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Name of Work: Internal Electrical Works in Various Labs of J.C.Bose Building

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NIT Amounting to Rs. 2359547/- (Rupees Twenty Three Lakhs Fifty Nine Thousand Five Hundred and Forty Seven Only)

[Certified that this NIT contains 27 pages (Twenty Seven only) pages + BOQ contains 3 (Three only) Pages + Drawing contains 1 (One only) + List of Approved Makes 1 (One only) pages Total 32 (Thirty two only) pages only]

PART – A

INDIAN INSTITUTE OF TECHNOLOGY ROPAR
WORKS AND ESTATE OFFICE

TENDER DOCUMENT


Name of Work: Internal Electrical Works in Various Labs of J.C.Bose Building

SL. NO.	DESCRIPTION	PAGE
1.	PART-A (NIT, Form 6 & 8, Contract Agreement etc.)	1-20
2.	PART-B (Scope of Work, Quality Assurance of the Work)	22-27
3.	PART-C (BOQ attachment, Drawings etc)	(5)

Notes: The following will be the part of the contract Agreement:

1. CPWD General Conditions of Contract of 2014 modified upto date for details refer to [www.cpwd.gov.in/publications/GCC 2014](http://www.cpwd.gov.in/publications/GCC%202014).

Estimated Cost Rs. 2359547/- (Rupees Twenty Three Lakhs Fifty Nine Thousand Five Hundred and Forty Seven Only)


Executive Engineer

INDIAN INSTITUTE OF TECHNOLOGY ROPAR
WORKS AND ESTATE DEPARTMENT

NOTICE INVITING TENDER No. IITRPR/EE/T/19/188

The Registrar, IIT Ropar invites on behalf of Board of Governors of IIT Ropar sealed item rate tender for the following work:-

NIT No. IITRPR/EE/T/19/188,

Name of work: Internal Electrical Works in Various Labs of J.C.Bose Building,

Estimated Cost: Rs 23,59,547/-, EMD: Rs 47,191/-,

Time of completion: 30 days.

Last time and date of submission of bid is 3:00 PM on 24.05.2019.

The bid form and other details can be downloaded from the website **www.iitrpr.ac.in/tenders**

B. Manoj

**Registrar
IIT Ropar**

Form-6

INFORMATION AND INSTRUCTIONS FOR CONTRACTORS FOR TENDRING FORMING PART OF NIT AND TO BE POSTED ON WEBSITE

The Registrar, on behalf of Board of Governors of IIT ROPAR, invites item rate tenders from registered contractors in appropriate class in CPWD/ MES/ BSNL /Railways/ State PWDs and Central PSUs for the following work:

S.N	NIT No.	Name of work and location	Estimated cost put to tender	Earnest Money	Period of Completion	Last date & time of submission of tender	Last date for submitting of EMD, Tender Fee, other documents	Time & date of opening of Tender
1	IITRPR/EE/IT/19/188	Internal Electrical Works in Various Labs of J.C.Bose Building	Estimated cost Rs.2359547.00	Rs.47,191/-	30 Days	Upto 3:00 PM on 24.05.2019	3:00 PM on 24.05.2019	Opening at 3.30 PM on 24.05.2019

A. ELIGIBILITY CRITERIA :

1) Contractors who fulfill the following requirements shall be eligible to apply:-

- a) Should have satisfactory completed the works as mentioned below during the last seven years ending the last day of submission of application.
- 3 (three) similar* work each of value not less than 40% of the estimated cost put to tender
- OR
- 2 (two) similar* work each of value not less than 60% of the estimated cost put to tender.
- OR
- One similar* work of value not less than 80% of the estimated cost put to tender.

*Similar means internal electrification works

b) Enlistment contractors of appropriate class in CPWD/ MES/ BSNL /Railways/ State PWDs and Central Public Sector Units.

c) Joint ventures are not accepted:

B. Documents to be submitted with tender :

i) (Envelope one) :-

- a) Enlistment order of the contractor.
- b) Required experience/completion certificate of works .
- c) Certificate of registration for EPF and ESIC.
- d) Copy of GST Registration.
- e) Tender document with signature on all pages.
- f) Tender fee.
- g) EMD.
- h) Copy of PAN registration with Income Tax Department.

(Envelope Two) :-

- a) Price quoted for the respective items in words and figures
- b) Signatures & stamp.

ii) **Both the envelopes shall be placed in another envelope with due mention of Name of work, date & time of opening of tenders and to be submitted in the office of the Deputy Registrar (S&P), Utility block, IIT Ropar, IIT Ropar Birla Farms, Permanent Campus, Rupnagar – 140001.**

iii) **Cost of Tender Document – Rs. 590/- (Tender fee + GST@18%) in shape of DD/Banker's Cheque drawn in favour of the Registrar IIT Ropar payable at Ropar/ Rupnagar, Punjab.**

Second envelope submitted by intending tenderers shall be opened only of those tenderers, whose Earnest Money Deposit, Tender fee and other documents placed in the envelope are found in order.

The tender submitted shall be opened at 03:30 PM on 24.05.2019.

iv) The tender submitted shall become invalid and cost of tender fee shall not be refunded if:

- a) The tenderers if found ineligible.
- b) The tenderers do not submit all the documents as stipulated in the tender document.
- c) If any discrepancy is noticed in the documents submitted physically in the office of tender opening authority.

