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

IITD/WORKS (SP- 2026) /2018

Executive Engineer [P], Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 100016 [Phone No. 011-26591762] on behalf of Board of Governors invites online Item Rate Tender from Firms / Contractors Registered in appropriate class And category with CPWD, MES, BSNL and Railways dealing with Composite work for the following work:

1	Name of Work		Modification of Student assembly area of LHC
			converting into 60 Seaters and 40 Seaters class
		•	rooms at IIT Delhi.
			Sub-Head:- Composite work
2	NIT No.	:	67 Composite work /2018-2019/EE (P), IITD.
3	Estimated cost	:	Rs. 1,59,42,181.00
4	Earnest Money	:	Rs.3,18,850.00
5	Period of completion	:	90 Days
6	Last date & time of bid submission	:	14/01/2019 03:00 PM
7	Performance Bank Guarantee	:	5% of the tendered amount

The bid forms and other details 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 '.

Bidders can access Quotation / tender documents on the website (For searching in the NIC site, kindly go to Quotation Search option and type 'IIT'. Thereafter, Click on "GO" button to view all IIT Delhi Quotations). Select the appropriate Quotation / tender and fill them with all relevant information and submit the completed Quotation / 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 bids (both Technical and Financial should be submitted in the E-procurement portal).

Executive Engineer [P], For & on Behalf of BOG, IIT Delhi

CH. Head PLN-05 Work code (W03225)

C....Nil I....Nil O....Nil

D'Man /J.E. A.E.E / A.E. E.E.

Copy to: -

- 1. Institute Engineer
- 2. D.A. (Works Accounts) for opening of tenders in the office of D.R. [SPS]
- 3. A.E.E (C) Renovation.
- 4. D.R. (A/Cs)
- 5. D.R. [SPS]
- 6. Notice Boards.
- 7. Office Copy
- 8. Web site Administrator, IITD

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This NIT documents contains One to sixty eight pages only.

NIT Amounting Rs. 1,59,42,181/- (One Crore Fifty Nine Lakhs Forty Two Thousand One Hundred Eighty One Only) approved.

A.E.E.(C) E.E.(P)

I.E

SCHEDULE

1	Name of Organisation	:	Indian Institute of Technology Delhi.
2	Tender / Quotation Type [open / limited /		Onon
<u> </u>	EOI / auction / single]	:	Open
3	Tender / Quotation Category [services /		Works
3	goods / works]	:	WOIRS
	Type / Form of Contract [work / supply /		
4	auction / service / buy / empanelment /	:	Work
	sell]		
	Product Category [Composite work s /		
5	electrical works / fleet management /	:	Works
	computer systems]		
6	Is Multi Currency Allowed?	:	No
7	Date of issue / publishing /start	:	28/12/2018 3:00 PM
8	Document download start date	:	28/12/2018 3:00 PM
9	Document download end date	:	14/01/2019 3:00 PM
8	Last date & time of uploading of bids	:	14/01/2019 3:00 PM
9	Date & time of opening of Technical Bids	:	15/01/2019 3:30 PM
10	Tender fee	:	Rs. 1000/- (One thousand only), (Online) (To be paid through RTGS/NEFT. IIT Delhi Bank details are as under: Name of the Bank A/C : IITD Revenue Account SBI A/C No. : 10773572622 Name of the Bank : State Bank of India, IIT Delhi, Hauz Khas, NewDelhi-110016 IFSC Code : SBIN0001077 MICR Code : 110002156 Swift No. : SBININBB547 (This is mandatory that UTR Number is provided in the online quotation/bid. Kindly refer to the UTR Column of the Declaration Sheet at Annexure-I).
11	EMD	:	Rs.3,18,850/- (Three Lakh Eighteen Thousand Eight Hundred Fifty Only) in favour of Registrar, I.I.T. Delhi in the form of Banker Cheque or Demand Draft or Fixed Deposit receipt of a schedule bank.
12	Bid Validity Days	:	90 Days (From last date of opening of financial bid)
13	No. of covers [1/2/3/4]	:	02
			Executive Engineer [P], Room No.:- MZ-136,
14	Address for communication	:	Main Building, Hauz Khas, IIT Delhi, New Delhi –
			110016
15	Contact No.	:	011- 2659 1762,
16	E-mail address	:	a26790@admin.iitd.ac.in
		L	

INSTRUCTIONS FOR ONLINE BID SUBMISSION

As per the directives of Department of Expenditure, this Quotation / tender document has been published on the Central Public Procurement Portal (URL: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) 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 userID / password and the password of the DSC / e-Token.

SEARCHING FOR QUOTATION /TENDER DOCUMENTS

- There are various search options built in the CPP Portal, to facilitate bidders to search active Quotations / Tender by several parameters. These parameters could include Quotation ID, organization name, location, date, value, etc. There is also an option of advanced search for Quotations, 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 Quotation published on the CPP Portal.
- 2) Once the bidders have selected the Quotations they are interested in, they may download the required documents / Quotation schedules. These Quotations can be moved to the respective 'My Quotations' folder. This would enable the CPP Portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the Quotation document.
- 3) The bidder should make a note of the unique Quotation ID assigned to Nos. Quotation / 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 Quotation document before submitting their bids.
- 2) Please go through the Quotation / Tender advertisement and the Quotation / 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 Nos. 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 Quotation 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 Quotation document.
- 3) Bidder has to select the payment option as "offline" to pay the Quotation fee / EMD as applicable and enter details of the instrument.
- 4) A standard BoQ format has been provided with the Quotation 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 Quotation documents become readable only after the Quotation 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 Quotation document and the terms and conditions contained therein should be addressed to the Quotation Inviting Authority for a Quotation or the relevant contact person indicated in the Quotation.
- 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 Quotations 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 https://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".

Bidders are advised to follow the instructions provided in the 'Instructions to the Bidder for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app

INFORMATION AND INSTRUCTIONS TO BIDDERS FOR E-TENDERING

Executive Engineer [P], Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 100016 [Phone No. 011-26591762] on behalf of Board of Governors invites online Item Rate Tender from Firms / Contractors Registered in appropriate class And category with CPWD, MES, BSNL and Railways dealing with Composite work for the following work:

SI. No.	N.I.T. No.	Name of work & Location	Estimated cost put to bid	Earnest Money	Period of completion	Last date & time of submission of bid (online mode)	Time & date of opening of Technical Bid	Time & date of opening of Financial Bid
[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]
1	67 Composite work /2018-2019/EE (P), IITD.	Modification of Student assembly area of LHC converting into 60 Seaters and 40 Seaters class rooms at IIT Delhi. Sub-Head:- Composite work	Rs. 1,59,42,181.00	Rs. 3,18,850.00	90 Days	12/01/2019 3:00 PM	15/01/2019 3:30 PM	To be intimated after assessing technical bid.

1. The successful bidders shall be required to submit a performance guarantee of 5% 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 submit the performance guarantee within the specified period, full earnest money will be forfeited and the tender shall be treated as null and void. The performance guarantee shall be initially valid up to the stipulated 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 should have satisfactorily completed one similar work of value not less than **Rs.** 1,27,53,800.00 or two similar works Nos. of value not less than **Rs.** 95,65,400.00 or three similar works Nos. of value not less than **Rs.** 63,76,900.00 during last 7 years ending previous day of last date of submission of bids.
- ii) Tender fees Rs. 1000/- through online payment as per account details provided in page No. 4 of the NIT.
- iii) Earnest money of Rs. 3,18,850/- (Three Lakh Eighteen Thousand Eight Hundred Fifty Only) in favour of Registrar, I.I.T. Delhi in the form of Banker Cheque or Demand Draft or Fixed Deposit receipt of a schedule bank.
- 3. Similar work means pertaining to works of maintenance of buildings/Renovation/ Addition Alteration/ Rehabilitation/ New construction of buildings/painting, white washing works Composite work .
- 4. The intending bidder must read the terms and conditions [both commercial & Additional] & IITD 6 carefully which will be the part of the Contract. 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 e-procure.gov.in.
- **7.** But the bid can only be submitted after depositing requisite tender fee and EMD as specified in the schedule.
- **8.** 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 within a week physically in the office of e-tendering authority.
- **9.** Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited requisite tender fee and EMD and other documents scanned and uploaded are found in order.
- **10.** Completion certificates are required to be got issued by an officer not below the rank of Executive Engineer of similar works completed by the Firm. The work experience certificates submitted by the bidders shall clearly indicate that:
 - a. The similar work executed shall be as '3' above
 - b. The completed cost of the work
 - c. Actual date of completion of the work
- 11. Copy of registration certificates to be submitted. Registration of firms/ Contractors must be valid on the day of submission of Tenders or extended date of submission of Tenders whichever is later.
- 12. Work means only work under Government/ Public Sector Undertaking / Central Autonomous bodies.
- 13. 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.
- 14. 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.

- **15.** 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.
- **16.** 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.
- 17. 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.

18. The bid submitted shall become invalid if:

- a. The bidder is found ineligible.
- b. The bidder does not upload all the documents (including GST) as stipulated in the bid document including the undertaking / declaration.
- c. EMD not deposited as specified
- d. The firm shall not be registered with EPFO & ESIC

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

- 1. Annexure I duly filled in and got signed.
- 2. Enlistment order of contractor.
- 3. Affidavit as per Notice Inviting Tender Condition [IITD-6] 1.2.2 [To be submitted on stamp paper].
- 4. Certificate of work experience as desired.
- 5. Acceptance to execute INTEGRITY PACT [see integrity pact].
- 6. IITD 7 / 8 duly signed (At page 22–23).
- 7. EPF & ESI Registration proof.
- 8. GST Registration proof with allotted number.
- 9. Undertaking on firm's letter head for EMD, if EMD is not submitted online.
 - "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."
- 10. Any other document as specified in the NIT.
- 11. Submission of Technical Compliance sheet as per page 37 to 40.

Executive Engineer [P] For & on Behalf of BOG, IIT Delhi

IITD - 6

INDIAN INSTITUTE OF TECHNOLOGY DELHI NOTICE INVITING E-TENDER

Executive Engineer [P], Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 100016 [Phone No. 011-26591762] on behalf of Board of Governors invites online Item Rate Tender from Firms / Contractors Registered in appropriate class And category with CPWD, MES, BSNL and Railways dealing with Composite work for the following work of Modification of Student assembly area of LHC converting into 60 Seaters and 40 Seaters class rooms at IIT Delhi. Sub-Head:- Composite work

- 1.1 The work is estimated to cost **Rs. 1,59,42,181.00** 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 civil bid, besides indicating the combined estimated cost put to tender, should clearly indicate the estimated cost of Nos. 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.

- i) Firms/Contractors should have satisfactorily completed one similar work of value not less than Rs. 1,27,53,800.00or two similar works Nos. of value not less than Rs.95,65,400.00 or three similar works Nos. of value not less than Rs.63,76,900.00 during last 7 years ending previous day of last date of submission of bids.
- ii) Similar work means pertaining to works of maintenance of buildings/Renovation/ Addition Alteration/ Rehabilitation/ New construction of buildings/painting, white washing works Composite work .
- 1.2.1 Criteria of eligibility for CPWD as well as non-CPWD contractors.

As per CPWD guideline for registration for Composite work .

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 IIT Delhi 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

- 2. Agreement shall be drawn with the successful bidders on prescribed Form No. IITD 7/8 which is available as IIT Delhi 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 90 Days 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 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 **eprocure.gov.in**
- **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 of** Rs. 3,18,850/- (Three Lakh Eighteen Thousand Eight Hundred Fifty Only) in favour of Registrar, I.I.T. Delhi in the form of Banker Cheque or Demand Draft or Fixed Deposit receipt of a schedule bank.
- **10.** The bid can only be submitted after uploading the mandatory scanned documents such as submission of online receipt of EMD with http://eprocure.gov.in/eprocure/app/NEFT facility.
- 11. The bid submitted shall become invalid, if:
 - a) The bidder is found ineligible.
 - b) The bidder does not upload all the documents (including GST Registration/ Technical bid) as stipulated in the bid document.
 - c) EMD not deposited as specified
 - d) The firm shall not be registered with EPFO & ESIC.
- 12. The contractor whose bid is accepted will be required to furnish **performance guarantee of 5%** (**Five Percent**) of the bid amount within the period specified in Schedule F. This guarantee shall be in the form of Deposit at Call receipt of any scheduled bank / Banker' 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.
- 13. 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, 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 for rejection.
- 16. The competent authority on behalf of the 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 Gazette 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 Gazette rank or other Gazette 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 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 **ninety [90] days from the date of opening of financial bids**, 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, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the re-bidding process of the work.
- 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 applicable.
- 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 to be submitted physically in IIT Delhi, if so desired by the accepting authority, then the bid submitted shall become invalid and the IIT Delhi shall, without prejudice to any other right or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the bidder shall not be allowed to participate in the bidding process of the work.

