

ENTRUCE OF TECHTON

INDIAN INSTITUTE OF TECHNOLOGY DELHI

HAUZ KHAS, NEW DELHI - 110016

NOTICE INVITING TENDER

NAME OF WORK	:	Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi.
ESTIMATED COST	••	Rs. 1,77,66,080.00
EMD	:	Rs. 3,55,322.00
N.I.T. No.	:	0672/58/IITD/EW/EE(ED-1)/2024-25
Date of Opening	:	20.01.2025

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NIT for the above work has been prepared with the following:

1	Amount of NIT	:	Rs.1,77,66,080.00
2	Earnest money	:	Rs.3,55,322.00
3	Completion time	:	6 Months
4	Last date of	:	17.01.2025 upto 15:00 Hrs.
	submission (on line)		
5	Date of opening	:	20.01.2025 at 15:00 Hrs.
6	Form of NIT	:	IITD – 8
7	Schedule applicable	:	Market Rate, DSR-2022
8	Material stipulated	•	As per Schedule of Work
9	Chargeable head	• •	Renovation (Research Facility And Housing)/ 35.01.02(IOE)
10	Estimate no.	:	IITD/DB/0672
11	Work code no.	:	2021/006/0672
12	NIT No.	•	0672/58/IITD/EW/EE(ED-
			1)/2024-25
13	Type of work	••	Works of Upgradation/
			Maintenance.

Certified that this NIT contains 1 to 58 pages.

NIT amounting to Rs. 1,77,66,080.00 is approved.

D/Man (Planning Unit) JE [E] Executive Engineer (ED-1)

Institute Engineer

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INDIAN INSTITUTE OF TECHNOLOGY DELHI

HAUZ KHAS, NEW DELHI - 110016

NOTICE INVITING E-TENDER

IITD/WORKS (SP-4877)/2025

Executive Engineer (ED-1), Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 110016, Ph. No. 011-2654 8437 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 as per details given below.

1	Name of work	-	Work in Academic Complex in different laboratory/ offices at IIT Delhi.
2	NIT No.	l	0672/58/IITD/EW/EE(ED-1)/2024-25
3	Estimated Cost (Rs.)		1,77,66,080.00
4	4 Earnest Money Deposit (Rs.)		3,55,322.00
5	5 Security Deposit		2.5% of Tendered Value
6	6 Period of completion		6 Months
7	7 Last date & time of bid submission		Upto 3 PM of 17.01.2025
8	Performance Bank Guarantee	:	5 percent 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 enrol / register themselves before participating through web site 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 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 & Financial) should be submitted in the e-procurement portal.

Executive Engineer (ED-1) for & on behalf of BOG, IIT Delhi

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Ch. Head : Renovation (Research Facility And Housing)/ 35.01.02(IOE)

Copy to:-

1. Junior Engineer

Work Code : 2021/006/0672

- 2. D.A. (Works Accounts)
- 3. D.R. (A/C)
- 4. A.R. (Store Purchase Section)
- 5. Notice Board
- 6. Website Administrator, IIT Delhi
- 7. Office copy

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SCHEDULE

1	Name of organization	:	Indian Institute of Technology Delhi
2	Tender / Quotation type (open / limited /	:	Open
	EOI / auction / single)		'
3	Tender / Quotation category (services /	:	Goods & Works
	goods / works)		
4	Type of Contract (work / supply /	:	Work
	auction / service / buy / empanelment /		
	sell)		
5	Form of contract (IITD - 7/8)	:	IITD – 8
6	Work Category (civil / electrical / fleet	:	Electrical
	management / computer systems)		
7	Is multi-currency allowed?	:	No
8	Date of publishing / issue / start	:	09.01.2025 at 16.00 Hrs.
9	Document download start date	:	09.01.2025 at 16.00 Hrs.
10	Document download end date	:	17.01.2025 at 15.00 Hrs.
11	Date & time of pre-bid meeting	:	No pre-bid meeting be held
12	Venue of pre-bid meeting	:	Not applicable
13	Last date & time of uploading of bids	:	17.01.2025 at 15.00 Hrs.
14	Date & time of opening of Technical	:	20.01.2025 at 15.00 Hrs.
	bids		
15	Tender fee	:	NIL
16	Earnest Money Deposit (EMD) Rs.	:	3,55,322.00
17	Mode of payment of EMD & Tender Fee	:	Can 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, New
			Delhi-110016
			IFSC Code : SBIN0001077
			MICR Code 110002156
			Swift No. : SBININBB547
			(This is mandatory that UTR Number is
			provided in the on-line quotation/bid. (Kindly
			refer to the UTR Column of the Declaration
			Sheet at Annexure-II)
			OR
			Demand Draft favouring Registrar, IIT Delhi
			Payable at SBI, IIT Delhi Branch. Scanned
			copy of DD needs to be uploaded alongwith
			the Technical Bid. Original DD shall have to
			be submitted to the tender inviting authority by
			the bidder as and when required after opening

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			of bid.
17	Bid without EMD / Non-submission of	:	To be considered as UNRESPONSIVE
	original DD		and bid shall summarily be rejected
18	No. of bids / covers (1 / 2 / 3 / 4)		2
19	Bid Validity days (180/120/90/60/30)	:	90 days (From last date of Submission of bid)
20	Address for communication	:	Executive Engineer (Electrical), Works
			Department, MZ-136, Main Building, IIT
			Delhi, Hauz Khas, New Delhi - 110016
21	Contact No.	:	011-26548437 / 011-26591463
22	e-mail address for communication	:	aashish@admin.iitd.ac.in

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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 softcopies of their bids electronically on the CPP portal, using valid Digital Signature Certificates (DSC). 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

- Bidders are required to enrol 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 enrol". 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 user name and assign a password for their accounts.
- 3. Bidders are advised to register their valid e-mail address and mobile number 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 2 or class 3 certificates with signing key usage) issued by any certifying authority recognised by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.) with their profile.
- Only one valid DSC should be registered by a bidder. Please note that bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6. Bidder then logs into the site through the secured log-in by entering their user ID / password and the password of the DSC / eToken.

SEARCHING FOR TENDER DOCUMENTS

1. There are various search options built in the CPP portal to facilitate bidders to search active tenders by several parameters. These parameters could include tender ID, organisation name, location, date, value, etc. There is also an option of advanced search for tenders, wherein the bidders may combine a

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number of search parameters such as organisation name, form of contract, location, date, other keywords etc. to search for a tender published on the CPP portal.

- 2. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. The tenders can be moved to the respective "My Tenders" folder. This would enable the CPP portal to intimate the bidders through SMS / e-mail in case there is any corrigendum issued to the tender document.
- 3. The bidder should make a note of the unique Tender ID assigned to each other, in case they want to obtain any clarification / help from the Helpdesk.

PREPARATION OF BIDS

- 1. Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bids. Please note the number of covers in which the bid documents have to be submitted. Any deviations from these may lead to rejection of the bids.
- 3. Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF formats. Bid documents may be scanned with 100 dpi with black & 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's certificates, etc.) has been provided to the bidders. Bidders can use "My Space" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- 1. Bidder should log into the site well in advance for bid submission so that he / she upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.
- 2. The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- Bidder has to select the payment option as "on-line" to pay the tender fee / EMD as applicable and enter details of the instrument. Whenever, EMD / Tender fees is sought, bidders need to pay the tender fee and EMD separately online through RTGS (Refer to Schedule, Page no. 3)

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4. A standard BOQ Format has been provided with the tender document to be filled by all the bidders. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BOQ file, open it and complete the white coloured [unprotected] cells with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it 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 unauthorised persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done.
- 7. The uploaded tender documents become readable only after the tender opening by the authorised 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 tender document and the terms and conditions contained therein should be addressed to the tender inviting authority for a tender or the relevant contact person indicated in the tender.
- 2. Any queries relating to the process of online bid submission or queries relating to CPP portal in general may be directed to the 24 x 7 CPP Portal Help Desk. The contact number of the helpdesk is 18002337315.

GENERAL INSTRUCTIONS TO THE BIDDERS

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- 1. The tenders will be received online through portal https://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 authorised certifying agencies, details of which are available in the website https://eprocure.gov.in/eprocure/app under the link "Information about DSC".
- 3. Tenderers are advised to follow the instructions provided in the "Instructions to the tenderer" for the e-submission of the bids online through the Central Public Procurement Portal for e-procurement at https://eprocure.gov.in/eprocure/app.

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INFORMATION & INSTRUCTION TO BIDDERS FOR E-TENDERING

Executive Engineer (ED-1), Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 110016, Ph. No. 011-2654 8437 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 as per details given below.

Sr. No.	NIT No.	Name of Work & Location	Estimated cost put to bid (Rs.)	Earnest money (Rs.)	Tender Fee (Rs.)	Period of completion	Last date & time of submission of bid	Time & date of opening of Technical Bid	Time & date of opening of Financial Bid
1	0672/58/IITD/EW/EE(ED1) © (2024-25	(3) Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi.	1,77,66,080.00	3,55,322.00	(6)	6 Months	Upto 3 PM of 17.01.2025 (8)	20.01.2025at 15 PM ©	To be decided after assessing 6 Technical Bids

- 1. The successful bidder 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 fifteen 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 by the Institute and the tender shall be treated as null and void. EMD shall be refunded after submission of PBG. The performance guarantee shall be initially valid up to the stipulated date of completion (i.e. 60 days) plus sixty days beyond that.
- 2. Contractors who fulfil the following requirements shall be eligible to apply. Joint ventures are not accepted.
 - **a.** Should have satisfactorily completed the works as mentioned below during the last Seven years ending **previous day of last date of submission of bids.**
 - i. **Three** similar works each costing not less than **Rs.71,07,000.00**, or **two** similar works each costing not less than **Rs.1,06,60,000.00**, or one similar work costing not less than **Rs.1,42,13,000.00** (all figures rounded to nearest thousand)

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- 3. Earnest money (EMD) shall have to be deposited / submitted as stipulated in the schedule.
- 4. 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.
- 5. Similar work means: Providing and fixing of Electrical Installation work.
- 6. Work means work done with some Central Government Department / State Government Department / Central Autonomous Body / State Autonomous Body / Central Public Sector Undertaking / State Public Sector Undertaking / City Development Authority / Municipal Corporation of City formed under any Act by Central / State Government and published in Central / State Gazette.
- 7. 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 per '5' above
 - b. The completed cost of the work
 - c. Actual date of completion of the work
- 8. 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.
- 9. 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.
- **10.** Information and Instructions for bidders posted on website shall form part of bid document.
- 11. 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 free of cost.
- 12. But the bid can only be submitted after submission of EMD as prescribed in the schedule.
- 13. Copy of all mandatory documents as desired in the NIT 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 shall have to be submitted by the lowest bidder only within a week physically in the office of e-tendering authority. During scrutiny of technical bids, if required, bidders may be asked to submit original documents for cross checking.
- **14.**Online bid documents submitted by intending bidders shall be opened only of those bidders, who has submitted prescribed EMD and other documents scanned and uploaded are found in order.
- **15.** Those contractors not registered on the website mentioned above, are required to get registered beforehand. Bidders should refer "Instruction for Online Bid Submission" given earlier for further assistance.