C. OTHER CONDITIONS :

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

- 2) Information and Instructions for bidders posted on website shall form part of bid document.
- 3) The agreement shall be drawn with the successful tenderer on prescribed Form No. Form-8 as modified and corrected upto date which is available as a Govt. of India Publication. Tenderer shall quote his rates as per various terms and conditions of the said form which will form part of the agreement
- 4) The time allowed for carryout the work will be **30 days (Thirty days)** from the date of start as defined in schedule "F" or from the first date of handing over of the site, whichever is later, in accordance with the phasing, if any, indicated in the tender document.
- 5) The site for the work is available.
- 6) The bid document consisting of plans, specifications the schedule of quantities of various types of items to be executed and set of terms and conditions of the contract to be complied with and other necessary documents can be seen and downloaded from website www.iitrpr.ac.in/tenders
- 7) The bid shall be submitted in the office of Deputy Registrar (S&P), Utility block, IIT Ropar, IIT Ropar Birla Farms, Permanent Campus, Rupnagar – 140001 with details of the mandatory documents such as Demand Draft or Pay order or Banker's cheque or Deposit at call Receipt or Fixed deposit Receipts and Bank Guarantee of any scheduled Bank towards cost of bid document and EMD in favour of Registrar, IIT ROPAR, Payable at Ropar/ Rupnagar, Punjab.

Other necessary documents can be seen in the office of the Executive Engineer, IIT Ropar between hours of 10:00 AM to 5:00 PM from 17/05/2019 to 22/05/2019 every day except on Saturdays, Sundays and Public Holidays free of cost.
- 8) The tender shall be accompanied with earnest money of Rs. 47,191/-.
- 9) The contractor whose tender is accepted will be required to furnish performance guarantee of 5% (Five Percent) of the tendered amount within the period specified in Schedule F. This guarantee shall be Deposit at Call receipt of any scheduled bank / Banker's cheque of any scheduled bank / Demand Draft of any scheduled bank / Pay order of any Scheduled Bank of any scheduled bank or Government Securities or Fixed Deposit Receipts or Guarantee Bonds of any Scheduled Bank or the State Bank of India in accordance with the prescribed form. **In case the contractor fails to deposit the said performance guarantee within the period as indicated in Schedule 'F', including the extended period if any, the Earnest Money deposited by the contractor shall be forfeited automatically without any notice to the contractor.**
- 10) The Institute reserves the right to reject any prospective application without assigning any reason and to restrict the list of qualified contractors to any number deemed to suitable by it, if too many bids are received satisfying the laid down criterion.
- 11) The description of the work is as follows:
Copies of other drawings and documents pertaining to the works will be open for

inspection by the tenderers at the office of the above mentioned officer.

Tenderers, 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 the risks, contingencies and other circumstances which may influence or affect their tender. A tenderer shall be deemed to have full knowledge of the site whether he inspects it or not and no extra charges consequent on any misunderstanding or otherwise shall be allowed. The tenderer shall be responsible for arranging and maintaining at his own cost all materials, tools & plants, water, electricity access, facilities for workers and all other services required for executing the work unless otherwise specifically provided for in the contract documents. Submission of a tender by a tenderer implies that he has read this notice and all other contract documents and has made himself aware of the scope and specifications of the work to be done and of conditions and rates at which stores, tools and plant, etc. will be issued to him by the Government and local conditions and other factors having a bearing on the execution of the work.

- 12) The competent authority on behalf of the Director, IIT ROPAR does not bind itself to accept the lowest or any other tender and reserves to itself the authority to reject any or all of the tenders received without the assignment of any reason.
- 13) All tenders, in which any of the prescribed conditions is not fulfilled or any condition including that of conditional rebate is put forth by the tenderer, shall be summarily rejected.
- 14) Canvassing whether directly or indirectly, in connection with tenders is strictly prohibited and the tenders submitted by the contractors who resort to canvassing will be liable to rejection.
- 15) The competent authority on behalf of Director, IIT ROPAR reserves to himself the right of accepting the whole or any part of the tender and the tenderer shall be bound to perform the same at the rates quoted
- 16) The contractor shall not be permitted to tender for works in the IIT ROPAR responsible for award and execution of contracts in which his near relative is posted as Group A Officer in Accounts Section or as an officer in any capacity between the grade of Registrar and Junior Engineer (both inclusive). He shall also intimate the names of persons who are working with him in any capacity or are subsequently employed by him and who are near relatives to any officer in the IIT ROPAR. Any breach of this condition by the contractor would render him liable to be removed from the approved list of contractors of the concerned Department / termination of the contract from this institute.
- 17) 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 two years after his retirement from government service, without the previous permission of the Government of India in

writing. This contract is liable to be cancelled if either the contractor or any of his employees is found any time to be such a person who had not obtained the permission of the Government of India as aforesaid before submission of the tender or engagement in the contractor's service.

