

**INDIAN INSTITUTE OF TECHNOLOGY JODHPUR
NH-62 NAGAU ROAD KARWAR JODHPUR**

Index of Tender documents

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This Tender document contains pages One to Fifty-Five only.

NIT Amounting to Rs. 18,09,962.00 (Rupees Eighteen Lakh Nine Thousand Nine Hundred Sixty-Two Only)

Superintending Engineer
IIT Jodhpur

NOTICE INVITING E-TENDERS

Superintending Engineer, Indian Institute of Technology Jodhpur invites online **Percentage Rate Tender** from Firms/ Contractors for the following work:

1. NIT No : **IITJ/OIE/2025-26/17**
2. Name of Work : **Infrastructure work in Berm E-01 and E-03.**
3. Sub Head : **Electrical Work.**
4. Estimated cost : **Rs. 18,09,962.00**
5. Earnest Money : **Rs. 36,200.00**
6. Period of completion : **60 Days**
7. Last time & date of submission of bid: **07/11/2025 up to 3:00 pm (on line)**

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

**Superintending Engineer
IIT Jodhpur**

Copy to: -

1. DOIP
2. ADEI
3. Executive Engineer (Civil)
4. Assistant Executive Engineer (Electrical-I)
5. AR (Accounts)
6. Office Copy

INDIAN INSTITUTE OF TECHNOLOGY JODHPUR
NH-62 NAGAU ROAD KARWAR JODHPUR

INFORMATION AND INSTRUCTIONS FOR BIDDERS FOR e-TENDERING (Tender Notice)

Superintending Engineer, IIT Jodhpur invite online **Percentage Rate Tender** on two bid systems through CPP Portal from Firms/ Contractors for the following work:

S. No.	NIT No.	Name of Work	Estimated Cost (in Rs.)	Earnest Money (in Rs.)	Tender Fees (in Rs.)	Time for completion
1	IITJ/OIE/2025-26/17.	Infrastructure work in Berm E01 and E-03. Sub Head: - Electrical Work	Rs. 18,09,962.00	Rs. 36,200.00	Rs. 500/-	60 Days

Last date and time of submission of financial & Technical bid :- 07/11/2025 upto 3:00 pm (on line)

Date and time of opening of Online Technical bid :- 10/11/2025 at 3:00 pm

Price/Financial bids of eligible bidders as per NIT shall be opened at a later date after scrutiny of Technical bids.

- The successful bidders shall be required to submit a performance guarantee of 5% of the tendered amount in the form of Bank Guarantee or F.D.R. from a Nationalized/Scheduled Bank within 07 days of issue of letter of intent before award of work. In case the contractor is failed to deposit the performance guarantee within the specified period, full earnest money will be forfeited and the tender shall be treated as void. The performance guarantee shall be initially valid up to the stipulated date of completion plus 06 months beyond.
- Contractors who fulfill the following requirements shall be eligible to apply. Joint ventures are not accepted.

Firms/contractors must have completed similar works satisfactorily under Government organization/ Public Sector Undertaking / Autonomous bodies only.

- One similar electrical work amounting to Rs. 14,47,970.00

Or

- Two similar electrical work and each single work amounting to Rs. 10,85,977.00

Or

- Three similar electrical work and each single work amounting to Rs. 7,23,985.00

Works completed during last 7 years ending on the last date of submission of Bid.

- Earnest money of **Rs. 36,200/-** in the form of Demand Draft or Fixed Deposit Receipts **or through RTGS / NEFT** of a schedule bank drawn in favour of **Director, I.I.T. Jodhpur or online payment as per details given in NIT**. No relaxation in EMD will be allowed for MSME and MSEs as per CPWD works manual.

- The intending bidder must read the terms and conditions of IITJ/CPWD-6 carefully. He should only submit his bid if he considers himself eligible and he is in possession of all the documents required.

<https://iitj.ac.in/tenders/>

4. No exemption for submission of EMD/experience of work shall be allowed for MSME.
5. Information and Instructions for bidders posted on website shall form part of bid document.
6. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website <http://eprocure.gov.in/eprocure/app> in free of cost.
7. **Completion certificates issued by an officer not below the rank of Executive Engineer or equivalent level shall be considered.**
 - **Similar work means “Internal Electrical work”.**
8. 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.
9. IIT Jodhpur is committed to follow the principle of transparency, equity and competitiveness in public procurement. Before submission of bid each bid 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.
10. Those contractors not registered on CPP Portal are required to get registered beforehand. If needed they can be imparted training on online bidding process as per details available on the website
11. The intending bidder must have valid class-III digital signature to submit the bid.
12. On opening date, the contractor can login and see the bid opening process. After opening the bids he will receive the competitor bid sheets.
13. Contractor can upload documents in the form of JPG format and PDF format.
14. Contractor must ensure to quote rate of each item, while selecting any of the cells a warning appears that if any cell is left blank the same shall be treated as “0”. Therefore, if any cell is left blank and no rate is quoted by the bidder, rate of such item shall be treated as “0” (ZERO).
15. 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.
16. In e-Tendering intending bidder can quote his rates in figures only. The rates in words, amount of each item and total is generated automatically. Therefore, the rate quoted by the bidder in figures is to be taken as correct.
17. The bid can only be submitted after uploading the mandatory scanned documents such as Demand Draft or Fixed Deposit Receipts **or through RTGS / NEFT** towards Tender Fee and EMD (if applicable) in favour of **Director, I.I.T. Jodhpur** or to be deposited with <http://eprocure.gov.in/eprocure/app> / NEFT facility.
For online payment through RTGS/NEFT IIT Jodhpur Bank details are as below:

Name of Bank A/C	:	Director, IIT Jodhpur
Account No.	:	3399101000631
IFSC Code	:	CNRB0003399
MICR Code	:	342015501
Name of Bank & Branch	:	Canara Bank & IIT Jodhpur.
18. The EMD in original shall be deposited by the lowest tenderer within a week after opening of financial bid failing which the tender shall be rejected.
19. Certificate of work experience and other documents as specified in the notice inviting tender shall be scanned and uploaded to the e-Tendering website within the period of bid submission. However, certified / original copy of all the scanned and uploaded documents as specified in web notice may be verified by the institute.
20. **The bid submitted shall become invalid if:**
 - i. The bidder does not upload all the documents (including GST registration) as stipulated in the bid document.
 - ii. The lowest bidder does not deposit original EMD declaration within a week of opening of tender.
 - iii. In the event of tender being submitted by a firm, it must be signed separately by each partner thereof or in the event of the absence of any partner, it must be signed on his behalf by a person holding a power of attorney authorizing him to do so, such power of attorney to be produced with the tender, and it must disclose that the firm is duly registered under the Indian Partnership Act 1932, above not submitted.
21. Bid validity shall be 90 days after opening of bids.

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

- i. Affidavit (on Rs. 10 non-judicial stamp with notarized) regarding establishment of proprietorship firm/ partnership deed/ letter of incorporation for private ltd/ ltd firm with written power of attorney (in case of bidder is owner, not required) of authorized signatory.
- ii. Proof of deposit of Tender Fee and EMD.
- iii. Attested copy of work experience certificate.
- iv. Attested copy of valid PAN, GSTIN Registration.
- v. Attested copy of up to date filed return of GST.
- vi. Affidavit as per Notice Inviting Tender Condition 1.3 of IITJ/CPWD -6 FOR e-TENDERING.
- vii. Acceptance to execute Integrity Pact.
- viii. FORM "F" (Duly filled with all relevant required details).
- ix. Electrical Contractor License.

FORM-F**STRUCTURE & ORGANISATION**

1. Name & Address of the bidder:
2. Telephone no./ Phone no./ Fax no.:
3. E-mail:
4. Contact Person No.:
5. GST No.:
6. PAN No.:
7. Tender Fee (UTR No.):
(In case of on-line payment of Tender Fee)
8. EMD (UTR No.)
(In case of on-line payment of Tender Fee):
9. Legal status of the bidder (attach copies of original document defining the legal status):
 - a. An Individual
 - b. A proprietary firm
 - c. A firm in partnership
 - d. A limited company or corporation
5. Designation of individuals authorized to act for the organization.....
6. Has the bidder or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment.....
7. Has the bidder or any constituent partner in case of partnership firm, ever been debarred/ blacklisted for tendering in any organization at any time? If so, give details.....
8. Has the bidder, or any constituent partner in case of partnership firm, ever been convicted by the court of law? If so, give details.....

Signature of Bidder/Tenderer

INDIAN INSTITUTE OF TECHNOLOGY JODHPUR
NH-62 NAGAU ROAD KARWAR JODHPUR

Notice Inviting Tender

Terms & Conditions

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

Details of the item	As per Tender Notice
Earnest Money Deposit to be submitted	As per Tender Notice
Warranty	As per Tender Notice, NIT & IITJ/CPWD form 7/8
Performance security	As per Tender Notice, NIT & IITJ/CPWD form 7/8

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

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

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

Schedule

Name of Organization	Indian Institute of Technology Jodhpur
Tender Type (Open/Limited/EOI/Auction/Single)	Open
Tender Category (Services/Goods/works)	Works
Type/Form of Contract (Work/Supply/ Auction/Service/Buy/Empanelment/ Sell)	Works
Product Category (Civil Works/Electrical Works/Fleet Management/ Computer Systems)	Electrical
Source of Fund (Institute/Project)	Institute NR Budget
Is Multi Currency Allowed	No
Date of Issue/Publishing	17/10/2025
Document Download/Sale Start Date	17/10/2025
Document Download/Sale End Date	07/11/2025
Date for Pre-Bid Conference	Nil
Venue of Pre-Bid Conference	N/A
Last Date and Time for Uploading of Bids	As per Tender Notice
Date and Time of Opening of Technical Bids	As per Tender Notice
Tender Fee	In the form of Demand Draft or Fixed Deposit Receipts or term deposit or through RTGS / NEFT (for online payment, IIT Jodhpur Bank account details are as under):
EMD	Name of the Bank A/C : Director IIT Jodhpur. Canara Bank A/C No. : 3399101000631. Name of the Bank : Canara Bank IIT Jodhpur. IFSC Code : CNRB0003399. MICR Code : 342015501.
No. of Covers (1/2/3/4)	02 (Technical and Financial)
Bid Validity days	90 days (From the date of opening of bids)
Address for Communication	Assistant Executive Engineer, Office of Infrastructure, W-1 Berm, IIT Jodhpur
Contact No.	0291-2801054
Fax No.	Nil
Email Address	oie@iitj.ac.in

Instructions for Online Bid Submission:

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

More information useful for submitting online bids on the CPP Portal may be obtained at:

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

REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal ([URL:http://eprocure.gov.in/eprocure/app](http://eprocure.gov.in/eprocure/app)) by clicking on the link "Click here to Enroll". Enrolment on the CPP Portal is free of charge.
- 2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- 3) Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- 4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / TCS / nCode / eMudhra etc.), with their profile.
- 5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSCs to others which may lead to misuse.
- 6) Bidder then logs in to the site through the secured log-in by entering their userID / password and the password of the DSC / eToken.

SEARCHING FOR TENDER DOCUMENTS

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

PREPARATION OF BIDS

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid

<https://iitj.ac.in/tenders/>

documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

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

SUBMISSION OF BIDS

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

OR

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

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

ASSISTANCE TO BIDDERS

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

General Instructions to the Bidders

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

GENERAL INSTRUCTIONS

Tenders have been invited on the basis of standard Forms 7/8 and General Conditions of contract for the work in Central Public Works Department (CPWD). However, in the contract of IIT Jodhpur, the following terms may be read as:

S. No.	As per Standard Forms	To be read as
I	President of India	Director, IIT Jodhpur
II	Government of India	Indian Institute of Technology Jodhpur
III	Central Public Works Departments	Office of Infrastructure Engineering, IIT Jodhpur
IV	Chief Engineer, CPWD	Dean of Infrastructure Planning, IIT Jodhpur
V	Circle Office	Office of Infrastructure Engineering, IIT Jodhpur

Superintending Engineer
Office of Infrastructure Engineering.

