

**GOVERNMENT OF MADHYA PRADESH,
URBAN ADMINISTRATION AND DEVELOPMENT DEPARTMENT**



**INTEGRATED STANDARD SCHEDULE OF RATES
(4 VOLUMES)**

VOLUME - 4

ELECTRICAL WORKS



INFORCE FROM

1st JUNE 2011

ISSUED BY

COMMISSIONER

**Urban Administration and Development Department
Government of Madhya Pradesh, Bhopal**



FOREWORD

The 74th Constitutional Amendment has created a focus on improving and strengthening Urban infrastructure and systems in Urban Local Bodies. With the availability of substantial funds from various sources and with our own increased revenues, shortage of development funds is no longer a major constraint for development. However ensuring the effective utilization of available funds is a major concern.

Procurement processes in the Urban Local Bodies is one such area which requires basic system improvement and transparency. Estimating the cost of works correctly prior to the execution is one of the major challenges. Till now, Urban Administration and Development Department, Government of Madhya Pradesh did not have its own Standard Schedule of Rates which forms a basis for estimating the costs of various Building and Infrastructure works including Water Supply, Drainage, Road, Sewerage and Sanitation and Electrical Works. Presently Urban Local Bodies have to depend on Schedule of Rates of various Works Departments of the State Government such as MP Public Health Engineering Department, Public Works Department, Water Resource Department etc. for civil works and Madhya Pradesh State Electricity Board for electrical works. The infrastructure and maintenance works done by our Urban Local Bodies are town specific as well as need specific and therefore, new items are required to be created which are currently not mentioned in these SoRs. Hence the Department of Urban Administration and Development has decided to develop its own Integrated Standard Schedule of Rates for all Building and Infrastructure and maintenance works keeping in view the current and future requirements of the Urban Local Bodies.

I am extremely happy that the Department, with the assistance of Project Utthan, Madhya Pradesh Urban Services for the Poor (MPUSP), a DFID assisted programme has taken up this task and have completed it.

To complete this task, a 18 member Working Group was formed vide order number यांप्र/7/09/2442 dated 12th October 2009. This Working Group decided about the various items required by Urban Local Bodies to carry out the infrastructure development and construction works smoothly, and to be included in the ISSR.

The ISSR is prepared in four parts i.e. Volume - 1 Water Supply, Sewerage & Tube well works, Volume - 2 Building works, Volume - 3 Road & Bridge works, Volume - 4 Electrical works. Specifications for various works have also been illustrated in three separate volumes.

An Output Review Panel was also constituted vide order number MPUSP/Engg./SSRs/10/439, Bhopal Dated 23-7-2010. The Output Review Panel reviewed the process outputs and finalized various reports including Rate Analysis for various items under Integrated Standard Schedule of Rates.

All the volumes of the ISSR along with the applications are also available on the Website of UADD (mpurban.gov.in). Arrangements have been made for annual updation of the ISSR. This will help the Urban Local Bodies in preparing cost estimates close to the prevailing market values and hence, avoid high tender rates.

I extend my sincere thanks to the Project Director, Project Utthan, MPUSP, UADD, Bhopal and to all the members of Working Group and the Output Review Panel for taking keen interest in completing the voluminous job of preparation & completion of ISSR well in time.

I am sure that this Integrated Standard Schedule of Rates will be quite useful for all the construction, development and maintenance works of Urban Local Bodies of Madhya Pradesh.



(S.N. Mishra)
Commissioner

Urban Administration and Development
Government of Madhya Pradesh
Bhopal

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2. Shri C. S. Sankule, Chief Engineer, Project Uday, Department of Urban Administration and Development, Bhopal Member
3. Shri Ashok Khare, Superintending Engineer, Directorate of Urban Administration and Development, Bhopal Member
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15. Shri Rakesh Rawat, Assistant Engineer, Municipal Council, Hoshangabad Member
16. Shri P.P. Kaithwas, Assistant Engineer, Municipal Council, Neemuch Member
17. Shri J.P. Gupta Former Deputy Director (Engineering) MSU, MPUSP, UADD, Bhopal Member Secretary
18. Shri S.K. Goyal Engineering Consultant MPUSP Technical Consultancy Team, Bhopal Member

MEMBERS OF OUTPUT REVIEW PANEL

- | | | |
|----|--|-----------------|
| 1. | Shri Ashok Khare, Chief Engineer (In Charge), Directorate of Urban Administration and Development, Bhopal | Chairman |
| 2. | Shri M.J.S Tulsi, Deputy Director (Engineering), Project Utthan, Municipal Support Unit, MPUSP, Department of Urban Administration and Development, Bhopal | Convener |
| 3. | Shri Kamlesh Bhatnagar, Assistant Engineer, Project Utthan, Municipal Support Unit, MPUSP, Department of Urban Administration and Development, Bhopal | Special Invitee |
| 4. | Shri Shyam Mehndi Ratta, Engineering Consultant, MPUSP Technical Consultancy Team, Bhopal | Member |
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GENERAL NOTES

1 The SOR of UADD Department consists of 4 Volumes

VOLUME - I WATER SUPPLY, SEWRAGE AND TUBE WELL WORKS

VOLUME - II Building Works

VOLUME - III Road & Bridge Works

VOLUME - IV Electrical Works

2 The contents of each Volume are given below

VOLUME - I

WATER SUPPLY, SEWRAGE AND TUBE WELL WORKS

1	Cast Iron Pipes and Specials with with Socket & Spigot lead joints.
2	Cast Iron Tyton Pipes with Tyton Joints.
3	Cast Iron Pipes and Specials with flanged joints.
4	Ductile Iron Pressure Pipes and Special with Tyton joints.
5	Unplasticized PVC Pipes & Fittings for potable water supply.
6	Cast Iron Valves.
7	Galvanised Iron Pipes, Specials and Gun Metal/Brass Metal Fittings.
8	HDPE Pipes and Specials.
9	GRP Pipes and Specials.
10	Asbestos Cement Pressure Pipe and Cast Iron Fittings.
11	Salt Glazed Stoneware Pipes.
12	Unplasticized Non-Pressure Polyvinyl Chloride (PVC-U) Pipes for use in underground sewerage system.
13	Reinforced Cement concrete Pipes.
14	Sewer Appurtenances.
15	Civil Works for Water Supply & Sewerage works.
16	Miscellaneous.
17	Drawings for Water Supply & Sewerage.
18	Drilling of Tube Wells.

VOLUME - II BUILDING WORKS

1	Carriage of Material
2	Earth work
3	Motars
4	Concrete work
5	Reinforced Cement Concrete
6	Brick work
7	Stone work
8	Marble work other than flooring
9	Wood Work & P.V.C. Works
10	Steel work
11	Flooring
12	Roofing and ceiling
13	Finishing
14	Repair to Building
15	Dismantling & Demolishing
16	Pile work

17	Aluminium work
18	Water proofing
19	Horticulture & Landscaping
20	Form Work
21	Higher Charges of Machine
22	Water Harvesting, Recycle and Reuse wastewater
23	Building Water Supply
24	Building Drainage
25	Sanitary Installation

**VOLUME - III
ROAD & BRIDGES WORKS**

ROAD	
1	Carriage of Material
2	Site Clearance
3	Earth work, erosion control and Drainage
4	Sub-Bases, Bases (Non-Bituminous) and Shoulders
5	Bases and Surface courses (Bituminous)
6	Cement Concrete Pavements
7	Geosynthetics and Reinforced Earth
8	Traffic Signs, marking & other Road Appurtenances.
9	Supply of Material
10	Maintenance of Roads
11	Horticulture
12	Survey & investigation, Preparation of D.P.R. and other Miscellaneous items
BRIDGES	
13	Foundations
14	Sub-Structure
15	Super-Structure
16	River Training and protection works
17	Repair and Rehabilitation

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5	Sub Mains in surface/concealed rigid steel conduit system.
6	Rewiring in existing conduit.
7	Control switch gear/Bus bar.
8	MCCB's, Isolators, MCB's, MCB-DB and fixing.
9	Accessories/Pannel/Lamp/Telephone wires/Fans/Luminaries.
10	Miscellaneous
11	Earthing
12	Dismantling of Civil and Electrical Works

PART – 2 – EXTERNAL ELECTRIFICATION

13	External Electrification and over head lines
14	Power Cable & laying.
15	Transformers. & Fire Extinguishers.
16	High Mast
17	G.I. Pipe and Pump Sets
18	Solar Street Light System
19	Supply of Materials

General Notes for Volume -IV Electrical works'

Internal & External Electrification

3 Point Wiring

- 3.1 Method and type of wiring shall be fully described and measured separately, it shall be classified according to the size and types of cables used.
- 3.2 Concealed conduit work and surface conduit work shall also be classified and described separately the former shall include embedding the conduit and allied fitting in walls, floors etc. during constructions or cutting chases, or both and making good as necessary.
- 3.3 Point wiring shall include all work necessary in complete wiring of a switch circuit of any length from the tapping point on the distribution circuit to the following via a switch:
- (a) Ceiling rose or connector (in case of ceiling and exhaust fan points or stiff pendent).
 - (b) Ceiling rose (in case of pendent points except stiff pendent points).
 - (c) Lamp holder (in case of wall brackets, batten points bulk head fittings and similar other fittings).
 - (d) Call bell or Buzzer (in this case the words "Via the switch" shall be read as "Via the bell push or ceiling rose" as the case may be.
 - (e) Upto Electric Clock outlet.
 - (f) Upto Socket outlet.
- 3.3.1 When there is only one point on the distribution circuit (one way), the same shall be measured in two parts i.e. one as circuit wiring according to the definition of the circuit wiring and the other as "Points" according to the above definition for "Points".
- 3.3.2 The following shall be deemed to be included in the Point Wiring.
- (a) Rigid steel conduit/rigid PVC non-metallic conduit/HDPE conduit/casing and capping as the case may be, accessories for the same and wiring cables from controlling switch or any other type of switch to the point including earth wire.
 - (b) Switch and ceiling rose or connector or batten holder with special and suitable round block for neatly housing the connector as required.
 - (c) In case of wall brackets, bulk head fitting and similar fittings, cable as required upto the Lamp Holder
 - (d) Bushed conduit or porcelain tubing when cables pass through wall etc.

(e) All PVC/Metal blocks switch boards and boxes sunk or surface type, with suitable covering, i.e. (Phenolic laminated sheet, modular plate with base frame) including those frame required for mounting fan regulator but excluding those under the distribution board and main control switch, but as specified in schedule of items in this SOR, the boxes and covering shall be included.

(f) All fixing accessories such as clips, nails, screws, phil plug, rawl plug etc. as required.

(g) Joint for junction boxes and connecting the same as required.

(h) Connections to ceiling rose or connector, socket outlet, lamp holder, fan regulator etc.

(i) Socket outlets as specified.

(j) Inter connection wiring between points on the same circuits in same switch box or from another.

(k) connector as required for looping of wiring for two or more wires wherever required.

(l) Pendants, if provided shall be paid extra.

3.3.3 The mechanical protection to the wiring coming within 1.5 Mtr. from floor level upto switch board shall be deemed to have been included in the item of work. Method of installation and making good the damages shall be described in the specification.

