॥ सा विद्या या विमुक्तये ॥
ಭಾರತೀಯ ತಂತ್ರಜ್ಞಾನ ಸಂಸ್ಥೆ ಧಾರವಾಡ
भारतीय प्रौद्योगिकी संस्थान धारवाड
Indian Institute of Technology Dharwad
Near High Court, PB Road, Dharwad-580011
TEL NO: +91 836 2212 839

Tender for providing Annual Service Maintenance Contract (ASMC) in respect of Electrical and Miscellaneous works for one year to IIT Dharwad in WALMI Campus

Tender no: IITDH/MMD/IPS/2019-20/36

INDIAN INSTITUTE OF TECHNOLOGY DHARWAD
Near High Court, PB Road, Dharwad-580011
TEL NO: +91 836 2212 839

Tender no: IITDH/MMD/IPS/2019-20/36

1. NOTICE INVITING TENDER

Name of the work:	Tender for providing Annual Service Maintenance Contract (ASMC) in respect of Electrical and Miscellaneous works for one year to Indian Institute of Technology Dharwad in WALMI Campus
Type of Tender:	Open Tender Enquiry
Estimate Value:	Rs.25.00 Lakhs approximately
Cost of tender documents	Free of cost
EMD:	Rs.50,000/- (DD/PO in favour of The Registrar, IIT Dharwad) to be attached with the tender as separate sealed envelope.
Issue of tender:	24th July 2019
Date of Pre bid meeting	02nd August 2019 at 11:00 AM in Meeting Room at IIT Dharwad
Last date for submission of tender:	Date: 19th August 2019 Time: 10:00 AM
Opening of tender:	Date: 19th August 2019 Time: 11:00 AM
Contacting Authority:	The Assistant Registrar (MMD) Near High Court, P B Road Dharwad-580011 E-mail: armm@iitdh.ac.in Telephone: 91-836-2212-839

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Tender no: IITDH/MMD/IPS/2019-20/36

1. GENERAL CONDITIONS OF CONTRACT

Sealed tenders are hereby invited on behalf of the Indian Institute of Technology, (IIT) Dharwad, for providing Annual Service Maintenance Contract (ASMC) in respect of Electrical and Miscellaneous works for one year to Indian Institute of Technology Dharwad in WALMI Campus, Karnataka.

2. QUALIFICATION CRITERIA:

Only those bidders fulfilling the following Eligibility Criteria should participate in the tender: -

2.1 Bidders should be registered Government Contractor of Class II and above and must be in the business of providing AMC in respect of Electrical works since 5 years or more (i.e. the firm must be in the business since August 2014 or earlier).

2.2 The Bidder must have carried out at least one similar annual Electrical AMC work of minimum Rs.25 lakhs in reputed organizations/IITs/IIMs/Govt. offices/PSUs/Central Universities etc. during a period of last 5 years (i.e. must have successfully completed the work during August 2014 till date). Completion certificates etc. to this effect are required to be enclosed.

2.3 A Certificate/Undertaking on the letter head of the Company to the effect that the bidder has not been blacklisted anywhere in India or abroad by any organization. A self-certification to this effect is required to be enclosed.

2.4 The Bidder should be registered with concerned statutory authorities for GST/Income Tax etc. The bidder should furnish relevant GST registration documents and PAN/TAN copies along with the bank details of the firm.

Any prospective bidder, not satisfying any of the above mentioned qualification criteria shall be disqualified on technical grounds and the price bid of such disqualified bidder will not be considered for this tender.

3. Tender documents can be obtained from IIT Dharwad website:
http://www.iitdh.ac.in/announcements_worktenders.php

4. Tenders are to be submitted in a serially numbered & bounded manner. Tender should be placed in sealed cover super-scribed with the name of the work and the same will be put in the tender box by the tenderer kept in Office of Assistant Registrar up to 10:00 AM on or before last date and time of bid submission as mentioned in Notice Inviting Tender (NIT) and will be opened by Assistant Registrar or his authorized representatives in his office / any other place in the Institute on date and time of tender opening as mentioned in NIT, in the presence of such tenderers who desire to attend.

5. Tenders must be submitted in sealed covers and should be addressed to The Assistant Registrar (MMD), Indian Institute of Technology Dharwad, Near High Court, PB Road Dharwad 580011. The name of the tenderer and the name of the work must be noted on the above.

6. Income Tax PAN number & GST registration number is to be submitted along-with the bid.

7. The tenderers should write in figures as well as in words for the rates quoted by them on the proper form of the tender. All corrections / over writings must be attested by the dated initials of the contractor. The tenderer is advised to avoid offering discount /rebate in the covering page or at the end of the schedule. Instead the same can be incorporated in the unit rate by reducing the unit rates. If at all offered, the discount / rebate percentage offered is to be written in words such as Five percent / point Five percent etc.

8. The rates quoted shall be exclusive of GST. The contractor shall quote for all the items whose rates are asked and not leave any blanks. All taxes including GST shall be borne by the contractor.

9. The offer should be valid for 60 days from the date of opening for the purpose of issue of acceptance letter. The amount quoted herein after referred to as Base rate must be firm and inclusive of all charges of any kind and inclusive of any kind of liability from / to any authority. GST shall be mentioned separately and must not form part of base price. There will be no extra payment or payment of escalation in the amount under any circumstances whatsoever. Statutory taxes will be deducted at source from the payment against the bill amount.