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- **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.** Contractors must ensure to quote rate of each item.
- 19. The following undertaking in this regard shall be up-loaded by the intending bidders: "the physical EMD shall be deposited by me / us with the Authority inviting the tender, in case I / we become the lowest tenderer, within a week of the opening of financial bid, otherwise, department may reject the tender and also take action to debar me /us from tendering in any form in IIT Delhi."
- 20. Copy of enlistment order and certificate of work experience and other documents as specified in the Press Notice / web notice shall be scanned and up-loaded to the e-Tendering website within the period of bid submission. However, certified / original copy of all the scanned and up-loaded documents as specified in press notice web / notice shall have to be submitted by the lowest bidder only along with physical EMD of the scanned copy of EMD uploaded within a week physically in the office of e-tendering authority and it shall be sole responsibility of lowest bidder.
- 21.Online bid documents submitted by intending bidders shall be opened only of those bidders, who has deposited EMD, and other documents scanned and uploaded are found in order.
- 22. The bid submitted shall become invalid if:
 - a. The bidder is found ineligible.
 - b. The bidder does not upload all the documents (including GSTIN registration) as stipulated in the bid document including the undertaking / declaration if any.
 - c. EMD not deposited as specified.

Not registered with EPFO & ESIC.

- 23. 'Class 1 Local Supplier' means a supplier or service provider, whose goods, services or works offered for procurement has local content equal to or more than 50% as defined under Order No. P-45021/2/2017-PP(BE-II) dated 04-06-2020 issued by Department for Promotion of Industry and Internal Trade (Public Procurement Section), Ministry of Commerce and Industry, Govt of India.
 - d. 'Local Content' means the amount of value added in India which shall unless and otherwise prescribed by the nodal ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all domestic duties) as a proportion of the total value, in percent.
 - e. For the purpose of verification of 'Local Content', the Class-1 Local Supplier / Service Provider at the time of bidding, tender or solicitation shall be required to indicate percentage of local content and provide self-certification that the items offered meet the local content requirement for Class 1 Local Supplier. They shall also give details of the location(s) at which the local value addition is made.
 - f. In cases of procurement for a value in excess of 10 crore, the Class 1 Local Supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in case

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- of the companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
- g. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-certifications and auditor's / accountant's certificates on random basis and in the case of complaints.
- h. False declarations will be in breach of Code of Integrity under rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for upto two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

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

- 1. Annexure 1 duly filled in and duly mentioning UTR No. for EMD deposition or Banker's Cheque or Demand Draft or FDR number with date of issue and got signed
- 2. Proof of EMD deposit / Scanned copy of DD submission (favouring 'Registrar, IIT Delhi')

The following undertaking on firm's letter head shall be uploaded by the bidder I scanned copy of DD/FDR is uploaded by the bidder: "The exact physical EMD (as uploaded) shall be deposited by me / us with the authority inviting tender, in case I/we become the lowest tenderer, within a week of the opening of financial bid, otherwise, IITD may reject the tender and also take actions to debar me/ us from tendering in any form in IIT Delhi".

- 3. Enlistment order of Contractor.
- 4. Certificate of work experience as desired (vide clause 5 above) with complete Schedule of Work.
- 5. Certificate of GST Registration of the State in which the work is to be taken up, if already obtained by the bidder. If the bidder has not obtained GST registration in the State in which the work is to be taken up, or as required by GST authorities then in such a case the bidder shall scan and upload following undertaking along with other bid documents.

"if work is awarded to me, I/we shall obtain GST registration certificate of the State, in which work is to be taken up within one month from the date of receipt of award letter or before release of any payment by IIT Delhi, whichever is earlier, failing which I/we shall be responsible for any delay in payments which will be due towards me/us on a/c of the work executed and/or for any action taken by IIT Delhi or GST department in this regard."

- 6. Affidavit as per provision of the clause 1.2.2 of IITD-6 To be submitted on stamp paper and date of affidavit and purchase of stamp paper shall not be earlier than the publication of NIT. NIT number, name of work shall invariably be written on the 1st page of the Affidavit.]
- 7. Acceptance to execute INTEGRITY PACT [see integrity pact]
- 8. IITD 7 / 8 duly signed
- 9. Registration proof of EPFO & ESIC.
- 10. Valid Electrical Licence in the name of the contractor
- 11. Any other document as specified in the NIT

Executive Engineer [ED-1] For & on Behalf of BOG, IIT Delhi

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IITD - 6

INDIAN INSTITUTE OF TECHNOLOGY DELHI NOTICE INVITING E-TENDER

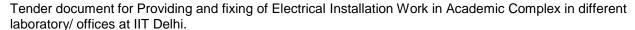
- 1.0 Item Rate Tender from Firms/ Contractors Registered in appropriate class and category with CPWD, MES, BSNL and Railways as per details given below for the following work as per details given below for the work of Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi.
- 1.1 The work is estimated to cost Rs.1,77,66,080.00. 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.
- 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:-
- 1.2.1 Criteria of eligibility for submission of bid documents: Conditions for intending bidders / contractors
- 1.2.1.1 Three similar works each costing not less than Rs.71,07,000.00, or two similar works each costing not less than Rs.1,06,60,000.00, or one similar work costing not less than Rs.1,42,13,000.00 in last 7 years ending previous day of last date of submission of bids. 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.
- 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 copy to be uploaded at the time of submission of bid)"
- 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.
- 3.0 The time allowed for carrying out the work will be 6 Months 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.
- **4.0** The site for the work is available.

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- 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 **e-procure.gov.in.**
- 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.
- 7.0 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.
- 8.0 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.
- **9.0** EMD shall have to be deposited / submitted as stipulated in the schedule of the NIT.
- 9.1 Copy of all 'mandatory documents' and other documents as specified in the press notice shall be scanned and uploaded to the e-tendering website within the period of bid submission. However, certified copy of all the scanned and uploaded documents as specified in press notice shall have to be submitted by the lowest bidder only within a week physically in the office of tender opening authority.
- **10.0** The bid submitted shall become invalid, if:
- **10.1** The bidder is found ineligible.
- The bidder does not upload all the documents (including GSTIN Registration) as stipulated in the bid document.
- **10.3** EMD & Proper Affidavit not submitted as specified
- 10.4 If any discrepancy is noticed between the documents as uploaded at the time of submission of bid and hard copies as submitted *physically by the lowest bidder* in the office of the bid opening authority.
- 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.
- 12.0 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

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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.

13.0 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.

14.0 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.

15.0 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.

The contractor shall not be permitted to bid for works in the IITD responsible for award and execution of contracts, in which his near relative is posted a Divisional Accountant or as an officer in any capacity between the grades of Superintending Engineer and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any Gazetted officer in the IIT Delhi. Any breach of this condition by the contractor would render him liable to be debarred from bidding process in future in IIT Delhi.

17.0 No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the prior permission of the Government of India in writing. This contract 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.

The bid for the works shall remain open for acceptance for a period of **ninety 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.

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 fifteen days** from the stipulated date of start of the work, sign the contract consisting of:-

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- 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.
- 19.2 Standard IITD Form –7/8 or other Standard IITD Form as applicable.
- 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.
- GST or any other tax applicable in respect of inputs procured by the contractor for this contract shall be payable by the Contractor and Government will not entertain any claim whatsoever in respect of the same. However, component of GST at time of supply of service (as provided in CGST Act 2017) provided by the contract shall be varied if different from that applicable on the last date of receipt of tender including extension if any.

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INTEGRITY PACT

10		
	,	
	lo. 0672/58/IITD/EW/EE(ED-1)/2024-25 for the work of "Providing and fixing of work in Academic Complex in different laboratory/ offices at IIT Delhi."	Electrica
Dear Sir,	,	
	t is hereby declared that IIT Delhi (IITD) is committed to follow the prency, equity and competitiveness in public procurement.	inciple of
the Bidde failing wh	The subject Notice Inviting Tender (NIT) is an invitation to offer made on the conter will sign the Integrity Agreement, which is an integral part of the tender/bid dhich the tender/bidder will stand disqualified from the tendering process and the rould be summarily rejected.	ocuments,
	This declaration shall form part and parcel of the Integrity Agreement and signall be deemed as acceptance and signing of the Integrity Agreement on behalf of	
	Your	s faithfully,
	Executive Engin	eer (ED-1)
		Page 20 of 58
C Nil I	Nil O Nil	<u> </u>

 $D'Man \hspace{1.5cm} AEE \, / \, AE \, / \, JE \hspace{1.5cm} EE(ED-1)$



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

Tο

Executive Engineer (ED-I), IIT Delhi, Hauz Khas, New Delhi – 110016

Subject: Submission of Bid for the work of "Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi.."

Dear Sir,

I / We acknowledge that IIT Delhi 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

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 signed by authorized signatory of the Bidder)

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Tender document for Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi..

[To be signed by the bidder and same signatory competent / authorized to sign the relevant contract on behalf of IITD]

INTEGRITY AGREEMENT

This Integrity Agreement is made at on this day of
BETWEEN
The Board of Governors, IIT Delhi, Hauz Khas, New Delhi - 16 represented through Executive Engineer (ED-I), IIT Delhi
referred as the 'Principal/Owner',
AND
(Name and Address of the Individual/firm/Company) Through
PREAMBLE
WHEREAS the Principal / Owner has floated the Tender (NIT No. 0672/58/IITD/EW/EE(ED-1)/2024-25) (hereinafter referred to as "Tender/Bid") and intends to award, under laid down organizational procedure, contract for "Providing and fixing of Electrical Installation work in Academic Complex East & West for setting up the lab's instruments etc. at IIT Delhi." (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:
Page 22 of 58 C Nil I Nil O Nil



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:
 - **1.1.** 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.
 - **1.1.1.** 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.
 - **1.1.2.** 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.

ARTICLE 2: COMMITMENT OF THE BIDDER(S) / CONTRACTOR(S)

- 1. It is required that each Bidder/Contractor (including their respective officers, employees and agents) adhere to the highest ethical standards, and report to the Government / Department all suspected acts of fraud or corruption or coercion or collusion of which it has knowledge or becomes aware, during the tendering process and throughout the negotiation or award of a contract.
- 2. The Bidder(s)/Contractor(s) commits himself to take all measures necessary to prevent corruption. He commits himself to observe the following principles during his participation in the Tender process and during the Contract execution:
 - **2.1.** 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.
 - **2.2.** 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.
 - **2.3.** 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.
 - **2.4.** 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

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C ... Nil I Nil O Nil



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.

- **2.5.** 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 wilful 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.

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C ... Nil I Nil O Nil



ARTICLE 4: PREVIOUS TRANSGRESSION

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

ARTICLE 5: EQUAL TREATMENT OF ALL BIDDERS/CONTRACTORS/SUBCONTRACTORS

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

ARTICLE 6: DURATION OF THE PACT

- 1. This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 6 months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.
- 2. If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority of IIT Delhi.

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

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C ... Nil I Nil O Nil



arbitration.

ARTICLE 8: LEGAL AND PRIOR RIGHTS

1. 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 :

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IITD - 7/8

INDIAN INSTITUTE OF TECHNOLOGY DELHI

HAUZ KHAS, NEW DELHI - 110016

Percentage Rate Tender / Item Rate Tender & Contract for Works

Tender for the work of "Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi.."