- 18) The tender for the works shall remain open for acceptance for a period of **sixty days** from the date of opening of tenders. If any tenderer withdraws his tender before the said period or issue of letter of acceptance, which-ever is earlier, or makes any modifications in the terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at a liberty to forfeit 50% of the said earnest money as aforesaid. Further, the tenderer shall not be allowed to participate in the re-tendering process of the work.
- 19) 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 the tender as issued at the time of invitation of tender and acceptance thereof together with any correspondence leading thereto.
 - b) Standard C.P.W.D. **Form-8** as modified and corrected.
- 20) Tenders with any condition including conditional rebates shall be rejected forthwith. However, tenders with unconditional rebates will be acceptable.
- **Part A :**
CPWD-6, CPWD-8 including schedule A to F for the major component of the work, standard General Conditions of Contract for CPWD 2014.
 - **Part B**
General / Specific conditions, specifications and schedule of quantities applicable to major component of the work.
 - **Part C**
Schedule A to F for minor component of the work. (Registrar/ EE in charge of major component shall also be competent authority under clause 2 and clause 5 as mentioned in schedule A to F of major components). General/ Specific conditions, specifications and schedule of quantities applicable to minor component(s) of the work.
- 20.1 Tenderers must associate himself, with agencies of the appropriate class eligible to tender for each of the minor components of work.
- 20.2 The eligible tenderers shall quote rates for all items of major component as well as for all items of minor components of work.
- 20.3 Entire work under the scope of composite tender including major and all minor components shall be executed under one agreement.

- 20.4 Security Deposit will be worked out separately for each component corresponding to the estimated cost of the respective component of works. The Earnest Money will become part of the security deposit of the major components of work.
- 21) The acceptance of the tender shall be conveyed by the **Executive Engineer, IIT Ropar** on behalf of the Director, IIT ROPAR.

BS. Nag

Registrar

For & on behalf of the Board of Governors, IIT Ropar

Form-8
ITEM RATE TENDER AND FOR WORKS CONTRACT

A) Internal Electrical Works In Various Labs Of J.C.Bose Building

To be submitted by 3:00 PM on 24.05.2019 in the Office of Deputy Registrar (S&P), Utility block, IIT Ropar, IIT Ropar Birla Farms, Permanent Campus, Rupnagar – 140001.

To be opened in presence of tenderers who may be present at 3:30 PM on 24.05.2019 in the Office of Deputy Registrar (S&P), Utility block, IIT Ropar, IIT Ropar Birla Farms, Permanent Campus, Rupnagar – 140001.

- 1) Issued to : _____
- 2) Executive Engineer, IIT Ropar

TENDER

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

I/We hereby tender for the execution of the work specified for the Director, IIT Ropar within the time specified in Schedule 'F', viz., schedule of quantities and in accordance in all respects with the specifications, designs, drawings 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 respects in accordance with, such conditions so far as applicable.

We agree to keep the tender **open for (60) sixty days from the date of opening of tender** and not to make any modifications in its terms and conditions.

A sum of **Rs. 47,191/-** is hereby forwarded in Cash/Receipt Treasury Challan/Deposit at call Receipt of a Scheduled Bank/Fixed deposit receipt of scheduled bank/demand draft of a scheduled bank/bank guarantee issued by scheduled bank as earnest money. If I/we, fail to furnish the prescribed performance guarantee or fail to commence the work within prescribed period I/we agree that the said Director, IIT, Ropar 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 of commence work as specified, I/we agree that Director, IIT, Ropar or his 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 therein and to carry out such deviations as may be ordered, up to maximum of the percentage mentioned in Schedule 'F' and 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 or both Earnest Money & Performance Guarantee as aforesaid, I/We shall be debarred for participation in the tendering process of the work.

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 therefrom 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 institute.

I/We undertake and confirm that eligible similar work(s) has/ have not been got executed through another contractor on back to back basis. Further that, if such a violation comes to the notice of Department, then I/we shall be debarred for tendering in IIT Ropar 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.

Dated _____

Signature of contractor

Postal Address: _____

Email : _____

Witness: _____

Address: _____

Occupation: _____

ACCEPTANCE

The above tender (as modified by you as provided in the letters mentioned hereunder) is accepted by me for and on behalf of the Board of Governors, IIT Ropar for a sum of Rs. _____ (Rupees _____ only). The letter referred to below shall form part of this contact Agreement- i)

ii)

iii)

Dated:

For on the behalf of Board of Governors, IIT ROPAR
Signature _____

PERFORMA OF SCHEDULES

SCHEDULE 'A'

Schedule of Quantities.

SCHEDULE 'B'

Schedule of materials to be issued to the contractor:

S.N.	Description of item	Quantity	Rates in figures & words at which the material will be charged to the contractor	Place of issue
1	2	3	4	5
-NIL-				

SCHEDULE 'C'

Schedule of Tools and Plants to be hired to the contractor

S.N.	Description of item	Hire charges per day	Place of issue
1	2	3	4
-NIL-			

SCHEDULE 'D'

Extra schedule for specific requirements / document work if any

As attached in for the tender form

SCHEDULE 'E'

Reference to General Conditions of contract.

Name of Work:	Internal Electrical Works In Various Labs Of J.C.Bose Building
Estimated cost of the work:	Rs.2359547/-
Earnest Money Deposit	Rs. 47,191/-
Performance Guarantee	5% of the tendered value of the work
Security Deposit	2.5% shall be deducted from the running bills.

SCHEDULE 'F'

General rules and direction:

Officer inviting tender

**Executive Engineer,
IIT ROPAR**

Maximum item of quantity of items of See at appropriate clause under work to be executed beyond which definitions rates are to be determined in accordance with Clause 12.2.& 12.3

Refer Clause 12

Definitions:

2(i) **Engineer-in-Charge**

Executive Engineer,
IIT Ropar

2(ii) **Accepting Authority**

Registrar, IIT Ropar

2(iii) **Market rate:** Percentage on cost of materials and labour to cover all overheads and profits

15%

2(iv) **Standard Schedule of Rates**

Delhi Schedule of Rates 2018

2(v) **Department:**

Central Public Works Department

2(vi) **Standard contract Form:**

GCC 2014, **Form-8** as modified & corrected up to date

Clause 1

i) Time allowed for submission of performance guarantee from the date of letter of acceptance.