INTEGRITY PACT

То
,
<u>Sub:</u> NIT No. 67 Composite work /2018-2019/EE (P), IITD. for the work of Modification of Student assembly area of LHC converting into 60 Seaters and 40 Seaters class rooms at IIT Delhi. Sub-Head:- Composite work.
Dear Sir,
It is here by declared that IITD 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 the tender/bid documents, failing which the tender/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 IITD.
Yours faithfully,
Executive Engineer (P)

[TO BE SUBMITTED DULY SIGNED BY THE BIDDER ALONGWITH BID DOCUMENTS]

To

Executive Engineer (P), IIT Delhi, Hauz Khas, New Delhi – 110016

<u>Subject:</u> Submission of Bid for the work of <u>Modification of Student assembly area of LHC converting into 60 Seaters and 40 Seaters class rooms at IIT Delhi. Sub-Head:- Composite work.</u>

Dear Sir,

I / We acknowledge that IITD. 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 IITD. 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, IITD shall have unqualified, absolute and unfettered right to disqualify the tenderer /bidder and reject the tender/bid is 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 IITD]

INTEGRITY AGREEMENT

This Integrity 20			at	•••••	on	this	•••••	day	of
			В	ETWEEN					
The Board of Gove (P), IIT Delhi					•				J
as the 'Principal/C	ddress of Div	ision)							
successors and peri									
				AND		•••••			
Through	(Name a	and Addres	ss of t	the Individual		•	• .		
		authorized and whic	l sign h exp	ression shall	(He	reinafte	er referred		
<u>Preamble</u>									
WILEDEAS the Dring	oinal / Osymon h	as floated t	ha Ta	odor (NIT No	67 Co	mnosita	work /2019	0010/EI	(D) HTD

WHEREAS the Principal / Owner has floated the Tender (NIT No. 67 Composite work /2018-2019/EE (P), IITD.) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for "Modification of Student assembly area of LHC converting into 60 Seaters and 40 Seaters class rooms at IIT Delhi. Sub-Head:- Composite work "(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.

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 (PoC 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.
- 3) 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 (PoC 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)

- It is required that Nos. 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.
- 2) The Bidder(s)/Contractor(s) commit 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/PoC Act. Further the Bidder(s) / Contractor(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 as part 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.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practices 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.
- 5) 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 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 Subcontractors/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

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 04 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.

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 of IITD.

Article 7: Other Provisions

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

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:
Dated:

IITD - 7/8

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

Item Rate Tender & Contract for Works

Tender for the work of "Modification of Student assembly area of LHC converting into 60 Seaters and 40 Seaters class rooms at IIT Delhi. Sub-Head:- Composite work "

(A) (I) To be submitted online by 12/01/2019

3:00 PM

(II) To be opened technical bid on 15/01/2019

3:30 PM online

e-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 Board of Governors, IIT Delhi 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 ninety (90) days from the due date of its opening / ninety days from the date of opening of financial bid in case tenders are invited on 2/3 envelop system (**strike out as the case may be**) and not to make any modification in its terms and conditions.

A sum of **Earnest money of Rs.3**,18,850/- (Three Lakh Eighteen Thousand Eight Hundred Fifty Only) in favour of Registrar, I.I.T. Delhi in the form of Banker Cheque or Demand Draft or Fixed Deposit receipt of a schedule bank.

If I / We fail to furnish the prescribed performance guarantee within prescribed period I / We agree that the said The Board of Governors, IIT 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 the work as specified, I / We agree that The Board of Governors, IIT 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 they 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 12.3 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.

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 IIT Delhi 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 informati	ion in any manner prejudicial to the safety of the State.
Dated:	
	Signature of Contractor
Witness:	
Address:	Postal Address
Occupation:	
	ACCEPTANCE
	ou as provided in the letters mentioned hereunder) is accepted
	vernors, IIT Delhi, Hauz Khas, New Delhi - 110016 for a sum
` •).
The letters referred to below shall for	orm part of this contract agreement:-
(a)	
(b)	
(c)	
	For & on behalf of Board of Governors, IIT Delhi
	Signature
Dated:	Designation
CNil INil ONil	

PROFORMA OF SCHEDULES

[Operative Schedules to be supplied separately to Nos. intending tenderer]

SCHEDULE 'A'

Schedule of quantities (enclosed)

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
—	Nil			+

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S.No.	Description	Hire charges per day	Place of Issue
+	Ni l		

SCHEDULE 'D'

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



SCHEDULE 'E'

Reference to General Conditions of contract [GCC]

1	Name of work	:	Modification of Student assembly area of LHC	
			converting into 60 Seaters and 40 Seaters class rooms	
			at IIT Delhi.	
			Sub-Head:- Composite work	
2	Estimated cost of work	:	Rs. 1,59,42,181.00	
3	Earnest Money	:	Rs. 3,18,850.00	
4	Performance Guarantee	:	5 percent of tendered value	
5	Security Deposit	:	5 percent of tendered value	

SCHEDULE 'F'

GENERAL RULES & DIRECTIONS

: Officer inviting tender

Maximu	im percentage for quantity of items of work to be executed	:	See below	
beyond	which rates are to be determined in accordance with			
Clauses	12.2&12.3			
Definiti	ons:			
2[v]	Engineer – in – charge	:	Executive Engineer [P]	
2[vi]	Accepting Authority	: Institute Engineer.		
2[x]	Percentage on cost of materials and labour to	: 15 percent		
	Cover all overheads and profits			
2[xi]	Standard schedule of rates	:	DSR 2016 + Market Rate	
2[xii]	Department	:	Works organization.	
9[ii]	Standard IITD Contract Form	:	General Conditions of	
			Contract 2010, IITD Form 7/8-	
			2010 modified & Corrected up to	
			date of submission of tender	

Clau	ise 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 fees @ 0.1% per					
	day of performance guarantee amount beyond the period	:	1 to 15 days			
	provided in (i) above					
Claus						
Autho	ority for fixing compensation under clause 2	:	Institute Engineer			
Claus	ee 2 A:					
Whether Clause 2A shall be applicable : No						
Claus	e 5:					
Numb	per of days from the date of issue of letter of	:	10 [ten] days			
award	for reckoning date of start					

Milestone(s) as per table given below:-

Sl.	Description of Milestone	Time allowed in days	Amount to be with-held in case
No.	(Financial)	(from date of start)	of non-achievement of mile
			stone
1	1/8th (of the whole work)	1/4th(of the whole work)	In the event of not achieving
2	3/8th (of the whole work)	1/2th (of the whole work)	the necessary progress as
	370th (of the whole work)	1/2th (of the whole work)	assessed from the running
3	3/4th (of the whole work)	3/4th (of the whole work)	payment, 1% of the Tender
4	FULL	FULL	value of work will be withheld
4	FULL	FULL	for failure of each milestone.

Time allowed for execution of work	:	90 Days
Authority to decide:		
Extension of time	:	Institute Engineer
Rescheduling of mile stones	:	Institute Engineer
Clause Applicable 6 or 6A:	:	Clause 6A Applicable
Clause 7:		
Gross work to be done together with net payment /	:	Not Applicable
adjustment of advances for material collected, if any,		
since the last such payment for being eligible to interim		
payment		
Clause 10 A:		
List of testing equipment to be provided by the	:	As desired by the Engineer-in-charge
contractor at site lab		relating to the work
Clause 10B(ii):		
Whether Clause 10 B (ii) shall be applicable	:	No
Clause 10C:		
Component of labour expressed as percent of value of work	:	25 percent

Clause 10CA:

S.N.	Nearest Materials (other reinforcement bars and the stru which All India Wholesale Pri followed	ictural steel) for	Materials cove	ered under
1				
2	NIII			
3				
4				

^{*} Base price of all the materials covered under clause 10 CA is to be mentioned at the time of approval of NIT.

		1	Λ		
U	ause	1	v	u	L .

Clause 10 CC to be applicable in contracts with stipulated period of completion exceeding the period shown in next	:	12 Months
column		
Schedule of component of other Materials, Labour, POL etc. for		
price escalation		
Component of civil (except materials covered under clause	:	Nil.
10CA)/ Electrical construction Materials expressed as percent		
of total value of work		
Component of Labour expressed as percent of total value of	:	Y: 25 percent
work		
Component of P.O.L. expressed as percent of total value of	:	Not Applicable
work		

Clause 11

Specifications to be followed for execution of work	:	CPWD General specifications for Civil
		&Electrical work with upto date correction
		slips.

Clause 12

Clause 12		
Type of work	:	Maintenance works including works of
		upgradation, aesthetic, special repair, addition/
		alteration
Clause 12.2. & 12.3		
Deviation Limit beyond which clauses 12.2 & 12.3 shall apply	:	30 percent
for building work		
Clause 12.5		
Deviation Limit beyond which clauses 12.2 & 12.3 shall apply	:	100 percent
for foundation work		

Clause 16

Clause 18

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

1	2	3
4	5	6
7	8 R 11	9

Clause 36 (i)

Requirement of Technical Representative(s) and recovery Rate

S.	Minimum	Discipli	Designation (Principal	Minimum	Num	Rate at which rec	overy shall be made
No	Qualification of	ne	Technical/	Experience	ber	from the contractor in the event of n	
	Technical		Technical	(Years)		fulfilling provision of clause 36(i)	
	Representative		Representative)				
						Figures	Words
	i)Graduate Engineer	Civil	Principal Technical	05 years	01	Rs 25000/- Each.	Rupees Twenty Five
		&	Representative				thousand only./ P.M
	ii) Graduate Engineer	Electric	Project Planning/Site/ billing	02 years	01	Rs 15000/- Each.	Rupees Fifteen thousand
	or	al	Engineer				only./ P.M
	Diploma Holder			05 years	01		

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

C	Nil	I	Nil	0	Nil
· · · · ·	. 1 411			O	

Clause 42

- (i) (a) Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates 2016 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. For works with estimated cost put to

3% plus/minus.

tender more than Rs.5 lakh.

2% plus/minus.

(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

(d) All other materials.

Nil

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S.No.	Description of Item	Rates in figures and words at which recovery shall be made from the Contractor				
		Excess beyond permissible variation	Less use beyond permissible variation			
1.	Cement					
2.	Steel Reinforcement					
3.	Structural Sections	As per CPWD Specification 2014				
4.	Bitumen issued free					
5.	Bitumen issued at stipulated fixed Price					

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

<< Organization Letter Head >> DECLARATION

I / We, hereby declare 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 /										
we have gone through the specification, conditions and stipulations in details and agree to comply with the										
requirements and intent of specification.										
1	Name & Address of the bidder	:								
2	Phone	:								
2	E-mail									
3	E-IIIaII	:								
4	Contact person name	:								
_	Table 1									
5	Mobile number	:								
	COM									
6	GST number	:								
7	PAN number	1:								
,	1711 (Indiniber	•								
8	UTR no. with date [for payment]	:	Tender Fees		EMD					
	BANK DETAILS									
9	Bank name	:								
10	Branch address	:								
11	Branch telephone no.	:								
12	MICR Code of the bank	:								
13	IFSC code	1:								
1.4	Deal Acceptance	- -								
14	Bank Account no.	:								
15	Type of account	:								
We further declare that our organization has not been blacklisted / delisted or put to any holiday by any										
Institutional agency / Govt. Department / Public Sector Undertaking in the last three years.										
				[Si	gnature of the bid	lder]				
					ime:					
				Se	al of the bidder					
				~~						

COMMERCIAL AND ADDITIONAL CONDITIONS

1 General

1.1 This specification covers manufacture, testing as may be necessary before dispatch, delivery at site, all preparatory work, assembly and installation, final testing, commissioning, as per the CPWD General Specification for Composite work Part-I, II and Electrical work Part-I, II & IV for the following works.

Name of work & location: - Modification of Student assembly area of LHC converting into 60 Seaters and 40 Seaters class rooms at IIT Delhi. Sub-Head:- Composite work. The work shall be executed as per CPWD General Specifications for Composite work s as amended up to date and as per directions of Engineer-in-charge. These additional specifications and conditions are to be read in the Additional specifications and conditions shall apply. However, nothing extra shall be paid on account of these as the same are to be read along with schedule of quantities for the work.

2 COMMERCIAL CONDITIONS

2.1 Type of contract

The work to be awarded by this tender shall be treated as indivisible works contract.

