



INDIAN INSTITUTE OF MANAGEMENT NAGPUR

**(Tender Reference NO.: IIMN/CAO/ELEC/02/2020-21
dated 27-05-2020)**

Website: www.iimnagpur.ac.in

Prepared & Issued by:

Cost of Tender document: 2360 INR. /- inclusive GST (Non-
refundable)

Last date of Submission: 11-06-2020 up to 3.00 PM

INDIAN INSTITUTE OF MANAGEMENT NAGPUR
Tender No. IIMN/CAO/ELEC-02/2020-21 dated 27-05-2020

A. NOTICE INVITING TENDERS

Sealed bids are invited under Single stage (TWO bid system) professional agencies for the work mentioned below:

Name of Work: **Electrification work of new hostel Block-F at IIM Nagpur**

Bid Downloading Schedule: Tender documents can be downloaded from IIMN web site **www.iimn.ac.in**

CRITICAL DATE SHEET

Issue of the bid Document	To be issued from IIM Nagpur office, from 27-05-2020 to 11-06-2020 up to 03.00 P.M .The tender documents can also be downloaded by the bidder from https://www.iimnagpur.ac.in/
Pre - Bid meeting followed by site visit	05-06-2020 on 3.00 P.M
Submission of Bid Documents	Last submission By 3.00 pm on 11-06-2020 Estate office IIM Nagpur, VNIT Campus, South Ambazari Road Nagpur-440010
Opening of Bids	PART-I i.e. Pre-Qualification bid shall be opened on 11-06-2020 at 3.30 P.M in the presence of authorized attending representatives of contractors.
Financial Bid Opening	Price Bid of only technically qualified bidders shall be opened on same day or at later date in presence of authorized representatives of bidders & IIMN Officers.

1. Bid Submission:

Bids shall be submitted at IIMN Nagpur Estate office VNIT Campus, South Ambazari Road Nagpur-10. The firms participating should submit their bid in a sealed envelope super scribing tender for ‘**Electrification work of new hostel Block-F at IIM Nagpur**’ and send by **Speed Post/ Courier OR** drop the sealed quotation at **Estate & Maintenance Office**. Not more than one tender shall be submitted by one bidder or bidders having business relationship. Under no circumstance will father and his son(s) or other close relations who have business relationship with one another (i.e. when one or more partner(s)/director(s) are common) be allowed to tender for the same contract as separate competitors. A breach of this condition will render the tenders of both parties liable to rejection.

Tenderer who has downloaded the tender from the IIMN website www.iimn.ac.in **shall not alter/modify the tender form including downloaded price bid template in any manner**. In case if the same is found to be altered/ modified in any manner, tender will be completely rejected and tenderer is liable to be banned from doing business with IIMN.

Intending tenderers are **advised to visit again** IIMN website www.iimn.ac.in **regularly till closing date of submission** of tender for any corrigendum / addendum/ amendment.

The tender shall be submitted as follows:

- Pre-qualification documents
- Price bid as per Price Bid format

The offers submitted by Fax/email shall not be considered. No correspondence will be entertained in this matter.

Part I: Pre-qualification Bid

The following documents are to be furnished by the tenderer along with **Pre-Qualification Bid** as per the tender document

Eligibility conditions:

Sr.	Description	Remarks (Documents to be submitted)
1.	Govt. Electrical contractor license	Valid electrical contractor license
2.	The applicant should have good reputation in Electrification works for a minimum period of TWO years as on 31.03.2019.	Please attached relevant document as a proof that the firm is in business for the period mentioned
3.	Bidder should have completed similar work as asked for in last two years as on 31.03.2019. One work of Rs.5 lakh OR Two works of Rs.2.5 lakh	Please attached client's certificates
4.	Other documents required to clear PQ criteria	Please attach copies of: 1. PAN. 2. GST (GST Registration), If applicable 3. DD for Tender 4. DD for EMD

Note: Only those bids who meet the above mentioned minimum criteria will be considered for evaluation of price bids

Part II: Price Bid

Price Bid of only technically qualified bidders shall be opened on same day or at later date in presence of Institute's Officials. Technically qualified bidders shall be intimated by web notification or email. The date and time of opening the price bid shall be communicated to the eligible bidders through web-notification or email.

The bidders have to submit the price bid only as per the price schedule format/template available on IIMN portal. Any other format for submission of price bid shall be out rightly rejected without any further reference to the bidders.

In case if the price bid is found to be tempered/modified in any manner, tender will be completely rejected and bidder is liable to be banned from doing business with IIMN.

Do not quote price in the Pre-Qualification, Technical bid or elsewhere it would lead to your bid getting disqualified without any further reference to the bidders.