3.3.4 The common bare earth continuity conductor as specified in the schedule of items shall be included in point/circuit wiring or fixing and drawing of all items and green colour PVC insulated Multi strand FR copper wire as earth wire. However, Switch Board with sheet - modular or non-modular type included in the rates of point wiring and switch boards should be selected so as to accommodate atleast similar one switch & socket in future.

3.4 Wiring points shall be classified as follows:

(a) Short points-not exceeding 3 Mtr. in length.

(b) Medium points-exceeding 3 Mtr. but not exceeding 6 Mtr. in length.

(c) Long point-exceeding 6 Mtr. but not exceeding 10 Mtr. in length.

(d) Extra Long Point-I:- Exceeding 10 Mtr. but not exceeding 15 Mtr. in length.

(e) Extra Long Point-II Exceeding 15 Mtr. but not exceeding 20 Mtr. in length.

(f) Extra Long Point-III:- Exceeding 20 Mtr.in length as required.

3.4.1 The terms length per point in point wiring in the case of fan points, light points and socket outlet hall mean the distance between the switch and ceiling rose/connector or back plate or lamp holder or socket outlet point depending upon the fitting measured along the run of wiring irrespective of the number of wires in the run, separate measurement may be made where the switches and socket outlet points are located on the same board.

- 3.4.2 In the case of boards with socket outlet point only, the length shall mean the distance between the socket outlet and the tapping point of live wire on the nearest switch board or junction box, as the case may be.
- 3.4.3 Any junction box provided for extending the wiring beyond the point referred to shall not be treated as the nearest tapping point.
- 3.4.4 Light point controlled by two, two way switches shall be measured as two points from fitting to switches on either side and classified according to the length.
- 3.4.5 In case of point with more than one light point controlled by the same switch such points shall be measured in parts i.e. from the switch to the first light point classified as one point and for the subsequent point, the distance from the fitting to fitting shall be measured along the run of wiring classified and treated as equivalent to half the point so derived.
- 3.4.6 In case of call bell/buzzer points, with single call bell/buzzer, controlled by more than one push, the length of point shall be measured in parts, i.e. from the call bell/buzzer to one of the nearest push classified as one point and for the other pushes, the distance from each push to the call bell shall be measured along the run of wiring classified and treated as equivalent to half the point so derived.
- 3.4.7 Where more than one call bell/buzzer points as controlled by the same push, the length of the points shall be measured as in 1.4.5.
- 3.4.8 Same Board socket outlet point means sockets and switches are provided on same board, if another sockets outlets is provided in adjacent switch board upto conduit length of 0.3M away shall be considered on same board. If length of conduits is above 0.3m (i.e. adjacent switch board is away above 0.3m) the point shall be considered as separate socket point.
- 3.4.9 M.S. Boxes will be embedded in wall of all types of wiring.
- 3.4.10 Any wiring should be carried out as per ISI/IS/BIS (emended upto date)
- 3.4.11 Wiring in PVC casing capping should be used in regular/for maintenance work.
- 4 The agency carrying out the work shall certify that the work has been carried out as per statutory or other regulations inforce and prescribed specifications.
- 4.1 The materials and labour involved shall be described and it shall be stated that the materials used are of approved make and as per list attached to the agreement/NIT etc.

- 4.2 Cutting through walls and floors lifting up floor boards and refixing cutting out plaster and making good all the work disturbed, notching or drilling holes through joists etc. shall be deemed to be included with the item of work.
- 4.3 The work shall be strictly carried out in accordance with the detailed layout plan of Electrical installation unless otherwise necessary to be altered due to site conditions during the course of execution.
- 4.4 Completion plans for the installation carried out shall be furnished.
- 4.5 Measurement – Tolerances for areas and cubic contents are applicable only for Civil Works associated with the electrical work:
- (a) Dimension shall be measured to the nearest 0.05 M.
 - (b) Areas shall be worked out in the nearest 0.01 Sqm.
 - (c) Cubic contents shall be worked out to the 0.01 Cum.
- 4.6 The material is to be used as per “List of standard list of electrical material “annexed herewith. However, the competent authority of UADD may further issue the list of electrical material of new Make/model keeping in view the quality and the required specification. In case of non-availability of material as specified in the ‘List of Approved material’ in any particulars are at any point of item, the Engineer-in-Charge may permit the use of material of the different equivalent make/model after taking permission from Higher Authority.
- 4.7 The rates given are for finished complete work. All material, labour, wastage, royalties, lease rent, scaffolding, temporary work, T&P hire charges, breakage, making good any damage to wall, surface, fitting etc. to original finish, transportation, replacement of any defective material, theft pilferage, insurance, variation in market rates etc. are included in the rates, unless specified otherwise. Removal of rubbish, dismantled material, cleaning of work/site is also included in the rates. Rectification of work due to defective/inappropriate materials and or workmanship.
- 4.8 In case of contradiction/conflict in the provisions of this SSR and UADD specifications, the former will prevail. In situations, where the provisions are not provided or silent in this SSR the provisions of UADD specification shall apply. However decision of competent authority for Technical sanction shall be final and binding.

5 **CIRCUIT WIRING'**

- 5.1 Circuit wiring is to be done in 2.5 sqmm cable. The rate of the earth wire of green colour of 2.5 sqmm copper Multi strand FR to be run inside the same conduit shall be payable separately as per actual measurements. Similarly, green colour earth wire of design size for sub-main shall run inside the same conduit and shall be paid separately. Separate conduit shall be used for point, circuit and sub-main wiring.

- 5.2 In case of exclusive socket outlet points with switch & socket the length of point shall be the distance between the socket outlet and the tapping point of live wire in the nearest distribution or sub distribution board and hence no separate measurement need be taken for circuit wiring or for earth continuity conductor.
- 5.3 Except as described above different types of wiring shall be measured separately and given in running meters. The length shall be the actual length of wiring installed and the number and size of cables shall be stated.
- 5.4 The length of sub mains, circuit wiring or any other type of wiring on linear basis shall include all lengths from end to end of casing and capping, conduits as the case may be exclusive of inter connections inside the switch board etc. The increase on account of division or slackness shall not be included in the measurements.
- 5.5 Modular accessories, and (non-modular), have been given accordingly.
- 5.6 The rewirable based SFUs and fuses are to be used.
- 5.7 MCB DBs of double door of sheet metal only are to be used and are included. MCBs of “C” curve type are to be used and rates have been accordingly provided.
- 5.8 Energy saver ceiling fans confirming to IS : 374 (update) with amended upto date are to be used. Provision for step type electronic regulator has been made and payable separately.
- 5.9 In addition to conventional energy saver CFL fitting and lamps are introduce.
- 5.10 Only Copper conductor (ICPCI approved) multi-strand cable with PVC Insulated Fire Retardant (FR) having minimum oxygen index value 29% is to be used.
- 5.11 Fixing and drawing of all items and green colour PVC insulated Multi strand FR copper wire as earth wire. However, Switch Board with sheet-modular or non-modular type is not included in the rates of point wiring and shall be paid separately and switch boards should be selected so as to accommodate atleast similar one switch & socket in future.
- 5.12 Fire extinguishers required for panel/sub-stations have also included.

6 CABLES

Cables shall be classified according to their voltage, materials, size and type of insulation armoring etc. Each type of cable shall be described and measured separately.

- 6.1 The length measured shall be actual length fixed or laid including connections upto switch for all cables other than paper insulated, lead covered cables and upto the entry point of cable end box of PILC cables.
- 6.2 The method of laying and the type of jointing shall be fully described.
- 6.3 Cables shall be described and given in running meters. Terminal and joint boxes of various type shall be enumerated and measured separately according to their type and size.
- 6.4 The mechanical protection for cables laid in walls or floor or underground shall be measured
- 6.5 4.5 manholes shall be described and enumerated separately.

7 **EARTHING'**

- 7.1 The object of an earthing system is to provide as nearly as possible a system of conductors at a uniform potential and as nearly zero or absolute earth potential as possible. The purpose of this is to ensure that in general all parts of apparatus other than live parts shall be at earth potential as well as to ensure that persons coming in contact with it shall be at earth potential at all times,

7.2 **System Earthing '**

Earthing associated with current carrying conductor is normally essential to the security of the system and is generally known as system earthing.

7.3 **Equipment Earthing'**

Earthing of non-current carrying metal work and conductor is essential to the safety of human life, of animals and or property and is generally known as equipment earthing.

As far as possible all earth connections shall be visible for inspection and shall be carefully made; if they are poorly made or inadequate the purposed for which they are intended, loss of life and property or serious personal injury may result. Earthing shall conform to the follow specifications. For other details not covered in this specification IS : 3043 – 1987 shall be referred to.

For checking the efficiency of earthing, the following tests are done.

- (a) The earth resistance of each electrode shall be measured.
- (b) Earth resistance of earthing grid shall be measured.
- (c) All electrodes shall be connected to the grid and the earth resistance of the entire earthing system shall be measured.

These tests shall preferably be done during the summer months.

- 8 Safety measures shall be followed as per IS Code 4770-1991 and IS 5424 - 1969 (Update)
- 9 Work shall be carried out by License holder Electrician/wireman registered from licensing board.
- 10 The items and rates taken in this SCHEDULE OF RATES are for finished items of work covering all materials, required labour, wastage, temporary work, tools, plants, overhead charges, lead and lifts, transportation, cleaning of obstacles if any, required to complete the work unless otherwise specified.
- 11 The rates mentioned in the SCHEDULE OF RATES are inclusive of all taxes and duties.
- 12 For technical specification, the I.E. rules 1956, Indian Electricity Act 1910, relevant IS codes with upto date amendments and Technical Specification (if enclosed) will be applicable unless otherwise specified.
- 13 While taking the measurement of overhead line conductor, 3% sag will be added in straight length.
- 14 The Tender form will be issued to the contractors having "A" class electrical contractor's valid license from M.P. Electrical Licensing Board, Govt. of M.P., and registered in appropriate category of M.P. departments as per N.I.T. conditions, unless otherwise specified.
- 15 The layout plan for External electrification shall be got approved from concerning authority of UADD and will be supplied to the contractor for execution.
- 16 All materials, fitting appliances etc. used in installation work shall be as per approved list of Deptt.
- 17 All materials will be confirming to relevant IS specifications wherever they exist.
- 18 Before inviting the tenders following special condition be added in notice inviting tender drafts:
 - (a) The contractor will be responsible for submitting the guarantee certificates for a period of 24 months from the date of charging, and handing over of installation to the Deptt. for Transformer, Circuit breaker and other equipment and accessories.
 - (b) The contractor shall submit the bill of purchase of materials, Test Certificate etc. and Excise gate passes (wherever required) before making payment.
 - (c) The contractor shall be responsible for arranging inspections of authorities of Electricity Board, Electrical Licenising Board and other local bodies, getting approval of layouts, drawings, installation from them and to submit the required document, charging certificate etc. to MP UADD.