2.2 Submission of Tender:-

Bidder shall submit the cost of tender documents, if any, e-tendering processing fee and earnest money, other documents, price bid in prescribed manner as indicated in "INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e-TENDERING FORMING PART OF NIT AND TO BE POSTED ON WEBSITE"

- 2.3 The tenderers are advised not to deviate from the technical specifications / items, commercial terms and conditions of NIT like terms of payment, guarantee, arbitration clause, escalation etc.
- 2.4 The department reserves the right to reject any or all the price bids and call for fresh price tenders as the case may be without assigning any reason.

2.0 Validity

Tenders shall be valid for acceptance for a period of 90 days from the date of opening of price bid.

4.0 Completion period

The completion period indicated in the tender documents is for the entire work of planning, designing, supplying, installation, testing, commissioning and handing over of the entire job to the satisfaction of the Engineer-in-charge.

5.0 SAFETY CODES AND LABOUR REGULATIONS

(i) In respect of all labour employed directly or indirectly on the work for the performance of the contractor's part of work, the contractor at his own expense, will arrange for the safety provisions as per the statutory provisions, B.I.S. recommendations, factory act, workman's compensation act, CPWD code and instructions issued from time to time. Failure to provide such safety requirements would make the tenderer liable for **penalty as specified in applicable clause.** In addition the Engineer-In-Charge shall be at liberty to make arrangements and provide facilities as aforesaid and recover the cost from the contractor.

(ii) The contractor shall provide necessary barriers, warning signals and other safety measures while laying pipelines, cables etc. or wherever necessary so as to avoid accident. He shall also indemnify IITD against claims for compensation arising out of negligence in this respect. Contractor shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause. The department shall not be responsible for any accident occurred or damage incurred or claims arising there from during the execution of work. The contractor shall also provide all insurance including third party insurance as may be necessary to cover the risk. No extra payment would be made to the contractor due to the above provisions thereof.

6.0 Payment Terms

6.1 Unless otherwise specified, in the additional conditions of the contract, the payment shall be made as per the relevant clauses of form PWD 7/8 forming a part of the tender documents.

7.0 Security Deposit

Security deposit shall be deducted from Nos. running bill and the final bill to be the extent of 10 percent of the gross amount payable. However the maximum amount of security deposit will be 5 percent of the tendered value. The earnest money deposited shall be adjusted against this security deposit. The security deposit shall be released on the expiry of guarantee period stipulated in the contract. Bank guarantee will not be accepted as security deposit.

8 Performance Guarantee

The successful tenderer shall submit an irrevocable performance guarantee of 5% of the tendered amount in addition to other deposits mentioned elsewhere in the contract in the contract for his proper performance of the contract agreement within 12 Months. Of issued of letter of acceptance of tender. This guarantee shall be in the form of Demand draft/ Pay order or irrevocable bank guarantee bond of any scheduled bank or the State Bank of India in the specified format or in the form of Government security, fixed deposit pledged in favour of Executive Engineer or as specified in the letter of acceptance of tender. **The performance guarantee shall be initially valid up to the stipulated date of completion plus 90 Days beyond**. This bank guarantee shall be kept valid till the recoding of completion certificate for the work by the competent authority.

9. Rates

- 9.1 The rates quoted by the tenderer, shall be firm and inclusive of all taxes (i/c Goods and Services Tax), duties & levies, octroi etc. and all charges for packing forwarding, insurance, freight and delivery, installation, testing, commissioning etc. at site i/c temporary construction of storage, risk, overhead charges, general liabilities / obligations and clearance from concerned authority.
- 9.2 Octroi duty shall not be paid separately but octroi exemption certificate can be furnished by the department on demand. However the department is not liable to re-imburse the octroi duty in case exemption certificates are not honored by the concerned authorities.

10. COMPLETION PERIOD

The completion period of 90 Days indicated in the tender documents is for the entire work of planning, designing, installation, testing, commissioning and handing over of the entire system to the satisfaction of the Engineer – in – charge.

11. COMPLETENESS OF TENDER

All sundry equipment, fittings, unit, assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections, cable glands, junction boxes and all other items which are useful and necessary for efficient assembly and installation of equipment and components of the work shall be deemed to have been included in the tender irrespective of the fact whether such items are specifically mentioned in the tender documents or not.

12. STORAGE AND CUSTODY OF MATERIALS

The existing Sub Station LT Panel room may be used for storage of materials and equipments. No separate storage accommodation shall be provided by the department. Watch and ward of the stores and their safe custody shall be the responsibility of the contractor till the final taking over the installation by the department.

13. CARE OF THE BUILDING

Care shall be taken by the contractor while handling and installing the various equipments and components of the work to avoid damage to the building. He shall be responsible for repairing all damages and restoring the same to their original finish at his cost. He shall also remove at his cost all unwanted and waste material arising out of the installation from the site of work.

14. WORKS TO BE DONE BY THE TENDERER

Following works shall be done by the contractor and therefore, their cost shall be deemed to be included in their tendered cost-whether specifically indicated in the schedule of work or not:-

- i) Sealing of all floor slab/wall openings with PCC if, provided by the Department or contractor for pipes and cables, from fire safety point of view, after laying of the same.
- ii) Sealing of all wall openings left for duct crossing with brick machinery with plaster.
- iii) Painting of all exposed metal surface of equipments and components with appropriate colour.
- iv) Making opening in the walls/floors/slabs or modification in the existing openings wherever provided for carrying pipe line, ducts etc.
- v) Providing wooden/metallic frames for fixing grills/ diffusers.
- vi) Making good all damages caused to the structure during installation and restoring the same to their original finish.

Any other minor building work required for the successful execution of the system and its operation.

16. Power supply, water supply and Draining

It is clarified that electricity will be provided from the existing connection near building and necessary arrangement for tapping and termination of supply will be done by the contractor. The charges for electricity may be recovered from the running account bill of the contractor as per the bill raised by IIT Delhi authorities.

17. Data manual and Drawings to be furnished by the tenderers:

With Tender: The tenderer shall furnish along with the tender, detailed technical literature, pamphlets and performance data for appraisal and evaluation of the offer.

17.2 **After Award of work**

The successful tenderer would be required to submit the drawings as per para 1.18.2 within 3 days of award of work for approval before commencement of installation.

18.0 Data Manual and Drawings to be furnished by the Tenderers:

18.1 After Award of work the contractor shall prepare & submit three sets of following drawings and get them approved from the Engineer-in-charge before the start of the work. The approval of drawings however does not absolve the contractor not to supply the equipments/ materials as per agreement, if there is any contradiction between the approved drawings and agreement.

Any other drawings relevant to the work

18.2 **Completion Drawings**

18.2.1 Three sets of the following laminated drawings shall be submitted by the contractor while handing over the complete site to the Department. In addition one set will be given on compact disc.

19. Extent of Work

- 19.1 The work shall comprise of entire labour including supervision and all materials necessary to make a complete installation and such tests and adjustments and commissioning as may be required by the department. The term complete installation shall not only mean major items of the plant and equipments covered by specifications but all incidental sundry components necessary for complete execution and satisfactory performance of installation with all layout charts whether or not those have been mentioned in details in the tender document in connection with this contract.
- 19.2 Minor building works necessary for installation of making of opening in floors or in walls and restoring to their original condition, finish and necessary grouting etc. as reqd.
- 19.4 Any item required for completion of the project but left inadvertently shall be executed with-in the quoted rate.
- 19.5 Contractor has to create PCC platform outside the building for fabrication and assembling of duct etc. as no fabrication will be allowed inside the building to avoid the damages and hindrance to other works
- 19.6 Contractor has to construct his own temporary store outside the building till the plant room is not ready and make watch and ward arrangement of the store. The location of the store shall be get approved from Engineer-in-charge.
- 19.7 Contractor has to provide technical assistance as and when required for approval of drawings etc.
- Inspection and testing: Initial inspection at works and final inspection and testing at site shall be carried out as per chapter 17 of CPWD General Specification for HVAC works 2004 as amended to date may be read along with 17(22) of technical specifications.

21 Validity

Tenders shall be valid for acceptance for a period of 90 days from the date of opening of price bid

22 Compliance with Regulations and Indian Standards, Indemnity & Insurance.

All works shall be carried out in accordance with relevant regulation, both statutory and those specified by the Indian Standards as detailed in Para 1.21& 1.22 of CPWD General Specifications for Composite work and Electrical Work 2005 amended upto date.

23 Mobilization Advance:

23.1 No mobilization advance will be given.

24. Insurance and Storage:

All consignments are to be duly insured up to the destination from warehouse to warehouse at the cost of the contractor. The insurance covers shall be valid till the equipment is handed over duly installed, tested and commissioned.

25. Verification of correctness of Equipment at Destination:

The contractor shall have to produce all the relevant records to certify that the genuine equipment from the manufacturers has been supplied and erected.

26. CLEAN UP WORKS AT SITE

During erection the contractor shall at all times keep the working and storage areas free from waste or rubbish. On completion of erection he shall remove all temporary structures, debris and leave the premises clean to the full satisfaction of the department.

27. RATES

Rates for Nos. of the items of Schedule of Quantity shall be firm and consolidated for the equipment delivered, installed, commissioned and tested at site including all taxes and levies. Prices shall remain firm and free from variation due to rise and fall in the cost of material equipments. Labour or any other reason whatsoever due to changes in statutory rules and regulations so far as admissible under the conditions of the contract.

28. TERMS OF PAYMENT

The terms of payments shall be as indicated in General Conditions of Contract.

29. PAINTING WORK

The painting should be carried out as required and as per the instruction of the department. The procedure and the standard colour codes are as follows:

- 1) Cleaning the surface
- 2) Apply a primer coat of red oxide
- 3) Applying two coats of enamel paint of APPROVED colour code after applying cement primer for plastered surface.

SPECIAL CONDITIONS

- 1. The Work has to be completed within the stipulated time.
- 2. In case it is noticed that the firm is intentionally delaying the work for one reason or the other, the firm could be debarred for future works i/c forfeiture of the EMD.
- 3. In case of any extra item, the contractor shall seek prior permission in writing from the Engineer-in-charge and submit analysis of rates.
- 4. In case of slow progress/intentional delay by the contractor the work can be withdrawn/rescinded in whole or part thereof and executed at the risk & cost of the defaulting contractor.
- 5. In case of any dispute, the arbitrator shall be appointed by the Director, IIT Delhi and his decision shall be Final as well as binding on both the parties.
- 6. Hindrance register shall be maintained by AEE (C) / JE(C) at site.
- 7. Instructions given in Site Order Book would be followed immediately by the contractor.
- 8. No T & P would be supplied by the institute and contractor will have to make own arrangement.
- 9. The contractors are advised to get acquitted with the proposed work including specifications & its and additional conditions carefully before quoting. No claim of any sort shall be entertained or account of any site conditions ignorance of specification & additional conditions. The work shall be carried out as per the availability of site
- 10. The work shall be carried out as per CPWD specifications 2014 volume I & II 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 in terms of latest from 7/8 of IITD.
- 11. 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 place etc.
- 12. 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.
- 13. 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.
- 14. Articles manufactured by the reputed firms and approved by Engineer-in –Charge shall only be used. Only articles classified as "First quality" by the manufacturer shall be used unless otherwise specified.
- 15. The sample of material required in the work brought at site shall be got approved from Engineer-in-Charge before use in execution of work.
- 16. 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 Department in case the test results are satisfactory and if test results fail testing charges shall be deducted from the bills of the contractor. All other expenditure to be incurred for taking sample, conveyance, packing etc. shall be borne by the contractor. Testing shall be done at NABL approved lab.
- 17. The Engineer-in-Charge can modify the programme and the contractors have to work accordingly. In case work does not start within 7 days the same is liable to be rescinded as per latest form 7/8 IITD and In case of delay liquidated damages to be imposed on Contractors as per latest form 7/8 of IITD. Extension of time in work shall be dealt as per latest form 7/8 of IITD.