The prices must include all the applicable taxes and duties, fees and any other charges except GST. GST component if applicable to be shown separately and will be paid extra, if applicable

IIMN reserves the right to negotiate the quoted price with the successful bidder

The quoted rates shall remain firm throughout the tenure of the contract and no revision is permissible for any reason

Part - 1 Pre-Qualification

Sealed tenders are invited from bonafide, experienced & reputed contractors of financial standing for the job given below:

Clause No.	Title	Description
101	Name of work	Electrification work of new hostel Block-F at IIM Nagpur.
102	Reference no.	IIMN/CAO/ELEC-02/2020-21 dated 27-05-2020
103	Details of bidder	Annexure- A is to be filled, duly signed and stamped and submitted along with the tender.
104	Tender submission cost	Rs. 2000+360(18% GST) = 2,360/- (Rupees: Two Thousand Three Hundred Sixty only) to be paid by Demand draft in favour of "IIM Nagpur" payable at Nagpur. on or before the tender closing date and time. All applicable bank charges shall be borne by the bidder. Tender Fees not received from any bidder as detailed above, the tender of that bidder will be liable to be rejected.
105	Earnest Money Deposit (EMD)	Rs. 7,320/- (Rupees: Seven thousand three hundred & twenty only) payable through DD/Pay Order from Scheduled Commercial banks payable at Nagpur in favour of "IIM Nagpur" All applicable bank charges shall be borne by the applicant. Tender submitted without EMD is liable to be rejected.
106	Contract Period	30 days from the date of issue of work order OR date of approval by Engineer in charge (Whichever is later). Extendable for the reasons beyond contractor's control and upon Engineer's recommendation.
107	Liquidated Damage	Delivery shall be considered complete when full quantities of all items are in fully functional condition at designated delivery location as per the instruction of the representative of IIMN for late delivery (LD) the liquidity damage shall be @1% of the contract amount per week delay. Maximum up to 5%. Beyond 5 weeks of delay order will be deemed cancelled
108	Initial Security Deposit (ISD)	Initial security deposit @ 5% of the Contract Value to be paid on award of contract but before commencement of work / services. ISD amount in form of Demand draft. In favour of " IIM Nagpur" payable at Nagpur.
109	Running Security Deposit (RSD)	Not Applicable
110	Interest on Security Deposit	No interest will be paid on any deposit
111	Release of RSD	Not Applicable

112	Release of ISD	After completion of defect liability period.
113	Defect Liability Period	12 months from the date of completion of the work certified by IIMN Engineer- in -charge.
114	Issue of the bid Document	To be issued from IIM Nagpur office, from 27-05-2020 to 11-06-2020 up to 3.00 P.M The tender documents shall also can be downloaded by the bidder. Downloaded version can also be submitted by the bidders. However if any of the dispute arises concerning the text of the tender document in the download version the hard copy available at IIM Nagpur office would be treated as the authentic one and shall prevail for all purposes. Any change in the tender document and important notifications will be notified in the website. So the bidder are requested to keep a close watch on the website on regular basis till the award of the work.
115	Pre - Bid meeting followed by site visit	05-06-2020 on 3.00 P.M
116	Submission of Bid Documents	Last submission By 3.00 pm on 11-06-2020 Estate office IIM Nagpur, VNIT Campus, South Ambazari Road Nagpur-440010
117	Opening of Bids	PART-I i.e. Pre-Qualification bid shall be opened on 11-06-2020 at 3.30 P.M in the presence of authorized attending representatives of contractors. Part-II (Price Bid) of the Pre-qualified bidders shall be opened at the same day or later date.
118	Essential Technical Requirement	The bidder must have all statutory registrations like 1) PAN, GST is Mandatory. 2) Valid Govt. Electrical contractor license, etc. is required if applicable.
119	Conditional Bids	Conditional bids or Bids based on the process / basic schemes other than mentioned and / or not conforming to the technical specifications / requirements of the Bidding documents will not be considered.
120	Contract Agreement	IF REQUIRED BY Indian Institute of Management Nagpur (hereinafter to be referred as IIMN), the successful Bidder has to execute a contract Agreement with IIMN on the non-judicial stamp paper of Rs. 100/- (Rupees One hundred only). The cost of stamp paper shall be borne by successful Bidder. IIMN reserves the right to amend the terms & conditions of contract after Mutual discussions and shall only be in writing.
121	Insurance	The bidders have to take the responsibility of its manpower, material & workmen. For any incidental loss IIM Nagpur will not be held responsible. The successful bidder has to indemnify IIMN for any consequential loss arising out of the negligent act.