Terms & Conditions Details

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

COMPLIANCE SHEET

S. No.	Technical Bid Requirement As per Tender Notice & NIT & IITJ/CPWD form 7 (Duly attested)	Compliance Y/N
1	Tender Fee.	
2	EMD Deposition.	
3	Experience Certificate.	
4	PAN Card and GSTIN Registration.	
5	Up to date filed return of GST.	
6	Affidavit as per Notice Inviting Tender Condition 1.3 at page 16 of NIT.	
7	INTEGRITY PACT Acceptance.	
8	FORM-F (duly filled with all required details).	
9	Electrical contractor License.	
10	Affidavit as per Notice Inviting Tender Condition 22(i) at page 5 of NIT.	
11	List of Govt. Organization as per Annexure-II	
12	BOQ	

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

Signature of Bidder

Name: _____

Designation: _____

Organization Name: _____

Contact No. : _____

ANNEXURE-II**List of Govt. Organization/ Department.**

List of Government organization/ Public Sector Undertaking / Autonomous bodies for whom the Bidder has undertaken such work as per Tender Notice & NIT & IITJ/CPWD -7/8		
Name of the organization	Name of Contact Person	Contact No.

Signature of Bidder

Name: _____

Designation: _____

Organization Name: _____

Contact No. : _____

IITJ/CPWD -6 FOR e-TENDERING

Percentage rate tenders are invited from contractors/firms engaged in the field of Electrical work in appropriate category for the work as per tender notice.

1. The contractor should have valid electrical contractor license on the last date of submission of tenders. In case the last date of submission of tender is extended, the Electrical contractor license should be valid on the original date of submission of tenders.
- 1.1 The work is estimated to cost as per tender notice This estimate, however, is given merely as a rough guide.
- 1.2 Details of criteria for eligibility as Indicated in "INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR e-TENDERING FORMING PART OF NIT AND TO BE POSTED ON WEBSITE"
- 1.3 To become eligible for issue of tender, the tenderer shall have to furnish an affidavit.
 - (i) Affidavit shall be purchased / notarized on or after NIT published date but on or before last date of submission of NIT.
 - (ii) Affidavit must have "NIT/tender reference number" and "Name of work" and shall be used once for each fresh tender.
No back dated affidavit shall be entertained and non-compliance of point (i) & (ii) shall lead to rejection of the tender.

Affidavit should be as mentioned under: -

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

2. Agreement shall be drawn with the successful bidders on prescribed Form No. IITJ/CPWD form No. 7 (or other standard form as mentioned), which is available as a Govt. of India Publication. Bidders shall quote his rates as per various terms and conditions of the said form which will form part of the agreement.
3. The time allowed for carrying out the work will be **as per tender notice** from the date of start as defined in schedule 'F' or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender documents.
4. The site for the work is available.
5. The bid document consisting of plans, specifications, the schedule of quantities of various types of items to be executed and the set of terms and conditions of the contract to be complied with and other necessary documents except Standard General Conditions of Contract Form can be seen from the web Site <http://eprocure.gov.in/eprocure/app> or iitj.ac.in or e-procure.gov **free** of cost.
6. After submission of the bid the contractor can re-submit revised bid any number of times but before last time and date of submission of tender as notified.
7. While submitting the revised bid, contractor can revise the rate of one or more item(s) any number of times (he need not re-enter rate of all the items) but before last time and date of submission of tender as notified.
8. If it is desired to submit revised financial bid, then it shall be mandatory to submit revised financial bid. If not submitted, then the tender submitted earlier shall become invalid.
9. Earnest Money in the form of Demand Draft or Fixed Deposit Receipts (drawn in favour of Director IIT Jodhpur) **or through RTGS / NEFT** from any Scheduled/ Nationalized Bank and shall be scanned & uploaded to the e-tendering website within the period of tender submission and original should be

<https://iitj.ac.in/tenders/>

deposited by lowest bidder within a week after the opening of financial bid in office of **Superintending Engineer, IIT Jodhpur**.

10. The time & date of submission & opening of financial bid of contractors qualifying the **criteria as per Tender Notice** shall be communicated to them at a later date.
11. The successful bidders shall be required to submit a performance guarantee of 5% of the tendered amount in the form of Bank Guarantee or F.D.R. from a Nationalized/Scheduled Bank within 07 days of issue of letter of intent before award of work. In case the contractor is failed to deposit the performance guarantee within the specified period, full earnest money will be forfeited and the tender shall be treated as void. The performance guarantee shall be initially valid up to the stipulated date of completion plus 06 months beyond.
12. The earnest money deposited along with bid shall be returned after receiving the aforesaid performance guarantee. In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F' including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.
13. Intending Bidders are advised to inspect and examine the site and its surroundings and satisfy themselves before submitting their tenders as to the nature of the ground and sub-soil (so far as is practicable), the form and nature of the site, the means of access to the site, the accommodation they may require and in general shall themselves obtain all necessary information as to risks, contingencies and other circumstances which may influence or affect their tender. Bidder shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charge consequent to any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity, access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government, local conditions and other factors having a bearing on the execution of the work.
14. The competent authority does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all the tenders received without the assignment of any reason. All tenders in which any of the prescribed condition is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer shall be summarily rejected.
15. Canvassing whether directly or indirectly, in connection with tenderers is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
16. The competent authority reserves the right to accept the whole or any part of the tender and the tenderer shall be bound to perform the same at the rate quoted.
17. The bidder shall not be permitted to tender for works in the IIT Jodhpur responsible for award and execution of contracts, in which his near relative is posted as a Divisional Accountant or as an officer in any capacity between the grades of Dean of Infrastructure Planning and Junior Engineer (both inclusive). The contract shall be withdrawn if any bidder is found violating this condition.
18. No Engineer of Gazetted rank or other Gazetted Officer employed in Engineering or Administrative duties in an Engineering Department of the Government of India is allowed to work as a contractor for a period of one year after his retirement from Government service, without the previous permission of the Government of India in writing. This contract is liable to be cancelled if either the contractor or any of his employees is found at any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.
19. The tender for the works shall remain open for acceptance for a period of ninety (90) days from the date of opening of tender. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, whichever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the institute shall, without prejudice to any other right

or remedy, be at liberty to forfeit 50% of the said earnest money as aforesaid. Further the tenderer shall not be allowed to participate in the retendering process of the work.

20. This notice inviting tender shall form a part of the contract document. The successful tenderer / contractor, on acceptance of his tender by the Accepting Authority shall within 15 days from the stipulated date of start of the work, sign the contract consisting of:
- a. The Notice Inviting Tender, all the documents including additional conditions, specifications and drawings, if any, forming part of the tender as uploaded at the time of invitation of tender and the rates quoted online at the time of submission of bid and acceptance thereof together with any correspondence leading thereto.
 - b. Standard IITJ/CPWD Form - 7/8 or other Standard IITJ Form as mentioned.

**Superintending Engineer
IIT Jodhpur**

INTEGRITY PACT e-TENDERING	I.I.T.J
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To,

.....,

.....,

.....

Subject: - Infrastructure work in Berm E01 and E-03.

Sub Head: - Electrical Work.

Dear Sir,

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

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

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

Yours faithfully

**Superintending Engineer
Office of Infrastructure Engineering**

Acceptance to execute integrity pact	I.I.T.J
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(To be signed by bidder and upload the scanned copy)

To,
 Superintending Engineer,
 IIT Jodhpur, NH 62 Nagour Road Karwar
 Jodhpur Rajasthan.

Subject: Submission of Bid for the “Infrastructure work in Berm E-01 and E-03”.

Sub Head: Electrical Work

Dear Sir,

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

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

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

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

Yours faithfully

(Duly authorized signatory of the Bidder)

INTEGRITY PACT e-TENDERING	I.I.T.J
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To be signed by the bidder and same signatory competent / authorized to
sign the relevant contract on behalf of IIT Jodhpur.

INTEGRITY AGREEMENT

This Integrity Agreement is made aton this.....day of..... 2.....

BETWEEN

The Director, IIT Jodhpur represented through Superintending Engineer, IIT Jodhpur

....., (Hereinafter referred as the
(Address of Division)

‘Principal/Owner’, which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

AND

.....
(Name and Address of the Individual / firm/ Company)

through..... (Hereinafter referred to as the
(Details of duly authorized signatory)

“Bidder/Contractor” and which expression shall unless repugnant to the meaning or context hereof include its successors and permitted assigns)

Preamble

WHEREAS the Principal / Owner has floated the Tender (NIT No.) (Hereinafter referred to as **“Tender/Bid”**) and intends to award, under laid down organizational procedure, contract for.....

.....
(Name of work)

hereinafter referred to as the **“Contract”**.

AND WHEREAS the Principal/Owner values full compliance with all relevant laws of the land, rules, regulations, economic use of resources and of fairness/transparency in its relation with its Bidder(s) and Contractor(s).

AND WHEREAS to meet the purpose aforesaid both the parties have agreed to enter into this Integrity Agreement (hereinafter referred to as **“Integrity Pact”** or **“Pact”**), the terms and conditions of which shall also be read as integral part and parcel of the Tender/Bid documents and Contract between the parties.

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

Article 1: Commitment of the Principal/Owner

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

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

- 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:
 - a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal/Owner's employees involved in the Tender process or execution of the Contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the Tender process or during the execution of the Contract.
 - b) The Bidder(s)/Contractor(s) will not enter with other Bidder(s) into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to cartelize in the bidding process.
 - c) The Bidder(s)/Contractor(s) will not commit any offence under the relevant IPC/PC Act. Further the Bidder(s)/Contractor(s) will not use improperly, (for the purpose of competition or personal gain), or pass on to others, any information or documents provided by the Principal/Owner as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
 - d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the names and addresses of agents/representatives in India, if any. Similarly Bidder(s)/Contractor(s) of Indian Nationality shall disclose names and addresses of foreign agents/representatives, if any. Either the Indian agent on behalf of the foreign principal or the foreign principal directly could bid in a tender but not both. Further, in cases where an agent participate in a tender on behalf of one manufacturer, he shall not be allowed to quote on behalf of another

manufacturer along with the first manufacturer in a subsequent/parallel tender for the same item.

- e) The Bidder(s)/Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the Contract.
- 3) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.
- 4) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm indulge in fraudulent practice **means a willful misrepresentation or omission of facts or submission of fake/forged documents in order to induce public official to act in reliance thereof, with the purpose of obtaining unjust advantage by or causing damage to justified interest of others and/or to influence the procurement process to the detriment of the Government interests.**
- 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 of a Bidder or Contractor, or of an employee or a representative or an associate of a Bidder or Contractor which constitutes corruption within the meaning of IPC Act, or if the Principal/Owner has substantive suspicion in this regard, the Principal/Owner will inform the same to law enforcing agencies for further investigation.

Article 4: Previous Transgression

- 1) The Bidder declares that no previous transgressions occurred in the last 5 years with any other Company in any country confirming to the anticorruption approach or with Central Government or State Government or any other Central/State Public Sector Enterprises in India that could justify his exclusion from the Tender process.
- 2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the Tender process or action can be taken for banning of business dealings/ holiday listing of the Bidder/Contractor as deemed fit by the Principal/ Owner.

- 3) If the Bidder/Contractor can prove that he has resorted / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal/Owner may, at its own discretion, revoke the exclusion prematurely.

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

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

Article 6- Duration of the Pact

This Pact begins when both the parties have legally signed it. It expires for the Contractor/Vendor 09 Months after the completion of work under the contract or till the continuation of defect liability period, whichever is more and for all other bidders, till the Contract has been awarded.

