29	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.	424	kg		
30	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.				
30.1	80x1.25 mm M.S. laths with 1.25 mm thick top cover	10.4	sqm		
31	Providing and fixing ball bearing for rolling shutters.	2	each		
32	Extra for providing mechanical device chain and crank operation for operating rolling shutters.				
32.1	Exceeding 10.00 sqm and upto 16.80 sqm in the area	10.4	sqm		
33	Extra for providing grilled rolling shutters manufactured out of 8 mm dia M.S. bar instead of laths as per design approved by Engineer-in-charge, (area of grill to be measured).	1.92	sqm		
34	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.				
34.1	Hot finished welded type tubes	8471	kg		
35	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.				
35.1	In gratings, frames, guard bar, ladder, railings, brackets, gates and similar works	600	kg		

36	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.	215	sqm		
37	Providing and laying vitrified floor tiles in different sizes (thickness to be specified by the manufacturer) with water absorption less than 0.08% and conforming to IS: 15622, of approved make, in all colours and shades, laid on 20mm 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., complete.				
37.1	Size of Tile 600x600 mm	47	sqm		
38	Deduct for not using 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand) bedding in laying of floor tiles and jointing with grey cement slurry @ 3.3 kg/ sqm.	47	sqm		
39	Fixing glazed/ Ceramic/ Vitrified floor tiles with cement based high polymer modified quick-set tile adhesive (Water based) conforming to IS: 15477, in average 3mm thickness.	47	sqm		
40	Providing and laying brick tiles over mumty roofs, grouted with cement mortar 1:3 (1 cement : 3 fine sand) mixed with 2% of integral water proofing compound by weight of cement, over 12 mm layer of cement mortar 1:3 (1 cement : 3 fine sand) and finished neat:				
40.1	With common burnt clay F.P.S. (non modular) brick tiles of class designation 10	110	sqm		
41	Making khurras 45x45 cm with average minimum thickness of 5 cm cement concrete 1:2:4 (1 cement: 2 coarse sand: 4 graded stone aggregate of 20 mm nominal size) over P.V.C. sheet 1 m x1 m x 400 micron, finished with 12 mm cement plaster 1:3 (1 cement: 3 coarse sand) and a coat of neat cement, rounding the edges and making and finishing the outlet complete.	8	each		
42	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.				
42.1	110 mm diameter	62	metre		

43	Providing and fixing on wall face unplasticised - PVC moulded fittings/ accessories for 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.				
43.1	Bend 87.5°				
43.1.1	110 mm bend	32	each		
44	Providing and fixing unplasticised -PVC pipe clips of approved design to unplasticised - PVC rain water pipes by means of 50x50x50 mm hard wood plugs, screwed with M.S. screws of required length, including cutting brick work and fixing in cement mortar 1:4 (1 cement : 4 coarse sand) and making good the wall etc. complete.				
44.1	110 mm	32	each		
45	Providing and fixing precoated galvanized iron profile sheets (size, shape and pitch of corrugation as approved by Engineer-in-charge) 0.50 mm (+ 0.05 %) total coated thickness with 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. Sheet should have protective guard film of 25 microns minimum to avoid scratches during transportation and should be supplied in single length upto 12 metre or as desired by Engineer- in-charge. The sheet shall be fixed using self-drilling /self-tapping screws of size (5.5x 55 mm) with EPDM seal, complete upto any pitch in horizontal/ vertical or curved surfaces, excluding the cost of purlins, rafters and trusses and including cutting to size and shape wherever required.	90	sqm		
46	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 :				
46.1	Ridges plain (500 - 600mm)	21	metre		
46.2	Flashings/ Aprons.(Upto 600 mm)	42	metre		
46.3	Gutter (600 mm over all girth)	42	metre		