10. No extra item or substitute item shall be allowed out without prior approval in writing.

11. Work has to be carried out in consultation with the representative as authorized by IIT Dharwad.

12. The tenderer should submit the requisite interest free Earnest Money Deposit (EMD) by pay order or Demand Draft in favour of the Registrar, IIT Dharwad. Tenders not accompanied by the Earnest Money Deposit shall not be considered. The EMD of unsuccessful tenderers will be returned within one month of award of work. In case EMD exemption is sought under SME/MSME/NSIC, Valid certificate from MSME explicitly mentioning the tender work herein, is required to be submitted.

13. The contractor whose tender is accepted will be required to furnish security deposit for the due fulfillment of his contract. Security deposit shall be deducted from each running account (RA) bill @5% (Five percent) of the amount of work executed and claimed in the bill. The Earnest money deposit paid by the successful bidder at the time of tender will also be retained as Security Deposit and shall be released after payment of final bill.

14. The full value of Earnest Money Deposit is to be absolutely forfeited to the Director, IIT Dharwad or his authorized representative, with prejudice to any other rights or remedies to the Director, IIT Dharwad or his authorized representative, if the contractor fails to commence the work within 15 days continuously from the schedule date of commencement specified.

15. No part of the contract shall be sublet without written permission of IIT Dharwad nor shall transfer be made to power of Attorney authorizing others to receive payment on contractor's behalf.

16. **Process for execution of Electrical ASMC Works:** The successful contractor shall execute the Electrical AMC work only upon receipt of the written approval. No work shall be commenced without obtaining written sanction from the Office of Dean (IPS) and AR (Works). The written approval shall form the basis of execution of work at site and must be enclosed with the RA bills for the purpose of measurement of work carried out and settlement of bills. Failure to obtain written permission to carry out the work and non-submission of approvals with the bills may result in deduction of final payment.

17. IIT Dharwad reserves the right to reject any tender or all the tenders without assigning any

reason therefore.

18. The Contractor shall comply with the provisions of all Acts, Statutes, Rules, Regulations etc. of the Central and State Government as the case may be that may apply to his case and if necessary, get himself duly registered as required by the said Acts, Statutes, Rules, Regulations etc.

19. The contractor for the work shall be liable to pay applicable tax (including Taxes on works contract to state Government) if any that may be levied by the State or Union Government. Any request contrary to this will not be accepted.

20. Completion period: As per the details mentioned in the written approval issued prior to execution of work.

21. **Terms of payment:** As per the measurements at site and on certification of the site engineer.

a) The contractor shall submit his monthly bill in triplicate along with monthly muster sheet & written approvals.
b) The payment shall be released through NEFT/RTGS payment system only in the bank account of the contractor after necessary deduction of statutory dues.
c) TDS and other Statutory taxes shall be deducted at the source from the monthly bills.

22. It shall be open to the Institute to abandon or give up at any stage of the construction of any of the said works or any part thereof. In the event of such abandonment or giving up or in the event of termination of the agreement, the Contractor shall be paid up to the work performed by then.

23. **DEVIATION, EXTRA ITEMS & APPROVALS FOR PRICING:**
In case of execution of any extra items(s), apart from the BOQ, contractor must intimate the office of Dean (IPS) to obtain prior sanction for carrying out the work along with the quantities & rates. Thereafter, the contractor may submit the bills as per the usual practice of submission of RA bills.

DEVIATION LIMIT FOR THE CONTRACT ITEMS IS 50%.
In case of contract items which exceed the limit of 50%, the contractor must intimate the office of Dean (IPS) to obtain prior sanction for carrying out the work along with the quantities & rates. Thereafter, the contractor may submit the bills as per the usual practice of submission of RA bills.

24. Termination of contract If the Contractor fails to perform any of its obligations under this agreement or if Institute is dissatisfied with the services of the Contractor, Institute may issue seven days' written notice intimating the Contractor of their failures or deficiencies and calling upon Contractor to rectify within such time as may be specified in the notice and if the Contractor fails to perform such obligation or make good such deficiencies
as pointed out to the Contractor in the notice, Institute may terminate the services of Contractor under this agreement. Institute may also terminate the Contract hereunder:

i) if the firm is adjudged bankrupt or

ii) if they make a general assignment for the benefit of their creditors or

iii) if a receiver is appointed on account of their insolvency or

iv) they disregard law, ordinances, rules, regulations or orders of any public authority having jurisdiction on the works.

The termination shall be without prejudice to all rights, liabilities and remedies that have arisen or accrued till date of such termination or that may arise on account of such termination. In such case,

the Contractor shall not be entitled to receive any further payment, if due, until the loss, damage or expense incurred by Institute due to breach of this agreement by Contractor have been settled.

In case the Contractor abandons the work during the course of the project, the Institute reserves the right to appoint an alternate Contractor or make an arrangement for carrying out the work of Contractor, at the risk and cost of the Contractor. Traveling / daily allowances shall not be payable to the Contractor, its representatives, officials and consultants engaged by it for their visit to construction site, offices of local authorities, Employer's office or any other place in Dharwad.

The scope of work broadly described herein and assigned to Contractor, as their area of responsibility is inclusive of all constancy and other services required in connection with the completion of work whether specifically mentioned herein or not and rendering such constancy services will not entitle the Contractor to charge any additional fees in as much as the same are included in the overall professional fees payable to them.

25. Liquidated Damages Clause:
If any delay in execution of the works is attributable to the acts or omissions and commissions of Contractor, Institute shall be entitled to recover liquidated damages at the rate of 0.5% of the total fees for each week of delay limited to maximum of 10% of the total actual fees payable.