If any claim is made/lodged during the time, the same shall be binding and continue to be valid despite the lapse of this Pacts as specified above, unless it is discharged/determined by the Competent Authority, I.I.T. Jodhpur.

Article 7- Other Provisions

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

Article 8- LEGAL AND PRIOR RIGHTS

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

IN WITNESS WHEREOF the parties have signed and executed this Integrity Pact at the place and date first

<https://iitj.ac.in/tenders/>

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:

I.I.T.J – 7/8 e-TENDERING	I.I.T.J
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**INDIAN INSTITUTE OF TECHNOLOGY
Jodhpur**

Percentage Rate Tender & Contract for Works

Tender for the work of: Infrastructure work in Berm E-01 and E-03.

Sub Head: - Electrical Work.

(C) To be submitted by **as per tender notice**
to.....

(C) To be opened in presence of bidders who may be present at **as per tender notice**

Issued to.....

Signature of officer issuing the documents

Designation.....

Date of Issue

TENDER

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

I/We hereby tender for the execution of the work specified for I.I.T. Jodhpur, 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 date of opening of bid.

A sum of **as per tender notice** is hereby forwarded in Banker Cheque or Demand Draft or Fixed Deposit receipt of a schedule bank drawn in favour of IIT Jodhpur earnest money. If I/We, fail to furnish the prescribed performance guarantee within prescribed period. I/We agree that the I.I.T. Jodhpur or his successors, in office shall without prejudice to any other right or remedy, be at liberty to forfeit the said earnest money absolutely. Further, if I/We fail to commence work as specified, I/We agree that The I.I.T. Jodhpur 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 re-tendering process of the work.

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

entire amount of Earnest Money Deposit/Performance Guarantee.

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

Dated:

Signature of Contractor

Witness:

Postal Address

Address:

Occupation:

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for an on behalf of I.I.T. Jodhpur for a sum of (Rupees.....)

The letters referred to below form part of this contract agreement:

(a)

(b)

For & on behalf of IIT Jodhpur

Signature

Designation

Date.....

PROFORMA OF SCHEDULES

I.I.T.J

PROFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of quantities (enclosed)

SCHEDULE 'B'

Schedule of materials to be issued to the contractor.

S. No.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the Contractor	Place of issue
1			4	
←		Nil		→

SCHEDULE 'C'

Tools and plants to be hired to the contractor

S. No.	Description	Hire charges per day	Place of Issue
1			
←		Nil	→

SCHEDULE 'D'

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

----- Nil -----

SCHEDULE 'E'

Reference to General Conditions of contract: General Conditions of contract for CPWD/IITJ Works 2024: GCC 2023 for Construction Works, Form-7 for CPWD works **as amended up to last date of submission of bid**

Name of work: Infrastructure work in Berm E01 and E-03.

Sub Head: Upgradation Work

- (i) Estimated cost of work : As per Tender Notice
- (ii) Earnest Money : As per Tender Notice
- (iii) Performance Guarantee : As per Tender Notice
- (iv) Security Deposit : 2.5% of the gross amount of each running and final bill till the sum deducted will amount to security deposit of 2.5% of the tendered amount of the work.

<https://iitj.ac.in/tenders/>

SCHEDULE 'F'

SCHEDULE 'F' (Electrical)	
General Rules & Directions:	
Officer inviting tender	Superintending Engineer, IIT Jodhpur
Maximum percentage for quantity of items of work to be executed beyond which rates are to be determined in accordance with Clauses 12.2 & 12.3	See Below
Definitions	
Engineer-in-charge	Assistant Executive Engineer (Electrical-1)
Accepting Authority	Deputy Director, IIT Jodhpur
Percentage on cost of materials and labor to cover all overhead & profits	15%
Standard schedule of Rates	DSR 2022 (E &M) with up to date correction slips and market rate.
Department	Office of Infrastructure Engineering, IIT Jodhpur
Standard IITJ contract Form	General Conditions of contract for CPWD for Construction Works 2023 as amended/modified up to last date of submission of bid.

CLAUSE 1		
(i)	Time allowed for submission of Performance guarantee, Programme Chart (Time and Progress) and applicable labour licenses, registration with EPFO, ESIC and BOCW Welfare Board including Provident Fund Code No. or proof of applying thereof from date of issue of letter of acceptance.	07 Days
(ii)	Maximum allowable extension with late fee @ 0.1% per day of performance guarantee amount beyond the period provided in (i) above	07 Days

Clause -2			
Authority for fixing Compensation under Clause 2		Superintending Engineer, IIT Jodhpur.	
Clause 2A			
Whether clause 2A is applicable		Not applicable	
Clause 5			
Number of days from the date of issue of letter of acceptance for reckoning date of start of start mile stone(s) as per table given below:		10 Days	
S. 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.	Supply of all electrical item such as DB,	20 Days	10% of bill value

	wiring, MCB, Cat6A cable, patch cord, patch panel, fiber cable etc. except UPS.		
2.	Supply of UPS with batteries	45 Days	10% of bill value
3.	Installation, Testing & Commissioning of UPSs along with electrical and Data work.	60 Days	10% of bill value
Time allowed for execution of work		60 Days	
Authority to decide:			
(i)	Extension of time	Superintending Engineer, IIT Jodhpur	
(ii)	Rescheduling of mile stones	Superintending Engineer, IIT Jodhpur	
(iii)	Shifting of date of start in case of delay in handing over of site	Superintending Engineer, IIT Jodhpur	
Clause 6, 6A			
Clause applicable -		 Clause 6.....	
Clause 7			
Gross work to be done together with net payment /adjustment of advances for material collected, if any, since the last such payment for being eligible to interim payment		Rs. Six Lacs or as mutually agreed by both the parties.	
Clause 10B		Not Applicable	
Clause 10B(ii)			
Whether Clause 10 B (ii) shall be applicable		No	
Clause 10C			
Component of labour expressed as percentage of value of work		25 %	
Clause 10CC escalation clause		Not Applicable	
Schedule of component of other Materials, Labour, POL etc. for price escalation.			
Component of civil (except materials covered under clause 10CA) /Electrical construction Materials expressed as percent of total value of work. -		Xm..... %	
Component of Labour -			
expressed as percent of total value of work.		Y..... %	
Component of P.O.L. -			
expressed as percent of total value of work.		Z..... %	
Clause 11			
Specifications to be followed for execution of work		CPWD specifications 2019 Vol-1&2 for civil and Part-I Internal 2023 and Part-II External 2023 for electrical works with upto date correction slips & manufacturers specifications & NIT	
Clause 12			
Type of work		Infrastructure work in Berm E-01 and E-03.	
12.2. & 12.3 Deviation Limit beyond which clauses shall apply for building work		100%	
Clause 16			
Competent Authority for deciding reduced rates		Superintending Engineer, IIT Jodhpur	
Clause 18			
List of mandatory machinery, tools & plants to be deployed by the contractor at site: -			
As per requirement and direction of Engineer-In-Charge			

Clause 25					
Settlement of dispute by conciliation and arbitration				Director, Indian Institute of Technology Jodhpur	
CLAUSE 32					
“Requirement of Technical Representative (s) and Recovery Rate” for the work					
S. No.	Requirement of Technical Staff		Minimum Experience (Years)	Designation of Technical Staff	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of clause
	Qualification	Number			
1.	Graduate Engineer or Diploma Engineer	1	2 or 5 respectively	Project Manager cum Planning/Quality/Site/Billing Engineer	Rs. 15000/- per month
“Assistant Engineer retired from Government Services those are holding Diploma will be treated at par with Graduate Engineer”.					
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					
(i)	Schedule/statement for determining theoretical quantity of cement & bitumen on the basis of Delhi Schedule of Rates			DSR 2022 with correction slips issued upto last date of submission of bid	
(ii)	Variations permissible on theoretical quantities				
	a.	Cement for works estimated cost put to tender not more than Rs. 25 Lakhs		3 % plus/minus	
	(i)	For works with estimated cost put to tender more than Rs. 25 Lakhs		2 % plus/minus	
	b.	Bitumen for all works		2.5% plus only & nil on minus side	
	c.	Steel reinforcement and structural steel section for each diameter, section and category		2% plus/minus	
	d.	All other materials		Nil	
RECOVERY RATES FOR QUANTITY BEYOND PERMISSIBLE VARIATION For All Elements					
	Excess beyond permissible limits			As per CPWD norms	
	Less use beyond the permissible limit			As per CPWD norms	

BANK GUARANTEE BOND	I.I.T.J
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**Form of Earnest Money Deposit
Bank Guarantee Bond**

WHEREAS, contractor (Name of contractor) (hereinafter called "the contractor") has submitted his tender dated (date) for the work of (name of work) (hereinafter called "the Tender")

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

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

- (1) If after tender opening the Contractor withdraws, his tender during the period of validity of tender (including extended validity of tender) specified in the Form of Tender;
- (2) If the contractor having been notified of the acceptance of his tender by the Engineer-in-Charge:
 - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to contractor, if required;
 - OR
 - (b) fails or refuses to furnish the Performance Guarantee, in accordance with the provisions of tender document and Instructions to contractor,
 - OR
 - (c) fails or refuses to start the work, in accordance with the provisions of the contract and Instructions to contractor,
 - OR
 - (d) fails or refuses to submit fresh Bank Guarantee of an equal amount of this Bank Guarantee, against Security Deposit after award of contract.

We undertake to pay to the Engineer-in-Charge either up to the above amount or part thereof upon receipt of his first written demand, without the Engineer-in-Charge having to substantiate his demand, provided that in his demand the Engineer-in-Charge will note that the amount claimed by him is due to him owing to the occurrence of one or any of the above conditions, specifying the occurred condition or conditions.

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

DATE

SIGNATURE OF THE BANK

WITNESS
(SIGNATURE, NAME AND ADDRESS)

SEAL

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

TERMS AND CODITIONS OF CONTRACT

1. Agency/ Firm shall abide by all laws of the land including, labour laws, Companies Act, Tax deduction liabilities, welfare measures of its employees and all other statutory obligations that enjoin in such cases and are not enumerated and defined herein, through any such onus shall be the exclusive responsibility of the Agency/ Firm, and it shall not involve the Institute in any way whatsoever.
2. The Financial Bid must be submitted in BOQ/Price Bid only.
3. Institute reserves the right to require the Agency/ Firm to remove any person deployed by the company, without assigning any reasons/notice. This will be without prejudice to the right of the Agency/ Firm to remove any of his own employees deployed in the Institute.
4. It would be responsibility of Agency/Firm to arrange all permission/ approvals from all local bodies/statutory bodies & nothing extra shall be paid on account of this by the Institute.
5. The Agency/ Firm shall be responsible for all injury and accident to persons employed by him while on duty. It is desirable that all employees are covered under an insurance cover.
6. All employees of the Agency/Firm shall be issued Identity Cards bearing their photographs. Photographs for identity cards shall be provided by the Agency/ Firm at their own cost. The ID Cards will be issued by the Agency/ Firm. These will be countersigned by the IIT Jodhpur Security Officer/ Engineer of Office of Infrastructure Engineering.
7. The Agency/Firm shall be responsible for the good conduct and behavior of its employees. If any employee of the Agency/ Firm is found misbehaving with the supervisory staff or other staff members of the Institute the Agency/ Firm shall terminate the services of such employees forthwith at their own risk and responsibility. The Agency/ Firm shall issue necessary Instructions to its employees to act upon the instructions given by the supervisory staff of the Institute.
8. When a register gets completed, it will be handed over to the concerned J.E. / A.E. It will not be returned to the contractor and the same will remain the property of the department.
9. The Agency/Firm shall obtain all other necessary approvals from statutory bodies as per applicable law in vogue.
10. The dismantled material which has scrap value needs to be handed over to Institute.
11. In the event of any loss being occurred to the Institute during the course of execution of work, on account of the negligence of duty by the Agency/ Firm' and their employees, the Agency/ Firm shall make good the loss sustained to the Institute either by replacement or on payment of the adequate compensation as per decision of Engineer-in-charge.
12. The Agency/ Firm shall not appoint sub-Agency/Firm to carry out any obligation under the contract.
13. The Agency/ Firm will take day-to-day instructions from the supervisory staff of the institute and shall maintain diary for the same.
14. The labours engaged by agency shall not be below age 18 years and no worker will be allowed to stay in the Institute campus.
15. The Agency/Firm shall maintain an Inspection Book as prescribed, which will be made available to supervisory staff of the Institute. Fault/observation record there on shall be attended to immediately.
16. Agency/ Firms will apply to the Labour Commissioner for obtaining a Labour License as applicable and nothing extra shall be paid to Agency by IIT Jodhpur. Agency/ Firms will submit a copy of license to officer-in-charge of IIT Jodhpur.
17. The Agency/ Firm would sign and give an undertaking as per Performa every month for compliance of the provision of Contract Labour Act. Rule and other Law as applicable.
18. Any dispute arising out of and in relation to this agreement shall be referred to the arbitration by sole arbitrator to be appointed by Director of the Institute. The arbitration would be conducted and governed by and under the provisions of Arbitration Act, 1996. Any legal dispute will be subject to

jurisdiction of Jodhpur Courts only and no other court shall have the jurisdiction refer IITJ/CPWD GCC form 7/8 in regard.