- 18. Some restrictions may be imposed by the security staff of IIT Delhi etc. on the working and or movement of labour camp/ huts shall be allowed in IIT Campus. The Contractor shall make his own arrangement for labour huts outside the campus. However constructions of cement go down 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.
- 19. The contractor shall be fully responsible for the safe custody of the material issued or brought at site by him for doing work.
- 20. 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.
- 21. The contractor shall clean the site thoroughly of scaffolding materials, rubbish, equipments 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.
- 22. 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. The amount against these items will be subtracted in calculating lowest agency.
- 23. 1% labour cess or as applicable will be deducted from the bills of contractor.
- 24. Water charges @ 1% of work done shall be deducted from bills if water supplied by Department.
- 25. Electricity charges shall be deducted @ 0.5% (Half Percentage) of the bill amount if supplied by the department.
- 26. The Clause of extension of time is also applicable as per CPWD manual.
- 27. GCC for 7/8 shall form part of NIT and the bidder shall go through GCC before quoting rates and the same shall be deemed to be accepted by bidder if he participates in the tender.
- 28. The quoted rates of all items shall be inclusive of all taxes including Goods and Service Tax, Labour Cess etc. and nothing extra shall be payable on this account.
- 29. The shop drawings for steel work (for civil partitions, electrical work, LAN, Fire Fighting & CCTV etc.) shall be submitted by agency for approval before execution of work. Nothing is to be paid extra on this account.
- 30. The CCTV Camera, NVR & switch should be compatible with the existing system installed in the LHC IIT Delhi.
- 31. 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.
- **32.** The smoke detectors & sprinklers to be provided should be compatible with the existing system installed in the LHC IIT Delhi.

TECHNICAL COMPLIANCE FOR CAMERA, NVR & SWITCH (Part 4) Electrical

Product Line Description	2MP IP IR Dome Camera	Compliance (Only Yes or No) with make & model
IMAGE SENSOR	1/3" 2 megapixel progressive scan CMOS	
EFFECTIVE PIXELS	1920 (H) × 1080 (V)	
ELECTRONIC SHUTTER SPEED	Auto/Manual, 1–1/100000 s	
MIN. ILLUMINATION	0.1 lux, F2.1 (Colour); 0 lux (IR LEDs on)	
IR DISTANCE	Up to 30 m	
DAY/NIGHT	Auto (ICR)/Colour/BW	
BACKLIGHT COMPENSATION	Back Light Compensation/DWDR & Highlight Compensation	
AUTO WHITE BALANCE	Required	
AUTOGAIN CONTROL	Required	
NOISE REDUCTION	3D	
PRIVACY MASKING	Up to 4 areas	
FOCAL LENGTH	2.8 mm	
MAX. APERTURE	F2.1	
FOCUS CONTROL	Fixed focus	
HORIZONTAL ANGLE OF VIEW	OF Minimum 92°	
LENS TYPE	Fixed	
COMPRESSION	H.264 (Main/High/Baseline Profile) /MJPEG	
RESOLUTION	1080p (1920×1080), 720p (1280×720), D1 (704×576/704×480), CIF (352×288/352×240)	
FRAME RATE	1080p (1–25/30 fps), D1, CIF (1–25/30 fps)	
COMPRESSION	H.264: 4–8192 kbps	
CORRIDOR MODE	Required	
ETHERNET	RJ-45 (10/100Base-T)	
PROTOCOL	IPv4/IPv6, HTTP, HTTPS, TCP/IP, UDP, UPnP,	
	ICMP, IGMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS, 802.1X.	
COMPATIBILITY	ONVIF Profile S	
MAX. USER ACCESS	20 users	
POWER SUPPLY	PoE (802.3af), 12 V DC	
POWER CONSUMPTION	4.7 W max. (with IR LEDs on)	
WORKING ENVIRONMENT	-30°C to 60°C; 10% to 100%, RH condensing	
ENVIRONMENT	condensing	

Approved Makes	Axis, Honeywell &Pelco	
Certification Required	CE. FCC. UL	
VANDAL RESISTANCE	IK10	
INGRESS PROTECTION	IP66	

		Compliance
ProductLine	Standalone Network Video Recorder	(Only Yes or
Description		No) with make
		& model
Stand	alone Network Video Recorder	
Make	Bidder to specify	
Model	Bidder to specify	
Туре	Rack-mountable, Dedicated Network Video Recorder with suitable hardware to connect up to 32 channel IP cameras. Offered storage is not an externally attached device to NVR, the total recording storage requirement shall be met through internally installed HDD itself. The bidder to submit the storage analysis for required no of cameras for a period of 30 days @25fps on minimum 1080P resolution.	
Storage Capacity	Each NVR storage unit should be provided with Internal storage supports 8 HDDs expandable up to 64 TB (8 TB each)	
Audio Input/ Output	1 Channel Input/1 Channel Output	
Two-Way	Supported	
Communication		
Interface	2 HDMI(1 HDMI up to 3840 * 2160: 1 VGA	
	2 nd HDMI Output	
Output Operating System	Linux or Embedded or Microsoft	
Operating System Network Throughput	Input 320 Mbps: Output 320 Mbps	
Record Bit Rate	cord Bit Rate 320 Mbps	
Bit Rate	16 kbps – 20 mbps per channel	
Video Compression	H.265, H.264, MJPEG/MPEG4	
Recording	The offered NVR must be able to support	
Support	simultaneous recording of 64 IP cameras at	
	1080p resolution at 25/30 fps	
No.playback streams	Bidder to specify	
Recording Resolution	12 MP (4000 × 3000); 8 MP (3840 × 2160); 6 MP	

	(3072 × 2048); 5 MP (2560 × 1920); 4 MP (2560 ×	
	1440); 3 MP (2048 × 1520); 1080p (1920 × 1080);	
	720p (1280 \times 720); D1 (704 \times 576 / 704 \times 480); CIF	
	$(352 \times 288 / 352 \times 240)$	
Network Protocol	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP,	
Support	UDP, SMTP, NTP, DHCP, DNS, IP Filter,	
Support	PPPoE, DDNS, FTP, Alarm Server, IP	
	Search, P2P.	
Accessories	Under bidder's scope: All required cables,	
Ticossories	connectors & interfaces, mounting	
	arrangement, software's etc. for successful	
	installation, commissioning of NVR.	
Documentation	Installation guide, Operation &Maintenance	
	Manuals, Installation	
	CD/DVD for licensed software	
InputVoltage	100~240 V AC, 50/60 Hz.	
Compatibility	The supplied NVR must be compatible in all	
	respects to the cameras being supplied at the	
	locations	
PowerConsumption	Bidder to specify	
Operatingtemperature	-10°C ~ 55°C or better	
Operating Humidity	10% to 90% RH, non-condensing	
Product Safety	To comply with CE, FCC, Type Test, CCC;	
	111	
	UL	
Detailsrequired with	Bidder to submit the details of complete	
offer	offered solution (Item make, model/part code,	
	block diagram etc.) as stated above along with	
	the offer	
Certification Required	UL, EN, FCC	
Approved Makes	Axis, Honeywell, Pelco	

8 Port Switch with 2 Fiber Port	Compl (Only No)	
Switch shall have minimum 8 nos. 10/100/1000 Base-T ports with PoE+capability and minimum 60W of PoE Power and additional 2 nos. Combo uplink ports loaded with 2 nos. of SMF modules.		
Shall have minimum 20 Gbps of switching fabric and 14.88Mpps of forwarding rate.		
Should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z, 802.3az, 802.3af, 802.3at.		
Switch should support port security, DHCP snooping, Dynamic ARP inspection, IP Source guard, BPDU Guard, spanning tree root guard and IPv6 First Hop Security.		
Ipv6 QoS, Ipv6 ACL, Multicast Listener Discovery (MLD v1/2) snooping, Ipv6 applications and Ipv6 First Hop Security.		
Switch should be Ipv6 Certified/Ipv6 logo ready. Approved Makes: CISCO		

Warranty: Three years for CCTV Equipment.

- 1.1The supplier/firm shall provide warranty that the equipment/system to be supplied shall be new and free from all defects and faults in material. Workmanship and manufacture and shall be of the highest grade, consistent with the established and generally accepted standards for materials of the type ordered and shall perform in full conformity with the specifications and drawings. The supplier shall be responsible for any defects that may develop under the condition provided by the supplier and under proper use arising from faulty materials, design or workmanship such as corrosion of the equipment, inadequate quantity of material to meet equipment requirements, inadequate contract protection, deficiencies in circuit design and or otherwise and shall remedy such defects at their own cost where called upon to do so by the purchaser who shall state in writing in what respect equipment is faulty. Replacement under warranty clause shall be made by the supplier free of all charges at site including fright insurance and other incidental charges.
- 1.2If it becomes necessary for the supplier/firm to replace or renew any defective portion(s) of the equipment under this clause, the provisions of the clause shall apply to the portion(s) of equipment so replaced or renewed or until the end of the above mentioned period of three year (Thirty Six Months). Whichever may be later. If any defect is not remedied within a reasonable time, the purchaser may proceed to do the work at the supplier's risk and expenses, but without prejudice to any other rights that the purchaser may have against the supplier in respect of such defects.

ACCEPTABLE MAKE OF EQUIPMENTS AND MATERIALS

	ACCEPTABLE MAKE OF EQUIPMENTS AND MATERIALS		
S. No.	Description	Approved Makes	
1.	Cement (Grey) OPC/ PPC Grade-43.	ACC / L & T/ J.K. / BIRLA/ UTRA TECH/ VIKRAM	
2.	Cement (White)	J.K. / BIRLA	
3.	Reinforcement Steel	PRIMARY MANUFACTURERS APPROVED BY MINISTRY OF STEEL / SECONDARY MANUFACTURERS HAVING VALID BIS LICENSE (to be as per letest RIS provisions)	
4.	Structural Steel	LICENSE (to be as per latest BIS provisions) PRIMARY MANUFACTURERS APPROVED BY MINISTRY OF STEEL / SECONDARY MANUFACTURERS HAVING VALID BIS LICENSE (to be as per latest BIS provisions)	
5.	Stainless steel (Grade 304)	JINDAL / SAIL / Salem	
6.	Bricks	COMMERCIALLY AVAILABLE OR REQUIRED STRENGTH	
7.	Aluminium Sections	HINDALCO / JINDAL / MAHAVIR	
8.	Flush doors	CENTURY / MERINO / DURO BOARD /GREEN	
9.	Laminates	GREENLAM / DURO / ARCHID / MERINO /DECOLAM / CENTURY	
10.	Glass / Mirror	SAINT GOBAIN / MODI FLOAT / ASAHI FLOAT	
11.	Ceramic Glazed tiles/Border tiles	1 ST QUALITY KAJARIA / NITCO / JOHNSON / ORIENT / SOMANY	
12.	Vitrified Tiles	NAVEEN / NITCO / JOHNSON / KAJARIA	
13.	Interlocking Precast pavers blocks / Kerb Stone	HINDUSTAN TILES / SWASTIK ALW/DALAL	
14.	Stainless Steel Hinges	JOLLY / GARG /AMIT / ASI SUPREME	
15.	Stainless Steel Nuts Bolts / Screws	KUNDAN / PUJA / ATUL / GKW	
16.	Paint / primer / oil bound distemper /Acrylic paint/plastic paint	1 st QUALITY PAINTS OF ASIAN / BERGER / NEROLAC / AKZONOBAL INDIA / SHALIMAR	
17.	Water Proof. Cement Paint/ Exterior paint	1 st QUALITY PAINTS OF ASIAN PAINTS / BERGER / NEROLAC / AKZONOBAL / SHALIMAR	
18.	Sanitary ware (Vitreous China) (European Seats, Urinals, Wash Basins, etc.)	HINDWARE / PARRYWARE/ CERA	
19.	Seat Covers	HINDWARE / PARRYWARE/ CERA	

	ACCEPTABLE MAKE OF EQUIPMENTS AND MATERIALS		
S. No.	Description	Approved Makes	
20.	C.P. brass Fittings / Accessories	JAQUAR / MARC / KOHLAR	
21.	G.I. Pipes	TATA / JINDAL (HISSAR)	
22.	G.I. Fittings	UNIK / ZOLOTO / AM	
23.	Stainless Steel Sink	NEELKANTH / JAINA / KINGSTON (COBRA)	
24.	Commercial Board / PLY	MERINO / DURO /GREEN/ CENTURY	
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	Dorma/Hafele/ Hardwyn/Kich/Geze	
28.	Door Closer	Dorma/Hafele/ Hardwyn/Kich/Geze	
29.	MIRROR	ATUL,MODIGUARD,SAINT GOBAIN	
30.	Vertical Blinds	VISTA / MAC	
31.	Metal False Ceiling	ARMSTRONG/ SANIT GOBAIN/ META WORTH	
32.	Water proofing compound	CICO / FOSROC / PIDILITE	
33.	Polymer Compound	CICO / PIDILITE / FOSROC	
34.	Particle Board	NOVA PAN / BHUTAN BOARD/ ECO BOARD	
35.	Rust Remover / Anticorrosive	FOSROC / CICO / PIDILITE	
36.	Adhesive	FEVICOL / VAMICOL/DUNLOP/VAM ORGANIC	
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)	Sintex / 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.	Aluminium Door fittings	Classic/ Everrest/Argent	
44.	Brass Bib / Stop cock	AGI / ELITE / Shakti / Sant / Leader	
45.	Thermoplastic paint	CBM, CMS, S.N. Industries.	
46.	Plaster of Paris Putty	ADHARSHREE/ SHREE RAM/ J.K	