122	Work and risk cost	The Institute reserves the right to get the whole or part of the work executed by some other agency at the risk and cost of the contractor if it is found that the quality and/or the progress in respect of whole or part of the work is not satisfactory.
123	Indemnity	The Contractor shall indemnify and keep indemnified the Institute against all losses and claims for injuries and or damages to any person or property. The contractor shall abide by and observe all statutory laws and regulations in matters of Labor Law, Factory Act, Explosive Act, Workmen Compensation Act, Sales Tax, Royalty, Excise Duty, GST, Works Contract, GST, etc. and shall keep the Institute indemnified against all penalties and liabilities of every kind for breach of any such statute ordinance or law/regulations or Bylaws. <u>The Contractor shall not employ child labour.</u> Payment to workers must be according to Minimum wages act.
124	Compliance with owners rules and regulations	The Contractor shall comply with all norms stipulated by the Owner such as Gate Passes, Checking, Maintenance of Cleanliness, Discipline & Decency at and Around the work site, Safety Precautions and Safety Regulations.
125	Arbitration	All disputes regarding quality, specifications and rates shall be tried to be settled mutually by making references to conditions of contract documents or prevailing local practices, etc., but if not settled mutually, shall be referred to arbitration subject to relevant Arbitration and Conciliation Act 1996. and its amendments, modifications to-date. Arbitration cost to be shared equally by the owner and the contractor.
126	Authorization	The Contractor shall submit to the Institute the names and reason and specimen signatures of the persons authorized by him to draw materials, sign joint measurements, bills, receive payments, receive instructions/notices, etc. on behalf of the Contractor.
127	Safety and Security	Contractor shall abide by the safety code provisions as per safety code framed from time to time by the government.
128	Prices, Taxes & Duties	The Bidder should quote firm prices/ rates inclusive of all Taxes like GST Tax, Duties, Levies, Personal Tax, Corporate Tax, worker welfare cess, etc. and all other expenditure required to be incurred by him/her for providing required construction work etc. during the contract period as indicated under his contract and afterwards no variation on any account unless otherwise specifically mentioned will be allowed. (The contractor will indemnify IIM-Nagpur against

		all statutory liabilities present and future, arising out this contract.) Only GST as applicable shall be paid extra over and above the quoted rates
129	Bid Validity	The bid submitted by bidder shall remain valid for a period of THREE Months from the date of opening of offer. Bidder shall not be entitled during this period to revoke or vary the content of Bid or any term thereof. In such case of making any variation subsequent to submission of bid at their own, the offer shall be treated as “REJECTED.”
130	Award of similar type of work on same rates	Upon mutual consent, the client may award another similar type of work in campus based on this rates to the contractor, for which the rates may be valid up to ONE year from the date of issue of WORK ORDER.
131	Access to site	The Contractor shall allow unhindered access to the Institute and/or any other party or person, engaged by the Institute to work at the same site and/or to check/ regulate / watch /guard/ measure/inspect, solely or jointly with the Contractor.
132	Rejection of bid(s)	The Owner reserves the right to reject any or all the tenders relating to the work under this Tender Document without assigning any reason whatsoever.
133	Quantom of work	This contract is basically an item rate contract. The quantities given in the “BILL OF QUANTITIES” (Part-2, Price Bid) are approximate only and may vary in actual course of execution in a range of +/- 5% to +/- 10 %. as the case may be. The Contractor is therefore, advised to quote very carefully. No claim for compensation from the Contractor shall be entertained due to any variation in quantities (irrespective of the quantum of variation) OR deletion of any item. The rates fixed for a particular year shall remain same through the year. Actual executed quantities shall be measured and paid.
134	Assignment and sub-contracting	The Contractor shall not assign, sub-contract or sub-let the whole or any part of the contract in any manner. In case of on unavoidable circumstances, the contractor shall be able to do it with approval of the owner of premises. However, the job shall be sublet only to the party approved by the owner.
135	Misconduct	The Contractor shall keep the Owner indemnified from and against all personal and third party claims whatsoever arising out of any commission or omission by Contractor or his employees, or representatives as the case may be.

136	Inspection and testing by IIM-Nagpur	The Owner shall be entitled to inspect and / or test by itself or through any of its representative or an independent agency any premises of the Contractor and materials stored therein for use pursuant to the Contract and/or any ingredient to be used. If any material, item or component intended to be used for the work is found to be unsatisfactory (in which matter the decision of the Owner or his authorized representative shall be final), the Contractor shall not use such material and shall keep the Owner indemnified from and against any claim.
137	Interpretation	The Special conditions of Contract shall be read in conjunction all other documents forming of this contract. Notwithstanding the sub-divisions of the documents into these separate sections, every part of each shall be deemed to be supplementary to and complimentary of every part and shall be read with and into the contract.
138	Vacation of the premises	The Contractor shall give vacant possession of the facilities/premises made available to the Contractor by IIM-Nagpur return all furniture, fixture, equipment, and other items made available by IIM Nagpur in good condition after the contractual period is over or if the contract is earlier terminated. Handing over of the vacant possession of the premises and equipment etc. shall be effected within 15 days of the completion of the period of contract or termination of the contract. If the Contractor fails to do so, the Owner shall be free to take possession of the premises by opening lock(s), if necessary, and make out an inventory of all furniture material and equipment and shall be free to deduct from the Contractor's bill(s) or security deposit, any item found to be missing at the replacement cost of the material/equipment, furniture etc. given to the Contractor by the Owner.
139	Water	Free of Cost at one point by IIM-Nagpur
140	Electricity	Free of Cost at one point by IIM-Nagpur
141	Payment of Bills	Payments will be made by crossed account payee cheques only OR e - payment.
141.1	Advance against material on site	Not Applicable
141.2	Running Account Bills	Not Applicable
141.3	Final Bill	Payments will be made within 21 days of submission of bills provided the bills are complete and duly authenticated by the specified Officer(s) of the Owner or Architect after completion of the work in all respect.