26. Professional indemnity: Contractor warrants that it shall exercise high degree of care and diligence in rendering the services pursuant to this agreement and that; such services shall be of a quality and standard satisfactory to Institute. The Contractor shall indemnify Institute from any damage or loss arising from such lack of care and diligence or arising out of any unsatisfactory performance of service by Contractor. The contractor is required to obtain a Contractor All Risk (CAR) policy for successful and safe completion of project. Contractor shall provide a copy of this policy to Institute showing that such insurance has been taken and being maintained and that all the premia thereon have been paid. A certified copy of such insurance policy shall be deposited with Institute.

27. Dispute Settlement: In case of any dispute or difference arise between the parties during the progress of or after construction of this contract or touching or relating either to the said buildings or works, or to any other matter or thing arising directly or indirectly under this contract, then and in such an event the same shall be referred to Director, IIT Dharwad as the SOLE ARBITRATOR who shall alone consider and determine the same, whose decision / award shall be binding and conclusive upon both the said parties and this clause shall be deemed a submission within the meaning of Arbitration and Conciliation Act 1996 or Statutory modification or re-enactment thereof. It is specifically agreed that the Contractor shall continue to render its services provided herein with all the due diligence, professional skill and tact not withstanding that any matter, question or dispute has been referred to arbitration. The venue of Arbitration proceedings shall be Dharwad. It is further agreed between the parties as hereto that the Dharwad Courts alone shall have the exclusive jurisdiction.

28. Site: The contractor shall remove all surplus materials, debris etc. out of the IIT Campus from the site of work on completion work and will hand over the site clean before the bill is processed for final payment. Dismantled materials if any (declared by In-charge of the work) shall be returned to the Estate/ Electrical stores by the contractor at his own cost. The disposal of material shall be done in environmental friendly way and complying with the local rules and regulations.

29. Security

a. Movement of contractor's materials:
Any materials which are removed from the site of work and are required to be taken out from the IIT campus, the contractor should follow the following procedure:

The contractor shall apply in writing to the In-charge of the work the details of the materials to be removed including which are rejected etc. This application shall be endorsed by the In-charge of work or his authorized representatives. The materials shall only be allowed to go out of IIT campus after counter signature of the security officer and checked at the gate. No materials/tools will be allowed to be brought on holidays/Saturdays/Sundays inside the campus. Contractors can bring the materials/tools/between 0900 hours and 1700 hours on any working day (Monday to Friday). This may please be noted.

b. Search:
Thorough search of all persons and transport shall be carried out at each gate and for as many times as gate is used for entry or exit and may also be carried out at any time or any number of times at the works site within the restricted area.

c. Labour Law:
The work will be executed strictly following the Labour Laws of Central Govt & State Govt as may be applicable.

30. Scope of Work

a. To maintain all electrical points, units etc. under the custody of IIT Dharwad in WALMI campus and the buildings, flats, etc. taken on lease by IIT Dharwad and also to Operate and Maintain electrical DG Sets at IIT Dharwad.
b. The contractor posted should attend and available in the IIT Dharwad Walmi campus to attend the work 24x7 on all days.
c. Electrical installation means lights, fans, equipment, generators, blowers, compressors, motors, pumps, electrical wirings, switches, plugs, starters, DB Boxes, MCB's, Main switches etc.
d. It will be the duty of the contractor to see that street lights are operated regularly, exhaust fans and other non R&D electronic equipment's and machineries are operated smoothly.
e. The contractor will monitor power supply voltage regularly. It will be the duty of the contractor to see that the generator which is under AMC (Annual Maintenance Contract) is maintained in excellent condition and switch on the generator as and when the power supply fails or on other demands and ensure continuous supply of power round the clock.
f. The contractor should ensure that all the fans and electrical fittings need to be cleaned regularly at least once in a month.
g. The contractor possessing valid license of class II and above and having enough work experience shall employ necessary number of qualified, healthy and talented electricians to attend all the above mentioned electrical works (as per qualification stated in the BOQ) should be made available to undertake the electrical maintenance work. A copy of their certificates with originals may be produced in this office for verification.
h. The contractor shall provide tools necessary for the work and no work should be left un-attended for want of tools.
i. The contractor has the responsibility to provide all safety garments, equipment's, tools etc.to his staff or the persons dealing with work.
j. The Contractor shall ensure that all fittings are working properly and all items required for replacement will be provided by the office as and when required. For items needed for replacement, the Contractor shall furnish the requirement to the Office of IIT Dharwad for making necessary provisions. The item replaced shall be returned to the stores (Issue) section of the Institute.
k. The contractor shall ensure sufficient stock of diesel to run the Generator set (3 No's). The requirements of the diesel should be intimated to the office sufficiently in advance for taking procurement action. Necessary log book needs to be maintained by the contractor.
l. Maintaining a register for all activities detailing date, time, item description, quantity

complaints diagnosis, time of completion of work etc. This register will be daily shown to the authorised staff of IIT Dharwad and countersigned to acknowledge the activities attended to reflect daily progress.

n. The contractor shall ensure that all energy efficient appliances, spare parts should be replaced as per the standards of approved make/ brand by PWD, KPTCL or HESCOM such as BIS, BEE, ISI, IEEE, ISO etc.

o. The Contractor shall ensure the type of works to be taken place in IIT Dharwad campus on visiting the Site and have to Prepare the quotation based on site inspection only.

p. The work of the Contractor will be supervised by the authorized representative/Engineer of IIT Dharwad.