7 days

ii) Maximum allowable extension with fee @ 0.1% per day of performance guarantee amount beyond the period as provided in (i) above.

3 days late

Clause 2

Authority for fixing compensation under clause 2

Registrar, IIT Ropar

Clause 2A

Whether clause 2A shall be applicable

Not applicable.

Clause 5

Number of days from the date of issue letter of acceptance for reckoning date of start

07 days of

Time allowed for execution of work

30 days

Authority to decide

i) Extension of time

ii) Rescheduling of mile stones

Executive Engineer, IIT Ropar

Registrar, IIT Ropar

Clause 6/ 6A

Only clause 6 applicable

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

5,00,000/-

Clause 10A

List of testing equipment is to be provided by the Contractor at site lab.

NIL

Clause 10B (ii)

Whether clause 10B (ii) shall be Applicable.

Not Applicable

Clause 10C

Component of labour expressed at percent of total value of work.

Not Applicable

Clause 10CA

Whether clause 10CA be applicable

No

Material covered under this clause	Nearest material (other than cement, reinforcement bars and structural steel) for which All India Whole sale price index is to be followed.	Base price of all the materials covered under clause 10 CA
1. Cement (PPC)	N.A.	Rs 5200/- Per MT
2. Reinforcement Steel (TMT)	N.A.	Rs 43700/- Per MT
3. Structural Steel	N.A.	Rs 47796/- Per MT

Clause 10CC

To be applicable in contracts with stipulated period of completion exceeding the period.

Not Applicable

Clause 11

Specification to be followed for

CPWD Specifications for electrical work Part I internal 2013 with upto date execution of work Upto date correction slips.

Clause 12

Clause 12.2 & 12.3

30%

Deviation limit beyond which clause 12.2 & 12.3 shall apply for building works

Clause 12.5

30% (i)

Deviation limit beyond which clause 12.2 & 12.3 shall apply for foundation Work

(ii) Deviation limit for items in earth work SH: of DSR or related items for foundation work (Execpt earthwork)

100%

Clause 16

Competent Authority for Deciding reduced rates:

Registrar, IIT Ropar

Clause 18

List of mandatory machinery, tools & plants to be deployed by the Contractor at site.

As per requirement.

Clause 36(i): Requirement of Technical Representative(s) and Recovery Rate

Minimum Qualificatio of Technical Representative	Discipline	Designation	Minium Experience	Number	Rate at which recovery shall be made from the contractor in the event of not fulfilling provision of caluse 36 (i)	
Diploma Holder	Electrical	Technical Representative	5 Years	1	Rs. 10,000/ Per month for each	Rs. Ten thousand per month for each

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

RECOVERY RATES FOR QUANTITIES BEYOND PERMISSIBLE VARIATION

S.No	Description of item	Rates in figures and words at which recovery shall be made from the Contractor	
		Excess beyond permissible variation	Less use from the permissible variation
1	Cement	NIL	
	a) PPC b) OPC		Rs. 5400/- per M.T Rs. 10,000/- per M.T
2	Steel	NIL	
	a) Primary producers b) Secondary producers		Rs.42,900/- per M.T Rs. 40,400/- per M.T

TABLE OF MILE STONE(S)

S.No	Financial Progress	Time allowed (from date of start)	Amount to be withheld in case of no achievement of milestone
1	1/8 th (of whole work)	1/4 th (of whole work)	In the event of not achieving the necessary progress as assessed from the running payments 1% of the tendered value of work will be withheld for failure of each milestone.
2	3/8 th (of whole work)	1/2 th (of whole work)	
3	3/4 th (of whole work)	3/4 th (of whole work)	
4	Full	Full	

CONTRACT AGREEMENT

(ON RS.100 NON JUDICIAL STAMP PAPER*)

THIS AGREEMENT is made on _____ 2019..... Between **Executive Engineer, Indian Institute of Technology Ropar, Punjab** (hereinafter referred to as "Client" which expression shall include his successors and assigns), and whose principal place of office is at IIT Ropar, Nangal Road, Rupnagar Punjab India 140001 of the One Part,

AND

M/s.....having its registered office at.....(Hereinafter referred to as "the Contractor") which expression shall unless excluded by or repugnant to the context be deemed to include his successors, heirs, executors, administrators, representatives and assigns) of the other part for

I. **WHEREAS** the Client invited bids through open tender, vide Notice Inviting Tender datedfor the work of Internal Electrical Works In Various Labs Of J.C.Bose Building" under **Tender No.**

II. **AND WHEREAS** the Contractor submitted his bid vide..... in accordance with the bid documents and represented therein that it fulfills all the requirements and has resources and competence to provide requisite services to the Client

III. **AND WHEREAS** the Client has selected **M/s**.....as the successful bidder ("the Contractor") pursuant to the bidding process and negotiation of contract prices, awarded the **Letter of Acceptance (LoA) No.**, to the Contractor on for a total sum of [Rupees Only].

IV. **AND WHEREAS** the Client desires that the Internal Electrical Works In Various Labs Of J.C.Bose Building as defined in the Bidding Document) be provided, performed, executed and completed by the Contractor, and wishes to appoint the Contractor for providing requisite services to the Client.

V. **AND WHEREAS** the Contractor acknowledges that the Client shall enter into contracts with other contractors / parties for Internal Electrical Works In Various Labs Of J.C.Bose Building at permanent campus of IIT Ropar for its office in cases the Contractor falls into breach of the terms and conditions as stipulated in the Tender Document and shall waive its claim whatsoever in this regard.

