



# NATIONAL INSTITUTE OF TECHNOLOGY

## TIRUCHIRAPPALLI – 15

### **Notice Inviting Tender Estate Maintenance Department/Electrical**

Tender Number	<b>Tender Number. NITT/EMD/EMC/AE(E)/Outsource - LT IZ/ Enq.No.11, dated 09.07.2018</b>
Name of the Work	<b>Tender for Comprehensive Annual Maintenance Contract (Electrical System) of LT installations and fuse of calls for Institute Zone.</b>
Estimated cost put to tender	<b>₹ 76.31 Lakhs</b>
Duration of the Contract	<b>Initially for a period of one year extendable for further Two year based on satisfactory performance.</b>
EMD Amount (Refundable)	<b>₹ 1, 52,630/- To be remitted through Demand Draft drawn in favor of the Director, NITT.</b>
Date and Venue for Pre bid meeting	<b>Friday 27<sup>th</sup> July 2018 at 11.00 A.M (Venue: A-11 Hall of the Administrative Building, NITT)</b>
Last date and time of submission of Tender	<b>Friday 03<sup>rd</sup> August 2018 up to 3.00 P.M</b>
Date and Time of opening of Tender (Technical Bid)	<b>Friday 03<sup>rd</sup> August 2018 up to 3.30 P.M</b>
Date and Time of opening of Price bid	<b>Will be intimated to the technically qualified bidders after evaluation of technical bid.</b>
Procedure for submission of Tender	<b>Envelope 1: EMD Bid Envelope 2: Technical Bid Envelope 3: Price Bid Envelope 4: Larger Size Outer Envelope (Wrapper) containing Envelope 1, 2 and 3</b>
Address for submission of Tender	<b>The Director, National Institute of Technology, Thuvakudi, Tiruchirappalli – 620 015</b>
Contact person for technical queries or clarifications on the tender document	<b>Er.C.Nallathambi, Assistant Engineer/ Electrical Estate Maintenance Department/Electrical, National Institute of Technology, Tiruchirappalli-15 Land line: 0431 250 3840 Mobile: 94890 66205. Mail ID: thambi@nitt.edu</b>
Inspection of the Premises	<b>To assess the scope of work involved, bidders can inspect the electrical installation at the NITT premises under prior appointment from the above mentioned official during the period from 21<sup>st</sup> July 2018 to 25<sup>th</sup> July 2018 during office hours.</b>

# NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI

## NOTICE INVITING TENDER

### ◆ INTRODUCTION

The National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli, is an Engineering College of National Importance. It is functioning under the control of Ministry of Human Resources Development, Government of India. Presently over 6000 students hailing from various States are pursuing their under graduate and post graduate education in the field of Engineering.

For Administrative convenience, NITT, through this open tender intends to **Tender for Comprehensive Annual Maintenance Contract for LT installations and fuse of calls for Institute Zone**

### ◆ LT Scope of work, under this tender, inter alia, includes the following:

#### 1. L.T Panel & L.T UG cable system

- a. General cleaning of the L.T. Panel, inside and outside for removal of dust and soot once in a month.
- b. Checking the tightness of the connection of the bus-bars, with gear, control wiring for indicating lamps, voltmeter with selector switches, ammeter with selector switches, incoming and outgoing cables once in a month.
- c. Visual inspection of the main contacts of the ACB is to be carried out once in six months. Minor pitting of the contacts of the ACB is to be cleaned with emery cloth and carbon tetrachloride/contact cleaning liquid. Major pitting or damaged contacts are to be replaced.
- d. Castle locking arrangement is to be checked for correct operation once in six months.
- e. Relays for protection are to be checked and cleaned once in year.
- f. Replacement of damaged /burnt out component when necessary.
- g. Greasing /oiling of moving or sliding parts of ACB/MCCB once in six(6) months
- h. Checking of tripping mechanism of ACB/MCCB once in a year.
- i. Testing and calibration of the relays once in a year.
- j. For L.T.Panel, insulation test for phase to phase and phase to earth with 1000V insulation tester.

#### 2. Earth Electrode & Earthing System

- a. Checking of the earth resistance of the combined earth electrode (equipment and neutral separately) once in a year.

- b. Checking of earth leads to all equipment for its continuity after tightening all connection once in a year.
- c. In case the earth resistance found higher than 1ohm, new earth electrode is to be installed in parallel, to reduce the earth resistance. The agency is liable to furnish certificate for this.
- d. Checking of earth continuity of all testing machine/equipment,3-phase,415V or every section in NIT once in a year.

**3. All Distribution Boards including Power D.B/Lights D.B/Fuse D.B**

- a. General cleaning of distribution boards inside and outside for removal of dust and soot once a month.
- b. Checking of tightness of connection inside the distribution boards once in a month.
- c. Replacement of damaged /burnt out (if found any) components of the distribution boards when necessary.

**4. Maintenance of all fittings including Lights, Fan, Regulator, Switch, Plug, Fuse, Calling bell and other Electrical Fittings in NIT building.**

- a. Routine maintenance /servicing of all tube light fittings, street lights, lamps sheds, ceiling fans(inside coil/bearing/bush), fan regulator, calling bell, plugs, fusers' etc.
- b. Day to day Maintenance /Service note book has to be maintained by the electrician.
- c. The cost of the repairing materials for major or minor repair as and when required will be borne by NIT.

**5. Attending fuse of calls (Replacement of faulty Electrical items)**

**6. Execution of the works such as point wiring, cable laying, earthings etc., as instructed by the Engineer-in-Charge.**

**7. Maintenance and attending faults in LT installations.**

**8. Attending complaints in any mode**

**9. Electrical Materials needed for attending fault/complaints are under Bidder's scope.**

**10. Any other works relating to LT installation not explicitly mentioned in the Tender, shall also be carried out by the Contractor as per the instruction of Engineer-in-Charge.**

**11. List of Locations wherein the successful bidder has to attend the maintenance operations, are given in the tender documents.**

### ◆ Pre-qualifications

1. For LT Works the bidder should possess a valid Electrical Contractor's license grade **ESB or higher grade** license issued by Tamilnadu Electrical Licensing board. If he possesses any other license issued by other State Governments, the same has to be endorsed by Tamilnadu Electrical Licensing Board.
2. **The contractor should have work experience with state PWDs, CPWD, Electricity Boards and Railways and Public sector organizations in past two years with performance letter/work completion letter/credentials if any.**
3. Contractor/Firm should have valid registration for Income Tax, Employees Provident Fund, Employees State Insurance Corporation and Service Tax Authorities.
4. Similar work experience in Public Sector Industries / Reputed establishments/ establishment is desirable.
5. Average Annual financial turnover during the last 2 years, ending 31<sup>st</sup> March of the previous financial year, should be at least 30% of the estimated cost. (Rs.22.89Lakhs)
6. Experience of having successfully completed similar works during last 7 years ending last day of month previous to the one in which applications are invited should be either of the following: -
  - a. Three similar completed works costing not less than the amount equal to 40% of the estimated cost. i.e Rs.30.52 Lakhs or
  - b. Two similar completed works costing not less than the amount equal to 50% of the estimated cost. i.e Rs.38.15 Lakhs or
  - c. One similar completed work costing not less than the amount equal to 80% of the estimated cost. i.e Rs.61.05 Lakhs.
7. Definition of "similar work" should be clearly defined.  
Similar work means execution of LT works/Fuse of calls in educational institution/Private/Public sector.

In addition to above, the criteria regarding satisfactory performance of works, personnel, establishment, plant, equipment etc. may be incorporated according to the requirement of the Project.

### ◆ Pre bid Meeting

- ❖ It is proposed to conduct a Pre - Bid meeting on **Friday 27<sup>th</sup> July 2018 at 11.00 A.M** (Venue: A-11 Hall of the Administrative Building, NITT) The purpose of the meeting is to clarify our requirements and to answer the questions of the prospective bidders on technical bid and commercial terms and conditions of this tender.
- ❖ View above, prospective bidders are advised to submit their doubts/ questions/ clarifications, if any, through Mail, (**Mail ID: [thambi@nitt.edu](mailto:thambi@nitt.edu)** ) before the date of Pre bid meeting. Further, on the date of the meeting, the questions should be given in writing.
- ❖ Any modification of the bidding documents which may become necessary as a result of the Pre bid meeting shall be made known to all the prospective bidders by the Selection Committee through a notification of amendment in the website of the NITT. No clarifications will be entertained beyond the date of pre bid meeting. No extension of time will be given for submission of tender on any account, beyond the last date for submission of tender.
- ❖ The prospective bidders are advised to visit Institute premises where the works are to be carried out at his own cost and examine the surroundings and collect all information that he considers necessary for proper assessment of prospective assignment during working hours with prior appointment from the Shri.C.Nallathambi, Assistant Engineer/Electrical, Mobile : 94890 66205, Phone : 0431 – 2503840, E-mail: [thambi@nitt.edu](mailto:thambi@nitt.edu), [emc@nitt.edu](mailto:emc@nitt.edu). Once the Tender is submitted, it will be presumed that the bidder has seen and understood the complete scope of work involved.

### ◆ Instructions and General Terms and Conditions

1. The Tender documents can be seen/downloaded from our website:  
<http://www.nitt.edu/home/other/tenders>
2. The Tenderer should be required to deposit Earnest Money Demand (EMD) and the Demand Draft should be in favor of the **Director, National Institute of Technology, Tiruchirappalli** and must be enclosed with Technical-Bid. **Tenders received without EMD will be rejected. The EMD can be submitted through Bank Guarantee also, instead of Demand Draft.** The Earnest Money deposit shall not carry any interest.

3. The Tenders will be in **Two-Bid system**. **Envelope No.-1** shall be super scribed as “**EMD Bid**” for each schedule and **Envelope No.-2** shall contain the following: -

**Tender for Comprehensive Annual Maintenance Contract of LT installations and fuse of calls for Hostel & Quarters zone.**

- i) Tender Earnest Money Deposit details  
EMD amount in ₹ 1,52,630/- (Refundable)
- ii) Copy of Goods and Service Tax registration.
- iii) Copy of PAN card.
- iv) Update copy of EPF registration.
- v) Update copy of ESI registration.
- vi) Copy of Work completion / Experience certificates as described above.
- vii) Copy of Income Tax clearance certificate
- viii) Duly signed & stamped of Tender document by the authorized person.
- ix) Copy of valid ESB or higher grade Electrical Contractor License for LT installations.
- x) Copy of Customer performance certificate.