- 1. To be submitted online by Upto 3 PM of 17.01.2025
- 2. To be opened on 20.01.2025 at 3 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 Rs. 3,55,322.00 is hereby deposited in IIT Delhi Revenue Account No. 10773572622 as earnest money / A Demand Draft of Rs. 3,55,322.00 favouring Registrar, IIT Delhi has been scanned and uploaded with the Technical Bid. 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 the said earnest money shall be retained by him towards security deposit to execute all the works referred to in the tender documents upon the terms and conditions contained or referred to those in excess of that limit at the rates to be determined in accordance with the provision contained in Clause 12.2 and 12.3 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 retendering process of the work.

I / We undertake and confirm that eligible similar work(s) has/have not been got executed

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Tender document for Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi..

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 information in any manner prejudicial to the safety of the State.

Dated:				
		S	Signature of Contractor	
Witness:				
			Postal Address	
Address:				
Occupation:				
		ACCEPTANCE		
The above to	ender (as modified	by you as provided in th	ne letters mentioned her	reunder) is
accepted by me for	an on behalf of Th	e Board of Governors, I	IT Delhi, Hauz Khas, N	ew Delhi -
110016	for	а	sum	of
		form part of this contract		
(a)				
(b)				
(c)				
		For & on hehalf	of Board of Governors, II	T Delhi
		Signature		
Dated:		Designation		
 C Nil I Nil	O Nil			Page 28 of 58

D'Man AEE / AE / JE EE(ED-1)

PROFORMA OF SCHEDULES

SCHEDULE "A"

Schedule of Quantities (enclosed)

SCHEDULE "D"

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

SCHEDULE "E"

Reference to General Conditions of Contract:

1	Reference to General Conditions of Contract	:	GCC for Maintenance work 2023 for CPWD works along with correction on slips/amendments issued upto last date of submission of bid.
2	Name of work	:	Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi.
3	Estimated cost of work (Rs.)	:	1,77,66,080.00
4	Earnest Money (Rs.)	:	3,55,322.00
5	Performance Guarantee	:	5 percent of tendered value
6	Security Deposit	:	2.5 percent of tendered value

SCHEDULE "F"

GENERAL RULES & DIRECTIONS:

Officer inviting tender	:	Executive Engineer (ED-I)
Maximum percentage for quantity of items of		See Clause 12 below
work to be executed beyond which rates are to		
be determined in accordance with Clauses 12.2		
& 12.3		

DEFINITIONS:

2 (V)	Engineer-in-charge	:	Executive Engineer (ED-I)
2 (viii)	Accepting authority	••	Institute Engineer
2 (x)	Percentage on cost of materials and labour to cover all overheads and profits	••	15 percent
2 (xi)	Standard Schedule of Rates		Market, DSR-2022 for Electrical Works with corrected up to date of submission of bid.
2 (xii)	Department	:	Estate & Works, IIT Delhi
9 (ii)	Standard IITD Contract Form	••	PWD / IITD Form 7 / 8 as modified and corrected upto date, GCC 2023 for Maintenance work of CPWD with latest modifications.

CLAUSE 1

i)	Time allowed for submission of Performance Guarantee from the	15 days	
	TOTIOTITIATION OUGLATION TOTIC		/
5		Page 29 o	f 58

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

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date o	issue of letter of	acceptance		
above	um allowable I the period pro with late fees @0 ormance guarante	.1% per day	:	10 days

CLAUSE 2

(i)	Authority for fixing	compensation	:	Institute Engineer
	under Clause 2			

CLAUSE 2A

(i)	Whether	Clause	2A	shall	be	 No
	applicable					

CLAUSE 5

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

TABLE OF MILE STONE(S):

Sr. No.	Description of Milestone (physical)	Time allowed in days (from date of start)	Amount to be with-held in case of non-achievement of milestone
(1)	(2)	(3)	(4)
	NOT SPECIFIED		

Time allowed for execution of work	: 6 Months	
------------------------------------	------------	--

Authority to	Extension of time	:	Institute Engineer
decide:	Rescheduling of		Institute Engineer
	milestones		
	Shifting of date of	:	Executive Engineer (ED-I)
	start in case of delay		
	in handling over of		
	site.		

CLAUSE 5

Clause applicable 5	:	Applicable
---------------------	---	------------

CLAUSE 6A

MB applicable: Computerized	:	CMB
Measurement Book (CMB) / Electronic		
Measurement Book (EMB)		

CLAUSE 7

Gross	work	to	be	done	together	with	net	payment	/	:	
adjustn	nent of	ad	vanc	es for	materials	collec	ted, i	f any, sinc	е		25 Lakhs

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

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the last such payment							
The fact of the property of	t for being el	igible to	interim pay	ment			
OL ALIOE 74							
CLAUSE 7A							
Whether clause 7A shall be applicable : No							
CLAUSE 10A							
	ting oguinm	ont to h	o provided	by tho	cont	ractor at site lab	
1 NIL	2	NIL	be provided	by the	3	NIL	
4 NIL	5	NIL			6	NIL	
4 NIL	3	NIL			0	NIL	
CLAUSE 10B (ii)							
Whether Clause 10 B	(ii) shall be a	applicab	ole (Yes / No) : N	10		
CLAUSE 10 C							
Component of labou	ır oynrossoc	l ac noi	reant of val	uo of		: 32 Percent	
work	ii expiessed	as pei	iceni di vai	ue oi		32 Fercent	
CLAUSE 10CC (Not	t Applicable	۵)					
Whether Clause 10 C	C shall be an	onlicable	e (Yes / No)		: No	applicable	
CLAUSE 11	o onan bo ap	рпоавт	3 (1007 140)		. 110	а аррисавіо	
Specification to be	e followed	for :	: CPWD S	Specifica	tion 2	2023 for Electrical works	
execution of work				•		nufacturers Specifications	
			upto the	last dat	e of b	id submission/uploading of	
			•				
			tender.				
			Detailed			of items& specifications	
			Detailed			of items& specifications sper Engineer-in-charge	
CLAUSE 12			Detailed for marke			-	
12.2 Deviation	n limit beyon		Detailed for marke			s per Engineer-in-charge	
12.2 Deviation 12.2 &	12.3 shall a _l	pply for	Detailed for marke			-	
12.2 Deviation 12.2 & ' work / U	12.3 shall a _l Ipgradation f	pply for	Detailed for marke			s per Engineer-in-charge	
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CLAUSE 32 (i)

Requirement of Technical Representative for SITC (s) and recovery rate

						(5) 5222 56 1 0 0 0	,
Sr. No.	Minimum qualification of Technical Representative	Discipline	Designation Principal Technical / Technical representative)	Minimum experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause 36 (i)	
						Figures	Words
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Graduate or Diploma	Electrical /	Technical Representative	5 years for Diploma and 2	2	15,000	Fifteen thousand per month per

Assistant Engineers retired from Govt. / IIT Delhi services that are holding Diploma will be treated at par with Graduate Engineers. Diploma holder with minimum 10 year relevant experience with a reputed construction co. can be treated at par with Graduate Engineers for the purpose of such deployment subject to the condition that such diploma holders should not exceed 50% of requirement of degree engineers.

CLAUSE 38

Authority to clause 38		Not applicable
Authority to clause 30	-	i Not applicable

5 Page **32** of 58 C ... Nil I Nil O Nil

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COMMERCIAL AND ADDITIONAL CONDITIONS

1. GENERAL

- **1.1.** Location: Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi.
- 1.2. The work shall be executed as per CPWD General Specifications for Electrical Works Part-I (Int.) 2023, Part-II (Ext.) 2023, as amended upto date, relevant I.E. Rules, BIS/IEC and as per directions of Engineer-in-Charge. These additional specifications/conditions are to be read in conjunction with above and in case of variations; specifications given in these additional conditions shall apply. However, nothing extra shall be paid on account of these additional specification and conditions, as the same are to be read along with schedule of quantities for the work.
- **1.3.** The tenderer should in his own interest visit the site and get familiarize with the site conditions before tendering.
- **1.4.** No T&P shall be issued by the Department and nothing extra shall be paid on account of this.

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 and opening of Tenders:
- **2.2.1.** The tender is in two parts:
 - 2.2.1.1. Part-I -Technical cum Un-priced commercial Bid
 - 2.2.1.2. Part-II-Price Bid
- **2.3.** The tender shall be submitted online, duly completed as per NIT conditions within period of bid submission.
- **2.4.** The tenderers are advised not to deviate from the technical specifications / item, commercial terms and conditions of NIT like terms of payment, guarantee, arbitration clause, escalation etc.
- **2.5.** Technical cum un-priced commercial bid only shall be opened on the due date and time in the presence of tenderers or their authorized representative who wish to remain present.
- **2.6.** Scrutiny/evaluation of the technical-cum-commercial bid shall be done by the department. In case, it is found that the technical-cum-commercial bid of a tenderer is not in line with NIT specifications/requirements and/or contains too many deviations, the department reserves the right to reject the technical bid of such firms(s) without making any reference to the tenderer(s).
- 2.7. Necessary clarifications required by the department shall have to be furnished by the tenderer within the time given by the department for the same. The tenderer will have to depute his representative to discuss with the officer(s) of the department as and when so desired. In case, in the opinion of the department a tenderer is taking undue long time in furnishing the desired clarifications, his bid will be rejected without making any reference.

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- **2.8.** After obtaining clarification from all the tenders, the department will intimate the tenders whose technical cum commercial bids are acceptable.
- **2.9.** The price bids of only those tenderers shall be opened whose technical bids are found to be technically acceptable. The time and date of opening of price bid shall be fixed after the technical cum unpriced commercial bid is accepted and intimated to them by post/Fax/e-mail.
- **2.10.** The department reserves the right to reject any or all the price bids and call for fresh prices/tenders as the case may be without assigning any reason.

3. TERMS OF PAYMENTS

3.1. Payment shall be released after successful completion (Supply, Installation, Testing and satisfactory commissioning) of the work. However, R.A. bill may be preferred to the extent of prorata basis based on progress of overall work. Bidder should note that necessary documents (PAN card, cancelled cheque, GST Reg. proof and RTGS mandate form as per prescribed proforma of IIT Delhi) be submitted as soon as the work is awarded to them. Separate Contractor's Code shall be generated in IIT Delhi if the bidder is a new contractor to IIT Delhi ('Code' is perpetual in nature). Payment shall be processed after submission of Invoice and necessary documents / certificates (as mentioned in the NIT). There is a prevailing practice of pre-audit (for total tendered amount more than 3 lakhs) at IIT Delhi before releasing payment. Bidder shall have to comply all necessary documents as outlined in the Contract as to be desired by the Auditor and or by the Accountant. It may take one to two months in the whole process (from submission / acceptance of bill in CMB / MB by the contractor upto processing by Accounts section) to release payment subject to quick compliance of all submittals by the contractor. Applicable Taxes shall be got deducted from the bill as per prevailing orders of the Government. 'GST part of the bill' shall be released after submission of proof of payment of GST, i.e. B2B challan, etc. as may be, by the contractor.

4. AWARD OF WORK

4.1. Work shall be awarded to the successful bidder only after concurrence of the **Auditor of the Internal Audit Section** of the IIT Delhi as per extant Rules of the Institute.