*= To be purchased and submitted by the Contractor.

VI. **AND WHEREAS** the terms and conditions of this Contract have been fully negotiated between the Client and the Contractor as parties of competent capacity and equal standing.

VII **AND WHEREAS** the Contractor has fully read, understood and shall abide by all the terms and conditions as stipulated in the Tender Documents for providing Internal

Electrical Works In Various Labs Of J.C.Bose Building at permanent campus of IIT Ropar for Client's office, failing which the Contract is liable to be terminated at any time, without assigning any reasons by the Client.

VIII. The Client and the Contractor agree as follows:

1. In this Agreement (including the recitals) capitalized words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other Contract documents.
 - (a) Notice Inviting Tender Form 6, Form No. 8, Performa of Schedules.
 - (b) The Letter of Intent/ Acceptance (LoI/A) issued by the Client.
 - (c) Price Schedule
 - (d) CPWD General Conditions of Contract 2014
 - (e) CPWD General Specifications for Electrical Works Part I Internal - 2013.
 - (f) Performance Bank Guarantee.
 - (g) Integrity Pact.
 - (h) The Addenda, if any, issued by the Client.
 - (i) Any other documents forming part of this Contract Agreement till date.
 - (j) Charges – Schedule annexed to this Article of Agreement
 - (k) Supplementary Agreements executed from time to time.

3. Any changes/modifications/amendments required to be incorporated in the Contract Agreement at a later stage shall be discussed and mutually agreed by both the parties and such supplementary agreements shall be binding on both the parties and shall form the part of this contract agreement.

4. This Contract shall be governed by and construed in accordance with the laws of India. Each Party hereby submits to the jurisdiction as set out in the Dispute Resolution Procedure in the Conditions of Contract.

IX. **IN WITNESS WHEREOF** the parties hereto have caused this Agreement to be executed in accordance with the laws of India on the day, month and year indicated above.

Signed on behalf of the Contractor

Signed for and on Behalf of IIT Ropar

(Authorised Signatory)

(Executive Engineer, IIT ROPAR)

PART – B

1. SCOPE OF WORK:

- 1.1. The Scope of work shall include supply, inspection and testing and commissioning of all equipment's to meet the requirements defined in Bill of Quantity and drawings attached with the tender and required for completion of the job including but not limited to the following works. The scope shall also include handling, transportation of equipment/ material from Purchaser's stores/ warehouse to the place of installation and supply of commissioning spares wherever required.
- 1.2. The job includes repairing of all civil works damaged during installation of electrical facilities. Supply and installation of all other accessories not specifically mentioned herein but nevertheless necessary for completion of job.
- 1.3. Minor modifications, wherever needed, for the free-issued material/ equipment/ devices to enable cable entry/ termination, wiring changes etc.
- 1.4. Sealing of openings made in walls/ floors, firewalls for cables etc., using acceptable practices and standards.

2. CONTRACT DOCUMENT:

- 2.1 The several documents, forming the contract, are to be taken as mutually explanatory of one another and in case of ambiguities or discrepancies the same shall be explained and adjusted by the Engineer-in-charge who shall thereupon issue to the contractor its interpretation directing in what manner the work is to be carried out. In case the contractor feels aggrieved by the interpretation of the Engineer-in-Charge then the matter shall be referred to the Registrar and his decision shall be final, conclusive and binding on both parties to the contract.
- 2.2 The drawing etc. shall remain in the custody of the Institute. Two complete sets of drawings, specification and Bill of Quantities shall be furnished by the Engineer-in-charge to the contractor in such time, which must not delay the progress of the construction, and the Institute shall furnish copies of any additional drawings, which in their opinion may be necessary for the execution of any part of the work. One complete set shall be kept on the work site and the Engineer-in-charge and his representatives shall be, at all reasonable times, have access to the same. The contractor shall study the drawings thoroughly before the commencement of work. In case of any discrepancy, the contractor shall seek clarification before proceeding with the works. Figured dimensions are in all cases to be accepted in preference to the scaled sizes. Large-scale details shall take preference over small scale ones.
- 2.3 The contractor shall give adequate notice in writing to the Engineer-in-charge of any further drawings or specification that may be required for the execution of the works or otherwise under the contract.
- 2.4 The Engineer-in-charge shall have full powers and authority to supply to the contractor from time to time during the progress of the work such drawings and instructions as shall be necessary for proper execution and the contractor shall carry out and be bound by the same.
- 2.5 The successful tenderer shall be required to enter into an agreement with the Institute. The Bill of Quantities & rates filled by the successful tenderer there in, the General Conditions of Contract for CPWD Works with upto date corrections slip incorporating corrections, CPWD specifications for Civil, the Special conditions, additional specifications, negotiation letter and the award letter etc. shall form part of the agreement to be signed by the successful tenderer. The cost of stamp paper and stamp duty, required for the agreement, shall be borne by the

contractor.