19. IIT Jodhpur is a 'No SMOKING ZONE' The Agency/ Firm should ensure that his employees DO NOT SMOKE while working in the IIT Campus. They will also not indulge in drinking alcohol or any other intoxicants. They will not consume drugs and eat pan/ Khaini / tobacco etc. they will not play cards or indulge in gambling on campus.
20. The Agency/ Firm shall keep himself fully informed of all acts and laws of the Central and State Government, all orders, decrees of statutory bodies, tribunals having any jurisdiction or authority, which in any manner may affect their engaged or employed and anything related to carry out the work. All the rules & regulations & byelaws lay down by the local bodies and any other statutory bodies shall be adhered to, by the Agency/ Firm, during the execution of work.
21. Agency/ Firm must employ adult and skilled personnel only. Employment of child labour shall lead to the termination of the contract at the risk and cost of the Agency/ Firm. Agency/ Firm shall deploy/ engage reliable persons at client after proper character and police verification and impose any conditions as per prevailing contractual labour laws for such engagements, take disciplinary action or reward any person at work etc., at its sole costs, risks and responsibilities.
22. Agency/ Firm shall deal with and settle the matters related with unions and shall make sure that no labour disputes / problems are referred to Client. It shall totally indemnify Client in this regard.
23. Agency/ Firm should at all times indemnify Client against all claims, damages or compensation under the provisions of payment of wages Act, 1936; Minimum Wages Act, 1948; Employer's Liability Act, 1938 ; the workmen compensation Act, 1932 ; Industrial Disputes Act, 1947 ; Maternity Benefit Act, 1961 ; or any modification thereof or any other law relating thereto and rules made hereunder from time. Client will not own any responsibility in this regard.
24. Tenderer should not have conflict of interest. The tenderer found to have conflict interest shall be disqualified.
25. Joint ventures are not allowed.
26. All statutory & mandatory deductions as per Government of India & Rajasthan State Government norms shall be deducted from each running bill & final bill of agency/ firm.
27. GST shall be applicable in this contract. NIT and the rules of Govt. of India of as notified from time to time shall be followed in items of GST. Presently, 18% GST has been considered in this tender and agency has to quote the rates inclusive of GST.
28. No escalation clause i.e, clause 10CC of IITJ/CPWD GCC form 7/8 is applicable in this NIT/ Contract.
29. **Security deposit @2.5% will be deducted for entire gross work done including extension period if any, from each installment however, earnest money deposit will be adjusted to security deposit.**
30. 1% (one percent) cess towards labour welfare fund or as applicable, income tax as applicable and other taxes/ statutory recoveries as applicable will be deducted from the bill of contractor.
31. Non-Judicial stamp paper worth Rs. 10/- (Ten Rupees only) will be submitted by contractor for execution of agreement between both the parties.
32. No T & P would be supplied by the Institute and contractor will have to make his own arrangement.
33. The contractors are advised to get acquainted with the proposed work including specifications & its site and additional conditions carefully before quoting. No claim of any sort shall be entertained or account of any site conditions and ignorance of specifications & additional conditions. The work shall be carried out as per the availability of site.
34. The work shall be carried out as per CPWD specifications for civil and electrical work with up - to date correction slips unless otherwise specified in the nomenclature of individual item or in the specification, additional conditions where specifications are silent, the decision of Engineer-in-Charge shall be final and binding on contractor.
35. The rates quoted by the contractor shall be taken as net and nothing extra shall be paid on any account i.e Royalty, Cartage, GST & stacking of material required at places etc. The rates for different items of work shall apply for Heights & Depths, Leads & Lifts unless otherwise specified in the agreement or specifications applicable in the agreement.

36. The agency shall execute the material/items as per list of approved makes given in tender document.
37. The sample of material required in the work brought at site shall be got approved from Engineer -in-Charge before use in execution of work.
38. All the required materials shall be got checked & approved by the Engineer-in-charge on receipt of the same at site before use and rejected material is to be removed from the site immediately.
39. The sample of material required for Testing shall be provided at free of cost by the contractor. Testing charges if any shall be borne by the IIT Jodhpur if satisfactory report and if test results are unsatisfactory than testing charges shall be deducted from bills of contractor. All other expenditure to be incurred for taking sample, conveyance, packing etc. shall be borne by the contractor.
40. The contractor shall submit a detailed program of work within 7 days of the date of award of work. The Engineer - in- Charge can modify the program and the contractors have to work accordingly.
41. The contractor shall make his own arrangement for getting the permission with respect to trucks from the Traffic Police.
42. No payment shall be made to contractor for any damage caused by the rain or any other natural causes what so ever during the execution of work.
43. Some restrictions may be imposed by the security staff of IIT Jodhpur etc. on the working and on movement of labour & material. **No labour camp/ huts shall be allowed in IIT Jodhpur. The contractor shall make his own arrangement for labour huts outside the campus.** However, constructions of cement godown and Chowkidar's hut in the Campus shall be permitted. The contractor shall be bound to follow all such restrictions/ instructions and nothing shall be payable on this account.
44. The contractor shall be fully responsible for the safe custody of the material issued or brought at site by him for doing the work.
45. The Malba / Garbage generated at site due to construction activities shall be removed from the site immediately & shall be disposed off by the contractor to the approved dumping site of Jodhpur Municipal Corporation and all statutory approvals from local bodies shall be a sole responsibility of contractor.
46. The contractor shall clean the site thoroughly of scaffolding materials, rubbish, equipment's left out of his work & dress the site around the building to the complete satisfaction of the Engineer-in-Charge before the work is treated as completed.
47. Water charges @ 1% and Electricity charges @ 0.5 % of gross work done shall be deducted from bills of contractor if electricity and water provided by IIT Jodhpur for this work.
48. Agency has to take proper safety measures during the execution of work.
49. IITJ/CPWD GCC form 7/8 shall form part of NIT and the bidder shall go through GCC before quoting rates and the same shall be deemed to be accepted by bidder if he participates in the tender.
50. ESI & EPF shall be reimbursed as per norms on production of original receipt of ESI & EPF from contractor specific to this work.
51. The contractor shall submit the program of execution of work as per clause 5 of IITJ/CPWD GCC form 7/8 of NIT including list of workers to be deployed by contractor for this work.
52. All the statutory obligations which is not covered in the bid document shall be reimbursed on actual basis after submission of proof of payment.
53. The rates for different items of work shall apply for all Heights & Depths, Leads & Lifts unless otherwise specified in the agreement or specifications applicable in the agreement. The Agency/ Firm must visit site (internal or external) area before quoting rates.
54. Final payment shall be released only after satisfactory completion of work.
55. Failure to comply any of the above clauses or due to unsatisfactory performance as observed by Engineer-in-charge, the contract shall be terminated at any stage without assigning any reason thereof.

Additional Terms and Condition for Electrical works-

1. The order of preference in case of any discrepancy as indicated in condition no. 1 under “Terms and Conditions of contract” given in the Standard CPWD Contract form may be read as the following:
 - a. Nomenclature of item as per Schedule of Quantities/ BoQ.
 - b. Additional specifications, particular specifications and special conditions for Electrical Works.
 - c. General conditions.
 - d. Contract Clauses of General conditions of contract for CPWD 2023.
 - e. CPWD specifications for electrical works 2023 part- I or as applicable.
 - f. Architectural/ structural drawings and specifications mentioned in drawings.
 - g. Indian standard specifications of BIS.
 - h. Sound engineering practice as per directions of the Engineer-in-charge.
 - i. Manufacturer’s specifications.
2. A reference made to any Indian Standard Specifications in these documents, shall imply reference to the latest version of that standard, including such revisions/amendments as issued by the Bureau of Indian Standards upto last date of receipt of tenders. The contractor shall keep at his own cost all such publications of relevant Indian Standards applicable to the work at site.
3. The main contractor shall engage eligible contractor for electrical work. The main contractor shall not indulge in procurement of electrical items and getting the work done on labour contract with the electrical contractor. The whole electrical component shall be executed by the eligible electrical contractor on a turnkey basis i.e. procurement of material & engaging labour. The associate electrical contractor shall submit the completion certificate of electrical work executed by him alongwith necessary test reports, completion plan etc.
4. The contractor shall take all safety precautions to avoid accidents by exhibiting caution boards, red flags, red lights and by providing necessary barriers and all other measures required from time to time. The contractor shall be responsible for all damages and accidents due to negligence on his part.
5. The contractor shall give due notices to Municipality, Police and/or other authorities that may be required under the law/rules under force and obtain all requisite permissions/licenses for temporary obstructions/enclosures and pay all charges which may be leviable on account of his execution of the work under the agreement. Nothing extra shall be payable on this account.
6. The contractor shall leave such recesses, holes, openings, etc., as may be required for the electric, air-conditioning and other related works. (For this purpose any required inserts, sleeves, brackets, conduits, base plates, insert plates, clamps etc. shall be arranged by the contractor and fix the same at the time of casting of concrete, stone work & brick work, if required, and nothing extra shall be payable on this account.
7. The contractor shall give a trial run of the equipment’s and machinery for establishing its capability to achieve the specifications within laid down tolerances to the satisfaction of the Engineer-in-charge before commencement of work.
8. The work will be carried out in close coordination with the building work and other agencies. Conduits will be laid in the slab within the specified time and it will have to be ensured that the casting of slabs is not delayed for want of laying of conduits. The conduits will also be laid in walls before the Plaster work is undertaken so as to avoid breaking cutting of plaster while making chase for laying of conduits subsequently. The contractor will have to employ adequate labour for carrying out the work. No claim regarding the idle labour for any reason will be entertained by the Department.
9. All tools, plant and machinery provided by the contractor shall, when brought at the site, be deemed to be exclusively intended for the construction and completion of this work and the contractor shall not remove the same or any part thereof (save for the purpose of moving it from one part of the site to another) without the consent of the Engineer-in-charge.