- (d) No final payment will be made till the lines are handed over to the deptt.
- (e) 5% of cost of transformer and VCBs will be kept in miscellaneous deposits till the same is taken over by MP Electricity Board/Depositor. In addition to above 2% of total cost of work will be kept in Misc. deposit till the lines are taken over by the deptt.
- (f) The contractor will be responsible for taking shutdown required from MPEB for execution and commissioning of work at his own risk & cost.
- (g) The rate quoted shall be deemed to be inclusive of all taxes, duties including service tax if any.
- (h) Income Tax, Commercial Tax, VAT, Labour Welfare etc. shall be deducted from the bill of contractors as per rules.
- (i) The contractor shall make his own arrangements of water supply, site office, store and electricity at site for execution of work.
- (j) The contractor shall be responsible for a period of 24 months for any loss/theft, if caused to the lines, sub-station and other materials from the date of charging and handing over the lines to the UADD.
- (k) During the guarantee period of two years, 5% (Five Percent) amount of total value of work done shall be retained by the Deptt. Or the contractor shall have to give Bank guarantee/FDR of the said amount in favour of UADD.
- (l) Transformer VCBs and associated items will be inspected/tested as per IS specification by M.C. before dispatch of materials at works. The above items will be accepted subject to the above qualifying.

- 19 The labour rates adopted for preparation of S.O.R. are inclusive of provision for weekend holiday.
- 20 Rates payable for any work to be done departmentally then rates should be reduced by (contractor profit percentage 10% + T & P charge 2%) i.c. $100 \times 12 / 115 = 10.434\%$

CHAPTER -1 to 8	
Wiring, Control Switch gear/Bus bar, MCCB's, Isolators and fixing	
1	General
	(a) Rates include all lead and lift, for all materials, for all items, unless otherwise specified.
	(b) The provision of scaffolding or ladder or any tools and plants required-shall be deemed to be included in the items, unless otherwise stated.
	(c) Excavation for poles, underground cables, concreting in foundations, painting of poles, struts etc, shall be measured separately.
	(d) Cutting through walls and floors, lifting up floor boards and re-fixing, cutting out plaster and making good all the work disturbed, notching or drilling holes through joists, etc., shall be deemed to be included with the item of work.
2	Point Wiring : -
	(a) Concealed conduit work shall include embedding the conduit and allied fittings in walls, floors etc., during construction or cutting chases, or both and making goods and necessary.
	(b) The work shall be strictly carried out in accordance with the detailed layout plan of electrical installation, unless otherwise necessary to be altered due to site conditions during the course of execution.
	(c) Completion plans for the installation carried out shall be furnished.
	(d) Point wiring shall include all work necessary to complete wiring of a switch circuit of any length from the tapping point on the distribution circuit to the following Via the switch:
	(i) Ceiling rose or connector (in case of ceiling and exhaust fan points or stiff pendant);
	(ii) Ceiling rose (in the case of pendant point except stiff pendant points);
	(iii) Socket outlet (in. the case of socket outlet points);
	(iv) Lamp holder(in the case of wall bracket(s), button points, bulb head fittings and similar other fittings.
	(v) Call bell or buzzer (in this case the words 'Via the switch' shall be read as 'via the bell push or ceiling rose as the case may be')
	(vi) Upto electric clock outlet.
	(e) Switches,
	(i) When measured separately from point wiring, the switches shall be described stating the type and rated capacity. Cover plates, if any, shall be included with the item.
	(ii) Switch plug combination, comprising socket outlet, switch and plug shall be described, and the type and rated capacity shall be stated.
	(e) When there is only one point on the distribution circuit (one way) the same shall be measured in two parts, one circuit wiring according to the definition of the circuit wiring and the other points according to the above definition for points.
	(f) The following shall be deemed to be included in the point wiring :-
	(i) Switch and ceiling rose of connector with special and suitable round block for neatly housing the connector as required;

	(ii) In the case of wall brackets, bulkhead fittings and similar fittings, cable as required up to the lamp holder;
	(iii) Bushed conduit or porcelain tubing when cables pass through walls etc.;
	(iv) Earth wire from 3-pin socket point to the common earth including connections to the earth pin of 3-pin socket outlet except the earth wire from the first tapping point of live wire to the sub-distribution board;
	(v) All wood or metal blocks, boards and boxes, sunk or surface type, with suitable covering, including those required, for mounting fan regulator but excluding those under the distribution board and main control switch
	(vi) All fixing accessories such as clips, nails, screws, phil plugs, rawl plugs, wooden plugs etc. as required.
	(vii) Joint for junction boxes and connecting the same as required and
	(viii) Connections to ceiling rose or connector, socket outlet, lamp holder, switch fan regulator, etc.
	(g) The mechanical protection provided to the wiring coming within 1.5 m. from floor level or up to switchboard shall be deemed to have been included in the item of work. Method of installation and making good the damages shall be described in the specification.
	(h) Wiring points shall be classified as follows :-
	(i) Short points not exceeding 3 m. in length.
	(ii) Medium points exceeding 3 m. but not exceeding 6 m. in length.
	(iii) Medium points exceeding 3 m. but not exceeding 6 m. in length.
	'.....'"
	Special points of length exceeding 10m in length as required.
	(i) The terms "Length per point" in point wiring in the case of fan points, light points and socket outlets shall mean the distance between the switch and ceiling rose, connector or back plate, lamp holder or socket-outlet point depending upon the fitting measurement along the run of wiring irrespective of the number of wires in the run. Separate measurement may be made where the switches and socket outlet points are located on the same board.
	(j) In case of boards with socket-outlet point only, the length shall mean the distance between the socket-outlet and the tapping point of live wire on the nearest switch board or junction box, as the case may be.
	(k) Any junction box provided for extending the wiring beyond the point referred to, shall not be treated as the nearest tapping point.
	(l) Special-points such as staircase lighting, group control, etc., shall be specified separately and so measured.
	(m) A light point controlled by two, Two-way switches shall be measured as two points from the fittings to switches on either side and classified according to the "length". Any extra light point in the same circuit shall be considered as given below in (n)
	(n) In case of points with more than one light point controlled by the same switch, such points shall be measured in parts; i.e. from the switch to the first light point classified as one point and for the subsequent point, the distance from the fitting to fitting shall be measured along the run of wiring classified and treated as equivalent to half the point so derived.
	(o) In case of call-bell/buzzer controlled by more than one push, the length of point shall be measured in
	(p) Where more than one call-bell/buzzer points are controlled by the same push, the length of the points

3	Circuit Wiring :-	
	(a) Length of wiring from the distribution board of sub-distribution board up to the tapping point of the first point, that is, up to first switch board shall be considered as circuit wiring The length of circuit wiring with two wires shall be measured from the distribution or sub-distribution board to the first switch board in the circuit irrespective of whether the neutral conductor goes into the switch box or not. The earth wire from the distribution or sub-distribution board up to the first tapping point shall be measured separately.	
	(b) In case of exclusive socket outlet circuits such as wiring points for power plugs, the length of points	
	(c) The lengths of sub-main, circuit wiring or any other type of wiring on linear basis shall include all	
4	Cables –	
	(a) Cables shall be classified according to their voltage, materials, size and type of insulation, armouring, etc. Each type of cable shall be described and measured separately.	
	(b) The length measured shall be actual length fixed or laid including connections up to switch for all cables other than paper-insulated, lead-covered cables and up to the entry point of cables en-box of PILC cables.	
	(c) Cables shall be described and given in running Meters. Terminal and joints boxes of various types shall be enumerated and measured separately according to their size and type.	
	(d) The mechanical protection for cables on walls or floors or underground shall be measured separately	
	(e) Manholes shall be described and enumerated separately.	
5	Power wiring shall be done in steel conduit system.	
The following Indian Standards may be referred to :- Chapter 1 to 8		
S.No.	Standards	Title Codes of Practice/ Guide
1	IS:732-1989	Code of practice for electrical wiring installation
2	IS:4648-1968	Guide for electrical layout in residential buildings.
3	IS:8061-1976	Code of practice for design, installation and maintenance of service lines upto and including 650 V.
4	IS:8884-1978	Code of practice for installation of electric bells and call system.
5	IS:5578-1985	Guide for marking of insulated conductor.
6	IS:11353-1985	Guide for uniform system of marking and identification of conductors and apparatus terminals.
7	IS:5728-1970	Guide for short circuit calculations.
8	IS:7752 (Part-1)-1975	Guide for improvement of power factor in consumer installation Low and medium supply voltage.
9	IS:10118(Part-1)-1982	Code of practice for selection, installation and maintenance of switch gear and control gear General.
10	IS:10118(Part-2)-1982	Code of practice for selection, installation and maintenance of switch gear and control gear selection.
11	IS:10118(Part-3)-1982	Code of practice for selection, installation and maintenance of switch gear and control gear installation.
12	IS:10118(Part-4)-1982	Code of practice for selection, installation and maintenance of switch gear and control gear maintenance.

13	IS:5216(Part-1)-1982	Guide for safety procedures and practices in electrical work General.
14	IS:4237-1983	General requirements for switch gear and control gear for voltages not exceeding 1000 V AC or 1200 V DC.
15	IS:6875(Part-1)-1973	Control switches (switching devices control and auxiliary circuits including contractor relays) for voltages upto and including 100 VAC and 1200 V DC : General requirements and tests.
16	IS:6875(Part-2)-1973	Control switches (switching devices for control and auxiliary circuits including contactor relays) for voltages upto and including 1000 V AC and 1200 V DC : Part 2 Push button and related control switches (Amendment 2).
17	IS:6875(Part-3)-1983	Control switches (switching devices for control and auxiliary circuits including contactor relays) for voltages upto and including 1000 V AC and 1200 V DC: Rotary control switches.
18	IS:2675-1983	Enclosed distribution fuse boards and cutouts for voltages not exceeding 1000V.
19	IS:8828-1978	Miniature air break circuit breakers for voltages not exceeding 1000 volt.
20	IS:13032-1991	Miniature circuit breaker boards for voltages upto and including 1000 volts AC.
21	IS:12610-1988	Residual current operated circuit breakers.
22	IS:2516(Part-1/Sec.1 1985)	Circuit breakers: Requirements and test voltages not exceeding 1000 V AC or 1200 V DC.
23	IS:8623(Part1)-1977	Factory built assemblies of switch gear and control gear for voltages upto and including 1000 V AC and 1200 V DC: General requirements.
24	IS:8623(Part-2)-1980	Factory built assemblies of switch-gear and control gear for voltages upto and including 100 V AC and 1200 V DC: Particular requirements for bus bar trunking system (bus ways).
25	IS:694-1990	PVC insulated cables for working voltages upto and including 1100 V/
26	IS:3964(Part-2)-1968	Recommended current ratings for cables PVC insulated light duty cables.
27	IS:1289(Part-1)-1984	Flexible cables for lifts and other flexible connections : Elastomer insulated cables.
28	IS:9537(Part-1)-1980	Conduits for electrical installations: General requirements.
29	IS:9537(Part-2)-1981	Conduits for electrical installations: Rigid steel conduits
30	IS:3480-1966	Flexible steel conduits for electrical wiring.
31	IS:2667-1988	Fittings for rigid steel conduits for electrical wiring.
32	IS:3837-1976	Accessories for rigid steel conduits for electrical wiring.
33	IS:9537(Part-4)-1983	Conduits for electrical installation : Pliable self recovering conduits for insulating materials.
34	IS:6946-1973	Flexible (pliable) non-metallic conduits for electrical installations.
35	IS:3419-1989	Fittings for rigid non-metallic conduits.
36	IS:5133(Part-1)-1969	Boxes for enclosure of electrical accessories: Steel and cast iron boxex.
37	IS:5133(Part-2)-1969	Boxes for enclosure of electrical accessories : Boxes made of insulating materials.
38	IS:2412-1975	Like clips for electrical wiring.