142	Escalation / De-escalation of rates	Prices/Rates quoted will be firm during the entire duration of contract
143	Basic Rates	Basic rates mentioned (if any) in the tender are FOR IIM Nagpur Campus. Difference will be paid OR deducted for the payment to the contractor upon submission of documentary proof if otherwise
144	Non tender items/ Extra Items	In case of items which the contractor has to execute which are not covered in the tender, the rates shall be paid based on rate analysis duly certified by engineer in charge and the profit margin would be 15% inclusive of all taxes EXCEPT Service tax as applicable
145	Method of Measurement	Point wiring quantity as on actual site executed and quantity in numbers for MCB, casing-capping, ceiling fan, etc. electrical works specified and otherwise in respective item.
146	Exit Clause	The vendor has to complete the works within the time schedule mentioned at clause No.106 , and on failing to do so, the vendor shall be notified on expiry of such delivery schedule. Even after such notice, if the vendor fails to complete its work to its entirety and hand over the same to IIMN for its use within two weeks form the date of issue of such notice, the order/contract shall deemed to be cancelled without any further notice to the vendor. Notwithstanding anything in this clause, IIMN shall be at its liberty to impose LD/penalty as mentioned in clause no.107 on the vendor as it deemed fit. The vendor shall not be allowed to remove any material pertaining to incomplete work, and IIMN shall not be liable to make any payment for the incomplete work."
147	Force Majeure	If the whole of any part of the performance by the Parties of any part of their respective obligations hereunder is prevented or delayed by causes, circumstances or events beyond the control of the Parties including delays due to floods, fires, accidents, earthquakes, riots, explosions, wars, hostilities, acts of government, custom barriers, or other causes of like character beyond the control of the Parties, then to the extent the Parties shall be prevented or delayed from performing all or any part of its obligations hereunder by reason thereof despite due diligence and reasonable efforts to do so notwithstanding such causes, circumstances or events, the Parties shall be excused from performance hereunder for so long as such causes, circumstances or events shall continue to prevent or delay such performance.
148		

148.1		The Contractor will be exclusively responsible to meet and comply with all legal requirements related to the work.
148.2	Taxes, Labour laws and Other regulations	The Contractor shall accept and bear full and exclusive liability for the payment of any and all existing taxes of the Central or State Government or of any other authority with respect to the contract or any item sold or supplied pursuant thereto or anything done or service rendered pursuant thereto.
148.3		Any legal matter or issues arise, and all court matters if arise for this contract are subjected in Nagpur courts jurisdictions only.
149	Pre-qualification requirements	Agency to submit the documentary proof in support for the eligibility criteria mentioned below. A simple undertaking by the agency for any of the above points shall not be considered for evaluation
149.1		Applicant should possess valid electrical contractor license. The applicant should have good reputation in Electrification works for a minimum period of TWO years as on 31.03.2019. Bidder should have completed one work of Rs.5 lakhs each or two works of Rs.2.5 lakh each. The right to accept the contracting business of the vendor will rest with IIMN
149.2		The applicant must have GST registration and PAN No as applicable to this contract from time to time(Please submit self-attested copies of relevant documents)
150	Bid format	The bid shall be submitted in order as follows.
	Sealed Envelope - 1	Legible copies of documents mentioned in 149.1 & 149.2 duly self-attested by bidder to be submitted along with the P Q BID documents
		PQ documents as issued from IIMN office or download from IIMN website to be submitted and must be stamp with bidder seal & signature
		Relevant experience certifications as per PQ criteria
		Copy of GST registration and PAN no.
		Any other information bidder would like to attach.
	Sealed Envelope - 2	Price bid documents issued from IIMN office or download from IIMN website to be filled and signed with bidder stamp
151	System of Bid Evaluation	Price BID of only those bidders who qualify in Pre-qualification process will be opened at a subsequent date.
152	Precedence Clause:	In the case of any ambiguity in interpretation, the Price bid will supersede the Pre-Qualification bid and decision by Asst. Manager (A&C), IIMN on the interpretation of the entire contract terms and conditions will be final and binding to all.