	ACCEPTABLE MAKE OF EQUIPMENTS AND MATERIALS		
S. No.	Description	Approved Makes	
47.	RCC Pipe	LAKSHMI/SOOD&SOOD/JAIN &Co. /Diwan spun pipes.	
48.	PVC Pipe	Prakash /Prince/Supreme	
49.	Glass Pans	SAINT GOBAIN,ASAHI INDIA,MODI GUARD	
50.	Hardware Fittings Stainless Steel	Dorma/ Blum/ Hettich/ Kich	
51.	Stainless Dash Fasteners/ Anchors	Hilti/ Fischer/UIP/Hitachi-Mungo	
52.	Ball Bearing Hinges and Spring Hinges	Dorma/ Hafele/ Geze/ Kich	
53.	Fire Retardant Paint	Asian Paints/ Berger Paints/ Shalimar/ Acro Paints	
54.	Wood Polish	Asian Paints/ Pidilite Industries/ ICI Dulux	
55.	Gypsum Board	St. Gobain Gyproc/ USG Boral	
56.	Calcium Silicate False Ceiling System Along with Supporting Grid	Aerolite/ Everest/ NCL/ Hilux	
57.	Mineral Fibre Ceiling	Armstrong/ Daikin/ Saint Gobain.	
58.	Steel Fire Door Shutter	Godrej/ Navair/ Saint Gobain/ Sukri	
59.	Wooden/ Metal glazed acoustic Fire door	Navair/ Sukir/ Pacific/ Kutty	
60.	Fire Check Glass 120 minute rating	Saint Gobain/ Pyrogaurd/Schott	
61.	Fire doors Hardware	Dorma/Kich/Geze/Hafele	

N.B.: For any item not covered in the above list, the contractor shall require to get the samples approved from the Engineer-in-charge before the supply is made.

C....Nil I....Nil O....Nil

D'Man /J.E. A.E.E / A.E. E.E.

LIST OF APPROVED MAKES FOR ELECTRICAL WORKS

1	PVC insulated copper wire (All size)	Finolex / Skytone / Havells / ECKO (ISI Marked)	
2	Steel conduit BEC / AKG / NIC / M.KAY (ISI Marked)		
3	PVC conduit	Poly pack / AKG/ Setia I.S.I. Marked.	
4	Batten Holder /ceiling rose /call bell & ordinary Switch, socket/regulator (socket type)	Anchor / Antex / M. KAY I.S.I. Marked.	
5	Modular type 5A switch, socket & 15A Switch, socket and electronic fan regulator (stepped type)	Roma / M.K / North West / Legrand (ISI Marked).	
6	Modular plate & cover	ROMA / MK / Northwest / LEGRAND (ISI Marked).	
7	Distribution board /MCB.	Legrand / Schneider / Hager.	
8	MCCB's / S.F.U. switches	Legrand / Schneider / Hager.	
9	Industrial type socket (SPN)	N) Hager / Legrand / Schneider / Indo Asian / Havells.	
10	Industrial type socket (TPN)	Hager / Legrand / Schneider.	
11	Ceiling fans (All size).	Usha Striker / Havells Velocity/ Crompton Greaves High Speed.	
12	Exhaust fans (All size).	Crompton Greaves / GEC Alstom / Usha / HAVELLS.	
13	L.T armored cable.	Havells / Grandlay/ ICL/ NICCO I.S.I. Marked.	
14	Energy meters.	Havells / Benitex / Jaipur.	
15	Ammeter & Voltmeter.	AE /HPL /Enercon (Conserve).	
16	G.I. pipes.	JINDAL /TATA (I.S.I. Marked).	
17	LED Fittings 20 watt. 1200 mm (-+6%) length	Wipro code no D532265/ Harvells LHE WEBP71NIWO20/ PHILIPS	
18	G.I. Box	Anchor / Legrand / Havells.	

N.B.: For any item not covered in the above list, the contractor shall require to get the samples approved from the Engineer-in-charge before the supply is made.

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	Organization Declaration Sheet as per Annexure - I	PDF.
2.		Affidavit as per NIT condition 1.2.2 on stamp paper	PDF.
3.		Enlistment order of contractor.	PDF.
4.		Certificate of work experience as desired	PDF.
5.		Acceptance to execute integrity pact	PDF.
6.		IITD 7/8 duly signed by the bidder	PDF.
7.		EPFO & ESIC Registration proof PDF.	
8.		GST Registration proof PDF	
9.		Any other document as specified in the NIT PDF.	
10.	Submission of Technical Compliance sheet as per page PDF. 37 to 40.		PDF.
	Envelope – 2		
Sl. No.	TYPES	Content	
1.	Financial Bid	Price bid should be submitted in BOQ format.	.XLS

IITD - 2010 CORRECTION SLIPS

In General condition of contract for IIT Delhi works department 2010 –

Reference	Existing	Modified	
Clause	Before any installment of advance is	Before any installment of advance is	
10B	released, the contractor shall execute a Bank Guarantee Bond from Scheduled Bank for	released, the contractor shall execute a Bank Guarantee Bond from Scheduled	
(ii),	the amount of advance &valid for the	Bank for the amount equal to 110% of	
Para-2	from time to time to cover the balance	the amount of advance and valid for the contract period. This (Bank Guarantee	
	amount and likely period of complete	from Scheduled Bank for the amount	
	recovery, together with interest.	equal to 110% of the balance amount of	
		advance) shall be kept renewed from time	
		to time to cover the balance amount and	
		likely period of complete recovery.	
Clause 3	If the contractor shall obtain a contract with	If the contractor had secured the contract	
(::)	Government as a result of wrong tendering or	with Government as a result of wrong	
(vii)	other non-bonafide methods of competitive	tendering or other non-bonafide methods	
	tendering.	of competitive tendering or commits	
		Breach of Integrity Agreement.	

Reference	Existing Provision	Modified Provision
Page 5, IITD 2010	Page 5, IITD 2010 4A. Applicable for Percentage Rate Tender only (IITD-7) In case of Percentage Rate Tenders, a tenderer shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for Nos. Tender	Page 5, IITD 2010 4A. Applicable for Percentage Rate Tender only (IITD-7) In case of Percentage Rate Tenders, contractor shall fill up the usual printed form, stating at what percentage below/above (in figures as well as in words) the total estimated cost given in Schedule of Quantities at Schedule-A, he will be willing to execute the work. The tender submitted shall be treated as invalid if:- 1. The contractor does not quote percentage above/below on the total amount of tender or any section/sub head of the tender. 2. The percentage above/below is not quoted in figures & words both on the total amount of tender or any section/sub head of the tender.

shall have the name and number of the works to which they refer, written on the envelopes. 3. The percentage quoted above/below is different in figures & words on the total amount of tender or any section/sub head of the tender: Tenders, which propose any alteration in the work specified in the said form of invitation to tender, or in the time allowed for carrying out the work, or which contain any other conditions of any sort including conditional rebates, will be summarily rejected. No single tender shall include more than one work, but contractors who wish to tender for two or more works shall submit separate tender for Nos. Tender shall have the name and number of the works to which they refer, written on the envelopes.

New Para 4B is added as below:

4B: In case the lowest tendered amount (estimated cost + amount worked on the basis of percentage above/ below) of two or more contractors is same, such lowest contractors will be asked to submit sealed revised offer in the form of letter mentioning percentage above/below on estimated cost of tender including all sub sections/sub heads as the case may be, but revised percentage quoted above/below on tendered cost or on Nos. sub section/ sub head should not be higher than the percentage quoted at the time of submission of tender. The lowest tender shall be decided on the basis of revised offers.

In case any of such contractors refuses to submit revised offer, then it shall be treated as withdrawal of his tender before acceptance and 50% of earnest money shall be forfeited.

If the revised tendered amount of two more contractors received in revised offer is again found to be equal , the lowest tender, among such contractors, shall be decided by draw of lots in the presence of SE of the circle, EE(s) in-charge of major & minor component(s) (also DDH in case Horticulture work is also included in the tender), EE(P) or EE(HQ) of the circle & the lowest contractors those have quoted equal amount of their tenders.

In case all the lowest contractors those

		have quoted same tendered amount, refuse to submit revised offers, then tenders are to be recalled after forfeiting 50% of EMD of Nos. contractor. Contractor(s), whose earnest money is forfeited because of non-submission of revised offer, shall not be allowed to participate in the re-tendering process of the work.
Reference	Existing Provision	Modified Provision
10A (page 6-7)	In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy. However if the contractor has worked out the amount of the tender and if any discrepancy is found in the percentage quoted in words and figures, the percentage which corresponds with the amount worked out by the contractor shall, unless otherwise proved, be taken as correct. If the amount of the tender is not worked out by the contractor or it does not correspond with the percentage written either in figures or in words, then the percentage quoted by the contractor in words shall be taken as correct. Where the percentage quoted by the contractor in figures and in words tally but the amount is not worked out correctly, the percentage quoted by the contractor will, unless otherwise proved, be taken as correct and not the amount.	In case of Percentage Rate Tenders only percentage quoted shall be considered. Any tender containing item rates is liable to be rejected. Percentage quoted by the contractor in percentage rate tender shall be accurately filled in figures and words, so that there is no discrepancy. (Remaining part deleted)
Reference	Existing Provisions	Modified Provisions
Deviations/ Variations Extent and Pricing	CLAUSE 12 The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and	CLAUSE 12 The Engineer-in-Charge shall have power (i) to make alteration in, omissions from, additions to, or substitutions for the original specifications, drawings, designs and

instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him writing signed by the Engineerin-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main works except as hereafter provided.

instructions that may appear to him to be necessary or advisable during the progress of the work, and (ii) to omit a part of the works in case of non-availability of a portion of the site or for any other reasons and the contractor shall be bound to carry out the works in accordance with any instructions given to him writing signed by the Engineerin-Charge and such alterations, omissions, additions or substitutions shall form part of the contract as if originally provided therein and any altered, additional or substituted work which the contractor may be directed to do in the manner specified above as part of the works, shall be carried out by the contractor on the same conditions in all respects including price on which he agreed to do the main works except as hereafter provided.

The completion cost of any agreement for Maintenance works including works of up gradation, aesthetic, special repair, addition/ alteration shall not exceed 1.25 times of Tendered amount.

Deviations, Extra Items, Pricing

12.2

In the case of extra items (items that are completely new and are in addition to the items contained in the contract), the contractor may within 90 days of receipt of order or occurrence of the item(s) claim rate, supported by proper analysis, for the work and the Engineer-in-charge shall within one month of the receipt of the claims supported by analysis after giving considerations to the analysis of the rates submitted by the contractor, determined the rates on basis of market rates and the contractor shall be paid in accordance with the rates so determined.

12.2

A. For Project and original works:

In the case of extra items (items that are completely new and are in addition to the items contained in the contract), the contractor may within 90 days of receipt of order or occurrence of the item(s) claim rate, supported by proper analysis, for the work and the Engineer-in-charge shall within one month of the receipt of the claims supported by analysis after giving considerations to the analysis of the rates submitted by the contractor, determined the rates on basis of market rates and the contractor shall be paid in accordance with the rates so determined.

B. For Maintenance including works of up gradation, aesthetic, special repair, addition/alteration:

In the case of Extra Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plush cost index (at the time of tender) plus/minus percentage above below quoted contract amount.

Payment of Extra items in case of nonschedule items (Non-DSR items) shall be made as per the prevailing market rate.

Deviation, Substituted Items, Pricing In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following Para.

- (a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).
- (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement item (to be substituted)

A. For Project and original works:

In the case of substituted items (items that are taken up with partial substitution or lieu of items of work in the contract), the rate for the agreement item (to be substituted) and substituted item shall also be determined in the manner as mentioned in the following Para.

- (a) If The market rate for the substituted item so determined is more than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted).
- (b) If the market rate for the substituted item so determined is less than the market rate of the agreement item (to be substituted), the rate payable to the contractor for the substituted item shall be the rate for the agreement item (to be substituted) so decreased to the extent of the difference between the market rates of substituted item and the agreement

item (to be substituted). For Maintenance including works of up gradation, aesthetic, special repair, addition/alteration:

In the case of Substitute Item(s) being the schedule items (Delhi Schedule of Rates items), these shall be paid as per the schedule rate plush cost index (at the time of tender) plus/minus percentage above below quoted contract amount. Payment of Extra items in case of non-schedule items (Non-DSR items) shall be made as per the prevailing market rate.