10. No foreign exchange shall be made available by the department for the purchase of equipment, plants, machinery, materials of any kind or any other items required to be carried out in execution of work.
11. The contractor shall carry out his work, so as not to interfere with or hinder the progress or completion of the work being performed by other contractor (s) or by the Engineer-in-charge and shall as far as possible arrange his work and shall place and dispose off the materials being used or removed, so as not to interfere with the operations of other contractors, or he shall arrange his work with that of the others in an acceptable and coordinated manner and shall perform it in proper sequence to the entire satisfaction of Engineer-in-charge.
12. All items, which are not covered while carrying out electrical work shall be removed and cleared by the contractors as soon as the work is completed.
13. The contractor shall give the Engineer-in-charge in every fortnight, a progress report of the work done during the previous fortnight. The progress of work will be reviewed periodically by the Engineer-in-charge with the contractor and shortfalls, if any, sorted out. The contractor shall thereupon take such action as may be necessary to bring back his work to schedule without any additional cost to the department.
14. It shall be responsibility of the main contractor to sort out any dispute involved with the associated contractor without any time and cost overrun to the department. The main contractor shall be solely responsible for settling the dispute/litigation arising out of his agreement with the associate contractor. The contractor shall ensure that the work shall not suffer on this account.
15. The main contractor shall be responsible for coordinating the activities of all works and essential progress of works as per milestone and laid down program.
16. The contractor shall be responsible for the watch and ward of the site/property/material provided by him and materials issued by the department against pilferage and breakage during the period of execution and thereafter till the work is completed and physically handed over to the department.
17. The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material or work beyond set out tolerance limits shall be summarily rejected by the Engineer-in-charge.
18. The contractor shall be required to make a sample of required job for each type at the earliest opportunity using all approved materials for approval of Engineer in charge before mass scale finishing works are taken up.
19. Even ISI marked materials shall be subjected to quality test at the discretion of the Engineer-in-charge besides testing of other materials as per the specifications described for the item/material. Whenever ISI marked materials are brought to the site of work; the contractor shall, if required by the Engineer-in-charge, furnish manufacturers test certificates to establish that the materials procured by the contractor for incorporation in the work satisfy the provisions of IS codes relevant to the material and/or the work done.
20. The contractor shall have to engage well experienced skilled labour and deploy modern T&P and other equipments to execute the work.
21. The firm shall use only electrically operated chase cutting machine for cutting the chases in the wall for recessed conduit wiring.
22. The contractor will have to make his own arrangement for storage of materials. No storage space shall be provided by department.
23. The contractor will have to make his own arrangement for water and power supply for execution of works.
24. The contractor will have to ensure that the skilled labour i.e. wireman etc., engaged in the execution of the work must possess valid electrical license, otherwise he will not be permitted to execute the work.
25. The associate contractors executing the electrical works must possess the valid electrical contractor license otherwise they will not be permitted to execute the electrical works.
26. Priority to arrange the material shall be decided by the department. However, material required for the work shall be brought at site only at the appropriate time keeping in view the progress of

building works as well as Electrical & Mechanical works. Decision of Engineer-in-charge in this regard shall be final.

27. The contractor has to intimate his authorized representative, who will be receiving instructions in his absence. The contractor /his authorized representative is bound to sign the site order book as and when required by the Engineer-in-charge and to comply with the instructions therein.
28. Suitable back plates providing for fixing the wall brackets and ceiling flush fittings shall be supplied by the contractor free of cost.
29. It shall be responsibility of contractor to provide polythene/PVC plastic cover for all SDBs/meter boards/feeder pillars/panels etc. so as to protect them from wear & tear/damage during execution stage. Contractor shall provide the covers for the materials if any being supplied departmentally also. Nothing extra shall be paid on this account.
30. Contractor is fully responsible for any kind of damage to the LT/HT cable during execution of work. No joints shall be allowed if the cable is damaged. Contractor has to replace the full length at his own cost.
31. The MCB should be of same make as that of MCB DBs.
32. Colour coding shall have to be adopted in the wiring system as per specification.
33. Tinned copper earthing lugs/Thimbles/ferrules shall be provided for termination of earth wire to all Metallic outlet boxes/fittings/fixtures/fan regulator/MCB DB/switch board/Meter board etc., properly crimped/brazed/soldered for which nothing extra shall be paid.
34. Suitable crimping tools shall be used for crimping the lugs/thimbles/ferrules. Nothing extra shall be paid on this account. The lugs/thimbles/ferrules pressed by conventional/ordinary pliers shall not be accepted.
35. A suitable brass/tinned copper neutral link shall be fixed at suitable place in the metallic outlet boxes of all sizes to terminate neutral wire properly. Nothing extra shall be paid on this account.
36. An earth termination with earth stud of brass/tinned copper i/c 2 no. metallic washers or suitable earth bar of Brass/tinned copper with tinned copper thimbles/ferrules/lugs should be suitably fixed at suitable place in the Metallic outlet box for termination of protective earth conductor. Nothing extra shall be paid on this account.
37. In the outlet boxes, phase from one switch to other switch shall be looped with suitable size of solid copper conductor. Nothing extra shall be paid on this account. Stranded conductor shall not be accepted.
38. Only required number of knockouts should be removed from Metallic outlet boxes for entry of conduits. If more than required number of knockouts are removed, the Metallic outlet box shall not be accepted.
39. Separate G.I. boxes shall be used for staircase light switches and bell push. Nothing extra shall be paid on this account.
40. Metal sheath of Co-axial T.V. cable shall be terminated using 'U' shape thimble/lugs/ferrules. Nothing extra shall be paid on this account.
41. To facilitate drawing of wires 16/18 SWG GI fish wire be provided along with laying of recessed conduit. Nothing extra shall be paid on this account.
42. Cable connection to switch gear is deemed to be included in the item of end termination. No extra payment shall be made for that.
43. The vendor shall have to procure the UPS from OEM or their authorized dealer and also required to submit all the relevant document from OEM during supply of UPS.

TECHNICAL SPECIFICATIONS FOR INTERNAL EI WORKS

1. All hardware items such as screws, thimbles, connectors, earth/neutral terminals, wires etc. which are essentially required for completing any item as per specifications will be deemed to have been included in the item even when the same have not been specifically mentioned.
2. All hardware material such as nuts/bolts/screws/washers etc. to be used in the work shall be zinc/cadmium plated iron. The galvanized boxes of modular switch/sockets etc. shall be of the same make as of switch/socket etc.
3. While laying conduit, suitable minimum number of junction boxes shall be left for pulling the wires. These shall be placed in such a way that the same do not remain noticeable.
4. Multi stranded FRLS PVC insulated copper conductor's wires are to be used in the work. Termination of multi-stranded conductors shall be done using crimping type copper thimbles at both the ends. Nothing extra shall be paid for the same.
5. The contractor shall follow the shortest route for circuits, submain, point wiring etc.
6. The connections of switches, sensors, earthing conductors & interconnections cables shall be made by adequate rating thimbles of approved standard makes only and nothing extra on this account shall be paid.
7. Check nuts shall be provided while terminating the M.S. conduits in switch board boxes for which nothing extra shall be paid.
8. All distribution boards shall be marked with circuits controlling the rooms/area/SDB controlled
9. Material to be used in the work shall be ISI marked. The makes of materials have been indicated in the list of acceptable makes. No other make will be acceptable. The materials to be used in the work shall be got approved from the Engineer-in-charge before its use at site. The Engineer-in-charge shall reserve the right to instruct the contractor to remove the material which, in his opinion, is not as per specifications
10. While deciding the size of switch boxes for light points/fan point, exhaust fan point items, extra two modules will be provided for each fan point for fixing of regulator(s) (fan regulator is to be provided under different item). Wherever extra modules are available, the same shall be provided with blanking plates without any extra cost.
11. Modular type switches/sockets/telephone outlets/TV sockets are to be provided wherever indicated in the items. The same shall be of only one make. The modular plates of switches, sockets, telephone & TV sockets etc. shall be in two parts i.e. plates with frames with in quoted rates.
12. The building shall be provided with false ceiling in various areas. In order to avoid maintenance problem, the contractor will not provide any ceiling rose/connector/looping box etc. above the false ceiling. The point wiring in that case will be extended up to the fitting/fan etc. directly without provisions of any termination arrangement in between. The wire from the end point up to the fixture shall be considered to be included in the point wiring. Nothing extra shall be paid for the same.
13. Wherever it is not possible to provide rigid conduits, flexible conduit pipe shall be provided for drawing/running the wires. However, such arrangement has to be kept to the barest minimum and only with the prior approval of Engineer-in-charge.
14. Earthing and all hidden items of work shall be carried out in the presence of the Engineer-in-charge or his authorized representative.
15. The fan box cover shall be made from 3mm thick phenolic laminated sheet as per CPWD specification.
16. The contractor shall provide only metallic junction boxes/looping boxes with cover of required sizes even in PVC conduiting and such boxes shall be measured as a part of conduit/wiring without any extra payment.
17. The metallic junction boxes & looping boxes shall be covered with approved makes of phenolic laminated sheet. For telephone, television & fire alarm system shall be provided at all the floors with in scope of work without any extra cost as per requirement & layout approved by Engineer-in-charge.

18. The firm has to go through the site order book kept with the Junior Engineer(E) regularly and has to sign the same and carryout the instructions recorded therein by various officers of the department.
19. The quantities of various items may vary from the quantities given in schedule of work. The agency shall bring the various items & materials as per actual requirement at site at the time of execution of work. Excess quantities shall not be accepted & paid by the department.
20. The ceiling roses wherever required to be provided are included in the scope of work without extra payment and the same shall also be of modular type & of the same make as that of switches & sockets along with earthing provision.
21. MCCB should have centrally adjustable overload setting 80% to 100% & short circuit setting adjustable from 500% to 1000% of nominal current for thermal type & overload setting 40% to 100% & short circuit setting adjustable from 150% to 1000% of nominal current for microprocessor type MCCB. All MCCB should be ICS=ICU.

Safety and Installation Guide Lines for Fiber Optic Cable:

1. This section describes general precautions to be taken when installing fiber optic cable in a building and the safe handling and disposal of optical cable. The methods and instructions provided are intended only as guidelines, as each installation will be influenced by local conditions and user preferences.
2. The reader should be experienced in fiber optic cable installation
3. Methods used for installing fiber optic cables are very similar to those used for installing standard copper cable. However, the qualities and characteristics fiber optic cable can be degraded when it is subjected to:
 - a. Excessive pulling.
 - b. Excessive tension.
 - c. Crushing forces
4. Leave the protective covering on the reel intact until it arrives at the installation site. If the covering has been previously removed, secure the cable end(s) during transit to prevent damage.
5. Personnel normally should not remain in an area where a cable is being pulled under tension around a piece of hardware. Personnel can remain in such an area (e.g., to observe the alignment of a cable around a corner block), if he or she stays clear of the hardware under tension and has a clear path to safety.
6. Laser light can damage your eyes. Laser light is invisible. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Never look into the end of a fiber, which may have a laser, coupled to it. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately
7. The following section provides general guidelines for internal installation of fiber optic cable. (This information is based upon standard cable designs). Mechanical specifications, minimum bend radii and cable temperature ranges can be obtained by contacting the OEM.
8. Caution: Fiber optic cable is sensitive to excessive pulling, bending, and crushing. Any such damage may alter the cable's characteristics to the extent that the cable may have to be replaced. To ensure all specifications are met, consult the specific cable specification sheet for the cable being installed.
9. Cable reels should be stored vertically on their flanges, end-to-end in rows and chocked to prevent rolling. Make sure that reels rest edge-to-edge with reels in adjacent rows to prevent damage to cables
10. Before the installation begins, carefully inspect the cable reel for protrusions such as nails and broken flanges which might cause damage to the cable as it is unreeled.
11. Take precautions to protect reeled cable from mishaps or other sources of possible damage. Any damage to a section of cable may require replacement of the entire section.
12. If the cable must be unreeled during installation, use the "figure-eight" configuration to prevent kinking or twisting. Do not coil fiber optic cable in a continuous direction except for lengths of 30 m (100 ft.) or less.
13. Fiber optic cable can be installed inside buildings using the same methods as coax or twisted pair; however, the following guidelines should be observed.
14. Do not deform the cable sheath, specifically when using cable fasteners or ties to secure the cable to a support or hardware.