31. SPECIAL TERMS AND CONDITIONS

a. The maintenance contract consists of operation and maintenance of compact RMU; HT & LT control panels and its associated AMF panels, underground cables, raising mains. D.G. sets, external and internal electrification, Telephone connections of R.O and staff Quarters as detailed in schedule accompanying the notification and tender documents.

b. The power factor of the installation has to be maintained / monitored daily and monthly as per the statutory requirements of KPTCL / HESCOM.

c. Due to negligence of operator if any, "the power factor" goes below 0.9 lag during the month, P.F. penalty will be imposed and recovered from the monthly maintenance bill (as per rate of Electricity Board.)

d. Electrician has to maintain the earthing point/ stations of the electrical power system, adding water & salt and keeping the station in good conductive //wet, at least once in a month regularly and keep that the earthing system is in good condition.

e. The operating / Supervisor staff shall possess the Knowledge of firefighting and first aid.

f. The operating/supervisor personnel shall have the basic Knowledge and technical skill of the DG set / HT equipment and shall be capable of independently carrying out the emergency repair works on generator/ AMF panel.

g. All the accessories, equipment comprising of batteries, battery chargers. Control panel, switch boards shall be operated and maintained by the agency.

h. The contractor / operator / supervisory personnel shall have a clear working Knowledge of the various electrical circuits and shall not meddle / alter the electrical circuits without the permission of the Engineer in charge.

31. **Evaluation Criteria:**

The L-1 will be decided on the Grand total rate quoted for the work. All levies/taxes (i.e. GST etc.) must be clearly mentioned in the row provided for the purpose (as per format of commercial bid).

However, the decision of the Competent authority will be final and binding in awarding the order.

In case of any clarification required, the same can be clarified from IIT Dharwad before submission of the bids.

Annexure-1

Bidder Information

1.	Name of the Bidder	
2.	Address of the Bidder	
3.	Government Registration Class	
4.	PAN No.	
5.	GSTN No.	
6.	State of GST Registration	
7.	E-mail	
8.	Contact Person's Name & Designation	
9.	Mobile No.	

Signature of the Bidder with date and seal

INDIAN INSTITUTE OF TECHNOLOGY DHARWAD
Near High Court, PB Road, Dharwad-580011
TEL NO: +91 836 2212 839

Tender no.: IITDH/MMD/IPS/2019-20/36

SCHEDULE OF WORK / BOQ / PRICE BID
(To be quoted on the letter head of the bidder)

Tender for providing Annual Service Maintenance Contract (ASMC) in respect of Electrical and Miscellaneous works for one year to Indian Institute of Technology Dharwad in WALMI Campus, Karnataka.

Sr. No	KPWD SR CODE	Particulars	Unit	Qty.	Rate Rs.	Amount Rs.
1	1.1	Open Conduit System Supplying heavy gauge PVC conduit pipe …….dia .....mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws.				
	1.1.1	19/20 mm dia. 2mm thick	Mtr	600		
	1.1.2	25mm dia. 2mm thick	Mtr	500		
	1.1.3	32mm dia. 2.5mm thick	Mtr	100		
	1.1.4	40mm dia. 2.5mm thick	Mtr	100		
2	1.7	Extra for Groove cutting in brick wall/CC floor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete.				
	1.7.1	upto 50mm conduit in brick wall	Mtr	100		
	1.7.2	upto 50mm conduit CC floor	Mtr	100		
3	1.8	Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, screws at an interval of 300mm …. etc. as required.				
	1.8.1	20mm	Mtr	800		
	1.8.2	25mm	Mtr	500		
	1.8.3	32mm	Mtr	50		
	1.8.4	38mm	Mtr	25		
	1.8.5	50mm	Mtr	10		
4	1.9	Supplying PVC/GI flexible conduit pipe…mm dia. fixing on surface over inverted tapered wooden plugs or phill plugs or rawl plugs and clamped using heavy gauge saddles at an interval of 300mm using NF screws and on either end of the pipe terminated completely				
	1.9.1	20mm	Mtr	200		

	1.9.2	25mm	Mtr	200		
	1.9.3	32mm	Mtr	50		
	1.9.4	38mm	Mtr	25		
	1.9.5	50mm	Mtr	10		
	1.10	Supplying And Fixing "S" Hook made out of 14mm dia .M. S .Rod.	No's	40		
	1.11	Supplying And Fixing M.S. Rafter Clamp Set made out of M.S. Flat & 14mm M.S. rod.	No	40		
5	2.3	Point wiring using Copper wire without switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multi strand FRLS PVC insulated, 2X1. 5Sq.mm Cable confirming to the GTP without switch, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet. GROUP A				
	2.3.1	Short point up to 3Mtr from tapping point to out let via switch box	No's	20		
	2.3.2	Medium point above 3Mtr up to 6Mtr from tapping point to out let via switch box	No's	15		
	2.3.3	Long point above 6Mtr up to 10Mtr from tapping point to out let via switch box	No's	15		
6	2.5	Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multi strand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A.				
	2.5.2	1.5 sqmm	Mtr	1000		
	2.5.3	2.5sqmm	Mtr	2500		
	2.5.4	4 Sqmm	Mtr	300		
	2.5.5	6 Sqmm	Mtr	100		
7	2.10	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper with low resistance conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and powder coating extruded PVC sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A				
	2.10.1	3C X 1.5Sq.mm	Mtr.	50		
	2.10.2	3C X 2.5Sq.mm	Mtr.	50		
	2.10.3	3C X 4.0Sq.mm	Mtr.	50		