	39	IS:371-1979	Ceiling roses.
	40	IS:3854-1988	Switches for domestic and similar purposes.
	41	IS:4615-1968	Switch socket outlets (non-interlocking type).
	42	IS:4160-1967	Interlocking switch socket outlet.
	43	IS:1293-1988	Plugs and socket outlets of rated voltage upto and including 250 volts and rated current upto and including 16 Amperes.
	44	IS:2551-1982	Danger notice plates.
	45	IS:2448 (Part-1)-1963	Adhesive insulating tapes for electric purposes: Tapes with cotton textile subtraction.
	46	IS:4770-1991	Rubber gloves for electrical purposes.
	47	IS:5424-1969	Rubber mats for electrical purposes. (xv)
Note:- The above IS Codes shall be applicable with latest amendments if any.			

CHAPTER -1			
Wiring in surface /concealed rigid P.V.C. conduit system.			
S.No.	Description of Items	Unit	rate
1.1	Point Wiring in surface rigid P.V.C. conduit system with Flush type Accessories.		
	Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for :-		
1.1.1	Light Point/Fan Points.		
	a) Short point	Each	279.00
	b) Medium point	Each	505.00
	c) Long point	Each	774.00
1.1.2	3 Pin 6 Amp socket outlet on Separate Board		
	a) Short point	Each	288.00
	b) Medium point	Each	515.00
	c) Long point	Each	784.00
1.1.3	Call Bell / Buzzer Points		
	a) Short point	Each	285.00
	b) Medium point	Each	511.00
	c) Long point	Each	780.00
1.1.4	Twin Control light points		
	a) Short point	Each	287.00
	b) Medium point	Each	514.00
	c) Long point	Each	782.00
1.1.5	Point wiring including metallic switch box, sheet, switches, sockets for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board .	Each	128.00
1.1.6	Circuit Wiring		
	Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) of ISI marked suitable size including painting etc. as required as per specification		
	a) 2x2.5 Sq.mm.	meter	86.00
	b) 4x2.5 Sq.mm.	meter	112.00
	c) 6x2.5 Sq.mm.	meter	136.00
	d) 8x2.5 Sq.mm.	meter	160.00

S.No.	Description of Items	Unit	rate
1.2	Point Wiring in surface rigid P.V.C. conduit system with Modular		
	Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for :-		
1.2.1	<u>Light Point/Fan Points.</u>		
	a) Short point	Each	324.00
	b) Medium point	Each	551.00
	c) Long point	Each	820.00
1.2.2	<u>3 Pin 6 Amp socket outlet on Separate Board</u>		
	a) Short point	Each	369.00
	b) Medium point	Each	596.00
	c) Long point	Each	865.00
1.2.3	<u>Call Bell / Buzzer Points</u>		
	a) Short point	Each	327.00
	b) Medium point	Each	560.00
	c) Long point	Each	832.00
1.2.4	<u>Twin Control light points</u>		
	a) Short point	Each	324.00
	b) Medium point	Each	592.00
	c) Long point	Each	911.00
1.2.5	Point wiring including metallic switch box, sheet, switches, sockets for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. conduit (MMS) ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board .	Each	224.00
1.3	WIRING IN CONCEALED RIGID PVC CONDUIT (HEAVY DUTY) SYSTEM WITH FLUSH TYPE ACCESSORIES		
	Point wiring including metallic switch box, sheet, switches, sockets, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for :-		
1.3.1	<u>Light Point/Fan Points.</u>		
	a) Short point	Each	348.00
	b) Medium point	Each	643.00
	c) Long point	Each	982.00
1.3.2	<u>3 Pin 6 Amp socket outlet on Separate Board</u>		
	a) Short point	Each	358.00
	b) Medium point	Each	653.00
	c) Long point	Each	991.00

S.No.	Description of Items	Unit	rate
1.3.3	Call Bell / Buzzer Points		
	a) Short point	Each	355.00
	b) Medium point	Each	656.00
	c) Long point	Each	997.00
1.3.4	Twin Control light points		
	a) Short point	Each	391.00
	b) Medium point	Each	727.00
	c) Long point	Each	1116.00
1.3.5	Point wiring including metallic switch box, sheet, switches, sockets for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board .	Each	128.00
1.3.6	Circuit Wiring		
	Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) of ISI marked suitable size including painting etc. as required as per specification		
	a) 2x2.5 Sq.mm.	meter	101.00
	b) 4x2.5 Sq.mm.	meter	144.00
	c) 6x2.5 Sq.mm.	meter	184.00
	d) 8x2.5 Sq.mm.	meter	223.00
1.4	WIRING IN CONCEALED RIGID PVC CONDUIT (HEAVY DUTY) SYSTEM WITH MODULER ACCESSORIES		
	Point wiring including metallic switch box, sheet, switche, socket, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting etc. as required as per specification for :-		
1.4.1	Light Point/Fan Points.		
	a) Short point	Each	394.00
	b) Medium point	Each	689.00
	c) Long point	Each	1027.00
1.4.2	3 Pin 6 Amp socket outlet on Separate Board		
	a) Short point	Each	439.00
	b) Medium point	Each	734.00
	c) Long point	Each	1072.00
1.4.3	Call Bell / Buzzer Points		
	a) Short point	Each	396.00
	b) Medium point	Each	698.00
	c) Long point	Each	1039.00

S.No.	Description of Items	Unit	rate
1.4.4	Twin Control light points		
	a) Short point	Each	394.00
	b) Medium point	Each	730.00
	c) Long point	Each	1118.00
1.4.5	Point wiring including metallic switch box, sheet, switche, socket for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in concealed rigid P.V.C. conduit (HMS) ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board .	Each	224.00
1.5	POWER WIRING IN SURFACE RIGID P.V.C.CONDUIT (HEAVY DUTY) SYSTEM WITH FLUSH TYPE ACCESSORIES		
	Point wiring including metallic switch box, sheet, for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C.Conduit (HMS) ISI Marked of suitable size including painting etc. with 16 Amp. F.T. Switch & Socket / S.S.Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for :-		
1.5.1	On Separate Board		
	A. Short Point	Each	488.00
	B. Medium Point	Each	821.00
	C. Long Point	Each	1223.00
	D. Extra Long -I	Each	1536.00
	E. Extra Long -II	Each	2080.00
	F. Extra Long -III	Each	2526.00
1.5.2	Same board socket 16 Amp	Each	300.00
1.5.3	POWER WIRING IN SURFACE RIGID P.V.C.CONDUIT (HEAVY DUTY) SYSTEM WITH MODULAR ACCESSORIES		
	Point wiring including metallic switch box, sheet, for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C.Conduit (MMS) ISI Marked of suitable size including painting etc. with 16 Amp. F.T. Switch & Socket / S.S.Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for :-		
	On Separate Board		
	A. Short Point	Each	760.00
	B. Medium Point	Each	1094.00
	C. Long Point	Each	1496.00
	D. Extra Long -I	Each	1810.00
	E. Extra Long -II	Each	2353.00
	F. Extra Long -III	Each	2799.00
1.5.4	Same board socket 16 Amp	Each	560.00

CHAPTER - 2			
Wiring in surface /concealed rigid Steel conduit system.			
S.No.	Descripton of Items	Unit	Rate
2.1	Wiring in surface rigid steel conduit system with Flush Type Accessories.		
	Point wiring including metallic switch box, sheet, switche, socket, lamp holders/ceiling roses etc. with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in surface rigid steel conduit ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting, etc. as required as per specification for :-		
2.1.1	Light Point/Fan Points.		
	a) Short point	Each	370.00
	b) Medium point	Each	725.00
	c) Long point	Each	1142.00
2.1.2	3 Pin 6 Amp socket outlet on Separate Board		
	a) Short point	Each	380.00
	b) Medium point	Each	734.00
	c) Long point	Each	1153.00
2.1.3	Call Bell / Buzzer Points		
	a) Short point	Each	377.00
	b) Medium point	Each	737.00
	c) Long point	Each	1159.00
2.1.4	Twin Control light points		
	a) Short point	Each	414.00
	b) Medium point	Each	809.00
	c) Long point	Each	1277.00
2.1.5	Point wiring including metallic switch box, sheet, switche, socket for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in surface rigid steel conduit ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board	Each	146.00
2.1.6	Circuit Wiring		
	Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in surface rigid steel conduit of ISI marked suitable size including painting etc. as required as per specification		
	a) 2x2.5 Sq.mm.	meter	156.00
	b) 4x2.5 Sq.mm.	meter	200.00
	c) 6x2.5 Sq.mm.	meter	238.00
	d) 8x2.5 Sq.mm.	meter	277.00

S.No.	Descripton of Items	Unit	Rate
2.2	WIRING IN SURFACE RIGID STEEL CONDUIT SYSTEM WITH MODULAR ACCESSORIES		
	Point wiring including metallic switch box, sheet, switche, socket, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in surface rigid steel conduit ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting, etc. as required as per specification for :-		
2.2.1	Light Point/Fan Points.		
	a) Short point	Each	416.00
	b) Medium point	Each	771.00
	c) Long point	Each	1188.00
2.2.2	3 Pin 6 Amp socket outlet on Separate Board		
	a) Short point	Each	461.00
	b) Medium point	Each	815.00
	c) Long point	Each	1233.00
2.2.3	Call Bell / Buzzer Points		
	a) Short point	Each	419.00
	b) Medium point	Each	780.00
	c) Long point	Each	1200.00
2.2.4	Twin Control light points		
	a) Short point	Each	452.00
	b) Medium point	Each	848.00
	c) Long point	Each	1316.00
2.2.5	Point wiring including metallic switch box, sheet, switche, socket for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in surface rigid steel conduit ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board	Each	224.00
2.3	WIRING IN CONCEALED RIGID STEEL CONDUIT SYSTEM WITH FLUSH TYPE ACCESSORIES		
	Point wiring including metallic switch box, sheet, switche, socket, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid steel conduit ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting, etc. as required as per specification for :-		
2.3.1	Light Point/Fan Points.		
	a) Short point	Each	440.00
	b) Medium point	Each	862.00
	c) Long point	Each	1350.00
2.3.2	3 Pin 6 Amp socket outlet on Separate Board		
	a) Short point	Each	450.00
	b) Medium point	Each	872.00
	c) Long point	Each	1360.00

S.No.	Descripton of Items	Unit	Rate
2.3.3	Call Bell / Buzzer Points		
	a) Short point	Each	446.00
	b) Medium point	Each	875.00
	c) Long point	Each	1366.00
2.3.4	Twin Control light points		
	a) Short point	Each	483.00
	b) Medium point	Each	947.00
	c) Long point	Each	1484.00
2.3.5	Point wiring including metallic switch box, sheet, switche, socket for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid steel conduit ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board	Each	128.00
2.3.6	Circuit Wiring		
	Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid steel conduit of ISI marked suitable size including painting etc. as required as per specification		
	a) 2x2.5 Sq.mm.	meter	157.00
	b) 4x2.5 Sq.mm.	meter	201.00
	c) 6x2.5 Sq.mm.	meter	240.00
	d) 8x2.5 Sq.mm.	meter	280.00
2.4	WIRING IN CONCEALED RIGID STEEL CONDUIT SYSTEM WITH MODULAR ACCESSORIES		
	Point wiring including metallic switch box, sheet, switche, socket, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid steel conduit ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit including painting, etc. as required as per specification for :-		
2.4.1	Light Point/Fan Points.		
	a) Short point	Each	486.00
	b) Medium point	Each	908.00
	c) Long point	Each	1396.00
2.4.2	3 Pin 6 Amp socket outlet on Separate Board		
	a) Short point	Each	531.00
	b) Medium point	Each	953.00
	c) Long point	Each	1441.00
2.4.3	Call Bell / Buzzer Points		
	a) Short point	Each	488.00
	b) Medium point	Each	917.00
	c) Long point	Each	1408.00
2.4.4	Twin Control light points		
	a) Short point	Each	486.00
	b) Medium point	Each	949.00
	c) Long point	Each	1487.00