15. Do not exceed the cable's maximum pulling tension.
16. Do not pull fiber optic cables with copper cables.
17. Do not pull fiber optic cables over existing cables. The friction could be excessive and cause cable damage. The cables may also become entangled, resulting in damage to the fiber optic cable.
18. Do not exceed minimum (installed and long-term) bend radius. (The minimum bend radius varies with the cable diameter. Consult the appropriate Cable specification.)
19. Do not pull the cable around sharp corners, such as support brackets.
20. Provide additional crush / mechanical protection in high-risk environments.
21. Secure the cable to larger permanent cables or available supports when possible. Do not attach the cable to cables that may be removed later or to steam or water lines
22. Use the following guidelines when installing cable in a rigid conduit:
 - Ensure the conduit system does not exceed minimum bend radius.
 - Do not pull the cable through pull boxes or junction boxes unless the cable's bend radius can be maintained through the use of conduit or inner duct
 - Avoid the use of elbows if possible and use an elbow only if the cable's long-term bend radius can be maintained. Never pull cable "through" an elbow. Pull the cable out of the elbow and "back-feed" it into the conduit exiting the elbow for a second pull.
 - Inner duct is semi-rigid plastic tubing commonly used in fiber optic installations to subdivide the duct and to provide for future cable pulls. Proper size and installation of the inner duct is critical for ease of cable installation.
 - If additional cables, specifically larger, bulkier cables, are to be installed in the same conduit, install the fiber optic cable inside an inner duct for mechanical protection
 - Eliminate sharp edges.
23. Tension Monitoring: Fiber optic cable is subject to damage if the cable's specified maximum tensile force is exceeded. Except for short runs or hand pulls, tension must be monitored. Maximum pulling tension varies with the cable fiber count. Refer to cable specification sheets for maximum tension.
24. All pulling equipment and hardware which will contact the cable during installation must maintain the cable's minimum bend radius.
25. Vertical Runs: Each fiber optic cable in the vertical run needs to be supported by its own support grip at the top of the run. Never use fiber optic cables as support for other cables. Cables that are individually supported may be taped or cable-tied together every 3 meters (10 ft.) for cable management - not support.
26. Fiber Optic Cable Disposal: At the end of the products service life there is the potential to recover and recycle component parts of the cable.
27. When handling and disposing of waste fiber optic cable, observe the following guidelines:
 - Comply with Local legislation.
 - Consider recycling opportunities.
 - Fiber waste should be disposed of safely, the use of sharps containers is recommended for waste fiber shards
28. "OEM must provide OTDR, OLTS, Penta scanning or FLUKE test report with 25 years' warranty certification."
29. Proposed OFC connectivity is Building to building and inside the building Rack to rack

Technical Specification for Data Works

1. FIBER OPTICS CABLE & COMPONENTS

Supported Applications, but not limited to:

- IEEE 802.3af Data Terminal Equipment (DTE) Power via Media Dependent Interface (MDI)
- Telecom – BRI, PRI and Digital Subscriber Loop (DSL) Applications
- Voice, Video and ISDN Applications

References & Standards, but not limited to:

- TIA / EIA
- International Electro Technical Commission (IEC)
- European Committee for Electro Technical Standardization (CENELEC)
- American National Standards Institute (ANSI)
- Institution of Electrical and Electronics Engineers (IEEE)

- Wherever there is reference to multiple standards and/codes, the ones most recent and most stringent shall apply.

It shall be the responsibility of the system integrator and OEM manufacturer to ensure that:

- The Passive Components of structured cabling distribution network will be free from manufacturing defects in material and workmanship under normal and proper use.
- All Passive Components in the structured cabling distribution network shall meet or exceed the relevant component specification of the EIA/TIA 568-B and EIA/TIA 568-C.2 series and ISO/IEC 11801: 2002 standards; or later version as applicable at the time of installation.
- The structured cabling distribution network compliant channels will meet or exceed the Guaranteed Channel Performance as per relevant standards in the structured cabling distribution network Performance Specifications in effect at the time of installation.
- The site will be duly certified by OEM for a period of 25 years from the date of issuance of the registration certificate or installation, whichever is earlier, for which they shall submit detailed performance test reports for every component installed.
- The specifications for items in this section, applies to the following:
 - Single Mode fibre optic cable and associated components such as distribution shelves, LIUs, pigtails and patch cords.
 - Networking Racks – for termination of networking cables.

FIBER OPTIC CABLE AND COMPONENTS

Type	Single mode OS2 fiber cabling system and all its components; must be from a single OEM (Cables + Components)
Networks Speeds Supported	1Gbps, 10Gbps and 40Gbps
Standard Compliance	ITU-T G.652A, B, C & D, IEC - 60793-2-50, TIA/EIA 492CAAB
Performance Testing	Must have ETL verified fibre channel compliance to ANSI/TIA568 -C.0 for OS2
Warranty	25-year systems warranty from OEM including OTDR test reports; Warranty to cover bandwidth of the specified and installed cabling system

SPECIFICATIONS FOR SINGLE MODE OPTICAL FIBER CABLE:

Cable Type	4/6 / 12 / 24 /144 (12x12) core, ISO 11801 -OS2. Single Mode, Armoured, Loose-tube, Gel filled & Multi tube construction cable.
Fiber Type	Single Mode, 9 / 125, 250 micron primary coated buffers.
Fiber core must be	As per Telecordia GR20, ITU-T G652D, IEC-60793-2-50, TIA/EIA 492-CAAB
Cable Construction Type	Loose tube corrugated steel tape armoured cable, provided with FRP or equivalent non-metallic central strength member
Outer Jacket Construction	High density polyethylene, anti - termite, anti - rodent suitable for direct burial application. Jacket must be UV stabilized.
Losses @ 1310nm frequency	< = 0.4 dB/Km
Losses @1550nm frequency	< = 0.3 dB/Km
Operating Temperature	-20 deg C to + 60 deg C
Test Parameters	Must pass the following : -IEC794-1-E1, IEC794-1-E2, IEC794-1-E3, IEC794-1-E4, EIA-455-104, IEC794-1-E7, IEC794-1-E10, IEC794-1-E11, IEC794-1-F5
Multi-Channel Capability	The fiber cable must have been designed to provide optimum performance from 1265nm to 1625nm making it suitable for 16 – channel Course Wavelength Division Multiplexing (CWDM) applications.
Cable / Component	All fiber cables and components must be from a single OEM (Including UTP CAT6A Cabling System)

SPECIFICATIONS FOR FIBER OPTIC CABLE PATCHCORDS:

Cable type	LC-LC or SC-SC style, SM or MM OM3/OM4 as required. Available as either 1.6mm or 3mm simplex or duplex patch cord. Compliance to ITU-
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	G657.B - Bend Insensitive Fiber
Fiber type	Single mode 9/125 & Multimode OM3/OM4 250 micron primary coated buffers
No of cores	2 cable construction type PVC outer jacket
Outside Diameter	1.6mm x 3.0mm (Simplex) or 1.6mm x 3.3mm (Duplex)
Minimum Cable Retention Strength	1.6mm: 50 N
Operating Temperature	-20 deg C to + 60 deg C

SPECIFICATIONS FOR CONNECTORS:	
Connector Type	SC or LC-Style, Simplex
Operating temperature	-20 deg C to + 50 deg C
Standard	Fully compliance to ISO/IEC 11801 standards.
Durability	(500 Matting's): < 0.2 dB Max
Ferrules	Pre-radius Ceramic Zirconia Ferrule. Bayonet Coupling: 2.5 mm Zirconia Ferrule
Attenuation	Not more than 0.75 dB per mated pair
Parameters / standard	Meets or exceeds ITU specifications, UL listed and 3rd Party RoHS compliant

SPECIFICATIONS FOR PIGTAILS (SINGLEMODE OR MULTIMODE, AS APPLICABLE):	
Type	SC or LC style, SM or MM OM3/OM4 as required. Simplex, 1 meter, compliant to ITU-G657.B - Bend Insensitive Fiber
Operating temperature	-20 deg C to + 50 deg C
Standard	Fully compliance to ISO/IEC 11801 standards.
Durability	(500 Matting's): < 0.2 dB Max
Ferrules	Pre-radius ceramic zirconia ferrule. Bayonet coupling: 2.5 mm zirconia ferrule
Attenuation	Not more than 0.75 dB per mated pair
Parameters / standard	Must have ETL/ Any 3rd Party Independent Lab / OEM Authorization / Datasheet for Fibre channel compliance to ANSI/TIA568-C.0 for OS2
Fiber Optic adapter plate	6-port, SC or LC style
Attenuation	Max of 0.75 dB per mated pair
Adapters	Available in Simplex and Duplex types
Durability	(500 Matting's): < 0.2 dB Max
Standard	Compliant as per EIA/TIA 568-B and ISO/IES 11080
SPECIFICATIONS FOR EXTERNAL FIBER OPTIC ENCLOSURE:	
Fibre core terminations Features	4/6/12/24/144/288 ports
Easy and fast-to-fix for fibre cable termination, IP-68 Rated	
Easy to re-enter, it should not require re-entry kits	

Fibre Optic adapter plate	6-port, SC or LC style
Attenuation	Max of 0.75 dB per mated pair
Adapters	Available in Simplex and Duplex types
Durability	< 0.2 dB max (500 Matting's)
Standard	Compliant as per EIA/TIA 568-B and ISO/IES 11080

Special Condition of Contract for Data work: -

1. The scope of all items in ICT systems (OFC Backbone passive components) is SITC – Supply, Installation, Testing and Commissioning.
2. The agency that is bidding for the total project shall be called as “ICT System Integrator”.
3. All and entire responsibility towards the successful execution of the ICT Systems of the project shall remain with the ICT System Integrator.
4. The passive components of networking – fiber optics cabling system and their components, options and accessories shall be from a single manufacturer / make / brand.

5. The passive networking system consisting of fiber optics cabling system shall be duly certified with test reports submitted by the manufacturer or their authorized partners for a period of 25 years minimum.
6. At the time of taking over of installation, for all equipment that are covered in SITC, the integrator shall transfer all warranties and guaranties from OEM – original equipment manufacturer – to the client.
7. The System Integrator is advised to provide technical datasheets and specification sheets for approval for all items prior to initiating any supply. Any items having deviations, in absence of specific approval from Engineer-in-Charge or client shall be returned whether installed or uninstalled at the risk, liability and expense of the System Integrator.
8. The ICT System Integrator is advised to specifically use items only from the make list and provide information on compliance of performance specifications.
9. Make of components required to be used by ICT System Integrator to complete the installation, if not mentioned anywhere, shall be required
10. All Passive Components should be from the same OEM.
11. The OEM should be ISO 9001:2015 & QS: 9000 Certified. In the changing needs of the global resources if the company has environmental management systems in place like ISO 14001 accreditation the same shall be added advantage.
12. The cabling should be certified to have application support warranty for next 25 years.
13. Full copper channel link 4 connector test report with minimum 3 dB NEXT headroom. This is applicable for site test report after the installation of cables.
14. It is the sole responsibility of the vendor to integrate the newly installed system with the existing infrastructure for better hand shaking or to keep system healthy.

Technical Specification for ICT Passive Component

GENERAL TERMS AND CONDITIONS

1. All Passive Components should be from the same OEM.
2. The OEM should be ISO 9001:2015 & QS: 9000 Certified. In the changing needs of the global resources if the company has environmental management systems in place like ISO 14001 accreditation the same shall be added advantage.
3. The cabling should be certified to have application support warranty for next 10 years.
4. Full copper channel link 4 connector test report with minimum 3 dB NEXT headroom. This is applicable for site test report after the installation of cables.