47	Providing and fixing tiled false ceiling of specified materials of size 595x595 mm in true horizontal level, suspended on inter locking metal grid of hot dipped galvanized steel sections (galvanized @ 120 grams/ sqm, both side inclusive) consisting of main "T" runner with suitably spaced joints to get required length and of size 24x38 mm made from 0.30 mm thick (minimum) sheet, spaced at 1200 mm center to center and cross "T" of size 24x25 mm made of 0.30 mm thick (minimum) sheet, 1200 mm long spaced between main "T" at 600 mm center to center to form a grid of 1200x600 mm and secondary cross "T" of length 600 mm and size 24x25 mm made of 0.30 mm thick (minimum) sheet to be interlocked at middle of the 1200x600 mm panel to form grids of 600x600 mm and wall angle of size 24x24x0.3 mm and laying false ceiling tiles of approved texture in the grid including, required cutting/making, opening for services like diffusers, grills, light fittings, fixtures, smoke detectors etc. Main "T" runners to be suspended from ceiling using GI slotted cleats of size 27 x 37 x 25 x 1.6 mm fixed to ceiling with 12.5 mm dia and 50 mm long dash fasteners, 4 mm GI adjustable rods with galvanised butterfly level clips of size 85 x 30 x 0.8 mm spaced at 1200 mm center to center along main T, bottom exposed width of 24 mm of all T-sections shall be pre-painted with polyester paint, all complete for all heights as per specifications, drawings and as directed by Engineer-in-charge.				
47.1	GI Metal Ceiling Lay in perforated Tegular edge global white color tiles of size 595x595 mm and 0.5 mm thick with 8 mm drop; made of GI sheet having galvanizing of 100 gms/sqm (both sides inclusive) and 20% perforation area with 1.8 mm dia holes and having NRC (Noise Reduction Coefficient) of 0.5, electro statically polyester powder coated of thickness 60 microns (minimum), including factory painted after bending and perforation, and backed with a black Glass fiber acoustical fleece.	184	sqm		
48	Providing and fixing thermal insulation with Resin Bonded rock wool conforming to IS: 8183, having density 48 kg/m ³ , 50 mm thick, wrapped in 200 G Virgin Polythene Bags fixed to wall with screw, rawel plug & washers and held in position by criss crossing GI wire etc. complete as per directions of Engineer- in- Charge.	174	sqm		
49	12 mm cement plaster of mix :				
49.1	1:4 (1 cement: 4 fine sand)	39	sqm		

50	15 mm cement plaster on the rough side of single or half brick wall of mix :				
50.1	1:6 (1 cement: 6 fine sand)	99	sqm		
51	Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface :				
51.1	Water thinnable cement primer	525	sqm		
52	Finishing walls with Premium Acrylic Smooth exterior paint with Silicone additives of required shade:				
52.1	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)	461	sqm		
53	Wall painting with acrylic emulsion paint of approved brand and manufacture to give an even shade :				
53.1	Two or more coats on new work	558	sqm		
54	Painting with synthetic enamel paint of approved brand and manufacture to give an even shade :				
54.1	Two or more coats on new work	324	sqm		
55	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.	725	sqm		
56	Removing dry or oil bound distemper, water proofing cement paint and the like by scrapping, sand papering and preparing the surface smooth including necessary repairs to scratches etc. complete.	652	sqm		
57	Repairs to plaster of thickness 12 mm to 20 mm in patches of area 2.5 sq.meters and under, including cutting the patch in proper shape, raking out joints and preparing and plastering the surface of the walls complete, including disposal of rubbish to the dumping ground, all complete as per direction of Engineer-in-Charge.				
57.1	With cement mortar 1:4 (1 cement : 4 fine sand)	16	sqm		
58	Making the opening in brick masonry including dismantling in floor or walls by cutting masonry and making good the damages to walls, flooring and jambs complete, to match existing surface i/c disposal of mulba/ rubbish to the nearest municipal dumping ground, all complete as per direction of Engineer-in-Charge.				
58.1	For door/ window/ clerestory window	5	sqm		
59	Disconnecting damaged overhead/terrace PVC water storage tank of any size from water supply line and removing from the terrace including shifting at ground level as per direction of Engineer-in-charge.	3	each		