S.No.	Descripton of Items	Unit	Rate
2.4.5	Point wiring including metallic switch box, sheet, switche, socket) for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid steel conduit ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit with required materials as per specification on same board	Each	224.00
2.5	POWER WIRING IN SURFACE RIGID STEEL CONDUIT SYSTEM WITH FLUSH TYPE ACCESSORIES		
	Point wiring including metallic switch box, sheet for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid Steel Conduit ISI Marked of suitable size including painting etc. with 16 Amp. Switch & Socket / S.S.Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for :-		
2.5.1	On Separate Board		
	A. Short Point	Each	579.00
	B. Medium Point	Each	1041.00
	C. Long Point	Each	1591.00
	D. Extra Long -I	Each	2020.00
	E. Extra Long -II	Each	2647.00
	F. Extra Long -III	Each	3200.00
2.5.2	Same board socket 16 Amp	Each	183.00
2.5.3	POWER WIRING IN SURFACE RIGID STEEL CONDUIT SYSTEM WITH MODULAR ACCESSORIES		
	Point wiring including metallic switch box, sheet for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid Steel Conduit ISI Marked of suitable size including painting etc. with 16 Amp. Switch & Socket / S.S.Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for :-		
	On Separate Board		
	A. Short Point	Each	852.00
	B. Medium Point	Each	1314.00
	C. Long Point	Each	1865.00
	D. Extra Long -I	Each	2292.00
	E. Extra Long -II	Each	2920.00
	F. Extra Long -III	Each	3473.00
2.5.4	Same board socket 16 Amp	Each	478.00

S.No.	Descripton of Items	Unit	Rate
2.5.5	POWER WIRING IN CONCEALED RIGID STEEL CONDUIT SYSTEM WITH FLUSH TYPE ACCESSORIES		
	Point wiring including metallic switch box, sheet for 3 Pin 16 Amp. Socket Outlet Point with 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid Steel Conduit ISI Marked of suitable size including painting etc. with 16 Amp. Switch & Socket / S.S.Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for :-		
	On Separate Board		
	A. Short Point	Each	618.00
	B. Medium Point	Each	1118.00
	C. Long Point	Each	1716.00
	D. Extra Long -I	Each	2167.00
	E. Extra Long -II	Each	2578.00
	F. Extra Long -III	Each	3017.00
2.5.6	Same board socket 16 Amp	Each	183.00
2.5.7	POWER WIRING IN CONCEALED RIGID STEEL CONDUIT SYSTEM WITH MODULAR ACCESSORIES		
	Point wiring including metallic switch box, sheet for 3 Pin 16 Amp. Socket Outlet Point with 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Concealed rigid Steel Conduit ISI Marked of suitable size including painting etc. with 16 Amp. Switch & Socket / S.S.Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside conduit as per specification for :-		
	On Separate Board		
	A. Short Point	Each	891.00
	B. Medium Point	Each	1392.00
	C. Long Point	Each	1989.00
	D. Extra Long -I	Each	2440.00
	E. Extra Long -II	Each	2851.00
	F. Extra Long -III	Each	3291.00
2.5.8	Same board socket 16 Amp	Each	478.00
2.6	SUPPLYING AND FIXING RIGID STEEL CONDUIT FOR SURFACE CONDUIT SYSTEM		
	Supplying and fixing rigid steel conduit ISI marked alongwith the accessories on surface including painting etc. as required		
1	H.G. Conduit 20 mm, wall thickness-1.6mm	meter	94.00
2	H.G. Conduit 25 mm, wall thickness-1.6mm	meter	104.00
3	H.G. Conduit 32 mm, wall thickness-1.6mm	meter	113.00
4	H.G. Conduit 40 mm, wall thickness-2.0mm	meter	133.00
5	H.G. Conduit 50 mm, wall thickness-2.0mm	meter	172.00

S.No.	Descripton of Items	Unit	Rate
2.7	SUPPLYING AND FIXING RIGID STEEL CONDUIT FOR CONCEALED CONDUIT SYSTEM		
	Supplying and fixing rigid steel conduit ISI marked alongwith the accessories in concealed system including cutting the wall and plastering & repainting the wall with matching colour to bring in its original condition as required		
1	H.G. Conduit 20 mm, wall thickness-1.6mm	meter	115.00
2	H.G. Conduit 25 mm, wall thickness-1.6mm	meter	126.00
3	H.G. Conduit 32 mm, wall thickness-1.6mm	meter	134.00
4	H.G. Conduit 40 mm, wall thickness-2.0mm	meter	154.00
5	H.G. Conduit 50 mm, wall thickness-2.0mm	meter	193.00
2.8	METALLIC SWITCH BOXES		
	Supplying and fixing factory fabricated hot dip galvanised switch box for normal flush type accessories of minimum 1.2 mm (18 swg gauge) thickness with earth terminal stud with nut and washer, with 3 mm thick synthetic phenollic resin bonded laminated sheet conforming to grade P-I of IS:2036-1974 on surface / concealed including painting etc. as required as per specification:		
1	MSBox 100 mm X 100 mm X60mm deep	Each	72.00
2	MS Box 200 mm X 150 mm X 60 mm Deep	Each	118.00
3	MS Box 180 mm X 100 mm X 60 mm Deep	Each	90.00
4	MS Box 200 mm X 125 mm X 60 mm Deep	Each	113.00
5	MS Box 200 mm X 250 mm X 60 mm Deep	Each	156.00
6	MS Box 250 mm X 300 mm X 60 mm Deep	Each	201.00
7	MS Box 200mm X 300 mm X 60 mm Deep	Each	175.00
2.9	MODULAR SWITCH BOXES		
	Supplying and fixing of approved make modular type metal box with modular frame/ base plate and cover plate including fixing in concealed / surface excluding switch,socket etc. as required for:-		
1	1 Or 2 Module	Each	90.00
2	4 Module	Each	153.00
3	6 Module	Each	155.00
4	8 Module	Each	180.00
5	12 Module	Each	228.00

CHAPTER -3			
Wiring in surface rigid P.V.C. casing capping system			
S.No.	Description of Items	Unit	Rate
3.1	WIRING IN SURFACE RIGID PVC CASING AND CAPPING SYSTEM WITH FLUSH TYPE ACCESSORIES		
	Point wiring including metallic switch box, sheet, switch, socket, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. CASING AND CAPPING ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside casing & capping including painting etc. as required as per specification for :-		
3.1.1	Light Point/Fan Points.		
1	a) Short point	Each	240.00
2	b) Medium point	Each	426.00
3	c) Long point	Each	647.00
3.1.2	3 Pin 6 Amp socket outlet on Separate Board		
1	a) Short point	Each	250.00
2	b) Medium point	Each	435.00
3	c) Long point	Each	657.00
3.1.3	Call Bell / Buzzer Points		
1	a) Short point	Each	246.00
2	b) Medium point	Each	432.00
3	c) Long point	Each	653.00
3.1.4	Twin Control light points		
1	a) Short point	Each	283.00
2	b) Medium point	Each	504.00
3	c) Long point	Each	772.00
3.1.5	Point wiring including metallic switch box, sheet, switch, socket for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. CASING AND CAPPING ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside casing & capping with required materials as per specification on same board	Each	128.00
3.1.6	Circuit Wiring		
	Wiring for circuit wiring with PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. CASING AND CAPPING of ISI marked suitable size including painting etc. as required as per specification		
1	a) 2x2.5 Sq.mm.	meter	78.00
2	b) 4x2.5 Sq.mm.	meter	122.00
3	c) 6x2.5 Sq.mm.	meter	161.00
4	d) 8x2.5 Sq.mm.	meter	200.00

S.No.	Description of Items	Unit	Rate
3.2	WIRING IN SURFACE RIGID PVC CASING AND CAPPING SYSTEM WITH MODULAR ACCESSORIES		
	Point wiring including metallic switch box, sheet, switch, socket, lamp holders/ceiling roses etc with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. CASING AND CAPPING ISI Marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside casing & capping including painting etc. as required as per specification for :-		
3.2.1	Light Point/Fan Points.		
1	a) Short point	Each	286.00
2	b) Medium point	Each	472.00
3	c) Long point	Each	693.00
3.2.2	3 Pin 6 Amp socket outlet on Separate Board		
1	a) Short point	Each	331.00
2	b) Medium point	Each	517.00
3	c) Long point	Each	738.00
3.2.3	Call Bell / Buzzer Points		
1	a) Short point	Each	288.00
2	b) Medium point	Each	474.00
3	c) Long point	Each	695.00
3.2.4	Twin Control light points		
1	a) Short point	Each	286.00
2	b) Medium point	Each	506.00
3	c) Long point	Each	774.00
3.2.5	Point wiring including metallic switch box, sheet, switch, socket for 3 pin 6 Amp. Socket outlet point with 1.5 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. CASING AND CAPPING ISI marked of suitable size and 1.5 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside casing & capping with required materials as per specification on same board	Each	224.00
3.3	Power Wiring in PVC Casing Capping System with Flush Type Accessories		
	Point wiring including metallic switch box, sheet for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C. CASING AND CAPPING ISI Marked of suitable size including painting etc. with 16 Amp. F.T. Switch & Socket / S.S. Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside capping as per specification for :-		
3.3.1	On Separate Board		
	A. Short Point	Each	448.00
	B. Medium Point	Each	742.00
	C. Long Point	Each	1096.00

S.No.	Description of Items	Unit	Rate
	D. Extra Long -I	Each	1371.00
	E. Extra Long -II	Each	1808.00
	F. Extra Long -III	Each	2300.00
3.3.2	Same board socket 16 Amps	Each	183.00
3.3.3	Power Wiring in PVC Casing Capping System with Mobular Accessories		
	Point wiring including metallic switch box, sheet for 3 Pin 16 Amp. Socket Outlet Point With 4 Sq. mm. PVC insulated cable FR with copper multi strand conductor ISI marked in Surface rigid P.V.C.CASING AND CAPPING ISI Marked of suitable size including painting etc. with 16 Amp. F.T. Switch & Socket / S.S.Combined 16 Amp. of ISI Marked and 4 Sq. mm. PVC insulated copper earth continuity conductor of green colour inside capping as per specification for :-		
	On Separate Board		
	A. Short Point	Each	721.00
	B. Medium Point	Each	1015.00
	C. Long Point	Each	1369.00
	D. Extra Long -I	Each	1644.00
	E. Extra Long -II	Each	2032.00
	F. Extra Long -III	Each	2495.00
3.3.4	Same board socket 16 Amps	Each	478.00