Copper cable installation guidelines:

1. Cables shall be coiled in the surface-mount boxes if adequate space is present to house the cable coil without exceeding the manufacturer's bend radius. No more than 12" of slack shall be stored.
2. In addition, each cable type shall be terminated as indicated below:
 - Cables shall be dressed and terminated in accordance with the recommendations made in the TIA/EIA-568-B document, manufacturer's recommendations and/or best industry practices.
 - Bend radius of the cable in the termination area shall not be less than 4 times the outside diameter of the cable.
 - The cable jacket shall be maintained as close as possible to the termination point.
5. Cables shall be neatly bundled and dressed to their respective panels or blocks. Each panel or block shall be fed by an individual bundle separated and dressed back to the point of cable entrance into the rack or frame.
6. Each cable shall be clearly labelled on the cable jacket behind the patch panel at a location that can be viewed without removing the bundle support ties. Cables labelled within the bundle, where the label is obscured from view shall not be acceptable.

Horizontal Distribution Cable & Installation:

1. Cable shall be installed in accordance with manufacturer's recommendations and best industry practices.
2. Cable raceways shall not be filled greater than the manufacturer recommended guidelines.
3. Cables shall be installed in continuous lengths from origin to destination (no splices).
4. The cable's minimum bend radius and maximum pulling tension shall not be exceeded.

5. Horizontal distribution cables shall be bundled into groups of not greater than 40 cables. Cable bundle quantities in excess of 40 cables may cause deformation of the bottom cables within the bundle.
6. Cables shall not be attached to ceiling grid or lighting support wires.
7. Any cable damaged or exceeding recommended installation parameters during installation shall be replaced by the contractor prior to final acceptance at no cost to IIT Jodhpur.
8. A self-adhesive label or PVC marker ferrules shall identify the Cables. A cable label shall be applied to the cable behind the faceplate on a section of cable that can be accessed by removing the cover plate. Similar label or marker ferrules shall also be placed on a section of the cable near to the patch panel termination.
9. Unshielded twisted pair cable shall be installed so that there are no bends less than four times the cables outside diameter (4 X cable outside diameter) at any point in the run.
10. Pulling tension on 4-pair UTP cables shall not exceed 25-pounds for a single cable or cable bundle. The pathway shall be adequately sized so as not to exceed the 80% cross-section fill of cables. The pathway shall be securely installed in the facility.
11. Horizontal Cable distance shall be within 90 Meter.
12. OEM must provide OTDR, OLTS, Penta scanning or FLUKE test report with 10 years' warranty certification.

Specification for cable 4P, Cat6A U/UTP

Installation Cable 4P Cat.6A U/UTP
Standardization : ISO/IEC 11801 ed. 2.2; IEC 61156-5 2nd ed.; EN 50173-1; EN 50288-6-1; TIA 568-C.2; Fire rating: IEC 60332-1; IEC 60754-2; IEC 61034;
Category : Cat.6A ISO
Cu cable shielding : U/UTP
Number of fibres / conductors : 8
Stranding : 4P
Cable jacket material : LSZH IEC60332-1
Cable jacket characteristics : cable, metal-free ; flame-retardant
Length (meter) : 305
<u>Patch Cord, U/UTP 4P, LSZH, Cat.6A</u>
Flexible cable, U/UTP, 4 x 2 x 0.14 (AWG 27/7), color gray, mounted on both sides with RJ45 connectors compliant with Cat.6A ISO component standard: IEC 60603-7-41 RJ45 category 6A ISO (500MHz), unshielded.
For the setting up of transmission channels of Class EA with up to 4 plugged connections acc. to ISO/IEC 11801 ed. 2.2, June 2011, ANSI/TIA 568.C.2 or DIN EN 50173-1
Complies with Cat. 6A requirements of the standards ISO/IEC 11801 ed. 2.2, June 2011 DIN EN 50173-1 or ANSI/TIA 568.C.2
Suitable for 10GBASE-T applications in acc. with IEEE 802.3™ Section Four up to 500 MHz
Low-smoke in acc. with IEC 61034 and halogen-free in acc. with IEC 60754-1. Halogen-free and heavy-metal free in acc. with EU directives RoHS 2.
Can accommodate color coding and mechanical coding. Strain-relief function in acc. with TIA 568-C.

Cat6A UTP Information Outlet

RJ45 connection module of Cat.6A ISO, For the setting up of transmission channels of Class EA with up to 4 plugged connections acc. to ISO/IEC 11801 ed. 2.2, June 2011, ANSI/TIA 568.C.2 or DIN EN 50173-1
Complies with Cat.6A requirements of the standards ISO/IEC 11801 ed. 2.2, June 2011, ANSI/TIA 568.C.2 or DIN EN 50173-1
Cat.6A according to TIA 568-C.2, re-embedded tested in acc. with IEC 60603-7-41 and 60512-27-100, interoperable and backwards compatible with Category 6 and Category 5e.
Suitable for 10GBASE-T applications in acc. with IEEE 802.3™ Section Four up to 500 MHz and 100 m.
Tested in line with INDUSTRIAL STANDARD's manufacturing control, performing 100% inspection.
Each module has own serial number or batch number and is traceable.
Compatible with RJ standard plugs (RJ11, RJ12, RJ45), connection of installation cables AWG 26 – 22 (0.4 mm – 0.65 mm)
Parallel pair termination without crossover in acc. with TIA 568-A/B, gold-plated bronze contacts for >750 mating cycles.
IDC contacts with ≥4 insertion cycles acc. to IEC 60352-3
contact resistance <5 mOhm compatible according to IEC 60512-99-001

Dielectric strength >1000 Veff compatible according to IEC 60512-99-001
PoE and PoE+ compatible according to IEC 60512-99-001
Material: halogen-free and heavy-metal free in acc. with EU directives RoHS 2.

information Outlet (I/O) Faceplate

Face plate 2/4 port
Material: ABS
Color : white
Size: 86x86mm
Security features: It should be lockable. This is an optional feature
Suitable for RJ45 connection modules, connection module ISDN 2xRJ45

19" 1U Patch Panel 24-Port, Cat.6A, unloaded

Modular patch panel
19" fastening kit, labelling fields with exchangeable labelling strips.
The ports are prepared for a visual color coding system
Panel Steel powder coated- black,
Port capacity: suitable for 24 individual Information Outlet

LIST OF APPROVED MATERIALS (Electrical):

S. No.	Material	Approved makes
1	LT panels / boards, Feeder panels.	MILESTONE, TRICOLITE, ADLEC, ADVANCE PANEL & SWITCHGEAR Ltd., PRISTINE, STERLING GENERATOR, APPLICATION CONTROL PANEL.
2	MCCBS	SIEMENS (BETA GUARD), L&T(AU), SCHNEIDER (ACTI 9), LEGRAND (DX 3), HAGER
3	MCB, ELCB, RCCB, DB and RCBO. Distribution board shall be of the same make of MCB, ELCB, RCCB, DB and RCBO.	SIEMENS (BETA GUARD), L&T(AU), SCHNEIDER (ACTI 9), LEGRAND (DX 3), HAGER
4	LT cables, 1.1 KV grade	UNISTAR, GRANDLAY, NATIONAL, RALLISON, KEI, HAVELLS POLYCAB, RR KABEL
5	FRLS copper wires and cables, 1.1 KV grade	UNISTAR, NATIONAL, RALLISON, KEI, HAVELLS, POLYCAB, RR KABEL
6	Switch Socket accessories.	LEGRAND (ARTEOR), SCHNEIDER (ZENCELO), MK (ELEMENTS), HAGER (INSYSTA), CRABTREE (MURANO)
7	Lugs and Ferrules	DOWELLS, JAINSON
8	Brass Compression Gland (Heavy duty)	COMMEX, GRIPWELL, HENSEL
9	Wall Fan	Havells (Plantina), Crompton (Hiflo wave plus), Bajaj (Esteem), USHA (Max Air), Orient (Wall 47), Almonard.
10	Cable Lugs & Thimbles	DOWELL, ASIAN, ACTION
11	Telephone Tag Blocks with boxes	KRONE, POUYET
12	PVC Conduits and Accessories (ISI Marked, Heavy duty)	BEC, PRECISION, POLY-PACK, POLYCAB,
13	MS Conduit and Pipes	BEC, AKG, M-KAY, STEEL CRAFT
14	MS Conduit Accessories (Heavy duty)	BEC, AKG, M-KAY, STEEL CRAFT.
15	Pipes and Accessories (ISI)	TATA, JINDAL, SAIL
16	Street /landscape & LED Light Fixtures	PHILIPS, CROMPTON, WIPRO, BAJAJ, SCHREDER, JAQUAR LIGHTING
17	LED Chip for Street /landscape and LED Light Fixtures	PHILIPS, CROMPTON, WIPRO, BAJAJ,
18	EXIT and Emergency Lights	PHILIPS, CROMPTON, WIPRO, BAJAJ, Prolite
19	CAT-6A CABLE	Tyco, Commscope, R&M, Molex, Panduit, Schneider (Actassi), LEGRAND
21	LED LIGHT FIXTURE	PHILIPS, CROMPTON, WIPRO, BAJAJ, SCHREDER, JAQUAR LIGHTING
22	Selector Switch	RISHAB - L&T, KAYCEE, SIEMENS, C&S, ABB
25	Photo Chromatic Switch	BAJAJ, WIPRO, PHILIPS
26	Annunciation Panel	CROMPTON, AREVA, SIEMENS, KIRLOSKAR
27	Terminal Blocks	BCH, INDUSTRIAL CONTROL, JAINSON
28	Change Over Switch	L&T, SOCOMEC, SIEMENS, HAGER, ABB
29	Bus bar	JINDAL, INDALCO, CENTURY
30	GI pipes	JINDAL, TATA, SAIL
31	Timers & Contactors to be mounted in DB's	L&T, SIEMENS, SCHNEIDER, HAGER, LEGRAND

32	MV Contactors/Timer/ Starters	L&T, SIEMENS, SCHNEIDER, LEGRAND, ABB
33	Protective Relays	AREVA, SIEMENS, L&T
34	kWh Meters (Electronic Digital type) / Multifunction Meter / Ammeter/ Voltmeter)	SCHNEIDER(CONZERV), C&S, L&T, SIEMENS, NEPTUNE, ABB
35	Indication Lamps/Push Button	L&T, BCH, GE
36	Ceiling/Exhaust/Wall Fans	CROMPTON GREAVES, ORIENT, HAVELLS
37	Cable Tray	MEM, PROFAB, RICO, INDIATECH, RMCON, LEGRAND
38	Raceway	LEGRAND, MK, SCHNEIDER
39	Polycarbonate Junction Boxes	HENSEL, CLIPSAL, MENEKES
40	Fasteners	HILTI, FISCHER, BOSCH, WUNH
41	TV Cable	FINOLEX, HAVELLS, BELDON
42	Splitter Box	MX, SHARP, CATVISION
43	Chemical Earthing	JEF ECOSAFE, ERICO, TERC PLUS
44	DWC Pipe	Tirupati, Gemini, Rex, TRICOLITE
45	UPS	SCHNEIDER, VERTIV, SOCOMEC, NUMERIC, ABB, MITSUBISHI
46	Sealed Maintenance free Batteries	EXIDE, QUANTA AMARON, INNER ROCKET, PANASONIC.
47	Street Light GRP Poles	SCHREDER, PHILIPS, BAJAJ, CREATIVE COMPOSITE, AERON COMPOSITE
48	PU paints on street light GRP poles	AZKO NOBEL, ASIAN