60	Hacking of CC flooring including cleaning for surface etc. complete as per direction of the Engineer-in-Charge.	44	sqm		
61	Dismantling 15 to 40 mm dia G.I. pipe including stacking of dismantled pipes (within 50 metres lead) as per direction of Engineer- in-Charge.(a) Internal Work- Exposed on wall	60	metre		
62	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.				
62.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	19	cum		
63	Demolishing brick work manually/ by mechanical means including stacking of serviceable material and disposal of unserviceable material within 50 metres lead as per direction of Engineer-in-charge.				
63.1	In cement mortar	16	cum		
64	Dismantling doors, windows and clerestory windows (steel or wood) shutter including chowkhats, architrave, holdfasts etc. complete and stacking within 50 metres lead :				
64.1	Of area 3 sq. metres and below	36	each		
64.2	Of area beyond 3 sq. metres	5	each		
65	Dismantling steel work manually/ by mechanical means in built up sections without dismembering and stacking within 50 metres lead as per direction of Engineer-in-charge.	500	kg		
66	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead.				
66.1	For thickness of tiles above 25 mm and up to 40 mm	440	sqm		
67	Demolishing mud phaska in terracing and disposal of material within 50 metres lead.	65	cum		
68	Dismantling roofing including ridges, hips, valleys and gutters etc., and stacking the material within 50 metres lead of:				
68.1	Asbestos Cement sheet	232	sqm		
69	Dismantling C.I. or asbestos rain water pipe with fittings and clamps including stacking the material within 50 metres lead :				
69.1	75 to 80 mm dia pipe	20	metre		
70	Dismantling old plaster or skirting raking out joints and cleaning the surface for plaster including disposal of rubbish to the dumping ground within 50 metres lead.	64	sqm		
71	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable material and	30	sqm		

	stacking of serviceable material within 50 meters lead as directed by Engineer-in-charge.				
72	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.	258	cum		
73	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).	2	cum		
74	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.				
74.1	60mm thick cement concrete paver block of M-35 grade with approved colour, design & pattern.	100	sqm		
75	Providing and fixing G.I. pipes complete with G.I. fittings and clamps, i/c cutting and making good the walls etc. Internal work - Exposed on wall				
75.1	15 mm dia nominal bore	18	metre		
75.2	20 mm dia nominal bore	24	metre		
75.3	25 mm dia nominal bore	48	metre		
76	Making connection of G.I. distribution branch with G.I. main of following sizes by providing and fixing tee, including cutting and threading the pipe etc. complete :				
76.1	25 to 40 mm nominal bore	4	each		
77	Providing and fixing gun metal gate valve with C.I. wheel of approved quality (screwed end) :				

77.1	25 mm nominal bore	4	each		
77.2	20 mm nominal bore	4	each		
78	Providing and fixing G.I. Union in G.I. pipe including cutting and threading the pipe and making long screws etc. complete (New work) :				
78.1	15 mm nominal bore	4	each		
78.2	20 mm nominal bore	4	each		
79	Providing and placing on terrace (at all floor levels) polyethylene water storage tank, IS : 12701 marked, with cover and suitable locking arrangement and making necessary holes for inlet, outlet and overflow pipes but without fittings and the base support for tank.	2000	per litre		
80	Providing and fixing PTMT Ball cock of approved quality, colour and make complete with Epoxy coated aluminium rod with L.P./ H.P.H.D. plastic ball.				
80.1	20 mm nominal bore, 120 mm long, weighing not less than 198 gms	4	each		
81	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) :				
81.1	For fixed portion				
81.1.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	938	kg		
81.2	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)				
81.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	376	kg		