Deviation, Deviated Quantities, Pricing

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

A. For Project and original works:

In the case of contract items, substituted items, contract cum substituted items, which exceed the limits laid down in schedule F, the contractor may within fifteen days of receipt of order or occurrence of the excess, claim revision of the rates, supported by proper analysis for the work in excess of the above mentioned limits, provided that if the rates so claimed are in excess of the rates specified in the schedule of quantities, the Engineer-in-Charge shall within one month of receipt of the claims supported by analysis, after giving consideration to the analysis of the rates submitted by the contractor, determine the rates on the basis of the market rates and the contractor shall be paid in accordance with the rates so determined.

B. For Maintenance including works of up gradation, aesthetic, special repair, addition/ alteration: In the case of contract items, which exceed the limit laid down in schedule F, the contractor shall be paid rates specified in the schedule of quantities.

	12.3 The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.	The provisions of the preceding paragraph shall also apply to the decrease in the rates of items for the work excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates. B. For Maintenance including works of up gradation, aesthetic, special repair, addition/alteration: In the case of decrease in the rates Prevailing in the market of items for the work excess of the limits laid down in Schedule F, and the Engineer-in-Charge shall after giving notice to the contractor within one month of occurrence of the excess and after taking into consideration any reply received from him within fifteen days of the receipt of the notice, revise the rates for the work in question within one month of the expiry of the said period of fifteen days having regard to the market rates.
Schedule F	Clause 12	Clause 12
	No provision.	Type of work: Maintenance works including works of up gradation aesthetic,

special repair, addition/ alteration.

Name of work:- Modification of Student assembly area of LHC converting into 60 Seaters and 40 Seaters class rooms at IIT Delhi.

Sub-Head :- Composite work

SCHEDULE OF QUANTITY

Civil Items.

S. No.	Description of items.	Qty.	Unit.	Rates	Amount.
1	CONCRETE WORK				
1.1	Providing and laying cement concrete in retaining walls, return walls, walls (any thickness) including attached pilasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window sills, fillets, sunken floor etc., up to floor five level, excluding the cost of centering, shuttering and finishing:				
1.1.1	1:2:4 (1 Cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size).	1	Cum		
2	MARBLE AND GRANITE WORK				
2.1	Mirror polishing on marble work/Granite work/stone work where ever required to give high gloss finish complete.	1390	Sqm		
3	WOOD AND P.V.C. WORK				
3.1	Providing and fixing aluminium extruded section body tubular type universal hydraulic door closer (having brand logo with IS: 3564, embossed on the body, door weight upto 36 kg to 80 kg and door width from 701 mm to 1000 mm), with double speed adjustment with necessary accessories and screws etc. complete.	12	Each		
3.2	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:				
3.2.1	300x16 mm	12	Each		
3.3	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:				
3.3.1	300x10 mm	24	Each		
3.4	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 :				
3.4.1	125 mm	24	each		
3.5	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.				
3.5.1	Twin rubber stopper	12	Each		

with a single body, Trim Latch & Lock on back side of the Panic Latch of reputed brand and manufacture to be approved by the Engineer in-charge, all complete. 3.7 Providing and fising fire resistant door frame of section 50 x 60 mm on borizontal side & 35 x 60 mm on vertical sides having built in rebate made out of 1.6 mm thick Gl sheet (Zine coating not less than 120gm/m²) suitable for mounting 120 min Fire Rated Glazed Door Shutters. The frame shall be filled with Mineral wool Insulation having density min 96Kg/m². The frame will have a provision of G.I. Anchor fastners 14 nos (5 each on vertical style & 4 on horizontal style of size M10 x 80) suitable for fixing in the opening along with Factory made Template for SS Ball Bearing Hinges of Size 100x89x3mm for fixing of fire rated glazed shutter. The frame shall be finished with a approved fire resistant primer or Powder coating of not less than 30 micron in desired shade as per the directions of Engineer—in-charge . (Cost of SS hall bearing hinges is excluded). 3.8 Providing and fixing 60 mm tikes glazed fire resistant door shutters of 120 min Fire Rating confirming to 18:3614 (Part II) or EN1634—11999, tested and certified as per laboratory approved by Engineer—in-charge, with suitable mounting on door frame, consisting of vortical styles, top rail & side rail 60 mm x 60 mm wide and bottom rail or 110 mm x 60 mm made out of 1.6mm thick G.1. sheet (zine coating not less than 120gm/m²) duly filled mineral wool insulation having density min 96 kg/m² and fixing with necessary staliless steed ball bearing hinges of size 100x89x3mm of approved make, including applying a coat of approved fire resistant primer or powder coating not less than 30 micron ot 61.6 mm thick G.1. sheet (zine coating not less than 120 gm/m²) of size 20 x 33 mm srewed with M4 x 38 mm SS screws at distance 75 mm from the edges and 150 mm c/c, including applying a coat of approved fire resistant primer/powder coating of not less than 30 micron ot 61. beading, & special exermic tape of 5 x 20	3.6	Providing and fixing panic bar / latch (Double point) fitted			
approved by the Engineer- in-charge, all complete. 3.7 Providing and fixing fire resistant door frame of section 50 x 60 mm on horizontal side & 35 x 60 mm on vertical sides having built in rebate made out of 1.6 mm thick GI sheet (Zine coating not less than 120gm/m²) suitable for mounting 120 min Fire Rated Glazed Door Shutters. The frame shall be filled with Mineral wool Insulation having density min 96Kg/m². The frame will have a provision of GI. Anchor fastners 14 nos (5 each on vertical style & 4 on horizontal style of size MIO x 80) suitable for fixing in the opening along with Factory made Template for SS Ball Bearing Hinges of Size 100x89x3mm for fixing of fire rated glazed shutter. The frame shall be finished with a approved fire resistant primer or Powder coating of not less than 30 micron in desired shade as per the directions of Engineer - in-charge (Cost of SS ball bearing hinges is excluded). 3.8 Providing and fixing 60 mm thick glazed fire resistant door shutters of 120 mm Fire Rating confirming to IS:3614 (Part II) or EN1634-1:1999, tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, top rail & side rail 60 mm x 60 mm wide and bottom rail of 110 mm x 60 mm made out of 1.6mm thick GI. sheet (Zine coating not less than 120gm/m²) duly filled mineral wool insulation having density min 96 kg/m² and fixing with necessary stainless steel ball bearing hinges of size 100x89x3mm of approved make, including applying a coat of approved fire resistant primer or powder coating not less than 30 micron et all complete as per direction of Engineer-in-charge (panelling to be paid for seperately). 3.9 Providing and Tixing glazing in fire resistant door shutters, fixed panels & partitions etc., with G.1. beading made out of 1.6 mm thick Gl. sheet (Zine coating not less than 120 gm/m²) of size 20 x 33 mm served with M4 x 38 mm SS screws at distance 75 mm from the edges and 150 mm c/c, including applying a coat of approved fire			4	Each	
3.7 Providing and fixing fire resistant door frame of section 50 x 60 mm on notroinal sides having built in rebate made out of 1.6 mm thick Gl sheet (Zinc coating not less than 120gm/m²) suitable for mounting 120 min Fire Rated Glazed Door Shutters. The frame shall be filled with Mineral wool Insulation having density min 96kg/m². The frame will have a provision of Gl. Anchor fastners 14 nos (5 each on vertical style & 4 on horizontal style of size MIO x 80) suitable for fixing in the opening along with Factory made Template for SS Ball Bearing Hinges of Size 100x89x3mm for fixing of fire rated glazed shutter. The frame shall be finished with a approved fire resistant primer or Powder coating of not less than 30 micron in desired shade as per the directions of Engineer - in-charge . (Cost of SS ball bearing hinges is excluded). 3.8 Providing and fixing 60 mm thick glazed fire resistant door shutters of 120 min Fire Rating confirming to 153:614 (Part III) or EN1634 - 11:999, tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, top rail & side rail 60 mm x 60 mm wide and bottom rail of 110 mm x 60 mm made out of 1.6 mm thick Gl. sheet (zinc coating not less than 120gm/m²) duly filled mineral wool insulation having density min 96 kg/m² and fixing with necessary stainless steel ball bearing hinges of size 100x89x3mm of approved make, including applying a coat of approved fire resistant primer or powder coating not less than 30 micron et all complete as per direction of Engineer-in-charge (panelling to be paid for seperately). 3.9 Providing and fixing glazing in fire resistant door shutters, fixed panels & partitions etc., with G.1. beading made out of 1.6 mm thick Gl. sheet (zinc coating not less than 30 micron on Gl. beading, & special ceramic tape of 5 x 20 mm size etc complete in all respect as per NBC 2016. IS 16231 (Part 3):2016 and as per direction of Engineer-in-charge with glass of required thickness having 120 minutes		=			
x 60 mm on horizontal side & 35 x 60 mm on vertical sides having built in rebate made out of 1.6 mm thick GI sheet (Zinc coating not less than 120gm/m²) suitable for mounting 120 min Fire Rated Glazed Door Shutters. The frame shall be filled with Mineral wool Insulation having density min 96Kg/m³. The frame will have a provision of GI. Anchor fastners 14 nos (5 each on vertical style & 4 on horizontal style of size M10 x 80) suitable for fixing in the opening along with Factory made Template for SS Ball Bearing Hinges of Size 100x89x3mm for fixing of fire rated glazed shutter. The frame shall be finished with a approved fire resistant primer or Powder coating of not less than 30 micron in desired shade as per the directions of Engineer—in-charge (Cost of SS ball bearing hinges is excluded). 3.8 Providing and fixing 60 mm thick glazed fire resistant door shutters of 120 min Fire Rating confirming to IS:3614 (Part II) or FN1634—1:1999, tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, top rail & side rail 60 mm x 60 mm wide and bottom rail of 110 mm x 60 mm made out of 1.6 mm hick GI. sheet (zinc coating not less than 120gm/m²) duly filled mineral wool insulation having density min 96 kg/m² and fixing with necessary stainless steel ball bearing hinges of size 100x89x3mm of approved make, including applying a coat of approved fire resistant primer or powder coating not less than 30 micron et all complete as per direction of Engineer-in-charge (panelling to be paid for seperately). 3.9 Providing and fixing glazing in fire resistant door shutters, fixed panels & partitions etc., with G1.1 beading made out of 1.6 mm thick G1. sheet (zinc coating not less than 120 gm/m2) of size 20 x 33 mm srevued with M4 x 38 mm SS screws at distance 75 mm from the edges and 150 mm c/c, including applying a coat of approved fire resistant primer/powder coating of not less than 30 micron on GL beading, & special ceramic tape of 5 x 20 mm size					
having built in rebate made out of 1.6 mm thick GI sheet (Zinc coating not less than 120gm/m²) suitable for mounting 120 min Fire Rated Glazed Door Shutters. The frame shall be filled with Mineral wool Insulation having density min 96Kg/m³. The frame will have a provision of GI. Anchor fastners 14 nos (5 cach on vertical style & 4 on horizontal style of size M10 x 80) suitable for fixing in the opening along with Factory made Template for SS Ball Bearing Hinges of Size 100x89x3mm for fixing of fire rated glazed shutter. The frame shall be finished with a approved fire resistant primer or Powder coating of not less than 30 micron in desired shade as per the directions of Engineer - in-charge (Cost of SS ball bearing hinges is excluded). 3.8 Providing and fixing 60 mm thick glazed fire resistant door shutters of 120 min Fire Rating confirming to 1S:3614 (Part II) or EN1634-1:1999, tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, top rail & side rail 60 mm x 60 mm wide and bottom rail of 110 mm x 60 mm made out of 1.6mm thick GI. sheet (zinc coating not less than 120gm/m²) duly filled mineral wool insulation having density min 96 kg/m³ and fixing with necessary stainless steel ball bearing hinges of size 100x89x3mm of approved make, including applying a coat of approved fire resistant primer or powder coating not less than 30 micron et all complete as per direction of Engineer-in-charge (panelling to be paid for seperately). 3.9 Providing and fixing glazing in fire resistant oor shutters, fixed panels & partitions etc., with G1. beading made out of 1.6 mm thick G1. sheet (zinc coating not less than 120 gm/m²) of size 20 x 33 mm screwed with M4 x 38 mm SS screws at distance 75 mm from the edges and 150 mm c/c, including applying a coat of approved fire resistant primer/powder coating of not less than 30 micron on G1. beading, & special ceramic tape of 5 x 20 mm size etc complete in all respect as per NBC 2016, IS 16231 (Par	3.7	Providing and fixing fire resistant door frame of section 50			
Zinc coating not less than 120gm/m²) suitable for mounting 120 min Fire Rated Glazed Door Shutters. The frame shall be filled with Mineral wool Insulation having density min 96Kg/m³. The frame will have a provision of G.I. Anchor fastners 14 no. 6 (5 each on vertical style, 4 on horizontal style of size M10 x 80) suitable for fixing in the opening along with Factory made Template for SS Ball Bearing Hinges of Size 100x89x3mm for fixing of fire rated glazed shutter. The frame shall be finished with a approved fire resistant primer or Powder coating of not less than 30 micron in desired shade as per the directions of Engineer -in- charge (Cost of SS ball bearing hinges is excluded). 3.8 Providing and fixing 60 mm thick glazed fire resistant door shutters of 120 min Fire Rating confirming to 1S:3614 (Part II) or EN1634- 1:1999, tested and certified as per laboratory approved by Engineer-in-charge, with suitable mounting on door frame, consisting of vertical styles, top rail & side rail 60 mm x 60 mm wide and bottom rail of 110 mm x 60 mm ande out of 1.6mm thick G1. sheet (zinc coating not less than 120gm/m²) duly filled mineral wool insulation having density min 96 kg/m² and lixing with necessary stainless steel ball bearing hinges of size 100x89x3mm of approved make, including applying a coat of approved fire resistant primer or powder coating not less than 30 micron etc all complete as per direction of Engineer-in-charge (panelling to be paid for seperately). 3.9 Providing and fixing glazing in fire resistant door shutters, fixed panels & partitions etc., with G1. beading made out of 1.6 mm thick G1. sheet (zinc coating not less than 120 gm/m²) of size 20 x 33 mm screwed with M4 x 38 mm SS screws at distance 75 mm from the edges and 150 mm c/c including applying a coat of approved fire resistant primer/powder coating of not less than 30 micron on G1. beading, & special ceramic tape of 5 x 20 mm size etc complete in all respect as per NBC 2016, IS 16231 (Part 3):2016 and as per direction of Fingineer-in-charge					
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4	STEEL WORK			
4.1	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.	1899	kg	
4.2	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.			
4.2.1	Hot finished welded type tubes	15827	kg	
4.3	Providing and fixing carbon steel galvanised (minimum coating 5 micron) dash fastener of 10 mm dia double threaded 6.8 grade (yield strength 480 N/mm2), counter sunk head, comprising of 10 m dia polyamide PA 6 grade sleeve, including drilling of hole in frame, concrete/ masonry, etc. as per direction of Engineer-in-charge.			
4.3.1	10 x 140 mm	300	Each	
5	FLOORING			
5.1	Kota stone slab flooring over 20 mm (average) thick base laid over and jointed with grey cement slurry mixed with pigment to match the shade of the slab, including rubbing and polishing complete with base of cement mortar 1: 4 (1 cement: 4 coarse sand):			
5.1.2	25 mm thick	70	Sqm	
5.2	Kota stone slabs 20 mm thick in risers of steps, skirting, dado and pillars laid on 12 mm (average) thick cement mortar 1:3 (1 cement: 3 coarse sand) and jointed with grey cement slurry mixed with pigment to match the shade of the slabs, including rubbing and polishing complete.	12	sqm	
6	ROOFING			
6.1	Providing and fixing false ceiling at all height including providing and fixing of frame work made of special sections, power pressed from M.S. sheets and galvanized with zinc coating of 120 gms/sqm (both side inclusive) as per IS: 277 and consisting of angle cleats of size 25 mm wide x 1.6 mm thick with flanges of 27 mm and 37mm, at 1200 mm centre to centre, one flange fixed to the ceiling with dash fastener 12.5 mm dia x 50mm long with 6mm dia bolts, other flange of cleat fixed to the angle hangers of 25x10x0.50 mm of required length with nuts & bolts of required size and other end of angle hanger fixed with intermediate G.I. channels 45x15x0.9 mm running at the spacing of 1200 mm centre to centre, to which the ceiling section 0.5 mm thick bottom wedge of 80 mm with tapered flanges of 26 mm each having lips of 10.5 mm, at 450 mm centre to centre, shall be fixed in a direction perpendicular to G.I. intermediate channel with connecting clips made out of 2.64 mm dia x 230 mm long G.I. wire at every junction, including fixing perimeter channels 0.5 mm thick 27 mm high having flanges of 20 mm and 30 mm long, the perimeter of ceiling fixed to wall/partition with the help of rawl plugs at 450 mm centre, with 25mm long dry wall screws @ 230 mm interval,			