153	Mathematical error	During the opening of price bids the total quoted amount will be declared. However, during calculation verification if there is any error found in total amount, the agency will be called for clarifications. The rates quoted by the agency will be considered firm and hence the amount will be worked out by multiplying the rate with quantity. The rate will not be allowed to be changed in any case. However, decision by Asst. Manager (A&C), IIMN on the interpretation of the entire contract terms and conditions will be final and binding to all.
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INSTRUCTIONS TO THE BIDDERS

- › The rate should be including of all taxes, duties, levies, etc. Accordingly fill up “**Price bid**” quoting price and submit duly signed
- › Bids shall be valid for a period of 90 days from the date of opening of bids.
- › The Tenders should be addressed to “**INDIAN INSTITUTE OF MANAGEMENT NAGPUR (IIMN), VNIT Campus, south Ambazari road, Nagpur 440010**” should be enclosed in **two (02) separate envelopes**:
 - **Part – I:** Comprising tender document with all relevant papers duly signed. The envelope should be super scribed as “**Technical Bid for Electrification work of new hostel Block-F at IIM Nagpur**”
 - **Part - II:** Comprising of Price Bid and the envelope should be super scribed as “**Price Bid for Electrification work of new hostel Block-F at IIM Nagpur**”

Any other condition laid etc. by the bidder in price bid will make the tender liable to be rejected.

- › The successful bidder may visit site before submission of the tender. The successful bidder should submit tender documents / credentials – PAN, GST registration no. etc. along with the tender.
- › In the case of any dispute, Director, IIMN shall be the sole arbitrator and his decision shall be final & binding on both the parties.
- › Director, IIMN reserves the right to reject or to accept any tender as whole or in part without assigning any reason thereof. It will also not be obligatory on IIMN to accept the lowest quotation and no explanation shall be given with regard to reason for rejection of quotation of any bidders.

- Prices indicated on the Price Schedule shall be entered in the following manner: -
 - i) The price of respective items shall be quoted as total price (inclusive of all taxes and levies, freight, installation etc what so ever for complete work).
 - ii) The bidder shall quote only one price for each item and if more than one price is quoted under different options the bid shall be liable to be rejected.
- Any bid received by IIMN, after the deadline for submission of bids prescribed by the IIMN, shall be rejected and returned unopened to the bidder.
- The person signing the tender form or any other documents forming part of the contract on behalf of the Bidders shall be deemed to warranty that he has authority to bind the Bidders. If subsequently comes to light that the person so signed had no authority to do so, the Director, IIMN may without prejudice to any other civil & criminal remedies cancel the tender and hold the Bidders liable for all costs, charges and damages.
- All the columns of the tender shall be duly, properly and exhaustively filled in. Any cutting/overwriting etc. in the tender must be signed by the person who is signing the tender. The rates and units shall not be overwritten. The financial part in the bid shall always be both in figures and words. In case of discrepancy in words or figures, the amount least between the figure and word will be treated as final.

▪ SPECIFICATIONS FOR INTERNAL & EXTERNAL ELECTRICAL WORKS

GENERAL & TECHNICAL

1 POINT WIRING: -

1.1. DEFINITION: - A point (other than socket outlet point) shall include all work necessary in complete wiring to the following outlets from the controlling switch or MCB.

- i. Ceiling rose or connector (in the case of points for ceiling/exhaust fan points, pre wired light fittings and call bells).
- ii. Ceiling rose (in the case of pendants except stiff pendants)
- iii. Back plate (in the case of stiff pendants).

1.2. SCOPE: - Following shall be deemed to include in point wiring.

- i. Conduit/casing and capping/channels as the case may be, accessories for the same and wiring cables between the switch box and the point outlet, loop protective earthing of each fan / light fixture.
- ii. All fixing accessories such as clips, nails, screws, Phil plug, rawl plug etc as required.
- iii. Metal / PVC switch boxes for control switches, regulators, sockets etc, recessed or surface type of modular type or piano type with sheet as required and as mentioned in BOQ.
- iv. Outlet boxes, junction boxes, pull-through boxes etc, but excluding metal boxes if any, provided with switchboards for loose wires/conduit terminations.
- v. Any special block required for neatly housing the connector.
- vi. Control switch or MCB, as specified in BOQ / drawings.

- vii. 3 / 5 pin or 6 pin socket, ceiling rose or connector as required.
- viii. Connections to ceiling rose, connector, socket outlet, lamp holder, switch etc.
- ix. Bushes conduit or porcelain tubing where wiring cables pass through wall etc.

1.3 MATERIAL: -

- i. The system of wiring shall consist of ISI marked single core, PVC insulated, FRLS, 1100 volt grade, stranded, flexible copper conductor wires as per IS : 694 amended up to date.
- ii. The Conduit and accessories shall be of mild steel of ISI marked (IS:9537) ERW black, stove enameled, screwed type. The wall thickness of conduits shall be 16 SWG for 20, 25 and 32 mm dia conduits and 14 SWG for 40 and 50 mm dia conduits. OR, ISI marked (IS: IS:9537-III, 3419 & 2509) heavy duty Rigid PVC. The wall thickness shall be 2 mm. (As mentioned in the respective BOQ)

1.4. CONDUCTOR SIZE: - Wiring shall be carried out with following sizes of wires –

- a) Light/fan/call bell/ exhaust fan point - 1.5 sq mm.
- b) 5 amp plug points - 1.5 sq mm.
- c) Light circuit - 1.5 sq mm.