CHAPTER - 4			
Wiring in existing/conduit/P.V.C. casing capping system			
S.No.	Description of Items	Unit	Rate
4.1	Point Wiring in Existing Surface rigid Conduit System with Flush Type Accessories.		
	Point wiring (excluding metallic switch box, but including sheet, switches, sockets,lamp holders/ceiling roses etc) with 1.5 Sq. mm. PVC insulated cable with Copper Stranded Conductor ISI marked in existing surface rigid conduit ISI Marked of suitable size with PVC insulated copper earth continuity conductor of green colour as per specification including earthing of regulator etc as required for :-		
4.1.1	Light Point / Fan Points.		
1	a) Short point	Each	183.00
2	b) Medium point	Each	328.00
3	c) Long point	Each	497.00
4.1.2	3 Pin 6 Amp socket outlet on Serarate Board		
1	a) Short point	Each	193.00
2	b) Medium point	Each	337.00
3	c) Long point	Each	507.00
4.1.3	Call Bell / Buzzer Points		
1	a) Short point	Each	189.00
2	b) Medium point	Each	334.00
3	c) Long point	Each	504.00
4.1.4	Twin Control light points		
1	a) Short point	Each	226.00
2	b) Medium point	Each	406.00
3	c) Long point	Each	622.00
4.2	POINT WIRING IN EXISTING SURFACE RIGID CONDUIT SYSTEM WITH MODULAR ACCESSORIES		
	Point wiring (excluding metallic switch box, but including sheet, switches, sockets,lamp holders/ceiling roses etc) with 1.5 Sq. mm. PVC insulated cable with Copper Stranded Conductor ISI marked in existing surface rigid conduit ISI Marked of suitable size with PVC insulated copper earth continuity conductor of green colour as per specification including earthing of regulator etc as required for :-		
4.2.1	Light Point / Fan Points.		
1	a) Short point	Each	236.00
2	b) Medium point	Each	381.00
3	c) Long point	Each	551.00
4.2.2	3 Pin 6 Amp socket outlet on Serarate Board		
1	a) Short point	Each	281.00
2	b) Medium point	Each	426.00
3	c) Long point	Each	596.00

S.No.	Description of Items	Unit	Rate
4.2.3	Call Bell / Buzzer Points		
1	a) Short point	Each	239.00
2	b) Medium point	Each	383.00
3	c) Long point	Each	553.00
4.2.4	Twin Control light points		
1	a) Short point	Each	236.00
2	b) Medium point	Each	416.00
3	c) Long point	Each	632.00
4.3	CIRCUIT WIRING IN EXISTING CONDUIT / PVC CASING CAPPING		
	Supplying and drawing single core PVC insulated cable FR with copper multi strand conductor ISI marked in existing rigid conduit in surface or concealed as per specification.		
4.3.1	1.5 Sq mm cable		
1	1 X 1.5 sq mm	meter	23.00
2	2 X 1.5 sq mm	meter	45.00
3	3 X 1.5 sq mm	meter	68.00
4	4 X 1.5 sq mm	meter	91.00
5	5 X 1.5 sq mm	meter	114.00
6	6 X 1.5 sq mm	meter	136.00
7	7 X 1.5 sq mm	meter	159.00
8	8 X 1.5 sq mm	meter	182.00
9	9 X 1.5 sq mm	meter	204.00
10	10 X 1.5 sq mm	meter	227.00
4.3.2	2.5 Sq mm cable		
1	1 X 2.5 sq mm	meter	30.00
2	2 X 2.5 sq mm	meter	61.00
3	3 X 2.5 sq mm	meter	91.00
4	4 X 2.5 sq mm	meter	121.00
5	5 X 2.5 sq mm	meter	151.00
6	6 X 2.5 sq mm	meter	182.00
7	7 X 2.5 sq mm	meter	212.00
8	8 X 2.5 sq mm	meter	242.00
9	9 X 2.5 sq mm	meter	272.00
10	10 X 2.5 sq mm	meter	303.00
4.3.3	4.00 Sq mm cable		
1	1 X 4.00 sq mm	meter	39.00
2	2 X 4.00 sq mm	meter	79.00
3	3 X 4.00 sq mm	meter	118.00
4	4 X 4.00 sq mm	meter	157.00
5	5 X 4.00 sq mm	meter	197.00
6	6 X 4.00 sq mm	meter	236.00
7	7 X 4.00 sq mm	meter	275.00
8	8 X 4.00 sq mm	meter	315.00
9	9 X 4.00 sq mm	meter	354.00
10	10 X 4.00 sq mm	meter	393.00

S.No.	Description of Items	Unit	Rate
4.3.4	6.00 Sq mm cable		
1	1 X 6.00 sq mm	meter	55.00
2	2 X 6.00 sq mm	meter	109.00
3	3 X 6.00 sq mm	meter	164.00
4	4 X 6.00 sq mm	meter	219.00
5	5 X 6.00 sq mm	meter	274.00
6	6 X 6.00 sq mm	meter	328.00
7	7 X 6.00 sq mm	meter	383.00
8	8 X 6.00 sq mm	meter	438.00
9	9 X 6.00 sq mm	meter	493.00
10	10 X 6.00 sq mm	meter	548.00

CHAPTER - 5

Sub Mains in surface/concealed rigid steel conduit system.

S.No.	Description of Items	Unit	Rate
5.1	SUB MAINS IN SURFACE RIGID STEEL CONDUIT IN COPPER CONDUCTOR		
	Wiring for sub-mains with PVC insulated cable FR with copper multi strand conductor ISI marked in surface rigid steel ISI marked conduit of suitable size(conduit included) including connection painting etc ,as required as per specification		
5.1.1	2 WIRE SUB MAIN		
1	2.5 sq mm cable in 20 mm conduit	meter	166.00
2	4.0 sq mm cable in 20 mm conduit	meter	185.00
3	6.0 sq mm cable in 25 mm conduit	meter	230.00
4	10.0 sq mm cable in 25 mm conduit	meter	306.00
5	16.0 sq mm cable in 25 mm conduit	meter	414.00
6	25.0 sq mm cable in 32 mm conduit	meter	593.00
7	35.0 sq mm cable in 40 mm conduit	meter	767.00
8	50.0 sq mm cable in 50 mm conduit	meter	1125.00
5.1.2	3 WIRE SUB MAIN		
1	2.5 sq mm cable in 20 mm conduit	meter	183.00
2	4.0 sq mm cable in 20 mm conduit	meter	216.00
3	6.0 sq mm cable in 25 mm conduit	meter	278.00
4	10.0 sq mm cable in 25 mm conduit	meter	392.00
5	16.0 sq mm cable in 25 mm conduit	meter	552.00
6	25.0 sq mm cable in 32 mm conduit	meter	816.00
7	35.0 sq mm cable in 40 mm conduit	meter	1067.00
8	50.0 sq mm cable in 50 mm conduit	meter	1583.00
5.1.3	3 1/2 WIRE SUB MAIN		
1	3 x 2.5 + 1 x 1.5 sq mm cable in 20 mm conduit	meter	202.00
2	3 x 4.0 + 1 x 2.5 sq mm cable in 25 mm conduit	meter	251.00
3	3 x 6.0 + 1 x 4.0 sq mm cable in 25 mm conduit	meter	311.00
4	3 x 10.0 + 1 x 6.0 sq mm cable in 25 mm conduit	meter	441.00
5	3 x 16.0 + 1 x 10.0 sq mm cable in 32 mm conduit	meter	647.00
6	3 x 25.0 + 1 x 16.0 sq mm cable in 50 mm conduit	meter	410.00
7	3 x 35.0 + 1 x 16.0 sq mm cable in 50 mm conduit	meter	1245.00
5.1.4	4 WIRE SUB MAIN		
1	2.5 sq mm cable in 20 mm conduit	meter	210.00
2	4.0 sq mm cable in 25 mm conduit	meter	261.00
3	6.0 sq mm cable in 25 mm conduit	meter	327.00
4	10.0 sq mm cable in 25 mm conduit	meter	479.00
5	16.0 sq mm cable in 32 mm conduit	meter	699.00
6	25.0 sq mm cable in 40 mm conduit	meter	1061.00
7	35.0 sq mm cable in 50 mm conduit	meter	1406.00

S.No.	Description of Items	Unit	Rate
5.2	SUB-MAIN IN CONCEALED RIGID STEEL CONDUIT IN COPPER CONDUCTOR		
	Wiring for sub-mains with PVC insulated cable FR with copper multi strand conductor ISI marked in recessed / concealed rigid steel ISI marked conduit of suitable size (Conduit included) including connection painting etc, as required as per specification		
5.2.1	2 WIRE SUB-MAIN		
1	2.5 sq mm cable in 20 mm conduit	meter	176.00
2	4.0 sq mm cable in 20 mm conduit	meter	196.00
3	6.0 sq mm cable in 25 mm conduit	meter	241.00
4	10.0 sq mm cable in 25 mm conduit	meter	317.00
5	16.0 sq mm cable in 25 mm conduit	meter	422.00
6	25.0 sq mm cable in 32 mm conduit	meter	601.00
7	35.0 sq mm cable in 40 mm conduit	meter	775.00
8	50.0 sq mm cable in 50 mm conduit	meter	1132.00
5.2.2	3 WIRE SUB-MAIN		
1	2.5 sq mm cable in 20 mm conduit	meter	197.00
2	4.0 sq mm cable in 20 mm conduit	meter	227.00
3	6.0 sq mm cable in 25 mm conduit	meter	288.00
4	10.0 sq mm cable in 25 mm conduit	meter	402.00
5	16.0 sq mm cable in 25 mm conduit	meter	560.00
6	25.0 sq mm cable in 32 mm conduit	meter	824.00
7	35.0 sq mm cable in 40 mm conduit	meter	1074.00
8	50.0 sq mm cable in 50 mm conduit	meter	1590.00
5.2.3	3 1/2 WIRE SUB-MAIN		
1	3 x 2.5 + 1 x 1.5 sq mm cable in 20 mm conduit	meter	210.00
2	3 x 4.0 + 1 x 2.5 sq mm cable in 25 mm conduit	meter	259.00
3	3 x 6.0 + 1 x 4.0 sq mm cable in 25 mm conduit	meter	319.00
4	3 x 10.0 + 1 x 6.0 sq mm cable in 25 mm conduit	meter	449.00
5	3 x 16.0 + 1 x 10.0 sq mm cable in 32 mm conduit	meter	654.00
6	3 x 25.0 + 1 x 16.0 sq mm cable in 50 mm conduit	meter	418.00
7	3 x 35.0 + 1 x 16.0 sq mm cable in 50 mm conduit	meter	1253.00
5.2.4	4 WIRE SUB-MAIN		
1	2.5 sq mm cable in 20 mm conduit	meter	218.00
2	4.0 sq mm cable in 20 mm conduit	meter	269.00
3	6.0 sq mm cable in 25 mm conduit	meter	335.00
4	10.0 sq mm cable in 25 mm conduit	meter	487.00
5	16.0 sq mm cable in 25 mm conduit	meter	707.00
6	25.0 sq mm cable in 32 mm conduit	meter	1069.00
7	35.0 sq mm cable in 40 mm conduit	meter	1414.00

CHAPTER - 6

Rewiring in existing conduit.