82	Providing and fixing 12 mm thick prelaminated particle board flat pressed three layer or graded wood particle board conforming to IS: 12823 Grade 1 Type II, in panelling fixed in aluminum doors, windows shutters and partition frames with C.P. brass / stainless steel screws etc. complete as per architectural drawings and directions of engineer-in-charge.				
82.1	Pre-laminated particle board with decorative lamination on both sides	24	sqm		
83	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):				
83.1	With float glass panes of 5 mm thickness (weight not less than 12.50 kg/sqm)	88	sqm		
84	Providing and fixing double action hydraulic floor spring of approved brand and manufacture conforming to IS : 6315, having brand logo embossed on the body / plate with double spring mechanism and door weight upto 125 kg, for doors, including cost of cutting floors, embedding in floors as required and making good the same matching to the existing floor finishing and cover plates with brass pivot and single piece M.S. sheet outer box with slide plate etc. complete as per the direction of Engineer-in-charge.				
84.1	With stainless steel cover plate minimum 1.25 mm thickness	2	each		
85	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.	6	each		
86	Providing and fixing aluminium round shape handle of outer dia 100 mm with SS screws etc. complete as per direction of Engineer-in-charge				
86.1	Powder coated minimum thickness 50 micron aluminium	16	each		
87	Providing and fixing anodised aluminium grill (anodised transparent or dyed to required shade according to IS: 1868 with minimum anodic coating of grade AC 15) of approved design/pattern, with approved standard section and fixed to the existing window frame with C.P. brass/ stainless steel screws @ 200 mm centre to centre, including cutting the grill to proper opening size for fixing and operation of handles and fixing approved anodised aluminium standard section around the opening, all complete	75	kg		

	as per requirement and direction of Engineer-in-charge. (Only weight of grill to be measured for payment).				
88	Filling the gap in between aluminium/ stone/ wood frame and adjacent RCC/Brick/ Stone/ wood/ Ceramic/ Gypsum work by providing weather/structural non sag elastomeric PU sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete, complying to ASTM C920, DIN 18540- F & ISO 11600				
88.1	Upto 5 mm depth and 5 mm width	200	metre		
88.2	Upto 10 mm depth and 10 mm width	50	metre		
89	Providing and laying integral cement based water proofing treatment including preparation of surface as required for treatment of roofs, balconies, terraces etc consisting of following operations: (a) Applying a slurry coat of neat cement using 2.75 kg/sqm of cement admixed with water proofing compound conforming to IS. 2645 and approved by Engineer-in-charge over the RCC slab including adjoining walls up to 300 mm height including cleaning the surface before treatment. (b) Laying brick bats with mortar using broken bricks/brick bats 25 mm to 115 mm size with 50% of cement mortar 1:5 (1 cement : 5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer- in-charge over 20 mm thick layer of cement mortar of mix 1:5 (1 cement :5 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer- in-charge to required slope and treating similarly the adjoining walls up to 300 mm height including rounding of junctions of walls and slabs. (c) After two days of proper curing applying a second coat of cement slurry using 2.75 kg/ sqm of cement admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge. (d) Finishing the surface with 20 mm thick joint less cement mortar of mix 1:4 (1 cement:4 coarse sand) admixed with water proofing compound conforming to IS : 2645 and approved by Engineer-in-charge including laying glass fibre cloth of approved quality in top layer of plaster and finally finishing the surface with trowel with neat cement slurry and making pattern of 300x300 mm square 3 mm deep. (e) The whole terrace so finished shall be flooded with water for a minimum period of two weeks for curing and for final test. "All above operations to be done in				