- 2.6 VAT & CESS as per prevailing Government notification shall be recovered from the contractor's bills.
- 2.7 EPF & ESI contribution paid to the contract workers shall be reimbursed by the Engineer-in-charge on actual basis after satisfying that it has been actually & genuinely paid by the contractor. The contractor should furnish documentary proof for the contribution made.
- 2.8 **The price quoted by the bidder should be inclusive of all taxes as applicable on the last date of submission of bid. The Institute shall not be responsible or hold liable to any tax which is applicable on the last date of submission.**

3. CONTRACT AGREEMENT:

- 3.1 The contract agreement, inclusive of its enclosures, shall remain in the custody of the Executive Engineer, Works & Estate Department, IIT ROPAR and be made available by him as and when required. Contractor shall however be supplied, an attested copy thereof, free of cost.
- 3.2 Canvassing in connection with tenders is prohibited and the tenders, submitted by the tenderers who resort to canvassing, are liable for rejection.
- 3.3 **Tenderers are not allowed to make additions and alternations in the tender document. Any additions and alterations, if incorporated in the tender, shall be at the tenderer's risk since the modified tender is liable for rejection. Conditional tenders violate of the spirit and the scope or the terms & conditions of the tender, are liable to be rejected without assigning any reason. Tenders with conditional rebate are liable for rejection at the sole discretion of the institute.**
- 3.4 The contractor shall have to make his own arrangement of water. The withdrawal of water from the network of the Institute shall not be allowed. No charges shall be recovered if the contractor develops tube well at site and pumping arrangement at his own cost. The contractor shall have to seek permission of digging tube well etc. for water arrangements from Engineer-in-charge.
- 3.5 Temporary electrical connection (single / three phase) shall be provided by the Institute from its distribution network and the charges shall be realized at the prevalent commercial tariff of the institute, presently recovery rate is Rs. 6.57 per unit on the basis of actual consumption thro' a separate sub-meter under the control of the Engineer-in-charge. If the rates are revised in future the same shall be applicable to the contractor. The contractor at his own cost shall arrange the cable for service connection and the sub meter.
- 3.6 Cement and steel for the work shall be arranged by the contractor on his own. No material shall be supplied by the Institute except where specifically mentioned in Schedule 'C'.

4. ARBITRATION:

In the unfortunate situation if any, all disputes, disagreement and controversies arising in any manner, which cannot be settled by mutual agreement between the two parties, shall be resolved through arbitration. The number of arbitrators shall be ONE, shall be appointed by Director, IIT Ropar. The decision of sole arbitrator shall be final and binding to both the parties. All provisions of Arbitration and Conciliation Act 1996 (with amendments) shall apply and the legal place of arbitration shall be Rupnagar, Punjab. The language of arbitration proceedings shall be English. The Court which have jurisdiction in the matter is District Court, Rupnagar, Punjab.

QUALITY ASSURANCE OF THE WORK

1. The contractor shall ensure quality control measures on different aspects of construction including materials, workmanship and correct construction methodologies to be adopted.
2. The contractor shall get the source of all other materials, not specified else where in the document, approved from the Engineer-in-Charge. The contractor shall stick to the approved source unless it is absolutely unavoidable. Any change shall be done with the prior approval of the Engineer-in-Charge for which tests etc. shall be done by the contractor at his own cost. Similarly, the contractor shall submit brand/ make of various materials not specified in the agreement, to be used for the approval of the Engineer-in-Charge along with samples and once approved, he shall stick to it.
3. Material Inspection:
 - i. Sample of building materials fittings and other articles required for execution of work shall be got approved from the Engineer-in-Charge. Articles manufactured by companies of repute and approved by the Engineer-in-Charge shall only be used. Articles bearing BIS certification mark shall be used in case the above are not available, the quality of samples brought by the contractor shall be judged by standards laid down in the relevant BIS specifications. All materials and articles brought by the contractor to the site for use shall conform to the samples approved by the Engineer-in-Charge which shall be preserved till the completion of the work.
 - ii. The contractor shall ensure quality construction in a planned and time bound manner. Any sub-standard material/work beyond set out tolerance limit shall be summarily rejected by the Engineer-in-Charge.
 - iii. BIS marked materials except otherwise specified 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 / materials. Wherever BIS marked materials are brought to the site of work, the contractor shall if required, by the Engineer-in-Charge furnish manufacturers test certificate or test certificate from approved testing laboratory to establish that the material produced by the contractor for incorporation in the work satisfies the provisions of BIS codes relevant to the material and/or the work done.
 - iv. The contractor shall procure all the materials at least in advance so that there is sufficient time to testing and approving of the materials and clearance of the same before use in work.
4. All materials brought by the contractor for use in the work shall be got checked from the Engineer-in-Charge or his authorized representative of the work on receipt of the same at site before use.
5. The contractor shall be fully responsible for the safe custody of the materials issued to him even if the materials are in double lock and key system.
6. The exact positions of all main switch board, BDB's and all runs of mains and submains, and distribution wirings to individual points including the exact position of all light fittings and switch boards shall be first marked on the buildings and shall be approved by the Engineer-in-Charge before actual commencement of the work.