5. SECURITY DEPOSIT

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5.1. Security Deposit shall be deducted from each running bill and final bill to the extent of 2.5% of the gross amount payable. The security deposit shall be released on the expiry of guarantee/ Maintenance period stipulated in the contract i.e 01 Years.

6. PERFORMANCE GUARANTEE

6.1. The successful tenderer shall submit an irrevocable performance guarantee of 5% of the tendered amount in addition to other deposit mentioned elsewhere in the contract for his proper performance of the contract agreement within 15 days of issue of letter of acceptance of tender. This guarantee shall be in the form of Demand Draft/Pay order of irrevocable bank guarantee bond of any schedule bank or the State Bank of India in the specified perform a of Government Security, fixed deposit receipt pledged in favour of **Registrar**, **IIT Delhi** 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 60 days. This bank guarantee shall be kept valid till the recording of completion certificate for the work by the competent authority. This shall be

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- released after submission of fresh bank guarantee for the comprehensive maintenance. Fresh bank guarantee shall have to be submitted @5% of the contract amount of comprehensive maintenance for the whole period of maintenance plus 60 days beyond.
- **6.2.** Income tax, GST, labour cess & other statutory deduction etc. shall be made at source as per the prevalent laws. The deduction of Security Deposit, Income Tax, etc., shall be done after calculation for the above due payment as per clause 3 above and net payment shall reduce accordingly.

7. RATES

7.1. The rates quoted by the tenderer, shall be firm and inclusive of all taxes (including works GST & labour cess), duties, levies, etc. and all charges for packing forwarding, insurance, freight and delivery, installation, testing and commissioning etc. at site including temporary construction of storage, risks overhead charges, general liabilities/ obligations.

8. COMPLETENESS OF TENDER

8.1. All sundry equipments, fitting, unit assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections 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 specially mentioned in the tender documents or not.

9. STORAGE AND CUSTODY OF MATERIAL

9.1. The agency has to make his own arrangement for storage. No separate storage accommodation shall be provided by the department Watch and ward of the storage and their safe custody shall be responsibility till the final taking over of the installation by the department.

10. CARE OF THE BUILDING

10.1. Care shall be taken by the contractor while handling and installing the various equipment 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.

11. COMPLETION PERIOD

11.1. The completion period indicated in the tender documents is for the entire work of planning, designing, approval of drawings etc, arrangement of materials & equipment, delivery at site including transportation, installation, testing, commissioning and handing over of the entire system to the satisfaction of the Engineer-in-charge.

12. GUARANTEE

12.1. The contractor shall guarantee the entire Electrical Installation work as per specifications both for components and for system as a whole. All E.I work shall be guaranteed for One year from the date of commissioning against unsatisfactory performance and / or breakdown due to defective design, workmanship or material. The equipment or component, or any part thereof, so found defective during guarantee period shall be forthwith replaced free of cost to the satisfaction of the Engineer-in-Charge. In case it is felt by the department that undue delay is

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being caused by the contactor in doing this, the same will be got done by the department at the risk and cost of the contractor. The decision of Engineer-in-Charge in this regard shall be final & binding on the contractor.

- **12.2.** The tenderer shall guarantee among other things, the following:
- 12.2.1. Quality, strength and performance of the material used as per manufacturer's standards.
- 12.2.2. Safe mechanical and electrical stress on all part under all specified conditions of operation.
- 12.2.3. Satisfactory operation during the maintenance period.

13. POWER SUPPLY

13.1. Power supply shall be made available by the department at one point near the site if required. Further, the arrangement for tapping power supply from this single point shall be made by the contractor.

14. EXTENT OF WORK

14.1. The work shall comprise of entire labour including supervision and all material necessary to make a complete installation and such tests and adjustment and commissioning as may be required by the department. The term complete installation shall not only mean major items of the plant and equipment's covered by the specification 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 documents in connection with this contract as this is a turnkey job.

15. VALIDITY

15.1. Tenders shall be valid for acceptance for a period 90 days of days from the date of opening of Technical Bid.

16. COMPLIANCE WITH REGULATIONS AND INDIAN STANDARDS

- **16.1.** All works shall be carried out in accordance with relevant regulation both statutory and those specified by the Indian Standards related to the works covered by this specification in particular, the equipment and installation will comply with the following:
- 16.1.1. Factories Act
- 16.1.2. Indian Electricity Rules
- **16.1.3.** B.I.S. & other standards as applicable
- **16.1.4.** Workmen's compensation Act
- **16.1.5.** Statutory norms prescribed by local bodies like fire department, CEA, Power Supply Co. etc.

17. INDEMNITY

17.1. The successful tenderer shall at all times indemnify the department, consequent on this works contract. The successful tenderer shall be liable, in accordance with the Indian Law and Regulations for any accident occurring due to any cause and the contractor shall be responsible for any accident or damage incurred or claims arising there from during the period of erection, construction and putting into operation the equipment's and ancillary equipment under the

5 Page **36** of 58 C ... Nil I Nil O Nil

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supervision of the successful tenderer in so far as the latter is responsible. The successful tenderer 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 successful tenderer on account of the above.

18. ERECTION TOOLS

18.1. No tools and tackles either for unloading or for shifting the equipments for erection purposes would be made available by the department. The successful tender shall make his arrangement for all these facilities

19. COOPERATION WITH OTHER AGENCIES AND OCCUPANTS OF THE BUILDING

19.1. The successful tenderer shall co-ordinate with other working contractors, if any and other occupants of different offices / Labs, etc., and exchange freely all technical information so as to make the execution of this work / contract smooth. No remuneration should be claimed from the department for such technical cooperation. If any unreasonable hindrance is caused to other agencies and any completed portion of the work has to be dismantled and re-done for want or cooperation and coordination by the tenderer during the course of work, such expenditure incurred will be recovered from the successful tenderer if the restoration work to the original condition or specification of the dismantled portion of work was not under taken by the tenderer himself.

20. MOBILIZATION ADVANCE

- **20.1.** No mobilization advance shall be paid for this work
- 21. INTERPRETING SPECIFICATION
- **21.1.** In interpreting the specification, the following order of decreasing importance shall be followed in case of contradictions:
- 21.1.1. Schedule of quantities
- **21.1.2.** Technical Specification
- **21.1.3.** Drawing (if any)
- **21.1.4.** General Specification for Electrical Works of CPWD (relevant Parts)
- **21.1.5.** Relevant BIS or other international code in case BIS code is not available.

22. POLICY OF THE INSTITUTE

Institute has a policy against **sexual harassment** and is committed to providing an environment free from **sexual harassment of women** at the workplace. Contractor shall have to abide by the policy of the Institute with due diligence. Any violation on the part of the contractor shall be dealt with the extant rules of the Institute.

- 23. The sample of material required for testing shall be provided by the contractor free of cost. Testing charges if any shall be borne by the IITD for satisfactory test results. However for unsatisfactory test reports or test results, testing charges shall be deducted from the bills of the contractor. The necessary expenditure to be incurred of taking sample, conveyance, packing etc. shall be borne by the contractor.
- 24. Department may inspect the material at OEM factory.

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ANNEXURE - 1

<< Organization Letter Head >> DECLARATION

1/\	Ve,		hereby declare that all the
info	rmation anddata furnished by our orga	aniz	ation with regard to this tender specification are
true	and complete to the best of our know	vled	ge. I / we have gone through the specification,
con	ditions and stipulations in details and	agr	ee to comply with the requirements and intent of
	cification.	Ü	
1	Name & Address of the bidder	•	
•	Trainio di Tradiccio di line biadei	-	
2	Phone	:	
3	E-mail	:	
4	Contact person name	:	
5	Mobile number	:	
6	GSTIN number	:	
7	PAN number	:	
8	UTR no. [if deposited online] for	:	
	EMD		
9	DD / FDR / Banker's Cheque No. [if	:	
	uploaded scanned copy] for EMD		
	BANK DETAILS of the Bidder		
10	Bank name	:	
11	Branch address	:	
12	Branch telephone no.	:	
13	MICR Code of the bank	:	
14	IFSC code	:	
15	Bank Account no.	:	
16	Type of account	:	
17	Pl attach one cancelled cheque	:	
We	further declare that our organization	ha	s not been blacklisted / delisted or put to any

We further declare that our organization has not been blacklisted / delisted or put to any holiday byany Institutional agency / Govt. Department / Public Sector Undertaking in the last three years.

(Signature& name of the bidder)
Seal of the bidder

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SPECIFICATIONS

1. The work shall be carried out as per CPWD general Specifications for Electrical Works Part – I, II & IV as amended upto date along with the following changes, relevant IE Rules and as per directions of Engineer-in-Charge. For electrical panels, CPWD General Specifications for Electrical Works Part-IV shall be applicable

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LIST OF APPROVED MAKES FOR ELECTRICAL INSTALLATION WORKS <u>E & M Items</u>

S. No.	Description	Approved Makes
01	MCB(10KA)/ Isolators &	Legrand /Havells/ Siemens/ Lauritz knudsen / ABB/
	MCB DB with End Box.	Schneider/ C&S.
02	MCCB	Legrand /Havells/ Siemens/ Lauritz knudsen / ABB/
		Schneider/ C&S.
03	MCCB BOX	Legrand /Havells/ Siemens/ Lauritz knudsen / ABB/
		Schneider/ C&S.
04	Modular type switch/	Havells Crabtree / Lauritz knudsen / ABB/ Wipro North West/
	socket, TV socket, Fan	Legrand(Arteor/ Myrius)/ Schneider (Zencelo).
	Regulator.	
05	Steel conduit pipe and	BEC/ AKG/ NIC / Steel Krafts
0.4	Accessories (ISI)	DEO/ M/O/NIO
04	PVC conduit pipe and	BEC/ AKG/ NIC
OF	Accessories(ISI)	Havella Crahtras / Anghar / North West / Lagrand
05	Junction Boxes/ MS Boxes	Havells Crabtree / Anchor / North West / Legrand PVC/ Nylon
06 07	Bushes FRLS PVC insulated copper	Polycab / Finolex / Havells/ KEI/ Universal
07	conductor cable	Polycab / Fillolex / Havelis/ REI/ Offiversal
08	LED Light Fixture	Philips// Bajaj/ Wipro/Crompton/ Havells/ Halonix
09	Ceiling Fans (BLDC) & Wall	Havells/ Atomberg/ Bajaj/ Crompton/USHA.
09	Fan	Travells/ Atomberg/ Bajaj/ Grompton/OSHA.
10	Exhaust Fan/ Fresh Air Fan	Havells/ Bajaj/ Crompton/USHA.
11	Industrial type socket	Legrand /Havells/ Siemens/ Lauritz knudsen / ABB/
' '	industrial type socket	Schneider/ C&S.
12	DLP U-PVC channel &	Schneider / Legrand
	accessories	
13	Modular Plate & Cover	Havells Crabtree / Lauritz knudsen / ABB/ Wipro North West/
	Plate	Legrand(Arteor/ Myrius)/ Schneider (Zencelo).
14	Distribution Board	Legrand /Havells/ Siemens/ Lauritz knudsen / ABB/
		Schneider/ C&S.
15	XLPE Alumium/ Copper	Havells/ Gloster/ Polycab/ Finolex/ RR kabel/ KEI/ Universal/
	conductor Armoured cable	Rallison
16	Multifunction Meter	Lauritz knudsen / AE/ Schneider/ Rishabh/ HPL
17	Ammeter	Lauritz knudsen / AE/ Universal/ Rishabh/ Meco/ Kaycee/
		Enercom
18	Voltmeter	Lauritz knudsen / AE/ Universal/ Rishabh/ Meco/ Kaycee/
40	Francisco Matan	Enercom
19	Frequency Meter	Digitron/ AE/ Rishabh/ Meco/ Keltron.
20	CT's	Lauritz knudsen /AE/ KAPPA/ Pragati/ Marshal
21 22	Selector Switches	Lauritz knudsen /AE/ KAPPA/ Pragati/ Marshal
22	Contractors	Lauritz knudsen / Seimens/ GE power/ Crompton/ Havells/ Legrand
23	Push button & Pilor lamps	BCH/ Lauritz knudsen / Seimens/ Vaishno
24	LED indicating Lights	Lauritz knudsen / Siemens/ Kaycee/ Crompton/ Vaishno
25	GI Pipe	Jindal Steel/ Jindal Hisar/ Sail/ Tata
26	DW HDPE Pipe	Reliance/ Duraline/ Hasti
27	Cat 6 LAN Cable	Legrand/ Molex/ Amp
28	Air conditioners	Mitsubishi/ O general/ Hitachi/ Daikin/ Blue Star/ Carrier/ LG/
	7 th Ooriginoriolo	Lloyds/ Panasonic/ Voltas