	order and as directed and specified by the Engineer-in-Charge :				
89.1	With average thickness of 120 mm and minimum thickness at khurra as 65 mm.	405	sqm		
90	Providing and fixing of external wall system on Light gauge steel frame work with outer face cement boards as per standard sizes fixed with self- drilling / tapping screws / fasteners @ 60cm c/c of approved make. A groove of 2 mm to 3mm shall be maintained and grooves shall be sealed with silicon based sealant. The board shall be fixed in a staggered pattern. Screws shall be of counter sunk rib head of 1.60mm to 4 mm thick or 8 to 10 gauge of length varying from 25 to 45 mm and. Internal face 12.5 mm thick gypsum plaster board fixed on cement board as per standard sizes fixed with self- drilling / tapping screws / fasteners @ 60cm c/c of approved make, proper taping and jointing to be done using fiber mesh tape and epoxy and acrylic based jointing compound for seamless finish.(cost of frame work to be paid for separately)				
90.1	Outer face: Outer face having 6mm thick fiber cement board fixed on 9mm thick fiber cement board, Type A, as per IS:14862:2000 (high pressure steam cured) Inner Face :- 12.5 mm thick gypsum plaster board conforming to IS 2095:2011 fixed on 8 mm thick fibre cement board conforming to IS:14862:2000 of type B (High pressure steam cured)	174	sqm		
91	Providing and fixing 50mm thick sandwich roof panel (factory made) as per specification as follow. a) Outer sheet; 0.50mm (TCT) pre-coated 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 scratches 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,	168	sqm		

	rafters and trusses and including cutting to size and shape wherever required. Work to be executed as per the instructions of Engineer-In-Charge.				
	ELECTRICAL WORK				
92	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.				
92.1	Group C	40.0	Point		
93	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.				
93.1	Group C	40.0	Point		
94	Wiring for light/ power plug with 2X4 sq.mmFRLS 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.	300.0	Meter		
95	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.	200.0	Meter		
96	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required				
96.1	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	50.0	Meter		
96.2	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	100.0	Meter		
96.3	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	50.0	Meter		
96.4	4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire	20.0	Meter		
96.5	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	100.0	Metre		
96.6	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	50.0	Meter		
97	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
97.1	3 x 2.5 sq. mm	50.0	Meter		

97.2	6 x 2.5 sq. mm	50.0	Meter		
97.3	3 x 4 sq. mm	100.0	Meter		
97.4	6 x 4 sq. mm	100.0	Meter		
97.5	3 x 6 sq. mm	50.0	Meter		
97.6	6 x 6 sq. mm	50.0	Meter		
98	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/ recessed steel/ PVC conduit as required.				
98.1	2 Pair	20.0	Meter		
99	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.				
99.1	20 mm	50.0	Meter		
99.2	25 mm	50.0	Meter		
100	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
100.1	20 mm	50.0	Meter		
100.2	25 mm	50.0	Meter		
101	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
101.1	5/6 A switch	4.0	Each		
101.2	15/16 A switch	56.0	Each		
101.3	3 pin 5/6 A socket outlet	4.0	Each		
101.4	6 pin 15/16 A socket outlet	56.0	Each		
101.5	Telephone socket outlet	2.0	Each		
102	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	20.0	Each		
103	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
103.1	1 or 2 Module (75mmX75mm)	2.0	Each		
103.2	6 Module (200mmX75mm)	10.0	Each		
103.3	12 Module (200mmX150mm)	10.0	Each		
104	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 amps modular socket outlet and 15/16 amps modular switch, connection etc. as required.	5.0	Each		
105	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling				

	holes in cubicle panel, making connections, etc. as required.				
105.1	125 A, 16 kA,TPMCCB	10.0	Each		
105.2	150 A, 16 kA,TPMCCB	5.0	Each		
106	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)				
106.1	12 way, Double door	2.0	Each		
106.2	16 way, Double door	1.0	Each		
107	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)				
107.1	12 way (4 + 36), Double door	2.0	Each		
108	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.				
108.1	Single pole	74.0	Each		
108.2	Double pole	2.0	Each		
108.3	Triple pole	12.0	Each		
109	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 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.	10.0	Each		
110	Supplying and fixing 30 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 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.	10.0	Each		
111	Supplying and fixing Cable End Box (Loose Wire Box) suitable for following triple pole and neutral, sheet steel, Vertical MCB distribution board, 415 Volts, on surface/ recess, complete with testing and commissioning etc. as required. (Make: Siemens/ L&T/ Schneider/ Legrand/ ABB/ C&S/ Havells)	2.0	Each		