S.No.	Description of Items	Unit	RATE
6	REWIRING IN EXISTING RIGID STEEL / PVC NON METALLIC CONDUIT WITH COPPER CONDUCTOR		
	Rewiring in existing surface /concealed rigid steel /PVC non metallic conduit with PVC insulated cable FR with copper multi strand conductor ISI marked and other materials as required including replacement of worn-out /damaged/missing material, painting etc. complete as per specification. This shall include all work, arrangement required for wiring but shall exclude switch, ceiling rose fitting etc.		
6.1	Light /Fan/3Pin 6AMP socket outlet on separate board / Call Bell/ Buzzer Points :-		
1	Short Point	Each	146.00
2	Medium Point	Each	291.00
3	Long Point	Each	461.00
6.2	Twin Control Light Point		
1	Short Point	Each	181.00
2	Medium Point	Each	361.00
3	Long Point	Each	577.00
6.3	Circuit Wiring		
1	2 X 1.5 Sq mm.	meter	25.00
2	2 X 2.5 Sq mm.	meter	68.00
6.4	3 Pin 5 Amp Socket Outlet Point on Same Board		
1	3 Pin 5 Amp Socket Outlet Point on Same Board with flush type accessires	Each	161.00
2	3 Pin 5 Amp Socket Outlet Point on Same Board with modular accessires	Each	224.00
6.5	2 WIRE SUB-MAIN		
1	2 X 2.5 Sq mm	meter	52.00
2	2 X 4.00 Sq mm	meter	70.00
3	2 X 6.00 Sq mm	meter	101.00
4	2 X 10.0 Sq mm	meter	172.00
5	2 X 16.00 Sq mm	meter	271.00
6	2 X 25.00 Sq mm	meter	430.00
7	2 X 35.00 Sq mm	meter	572.00
8	2 X 50.00 Sq mm	meter	867.00
6.6	3 WIRE SUB-MAIN		
1	3 X 2.5 Sq mm	meter	71.00
2	3 X 4.0 Sq mm	meter	99.00
3	3 X 6.0 Sq mm	meter	145.00
4	3 X 10.0 Sq mm	meter	252.00
5	3 X 16.0 Sq mm	meter	400.00
6	3 X 25.0 Sq mm	meter	638.00
7	3 X 35.0 Sq mm	meter	851.00

S.No.	Description of Items	Unit	RATE
8	3 X 50.0 Sq mm	meter	1295.00
6.7	3 1/2 WIRE SUB-MAIN		
1	a) 3 x 2.5 + 1 x 1.5 sq mm	meter	83.00
2	b) 3 x 4.0 + 1 x 2.5 sq mm	meter	118.00
3	c) 3 x 6.0 + 1 x 4.0 sq mm	meter	174.00
4	d) 3 x 10.0 + 1 x 6.0 sq mm	meter	296.00
5	e) 3 x 16.0 + 1 x 10.0 sq mm	meter	479.00
6	f) 3 x 25.0 + 1 x 16.0 sq mm	meter	200.00
7	g) 3 x 35.0 + 1 x 16.0 sq mm	meter	980.00
6.8	4 WIRE SUB-MAIN		
1	4 X 2.5 sq mm	meter	91.00
2	4 X 4.0 sq mm	meter	127.00
3	4 X 6.0 sq mm	meter	190.00
4	4 X 10.0 sq mm	meter	331.00
5	4 X 16.0 sq mm	meter	528.00
6	4 X 25.0 sq mm	meter	846.00
7	4 X 35.0 sq mm	meter	1130.00
8	4 X 50.00 sq mm	meter	1722.00

CHAPTER - 7			
Control switch gear/Bus bar.			
S.No.	Description of Items	Unit	Rate
7.1	Supplying of ISI Marked Switch Fuse Unit (rewirable type) triple pole with neutral link ,415 Volt having conduit / cable gland entry with two earthing terminals confirming to IS : 13947(Part I & III) .		
1	16 Amps.	Each	1065.00
2	32 Amps.	Each	1478.00
3	63 Amps.	Each	3096.00
4	100 Amps.	Each	5769.00
5	200 Amps.	Each	9360.00
6	320 Amps.	Each	12929.00
7.2	Supplying of ISI Marked iron clad / metal clad triple pole and neutral switch fuse unit with two earthing terminals & without HRC fuses --		
1	16 Amps. 415/500 Volts.	Each	972.00
2	32 Amps. 415/500 Volts.	Each	1358.00
3	63 Amps. 415/500 Volts.	Each	2906.00
4	100 Amps. 415/500 Volts.	Each	5427.00
5	200 Amps. 415/500 Volts.	Each	7757.00
6	400 Amps. 415/500 Volts.	Each	14760.00
7	500 Amps. 415/500 Volts.	Each	17927.00
8	600 Amps. 415/500 Volts.	Each	21403.00
7.3	Supplying of ISI Marked Change over switches in sheet encloser confirming to IS : 4064 / IS : 13947 (part I & III) with side handle operated 4 pole with two earthing terminals		
1	16 Amps. 415/500 Volts. (on load)	Each	1717.00
2	32 Amps. 415/500 Volts.(on load)	Each	2064.00
3	63 Amps. 415/500 Volts.(on load)	Each	4199.00
4	100 Amps. 415/500 Volts.(on load)	Each	8447.00
5	200 Amps. 415/500 Volts.(off load)	Each	12087.00
6	320 Amps. 415/500 Volts.(off load)	Each	15376.00
7	400 Amps. 415/500 Volts.(off load)	Each	20052.00
8	630 Amps. 415/500 Volts.(off load)	Each	30774.00
9	800 Amps. 415/500 Volts.(off load)	Each	38368.00
7.4	Supplying of ISI Marked On-Load Change over switches panel mounting type confirming to IS : 13947 (part I & III) with front operated 4 pole, 415 V with two earthing terminals if required.		
1	40 Amps. (open - execution)	Each	3770.00
2	63 Amps. (open - execution)	Each	3971.00
3	100 Amps. (open - execution)	Each	5068.00
4	125 Amps. .(open - execution)	Each	7578.00
5	160 Amps. (open - execution)	Each	7846.00
6	200 Amps. (open - execution)	Each	9653.00
7	250 Amps. (open - execution)	Each	13798.00
8	320 Amps. .(open - execution)	Each	14591.00
9	400 Amps. .(open - execution)	Each	21251.00

S.No.	Description of Items	Unit	Rate
10	630 Amps. .(open - execution)	Each	24592.00
11	800 Amps. .(open - execution)	Each	35424.00
12	40 Amps. (With enclosure)	Each	5101.00
13	63 Amps. (With enclosure)	Each	5530.00
14	100 Amps.(With enclosure)	Each	6568.00
15	125 Amps. .(With enclosure)	Each	9268.00
16	160 Amps. .(With enclosure)	Each	11261.00
17	200 Amps. .(With enclosure)	Each	12424.00
18	320 Amps. .(With enclosure)	Each	18497.00
19	400 Amps. .(With enclosure)	Each	25575.00
20	630 Amps. .(With enclosure)	Each	29351.00
21	800 Amps. .(With enclosure)	Each	41655.00
7.5	Supplying of ISI Marked Automatic Transfer Switches (ATS) confirming to IEC : 60947-1 & IEC : 60947-6-1 with automatic inbuilt time delay 4 pole, 415 V with two earthing terminals if		
1	100 Amp (open execution)	Each	29758.00
2	160 Amp (open execution)	Each	38515.00
3	200 Amp (open execution)	Each	47620.00
4	315 Amp (open execution)	Each	56366.00
5	400 Amp (open execution)	Each	69066.00
6	630 Amp (open execution)	Each	85266.00
7	100 Amp (with enclosure)	Each	32567.00
8	160 Amp (with enclosure)	Each	41318.00
9	200 Amp (with enclosure)	Each	50423.00
10	315 Amp (with enclosure)	Each	59180.00
11	400 Amp (with enclosure)	Each	74499.00
12	630 Amp (with enclosure)	Each	90693.00
7.6	Supplying of Two Way Centre off MCB Changeover Switch confirming to IS:13947 (part III) / IEC : 60947-3, 2/4 pole ,AC 240 / 415 Volt, 50 Hz		
1	25 Amps, Double Pole (DP)	Each	837.00
2	40 Amps, Double Pole (DP)	Each	1135.00
3	25 Amps, Four Pole (FP)	Each	1461.00
4	40 Amps, Four Pole (FP)	Each	2216.00
7.7	Supplying of ISI Marked Switch Disconnecter Fuse (SDF), open execution (Panel mounting cubicle type) confirming to IS:13947 (part I & III) 2 pole , AC -23A ,50 Hz , 415 Volt with 2 HBC fuses complete.		
1	32 Amps	Each	1570.00
2	63 Amps	Each	2097.00
3	100 Amps	Each	3960.00
4	125 Amps	Each	4362.00

S.No.	Description of Items	Unit	Rate
7.8	Supplying of ISI Marked Switch Disconnecter Fuse (SDF), in sheet steel enclosure (Panel mounting cubicle type) confirming to IS:13947 (part I & III) 2 pole , AC -23A ,50 Hz , 415 Volt with 2 HBC fuses complete.		
1	32 Amps	Each	2086.00
2	63 Amps	Each	2602.00
3	100 Amps	Each	4498.00
4	125 Amps	Each	4900.00
7.9	Supplying of ISI Marked Switch Disconnecter Fuse (SDF), open execution (Panel mounting cubicle type) confirming to IS:13947 (part I & III) 3 pole and neutral , AC -23A ,50 Hz , 415 Volt with 3 HBC fuses complete.		
1	32 Amps	Each	1814.00
2	63 Amps	Each	2428.00
3	100 Amps	Each	4254.00
4	125 Amps	Each	5019.00
5	160 Amps	Each	6475.00
6	200 Amps	Each	6790.00
7	250 Amps	Each	7986.00
8	320 Amps	Each	10517.00
9	400 Amps	Each	12494.00
10	630 Amps	Each	19855.00
7.10	Supplying of ISI Marked Switch Disconnecter Fuse (SDF), in sheet steel enclosure (Panel mounting cubicle type) confirming to IS:13947 (part I & III) 3 pole and neutral , AC -23A ,50 Hz , 415 Volt with 3 HBC fuses complete.		
1	32 Amps	Each	2694.00
2	63 Amps	Each	3183.00
3	100 Amps	Each	5737.00
4	125 Amps	Each	6166.00
5	160 Amps	Each	8464.00
6	200 Amps	Each	8855.00
7	250 Amps	Each	9756.00
8	320 Amps	Each	12451.00
9	400 Amps	Each	14222.00
10	630 Amps	Each	23636.00
7.11	Supplying of ISI Marked Direct On-Line Starters confirming to IS : 13947-4 with suitable over load relay range and contactor size, 415 V , 3 -Phase with two earthing terminals		
1	i) 0.75 / 1.0 / 2.0 / 3.0 / 5.0 / 7.5 HP	Each	1347.00
2	ii) 10 HP	Each	1456.00
7.12	Supplying of ISI Marked Automatic Star-Delta Starters confirming to IS : 13947-4 with suitable over load relay range and contactor size & timer 415 V , 3 -Phase with two earthing terminals		
1	i) 10.0 HP	Each	4998.00
2	ii) 12.5 / 15.0 HP	Each	5215.00
3	iii) 20 HP	Each	6084.00
4	iv) 25 HP	Each	6193.00