4. **Technical - Bid** shall be submitted vide a letter on the letter head of the Tenderer as per the proforma Technical bid format.

5. **Envelope No.-3** should be **super scribed** as “**Financial - Bid**” for each schedule and should contain only the Contractor’s/Agencies quoted rates in the given format. **Envelope No.-3 will be opened only if the Committee constituted by the Director, National Institute of Technology, Tiruchirappalli is satisfied with the Technical-Bid (Envelope No.-2)**, which will be opened first and Financial - Bid opening date will be intimated to the technically qualified Tenderers. **Envelope No.-1, Envelope No.-2 and Envelope No.-3** shall be sealed separately & placed in fourth envelope which also shall be sealed & duly super scribed as “Tender for Comprehensive Annual Maintenance contract for **Tender for Comprehensive Annual Maintenance Contract for LT installations and fuse of calls for Hostel & Quarters Zone.**”

6. **Submission of Bids;** Bids with all complete relevant documents will be sent to the **Director, National Institute of Technology, Thuvakudi, Tiruchirappalli – 620 015** on or before **03.08.2018 up to 3:00 PM**. Late Tenders /unsigned Tenders will not be entertained. The bidder should sign each and every page of the tender document.

**7. Opening of Technical - Bids**

- a. Technical-Bids shall be opened on **03.08.2018 at 3.30 PM** in the **A11 hall of the Administrative building** of the Institute in the presence of Tenderers or their authorized Representatives who may wish to be present.

- b. The Technical-Bid shall be opened first. The Financial - Bid (Envelope No.-3) will be opened only of those Tenderer whose Technical-Bid is found to be in order and for which they shall be intimated separately about date & time by email.
  - c. The Bidder who has not submitted the documents as per Tender conditions, without proper EMD, Valid Electrical License, and Experience certificates, tender documents etc. their Tender may be treated as non-responsive and their Financial - Bid (Envelope No.-3) shall not be opened.
8. Institute will not be responsible for any postal delay.
9. An undertaking to the effect that the Bidder in the past has never been blacklisted, given any warning for non-performance and not put any penalty for lack of performance.
10. If a later date, it is found that the documents and certificates submitted by the Tenderer are forged or have been manipulated the Work Order issued to the Tenderer shall be cancelled and Earnest Money issued to the Institute shall be Forfeited without any claim whatsoever on Institute and the Tenderer is liable for action as appropriate under the extant laws.
11. The successful Firms/Agencies/Contractors will be intimated and contract agreement will be entered into initially for a period of one year.
12. Except writing rates and amount, the Tenderer should not write any conditions or make any changes, additions, alterations and modifications in the printed form of Tenders.
13. The Director, National Institute of Technology, Tiruchirappalli reserves the right to accept or reject any or all Tender Bids without assigning any reasons. Whatsoever and his decision will be binding on all the parties.
14. Bid Price shall be quoted exclusive of applicable taxes, duties, levies etc. Statutory taxes, duties, levies etc. applicable will be borne by the purchaser. However, at the time claiming, taxes, duties, levies etc. applicable should be specifically indicated in the bills. Copies of notifications issued authorities concerned specifying applicability & rates should be submitted to the purchaser along with the first bill and subsequently in case of any changes.
15. The Rates quoted shall be valid for a period of 120 days from the date of opening of the Price Bid.

16. The Contractor shall take Insurance against all claims applicable for the workman' compensation Act-1948, Agency shall take necessary Insurance cover for any persons deploy sites even for short duration. NIT, Trichy shall be indemnified totally on this account.
17. Contractor shall be solely responsible for payment of Minimum wages and variable Dearness Allowance to their personnel as per the rules or act applicable under Government order. Tiruchirappalli is a B class city under Central Minimum Wages. All Central, State, Local laws & Bye laws applicable will be observed by the Contractor and NIT, Trichy will be kept indemnified of such payable by the Contractor.
18. Daily attendance of the Staffs shall be maintained by the Contractor and the Contractor shall make it available to Engineer-in-Charge of EMC/NIT, Trichy for inspection as and when required.
19. The deputed staff shall ensure the presence of duty in time by registering their finger print in the smart attendance system installed at the Main Power House.
20. Without taking prior approval from the Engineer-in-Charge of maintenance, no fittings/materials will be removed for the purpose of repairs. It will be the Contractor responsibility to provide alternative serviced temporary arrangements for such items removed during the period of repair.
21. Engineer-in-Charge, Maintenance/EMC, NIT, Trichy shall be at liberty to carry out surprise check on the persons as deployed by the Contractor in order to ensure that persons deployed by him are doing their duties.
22. For performing the assigned work, the Contractor shall deploy medically and physically fit persons (Preferably below the age of 50). The Contractor shall ensure that the persons are punctual and disciplined and remain vigilant in performance of their duty. Persons so engaged by the Contractor shall be from amongst properly trained Electrician & Supervisor of high integrity and good conduct, and shall be conversant in the local language i.e. Tamil. In no circumstances, persons below 18 years of age should be employed.
23. The Contractor shall further keep the NIT, Trichy indemnified against any loss to the NIT, Trichy property and assets. The NIT, Trichy shall have further right to adjust and/or deduct any of the amounts as aforesaid from the payments due to the Contractor under this contract.

24. The Contractor shall ensure that the persons so deployed do not allow any property of the NIT, Trichy related to equipment's to be taken out of the premises without a Gate Pass signed by the designated officials of the EMC/NIT, Trichy.
25. In case, any Staffs is not found up to the mark and not able to work properly, he will have to be changed as per the instruction of the Engineer-in-Charge of EMC, NIT, Trichy.
26. Institute reserves the right to terminate the contract with and advance notice of one months. The contract can also be terminated at the request of agency, with an advance notice of one month failing which, the agency is liable to pay liquidated damages @5% of tendered value besides forfeiture of security deposit.
27. The Contractor shall keep the equipment well maintained, neat and clean and adhere to the maintenance schedules of various equipment. On placement of Work Order they will prepare the maintenance schedule and discuss the same with Engineer-in-Charge of EMC/NIT, Trichy for its implementation. This may be revised from time to time as per the requirement.
28. The Contractor/Agency shall submit list of technicians & their working hours to be furnished and any change must be informed to the Institute accordingly before the changes is affected.
29. The persons deployed by the Contractor for the services mentioned above shall be the employees of the Contractor for all intents and purposes and that the persons so deployed shall remain under the control and supervision of the Contractor.
30. For the purpose of proper identification of the employees of the Contractor deployed for the work, Contractor shall issue identity cards bearing their Photographs/identification etc. and such employees shall display their identity cards at the time of duty.
31. The Contractor shall be liable for the payment of wages and all other dues which they are entitled to receive under the various Labour laws and other statutory provisions.
32. The Contractor shall comply with the statutory provisions of Contract Labour (Regulation & Abolition) Act, 1970; Employees State Insurance Act; Workman's Compensation Act, 1923; Payment of Wages Act, 1936; The Employees Provident Fund (and Miscellaneous Provisions) Act, 1952; Payment of Bonus Act, 1965; The Minimum Wages Act, 1948; Employer's Liability Act, 1938; and/or any other rules/regulations and/or statues that may be applicable to them. The Contractor shall indemnify the Institute against all claims which may be made upon the Institute whether under the aforesaid statutes or any other statute in force during the currency of this contract. In a Nutshell, there is no employer

employee relationship between NITT and the personnel deployed by the contractor.

33. Contractor shall deploy his persons in such a way that they get weekly rest. The working hours / leave, for which the work is taken from them, do not violate relevant provisions of Shops and Establishment Act. The Contractor shall arrange to provide reliever equally qualified in case of absence/leave/off etc. The Contractor shall in all dealings with the persons in his employment have due regards to all recognized festivals, days of rest and religious or other customs. In the event of the Contractor committing a default or breach of any of the provisions of the Labour laws including the provisions of Contract Labour (Regulation and Abolition) Act, 1970 as amended from time to time or in furnishing any information, or submitting or filling any statement under the provisions of the said regulations and rules which is materially incorrect, he shall without prejudice to any other liability pay to the Director, NIT, Trichy, a sum as may be claimed by NIT, Trichy.
34. **Earnest Money Deposit** : To be remitted through Demand Draft drawn in favor of the Director, NITT. Submission of EMD is liable to be rejected.
35. **Security Deposit** : The successful tenderer will have to execute a Demand Draft (OR) Performance Bank Guarantee (PBG) **Annexure-IV** in favor of the **Director, National Institute of Technology, Tiruchirappalli** within 15 days of the issue of the formal order, for a sum equivalent to 10% of contract value and this will be refunded after the contract has been ended. .

The PBG should remain valid for a period of 90days beyond the date of completion of all the completion of all the contractual obligations of the supplier. PBG will be discharged after three months (from the end of contract) after compliance of contractor's performance obligations under the contract.

- a.If the agency fails to deploy manpower against the initial requirement within 15 days from date of placing the order, the PBG shall be realized without giving any further notice.
- b. If the contractor fails or neglects any of his obligations under the contract it shall be lawful for the NIT Trichy to realize either whole or any part of PBG furnished by the bidder as compensation for any loss resulting from such failure. In case of breach of any terms and conditions attached to this contract, the PBG of the agency will be liable to be realized besides annulment of the contract.

35. Contractor shall keep the NIT, Trichy indemnified against all claims whatsoever in respect of the employees deployed by the Contractor, in case any employee of the Contractor so deployed enters in dispute of any nature whatsoever, it will be the primary responsibility of the Contractor to contest the same. In case NIT, Trichy is made party and is supposed to contest the case, the NIT, Trichy will be reimbursed for the actual expenses incurred towards Counsel fee and other expenses, which shall be paid in advance by the Contractor to NIT, Trichy on demand. Further, the Contractor shall ensure that no financial or any other liability comes on NIT, Trichy in this respect of any nature whatsoever and shall keep NIT, Trichy indemnified in this respect.
36. Income Tax deduction at source as per the rules in force will be deducted from the bill and the amount so deducted will be credited to the Income Tax authority and a certificate of the amount credit will be issued by the Account Section of Institute.
37. **Institute reserve the right to curtail or enhance the scope of work either by deletion of certain items entirely or by reducing/increasing the quantities of certain items as required and reviewed by the Institute from time to time and therefore, the final value of the work shall be worked out and paid to the extent of work actually carried out.**
38. In the event of any question, dispute/difference arising under the agreement or in Connection herewith (except as to matters the decision of which is specially provided under the agreement) the same shall be referred to the sole arbitration by the Director, NIT, Trichy & his decision will be final and binding.
39. The Arbitrator may give interim awards and/or directions, as may be required, Subject to the aforesaid provisions the Arbitrator & Conciliation Act, 1996 and the rules made hereunder and any modification thereof from time to time being in force shall be deemed to apply to the arbitration proceedings under this clause.
40. **Payment Terms:** Payments will be made within 45days from the date of submission of Monthly bills. **Payment will be made monthly after satisfactory completion of service on submission of bill on pro rata basis as per Engineer-in-Charge certification. Advance payment of 60% will be made if there is any clarification in the bill. Balance 40% will be release after the detailed verification.**
41. **Penalty provisions** : All complaints shall be attended on the same day. The penalty will be imposed as below.