112	Providing and fixing M.S. Fan clamp type I or II of 16 mm dia M.S. bar, bent to shape with hooked ends in R.C.C. slabs or beams during laying, including painting the exposed portion of loop, all as per standard design complete as required. Rate to be taken	15.00	Each		
113	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.				
113.1	150 mm width X 50 mm depth X 1.6 mm thickness	50.0	Meter		
113.2	300 mm width X 50 mm depth X 1.6 mm thickness	100.0	Meter		
114	Supplying and drawing of UTP 4 pair CAT 6 LAN Cable in the existing surface/ recessed steel/ PVC conduit as required. (Make: Havells/ Beldon/ D-Link/ Polycab)				
114.1	1 run of Cable	100.0	Meter		
114.2	2 run of Cable	50.0	Meter		
115	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		
116	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.	20.0	Metre		
117	Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as required.	20.0	Metre		
118	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.	420.0	Metre		
119	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
119.1	3½ X 35 sq. mm (32mm)	2	Each		
119.2	3½ X 50 sq. mm (35mm)	8	Each		
119.3	3½ X 95 sq. mm (45mm)	2	Each		
119.4	3½ X 185 sq. mm (57mm)	2	Each		
120	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	15.0	Each		

	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/)				
	FIRE ALARAM SYSTEM				
121	Supplying, installation, testing & commissioning of heat detector operating at 54C/57C with rate of rise cum fixed temperature (dual thermister) type with mounting base complete with all connections etc. as required. (Make: Mather and Platt/ Meltron/ Steelage industries/ Safeway Security System, Mumbai/ Carmel and Ravel Electronic Co. Chennai)	2.0	Each		
122	Supplying, installation, testing & commissioning of smoke detector with builtin LED and mounting base complete with all connections etc. as required. (Make: Mather and Platt/ Meltron/ Steelage industries/ Safeway Security System, Mumbai/ Carmel and Ravel Electronic Co. Chennai)	28.0	Each		
123	Supplying, installation, testing & commissioning of manual call box of ABS type in surface/recess with stainless steel chain & hammer assembly complete with glass and push button etc. as required. (Make: Mather and Platt/ Meltron/ Steelage industries/ Safeway Security System, Mumbai/ Carmel and Ravel Electronic Co. Chennai)	4.0	Each		
124	Supplying, installation, testing & commissioning response indicator on surface/recess MS box having two LEDs metallic cover complete with all connections etc. as required. (Make: Mather and Platt/ Meltron/ Steelage industries/ Safeway Security System, Mumbai/ Carmel and Ravel Electronic Co. Chennai)	4.0	Each		
126	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 transformer etc. complete as required. (Make: Mather and Platt/ Meltron/ Steelage industries/ Safeway Security	2.0	Each		

	System, Mumbai/ Carmel and Ravel Electronic Co. Chennai)				
127	Supplying & laying of 2x1.5 sqmm fire alarm armoured cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armouring & FRLS outer sheath complete as required. (Make: Havells/ Finolex/ Polycab)	150.0	Metre		
128	Supplying, installation, testing & commissioning sector panel suitable for following zones, complete with visual indications for short circuit fault, open circuit fault, fire condition and all other standard facilities as per IS : 2189 with mimic diagram for all area / zone covered , complete with all connections , interconnections etc as required. (Make: System-Tek/Morley/Agni/Ravel/Safeway Security System)				
128.1	4 Zone	1.0	Each		
129	Supplying and fixing of 32 mm dia X 2.00 metres long G.I. pipe (medium class) bracket for mounting of fluorescent / HPMV / HPSV street light fitting on pole including bending the pipe to the required shape, 2 nos 40 mm X 3 mm flat iron clamps with nuts, bolts and washer, painting the flat iron with primer and finish paint etc. as required.	6.0	Each		
130	Supplying and fixing following rating, double pole, 240 volts, MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
130.1	63 Amp	1.0	Each		
131	Supplying and fixing following rating, Triple pole, 415 volts, MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
131.1	63 amps	4.0	Each		
132	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 outlet and complete with connections, testing and commissioning etc. as required.	4.0	Each		
133	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)	20.0	Meter		
134	Providing and Fixing following accessories on the existing FR DLP PVC trunking (150mm x 50mm) etc. as required. (Make: Legrand)				