Size of point/ circuit / sub-main wires

2x1.5 sqmm. -

2x2.5 sqmm. -

2x4 sqmm. -

Earth wire

1x1.5 sqmm

1x1.5 sqmm.

1x2.5 sqmm.

2. MEASUREMENT: -

2.1. POINT WIRING: -

- i. Unless and otherwise specified, there shall be no linear measurement for point wiring for light points, fan points, exhaust fan points and call bell points. These shall be measured on unit basis by counting.
- ii. No separate measurement will be made for interconnections between points in the same distribution circuit and for the circuit protective (loop earthing) conductors between metallic switch boxes.

2.2 POINT WIRING FOR SOCKET OUTLET POINTS: -

- i. The light plug (5A/6A) point and power (15A/16A) point wiring shall be measured on linear basis, from the respective tapping point of live cable, namely switch box, another socket outlet point, or the sub distribution board as the case may be, up to the socket outlet.
- ii. The metal / PVC box with cover; switch/MCB socket outlet and other accessories shall be measured and paid as a separate item.

2.3 GROUP CONTROL POINTS WIRING: -

- i. In the case of points with more than one point controlled by the same switch, such point shall be measured in parts i.e.
 - a. from the switch to the first point outlet as one point (Primary point), and
 - b. for the subsequent points each shall be treated as separate point (additional/secondary).
- ii. No recovery shall be made for non-provision of more than one switch in such cases.

2.4 TWIN CONTROL LIGHT POINT WIRING: -

- i. A light point controlled by two numbers of two way switches shall be measured as two point.
- ii. No recovery shall be made for non-provision of more than one ceiling rose / connector in such cases.

3. CIRCUIT AND SUBMAIN WIRING: -

3.1. CIRCUIT WIRING: - Circuit wiring shall mean the wiring from the distribution board up to the first tapping point inside the switch board.

3.2. SUB MAIN WIRING: - Sub main wiring shall mean the wiring from one main/distribution switchboard to another and from Distribution Board to Power Outlet / AC Outlet.

4. MEASUREMENT OF SUBMAIN / CIRCUIT WIRING: -

- i. Sub main wiring shall be measured on linear basis along the run of the wiring. The measurement shall include all length from end to end of conduit or casing and capping as the case may be, exclusive of interconnections inside the switch board etc. The increase on account of diversion or slackness shall not be included in the measurement.
- ii. The length of circuit wiring shall be measured from the distribution board to the nearest switch box from which the point wiring starts. Looping of switch box also will be counted towards circuit wiring, measured along the length of conduit / channel

5. SYSTEM OF DISTRIBUTION AND WIRINGS: -

- i. Main distribution board shall be controlled by the circuit breaker. Each outgoing circuit shall be controlled by a circuit breaker on the phase or live conductor.
- ii. The branch distribution board shall be controlled by a circuit breaker. Each outgoing circuit shall be provided with a MCB of specified rating on the phase or live conductor.
- iii. The load of the circuits shall be divided, as far as possible, evenly between the number of ways of the distribution boards, leaving at least one spare circuit for future extension.
- iv. The neutral conductors (incoming and outgoing) shall be connected to a common link (multi way connector) in the distribution board and be capable of being disconnected individually for testing purposes. i. Wiring shall be separate for essential loads (i.e. those fed through stand by supply) and non-essential loads throughout.

6. BALANCING OF CIRCUITS: - The balancing of circuits in three wire or poly phase installations shall be arranged up to the satisfaction of the Engineer-in-charge.

7. WIRING SYSTEM: -

- a) the wiring shall be done only by the “Looping system”. Phase or live conductors shall be looped at the switch boxes. For point wiring neutral / earth wire looping for the first point shall be done in the switch box, and neutral / earth looping of subsequent point will be made from point outlet.
- b) Lights, fans and call bells shall be wired in the ‘lighting’ circuits. 15A/16A socket outlets and other power outlets shall be wired in the ‘Power’ circuits. 5A/6A socket outlets shall also be wired in the “Lighting” circuit unless mentioned otherwise.
- c) The wiring throughout the installation shall be such that there is no break in the neutral wire except in the form of a linked switch gear.
- d) Surface wiring shall run, as far as possible, along the walls and ceiling so as to be easily accessible for inspection.
- e) In all types of wiring, due consideration shall be given for neatness, good appearance and safety.
- f) Colour coding: Phase : Red / Yellow / Blue (three phase wiring) Live : Red (single phase wiring) Neutral: Black Earth : Green

8. PASSING THROUGH WALLS OR FLOORS: -

- i. When wiring cables are to pass through a wall, these shall be taken through a protection (steel/PVC) pipe or porcelain tube of suitable size such that they pass through in a straight line without twist or cross in them on either end of such holes. The ends of metallic pipe shall be neatly bushed with porcelain, PVC or other approved material.
- ii. Where a wall pipe passes outside a building so as to be exposed to weather, the outer end shall be bell mouthed and turned downwards and properly bushed on the open end.
- iii. All floor openings for carrying any wiring shall be suitably sealed after installation.