Complaint discharge time	Period	Particulars (Penalty)
	Below 24 Hrs	No Penalty
	Above 24 Hrs. to 48Hrs	A Penalty of 0.5% of the contract amount
	Above 48 Hrs. to Below 96 Hrs.	A Penalty of 1% of the contract amount
	Above 96 Hrs.	Contract will be terminated.

- 42. Replacement of Materials:** Replaced material shall be handover to EMC store for verification and the replaced parts shall have a warranty of 1 year.
- 43. Store room:** Store rooms will be provided to successful bidder for storing required materials for day to day maintenance.
- 44. Minimum Quantity of materials:** 30% of estimated quantity shall be kept in store as stock.
- 45.** The agency shall dispose the complaints regularly by log into the [www.emc.nitt.edu](http://www.emc.nitt.edu) portal at regular intervals (06.30 a.m., 10.00 a.m, 12.00 p.m, 03.00 p.m, 05.00p.m, 08.00 p.m.). Necessary user name and password will be supplied by NITT.
- 46.** Soft copy of Price bid schedule should be submitted to Engineer In charge at the time of Price bid opening.

**◆ ADDITIONAL INFORMATION AND ADDITIONAL INSTRUCTION TO BIDDERS**

**1. General**

- ❖ The “TECHNICAL BID” (application to qualify) shall contain data and information to enable the institute to draw up a list of agencies who can take part in the Tender process and whose “Financial Bids” (Tenders) can be opened.
- ❖ The decision of the NIT, Trichy Outsourcing Committee is final in all matters of Tender. In case of dispute, the matter will be subject to Tiruchirappalli, Tamil Nadu, Jurisdiction only.

**2. Final Decision Making Authority**

The Director, NIT Tiruchirappalli reserves the right to accept or reject all or any of the applications and to annul the qualification process / tender process at any time without assigning any reason or incurring any liability to the applicants.

3. The applicant should have sufficient Instruments, Tools and tackles like

- 1.Chase cutting machine
- 2.Electrical wire drawing equipment
- 3.Conduit die set,Pipe Vice & Bench Vice
- 4.1000 V LT insulation tester
- 5.2.5 kV insulation Tester for HT works
- 6.Cable fault locator
7. Tong Tester
- 8.Multi Meter
- 9.hydraulically operated & hand operated crimping machines
- 10.Earth tester
- 11.portable drilling machine
- 12.Overhead conduit puller.
- 13.Measurement tape.
- 14.Ladder

However, no tools and plants will be provided by the NITT. The Successful bidder shall arrange for the same, on his own.

#### 4. Evaluation By Scoring

- a. The applicants, who qualify the eligibility criteria mentioned under clause 1 of Notice Inviting Tender, shall be further evaluated for the following criteria by scoring method based on the details submitted by them.
- b. Inspection committees will carry out surprise visit to tenderers clients' places and their reports, form valuable inputs for the short-listing process.
- c. The final selection of the contractors will be based on a weighted criteria system to be derived from the tender documents of the bidders. The tender will be considered as a whole and hence overall lowest value will be the lowest tenderer. Quoting all the items is mandatory and partial offer will be treated incomplete tender and rejected.
- d. Only the applicants who fulfill the eligibility criteria as stated earlier shall only be evaluated further for the following criteria:-

1	Functional Strength	Maximum 30 Marks
2	Experience in similar nature of work during last five years	Maximum 25 Marks
3	Performance on Works	Maximum 20 Marks
4	Equipment, Tools and Tackles	Maximum 25 Marks
	<b>Total</b>	<b>Maximum 100 Marks</b>

**Note:** To qualify, the applicant must secure at least 60% (Seventy percent) marks in aggregate. The Director, NIT, Trichy reserves the right to restrict the list of pre-qualified contractors to any number deemed suitable by it. Even though an applicant

may satisfy the above requirements, he would be liable to disqualification if he has:

- (a) Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the qualification document.
- (b) Record of poor performance such as, abandoning work, not properly completing the contract, or financial failures / weaknesses etc.

### **5. Tender Submission and Decision:**

After the details submitted by the applicant regarding his financial capacity, previous experience etc. are studied and evaluated, a list of agencies who can take part in the Tendering process shall be prepared and all concerned will be intimated. The financial bids (Tender) of the applicants who have not been qualified after evaluation, shall be returned unopened. Other Tenders shall be opened on the date and time to be intimated, in the presence of the Tenderers or their authorized representatives who may be present by the committee constituted for this purpose.

### **◆ ADDITIONAL CONDITIONS**

1. The contractor should employ supervisors who have experience in this type of work.
2. Child Labour is strictly prohibited and if there is any violation, the contract will be terminated.
3. Permits for workers and supervisor to the campus / building shall be obtained by the contractor from the concerned authorities. Only photo passes shall be issued and no group passes shall be issued.
4. Necessary monthly bills should be submitted by the contractor after obtaining the signature from the Engineer-In-Charge on or before tenth of subsequent month by obtaining all formalities.
5. All expenses related to the functioning of the employees engaged by the contractor shall be in the scope of the contractor. The Contractor is solely responsible for the payment of minimum wages for their employees as per the Government of India norms and E.S.I. The record of duty hours and pay structure should be maintained as per rules for inspection by authorized government personnel and meeting other statutory and non-statutory benefits/obligations.
6. The contractor shall bring the required equipment's at his/her own cost and risk and no extra payment will be made for the same.
7. The contractor should maintain an attendance register in each Institute and

Department buildings and the same should be certified by the nominated officials from NIT Administration and hand over a copy to The Assistant Engineer, EMD/EMC, NIT, Trichy on the next working day and it should be followed throughout the year.

8. The contractor should pay the labour wages in the first week of the successive month and delay / failure will attract fine as deemed fit by the Institute.
9. The contractor shall obtain a feedback certificate on performance of work from each Administrative/Department Head while submitting his/ her running account bill along with the attendance registrar.
10. The contractor must ensure that no labours shall work without uniforms and other safety accessories like mask, shoes and gloves etc.,
11. Rate per each quantity of work should be quoted in Rupees only. In case of any difference in rate quote in figures and words, the lower of the two rates will be taken as the tendered rate
12. The rate quoted in the tender shall remain valid for a period of four months from the date of opening Financial Bid. Once the contract is awarded after acceptance of tender, the rate as accepted by NITT shall be valid for billing till the entire work is completed and final bill is paid.
13. **Working Conditions:**
  - a. Sufficient man power is required to be provided to all the work.
  - b. Strict discipline must be observed by the workers.
  - c. The laborers put in work must be provided with the proper uniform to distinguish them from other staff.
  - d. The labourers and other staffs must be provided with identity card with the NITT's approval of Institute Authorities.
  - e. The supervisors, under whom the labourers work, shall have to report daily to the **Assistant Engineer/Electrical**.
  - f. No payment will be made for a non-working days, proportionate reduction will be made if any item of work is not carried out or work is not carried out on any day due to any reason, as indicated in the bill of quantities.
  - g. The rate quoted shall have to take care of increase in minimum wages and any other incidental charges.
  - h. The payment will be made after deducting Income Tax, **Labour Welfare Cess etc.**

14. The contractor shall depute adequate staff to ensure round the clock for Maintenance services on all days (including Sundays & holidays) at NITS as per below given details.

Sl.no	LT Zones	Supervisor	Technician	Timings
01	Institute Zone	01 Persons	4 Person	06.00 AM – 02.00 PM and shall work beyond on emergency situations for technicians.
			4 Person	02.00 PM – 10.00 PM and shall work beyond on emergency situations for technicians.

**Qualification and experience of various categories of staff deputed by contractor shall be as follows:**

- a. Technician (skilled): Having Diploma in Electrical Engineering or certificate in Electrician/Wireman trade issued by ITI/Local authorities/Govt. of India and minimum 2years experience in this field.**
- b. Supervisor: Having Diploma in Electrical Engineering with C Certificate and should have knowledge/certificate of 3years experience in this line or Higher Qualification.**
- c. The L.T.works shall be carried out by the qualified operator/switch board operator/electrician, having valid certificate, to work on L.T.Installation.**

15. A Successful agency shall provide two Mobiles with sim to supervisors.

16. Contractor shall ensure that his employee do not indulge in any unsafe or hazardous practices. They use safety equipment such as safety belts, safety shoes, goggles, helmet and masks where use of such equipment is required in day-to-day operations. All such safety gadgets will be provided by the contractor failing which the contract operating division will provide safety equipment to such employee of the contractor at the cost of the contractor to be recovered from his bills. Contractor shall fully indemnify NIT against any claim for damages for injury to person or property resulting from such accidents.

17. In case of any dispute or differences arising under the terms of this Agreement the same shall be settled by reference to arbitration by a sole Arbitrator to be appointed by Head, NIT. The provisions of Arbitration and Conciliation Act 1996 shall be applicable.

18. Any violation of instructions/agreement or suppression of facts will attract cancellation of agreement without any reference.