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29 Access Control System Bosch/ Honeywell/ HID/ Nextwatch 30 Intruder Alarm Systerm Ademco/ bosch/ DSC/ Honeywell 31 Cable raceway floor/ wall Legrand/ AKG/ BEC/ ESSAR/ Honeywell/ Godrej. mounted & Accessories(MS/G.I) C&S/ Lauritz knudsen / Schneider/ ABB. 32 Sandwitch Bus trunking/ Rising Main 33 Telephone wire Delton/Finolex/Havells/Skytone 34 Occupancy Sensor Wipro/ Schneider/ Honeywell/ Seimens/ Bosch 35 Gooseneck Microphone Televic/ Beyerdynamic/ Bosch/ Bose/ Sennheiser Amplifier Crown/ Extrom/ Crestron 36 24 Port Switch 37 Cisco/ Netgear/ Hp/ Juniper 38 8 Port LIU Legrand/ AMP/ Molex 16 Port Gigabit POE Switch 39 Netgear/ Juniper/ Cisco 40 HDMI/ USB Cable AMX/ Crestron/ Manhatten 41 AV Speaker JBL/ Bosch/ Bose/ Sony CCTV Camera 42 Pelco/ Bosch/ Honeywell DVR (Digital Video 43 Bosch/ Honeywell/ Pelco Recorder) 44 Fire Suppression System Minimax/ Ceasefire/ Ansul Johnson Control (IFC)/ Notifier (UL) / Bosch (UL) / Mircom 45 Fire Panel (UL) / Fike (UL) Notifier/ Johnson Control/ Fike/ Cooper/ Bosch/ Honeywell 46 PA System Addressable Heat/ Smoke Johnson Control (IFC)/ Notifier (UL) / Bosch (UL) / Mircom 47 detector/ Hooter/ RI/ (UL) / Fike (UL). Pullstation/ 48 Conventional Heat/ Smoke System Sensor/ Cooper/ GST/ Ravel/ Fike/ Essar/ Honeywell/ Bosch/ Bosch detector/ Hooter/ RI/ Pullstation/ Cable joint Kit Raychem/ M-Seal/ Densons/ 3M 49 Cement (Grey) OPC/ PPC ACC/ L&T/J.K/ BIRLA/ULTRA TECH/ VIKRAM 50 Grade-43 Cement (White) J.K/ BIRLA 51 Reinforcement Steel PRIMARY MANUFACTURERS APPROVED BY MINISTRY 52 OF STEEL/ SECONDARY MANUFACTURERS HAVING VALID BIS LICENSE (to be as per latest BIS provisions) Structural Steel PRIMARY MANUFACTURERS APPROVED BY MINISTRY 53 OF STEEL/ SECONDARY MANUFACTURERS HAVING VALID BIS LICENSE (to be as per latest BIS provisions) 54 Stainless Steel (Grade 304) JINDAL/ SAIL/ SALEM 55 **Bricks** COMMERCIALLY AVAILABLE OR REQUIRED STRENGTH **Aluminum Sections** HINDALCO/ JINDAL/ MAHAVIR 56 Cement (Grey) OPC/ PPC ACC/ Lauritz knudsen /J.K/ BIRLA/ULTRA TECH/ VIKRAM 57 Grade-43 58 Cement (White) J.K/ BIRLA PRIMARY MANUFACTURERS APPROVED BY MINISTRY Reinforcement Steel 59 OF STEEL/ SECONDARY MANUFACTURERS HAVING VALID BIS LICENSE (to be as per latest BIS provisions) Interlocking Precast paver HINDUSTAN TILES/ SWASTIK/ DALAL 60 blocks/ Kerb Stone 61 **RCC Pipe** LAKSHMI/ SOOD & SOOD/ JAIN &Co./ DIWAN SPUN PIPES PVC Pipe 62 PRAKASH/ PRINCE/ SUPREME M.S Pipes 63 JINDAL/ APPOLO/ SWASTIK / TATA / SURYA

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



BID SUBMISSION CHECK LIST

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)					
SI. No	Documents	Content	File Types			
1	Technical Bid	Annexure - I duly filled in and duly mentioning UTR No. for EMD deposition or Banker's Cheque or Demand Draft or FDR number with date of issue and got signed	.PDF			
2		Proof of EMD deposit / Scanned copy of DD submission (favouring 'Registrar, IIT Delhi') & Undertaking.	.PDF			
3		Enlistment order of Contractor	.PDF			
4		Certificate of work experience as desired with complete Schedule of Work	.PDF			
5		Certificate of GST Registration & undertaking	.PDF			
6		Affidavit as per provision of the clause 1.2.2 of IITD-6	.PDF			
7		Acceptance to execute INTEGRITY PACT	.PDF			
8		IITD 7 / 8 duly signed	.PDF			
9		Registration proof of EPFO & ESIC	.PDF			
10		Valid Electrical Licence	.PDF			
11		Any other document as specified in the NIT	.PDF			
		Envelope – 2				
SI. No	TYPES	Content				
1.	Financial Bid	Price bid should be submitted in BOQ format.	.EXL			

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 $C \dots Nil \hspace{0.5cm} I \dots \dots Nil \hspace{0.5cm} O \dots \dots Nil$



SCHEDULE OF QUANTITY

Name of work: Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi.

SLNo	Description	Qty	Unit	Rate	Amount
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 earthing the point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable etc. as required.				
1.1	Group C	80	Point		
2	Wiring for light/ power plug with 2X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	600	Metre		
3	Wiring for light/ power plug with 4X4 sq. mm FRLS PVC insulated copper conductor single core cable in surface/ recessed steel conduit alongwith 2 Nos. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	500	Metre		
4	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.				
4.1	2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire	600	Metre		
4.2	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	600	Metre		
4.3	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	600	Metre		
4.4	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	500	Metre		
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 1.5 sq. mm	800	Metre		
5.2	3 x 2.5 sq. mm	900	Metre		
5.3	6 x 2.5 sq. mm	1000	Metre		
5.4	3 x 4 sq. mm	1500	Metre		
5.5	6 x 4 sq. mm	800	Metre		
5.6	3 x 6 sq. mm	500	Metre		
5.7	6 x 6 sq. mm	500	Metre		
6	Supplying and drawing following pair 0.5 mm dia FRLS PVC insulated annealed copper conductor, unarmored telephone cable in the existing surface/				

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C ... Nil I Nil O Nil



	recessed steel/ PVC conduit as required.			
6.1	2 Pair	400	Metre	
7	Supplying and fixing of following sizes of steel conduit along with accessories in surface/recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required.		oue	
7.1	25 mm	600	Metre	
7.2	32 mm	500	Metre	
8	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.			
8.1	20 mm	500	Metre	
8.2	25 mm	500	Metre	
9	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.			
9.1	5/6 A switch	400	Each	
9.2	15/16 A switch	400	Each	
9.3	3 pin 5/6 A socket outlet	400	Each	
9.4	6 pin 15/16 A socket outlet	400	Each	
10	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	50	Each	
11	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	20	Each	
12	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.			
12.1	3 Module (100mmX75mm)	160	Each	
12.2	6 Module (200mmX75mm)	200	Each	
12.3	12 Module (200mmX150nnm)	60	Each	
13	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 & 15/16 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	60	Each	

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 $C \ldots Nil \quad I \ldots \ldots Nil \quad O \ldots \ldots Nil$



14	Supplying & fixing suitable size GI box wih modular plate and cover in front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	60	Each	
15	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.			
15.1	100 A, 16 KA,TPMCCB	10	Each	
15.2	125 A, 16 KA,TPMCCB	10	Each	
15.3	150 A, 16 KA,TPMCCB	5	Each	
16	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 V, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)			
16.1	8 way , Double door	10	Each	
16.2	12 way , Double door	10	Each	
16.3	16 way, Double door	8	Each	
17	Supplying and fixing of following ways surface/recess mounting, vertical type, 415 V, TPN MOB 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 MOB TPDB is normally used where 3 phase outlets are required.)			
17.1	4 way (4 + 12), Double door	8	Each	
17.2	8 way (4 + 24), Double door	8	Each	
17.3	12 way (4 + 36), Double door	10	Each	
18	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 MOB DB complete with connections, testing and commissioning etc. as required.			
18.1	Single pole	950	Each	
18.2	Double pole	50	Each	
18.3	Triple pole	50	Each	
19	Supplying and fixing single pole blanking plate in the existing MOB DB complete etc. as required.	10	Each	

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 $C \ldots Nil \quad I \ldots \ldots Nil \quad O \ldots \ldots Nil$



20	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.			
20.1	40A	10	Each	
20.2	63A	20	Each	
21	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.			
21.1	40A	10	Each	
21.2	63A	10	Each	
22	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	20	Each	
23	Supplying and fixing TP sheet steel enclosure on surface/ recess along with 16/25/32 A 415 V "C" curve TP MCB complete with connections, testing and commissioning etc. as required.	25	Each	
24	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	50	Each	
25	Supplying and fixing 20 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	40	Each	
26	Supplying and fixing 30 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 30 A "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	30	Each	
27	Supplying and fixing Cable End Box (Loose Wire Box) suitable for triple pole and neutral, sheet steel, Vertical MCB distribution board, 415 Volts, on	10	Each	

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 $C \ldots Nil \quad I \ldots \ldots Nil \quad O \ldots \ldots Nil$