7. TESTING OF INSTALLATION

Before a completed installation or an addition to an existing installation is put into service, the following tests shall be carried out by the contractor in presence of the Engineer-in-Charge

i. Polarity of switches

It must be ensured by test that all single pole switches have been fitted on the live side of the circuits they control

ii. Insulation Test

- a. By applying a 500 volt megger between earth and the whole system of conductors or any section thereof, with all fuses in place and all switches closed, all lamps in position or both poles of installation otherwise electrically connected together :- The result in megohm shall not be less than 50 divided by the number of points on the circuit, and should not be less than 1 megohm
- b. Between all conductors connected to one phase and all such conductors connected to the neutral or to the other phase conductors of the supply after removing all metallic connections between the two poles of the installation and switching on all switches. The insulation resistance shall be as in (a) above

The completed work will be taken over only if the results obtained in above tests are within the limits mentioned above, and in accordance with I.E. Rules

8. Before fixing all switches, fittings etc. these should be produced before Engineer-in-Charge and get approved.

9. While laying the conduits for concealed wiring in the ceilings/beams/columns/walls/partitions/modular furniture etc, the contractor must ensure that all the inlets and both ends of the conduits are plugged to stop entry of foreign materials so that no difficulty arises during drawing of wires later

10. Damage to any fitting during erection and before handing over the installation by contractor shall be set right or replaced by the contractor at his own cost

11. Any repairs done to wall etc. should match with the surrounding surface

12. The installations should not be energized without adequate earthing

13. Conduit pipes shall be fixed by heavy gauge saddles and h.w. or metal bars, secured to wall/ceiling by screws driven into wood plugs or rawl plugs or phil plugs at an interval of not more than 76 cm apart for vertical run and 60 cm apart for horizontal run. But on either side of couplers or bend of similar fittings-saddle shall be fixed at a distance of 30 cm from the centre of such fittings. The minimum thickness for saddles shall be 24 SWG for conduits upto 25 mm dia, and 20 SWG for larger sizes.

14. All necessary bends in the system including diversion shall be done by inserting suitable inspection type bends, elbows or similar fittings

CONTRACTOR

(Executive Engineer)
For and on behalf of
Director, IIT ROPAR

BILL OF QUANTITY

S.No	Description	Unit	Quantity	Rate (in figures & words)	Amount
1	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc. as required.				
1.1	125 A, 36KA, FPMCCB	Each	9		
2	Supplying and fixing following way, single pole and neutral, sheet steel, SPN distribution board, 240 V, on surface/ recess, complete with lined copper bus bar, neutral bus bar, earth bar, dln bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
2.1	10 way, Double door	Each	6		
2.2	12 way, Double door	Each	11		
2.3	16 way, Double door	Each	4		
2.4	20 way, Double door	Each	2		
3	Supplying and fixing Cable End Box (Loose Wire Box) suitable for following single pole and neutral, sheet steel, MCB distribution board, 240 Volts, on surface/ recess, complete with testing and commissioning etc. as required				
3.1	For 6 way, Double door SPN MCBDB	Each	5		
3.2	For 10 way, Double door SPN MCBDB	Each	1		
4	Providing and fixing following rating contactor with 4 poles, 4 NO, terminal spreaders in suitable panel box including drilling holes in cubicle panel, making connections, etc. as required. (Rate inclusive of panel box of suitable size)				
4.1	125A, 220 V rated coil voltage,	Each	4		
5	Supplying and fixing 5 A to 32 A, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
5.1	Single pole	Each	136		
6	Supplying and fixing 63 A, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
6.1	Single pole	Each	3		
7	Supplying and fixing following rating, double pole, 240 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
7.1	32 A	Each	1		
7.2	40 A	Each	9		
7.3	63 A	Each	18		
8.1	32 amps. ratings, TP MCB, "C" curve, 10 KA breaking capacity	Each	10		
9.1	40 amps. ratings, TP MCB, "C" curve, 10 KA breaking capacity	Each	11		

[Handwritten Signature]

BILL OF QUANTITY

S.No	Description	Unit	Quantity	Rate (in figures & words)	Amount
10.1	63 amps. ratings , TP MCB, "C" curve, 10 KA breaking capacity	Each	7		
11.1	Sheet steel TPN MCB enclosure with 32 amps. ratings , TPN MCB, "C" curve, 10 KA breaking capacity	Each	26		
12.1	Sheet steel TPN MCB enclosure with 40 amps. ratings , TPN MCB, "C" curve, 10 KA breaking capacity	Each	5		
13.1	Sheet steel DP MCB enclosure	Each	9		
14.1	Supplying and fixing 63 A, 415 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 63 A "C" curve, TPNMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required	Each	13		
15.1	Supplying and fixing 20 A, 240 V, TPN Industrial type socket outlet, with 4 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, DP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.	Each	30		
16.1	Provision for table mounted 3 phase AC and DC outlet with terminals for connecting AC and DC lab instruments and emergency stop with provision for RCCB, TPN and DP MCB (But without MCB/RCCB/isolator)	Each	11		
17.1	Supplying and fixing following rating, four pole, (three phase and neutral), 415 volts, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc. as required.	Each	19		
18	Supplying and fixing following rating, 240 V, MCB in the existing outlet complete with connections, testing and commissioning etc. as required.				
18.1	32 amps. rating, DP MCB, "C" curve, 10 KA breaking capacity	Each	9		
18.2	32 amps. ratings , TPN MCB, "C" curve, 10 KA breaking capacity	Each	11		
19	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required.				
19.1	2 Module (75mm X 75mm)	Each	27		
19.2	3 Module (100mmX75mm)	Each	10		
19.3	6 Module (200mmX75mm)	Each	65		
19.4	8 Module (125mmX125mm)	Each	191		
19.5	12 Module (200mmX150mm)	Each	67		