19. An agreement shall be signed with the successful bidder as per specimen enclosed.

20. **Jurisdiction:** Disputes of any nature that may be arise in connection with the execution of this order shall be governed by the Laws of India and subject to the jurisdiction of Courts situated in Tiruchirappalli, Tamil Nadu, India only

◆ *Location of LT Installations*

**LT Installations: Institute Zone**

1. OJAS Building
2. Architecture Dept.
3. Orion Building
4. Chemical Dept.
5. ADM block
6. Electrical and Electronics Dept.
7. Mechanical Dept.
8. Metallurgical and Materials Dept.
9. Civil Dept.
10. Old and new Library Buildings
11. Sports Dept. & Grounds,
12. IT Center (CS Dept., CA Dept., Maths Dept. & Exam Hall)
13. Lyceum
14. Instruments and Control Engineering Dept., and its Project room
15. Silver Jubilee Building
16. Production Dept.
17. Powder Metallurgy Dept.
18. Computer Support Group Building
19. UG Lecture Hall
20. Barn Hall
21. Multi-Purpose Hall & All function hall
22. CEESAT Building and its Annexure
23. Estate Maintenance Department & Electrical Maintenance Centre
24. Sump Houses
25. Transport Dept.
26. Training & Placement
27. Old Student Activity Centre (Canara bank)
28. Security office & Booths
29. All Bore Well in Institute zone
30. All indoor & Outdoor Panels ,Street Lights & High mast lights in institute zone
31. And left out areas if any.

**ANNEXURE - I**  
**FOR LT INSTALLATIONS**  
**PROFORMA FOR TECHNICAL BID**

<b>Sl. no</b>	<b>Item/Requirement from the Bidder</b>	<b>Details</b>	<b>Pg.no</b>
<b>1</b>	Particulars of remittance of EMD: Specify (a) DD Number (b) Amount (c) Name of Issuing Banker <b>Note: Bids without EMD will be rejected summarily</b>		
<b>2</b>	<b>Name and Complete Postal address of the Applicant or Bidder Firm/ Company with phone/ Fax/ Mobile number</b>		
<b>3</b>	Legal status / Constitution of the Bidder : (a) Sole Proprietor (b) Partnership (c) Private Limited Company d) Public Limited Company (e) others <b>Please attach self-attested documentary proof</b>		
<b>4</b>	<b>Details of License obtained from the Licensing Authority (Attach Self-attested Xerox Copy)</b> ESB <input type="checkbox"/> EA <input type="checkbox"/> ESA <input type="checkbox"/>	License No: Valid till :	
<b>5</b>	Nature of the Business of the Bidder		
<b>6</b>	Year of Commencement of Business		
<b>7</b>	Location of the Registered / Main Office		
<b>8</b>	(a) Name, (b) address ,(c) designation, (d) phone & cell number and (e) E mail ID of the CONTACT PERSON of the applicant/ bidder		
<b>9</b>	Name and address of your banker		

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<b>10</b>	Copy of Income Tax Permanent Account Number (PAN Number) <b>(Please Attach self-attested Xerox copy)</b>		
<b>11</b>	Annual Turnover during the Last three financial years 2015-16, 2016-17 and 2017-18 <b>(Profit and Loss Account and Balance sheet duly audited and certified by a Chartered Accountant and Income Tax Return Acknowledgement i.e., ITR for the last three years may be attached)</b>		
<b>12</b>	Details of Manpower available with the bidder	<b>Use separate sheet to furnish the list</b>	
<b>13</b>	Details of Equipment/ Tools/ Tackles available with bidder	Use separate sheet to furnish complete details in Annexure-A.	
<b>14</b>	Registration with Employees Provident Fund (furnish documentary proof)		
<b>15</b>	Registration with Employees State Insurance (furnish documentary proof)		
<b>16</b>	Goods and Service Tax Registration Number, <b>(Self-attested Xerox copy to be attached)</b>		
<b>17</b>	Details of similar work, if any, executed or being executed along with address of the service receiver with contact number, value of the work. <b>Enclose a copy of the work order along with performance certification.</b> (Annexure-B)		

**Bidders Response should be definite, complete and legible. Use separate sheet wherever necessary.**

1. I / we hereby certify that all the statements made and information supplied in the enclosed forms and accompanying statements are true and correct.
2. I / we have furnished all information and details necessary for deciding our eligibility to be qualified for taking part in the tendering process for the work. We have no further information to supply.
3. I/We also authorize the Director, NIT Tiruchirappalli or his representative to approach individuals, firms and corporations to verify our competence and general reputation.

**Authorized signatory of Bidder with Seal**

**Name**.....

**Designation**.....

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**PRICE BID for LT Installation: ANNEXURE – II Enclosed**

**Annexure-A.**

Sl.no	Name of the tools & Instruments	Make	Year of calibration for necessary items	Available Qty with the bidders
1.	Chase cutting machine			
2.	Electrical wire drawing equipment			
3.	Conduit die set			
4.	Pipe Vice & Bench Vice			
5.	1000 V LT insulation tester			
6.	2.5 kV insulation Tester for HT works			
7.	Cable fault locator			
8.	Tong Tester			
9.	Multi Meter			
10.	hydraulically operated & hand operated crimping machines			
11.	Earth tester			
12.	Portable drilling machine			
13.	Overhead conduit puller			
14.	Measurement tape.			
15.	Ladder			
16.				

Note: Bidders should fill up the following tools and Equipment. Other than the specified items can be included in the left out rows.

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## Annexure-B

### Experience Certificate

Sl. No.	Name of the Contract	Name of the Client	Brief Description of Work	Date of Start	Date of completion as per contract	Date of actual completion of Work	Value (₹)	Type of Industry (MF/Institution)	Signature of Executive Engineer/ Project Manager/ Equivalent

The above projects have been satisfactorily completed.

**Signature of the Customer**

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## ANNEXURE – III

(To be made on Rs 100.00 Non Judicial Stamp Paper)

### DRAFT AGREEMENT

This agreement is made on \_\_\_\_\_ day of \_\_\_\_\_ Two thousand eighteen between NATIONAL INSTITUTE OF TECHNOLOGY, TRICHY as one part, hereinafter called 'NIT' and M/s \_\_\_\_\_, having its registered office at \_\_\_\_\_ hereinafter called the 'Agency' for **Comprehensive Annual Maintenance Contract (Electrical System) of LT installations and fuse of calls for Institute Zone.** WHEREAS the NIT is desirous to engage the Agency for **Comprehensive Annual Maintenance Contract (Electrical System) of LT installations and fuse of calls for Institute Zone** for NIT, TRICHY on the terms and conditions stated below:

1. The Agency shall be solely responsible for compliance to provisions of various labour, Industrial and any other laws applicable and all statutory obligations, such as, wages, Allowances, compensations, EPF, Bonus, Gratuity, ESI, etc. relating to electrical maintenance personnel deployed in NIT. The NIT shall have no liability in this regard.
2. The Agency shall be solely responsible for any accident/medical/health related Liability/compensation for the personnel deployed by it at NIT. The NIT shall have no liability in this regard.
3. Any violation of instruction/agreement or suppression of facts will attract cancellation of agreement without any reference or any notice period.
4. The contract can be terminated by giving one month notice on either side. In case of non-compliance with the contract, the NIT reserves its right to:
  - a) Cancel/revoke the contract; and/or
  - b) Impose penalty up to 10% of the total annual value of contract.
5. Security deposit equal to 10% of the Annual Contract Value (refundable Without interest after two months of termination of contract) in the form of Pay Order/Demand Draft or Bank Guarantee shall be furnished at the time of signing of the Agreement.
5. The Agency shall be fully responsible for timely monthly payment of wages and any other dues to the personnel deployed in NIT.
6. The Technical personnel provided by the Agency shall not claim to become the employees of NIT and there will be no Employee and Employer relationship between the personnel engaged by the Agency for deployment in NIT.

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7. There would be no increase in rates payable to the Agency during the contract period except reimbursement of the statutory wages revised by the Govt.
8. The Agency also agrees to comply with annexed Terms and Conditions and amendments thereto from time to time.
9. Decision of NITS with regard to interpretation of the Terms and Conditions and the Agreement shall be final and binding on the Agency.
10. In case of any dispute between the Agency and NIT, NIT shall have the right to decide. However, all matters of jurisdiction shall be at the local courts located at TRICHY.

THIS AGREEMENT will take effect from \_\_\_\_\_ day of \_\_\_\_\_ Two thousand Eighteen and shall be valid for one year & the contract may be extended for maximum two year on the basis of satisfactory service.

IN WITNESS WHEREOF both the parties have set and subscribed their respective hands with their Seal in Trichy in the presence of the witness:

NATIONAL INSTITUTE OF TECHNOLOGY, TRICHY

Witness: 1.

2.

AGENCY

Witness: 1.

2.

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**ANNEXURE – IV**  
**BANK GUARANTEE FOR SECURITY DEPOSIT**

1. THIS DEED OF GUARANTEE made this **First Day of September 2018** By Name of **Bank** in favor of **M/s.National Institute of Technology,Tamilnadu,Tiruchirappalli 620 015**, having its registered office at National Institute of Technology, Trichy – 620015.
2. WHEREAS Ms. National Institute of Technology (hereinafter called the "COMPANY") have placed work order(s) which are pending as on date and also proposes to place further work order(s) (hereinafter called the "CONTRACT" up to **31.08.2019** for Work order no ..... **Comprehensive Annual Maintenance Contract (Electrical System) of LT installations and fuse of calls for Institute Zone.** Dated ..... With (Name of the Contractor & Address) (herein after called the "CONTRACTOR") and as per the terms of the contract, the company has issued/proposes to issue raw materials to the contractor to enable them to complete the work.
3. AND WHEREAS one of the conditions for placing such contract(s) is that the Contractor/ Supplier shall provide the Company a Bank Guarantee for **₹ (10% of contract value)** in lieu of cash and towards the security deposit for the raw materials supplied and to be supplied, in pursuance of the contract(s) already placed but pending as on date and the contract(s) to be placed from time to time up to **31.08.2019** and also for the satisfactory performance and completion of work/supply as per the terms and conditions of the said contract(s).
4. AND WHEREAS the Name of the Contractor approached the **Name of the Bank** and at their request and in consideration of the arrangement arrived at between the said Contractor **Name of the Contractor** and the said Bank.
5. We **Name of the Bank** do hereby undertake to pay the amounts due and payable under this guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of Inss or damage caused to or would be caused to or suffered by the Company by reason of breach by the said Contractor(s) of any of the terms and conditions contained in the said Agreement or by the reason of the contractor(s) 'failure to perform' the said agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding ₹ \_\_\_\_\_/-
6. We **Name of the Bank** further assure that the Contractor/ Supplier shall be responsible for the safe custody and protection of the raw materials that have been supplied/and to be supplied by NIT under the contract(s) already placed but pending as on date and to be placed up to **31.08.2019** against all risks till they are delivered back as finished products to NIT as per the terms and conditions of the Contract or as they may direct and until such time, the Contractor/ Supplier shall hold the raw materials in trust for NIT and shall not alienate the same in any

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manner whatsoever by way of sale or mortgage or charge or hypothecation etc. in favor of anyone else including the bank herein or any other banks /financial institutions etc.