DATA NETWORKING, CCTV, ACCESS CONTROL SYSTEM & EPBAX SYSTEM

S. No.	Material	Manufacturer
1	Fiber Optics Components (Data & Voice/Telecom, Single Mode and/or Multimode) – Cables, LIUs, Shelves, Pigtailed, Patch-cords, Connectors, Couplers, Splices.	Tyco, Commscope, Molex, Panduit, Schneider (Actassi), Legrand.
2	Outdoor mounted enclosure	Molex, HOFFMAN, HENSEL, PANDUIT, SCHNEIDER
3	IP66 rated 96 core External Splicing Kit for outdoor fiber optics cable	Molex, 3M, RAYCHEM, TYCO, SCHNEIDER
4	Networking Racks, Data Centre racks, Distribution Racks – from sizes 15U to 42U	Molex, APW-VERO PRESIDENT, RITTAL, PANDUIT-PANNET, SCHNEIDER, VALRACK
5	CAT6A Cable, I/Os for CAT6A, Patch panel, Face plate, modular box	Tyco, Commscope, Molex, Panduit, Schneider (Actassi), Legrand.
6	CCTV Camera	PELCO, SONY, BOSCH, AXIS.
7	Network Video Recorder/VMS	PELCO, SONY, BOSCH, AXIS.
8	Monitor	SONY, SAMSUNG, PHILIPS
9	Networking Switch	Cisco, Extreme, Juniper
10	IP Based EPABX System	Siemens / Cisco / Alca Tel / Matrix/Avaya/Coral
11	Access Control System	
(a)	Access Controllers	LENEL, CASSIRUSCO, SMART -I, MOTOROLA
(b)	Access Control Management	LENEL, CASSIRUSCO, SMART -I, MOTOROLA

	Software	
(c)	Door Interlock Controller	LENEL,CASSIRUSCO, SMART -I, MOTOROLA
(d)	Biometric Fingerprint Reader	LENEL,CASSIRUSCO, SMART -I, MOTOROLA
(e)	Smart Card Reader	LENEL,CASSIRUSCO, SMART -I, MOTOROLA
(f)	Smart cards	LENEL,CASSIRUSCO, SMART -I, MOTOROLA
(g)	Electromagnetic Locks	TRIMEC, BEL, ALGATECH
(h)	Computer	IBM, HP, LENOVO

Note: Superintending Engineer, IIT Jodhpur reserves the right to add or delete any material and brands in the list of preferred material/brands on the recommendation of Engineer-In -charge.

Schedule of Quantities

S. No.	Item Description	Qty.	Unit	Rate	Total amount.
Sub Head: Electrical & Data Work					
1	Supply and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/PVC conduit as required.				
1.1	3x4 sqmm.	600.00	Metre.	206.00	123600.00
2	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
2.1	15/16 A switch	55.00	Each	156.00	8580.00
2.2	6 pin 15/16 A socket outlet	55.00	Each	197.00	10835.00
3	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
3.1	03 Module (200mmx75mm)	35.00	Each	327.00	11445.00
3.2	8 Module (125mmX125mm)	20.00	Each	454.00	9080.00
4	Supply and fixing of following sizes of medium class PVC conduit/casing capping along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
4.1	25mm	200.00	Meter	145.00	29000.00
4.2	32mm	100.00	Meter	184.00	18400.00
5	Supply and fixing of following ways Horizontal type three pole and neutral MCB distribution board 415V, on surface/recess complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnection, powder painted including earthing etc as required. (But without MCB/RCCB/isolator)				
5.1	4way (4+12), Double door	2.00	Each	4091.00	8182.00
6	Supplying and fixing 5A to 32Amp rating 10kA, C curve MCB breaker suitable for inductive load of following poles in the existing MCB DB complete with connections testing and commissioning etc as required.				
6.1	Single pole	24.00	Each	256.00	6144.00
7	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/recessed medium class PVC conduit as required.				
7.1	4x16sqmm+2x6sqmm earth wire	100.00	Meter	1365.00	136500.00
8	Online UPS- Input supply: Three Phase, Output supply: Three Phase				
	Supplying, installation, Testing & Commissioning of of following capacity at full load (Unity Power Factor) at operating temperature 0 to 40 deg C, Relative humidity 0 to 95%, Online double				

	conversion true sine wave Uninterrupted hot swappable (allow for the replacement or addition of battery modules without shutting down the entire system) modular Power Supply (UPS) system with N+1 modules (N denotes total number of modules required for rated capacity). The UPS shall include a Rectifier, inverter, battery bank suitable for 30 minutes back up (Battery VAH capacity shall not be less than 1600 VAH per KVA of UPS rating per Hour backup time) on full load (Battery shall be VRLA, SMF in ABS Container) and Static Bypass switch alongwith provision for manual bypass, suitable isolation transformer for additional protection against neutral faults etc. UPS shall have inbuilt				
	phase sequence correction. The UPS systems offered are to be of the latest technology with Digital Control Microprocessor based for reliable operation using Insulated Gate Bipolar Transistor (IGBT)'s both for the rectifier & inverter (3 Level) with PWM (Pulse Width Modulation). The quality of design, manufacturing and inspection process should confirm to the relevant International standards such as IEC/EN/VDE. The operating efficiency of the UPS systems shall be >96% while operating on battery mode and delivering quality power to the 100% non-linear loads. Current total harmonic effect(ITHD) on the input grid shall be < 5% at 50 %load. (The required LC (inductor (L) and a capacitor (C)) filters shall be included in UPS cost), extreme power factor kit to be included to limit the				
	input power factor (PF) to 0.99 and output power factor shall be unity (i.e. kw rating of the UPS shall be kva rating x 1), however UPS shall be suitable to take load at 0.7 lagging to 0.7 leading power factor loads. UPS shall be suitable for incoming supply AC: 3Phase 400V +/-20%, 50 Hz +/-5 Hz, AC Output voltage: 3Phase 415 Volt, 50 Hz +/- 0.2Hz, Overload capacity of 120% for 10 mins, Sine wave output. Non condensing, noise level less than 60db at 1-meter distance, protections: Input Under voltage over voltage, abnormal out voltage, battery over charging, output over current, short circuit protection, battery deep discharge protection, 10KV surge. UPS must comply with low voltage electromagnetic compatibility (EMC) achieved as per EN 6204, EN6204 Part I and Part 2, it shall be a Voltage and Frequency Independent (VFI)-type UPS. Communication RS232/RS485/SNMP port open				
	protocol for BMS integration, all hardware & software for IoT Communication as per approved by Engineering in charge. Required battery racks and interconnecting copper conductor cables of suitable size and connectors and all required accoseries are inclusive of the cost). This system must provide a				

	means for logging and alarming of all monitored points plus email notification. Forced air-cooling with integral inbuilt fans with redundancy (if one fan fail UPS should be able to handle at least 80% of the load, Noise Level 65 DB at 1-meter distance. The system shall be in compliance IEC 62040- 1,2 & 3, IS: 16242 and CPWD Specification. Display Panel (minimum) (In-build 5 inch or more LC Display / LED) to display: a) Input: Voltage, current, Frequency. b) Bypass: Voltage, Frequency. c) Output: Voltage, frequency, Current. d) Battery: Voltage, Capacity. e) Load: KVA, KW, Percentage.				
	f) Temperature: STS, Inverter, PFC. g) Event Logging & Statistical Data (On LCD/LED): UPS should capture and display up to 3000 events like: Over temperature / DC Bus Fail / Fan Fail / Fuse Fail / Overload / Short-circuit / Device Fail / Inverter Fail / Rectifier Fail / Bypass Fail, etc. h) Statistical Data: No. of power failures / Transfers to Bypass / Total Running time, etc. i) Mains Mode of Operation / Battery Mode of Operation / Bypass feeding the load / UPS Fault / Battery charging and discharging, overload, battery voltage and battery capacity. j) Audible Alarms: Mains Failure, Battery Low Alarm, UPS Overload, Fault, Shutdown, Input Over, Under Voltage, Output Over, Under Voltage, Battery Over, Under Voltage, Over Load and short circuit, Over Temperature. The UPS should have QR code which should contain drawing, test report OEM manual, Geo- Tag of manufacturing location etc.				
8.1	20KVA (Each Power module shall be < 10 KVA)	2.00	Each	341772.00	683544.00
9	Supplying and fixing of following rating four pole 415V, MCB TPN, C Curve in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
9.1	63Amp	6.00	Each	2318.00	13908.00
10	Supplying and drawing of UTP 4 pair CAT 6A LAN Cable in the existing surface/ recessed Steel/ PVC conduit/DLP as required.	3300.00	Metre.	77.00	254100.00
11	Supply Installation Testing & Commissioning of Cat6A UTP Patch cord 1 mtr (For rack and User side) etc as required.	150.00	Each	358.00	53700.00
12	Supply Installation Testing & Commissioning of 24 Port Patch Panel Cat6A Unloaded in 1U form factor, with universal A/B labelling and 110 connector terminations on rear of panel allowing for quick and easy installation of 22 to 24 AWG cable, etc. as required.	5.00	Each	5541.00	27705.00
13	SITC of single UTP CAT6A I/O of specified make including mounting inside single and MS back box of 02Module assembly (if required), RJ 45 Connector as per requirement, inclusive of termination of UTP CAT6A cable at each IO at workstation area/device/ user side/ patch panel side etc. as required.	170.00	Each	950.00	161500.00

14	Supply and fixing of 105*50 mm DLP PVC trucking system including all accessories like Flexible cover, cover joints, body joints, angles and end caps etc. as required.	100.00	Metre.	1324.00	132400.00
15	Supply, laying, testing and commissioning of fibre optic cable of given capacities to be laid in pre-laid conduits/PVC/DLP etc. as required.				
15.1	4 core, single mode, optical cable	200.00	Metre.	43.00	8600.00
16	Splicing/termination of fibre optic cable cores using fusion splicing with pre-terminated pigtails, dressing and proper fixing in splice trays.	25.00	Each	641.00	16025.00
17	Supplying and fixing TPN sheet steel enclosure on surface/ recess (but without MCB/MCCB) complete with connections etc. as required.	4.00	Each	726.00	2904.00
18	Supply and installation of ABC (DCP) Type fire extinguisher 06KG, MAP-90%, portable type, average range of throw 05 meter, avg discharge time 24 sec. weight (full) is approx. 8.9kg, operating temp range - 30 C to +60 C with nozzle and Hose as per latest IS standard etc. as required.	4.00	Each	6831.00	27324.00
19	Supply and installation of CO2 type 4.5KG fire extinguisher, portable type, average range of throw 02 meter, avg discharge time 11 sec, weight (full) is approx. 18kg, operating temp range -30 C to +60 C with nozzle and Hose as per latest IS standard etc. as required.	4.00	Each	13493.00	53972.00
Total					1797448.00
Total DSR E&M (2022) items Rs.					361766.00
Total DSR E&M (2025) Volume-II items Rs.					683544.00
Total Non-DSR items Rs.					752138.00
Add GST difference @6.33% on DSR items Rs.					22899.79
Less 2.70% (for 0.973 correction factor) on DSR items Rs					-10385.98
Total Amount					1809961.81
Say Rs.					1809962.00

Percentage BoQ						
Tender Inviting Authority:						
Name of Work: Infrastructure work in Berm E01 and E-03.						
Contract No: IITJ/OIE/2025-26/17.						
Name of the Bidder/ Bidding Firm / Company :						
<u>PRICE SCHEDULE</u> (This BOQ template must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only)						
NUMBER #	TEXT #	NUMBER #	TEXT #	NUMBER	NUMBER #	TEXT #
Sl. No.	Item Description	Quantity	Units	Estimated Rate in Rs. P	TOTAL AMOUNT With Taxes in Rs. P	TOTAL AMOUNT In Words
1	2	3	4	5	6	7
1	Infrastructure work in Berm E01 and E-03.	1.000	Nos	1809962.00	1809962.00	INR Eighteen Lakh Nine Thousand Nine Hundred & Sixty Two Only
Total in Figures					1809962.00	INR Eighteen Lakh Nine Thousand Nine Hundred & Sixty Two Only
Quoted Rate in Figures			Select		0.00	INR Zero Only
Quoted Rate in Words		INR Zero Only				