8	3.4	Supplying and fixing surface/flush mounting unbreakable PVC modular box suitable for mounting modular switch plates with due groove cutting in Brick/C.C wall, including necessary rawal plugs, Machine/NF screws etc., complete.				
	3.4.1	1-3Way	No's	25		
	3.4.2	4-5Way	No's	25		
	3.4.3	6-8Way	No's	150		
	3.4.4	10-12Way	No's	150		
9	3.6	Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box.				
	3.6.1	1 to 3 Module	Each	25		
	3.6.2	4 Module	Each	25		
	3.6.3	6 Module	Each	50		
	3.6.4	8 Module	Each	100		
	3.6.5	10 Module	Each	50		
	3.6.6	12 Module	Each	100		
10	3.7.A	Supplying and fixing of modular switch/ Socket/stepped electronic fan regulator/ dimmer/telephone socket etc. on existing modular switch plate as per IS 3854 and IS 1293 GROUP A				
	3.7.A.1	6Amps one way.	No's	150		
	3.7.A.2	6Amps Two way.	No's	100		
	3.7.A.3	6Amps 3way socket.	No's	120		
	3.7.A.4	Stepped Fan Regulator.	No's	120		
	3.7.A.7	16Amps one way switch	No's	120		
	3.7.A.8	6Amps Bell push	No's	20		
	3.7.A.9	32Amps DP switch	No's	75		
	3.7.A.10	6/16Amps universal socket	No's	120		
11	6.16	Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.				
	6.16.1	5-32Amps SP	Each	3		
	6.16.2	40-63 Amps SP	Each	3		
	6.16.3	5-32 Amps DP	Each	3		
	6.16.4	40-63Amps DP	Each	3		
	6.16.5	5-32Amps TPN	Each	10		
	6.16.6	40-63Amps TPN	Each	5		
12	6.18	Supplying, fixing and wiring Earth Leakage Miniature Circuit Breaker [ELMCB] 240/450V up to 300mA sensitivity on existing wood/panel board.				
	6.18.1	16-25 Amps 2 pole	Each	6		

	6.18.2	32-40 Amps 2 pole	Each	4		
	6.18.3	32-40 Amps 4 pole	Each	6		
	6.18.4	63 Amps 4 pole	Each	4		
13	6.17.III	Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.III - Double Door				
	6.17.III .7	4Way TP &N	No's	1		
	6.17.III .8	6Way TP &N	No's	1		
	6.17.III .9	8Way TP &N	No's	1		
	6.17.III .10	12Way TP &N	No's	1		
14	9.3.1	Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system. 48" Sweep (1200mm)				
	9.3.1.1	Regular model	No's	20		
15	9.2	Supplying of 1440rpm heavy duty exhaust fan with bracket blades suitable to operate on 230V 50Hz, AC Supply complete.				
	9.2.1	12" Sweep (300mm)	Each	10		
	9.2.2	15" Sweep (450mm)	Each	10		
16	4.29.2	LED Indoor Supplying of 2' feet - LED PVC Square Batten ..W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50Hz & Power factor >0.9 along with CE approved drivers. 5 years Warranty against any manufacturing defect working under standard electrical condition				
		LED light fighting 4' - 28 watts	Each	90		
17	17.1	Extra length of GI pipe of class B 19mm dia for down rod.	Mtr.	40		
18	17.5	Fixing halogen/metal halide / SVL / IL / LED floodlight fitting over existing pole / wall ceiling including clamps, bolts, nuts and wiring using suitable capacity wires.	Each	60		
19	17.6	Fixing charges of post top/ Gate/ Garden fitting /LED on the existing CI / GI or any other pipe using required size of reducer, wiring using suitable wires.	Each	40		
20	17.7	Fixing all types and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076” twin twisted PVC insulated wires, required Nos of round blocks and clamps.				

	17.7.1	On wall / ceiling / Rafter / Girders	Each	100		
	17.7.2	Using necessary length of G.I. chain	Each	70		
21	17.8	Fixing a ceiling / Wall mounting fan of all capacities and all types to the existing 'S' hook with fan regulator to the existing board together with supplying and fixing 5 amps. ceiling rose, necessary length of 23 / 0.0076 inch PVC insulated twin twisted copper wire and wiring.	Each	50		
22	17.9	Fixing a ceiling / wall mounting fan of all capacities and all types, with necessary clamps and 'S' hook made out of 15mm dia MS rod, with 5 amps. ceiling rose of approved quality with necessary length of 23 / 0.0076 inch PVC insulated twin twisted wire of approved quality, mounted on a suitable size wooden board and wired.	Mtr	30		
23	17.11	Fixing one exhaust fan after making a suitable nitch in the wall and finishing with cement mortar and colouring to match the existing wall or brackets, with bolts and nuts and a 5 amps, ceiling rose with sufficient length of 23 / 0.0076 inch PVC insulated twin core wire of approved make with wire mesh and wooden frame.	Each	5		
24	17.12	Fixing one exhaust fan in the nitch already left in the wall with bolts and nuts and 5 amps. ceiling rose with sufficient length of 23 / 0.0076 inch PVC insulated twin core wire.	Each	50		
25	17.13	Erection charges for fixing a …litres capacity wall mounting electric geysers using bolts, flat at one end nut and washers at the other end for through bolts and nuts and washers with 150x450x600mm back plate and wiring complete with 15A 3 pin top.				
	17.13.1	Up to 30 Litres	Each	10		
26	17.14	Erection of single phase preventer / ammeters / including fixing selector switch / voltmeter / current operated earth leakage circuit breakers / voltage operated circuit breaker / above 100A fuse channel set (3 Nos) HRC fuses above 100A (3 Nos.) / Digital ammeter/digital volt meter/set of 3 indicating lamps /MCB / Relays /A-V selector switches including wiring using suitable capacity wires, bolts, nuts, screws.	Each	10		
27	17.15	Fixing a shunt capacitor of … KVAR capacity with necessary clamps, bolts, and nuts on existing wooden or metal board including banking of more than one capacitor.				
	17.15.1	Up to 5 KVAR	Each	2		
	17.15.2	6 to 10 KVAR	Each	2		
	17.15.3	11 to 20 KVAR	Each	2		