The raw materials shall always remain the property of NIT and the Bank shall indemnify NIT against the loss, damage or deterioration whatsoever in respect of the said raw materials while in the possession of the Contractor/Supplier. The raw materials of NIT shall always be open for inspection by any Officer authorized by NIT. The liability under this Guarantee is a continuing one covering all contracts already placed but pending as on date and to be placed up to **31.08.2019** and should any loss or damage occur on account of the breach of the terms and conditions of the said contract(s) by the Contractor/ Supplier or should any surplus raw materials become due to the Company under the Contract(s) and remains undelivered by the Company, the Bank shall indemnify the Company for the loss /damage for the value of raw materials for ₹ -----/- (**Rupees ----- only**) and this is without prejudice to any other remedies which may be otherwise available to the Company by deduction from any sum due or any sum which at any time hereinafter become due from the Contractor/ Supplier under this or any other Contract(s).

7. We undertake to pay unconditionally to the Company any money so demanded notwithstanding any dispute(s) raised by the Contractor in any suit, or proceedings pending before any Court or Tribunal or Arbitration or before any other authority relating thereto our liability under this present being absolute and unequivocal. The payment under this guarantee would not wait till the disputes have been decided by any Court or Tribunal or in the arbitration proceedings or by any other authority. The payment so made by us under this Bond shall be a valid discharge of liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
8. We **Name of the Bank** further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken force of the said Agreement and that it shall continue to be enforceable till all the dues of the Company under or by virtue of the said Agreement have been fully paid and its claims satisfied or discharged or till **31.08.2019** Office / Department/ Division of the Company certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
9. (i) Unless a demand or claim under this guarantee is made on us in writing on or before the **31.08.2019** we shall be discharged from all the liability under this guarantee thereafter. But where such claim or demand has been preferred by the Company with the Bank before the expiry of the said date, the claim shall be enforceable notwithstanding the fact that the said enforcement is effected after the said date.  
  
(ii) For the purpose of this clause, any letter making demand on the Bank by M/s. NIT dispatched by Registered Post with Ack. Due or by Telegram or by any

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Electronic media addressed to the above mentioned address of the Bank shall be deemed to be the claim / demand in writing referred to above irrespective of the fact as to whether and when the said letter reaches the Bank, as also any letter containing the said demand or claim is lodged with the bank personally.

10. We **Name of the Bank** further agree with the company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor (s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the company or any indulgence by the company to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating would but for this provision have effect of not so relieving us.
11. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
12. It shall not be necessary for the company to proceed against the contractor before proceeding against the guarantor-bank and the guarantee herein contained shall be enforceable against them notwithstanding any security, which the company may have obtained or obtain from the Contractor shall, at the time when proceedings are taken against the guarantor hereunder be outstanding or unrealized.
13. Any claim or dispute arising under the terms of this document shall only be enforced or settled in the Courts at Tiruchirappalli.
14. The guarantor hereby declare that it has power to execute this guarantee and the executant has full powers to do so on its behalf under the proper authorities granted to him/them by the guarantor.

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15. We **Name of Bank** lastly undertake not to revoke this guarantee during its currency except with the previous consent of the company in writing.

In witness whereof we **Name of Bank** have hereunto setout Bank Seal the 1<sup>st</sup> Day September 2018.

Dated:

(Name of the bank)

Note: This guarantee should be issued on non-judicial stamped paper, stamped in accordance with stamp act.

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***List of Approved Make for Electrical Materials***

<b>Sl.No.</b>	<b>Description</b>	<b>Name of the Manufacturer</b>
1	Copper wire	Havells, Finolex / Polycab / KEI /RR/Equivalent
2	Switch, Socket, Fuse, Indicator, call buzzer & Regulator	Lisa/Anchor/ GM/MK/Equivalent
3	Modular GI Box base and cover plate	Legrand/MK/Equivalent
4	Ceiling rose & Holder	Anchor/GM/Equivalent
5	Tube light Fittings	Bajaj/Crompton greaves/Philips/Equivalent.
6	Light fittings, Lamp & Accessories	Bajaj/CG/Philips/Havells/Equivalent
7	CFL Lamp	Philips/CG/Havells/Equivalent.
8	Ceiling Fan/Wall mount Fan/Exhaust Fan	CG/Orient/Usha/Equivalent
9	G.I.Pipe 'B' Class	Tata/Jindal/Equivalent
10	PVC Pipe	Avon plast/Finolex/Equivalent
11	DWC Pipe	Reputed
12	XLPE Armored Cable, 1.1 KV grade	Gloster / Polycab / Havell's /RR/Equivalent
13	M.C.B's, ELCB,MCCB,MCB DBs,MCCB DBs & AC Sockets	Legrand / ABB / Hager/Equivalent
14	M.S. Conduit & Accessories	Supreme / AKG,/ ICI/Equivalent
15	PVC Conduit & Accessories	Presto / Priti / AKG /Equivalent
16	Cable Glands.	Arun / Ratan / Commet /Equivalent
17	Cable Joint Kits	Mseal/Equivalent
18	Lugs	Dowells/Jainson /Equivalent

Note :

- 1.Replacement of the materials should be as in the existing makes.
- 2.Selection of the 'Make' from the above list will be decided by 'Engineer in charge'.
- 3.The item for which no makes are specified in the price bid schedule, only ISI marked and approved Engineer in charge shall be used.
4. The bidders should provide warranty as per manufacturer specified warranty.

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**INSTITUTE ZONE - PRICE BID B**

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
<b>1</b>	<b>WIRINGS</b>					
1.1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with piano/modular type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc. as required.					
1.1.1	Group B Piano	Point	50			
1.1.2	Group C Piano	Point	50			
1.1.3	Group B Modular	Point	50			
1.1.4	Group C Modular	Point	100			
1.2	Wiring for twin control light point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, 2 way modular switch, modular plate, suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc as required.	Point	5			
1.3	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel/ PVC conduit including dismantling as required.					
1.3.1	Group B	Point	20			
1.3.2	Group C	Point	20			
1.4	Wiring for circuit/ sub main wiring along with earth wire with the following sizes of FRLS PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required					
1.4.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Metre	200			
1.4.2	2 X 4 sq. mm + 1 X 4 sq. mm earth wire	Metre	500			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
1.4.3	2 X 6 sq. mm + 1 X 6 sq. mm earth wire	Metre	100			
1.4.4	2 X 10 sq. mm + 1 X 10 sq. mm earth wire	Metre	50			
1.4.5	2 X 16 sq. mm + 1 X 16 sq. mm earth wire	Metre	50			
1.4.6	4 X 4 sq. mm + 2 X 4 sq. mm earth wire	Metre	50			
1.4.7	4 X 6 sq. mm + 2 X 6 sq. mm earth wire	Metre	50			
<b>1.5</b>	<b>Supplying and fixing of following size ISI marked PVC insulated and PVC unsheathed copper single core and multi-core shaethed bright annealed bare copper flexible cables for voltage grade 1.1 KV grade as required.(Make:Finolex,Gloster,Havells and Polycab)</b>					
1.5.1	3x1.5 sqmm	Metre	50			
1.5.2	3x2.5 sqmm	Metre	50			
1.5.3	3x4.0 sqmm	Metre	50			
<b>1.6</b>	<b>DLP Wiring for circuit/ submain wiring alongwith earth wire with the following sizes of FR PVC insulated copper conductor, single core cable in surface/ recessed as required.(Make: Finolex/Polycab/RR)</b>					
1.6.1	2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire	Meter	50			
1.6.2	2 X 4.0 sq. mm + 1 X 4.0 sq. mm earth wire	Meter	100			
1.6.3	2 X 6.0 sq. mm + 1 X 6.0 sq. mm earth wire	Meter	100			
1.6.4	2 X10.0 sq. mm + 1 X 10.0 sq. mm earth wire	Meter	50			
1.6.5	2 X 16.0 sq. mm + 1 X 16.0 sq. mm earth wire	Meter	50			
1.6.6	4 X 25.0 sq. mm + 2 X 25.0 sq. mm earth wire	Meter	50			
1.6.7	1X35 Sq.mm	Meter	25			
1.6.8	1X50 Sq.mm	Meter	25			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
1.6.9	1X70 Sq.mm	Meter	25			
1.6.10	1X95 Sq.mm	Meter	25			
1.6.11	1X120 Sq.mm	Meter	25			
<b>1.7</b>	<b>DLP PlasticTrunking wiring (Make: Legrand/MK)</b>					
1.7.1	DLP Pastic Trunking 105x50mm and accessories Flexible cover 40mm width-1No,Flexible cover 85mm -1No, Joints for cover 40 mm width-1No, Joints for cover 85mm width-1No,Basejoint-25Nos,Clips-15Nos,Separation partition-1No,Endcap-1No,Internal angles-adjustable from 80 degr - 120 deg - 1No, VDI accessories for internal angles-1No,VDI accessories for external angles - 1No, Flat angles -1No, VDI accessories for flat angles-1No, Flat junctions-1No, Flat junctions for specific size-tap off to an 80mm wide branch -1No, VDI accessories for juctions -1No, Wall crossing -1No, Capacity change - 1No,Capacity change-1No, partition junction -1No, Cable ties base -1No. (Make: Legrand/MK)	Meter	100			
1.7.2	DLP PlasticTrunking with cover 80x50mm flexible cover 65 mm -1No Joints for cover 65 mm width -1No,Base joint -1No,Clips-1No,Separation partition-1No,End cap - 1No,Internal angles adjustable from 80 degr - 120 deg - 1No ,VDI accessories for internal angles - 1No,VDI accessories for external angles - 1No,Flat angles - 1No,VDI accessories for flat angles - 1No,Flat junctions-1No Flat junctions for specific size-tap off to an 80mm wide branch- 1No VDI accessories for juctions - 1No,Wall crossing-1No,capacitychange - 1No,Capacity change - 1No,partition junction- 1No and Cable tiesbase- 1No.	Meter	50			
1.7.3	DLP Pastic mini Trunking system 32x12.5mm and accessories Endcap-1No,Internal angles-adjustable from 85 degr - 95 deg - 1No,Flat junctions - 1No.(Make: Legrand)	Meter	50			
<b>1.8</b>	<b>Supply and fixing of following piano type switch/socket/Regulator on the existing switch box/ cover including connections etc. as required. Make:Lisha/Anchor/GM/Equivalent</b>					
1.8.1	5/6 amps Switch/Bell switch/2way switch	Each	200			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
1.8.2	15/16 amps Switch	Each	100			
1.8.3	3pin 5/6 amp Socket outlet	Each	200			
1.8.4	6pin 15/16 amp Socket outlet	Each	100			
1.8.5	Socket type Step Regulator	Each	100			
1.8.6	Switch type Step Regulator	Each	50			
1.8.7	Call bell/ buzzer suitable for single phase, 230 volts, complete as required.	Each	10			
1.8.8	Fixing of 5-15 A Switch/Socket/Bell Push/Indicator/Regulator	Each	25			
1.8.9	Replacement of 5-15 A Switch/Socket/Bell Push/Indicator/Regulator	Each	25			
<b>1.9</b>	<b>Supply and fixing of following Modular/Arteor type switch/socket on the existing switch box/ cover including connections etc. as required. Make:Legrand, MK, Crobtree</b>					
1.9.1	5/6 amps Switch	Each	150			
1.9.2	Bell switch	Each	25			
1.9.3	2way switch	Each	25			
1.9.4	15/16 amps Switch	Each	100			
1.9.5	3pin 5/6 amp Socket outlet	Each	200			
1.9.6	6pin 15/16 amp Socket outlet	Each	100			
1.9.7	Socket type Step Regulator	Each	100			
1.9.8	Call bell/ buzzer suitable for single phase, 230 volts, complete as required.	Each	25			
1.9.9	RJ 45 Socket including termination	Each	20			
1.9.10	Fixing of 5-15 A Switch/Socket/Bell Push/Indicator/Regulator	Each	75			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
1.9.11	Replacement of 5-15 A Switch/Socket/Bell Push/Indicator/Regulator	Each	50			
<b>1.10</b>	<b>Supplying and fixing following size/ modules, GI box alongwith modular base &amp; cover plate for modular switches in recess etc as required. Make:Legrand/MK/Equivalent</b>					
1.10.1	1 or 2Module	Each	50			
1.10.2	3 Module	Each	50			
1.10.3	4 Module	Each	50			
1.10.4	6 Module	Each	50			
1.10.5	8 Module	Each	50			
1.10.6	12 Module	Each	50			
<b>1.11</b>	<b>Supplying and fixing following modular base &amp; cover plate on existing modular metal boxes etc as required.Make:Legrand/MK/Equivalent</b>					
1.11.1	1 or 2Module	Each	50			
1.11.2	3 Module	Each	50			
1.11.3	4 Module	Each	50			
1.11.4	6 Module	Each	50			
1.11.5	8 Module	Each	50			
1.11.6	12 Module	Each	50			
<b>1.12</b>	<b>Supplying and fixing 3 pin, 5 amp ceiling rose on the existing junction box/ wooden block including connection etc as required.Make:Lisha/Anchor/GM/Equivalent</b>	Each	10			
<b>1.13</b>	<b>Supplying and fixing brass patten/ angle holder including connection etc. as required. Make:Lisha/Anchor/GM/Equivalent</b>	Each	10			
<b>1.14</b>	<b>Supplying and fixing of 3 pin, following amps pin top including connection etc. as required. Make:Lisha/Anchor/GM/Equivalent</b>					