including fixing of gypsum board to ceiling section and perimeter channel with the help of dry wall screws of size 3.5 x 25 mm at 230 mm c/c, including jointing and finishing to a flush finish of tapered and supare edges of the board with recommended jointing compound , jointing tapes , finishing with jointing compound in 3 layers covering upto 130 mm on both sides of joint and two couls of primer suitable for board, all as per manufacturer's specification and also including the cost of making openings for light fittings, grills, diffusers, cutouts made with frame of perimeter channels suitably fixed, all complete as per drawings, specification and direction of the Engineer in Charge but excluding the cost of painting with: 6.1.1 12.5 mm thick tapered edge gypsum moisture resistant board 7 FINISHING 7.1 Applying one coat of water thinnable cement primer of approved brand and manufacture on wall surface: 7.1.1 Water thinnable cement primer 7.2 Providing and applying white cement based putty of average thickness 1 mm, of approved brand and manufacture, on the plastered wall surface to prepare the surface even and smooth complete. 7.3 Wall painting with premium acrylic cmulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. 7.3.1 Two coats 7.4 Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. 7.4.1 Two coats 8 Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content. 8 REPAIRS TO BUILDINGS 8 With cement mortar 1.4 (I cement : 4 fine sand) 3 S					
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approved brand and manufacture on wall surface: 7.1.1 Water thinnable cement primer 7.2 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. 7.3 Wall painting with premium acrylic emulsion paint of interior grade, having VOC (Volatile Organic Compound) content less than 50 grams/ litre of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. 7.3.1 Two coats 7.4 Painting with synthetic enamel paint, having VOC (Volatile Organic Compound) content less than 150 grams/ litre, of approved brand and manufacture, including applying additional coats wherever required to achieve even shade and colour. 7.4.1 Two coats 8.48 sqm 7.5 Applying priming coats with primer of approved brand and manufacture, having low VOC (Volatile Organic Compound) content. 7.5.1 With ready mixed pink or grey primer on wood work (hard and soft wood) having VOC content less than 50 grams/ litre 8 REPAIRS TO BUILDINGS 8.1 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 directions of Engineer-In-Charge. 8.1.1 With cement mortar 1:4 (I cement: 4 fine sand)	7	FINISHING			
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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 directions of Engineer-In-Charge. 8.1.1 With cement mortar 1:4 (1 cement : 4 fine sand)	8	REPAIRS TO BUILDINGS			
		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 directions of Engineer-In-Charge.			
	8.1.1	With cement mortar 1:4 (1 cement : 4 fine sand)	35	Sqm	

8.2	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 directions of Engineer-In-Charge.			
8.2.1	For door/ window/ clerestory window	13	Sqm	
9	DISMANTLING & DEMOLISHING		•	
9.1	Demolishing cement concrete manually/ by mechanical means including disposal of material within 50 metres lead as per direction of Engineer - in - charge.			
9.1.1	Nominal concrete 1:3:6 or richer mix (i/c equivalent design mix)	1	Cum	
9.2	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.			
9.2.1	In cement mortar	1	Cum	
9.3	Dismantling stone slab flooring laid in cement mortar including stacking of serviceable material and disposal of unserviceable material within 50 metres lead.	55	Sqm	
9.4	Dismantling aluminium/ Gypsum partitions, doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material with in 50 meters lead as directed by Engineer-incharge.	1338	sqm	
9.5	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-incharge, beyond 50 m initial lead, for all leads including all lifts involved.	25	cum	
10	ALUMINIUM WORK			
10.1	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-incharge. (Glazing, paneling and dash fasteners to be paid for separately):			
10.1.1	For fixed portion			
10.1.1.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	662	Kg	

10.1.2	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)			
10.1.2.1	Powder coated aluminium (minimum thickness of powder coating 50 micron)	252	Kg	
10.2	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.			
10.2.1	Pre-laminated particle board with decorative lamination on both sides	92	sqm	
10.3	Filling the gap in between aluminium frame & adjacent RCC/ Brick/ Stone work by providing weather silicon sealant over backer rod of approved quality as per architectural drawings and direction of Engineer-in-charge complete.			
10.3.1	Upto 5mm depth and 5 mm width	108	Metre	
10.4	Providing and fixing 100mm brass locks (best make of approved quality) for aluminium doors including necessary cutting and making good etc. complete. NEW TECHNOLOGIES AND MATERIALS	12	Each	
11.1	Providing and fixing mineral fibre false ceiling tiles at all			
	heights of size 595X595mm of approved texture, design and pattern. The tiles should have Humidity Resistance (RH) of 99%, Light Reflectance > 85%, Thermal Conductivity k = 0.052 - 0.057 w/m K, Fire Performance as per (BS 476 pt - 6 &7)in true horizontal level suspended on interlocking T-Grid of hot dipped all round galvanized iron section of 0.33 mm thick (galvanized @120 gsm) comprising of main T runners of 15x32 mm of length 3000 mm, cross T of size 15x32mm of length 1200 mm and secondary intermediate cross T of size 15x32 mm of length 600 mm to form grid module of size 600x600 mm suspended from ceiling using galvanized mild steel item (galvanised @80gsm) 50 mm long 8mm outer diameter M-6 dash fasteners, 6 mm diameter fully threaded hanger rod upto 1000 mm length and L-shape level adjuster of size 85x25x2 mm, spaced at 1200 mm centre to centre along main 'T'. The system should rest on periphery walls /partitions with the help of GI perimeter wall angle of size24x24X3000 mm made of 0.40 mm thick sheet, to be fixed to the wall with help of plastic rawl plug at 450 mm centre to centre & 40 mm long dry wall S.S. screws. The exposed bottom portion of all T-sections used in false ceiling support system shall be prepainted with polyester baked paint, for all heights. The work shall be carried out as per specifications, drawings and as per directions of the engineer-in-charge.			
11.1.1	With 20 mm thick bevelled tegular mineral fibre false ceiling tile (NRC 0.7)	1338	sqm	

12	ACOUSTICS & FIRE DOORS			
12.1	Providing and Fixing Wooden perforated panels of size 2400x192x15mm or as required by the Architect/ Engineer In-Charge / Competent authority made up of moisture resistant fibre board with minimum density of 595 kg/cum substrate with a laminated facing as per the approved shade & finish and a melamine balancing layer on the reverse side. The boards shall have a special perforation pattern where the visible surface has a "Helmholtz" fluted perforation of 3mm width and 5mm of visible panel each. The edges of the panels shall be "tongue-and-grooved" to receive special clips for installation. The back of the perforated panel shall have sound absorbing non-woven acoustical fleece having NRC of 0.63. The panels shall be mounted on special aluminium splines (keel) using clips and placing the inside clip on the groove end of the panel along the Al keel and then place the tongue end of the next panel. Continue installing rows of panels by inserting the tongue into the groove of the earlier inserted panel and progressively installing inside clips into the next keel till the actual height is achieved complete as per directions of Engineer-In-Charge / Competent Authority. For payments, plan area of finished surface shall be measured in sqm up to two decimal points. (Make: Armstrong / Saint Gobain / Knauf AMF) The complete work shall only be carried out by the authorised applicator of primary material manufacturing company and shall only follow manufacturer's method of application.	880	sqm	