135	Providing and Fixing of FR PVC trunking cover width 40 mm + full cover width 85 mm for Power + LAN component	20.0	Meter		
136	Providing and fixing of Clip on partition - Plastic (Make: Legrand)	20.0	Meter		
137	Providing and fixing of Separation on partition - Plastic (Make: Legrand)	20.0	Meter		
138	Providing and fixing of End caps for 150 mm x 50 mm trunking (Make: Legrand)	6.0	Each		
139	Providing and fixing of Internal angle for 150 mm x 50 mm trunking (Make: Legrand)	6.0	Each		
140	Providing and fixing of External angle for 150 mm x 50 mm trunking (Make: Legrand)	6.0	Each		
141	Supplying and Fixing DLP U-PVC trunking of 105mm x 50mm on surface etc as required.	20.0	Meter		
142	Supplying and Fixing Full Flexible cover of width 85mm on existing DLP U-PVC trunking etc as required.	20.0	Meter		
143	Supplying and Fixing of internal angle for 105mm x 50mm existing DLP U-PVC trunking etc as required.	4.0	Each		
144	Supplying and Fixing of external angle for 105mm x 50mm existing DLP U-PVC trunking etc as required.	4.0	Each		
145	Supplying and Fixing of End cap for 105mm x 50mm on existing DLP U-PVC trunking etc as required.	10.0	Each		
146	Supplying and Fixing 1 module arterior frame for 40 mm cover (Make: Legrand)	10.0	Each		
147	Supplying and fixing of 3 module arterior frame for 85 mm cover (Make: Legrand)	10.0	Each		
148	Supplying and fixing of 6 module arterior frame for 85 mm cover (Make: Legrand)	10.0	Each		
149	Supplying and fixing following modular switch/socket on the existing 1/3/6 module frame / U-PVC trunking system including connections etc. as required.				
149.1	Information socket - category 6-UTP - 1 module (Make: Legrand)	10.0	Each		
149.2	20 Amp switch	30.0	Each		
149.3	6 pin 20 Amp socket outlet/6 pin 6/16 A universal socket	30.0	Each		
150	Providing and fixing 125A,25kA,FP MCCB rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders with SS Enclosure box(l & 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.	4.0	Each		

151	Providing and fixing 160A,25kA,FP MCCB rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders with SS Enclosure box(l & 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.	1.0	Each		
152	Providing and fixing 250A,36kA,FP MCCB rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders with SS Enclosure box(l & 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.	1.0	Each		
153	Supplying and Laying of one number PVC insulated and PVC sheathed / XLPE Aluminium 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.				
153.1	Upto 35 sq. mm (3.5C x 35 sq.mm)	60.0	Metre		
153.2	Above 35 sq. mm and upto 95 sq. mm (3.5C x 50 sq.mm)	60.0	Metre		
153.3	Above 35 sq. mm and upto 95 sq. mm (3.5C x 95 sq.mm)	50.0	Metre		
154	Supplying and Laying and fixing of one number PVC insulated and PVC sheathed / XLPE Aluminium armoured power cable of 1.1 KV grade of following size on wall surface as required.				
154.1	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp (3.5C x 50 Sq.mm)	20.0	Metre		
154.2	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp (3.5C x 95 Sq.mm)	20.0	Metre		
154.3	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp) (3.5C x 185 Sq.mm)	10.0	Metre		
155	Supplying, Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on cable tray as required.				
155.1	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp) (3.5C x 185 Sq.mm)	270.0	Metre		
156	S/I/T/C of recess mounting LED luminaire with chain and hook (including dismantling of existing lights) equipped with CRCA powder coating housing, anti-glare polycarbonate diffuser with energy efficient electronic driver suitable for	36.0	Each		