Supplying, installing, testing and commissioning of following capacity TPN tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with TPN disconnector FSU and HRC fuses, connections, earthing etc. as required. 28.1 200 A TPN 3 Each 3 Each 3 Supplying, installing, testing and commissioning of following capacity TPN distribution tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with HRC fuses, interconnections, earthing etc. as required. 29.1 63 A TPN, 4 way 3 Each 3 Each 3 Each 4 Supplying, installing, testing and commissioning of following capacity End Feed Unit made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with TPN disconnector FSU and HRC fuses, mounting stands, cable end box, brass complete with TPN disconnector FSU and HRC fuses, mounting stands, cable end box, brass compession gland, connections, earthing etc. as required. 30.1 200 A TPN 3 Each 5 Each 5 Each 5 Each 6 Each 5 Each 6 Each		surface/ recess, complete with testing and commissioning etc. as required.			
commissioning of following capacity TPN tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with TPN disconnector FSU and HRC fuses, connections, earthing etc. as required. 28.1 200 A TPN 3 Each Supplying, installing, testing and commissioning of following capacity TPN distribution tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with HRC fuses, interconnections, earthing etc. as required. 29.1 63 A TPN, 4 way Supplying, installing, testing and commissioning of following capacity End Feed Unit made of 1.6mm thick sheet steel enclosure duly painted with powder coating rising mains complete with TPN disconnector FSU and HRC fuses, mounting stands, cable end box, brass compression gland, connections, earthing etc. as required. 30.1 200 A TPN Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. boits & nuts, etc. as required. 31.1 150 mm width X 50 mm depth X 1.6 mm thickness Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. boits & nuts, etc. as required. 32 with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. botts & nuts, etc. as required.		commissioning etc. do required.			
28.2 315 A TPN Supplying, installing, testing and commissioning of following capacity TPN distribution tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with HRC fuses, interconnections, earthing etc. as required. 29.1 63 A TPN, 4 way 30.2 Supplying, installing, testing and commissioning of following capacity End Feed Unit made of 1.6mm thick sheet steel enclosure duly painted with powder coating to existing rising mains complete with TPN disconnector FSU and HRC fuses, mounting stands, cable end box, brass compression gland, connections, earthing etc. as required. 30.1 200 A TPN Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 31.1 150 mm width X 50 mm depth X 1.6 mm thickness Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness 3 Each	28	commissioning of following capacity TPN tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with TPN disconnector FSU and HRC fuses, connections, earthing etc. as required.			
Supplying, installing, testing and commissioning of following capacity TPN distribution tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with HRC fuses, interconnections, earthing etc. as required. 29.1 63 A TPN, 4 way 3 Each Supplying, installing, testing and commissioning of following capacity End Feed Unit made of 1.6mm thick sheet steel enclosure duly painted with powder coating to existing rising mains complete with TPN disconnector FSU and HRC fuses, mounting stands, cable end box, brass compression gland, connections, earthing etc. as required. 30.1 200 A TPN Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 31.1 150 mm width X 50 mm depth X 1.6 mm thickness Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness 32 with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.	28.1	200 A TPN	3	Each	
commissioning of following capacity TPN distribution tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with HRC fuses, interconnections, earthing etc. as required. 29.1 63 A TPN, 4 way Supplying, installing, testing and commissioning of following capacity End Feed Unit made of 1.6mm thick sheet steel enclosure duly painted with powder coating to existing rising mains complete with TPN disconnector FSU and HRC fuses, mounting stands, cable end box, brass compression gland, connections, earthing etc. as required. 30.1 200 A TPN Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 31.1 150 mm width X 50 mm depth X 1.6 mm thickness Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Balvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.	28.2	315 A TPN	3	Each	
Supplying, installing, testing and commissioning of following capacity End Feed Unit made of 1.6mm thick sheet steel enclosure duly painted with powder coating to existing rising mains complete with TPN disconnector FSU and HRC fuses, mounting stands, cable end box, brass compression gland, connections, earthing etc. as required. 30.1 200 A TPN Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 31.1 150 mm width X 50 mm depth X 1.6 mm thickness 100 Metre Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness 3 Each	29	commissioning of following capacity TPN distribution tap off box made of 1.6mm thick sheet steel enclosure duly painted with powder coating on existing rising mains complete with HRC fuses, interconnections, earthing etc. as required.			
commissioning of following capacity End Feed Unit made of 1.6mm thick sheet steel enclosure duly painted with powder coating to existing rising mains complete with TPN disconnector FSU and HRC fuses, mounting stands, cable end box, brass compression gland, connections, earthing etc. as required. 30.1 200 A TPN Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 31.1 150 mm width X 50 mm depth X 1.6 mm thickness Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness 3 Each	29.1	63 A TPN, 4 way	3	Each	
Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 31.1 150 mm width X 50 mm depth X 1.6 mm thickness 100 Metre 31.2 300 mm width X 50 mm depth X 1.6 mm thickness 100 Metre Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness 3 Each	30	commissioning of following capacity End Feed Unit made of 1.6mm thick sheet steel enclosure duly painted with powder coating to existing rising mains complete with TPN disconnector FSU and HRC fuses, mounting stands, cable end box, brass compression gland, connections, earthing etc. as			
Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 31.1 150 mm width X 50 mm depth X 1.6 mm thickness 100 Metre 31.2 300 mm width X 50 mm depth X 1.6 mm thickness 100 Metre Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness 3 Each	30.1	200 A TPN	3	Each	
31.2 300 mm width X 50 mm depth X 1.6 mm thickness Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness 3 Each		Hot Dipped Galvanised Iron cable tray (Galvanisation thickness not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required.			
Supplying and installing following size of perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness 3 Each	31.1	•	100	Metre	
perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I. bolts & nuts, etc. as required. 32.1 150 mm width X 50 mm depth X 1.6 mm thickness 3 Each	31.2	·	100	Metre	
32.1 150 mm width X 50 mm depth X 1.6 mm thickness 3 Each	32	perforated Hot Dipped Galvanised Iron cable tray "bends" (galvanisation not less than 50 microns) with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with G.I. suspenders including G.I.			
·	32.1		3	Each	
	-	·			

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 $C \ldots Nil \quad I \ldots \ldots Nil \quad O \ldots \ldots Nil$



Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal/coke and salt as required. Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking 10 Set
X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking 10 Set
arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.
Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.
Supplying and laying 25 mm X 5 mm copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of brass nut bolt & spring washer spaced at 50mm) Metre
Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm) Metre
Providing and fixing 25 mm X 5 mm copper strip in 40 mm dia G.I. pipe from earth electrode including connection with brass nut, bolt, spring, washer excavation and re-filling etc. as required. Metre
Providing and fixing 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-filling etc. as required.
Providing and fixing 25 mm X 5 mm copper strip on surface or in recess for connections etc. as 200 Metre required.
Providing and fixing 25 mm X 5 mm GI. strip on surface or in recess for connections etc. as required. Metre
Providing and fixing 6 SWG dia GI. wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ subnnain wiring/ cable as required. Metre
Providing and fixing 4.00 mm dia copper wire on surface or in recess for loop earthing along with existing surface/ recessed conduit/ submain wiring/ cable as required. 150 Metre

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 $C \ldots Nil \quad I \ldots \ldots Nil \quad O \ldots \ldots Nil$



44	Providing and fixing earth bus of 50 mm X 5 mm copper strip on surface for connections etc. as required.	5	Metre	
45	Jointing copper! G.I. tape (with another copper/ G I tape, base of the finial or any other metallic object) by riveting / nut bolting/ sweating and soldering etc as required.	100	Each	
46	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.			
46.1	3.5X 35 sq. mm (32mm)	8	Each	
46.2	3.5 X 50 sq. mm (35mm)	8	Each	
46.3	3.5 X 70 sq. mm (38mm)	8	Each	
46.4	3.5 X 150 sq. mm (50mm)	8	Each	
46.5	4 X 16 sq. mm (28mm)	10	Each	
47	Supplying, laying, fixing, testing and commissioning of following thickness closed cell elastrometric nitrile rubber of class 'O' applied by suiatable adhesive, as per specifications and as required complete in all respect.			
47.1	32mm	150	sqm	
47.2	19mm	150	sqm	
48	Supply, Installation, Testing and Commissioning of 1200 mm sweep, BEE 5 star rated, ceiling fan with Brush Less Direct Current (BLOC) Motor, class of insulation: B, 3 nos. blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, Power Factor not less than 0.9, Service Value (CM/M/W) minimum 6.00, Air delivery minimum 210 Cum/Min, 350 RPM (tolerance as per IS: 374-2019), THD less than 10%, remote or electronic regulator unit for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 degree C (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC Supply, earthing etc. complete as required.	50	Each	
49	LED Light Fixtures			

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 $C \ldots Nil \quad I \ldots \ldots Nil \quad O \ldots \ldots Nil$