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
1.14.1	5/6 Amps pin top	Each	20			
1.14.2	15/16 Amps pin top	Each	20			
<b>1.15</b>	<b>Supplying and fixing of following size of MS Metal Box with Hylam sheets with 3.0mm thick including making slots for switches &amp; Sockets etc., as required.</b>					
1.15.1	100mm X 100mm	Each	10			
1.15.2	150mm X 100mm	Each	20			
1.15.3	250mm X 200mm	Each	20			
1.15.4	300mm X 200mm	Each	20			
1.15.5	100mm X 100mm Hylam Sheet only	Each	20			
1.15.6	150mm X 100mm Hylam Sheet only	Each	20			
1.15.7	250mm X 200mm Hylam Sheet only	Each	20			
1.15.8	300mm X 200mm Hylam Sheet only	Each	20			
	<b>SUB TOTAL</b>					
<b>2</b>	<b>T5/LED/METAL HALIDE/CFL FITTINGS</b>					
<b>2.1</b>	<b>Supply and fixing of industrial patten suitable for TL5 lamp 28w Available with optional reflector. (Make: Bajaj,Crompton Greaves &amp; philips/Equivalent etc) (with 2 years manufacturer's warranty)</b>					
2.1.1	TMSI 22 M 1 X TL5 -28W EBT with lamp	Each	150			
2.1.2	TMSI 22 M 2 X TL5 -28W EBT with lamp	Each	10			
2.1.3	T5 28w Tube	Each	300			
2.1.4	Electronic Choke suitable EBT for T5 28W fitting	Each	100			
2.1.5	T5 14W Tube	Each	10			
2.1.6	Electronic Choke suitable for 9-14W	Each	20			
2.1.7	ECO-4-024, 24W Tube only save it energy-energy saver	Each	100			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
2.1.8	ECO-4-024, adopter only save it energy-enege saver	Each	75			
2.1.9	36W Tube	Each	100			
2.1.10	Electronic choke suitable for 36W fitting	Each	100			
2.1.11	36W Starter	Each	150			
2.1.12	7W B22 Base LED Bulb	Each	20			
2.1.13	7W E27 Base LED Bulb	Each	20			
<b>2.2</b>	<b>Supplying and fixing street light luminaire with die cast aluminum housing and toughened glass cover with min IP65 protection , with the LED Type fixtures of following Wattage complete with all accessories and drivers, LN6 heat sink minimum 5kVA surge protection low power LEDs with driving current less than 350mA etc. on existing brackets on street light poles including connection &amp; loop earthing with 3 core 1.5 sqmm flexible PVC insulated PVC round sheathed copper conductor cable from street light box to fitting, testing and commissioning etc. as required. (with 5 years manufacturer's warranty) (Make: Havells,Bajaj,Crompton Greaves, &amp; philips etc)</b>					
2.2.1	LED 40-45W ST white colour lamp.	Each	20			
2.2.2	Drive for 40-45W LED	Each	20			
2.2.3	LED 90W ST white colour lamp.	Each	10			
2.2.4	Drive for 90W LED	Each	10			
<b>2.3</b>	<b>Supply and fixing of outdoor of LED Floodlighting for instant start, Extruded aluminium heat sink, designed to act as efficient heat dissipater – important for LED luminaires, Pressure die-cast aluminium cover on both sides for holding of extruded aluminium heat sink, Luminaire provided with heat resistant toughened glass, Control gear compartment is an integral part of luminaire, LEDs are provided with secondary lens optics to get optimum optical performance, The driver used is specially designed to have surge voltage, open/short circuit protections and Luminaire is provided with a mounting bracket fixed on pressure die-cast aluminium covers for aiming adjustment etc. as required. (Make: Bajaj, Philips, Stand LED)</b>					