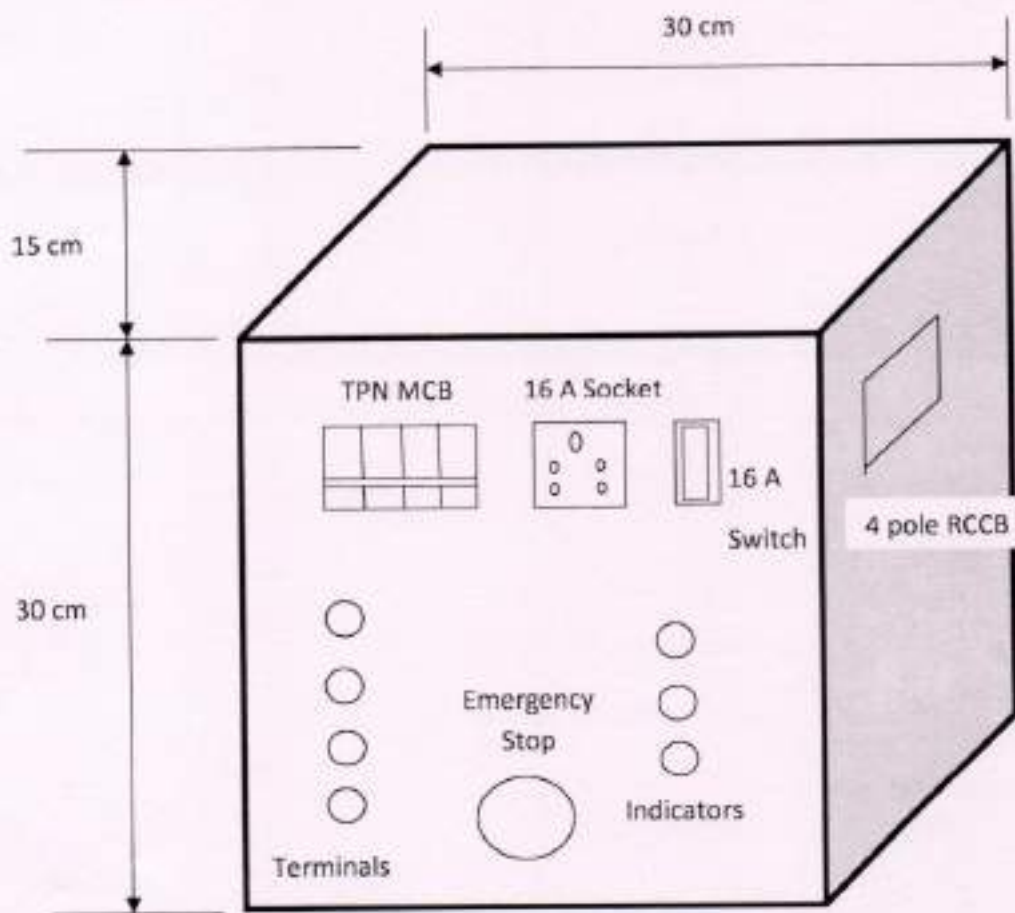
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BILL OF QUANTITY

Sl. No	Description	Unit	Quantity	Rate (In figures & words)	Amount
20	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc. as required.				
20.1	3 pin 5/6 A socket outlet	Each	698		
20.2	5/6 A switch	Each	153		
20.3	6 pin 15/16 A socket outlet	Each	285		
20.4	15/16 A switch	Each	173		
20.5	25 amp modular SPMCB, 'C' curve	Each	27		
20.6	Indicator	Each	34		
20.7	LAN port modular	Each	27		
21	Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required.				
21.1	4 X 10 sq. mm + 2 X 6 sq. mm earth wire	Metre	150		
21.2	2 X 10 sq. mm + 1 X 6 sq. mm earth wire	Metre	150		
21.3	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Metre	100		
21.4	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	Metre	200		
22	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required.				
22.1	1 x 1.5 sq. mm	Metre	1100		
22.2	1 x 2.5 sq. mm	Metre	8250		
22.3	1 x 4 sq. mm	Metre	7050		
23	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
23.1	25 mm	Metre	1650		
Total					

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TABLE MOUNTED 3 PHASE AC / DC OUTLET



**LIST OF APPROVED MAKES/AGENCIES
FOR WORKS COVERED UNDER THIS CONTRACT**

- 1) All materials and products used in the work shall conform to the relevant standards/ specifications and shall be of approved make and design. Lists of approved manufacturers/ vendors for Electrical works are given herein below. The approval of a manufacturer/ vendor shall be given only after review of the sample/specimen by the Engineer-in-charge. The complete system and installation shall also be in conformity with the "Applicable Codes Standards and Publications".
- 2) List of Approved makes for Products, Materials and specialist agencies is given below. Other equivalent manufacturers may be considered with prior approval; however the decision of the Engineer-in-charge shall be final.
- 3)

LIST OF APPROVED MAKES

S.No	Description	Make
1	Modular Sockets, Modular Switches, Surface mounted module Boxes, Surface mounted module sheets, Fan Regulators, Blanking Plate, Ceiling rose	Greatwhite / MK / Havells / Legrand / Crabtree
2	MCCB (125 A rating)	Legrand DPX ³ 160 only
3	Conduits, Junction box, bend etc	BEC/ AKG/ Atul/ RKG or any equivalent make with ISI Marked
4	Insulation tape	Anchor grip, Steel grip
5	Lugs	Dowells/ Ismal
6	MCB/ Distribution boards/ Busbar Chamber/ RCCB/ Contactors	Havells/ Hager/ Standard/ Legrand/ ABB/ Schneider/ Siemens/ GE/ L & T
7	Cable	Finolex/ Polycab/ Havells
8	Industrial Type Socket with plug	Standard ISI rated
9	Glands	Gripwell/ Comet/ Jainson/ Dowell
10	1.1 kV grade Copper wire FRLS	Finolex/ Polycab/ Havells