Supplying and installation of Recess/ Surface mounting LED luminaire equipped with CRCA powder coating housing, anti glare polycarbonate diffuser with energy efficient electronic driver with following features: suitable for operating voltage and frequency: 130-300 Va.c., 50 Hz.; wattage not more than 36 Watts;Output lumens not less than 3300 Im; CCT 6000K; Dimension in mm (595X595); Nominal surge protection 2.5 kV;Power factor not less than 0.9; Minimum IP protection 20 Supplying and installation of Recess/Surface mounting round LED luminaire equipped with diecast aluminium / CRCA housing, anti glare polycarbonate diffuser with energy efficient electronic driver with following features:-Suitable for operating voltage and frequency: 130-300 Va.c., 50 Hz.; wattage not more than 12 Watts;Output lumens not less than 650 Im; CCT 6000K; Nominal surge protection 2.5 kV;Power factor not less than 0.9; Minimum IP protection 54 Supplying and installation of Surface mounting LED Industrial Batten light with following features:-Suitable for operating voltage and frequency: 130-300 Va.c., 50 Hz.; wattage 40 Watts; Length 1200mm; Nominal surge protection 2.5 kV;IP 66. Supplying and installation of LED flood light with energy saving, environmental friendly, long life, exclusive innovative die-cast aluminium IP66, suitable for inplinghting architectural facade and general purpose lighting with following features:-Suitable for operating voltage and frequency: 130-300 Va.c., 50 Hz.; wattage 100 Watts; Nominal surge protection 2.5 kV; IP 66. THD-10 % Providing and fixing DLP plastic trunking of size 105 mm x 50 mm on surface as reqd [Make Legrand] PVC trunking bleft or right End cap PVC trunking full cover of size 85 mm size 1000 Metre 50.1 PVC trunking left or right End cap 1001 Metre 50.2 PVC trunking letternal angle adjustable from 60°-100° 400 Each 50.4 PVC trunking Internal angle adjustable from 60°-100° 50.5 PVC trunking Dever joint for 85 mm width 50.6 PVC trunking base/body joint 50.7 PVC trunking base/bod					
mounting round LED luminaire equipped with diecast aluminium / CRCA housing, anti glare polycarbonate diffuser with energy efficient electronic driver with following features:-Suitable for operating voltage and frequency: 130-300 Va.c, 50 Hz.; wattage not more than 12 Watts; Output lumens not less than 650 Im; CCT 6000K; Nominal surge protection 2.5 kV; Power factor not less than 0.9; Minimum IP protection 54 Supplying and installation of Surface mounting LED Industrial Batten light with following features:-Suitable for operating voltage and frequency: 130-300 Va.c, 50 Hz.; wattage 40 Watts; Length 1200mm; Nominal surge protection 2.5 kV; IP 66. THD<10 %; Supplying and installation of LED flood light with energy saving, environmental friendly, long life, exclusive innovative die-cast aluminium IP66, suitable for operating voltage and frequency: 130-300 Va.c, 50 Hz.; wattage 100 Watts; Nominal surge protection 2.5 kV; IP 66. THD<10 %. 50 For Providing and frixing DLP plastic trunking of size 105 mm x 50 mm on surface as reqd.[Make Legrand] 50.1 PVC trunking without cover of size 85 mm size 50.2 PVC trunking full cover of size 85 mm size 50.3 PVC trunking Left or right End cap 50.4 PVC trunking Left or right End cap 50.5 PVC trunking External angle adjustable from 80°-120 50.6 PVC trunking External angle adjustable from 60°-120 50.7 PVC trunking Sternal angle adjustable from 60°-120 FVC trunking Cover joint for 85 mm width 35 Each 50.9 6/8 Modules clip on frame with finishing plate for 85 200 Each	49.1	mounting LED luminaire equipped with CRCA powder coating housing, anti glare polycarbonate diffuser with energy efficient electronic driver with following features: Suitable for operating voltage and frequency: 130-300 Va.c, 50 Hz.; wattage not more than 36 Watts;Output lumens not less than 3300 lm; CCT 6000K; Dimension in mm (595X595); Nominal surge protection 2.5 kV;Power	50	Each	
Industrial Batten light with following features: Suitable for operating voltage and frequency: 130- 300 Va.c, 50 Hz.; wattage 40 Watts; Length 1200mm; Nominal surge protection 2.5 kV; IP 66. THD<10 %; Supplying and installation of LED flood light with energy saving, environmental friendly, long life, exclusive innovative die-cast aluminium IP66, suitable for highlighting architectural facade and general purpose lighting with following features: Suitable for operating voltage and frequency: 130- 300 Va.c, 50 Hz.; wattage 100 Watts; Nominal surge protection 2.5 kV; IP 66. THD<10 % Providing and fixing DLP plastic trunking of size 105 mm x 50 mm on surface as reqd.[Make Legrand] 50.1 PVC trunking without cover of size 105 x 50 mm size 50.2 PVC trunking full cover of size 85 mm size 1000 Metre 50.3 PVC trunking Internal angle adjustable from 80°- 100° 40 Each 50.4 PVC trunking External angle adjustable from 60°- 120 50.5 PVC trunking External angle adjustable from 60°- 120 50.6 PVC trunking External angle 50.7 PVC trunking Cover joint for 85 mm width 50.8 PVC trunking base/body joint 50.9 6/8 Modules clip on frame with finishing plate for 85 200 Each	49.2	mounting round LED luminaire equipped with diecast aluminium / CRCA housing, anti glare polycarbonate diffuser with energy efficient electronic driver with following features:-Suitable for operating voltage and frequency: 130-300 Va.c, 50 Hz.; wattage not more than 12 Watts;Output lumens not less than 650 lm; CCT 6000K; Nominal surge protection 2.5 kV;Power factor not less than 0.9; Minimum IP protection 54	50	Each	
energy saving, environmental friendly, long life, exclusive innovative die-cast aluminium IP66, suitable for highlighting architectural facade and general purpose lighting with following features:-Suitable for operating voltage and frequency: 130-300 Va.c, 50 Hz.; wattage 100 Watts; Nominal surge protection 2.5 kV; IP 66. THD<10 % Providing and fixing DLP plastic trunking of size 105 mm x 50 mm on surface as reqd.[Make Legrand] PVC trunking without cover of size 105 x 50 mm size FVC trunking full cover of size 85 mm size 1000 Metre 50.2 PVC trunking Left or right End cap PVC trunking Internal angle adjustable from 80°-100° FVC trunking External angle adjustable from 60°-120 PVC trunking Sternal angle adjustable from 60°-120 FVC trunking Oo°Flat angle 50.6 PVC trunking Cover joint for 85 mm width 35 Each 50.7 PVC trunking base/body joint 40 Each 50.9 6/8 Modules clip on frame with finishing plate for 85 200 Each	49.3	Industrial Batten light with following features:-Suitable for operating voltage and frequency: 130-300 Va.c, 50 Hz.; wattage 40 Watts; Length 1200mm; Nominal surge protection 2.5 kV; IP 66.	50	Each	
mm x 50 mm on surface as reqd.[Make Legrand] 50.1 PVC trunking without cover of size 105 x 50 mm size 50.2 PVC trunking full cover of size 85 mm size 50.3 PVC trunking Left or right End cap 50.4 PVC trunking Internal angle adjustable from 80°- 40 Each 50.5 PVC trunking External angle adjustable from 60°- 40 Each 50.6 PVC trunking 90°Flat angle 50.7 PVC trunking Cover joint for 85 mm width 50.8 PVC trunking base/body joint 50.9 6/8 Modules clip on frame with finishing plate for 85 200 Each	49.4	energy saving, environmental friendly, long life, exclusive innovative die-cast aluminium IP66, suitable for highlighting architectural facade and general purpose lighting with following features:-Suitable for operating voltage and frequency: 130-300 Va.c, 50 Hz.; wattage 100 Watts; Nominal surge protection 2.5 kV; IP 66. THD<10 %	20	Each	
50.1 PVC trunking without cover of size 105 x 50 mm size 50.2 PVC trunking full cover of size 85 mm size 50.3 PVC trunking Left or right End cap 50.4 PVC trunking Internal angle adjustable from 80°- 40 Each 50.5 PVC trunking External angle adjustable from 60°- 40 Each 50.6 PVC trunking 90°Flat angle 50.7 PVC trunking Cover joint for 85 mm width 50.8 PVC trunking base/body joint 50.9 6/8 Modules clip on frame with finishing plate for 85 200 Each	50				
50.2PVC trunking full cover of size 85 mm size1000Metre50.3PVC trunking Left or right End cap40Each50.4PVC trunking Internal angle adjustable from 80°- 100°40Each50.5PVC trunking External angle adjustable from 60°- 12040Each50.6PVC trunking 90°Flat angle35Each50.7PVC trunking Cover joint for 85 mm width35Each50.8PVC trunking base/body joint40Each50.96/8 Modules clip on frame with finishing plate for 85200Each	50.1	PVC trunking without cover of size 105 x 50 mm	1000	Metre	
50.4 PVC trunking Internal angle adjustable from 80°- 100° 40 Each 50.5 PVC trunking External angle adjustable from 60°- 120 40 Each 50.6 PVC trunking 90°Flat angle 35 Each 50.7 PVC trunking Cover joint for 85 mm width 35 Each 50.8 PVC trunking base/body joint 40 Each 50.9 6/8 Modules clip on frame with finishing plate for 85 200 Each	50.2		1000	Metre	
50.4 100° 50.5 PVC trunking External angle adjustable from 60°- 120 50.6 PVC trunking 90°Flat angle 50.7 PVC trunking Cover joint for 85 mm width 50.8 PVC trunking base/body joint 50.9 6/8 Modules clip on frame with finishing plate for 85 40 Each 50.5 Each 50.6 Each 50.7 Each 50.8 PVC trunking base/body joint 50.9 Each	50.3		40	Each	
50.5 120 40 Each 50.6 PVC trunking 90°Flat angle 35 Each 50.7 PVC trunking Cover joint for 85 mm width 35 Each 50.8 PVC trunking base/body joint 40 Each 50.9 6/8 Modules clip on frame with finishing plate for 85 200 Each	50.4	100°	40	Each	
50.7PVC trunking Cover joint for 85 mm width35Each50.8PVC trunking base/body joint40Each50.96/8 Modules clip on frame with finishing plate for 85200Each	50.5	120	40	Each	
50.8 PVC trunking base/body joint 40 Each 50.9 6/8 Modules clip on frame with finishing plate for 85 200 Each					
50.9 6/8 Modules clip on frame with finishing plate for 85 200 Each		,			
	-	<u> </u>			
	50.9	o/o iviodules clip on frame with finishing plate for 85	200	∟ach	Page 50 of 58

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 $C \ldots Nil \quad I \ldots \ldots Nil \quad O \ldots \ldots Nil$



	mm cover			 [[
50.1	Modular 5/6 amps switch on the existing modular	200	Each		
50.11	plate & switch box / channel including connection Modular 5/6 amps socket on the existing moudular	200	Each		
50.12	plate & switch box including connection. Modular 16A/20 amps switch on the existing modular plate & switch box / channel including connection	250	Each		
50.13	Modular 6/16 amps multi socket on the existing moudular plate & switch box including connection.	250	Each		
50.14	Information data socket RJ45 with shutter with moudular plate	50	Each		
50.15	Telephone socket RJ11 with shutter with moudular plate	20	Each		
50.16	3 Modules clip on frame with finishing plate for 85 mm cover.	50	Each		
51	Supplying, installation DLP mini- trunking 32mm x 20mm with independent cover etc. complete as reqd.[Make Legrand]				
51.1	PVC mini trunking with independent cover of size 32mm x 20mm size.	250	Metre		
51.2	PVC mini trunking End cap left or right.	15	Metre		
51.3	PVC mini trunking Internal/ External angle from 60°-120°	15	Each		
51.4	PVC mini trunking Flat angle from 85°-95°	15	Each		
51.5	PVC mini trunking Flat junction	15	Each		
52	Supplying and laying of PVC insulated, PVC sheathed XLPE aluminium conductor armored cable of Following size, 1.1 KV grade, direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required. etc. as required [conforming to I.S-1554/1/8]				
52.1	4 X 16 sq. mm	50	Metre		
52.2	3½ X 35 sq. mm	50	Metre		
52.3	3½ X 50 sq. mm	25	Metre		
52.4	3½ X 70 sq. mm	25	Metre		
52.5	3½ X 150 sq. mm	25	Metre		
53	Supplying and laying of PVC insulated, PVC sheathed XLPE aluminium conductor armored cable of Following size, 1.1 KV grade in the existing RCC/HUME/ METAL pipe as required. [conforming to I.S-1554/1/8].				
53.1	4 X 16 sq. mm	30	Metre		
53.2	3½ X 35 sq. mm	25	Metre		
53.3	3½ X 50 sq. mm	25	Metre		
53.4	3½ X 70 sq. mm	25	Metre		

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C ... Nil I Nil O Nil



53.5	3½ X 150 sq. mm	25	Metre	
54	supplying and laying and Fixing of PVC insulated, PVC sheathed XLPE aluminium conductor armored cable of Following size, 1.1 KV grade on wall surface as required. Upto 35 sq. mm (clamped with 1 mm thick saddle) Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm [conforming to I.S-1554/1/8].			
54.1	4 X 16 sq. mm	250	Metre	
54.2	3½ X 35 sq. mm	200	Metre	
54.3	3½ X 50 sq. mm	200	Metre	
54.4	3½ X 70 sq. mm	150	Metre	
54.5	3½ X 150 sq. mm	150	Metre	
55	Fans.			
55.1	Supplying and fixing of 450mm Wall mount fan complete with all accessories for use on 220/240 volts 50 HZ, single phase A/C Supply including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor single/ multi core cable etc as reqd	15	Each	
55.2	Supplying and fixing of 250 mm size fresh air fan complete with suitable size louvers with all accessories suitable for use on 230 V , 50 Hz supply in the existing opening, including making good the damage , connection, testing and commissioning etc. as required.as required	15	Each	
55.3	Supplying and fixing of 300 mm size heavy duty exhaust fan complete with suitable size louvers with all accessories suitable for use on 230 V , 50 Hz supply in the existing opening, including connection with 1.5 sq. mm FRLS PVC insulated, copper conductor single/ multi core cable and making good the damage , testing and commissioning etc. as required.	15	Each	
56	Supply and installation of SS enclosure duly powder Coated paint for housing incomming MCCB 4P, of appropriate size with incomming and outgoing opening, suitable to accommodate upto 70sqmm, 3.5 core aluminium armoured cable, with louvers for heat dissipation and mounting hole for easy wall mounting. (matter: AC / Normal / Emergency Power) etc. as required	10	Each	