28	2.8	Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to table 3 class 5 of IS:8130-1984 and (Virgin) PVC insulation and sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A.				
	2.8.1	2C X 1.5Sq.mm	Mtr.	20		
	2.8.2	3C X 1.5Sq.mm	Mtr.	20		
	2.8.3	4C X 1.5Sq.mm	Mtr.	20		
	2.8.8	3C X 2.5Sq.mm	Mtr.	20		
	2.8.9	4C X 2.5Sq.mm	Mtr.	20		
29	3.3.A	Supply and fixing of Bakelite D.P/Socket/ switch with/without neon indicator over existing wood board or flush mounting in plastic plates/nitches as per IS 1293 and IS 3854 GROUP A				
	3.3.A.1	32Amps Flush/projected type DP switch	Each	30		
	3.3.A.2	16Amps Flush type SP switch	Each	50		
	3.3.A.3	16Amps Flush type Universal socket	Each	40		
	3.3.A.4	16Combined switch and socket with indication	Each	40		
	3.3.A.5	Electronic stepped regulator.	Each	30		
30	3.14.D	Supplying and fixing of metal clad industrial plugs and sockets. SOCKET 3pole+earth 440V				
	3.14.D.7	20 Amps	Each	10		
	3.14.D.8	30 Amps	Each	10		
31	3.15.A	Supplying and fixing/replacing of 6/16/32Amps electrical accessories on existing switch board. GROUP A				
	3.15.A.1	6Amps SP Switch	No	20		
	3.15.A.2	6Amps 2way Switch	No	5		
	3.15.A.3	6Amps 3 way 5 pin Socket	No	80		
	3.15.A.4	6Amps 3 pin Top	No	60		
	3.15.A.5	6Amps Bakelite ceiling rose	No	40		
	3.15.A.6	6 Amps lamp holder	No	25		
	3.15.A.7	6 Amps bell push	No	10		
	3.15.A.8	6 Amps bell buzzer	No	10		
	3.15.A.	16 Amps SP switch	No	50		

	9					
	3.15.A.10	16 Amps 3 way 5 pin socket	No	150		
	3.15.A.11	16 Amps 3 pin top	No	60		
	3.15.A.12	32 Amps Bakelite DP	No	30		
	3.15.A.13	16/6 Amps combined plug and socket with control switch	No	50		
32	4	LUMINAIRS / LIGHT FIXTURES & ACCESSORIES				
	4.2	Supplying and fixing PBBC/Bakelite straight or slant batten holder and wiring with 60w/230 volts lamps.	Each	150		
	4.38.33	Accessories-Condenser for ceiling fan/MV/SV/MH and other luminaires				
	4.38.33.1	Upto 4 MFD	No	50		
	4.38.33.3	10mfd	No	50		
	4.38.33.4	15mfd	No	20		
	4.38.33.5	20mfd	No	20		
33	6.12	Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.				
	6.12.1	25Amps	Each	3		
	6.12.2	40Amps	Each	5		
	6.12.3	60-70Amps	Each	1		
34	6.13.A	Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts and wiring complete. Protection of Overload and Short circuit with thermal Magnetic/Microprocessor release and Earth Fault as per IS-13947. (Icu = Ics) THREE POLE				
	6.13.A.1	100Amps 25kA.	Each	5		
	6.13.A.2	125-160Amps 25kA.	Each	5		
35	6.19	Supplying, fixing and wiring earth leakage relay with core balanced current transformer suitable for single phase 50 Hz AC with latest microcontroller based, digital readout of percentage leakage current, programmable delay/auto/manual reset facility suitable to mount on DIN rail/ flush mounting on panel board.				
36	6.20	Supplying, fixing and wiring 0 to 600Volts 96x96mm AC Voltmeter on existing panel/wood board.	Each	5		