	_			1	1
12.2	Providing and fixing of non-metallic asbestos free composite fire smoke check for 2 hours Fire Rating door				
	system duly tested for Stability, Integrity and Insulation as				
	criteria clause 9.4 of IS-3614 Part - 22 and BS-476 Part 22				
	for single and double leaf Doors (prototype tested and				
	certified at CBRI Roorkee / Quality Marking Centre,				
	Department of Industries & Commerce, Govt. of Haryana)				
	with Hardwood Door Frame (Red Meranti) of section				
	145mm x 70mm with heat activated intumescent fire seal				
	strip of size 10mm x 4mm and one coat of anti-termite fire				
	retardant primer along with 55mm thick fire / smoke check				
	wooden shutters of 120 minute fire rating comprising of two				
	9mm thick Calcium Silicate board (100% without asbestos,	63	sqm		
	bruclte and meerschaum having density not more than 950				
	Kg/cum and thermal conductivity 0.14 W/m*k sandwiching				
	31mm thick fire resistance insulation filler coated with FR				
	sealants and faced with 4mm thick commercial ply facing on				
	both sides with heat activated intumescent fire seal strips of				
	size 10mm x 4mm mounted in the grooves of hardwood				
	lipping on three sides except bottom. The door frame and				
	door shutters shall be painted with fire retardant paint to				
	provide Class 1 surface spread of flame conforming to BS				
	476 Part 7, IS: 12777 in desired shade over a coat of fire				
	resistant primer. The manufacturer should have tested the				
	entire assembly / prototype of assembly from CBRI Roorkee				
	/ Quality Marking Centre, Department of Industries &				
	Commerce, Govt. of Haryana along with hardware for 2				
	hours fire rating and shall submit the same for both single				
	leaf and double leaf configurations to the Engineer-In-				
	Charge. The rate includes the cost of all the materials,				
	labour & T & P required for proper completion of the item				
	described above. The rates also includes the cost of				
	providing and fixing following hardware to door assembly				
	system. The hardware shall be of approved make.				
	• SS door closers suitable for shutters weighing 70kg - 120				
	kg – 01 no. for each shutter.				
	• SS ball bearing hinges of size 102mm x 76mm x 3mm				
	(heavy duty) with screws – 04 nos. for each shutter.				
	• SS 316 grade (satin finish) tower bolts of size 300x10mm				
	- 02 nos. for each shutter.				
	• SS 316 grade D-Handles of size 19mm dia. x 250mm long - 02 nos. for each shutter.				
	• SS 316 grade (satin finish) hanging floor door stopper with				
	spring function with high quality SS screws and high grade				
	PVC/ rubber strongly fixed on the rod to make better grip of				
	door on floor – 01 no. for each shutter.				
	• SS 316 grade satin finish sliding door bolt of size				
	300x16mm (heavy duty) superior quality with necessary SS				
	screws etc. – 01 no. for complete door.				
	• SS dead lock with both side keys – 01 no. for complete				
	door.				
	For payment purpose the area of opening including door				
	frame shall only be measured.				
	italic shall only be incustred.				

12.3	OUTSIDE ACCESS DEVICE (TRIM): Providing and fixing of stainless steel 304 grade external trim with keys for Panic Bar of approved make all complete as per manufacturer's specifications, approved drawing and direction of the Engineer-In-Charge.	4	Each	
12.4	Providing and fixing 18-19 mm thick fire retarded commericial block board as per IS: 5509: 2000 of approved make over brick / RCC / Steel Frame with necessary fixing arrangement and as per requirement complete as per direction of Engineer In Charge. (Make: Century Ply - Firesafe / Duro Fireshield)	586	sqm	
	Total Rs.			

CREDIT OF DISMANTLED MATERIAL (CIVIL WORKS)

1	Credit of dismantled Steel scrap like M.S. iron frames, M.S. bars, TMT bars etc.	50	Kg.	
2	Credit of dismantled Old broken fire wood like flush door shutters / cupbord shutters / wooden partitions / false ceiling tiles of various thickness with fittings.	400	Kg.	
	Total Rs.			

C....Nil I....Nil O....Nil

D'Man /J.E. A.E.E / A.E. E.E.

	Electrical wiring & other Allied works in all the 10 Rooms (Part(I))			
1	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 earthling the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.			
1.1	Group C	260.00	Point	
2	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthling as required.	1000.00	Mtr.	
3	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthling as required.	1200.00	Mtr.	
4	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.			
4.1	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	700.00	Mtr.	
4.2	4 X 2.5 sq. mm + 2 X 2.5 sq. mm earth wire	500.00	Mtr.	
4.3	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	300.00	Mtr.	
5	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.			
5.1	3 x 2.5 sq. mm	110.00	Mtr.	
5.2	3 x 4 sq. mm	500.00	Mtr.	
5.3	6 x 4 sq. mm	100.00	Mtr.	
6	Supplying and fixing following modular switch/ socket on the existing modular plate & Switch box including connections but excluding modular plate etc. as required.			
6.1	15/16 A switch	350.00	Each	
6.2	6 pin 15/16 A socket outlet	350.00	Each	
7	Supplying and fixing following size/ modules, GI / PVC box along with modular base & cover plate for modular switches in recess etc. as required.			
7.1	3 Module (100 mmX75 mm)	50.00	Each	
7.2	6 Module (200 mmX75 mm)	150.00	Each	

8	Supply, installation, testing and commissioning of 34-36 watt recessed mounted 600mm x 600mm size (+ 1%) LED luminaire, IP-20, with 34-36 watt LED complete, directly o ceiling / false ceiling, including connection with 1.5 sq.mm FRLS PVC insulted, copper conductor, single / multi core cable & earthling etc. as reqd. Make:- Wipro cat no - CRCO10R038HP57/ Havells / Philips.	120.00	Nos.	
9	Supply, installation, testing and commissioning of 14-16 Watts recess mounted LED luminaire (Down lighter) fitting complete with 14-16 watt LED complete. Make:- Wipro / Havells/ Philips.	140.00	Nos.	
10	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.)			
10.1	8 way (4+24), Double door	4.00	Each	
10.2	12 way (4 + 36), Double door	2.00	Each	
11	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.			
11.1	Single pole	150.00	Each	
11.2	Triple Pole	30.00	Each	
12	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 A, "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	40.00	Each	
13	Supplying and fixing 100A/125 amps, 25KA, TP MCCB in the existing TPN Distribution board/ panel board including testing & Make:- Hager / Legrand / Schnieder	6.00	Nos.	
14	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 kV grade of following size on wall surface as required.			
14.1	Up to 35 sq. mm.	700.00	Mtr.	
14.2	above 35 sq. mm & up to 95 sq. mm.	200.00	Mtr.	

15	Supplying of PVC insulated, PVC sheathed XLPE aluminum conductor armored cable of 1.1 KV grade confirming to I.S-1554/1/88 of following size Make- NICCO / Havells / Grandlay, I.S I mark			
15.1	4X 10 sq. mm.	500.00	Mtr.	
15.2	4X 25 sq. mm.	200.00	Mtr.	
15.3	3 ½ x 50 sq. mm.	200.00	Mtr.	
16	Supply and making end Termination with brass cooperation gland and aluminum lugs for following size of PVC insulated and PVC sheathed / XLPE aluminum conductor cable of 1.1 KV grade as required.			
16.1	4 X 10 sq mm	16.00	Each	
16.2	4 X 25 sq mm	4.00	each	
16.3	3 ½ x 50 sq mm	4.00	Each	
17	Providing and fixing 6 SWG dia G.I. wire on surface or in recess for loop earthling along with existing surface/recessed conduit/sub main wiring/cable as required.	1800.00	Mtr	
18	S/F of 125 AMP TPN switch fuse unit suitable for operation on 415 V, 50 Hz AC supply of 23 A category confirm to IS 60947-3 complete with HRC fuses of 125A rating etc. complete as required (Make & Model – L&T, FN 125 or Havells / Standard)	4	Each	
19	S/F of PVC insulated and PVC sheathed un-armored copper conductor cable of 1.1 KV grade of 25 Sq. mm size including making end Termination w brass cooperation gland and aluminum Lugs etc. as required (Make- Havells / Polycab/ Fin LAN works -Part (2)	40	Mtr	
20	Supplying and Drawing of Cat-6 wire for internet wiring on the existing surface/ recess channel/conduit/ raceway including termination, testing etc. as required.	1125	Mtr.	
21	Supplying and Fixing of RJ-45 Jack With Cover Plate for networking point on the existing PVC box including termination, testing etc. as required.	30	Nos.	
22	Supplying and fixing 2 Module (75 mm x 75 mm) PVC Box on Surface etc. as required.	30	Nos.	
23	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.			
23.1	25 mm	1000	Mtr.	

	Fire Works Part- (3)			
24	Supplying, installation, testing commissioning of intelligent analog addressable photo thermal detector complete with mounting base complete as required	50.00	Nos.	
25	Supplying, installation, testing & commissioning of fault isolator complete with base as required	10.00	Nos.	
26	Supplying, installation, testing commissioning of intelligent addressable thermal detector with rate of rise cum fixed temperature thermistor complete with base as required	10.00	Nos	
27	Supplying, installation, testing commissioning of addressable fire control module complete as required	4.00	Nos.	
28	Supplying, installation, testing commissioning of intelligent addressable programmable sounder complete as required	4.00	Nos.	
29	Supplying & laying of 2x1.5 sq.mm. fire survival armored cable, 600/1000V rated with annealed copper conductor having XLPE insulation, steel wire armoring & FRLS outer sheath complete as required.			
(i)	2 X 1.5 sq.mm.	200.00	Mtr.	
(ii)	4 X 1.5 sq.mm.	300.00	Mtr.	
30	Supplying & fixing of pendent type sprinklers with extension nipples & High pressure flexible pipe.	75.00	Nos.	
	S/I/T/C of CCTV Works (Part -4)			
31	S/I/T/C of IP Network TDN Low-Light IR Dome Camera, ½.9" CMOS, 2 MP @ 25fps, triple stream, Min. Illumination required 0.01 lux @ F1.4 (color), 120db True WDR, Min. Pixels 1920x 1080, 3.6 mm Fixed lens, BLC, HLC, 3DNR, Privacy Mask, 3 IR LEDs Smart IR with upto 35m IR distance, PoE, H.264 High Profile and MJPEG, PoE Class 3 and 12V DC, Having Operating temp range: - 20° C to 40° C. Certification: ONVIF Profile S & G Compliant, UL, CE, EN, FCC & RoHS Compliant. Approved Makes: Honeywell, Pelco & Axis.	10	Each	
32	S/I/T/C of Rack-mountable, Dedicated Network Video Recorder with suitable hardware to connect up to 32 channel IP cameras. Offered storage is not an externally attached device to NVR the total recording storage requirement shall be met through internally installed HDD itself. The bidder to submit the storage analysis for required number of cameras for a period of 30 days @ 25fps on minimum 1080p resolution.	1	Each	
33	Approved Makes: Honeywell, Pelco & Axis. S/I/T/C of 43" LED TV with 1920x1080 full HD resolution and as per specification attached for mounting on wall including connection etc. Approved Makes: Samsung, LG, Panasonic.	1	Each	

34	S/I/T/C of PoE Layer II managed ethernet switch, 8 port RJ45 10/100/1000 T with 2 nos. OFC port complete as required. Approved Make: Cisco	2	Each	
35	S/I/T/C of 6U Rack. Approved Make: Comrack/Valrack/Netrack	2	Each	
36	S/I/T/C of UTP CAT 6 Cable. Approved Make: Molex/D-link/Systimax	800	Each	
37	S/I/T/C of PVC Conduit. Approved Make: BEC/Kalinga/AKG	800	Each	
38	S/I/T/C of 2 Core Power Cable 1.5 sq mm. Approved Make: Havells/Finolex/Polycab	300	Each	
	Total Rs.			

CREDIT OF DISMANTLED MATERIAL (Electrical & Allied works)

S. No.	Description of items.	Qty.	Unit.	Rates	Amount.
1	Dismantled old M.S. box with back elite sheet of different size.	10	Kg		
2	Dismantled 3 X 14 TS fitting.	80	Nos.		
3	Dismantled of old Aluminium/ Copper wire.	10	Kg.		
4	Dismantled of old SP MCB.	100	Nos.		
5	Dismantle of old 5A switch.	72	Nos.		
6	Dismantled of old 5A socket.	112	Nos.		
7	Dismantled of old 15A switch.	56	Nos.		
8	Dismantled of old 15A socket.	56	Nos.		
9	Dismantled of old fan regulator.	46	Nos.		
10	Dismantled of old fan 1200 mm	46	Nos.		
11	Dismantled Smoke Detectors	47	Nos.		
12	Dismantled sprinklers	87	Nos.		
	Total Rs.				

Special Conditions: -

- 1. No labour huts shall be allowed in IIT Campus and nothing shall be extra paid on this account.
- 2. The contractor must visit the site of work before quoting the rates.
- 3. No labour to stay in IIT Campus, nothing shall be paid extra on this account.
- 4. Site shall be made available as and when available.
- 5. The quoted rates of all items shall be inclusive of all taxes including Goods and Service Tax, Labour Cess etc. and nothing extra shall be payable on this account.
- 6. The shop drawings for steel work (for civil partitions, electrical work, LAN, Fire Fighting & CCTV etc.) shall be submitted by agency for approval before execution of work. Nothing is to be paid extra on this account.