9. JOINTS IN WIRING: -

- i. No bare conductor in phase and/or neutral or twisted joints in phase, neutral, and/or protective conductors in wiring shall be permitted.
- ii. There shall be no joints in the through-runs of cables. If the length of final circuit or sub main is more than the length of a standard coil, thus necessitating a through joint, such joints shall be made by means of approved mechanical connectors in suitable junction boxes.
- iii. Termination of multi stranded conductors shall be done using suitable crimping type thimbles.

10. CONFORMITY TO I.E. ACT, I.E. RULES AND STANDARDS: -

- i. All electrical works shall be carried out in accordance with the provisions of the Indian Electricity Act, 1910 and Indian Electricity Rules 1956 amended up to date.
- ii. The work shall also conform to relevant Indian Standard codes of practice for the type of work involved.
- iii. In all electrical installation works, relevant safety codes of practice shall be followed.
- iv. The complete wiring installation shall conform to IS : 732 amended up to date.

11. GENERAL REQUIREMENTS OF COMPONENTS: -

11.1 QUALITY OF MATERIALS: - All materials and equipment supplied by the contractor shall be new. They shall be of such design, size and material as to satisfactorily function under the rated conditions of operation and to with stand the environmental conditions at site.

11.2 RATING OF COMPONENTS: -

- i. All components in a wiring installation shall be of appropriate ratings of voltage, current and frequency, as required at the respective sections of the electrical installation in which they are used.
- ii. All conductors, switches and accessories shall be of such size as to be capable of carrying the maximum current which will normally flow through them, without their respective ratings being exceeded.

11.3 CONFORMITY OF STANDARDS: - All components shall conform to relevant Indian Standard specification, wherever existing. Materials with ISI certification mark shall be preferred. However, for conduits, wiring cables, piano/tumbler switches and socket outlets, ISI marked materials shall only be permitted.

1. CONTROL SWITCHES FOR POINTS: -

- i. The switch box or regulator box shall be hot dipped galvanized, factory fabricated. The wall thickness shall not be less than 1.2 mm (18 gauge) for boxes up to a size of 20 cm x 30 cm, and above this size 1.6 mm (16 gauge) thick boxes shall be used. The metallic boxes shall be duly painted with anticorrosive paint before erection.
- ii. Where a large number of control switches and/or fan regulators are required to be installed at one place, these shall be installed in more than one outlet box adjacent to each other for ease of maintenance.
- iii. An earth terminal with stud & 2 metal washers shall be provided in each box for termination of protective conductors and for connection to socket outlet/metallic body of fan regulator etc.
- iv. Clear depth of the box shall not be less than 50 mm, and this shall be increased suitably to accommodate mounting of fan regulators in flush pattern.
- v. The fan regulators can also be mounted on the switch box covers, if so directed by the Engineer-in-charge.
- vi. Control switches (single pole switches) carrying not more than 16 A shall be of piano type, as specified, and the switch shall be "ON" when the nob is down.
- vii. Only MCB's shall be used for controlling industrial type socket outlets.
- viii. Control switch shall be placed only in the live conductor of the circuit. No single pole switch or fuse shall be inserted in the protective (earth) conductor, or earthed neutral conductor of the circuit.
- ix. All switches, regulators, outlets & other accessories shall be white colour with matching white cover plate. In no case ivory or off white switches shall be accepted.
- x. All switches shall be as per IS 3854 amended up to date.

2. SOCKET OUTLETS: -

- i. Socket outlet shall be of the same type, white piano type as their control switches. These shall be rated either for 5A/6A or 15A/16A. Combined 5A/15A or 6A/16A six pin socket outlet shall be provided in 'power' circuits.

- ii. In an earthed system of supply, socket outlets and plugs shall only be of 3 pin type, the third pin shall be connected to earth through protective (loop earthing) conductor. 2 pin or 5 pin sockets shall not be permitted to be used.
- iii. Every socket outlet shall be controlled by a switch or MCB, as specified. The control switch/MCB shall be connected on the 'live' side of the line.
- iv. Outlet boxes for socket outlets (both 15A/16A and 5A/6A) points shall be of size 175 mm x 100mm.
- v. Unless and otherwise specified, the control switches for the 5A/6A and 15A/16A socket outlets shall be kept along with the socket outlets.
- vi. All sockets shall be as per IS 1293 amended up to date.

3. SWITCH BOX COVERS: -

Phenolic laminated sheets of approved white shade (same as switches and sockets) shall be used for switch box covers. These shall be of white 3 mm thick synthetic phenolic resin bonded laminated sheet as base material and conforming to grade P-I of IS:2036-1974, Secured to the box with counter sunk C.P. Brass Screws. The corners of cover plates shall be at right angle. SWITCHES & BOXES (Modular Type) i. The switch box or regulator box shall be made of metal on all sides, except on the front. The boxes shall be used of the same make and model as of modular switches. In no case the locally manufactured switch boxes will be accepted.