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
2.3.1	140W LED Flood light	Each	5			
2.3.2	Drive for 140W LED	Each	1			
<b>2.4</b>	<b>Supply and fixing of following rating metal halide fitting (phillips MWF 331) in existing pole i/c 3x1.5 sq mm wire from pole mouting box to fitting. Make : Bajaj/Philips/Crompton/Havells/Equivalent</b>					
2.4.1	MWF331 1xHPITP150W S 150w lamp	Each	5			
2.4.2	MWF331 1xHPITP250W S/A 250w lamp	Each	5			
2.4.3	MWF331 1xHPITP400W S/A 400w lamp	Each	5			
2.4.4	150w Metal Halide lamp	Each	10			
2.4.5	250w Metal Halide lamp	Each	10			
2.4.6	400w Metal Halide lamp	Each	10			
2.4.7	Ignitor for 150W MH lamp	Each	10			
2.4.8	Ignitor for 250W MH lamp	Each	10			
2.4.9	Ignitor for 400W MH lamp	Each	10			
2.4.10	150W Metal Halide choke	Each	10			
2.4.11	250W Metal Halide choke	Each	10			
2.4.12	400W Metal Halide choke	Each	5			
<b>2.5</b>	<b>Supply and fixing of PLL-PLC 2Pin and 4Pin lamp with connections etc as required. Make Philips/Crompton/Havells/Equivalent</b>					
2.5.1	9-11W PLC 2P	Each	50			
2.5.2	11-13W PLC 4P	Each	50			
2.5.3	18W PLL 4P	Each	50			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
2.5.4	36W PLL 4P	Each	50			
<b>2.6</b>	<b>Supply and fixing of B22, E14, E27 base LE/ CFL Make: Philips/Crompton/Havells/Equivalent</b>					
2.6.1	B22 base 11-13W CFL	Each	50			
2.6.2	B22 base 18 - 20W CFL	Each	50			
2.6.3	B22 Base 7-9W LED lamp	Each	50			
2.6.4	E14 base 3-5W LED lamp	Each	10			
2.6.5	E27 base 11-13W LED lamp	Each	20			
2.6.6	4 Pin 18W LED lamp	Each	10			
<b>2.7</b>	<b>Supply and fixing of indoor decorative tube light fitting of high efficiency luminaire range suitable for recessed/surface mounting in modular ceiling with 600 x 600/300X300/round type module and extremely low height of 50 mm. (Make: philips / Crompton Greaves/ Havells etc)</b>					
2.7.1	2X2 Size T5/14W fitting with tubes.	Each	10			
2.7.2	4X14W E- choke	Each	10			
<b>2.8</b>	<b>Supply and fixing of indoor decorative LED fitting of high efficiency luminaire range suitable for recessed/surface mounting in modular ceiling with 600 x 600/300X300/ Square type module and extremely low height of 50 mm. (Make: Crompton Greaves, philips etc)</b>					
2.8.1	2x2 LED TUBE Light fitting with tubes.	Each	10			
2.8.2	LED Drive 8-10W LED driver for 2 X 2 Light fitting Uin=240-, Fin=50hz, Iin=0.23A max,Pin=52W max ,PF(λ)=0.95 Typ.,Iout=0.60A,ULED=57-67V DC,Uout=115V DC max,ta=0-50°C,tc=+70°C	Each	10			
2.8.3	1x1 LED 24W TUBE Light fitting with tubes.	Each	5			
2.8.4	LED Drive for 1x1 LED TUBE Light.	Each	5			
2.8.5	LED Tube LPLL-18-CDL	Each	5			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
2.8.7	2x2 LED Fitting	Each	5			
2.8.8	2 (or) 3inch round/ square type LED fitting	Each	5			
2.8.9	6inch round/ square type LED fitting	Each	5			
2.8.10	9inch round/ square type LED fitting	Each	5			
2.9	<b>Supply and fixing of outdoor decorative light fittings</b>					
2.9.1	COLONNA CFPT25/35/45/BC/ECO	Each	5			
2.9.2	9W LED bollards Landscape LED lighting opal acrylic with IP 65 protection.Model no: TULIP 111284	Each	5			
2.9.3	G.I.Round cable looping with "C" class size of 150mm dia, 300mm high, Provsion of 3Nos legs 50mmx50mm "L" angle 450mm hight with 2A MCB, connector block., etc as required.	Each	5			
2.9	<b>FAULT ATTENDING &amp; CLEANING OF INDOOR LIGHTS/FITTINGS</b>					
2.9.1	Checking, identifying the faults in T5-28/40W tube light fitting/All type of Fans,cleaning and rectification of the faults by replacement of one (or) more of the followings:Lamp,choke,Capacitors,lamp holder, terminal block, driver unit,inter Connection wiring from DL-MCB to ceiling rose/ terminal Strip and to fitting.	each	100			
2.9.2	Checking, identifying the faults in 70-400W Metal Halide/HPMV/HPSV roof light fittings/street light fittings and rectification of the faults by replacement of one (or) more of the followings:Lamp,choke,Capacitors,lamp holder, terminal block, driver unit,inter Connection wiring from DL-MCB to ceiling rose/ terminal Strip and to fitting.	each	50			
2.9.3	Checking, identifying the faults in 45-140W LED fittings/street light fittings and rectification of the faults by replacement of one (or) more of the followings:Lamp,choke,Capacitors,lamp holder, terminal block, driver unit,inter Connection wiring from DL-MCB to ceiling rose/ terminal Strip and to fitting.	each	50			
2.9.4	Checking, identifying the faults in High Mast light fittings and rectification of the faults by replacement of one (or) more of the followings: Lamp, choke, Capacitors, lamp holder, terminal block, driver unit, inter Connection wiring from DL-MCB to socket / terminal Strip and to fitting including hoisting and lowering of Mast etc.as required.	each	5			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
2.9.5	Removing and fixing of 1X28W/2x28W /40W/65W/80W/box type/industrial type fluorescent tube light fittings including hand over to EMC	each	20			
2.9.6	Cleaning of 1X28W/2x28W /40W/65W/80W/4x24 w box type/industrial type fluorescent tube light fittings including the reflectors/diffusers etc	each	100			
2.9.7	Maintenance of street light distribution panel.	each	10			
<b>SUB TOTAL</b>						
<b>3</b>	<b>FAN REWINDING WORKS</b>					
<b>3.1</b>	<b>Ceiling fan/Exhaust Fan/Wall mount Fan rewinding works with minimum 1year warranty</b>					
3.1.1	Ceiling Fan Winding	each	500			
3.1.2	Exhaust Fan Winding 300mm	each	50			
3.1.3	Exhaust Fan Winding 380-450mm	each	10			
3.1.4	Exhaust Fan Winding 600mm	each	5			
3.1.5	Wall mount Fan Winding light duty	each	30			
3.1.6	Wall mount Fan Winding medium duty	each	30			
3.1.7	Wall mount Fan Winding heavy duty	each	5			
<b>3.2</b>	<b>Supplying and fixing of ceiling fan of following sweep, suitable for operation on 230 Volts, single phase, 50 Hz, AC Supply including 300 mm long down rod as required.(Make: Crompton Greaves/Rivera/Equivalent)</b>					
3.2.1	1200mm Sweep	each	50			
3.2.2	G.I.Pipe down rod length 90 cm and dia 20 mm ,2 or 3mm thickness	each	30			
3.2.3	Fan service ball bearing set replace work	each	150			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
3.2.4	Supplying and fixing extra conduit down rod of 150 cm length G.I. pipe 20 mm dia, heavy gauge including painting etc.required. (Note: More than 5 cm length shall be rounded to the nearest 10 cm and 5 cm or less shall be ignored.)	each	50			
3.2.5	Replacement of condensor including labour	each	500			
3.2.6	Fan clamp set including labour	each	200			
<b>3.3</b>	<b>Supply and fixing of heavy duty 960 RPM exhaust fan of following sweep, suitable for operation on 230 Volts, single phase, 50 Hz, AC Supply including suitable size louvers etc., as required.</b>					
3.3.1	300mm	each	10			
3.3.2	380mm	each	5			
3.3.3	450mm	each	5			
3.3.4	300mm Blade	each	10			
3.3.5	380mm Blade	each	10			
3.3.6	450mm Blade	each	10			
3.3.7	600mm Blade	each	10			
3.3.8	Replacement of condensor including labour	each	20			
<b>3.4</b>	<b>supply and fixing readymade round cement block for following size of 300, 380 &amp; 400mm labour charges for exhaust fan fixing including mesh wire ,wall cutting bolt nuts fixing and finishing.</b>	each	20			
<b>3.5</b>	<b>Supplying and fixing of wall mounting fan of following 450mm sweep , suitable for operation on 230 Volts, single phase, 50 Hz, AC Supply including wall bracket rod and resistance type regulator as required.</b>					
3.5.1	Light duty	each	10			
3.5.2	Medium type	each	5			
3.5.3	Heavy Duty	each	2			
	<b>SUB TOTAL</b>					

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
<b>4</b>	<b>FIXING/CLEANING/NUMBERING OF FAN</b>					
4.1	Fixing of Ceiling Fan 1200/1400 mm sweep	each	100			
4.2	Fixing of MS "S" type/MS "Anger fastener" type fan hook including chipping, fixing & surfacing to make good condition..	each	30			
4.3	Cleaning of ceiling fan/exhaust fan /Pedestal fan completely .	each	50			
4.4	Supplying Printed labels for tubes,fans,lights etc as required. Ex:for Ceiling fan NITT/C.F/1	Each	200			
	<b>SUB TOTAL</b>					
<b>5</b>	<b>E A R T H I N G</b>					
5.1	Earthing with G.I. earth pipe 4.5 metre long, 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. as required.	Each	5			
5.2	Supply and laying of 6 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	Meter	25			
5.3	Supply and laying of 6 SWG Copper wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	Meter	25			
5.4	Supply and laying of 8-10 SWG G.I. wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	Meter	25			
5.5	Supply and laying of 8-10 SWG Copper wire at 0.50 metre below ground level for conductor earth electrode, including connection/ termination with GI thimble etc. as required.	Meter	25			
5.6	Supply and laying of 25 mm X 6 mm Copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.	Meter	25			
5.7	Supply and laying of 50 mm X 6mm Copper strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.	Meter	25			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
5.8	Supply and laying of 25 mm X 6 mm GI strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.	Meter	25			
5.9	Supply and laying of 50 mm X 6mm GI strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required.	Meter	25			
5.10	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Each	10			
5.11	Cosmos roma 40mm dia 2Mtrs length with moisture enhancer 25 Kg.	each	5			
5.12	Cosmos roma 40mm dia 3Mtrs length with moisture enhancer 25 Kg.	each	5			
5.13	Earth bit testing and value writing in paint with SS bolt nut replacing	each	50			
<b>SUB TOTAL</b>						
<b>6</b>	<b>CABLES</b> <b>Make : Gloster/Havells/Finolex/RK/Polycab/Equivalent</b>					
6.1	<b>Supply of aluminium Armoured XLPE UG CABLE 1.1KV as per ISI Specification IS:7098/(Part-II) 1985 with latest amendments</b>					
6.1.1	2x16.0 Sq.mm	Meter	200			
6.1.2	4x16 Sq.mm	Meter	100			
6.1.3	4x25 Sq.mm	Meter	100			
6.1.4	4x50 Sq.mm	Meter	100			
6.1.5	3.5x70 Sq.mm	Meter	50			
6.1.6	3.5x95 Sqmm	Meter	50			
6.1.7	3.5x120 Sqmm	Meter	100			
6.1.8	3.5x150 Sqmm	Meter	100			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
6.1.9	3.5x185 Sq.mm	Meter	100			
6.1.10	3.5x240 Sq.mm	Meter	200			
6.1.11	3.5x300 Sq.mm	Meter	100			
6.2	<b>CABLE FAULT</b>					
6.2.1	Find out LT cable fault using cable fault locater instrument including excavation & Re-Filling trench	each	5			
6.2.2	Excavation of refilling the trench with sand, brick or cable dub(cover) LT Cable Joint Per Location 3.5 X120 -300Sq.mm	each	5			
6.3	<b>Supply and laying of following size Double walled Corrugated High Density Polyethylene pipe having corrugation on the outer wall and plain surface inner wall conforming to IS 14930 part- I and part -II complete with necessary HDPE fitting for protection of 1.1 KV grade under ground cable directly in ground at a depth 75cm including inserting of cable, excavation and refilling the trench etc as required.</b>					
6.3.1	38mm/40mm (OD/ ID)	Meter	200			
6.3.2	77mm/63mm (OD/ ID)	Meter	150			
6.3.3	110mm/94mm (OD/ ID)	Meter	200			
6.3.4	120mm/103mm (OD/ID)	Meter	150			
6.3.5	180mm/152mm (OD/ID)	Meter	100			
	<b>SUB TOTAL</b>					
7	<b>MV CABLE LAYING</b>					
7.1	<b>Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.</b>					
7.1.1	Upto 35 sq. mm	Meter	200			
7.1.2	Above 35 sq. mm and upto 95 sq. mm	Meter	200			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
7.1.3	Above 95 sq. mm and upto 185 sq. mm	Meter	200			
7.1.4	Above 185 sq. mm and upto 400 sq. mm	Meter	200			
7.2	<b>Removing &amp; Re-Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in existing trench and the same cables handover to EMC stores etc. as required.</b>					
7.2.1	Removing & Re-Laying Upto 400 Sq.mm	Meter	200			
7.3	<b>Safe Rmoval of AA UG cable from the ground and same cables hand over to EMC store etc. as required.</b>					
7.3.1	Removing Upto 400 Sq.mm	Meter	200			
	SUB TOTAL					
<b>8</b>	<b>GI/RCC/PVC Pipes</b>					
<b>8.1</b>	<b>Supplying and fixing of following size Medium class G.I. pipe bended to required shape having threaded top end with chucknuts to fix in looping box, and fixing in pole collar /foundation as required.</b>					
8.1.1	15 mm dia. G.I. pipe (medium class)	Meter	20			
8.1.2	20 mm dia. G.I. pipe (medium class)	Meter	20			
8.1.3	32 mm dia. G.I. pipe (medium class)	Meter	20			
8.1.4	40 mm dia. G.I. pipe (medium class)	Meter	20			
8.1.5	50 mm dia. G.I. pipe (medium class)	Meter	20			
8.1.6	80 mm dia. G.I. pipe (medium class)	Meter	20			
8.1.7	100 mm dia. G.I. pipe (medium class)	Meter	20			
8.1.8	150 mm dia. G.I. pipe (medium class)	Meter	20			
8.1.9	63 mm dia. G.I. pipe (medium class)	Meter	20			
8.1.10	25 mm dia. M.S. Square pipe (medium class)	Meter	20			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
8.2	<b>Supplying and erection of following size Medium class PVC pipe bended to required shape having threaded top end with chucknuts to fix in looping box, and fixing in pole collar /foundation as required.</b>					
8.2.1	20 mm dia.pvc pipe (medium class)	Meter	20			
8.2.2	25 mm dia.PVC. pipe (medium class)	Meter	20			
8.2.3	32 mm dia.PVC. pipe (medium class)	Meter	20			
8.2.4	40 mm dia. PVC. pipe (medium class)	Meter	20			
8.2.5	50 mm dia.PVC. pipe (medium class)	Meter	20			
8.2.6	80 mm dia.PVC. pipe (medium class)	Meter	20			
8.2.7	100 mm dia.PVC. pipe (medium class)	Meter	20			
8.2.8	150 mm dia.PVC. pipe (medium class)	Meter	20			
8.3	<b>Providing, laying and fixing following dia RCC pipe NP 2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc. as required.</b>					
8.3.1	150 mm dia	Meter	5			
8.3.2	300 mm dia	Meter	5			
8.4	<b>Supplying and making LT cable route marker with cement concrete 1:2:4 (1 cement : 2 coarse sand : 4 graded stone aggregate 20 mm nominal size ) of size 60 cm X 30 cm with a thickness of 8cm including inscription duly engraved as required.</b>	each	20			
	<b>SUB TOTAL</b>					
9	<b>MV /HV CABLE TERMINATION /JOINT KITS</b>					
9.1	<b>Supply and Making MV cable end indoor/outdoor termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. Make: Mseal/Equivalent</b>					
9.1.1	2 X 16-50 sq. mm	Each	100			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
9.1.2	3½ X 70-95sq. mm	Each	50			
9.1.3	3½ X 120-185 sq. mm	Each	50			
9.1.4	3½ X 240-400 sq. mm	Each	50			
9.1.5	4 X 16 sq. mm	Each	50			
9.1.6	4 X 25-35 sq. mm	Each	50			
9.1.7	4 X 50 sq. mm	Each	50			
<b>9.2</b>	<b>Supplying and making straight through joint with heat shrinkable kit including ferrules and other jointing materials for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required. Make: Mseal/Equivalent</b>					
9.2.1	2 X 16-50 sq. mm	Each	5			
9.2.2	3½ X 70-95 sq. mm	Each	5			
9.2.3	3½ X 120-185 sq. mm	Each	5			
9.2.4	3½ X 240 sq. mm	Each	2			
9.2.5	3½ X 300 sq. mm	Each	1			
9.2.6	3½ X 400 sq. mm	Each	1			
9.2.7	4 X 16 sq. mm	Each	5			
9.2.8	4 X 25-35sq. mm	Each	5			
9.2.9	4 X 50 sq. mm	Each	5			
	<b>SUB TOTAL</b>					
<b>10</b>	<b>Fixing of Meters/Hose/Acrylic sheets/UPS</b>					