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 $C \ldots Nil \quad I \ldots \ldots Nil \quad O \ldots \ldots Nil$



57	Supply and installation of SS enclosure duly powder Coated paint for housing incomming MCCB 4P, of appropriate size with incomming and outgoing opening, suitable to accommodate upto 300sqmm, 3.5 core aluminium armoured cable, with louvers for heat dissipation and mounting hole for easy wall mounting. (matter: AC / Normal / Emergency Power) etc. as required. (Make: L&T / Schneider / Legrand / Havells / C&S / Siemen / ABB)	10	Each	
58	Providing and fixing DLP plastic trunking of size 150 mm x 50 mm on surface as reqd.[Make Legrand]			
58.1	DLP plastic trunking of size 150 mm x 50 mm without cover	500	Metre	
58.2	PVC trunking full cover of size 85 mm size	500	Metre	
58.3	PVC trunking full cover of size 40 mm size	500	Metre	
58.4	Clip on Partition (Plastic)	500	Metre	
58.5	PVC trunking Left or right End cap	30	Each	
58.6	PVC trunking Internal angle adjustable from 80°-100°	25	Each	
58.7	PVC trunking External angle adjustable from 60°-120°	25	Each	
58.8	PVC trunking 90°Flat angle	25	Each	
58.9	PVC trunking Cover joint	25	Each	
58.1	PVC trunking base/body joint	25	Each	
58.11	6/8 Modules clip on frame with finishing plate for 85 mm cover	100	Each	
58.12	1 Modules clip on frame with finishing plate for 40 mm cover	100	Each	
58.13	Modular 5/6 amps switch on the existing modular plate & switch box / channel including connection	100	Each	
58.14	Modular 5/6 amps socket on the existing moudular plate & switch box including connection.	100	Each	
58.15	Modular 16A/20 amps switch on the existing modular plate & switch box / channel including connection	100	Each	
58.16	Modular 6/16 amps multi socket on the existing moudular plate & switch box including connection.	100	Each	
58.17	Telephone socket RJ11 with shutter in the existing moudular plate	25	Each	
58.18	Information data socket RJ45 with shutter in the existing moudular plate	25	Each	

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 $C \ldots Nil \hspace{0.5cm} I \ldots \ldots Nil \hspace{0.5cm} O \ldots \ldots Nil$



59	Supply, Making, Testing & commissioning of Advance maintenance free Chemical Gel Earthing of single pipe Technology(copper) of 3 mtr. long 50 mm dia fiiled with highly conducting metallic compound with the permanent sealings at the both the ends with the lead terminal 32x10mm at the top along with 50kgs of chemical gel for (mixture of sulphate, Silica, Alumina, Iron Oxide, Titanium Oxide, Magnesium Oxide, Sodium Oxide, Zinc Oxide etc.) Resitance lowering grounding Minerals. The loss on ignition by mass of the chemical compound should be tested and certified by any International accredited and BIS (Bureau of Indian Standard) accredited laboratory. The Chemical earth electrode manufacturer shall be an ISO 9001:2008 & ISO 14001:2001 certified organization. The Testing laboratory should be ISO 14001 certified. The JK CHEMRODE shall be duly tested & certified by CPRI (Central Power Research Institute) Govt. of India for a minimum short circuit current of 30 KA rms. The Chemical Earth electrode manufacturer shall be an ISO 9001:2008 & ISO 14001:2004 certified organisation. along with Heavy duty polyplastic weather proof earth pit/ chamber.	10	Each	
60	Electrical Panel board			
60.1	Design, Fabrication, Supplying, testing & commissioning of front operated cubicle type compartmentalized, front access free standing, dust and vermin proof (IP 54) panel board of 1750x 1550x 400 mm size suitable for use at 415 volt, 3 phase, 4 wire, 50 hertz system suitable for fault level of required value symmetrical at 415 volts, made out of 2mm thick CRCA MS sheet with hinged, gasketed (metal based neoprene) and lockable doors having structural reinforcement with suitable angle/channel/ T/ Flat/ sections including 3 mm thick gland plates on top and bottom and lifting hooks and GI earth strip of required size with 2 nos. earthing terminal and powder coated paint finish of approved shade over metal surface cleaned and treated with seven tank process complete with frame duly erection in ground and interconnection with copper conductor etc. as specification, as complete as required confirming to IS8623:93 as below. [Note:- The panel should be IS 8623:93, IEC 61439 part-1 and II manufacturer has to produces the	3	Each	

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C ... Nil I Nil O Nil



relevant test certificate as per IEC code for the same failing which panel shall be rejected) and CPRI Approved.]

Incoming

(a) 400 amp, 4P, 36KA, 50HZ, 415V, AC MCCB with thermal magnetic based releases for O/C & S/C protection = 01 Nos.

Bus Bar

Electrolytic high conductivity aluminium, three phase and neutral busbars rated at 630 amps having a maximum current density of 120 A/sq cm suitable to with stand symmetrical fault level of 35 kA. at 415 Volts. The Neutral busbar is to be of 100% capacity. Outgoing

- (a) 250 amps, 4P, 36KA, 50HZ, 415V, AC MCCB with thermal magnetic based releases for O/C & S/C protection = 01 Nos.
- (b) 125 amps, 4P, 36KA, 50HZ, 415V, AC MCCB with thermal magnetic based releases for O/C & S/C protection = 04 Nos.
- (c) 63 amps, 4P, 36KA, 50HZ, 415V, AC MCCB with thermal magnetic based releases for O/C & S/C protection = 04Nos.
- (d) Earthing studs 2 Nos
- (e) Danger plate 01 Nos Metering
- (a) Digital Ammeter 01 Nos with accuracy class 1.0
- (b) Digital Voltmeter 01 Nos with accuracy class 1.0
- (c) RYB indicating lamp
- (d) Suitable CT's

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C ... Nil I Nil

(e) Rotatory handle in each switch

O Nil

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D'Man AEE / AE / JE EE(ED-1)



60.2	Design, Fabrication, Supplying, testing & commissioning of front operated cubicle type compartmentalized, front access free standing, dust and vermin proof (IP 54) panel board of 1650x 1200x 400 mm size suitable for use at 415 volt, 3 phase, 4 wire, 50 hertz system suitable for fault level of required value symmetrical at 415 volts, made out of 2mm thick CRCA MS sheet with hinged, gasketed (metal based neoprene) and lockable doors having structural reinforcement with suitable angle/channel/ T/ Flat/ sections including 3 mm thick gland plates on top and bottom and lifting hooks and GI earth strip of required size with 2 nos. earthing terminal and powder coated paint finish of approved shade over metal surface cleaned and treated with seven tank process complete with frame duly erection in ground and interconnection with copper conductor etc. as specification, as complete as required confirming to IS8623:93 as below. [Note:- The panel should be IS 8623:93, IEC 61439 part-1 and II manufacturer has to produces the relevant test certificate as per IEC code for the same failing which panel shall be rejected) and CPRI Approved.]	3	Each	
	Incoming			
	(a) 250 amp, 4P, 36KA, 50HZ, 415V, AC MCCB with thermal magnetic based releases for O/C & S/C protection = 01 Nos.			
	Bus Bar Electrolytic high conductivity aluminium, three phase and neutral busbars rated at 400 amps having a maximum current density of 120 A/sq cm suitable to with stand symmetrical fault level of 35 kA. at 415 Volts. The Neutral busbar is to be of 100% capacity. Outgoing			
	(a) 160 amps, 4P, 36KA, 50HZ, 415V, AC MCCB with thermal magnetic based releases for O/C & S/C protection = 01 Nos.			
	(b) 125 amps, 4P, 36KA, 50HZ, 415V, AC MCCB with thermal magnetic based releases for O/C & S/C protection = 02 Nos.			

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C ... Nil I Nil O Nil



			. 		
	(c) 63 amps, 4P, 36KA, 50HZ, 415V, AC MCCB with thermal magnetic based releases for O/C & S/C protection = 04Nos. (d) Earthing studs 2 Nos (e) Danger plate – 01 Nos Metering (a) Digital Ammeter - 01 Nos with accuracy class 1.0 (b) Digital Voltmeter - 01 Nos with accuracy class				
	1.0 (c) RYB indicating lamp (d) Suitable CT's				
	(e) Rotatory handle in each switch				
61	Metal/ G.I Raceways				
61.1	Cutting of existing cement concrete floor for 225mm width x 38 mm deep to fix raceway including making good the same with proper cement mortar atc. as required.	50	Metre		
61.2	Supplying and fixing 225mm X 38mm, 3 compartment type metal / G.I raceway, IP-20 & fixing in floor with all accessories etc. as required.(Make - Legrand)	150	Metre		
61.3	Supplying and fixing G.I Junction box / floor box for 225 X225 X 65 mm size etc. as required. (Make-Legrand)	40	Each		
61.4	Supplying and fixing of 225 X 38 mm size G.I bracket for fixing the raceway in floor etc as required.(Make - Legrand)	50	Each		
61.5	Supplying and fixing G.I coupler for 225 mm X 38 mm size G.I raceway etc as required. (Make-Legrand)	50	Each		
61.6	Supplying and fixing G.I vertical riser for 225 mm X 38 mm size G.I raceway etc as required. (Make - Legrand)	5	Each		
62	Supplying and laying of PVC innersheathed, XLPE insulated copper conductor armored cable of Following size, 1.1 KV grade, in the existing RCC/HUME/ METAL pipe as required. [conforming to I.S-7098(Part 1) 1988.				
62.1	4 X 16 sq. mm	50	Metre		
62.2	4 X 25 sq. mm	50	Metre		
62.3	4 X 35 sq. mm	50	Metre		
63	Supplying and laying of PVC innersheathed, XLPE insulated copper conductor armored cable of Following size, 1.1 KV grade, on wall surface as required. Upto 35 sq. mm (clamped with 1 mm thick saddle) [conforming to I.S-7098(Part 1) 1988.				

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C ... Nil I Nil O Nil



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Tender document for Providing and fixing of Electrical Installation Work in Academic Complex in different laboratory/ offices at IIT Delhi..

63.1	4 X 16 sq. mm	300	Metre	
63.2	4 X 25 sq. mm	350	Metre	
63.3	4 X 35 sq. mm	300	Metre	
64	Structural steel work in single section, fixed with or without connecting plate, including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete.(Civil)	150	Kg	
	Total			

JE[E] EE[ED-1]

 $D'Man \hspace{3.1cm} AEE \, / \, AE \, / \, JE \hspace{3.1cm} EE(ED-1)$