37	6.21	Supplying, fixing and wiring 0 to 30volts Direct Reading DC Voltmeter/Ammeter.	Each	5		
38	6.22	Supplying, fixing and wiring 0 to 30amps Direct Reading AC analog type Ammeter	Each	5		
39	6.25	Supplying, fixing and wiring rotary selector switch suitable for Ammeter.	Each	5		
40	6.26	Supplying, fixing and wiring rotary selector switch suitable for Voltmeter.	Each	5		
41	6.27	Supplying, fixing and wiring 3 Phase Digital Ammeter /Voltmeter.	Each	5		
42	6.28	Supplying, fixing and wiring electronic 5 to 20Amps single phase Class-1 Accuracy with Temper Proof Energy Meter.	Each	5		
43	6.29	Supplying and fixing Trivector Meter suitable for operation LT operation and -CT operated meter in polycarbonate body in class 0.5 accuracy as per IS 14697 and completely wired.	Each	2		
44	6.3	Supplying and fixing digital frequency meter with latest micro controller technology, ultra-bright 4 digit LED display, from 30-500V AC and optional or relay output for high/low frequency and wiring complete.	Each	2		
45	6.31	Supplying of multi-function digital meter with three line back light LCD type display for voltage, Current, frequency, Power, power factor, KVA, KWH,KVAR suitable for 3 phase, 4 wire LT network with IP 54 degree of protection and completely wired as required with communication Port and Class 0.5s accuracy.	Each	2		
46	6.32	Supplying, fixing and wiring 50/5 to 400/5Amps 5VA burden Current Transformer. Class 0.5 accuracy with Tape Wound.	Each	2		
47	6.33	Supplying, fixing and wiring electronic 10 to 40 Amps three phase 4 wire class-1 Accuracy Energy Meter.	Each	5		
48	7	L.T. U.G. CABLES				
	7.1	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cut-outs and other equipment's on the meter board using 40mm dia. 2.90mm thick GI pipe 2.5 meter long buried in a pit … The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia. bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia.	No	4		
49	7.3.B	Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. 25x3mm Copper strip				

	7.3.B.6	25x3mm	Mtr	70		
50	7.4	Supplying of 1.1 KV LT UG cable having aluminium conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A.				
	7.4.1	2 core 10 sq. .mm	Mtr	25		
	7.4.2	4 core 10 sq.mm	Mtr	25		
	7.4.3	2 core 16 sq.mm	Mtr	25		
	7.4.4	4 core 16 sq.mm	Mtr	25		
	7.4.5	3.5 core 25 sq. mm	Mtr	25		
	7.4.6	3.5 core 35 sq. mm	Mtr	25		
	7.4.7	3.5 core 50 sq. mm	Mtr	20		
	7.4.8	3.5 core 70 sq. mm	Mtr	20		
51	7.8.A	Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required. In existing trench/duct.				
	7.8.A.1	6 sq.mm to 16 sq. mm	Mtr	100		
	7.8.A.2	25 sq. mm to 75 sq. mm	Mtr	70		
	7.8.A.3	95 sq. mm to150Sqmm	Mtr	50		
52	7.9	Digging of trench of 0.6m deep x 0.50 meter wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7)				
	7.9.1	In soil (ordinary)	Mtr	200		
	7.9.2	In soil (hard)	Mtr	200		
	7.9.3	Cutting road surface	Mtr	100		
53	7.2	Supply and laying double walled corrugated (DWC) HDPE Pipe including all necessary connecting Sockets/Couplings/Tees/Bends/End-caps of same materials in existing trench as per IS 14930 part -II suitable for drawing underground cables.				
	7.20.1	40mm OD / 32mm ID	Mtr	100		
	7.20.3	63mm OD / 50mm ID	Mtr	100		
54	7.21	Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes.				
	7.21.9	50 sq.mm Long Barrel	Each	50		
	7.21.10	70 sq.mm Long Barrel	Each	50		
	7.21.11	95 sq.mm Long Barrel	Each	50		
	7.21.12	120 sq.mm Long Barrel	Each	50		
	7.21.13	150 sq. mm Long Barrel	Each	50		
55	7.22.A	Supplying and running GI/Copper conductor for grounding and (along with other wires in conduit system of wiring) using necessary suitable size clamps, nails, guttas/spacers etc. Copper wire.				

	7.22.A.3	8 SWG	Mtr	150		
56	7.23	Chemical earthing for grounding. Conduits, IC cut-outs & other equipment's backfill compound which is non-corrosive, thermally conductive, potential to permissible limits, superior Fault conduction capacity, non toxic, weather resistance & capable of achieving ohmic value less than one ohm				
	7.23.2	Using 6ft. Copper bonded rod with backfill compound	1 kit	5		
57	9.1	Installation charges for split type air conditioner with allied works for one indoor and one outdoor unit is to be mounted on suitable Angle Iron support up to 3.0 ton split/cassette type A/C.	Each	15		
58	9.11	Supplying and installation of insulated refrigerant copper tubing of 5/8`` and 3/8`` with polythene foam insulation 3 core 80 stand copper wiring between indoor and outdoor unit. Leak testing OIL and gas charging for additional piping length of tube.				
	9.11.1	For Split A.C.	Mtr.	50		
59	9.13	Supply and fixing of condensing coil for Split Air Conditioners.				
	9.13.1	1 ton capacity	Each	3		
	9.13.2	1.5 ton capacity	Each	3		
60	9.14	Supplying and fixing capacitor`s (of approved make) for window /split air conditioners.				
	9.14.1	25 to 45mfd running capacitor.	Each	5		
	9.14.2	80 to 200mfd starting capacitor.	Each	5		
	9.15	Supplying & fixing relay for over load protection for window and split air conditioners.	Each	5		
	9.17	Supplying & filling refrigerant (F-22/F/12) for air conditioning equipment's. Which includes the labour & Nitrogen gas for pressure and leak testing.	Per Kg	50		
61		11. NETWORKING & TELECOMMUNICATIONS				
	11.1	Supplying and drawing UTP-CAT 6E LAN cable.	MT.	1100		
62		16. MAINTENANCE WORKS				
	16.1	Supplying and fixing one of 230 volts bell or buzzer and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws.	Each	5		
63	16.3	Supplying and fixing/replacing condenser for ceiling fan/MV/SV/MH and other luminaries.				
	16.3.1	upto 4mfd	Each	50		
	16.3.2	8mfd	Each	50		
	16.3.3	10mfd	Each	50		