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
10.1	Fixing of energy meter/multifunction meter/ammeter/voltmeter/selector switch for following ratings suitable operation on 230/415 Volts, 1 ph,3 ph 50 Hz, AC Supply as required.	Each	10			
10.2	Energy meter reading taking in Qtrs zone including preparation and issue of bills	Each	10			
10.3	Providing temporary supply to stalls and mess areas including preparation of bills	Each	20			
<b>10.4</b>	<b>Labour charges for installing UPS/inverter with connections as required.</b>					
10.4.1	2-5kVA,1Ph/3Ph	Each	5			
10.4.2	7.5-20kVA,1Ph/3Ph	Each	5			
<b>10.5</b>	<b>Carried out Maintenance of DBs,MV panel</b>	Each	10			
	<b>SUB TOTAL</b>					
<b>11</b>	<b>MCCB,MCB&amp;DB'S DSR 2012</b>					
<b>11.1</b>	<b>Supplying and fixing 5 amps to 32 amps rating, 240/415 volts, "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 including removing charges. Make : Legrand/Equivalent</b>					
11.1.1	Single Pole	Each	50			
11.1.2	Double Pole	Each	50			
11.1.3	Triple Pole	Each	10			
11.1.4	Four Pole	Each	30			
11.1.5	Double/Triple/Four pole enclosure	Each	10			
<b>11.2</b>	<b>Supplying and fixing 240/415 volts, "C" curve, ELCB suitable for inductive load of following poles in the existing MCB DB complete with connections,testing and commissioning etc. as required including removing charges. Make : Legrand/Equivalent</b>					

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
11.2.1	25-40A , DP,30 mA	Each	5			
11.2.2	63A DP,30mA	Each	5			
11.2.3	40-63A FP 30mA	Each	5			
<b>11.3</b>	<b>Supplying and fixing for following amps rating, 240/415 volts,"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.Make : Legrand/Equivalent</b>					
11.3.1	Triple pole 40-63A MCB	Each	10			
11.3.2	Four pole 40-63A MCB	Each	5			
<b>11.4</b>	<b>Supplying and fixing of following amps, 240 volts, SPN industrial type, socket outlet, with 1 pole and earth,metal enclosed plug top alongwith 20 amps "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required. Make : Legrand/Equivalent</b>					
11.4.1	1P 20A industrial socket	Each	10			
11.4.2	2P 20A industrial socket	Each	5			
11.4.3	16A 2P +E-DP industrial socket	Each	1			
11.4.4	32A 2P +E-DP industrial socket	Each	1			
<b>11.5</b>	<b>Supplying and fixing of following amps, 415 volts, TPN industrial type, socket outlet, with 4 pole and earth, metal enclosed plug top along with following amps "C" curve, TPMCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required.</b>					
11.5.1	3P 20A industrial socket	Each	1			
11.5.2	3P 32A industrial socket	Each	1			
11.5.3	32A 3P +E-FP industrial socket	Each	1			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
11.5.4	32A 3P +N+E-FP industrial socket	Each	1			
11.5.5	63A 3P +N+E-FP industrial socket	Each	1			
<b>11.6</b>	<b>Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)</b>					
11.6.1	2 + 8 way, Double door	Each	5			
11.6.2	2 + 12 way, Double door	Each	5			
<b>11.7</b>	<b>Supplying and fixing following way, horizontal type three pole and neutral, sheet steel, MCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)</b>					
11.7.1	4 way (4 + 12), Double door	Each	5			
11.7.2	8 way (4 + 24), Double door	Each	5			
<b>11.8</b>	<b>Supplying and fixing following way, Vertical type three pole and neutral, sheet steel, MCCB distribution board, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (With Out MCCB's)</b>					
11.8.1	160A 4 way Double Door	Each	1			
11.8.2	160A 8 way Double Door	Each	1			
11.8.3	250A 4 way Double Door	Each	1			
11.8.4	250A 8 way Double Door	Each	1			
11.8.5	250A 12 way Double Door	Each	1			
<b>11.9</b>	<b>Providing and fixing following rating and breaking capacity and pole MCCB in existing MCCB DB, making connections, etc. as required. (Make: L&amp;T, Legrand, Schnider - NSX or Equivalent)</b>					

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
11.9.1	4 pole 125A, 36 KA	Each	2			
11.9.2	4 pole 160A, 36KA	Each	1			
11.9.3	4 pole 200A, 36 KA	Each	2			
11.9.4	4 pole 250A, 36KA	Each	2			
<b>11.9</b>	<b>Providing and fixing following rating and breaking capacity and pole MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, including copper bus bar etc. as required. (Make: L&amp;T, Legrand, Schnider - NSX or Equivalent)</b>					
11.9.1	4 pole 125A, 36 KA	Each	1			
11.9.2	4 pole 160A, 36KA	Each	1			
11.9.3	4 pole 200A, 36 KA	Each	2			
11.9.4	4 pole 250A, 36KA	Each	2			
<b>11.10</b>	<b>Supply and fixing of rotary handle including necessary extender, drilling slots in cubical panel etc as required</b>					
11.10.1	DN1 160-250 Rotary Handle	Each	2			
11.10.2	DN2 400-630 Rotary Handle	Each	2			
	SUB TOTAL					
<b>12.0</b>	<b>Supplying and fixing glass reinforced SMC (sheet moulding compound) looping box of nominal size not less than 250mm X 170mm X 100mm deep on the existing street light foundation with built-in bracket clamp, terminal block &amp; mounting plate etc.as required.</b>	Each	10			
<b>13.0</b>	<b>Fuse of calls (Attending of Power failure)</b>	each	100			
<b>14.0</b>	Providing services on Emergency/Function duties, Labour charges will be given only beyond working days if approved by engineer incharge					
14.1	Skilled	Per Day	50			

SLNo	Description	Unit	Qty	Rate	Total amount A*B	Rate in Words
			A	B	C	
14.2	Semi Skilled	Per Day	50			
	SUB TOTAL					
A	Total Amount					
B	Percentage for Second Year (A. Total Amount + %)					
C	Percentage for Third Year (A. Total Amount + %)					
	Net Total (A+B+C)					
<b>*Note: Contract GST Extra as applicable</b>						