SWITCHES & BOXES (Modular Type)

- i. The switch box or regulator box shall be made of metal on all sides, except on the front. The boxes shall be used of the same make and model as of modular switches. In no case the locally manufactured switch boxes will be accepted. The size of box shall be governed by the number of switches/outlets/regulators on the respective board. The boxes shall be with zinc plating and yellow passivation to complies with the rust test as per IS 3854. The boxes should have slotted holes for level adjustments. The boxes shall be fitted with riveted brass earth terminals for earth connections.
- ii. Clear depth of the box shall not in a range of 50 mm to 65 mm depending upon the size of board and manufacturer.
- iii. Control switch shall be placed only in the live conductor of the circuit. No single pole switch or fuse shall be inserted in the protective (earth) conductor, or earthed neutral conductor of the circuit. The switches shall be provided with silver contacts. The neutral should make first and breaks last.
- iv. Socket outlet shall be rated either for 5A/6A or 15A/16A. 5/6 Amp sockets shall be of 5 pin type with shutters. Combined 5A/15A or 6A/16A six pin shuttered socket outlet shall be provided in 'power' circuits. The earth pin shall be connected to earth through protective (loop earthing) conductor. All sockets shall be provided with safety shutters to allow easy entry of two pin plugs without the need to force the earth terminal by unsafe means. All sockets shall confirm to IS: 1293.
- v. Every socket outlet shall be controlled by a switch, as specified. The control switch shall be connected on the 'live' side of the line.
- vi. The switches and sockets shall be manufactured using engineering plastic to make it fire retardant and highly resistant to impact.
- vii. The fan speed regulators shall be of electronic and stepped type

Note: -

- 1) For point wiring above 6 meters of length, add 10 % of overall rate of point wiring for every additional 1-meter length or part thereof.
- 2) Point wiring starts from Main board/Intermediate switch board and suitable circuit mains are to be provided from D.B. to first board and between boards.
- 3) For point wiring in stair case with 2-way control point increase overall rate by 50 % of point wiring.
- 4) Earth Wire of minimum 1.5 sq mm Shall be terminated in each point
- 5) For point wiring in FRLS wire subtract 2% from overall rate of Point wiring with FRLSH Wire

1	Rate shall be inclusive of all wastages of cables, conduit, fixtures, clamps and fixing of best quality and to the best workmanship manner.	
2	Cables: Havells / polycab / finolex/RR Cable/L&T with approximate rating which will take the load as required .	
3	Actual size installed at site to be measured and paid. (No Extra Payment to be made for wastage of material, lead & lift of material to any floor, and working in odd hours.)	
4	Rates to be inclusive of moving existing furniture where required, placing it again, removing of debris and cleaning all finished surfaces of unwanted paint/polish smudges ,adhering foreign material, sharp edges etc.	
	List of Approved Make	
a	PVC insulated copper FRLS wires	Havells /RR Cable/Finolex/L&T/polycab
b	Casing-N-Capping	MODI, superplast
c	MCB,MCBDB	Hanger, L&T, Seimens, Legrand
d	Modular type Switches & socket	Havells/ Legrand /polycab/L&T
e	LED fitting	Philips/Wipro/GE/Bajaj

Annexure A

PARTICULARS OF BIDDER

SR.NO	DEACRIPTION	
1	Name of the bidder	
A	Trade Name (in Block letters)	
B	Status of the Bidder (Proprietorship/Partnership/LLP/Limited Co.) In Block letters)	
C	Name of Proprietor/Partners/CEO/Directors (In Block letters)	
2	Postal Address	
3	Telephone No.	
4	E-mail / Website address (if available)	
5	TENDER FEES (2,360/-)	
6	EMD AMOUNT (7,320/-)	
7	Name of the Banker, Branch Name & address (In Block letters) (For e-payment purpose)	
8	PAN (Enclose self-attested photocopy)	
9	GSTIN (GST Registration No.) (Enclose self-attested photocopy)	

I/We hereby declare and affirm that I/we have read and understood the terms and conditions of this tender/quotation/NIT as stipulated in the tender notice No IIMN/CAO/ELEC-02/2020-21 dated 27-05-2020 Accordingly, I/ we accept the terms and conditions and hereby offer the rates for “**Electrification work of new hostel Block-F at IIM Nagpur**” as per Price Bid

Signature _____

Date _____

Official seal of bidder _____

CHECK LIST OF DOCUMENTS TO BE SUBMITTED
Bidder is required to fill-up this checklist which is as follows:

Sr.no	Item Description	Details of Certification Enclosed YES/NO	Bid Reference
1	PAN		
2	GST Registration		
3	Particulars of bidders (Annexure A)		
4	Govt. licensed Electrical contractor		
5	The applicant should have good reputation in business of Electrification Work for a minimum period of TWO years as on 31.03.2019.		
6	Bidder should have completed similar work as asked for in last two years as on 31.03.2019.		
a.	Two contracts > Rs.2.5 lakh		
b.	One contracts > Rs.5 lakh		