64	16.4	Rewinding a … mm ceiling fan/after using necessary gauge annealed and insulated copper wire with necessary insulating, separators vibration arresting shellac, etc including replacement of bearings if any transportation to and from the spot to workshop inclusive of releasing the refixing.				
	16.4.3	1200MM	Each	30		
	16.4.4	1400MM	Each	30		
65	16.5	Releasing the existing fan dismantling testing painting after removing the existing painting by scraping and cleaning (spray method) not less than 2 coats of approved make enamel paint to a ceiling fan and wiring and fixing of the same.	Each	40		
66	16.6	Supplying and replacing ceiling fan regulator 900mm to 1500mm.	Each	80		
67	16.8	Releasing the existing fan checking, testing and installation at the same place.	Each	100		
68	16.9	Releasing the existing fan checking, testing and installation at the New place.	Each	100		
69	16.10.	Releasing the existing fan and refixing the same in the new place with clamps without `S' hook complete.	Each	50		
70	16.23	Supplying and fixing/replacement of heating element for Geyser/Boiler.				
	16.23.1	2KW Capacity	No	30		
	16.23.2	3KW Capacity	No	20		
71	16.28	Painting of existing street light pole after scrapping the old paint and painted with suitable colour enamel/Silver paint including coping/footing of the pole.				
	16.28.1	Upto 5Mtr street light pole.	No	5		
	16.28.2	Above 5.5 to 7.5Mtr street light pole.	No	5		
	16.28.3	8Mtr and above street light pole.	No	5		
	16.29	Supplying and fixing of 28 watts energy saving device (electronic ballast) with less than 10% THD & P.F>0.9 cut off facility, short circuit proof suitable for18/36/40 watts existing fluorescent fitting and completely wired used on 90 to350 volts 50 Hz AC supply.	No	5		
72	16.15	Supplying and fixing/replacing of fluorescent tube.				
	16.15.1	18 to 40Watts	No	50		
	16.18	Supply and fixing of 230 volts 20/40 watts starter for fluorescent lamp.	No	50		
	16.19	Supply and fixing of 230 volts 20/40 watts fluorescent lamp holder.	No	50		
73		**Supply of Labour -**				
		Electrician(8 hours duty)	Man	605		

			Days			
		Helper (8 hours)	Man Days	365		
		A C Technician	Man Days	24		
		Total				
		GST 12%				
		Total including GST				

Declaration: I/We do hereby accept all the terms and conditions laid down in the tender document for the above said work/supply. I/We also agree to the condition that the right to suspend the tender process or part of the process, to accept or reject any or all the tenders at any stage of the process and/or to modify the process or any part thereof at any time without assigning any reasons thereto is reserved by the Competent authority of the Institute without any obligation or liability whatsoever.

Signature of the Bidder with date and seal

LIST OF APPROVED MAKE/MODEL

1) All material shall confirm to relevant technical specification. The material shall be further subjected to tests in the recognized laboratories at the sole discretion of the Engineer-in-Charge and shall be at contractor's cost.
2) Material bearing appropriate IS marking and having valid licence for the last 3 years shall be given preference while selecting for the work.
3) In the case of material which are not widely available with IS marking in the market but confirm to the technical specification mentioned in the tender documents, the same shall be procured from any of the manufacturer listed below after prior approval of the EIC.
4) EIC can approve any other brand subject to verification of the adherence to the relevant technical specification.

Sl. No.	MATERIALS	MAKE /BRAND
1	Rigid FR PVC conduit Pipe and accessories	Nihir, precision, Polycab or equivalent
2	Copper wire /conductor	Finolex, Polycab, RR cable, Havells, or Equivalent
3	Modular type	Mk , Legrand, anchor, Havells or equivalent
4	MCB / ELCB/ RCCB	Legrand, ABB, Hager, Scheindler L&T, Indo-Asian or equivalent
5	MCCB/ ACB	Legrand, ABB, Hager, Scheindler L&T, Indo-Asian or equivalent
6	Lighting fixtures & Lamps	Philips, Crompton, Wipro, Havells or equivalent
7	Ceiling fans & exhaust fan	Crompton, orient, Havells, Bajaj, Usha or Equivalent
8	Geyser	Racold, Havells, Bajaj, Usha, AO smith or Equivalent
9	PVC tape	Steel grip, anchor , Jonson or equivalent
10	Call bell	Anchor, Orpat, max or equivalent
11	Distribution board	Indo-Asian, Havells, Simens, L&T or equivalent
12	UG 1.1kv LT cables	Finolex, Polycab, RR cable, Havells, or Equivalent
13	Air conditioners	Voltas, Daikin, Blue Star, LG or Equivalent
14	PVC casing capping and accessories	Modi, Polycab, classic
15	Motor pump set	Crompton, Kirloskar, KSB or equivalent
16	Timers	L&T, Siemens, ABB, culter hammer or equivalent
17	Selector switch	L&T, Hpl, Cummins, Havells or equivalent
18	Cable lugs	Dowell's, Johnson, hex or equivalent
19	Cable jointing kit	Raychem, Denson, m-seal or equivalent
20	Indicating led lamp	Siemens, ABB, L&T, Wipro or equivalent
21	Protection relay	L&T, Siemens, ABB, culter hammer or equivalent