	SMD LEDs with following features:- suitable for operation voltage and frequency: 130-300 V AC, 50 Hz ; wattage 36 watts, Output lumens not less than 1001m/watt; CCT not less than 5700K; DimensionLxWxH in mm (1195x295x70mm); Normal surge protection 2.5kV; power factor not less than 0.95; Minimum IP protection 20. (Make : Philips/ Wipro/ Havells) PLANO2X2PLR36WLED857S				
157	S/I/T/C of recess 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 not more then 12 watts, Output lumens not less then 9001m; CCT not less then 6000K; slim profile surface mounted down light square/ round type; Normal surge protection 2.5kV; power factor not less then 0.9; Minimum IP protection 20. (Make : Philips/ Wipro/ Havells/ Panasonic/ Bajaj/ Crompton/ Osram)	10.0	Each		
158	Supplying, Installation, testing & commissioning of energy efficient LED compound light equipped with power coated PDC aluminum body & secondary optical lens for superior light distribution with energy efficient electronic driver with following features:- 130-300 Vac, 50Hz, wattage 120 Watts, efficiency not less then 110 Lm/W, CCT 6500K, Nominal surge protection 2.5 kV, Power factor not less then 0.9, Minimum IP protection 66 etc. in suitable size GI pipe with reducer, GI saddle, bracket for proper fixing as required. (Make: Philips/Havells/ Wipro)	10.0	Each		
159	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-in-charge)	4.0	Each		
160	S/I/T/C of 10"(250mm) size,copper wound, ventilating 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		
161	S/I/T/C of 12"(300mm) size,1400rpm,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	4.0	Each		

	complete with accessories such as motor, legs,frame,loober and Nut & bolts etc complete as required Make Crompton Greaves / GE /Havells Turbo Force SP				
162	S/I/T/C of 15"(380mm) size,1400rpm,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 Greaves / GE /Havells Turbo Force SP	2.0	Each		
163	S/I/T/C of 18"(450mm) size,1400rpm,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 Greaves / GE /Havells Turbo Force SP	2.0	Each		
164	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 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				
i)	1 Nos. 400 Amps. FP MCCB of 36 KA with inbuilt 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				
ii)	1 nos. 0-400A Digital type Ammeter with selector switch with CT's 400/5A				
ii)	3 Nos. phase indication lights LED type with protection MCB.				
	OUTGOINGS				
i)	1 Nos. 250 Amps. FP MCCB of 36 KA with inbuilt protection.				
ii)	2 Nos. 200 Amps. FP MCCB of 36 KA with inbuilt protection.				
ii)	6 Nos. 160 Amps. FP MCCB of 36 KA with inbuilt protection.				
	Total Panel Cubical Type Feeder Pillar AS DESCRIBED ABOVE.	1	Set		
	Air Conditioning				
165	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: Ecofriendly; 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)	10.0	Each		
166	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 / Visiario]; [Acceptable make of tubular insulation: Visiario / 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				
167	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)	50.0	Meter		
168	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)	50.0	Meter		
169	Supplying and laying of ISI marked FRLS 4 core x 2.5 sqmm PVC insulated industrial flexible copper conductor cable of 1.1 kV grade conforming to IS 694:2010 including making connections etc. as required. (Acceptable make: Havells / Finolex / Polycab / Universal)	50.0	Meter		
170	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 prepainted with anticorrosive paint, nuts, bolts, fasteners, grouting / properly securing from accidental fall, fasteners, etc. complete as required.	10.0	Each		
	CREDIT OF DISMANTLE ITEMS				
171	Credit of dismantle of old Iron Scrap like steel windows / door frames, MS grills, MS bars, GI pipe and fittings etc.	400	Kg		
172	Credit of dismantle of old Wooden Scrap like old flush doors, wooden frames, ply, board etc.	800	Kg		
173	Credit of dismantle of old PVC scrap like PVC cistern, PVC tanks, PTMT fittings etc.	50	Kg		

Special Conditions:

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