S.No.	Description of Items	Unit	Rate
5	v) 30 HP	Each	7931.00
6	vi) 35 HP	Each	9724.00
7	vii) 50 HP	Each	14776.00
8	viii) 60 HP	Each	21186.00
9	ix) 75 HP	Each	23902.00
7.13	Supplying & fixing of High Breaking Capacity (HBC) Fuse Links bolted connection type as per IS : 13703 : 1993 & IEC : 60269 :1986 with 80 kA breaking capacity of approved make		
1	20 Amp. to 32 Amp	Each	43.00
2	36 Amp to 63 Amp	Each	68.00
3	80 Amp to 125 Amp	Each	152.00
4	160 Amp to 250 Amp	Each	228.00
5	300 Amp to 315 Amp	Each	321.00
6	400 Amp to 500 Amp	Each	684.00
7	630 Amp	Each	1309.00
7.14	Supplying & fixing of High Breaking Capacity (HBC) Fuse Links knife (DIN) type as per IS : 13703 : 1993 & IEC : 60269 :1986 with 80 kA breaking capacity of approved make		
1	20 Amp. to 100 Amp	Each	201.00
2	125 Amp to 160 Amp	Each	223.00
3	200 Amp to 315 Amp	Each	435.00
4	350 Amp to 400 Amp	Each	522.00
5	425 Amp to 630 Amp	Each	761.00
7.15	Supplying & fixing of ISI marked Porcelain Rewireable type fuse carrier & base unit of approved make & confirming to IS: 2086-1993		
1	16 Amps./240 Volts	Each	30.00
2	16 Amps./415 Volts or 32 Amps/240 Volts	Each	41.00
3	32 Amps /415 Volts	Each	85.00
4	63 Amps /415 Volts	Each	133.00
5	100 Amps /415 Volts	Each	272.00
6	200 Amps /415 Volts	Each	771.00
7	300 Amps /415 Volts	Each	923.00
7.16	BUSBAR CHAMBERS		
	Supplying of metal clad ISI Marked busbar chamber made of heavy gauge iron sheet complete with copper strip and busbar supports as per specification confirming to IS -4064		
1	32 AMP 440/500 VOLTS, 4 way	Each	633.00
2	60/63 AMP 440/500 VOLTS, 4 way	Each	1238.00
3	100 AMP 440/500 VOLTS, 4 way	Each	1843.00
4	200 AMP 440/500 VOLTS, 4 way	Each	3311.00
5	300 AMP 440/500 VOLTS, 4 way	Each	3955.00
6	400 AMP 440/500 VOLTS, 4 way	Each	4352.00
7	500 AMP 440/500 VOLTS, 4 way	Each	5839.00

CHAPTER - 8			
MCCB's, Isolators, MCB's, MCB-DB and fixing.			
S.No.	Description of Items	Unit	Rate
8	Supplying of ISI Marked and approved make of Moulded Case Circuit Breaker (MCCB) suitable for 3 phase,3 pole, 50 Hz, 415 Volts, AC supply with respective interrupting capacity (KA) at 415 Volts cited against their range standard conforming to IS - 8828		
8.1	MCCB with Breaking Capacity 25 KA at 415 V		
1	Current Rating -25 to100 Amps & 70% -100% adjustable	Each	4490.00
2	Current Rating -125 Amps & 70% -100% adjustable	Each	5674.00
3	Current Rating -160 Amps & 70% -100% adjustable	Each	7918.00
4	Current Rating -200 Amps & 70% -100% adjustable	Each	7800.00
8.2	MCCB with Breaking Capacity 35 KA at 415 V		
1	Current Rating -160 Amps & Adjustable: 70% -100% thermal & 5-10 times magnetic setting	Each	12673.00
2	Current Rating -200 Amps & Adjustable: 70% -100% thermal & 5-10 times magnetic setting	Each	13091.00
3	Current Rating -250 Amps & Adjustable: 70% -100% thermal & 5-10 times magnetic setting	Each	16189.00
4	Current Rating -315 Amps & Adjustable: 70% -100% thermal & 5-10 times magnetic setting	Each	19006.00
5	Current Rating -400 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	19006.00
6	Current Rating -500/630 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	21117.00
7	Current Rating -800 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	25340.00
8.3	MCCB with Breaking Capacity 50 KA at 415 V		
1	Current Rating -400 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	20418.00
2	Current Rating -500/630 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	23228.00
3	Current Rating -800 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	26745.00
8.4	Supplying of ISI Marked and approved make of Air Circuit Breaker (ACB) with Microprocessor release with LCD screen showing kW ,kVA,PF,maximum demand with breaking capacity of 50 kA , 4 pole , 415 Volts conforming to IEC : 60947-2 / IS :13947-II		
1	630 Amp,manual,fixed	Each	66982.00
2	800 Amp,manual,fixed	Each	69374.00
3	1000 Amp,manual,fixed	Each	72962.00
4	1250 Amp,manual,fixed	Each	102865.00
5	1600 Amp,manual,fixed	Each	107052.00
6	2000 Amp,manual,fixed	Each	121405.00
7	630 Amp,manual,drawout	Each	112135.00
8	800 Amp,manual,drawout	Each	113331.00
9	1000 Amp,manual,drawout	Each	119192.00
10	1250 Amp,manual,drawout	Each	148796.00

S.No.	Description of Items	Unit	Rate
11	1600 Amp,manual,drawout	Each	160218.00
12	2000 Amp,manual,drawout	Each	193530.00
8.5	Supplying of ISI Marked and accepted standard of Miniature Circuit Breaker (MCB) of 'C' series suitable for 240/415 Volts, 50 Cycle , 10 kA Value AC supply confirming to IS : 8828 : 1996, IEC : 60898 :2002 but without enclosures :-		
8.5.1	SINGLE POLE (SP)		
1	0.5 Amp to 5 Amp Rating	Each	221.00
2	6 Amp to 32 Amp Rating	Each	151.00
3	For 40 Amps. Rating only.	Each	311.00
4	50 Amp to 63 Amp Rating	Each	365.00
8.5.2	SINGLE POLE & NEUTRAL(SPN)		
1	0.5 Amp to 5 Amp Rating	Each	508.00
2	6 Amp to 32 Amp Rating	Each	455.00
3	For 40 Amps. Rating only.	Each	628.00
4	50 Amp to 63 Amp Rating	Each	712.00
8.5.3	DOUBLE POLE (DP)		
1	0.5 Amp to 5 Amp Rating	Each	610.00
2	6 Amp to 32 Amp Rating	Each	508.00
3	For 40 Amps. Rating only.	Each	682.00
4	50 Amp to 63 Amp Rating	Each	831.00
8.5.4	FOR TRIPLE POLE (TP)		
1	0.5 Amp to 5 Amp Rating	Each	837.00
2	6 Amp to 32 Amp Rating	Each	754.00
3	For 40 Amps. Rating only.	Each	1041.00
4	50 Amp to 63 Amp Rating	Each	1208.00
8.5.5	FOR TRIPLE POLE & NEUTRAL(TPN)		
1	0.5 Amp to 5 Amp Rating	Each	1130.00
2	6 Amp to 32 Amp Rating	Each	987.00
3	For 40 Amps. Rating only.	Each	1298.00
4	50 Amp to 63 Amp Rating	Each	1525.00
8.5.6	FOUR POLE(FP)		
1	0.5 Amp to 5 Amp Rating	Each	1238.00
2	6 Amp to 32 Amp Rating	Each	1094.00
3	For 40 Amps. Rating only.	Each	1393.00
4	50 Amp to 63 Amp Rating	Each	1609.00
8.4.(B)	Supplying of MCB Isolators suitable for 240/415 Volts, 50 Hz AC supply with KA value rating 10 kA of approved make confirming to IS :13947-Part III : 1993 & IEC :60947- 3:2001 (without enclosures) :-		
8.4.1	SINGLE POLE		
1	40 Amps.	Each	191.00
2	63 Amps.	Each	215.00
8.4.2	DOUBLE POLE		
1	40 Amps.	Each	299.00
2	63 Amps.	Each	377.00

S.No.	Description of Items	Unit	Rate
8.4.3	TRIPLE POLE		
1	40 Amps.	Each	544.00
2	63 Amps.	Each	592.00
8.4.4	FOUR POLE		
1	40 Amps.	Each	664.00
2	63 Amps.	Each	688.00
3	80 Amps.	Each	897.00
4	100 Amps.	Each	897.00
8.5.(B)	Supply of approved make powder coated sheet steel encloser SPN MCB DB inclusive of Busbar, Neutral bar, Earth bar & two earth terminals etc. complete as per IS:13032(exclusive of MCB & isolator)-		
1	2 way single door	Each	179.00
2	4 way single door	Each	437.00
3	4 way double door	Each	754.00
4	6 way double door	Each	885.00
5	8 way double door	Each	1017.00
6	12 way double door	Each	1310.00
7	16 way double door	Each	1627.00
8.6	Supplying of approved make TPN MCB DB Metal Double Door with provision for FP MCB/Isolator/RCCB/RCBO as incomer and SP MCBs as outgoing inclusive of Busbar, Neutral bar, Earth bar & two earth terminals etc. complete as per IS:13032(exclusive of MCB & isolator):		
1	4 way (4+12)	Each	2045.00
2	6 way (4+18)	Each	2590.00
3	8 way (4+24)	Each	2990.00
4	4 way (8+12)	Each	2134.00
5	6 way (8+18)	Each	2661.00
6	8 way (8+24)	Each	3170.00
7	12 way (8+36)	Each	4288.00
8.7	Supplying of approved make Vertical TPN MCB DB Metal Double Door with provision for FP CB/Isolator/RCCB/RCBO as incomer and SP/TP MCBs as outgoing inclusive of Busbar, Neutral bar, Earth bar & two earth terminals etc. complete as per IS:13032(exclusive of MCB & isolator)		
1	4 way (8+12)	Each	6068.00
2	6 way (8+24)	Each	7685.00
3	12 way (8+36)	Each	10288.00
8.8	Supplying of approved make, powder coated Vertical TPN MCB DB Metal Double Door with MCCB 100A TP 10kA as incomer and space for SP/TP MCBs as outgoing (without MCBs) inclusive of busbar & connections etc without MCB:		
1	4 way with MCCB	Each	7799.00
2	8 way with MCCB	Each	8654.00
3	12 way with MCCB	Each	9898.00

S.No.	Description of Items	Unit	Rate
8.9	Supplying & fixing of approved make Industrial type metal plug & socket DBs (without MCB) SPN sheet encloser (dust protected) inclusive of 2 pole and earth metal plug and socket and space to incorporate SP MCB complete as per specification as required.		
1	10 Amps	Each	664.00
2	20 Amps	Each	681.00
8.10	Supplying & fixing of ISI marked Industrial type metal plug socket D.B.s (without MCBs) for TPN encloser three pole and earth metal plug and socket including space incorporating TP MCB complete as per specification as required.		
1	20 Amps	Each	1310.00
2	30 Amps	Each	1824.00
8.11	Supply & fixing of approved make Industrial type metal plug & socket, 3 pin (2P + E) conforming to IEC : 60309 -1&3 complete as per specification		
1	10 Amps Plug only	Each	108.00
2	10 Amps socket only	Each	108.00
3	20 Amps Plug only	Each	120.00
4	20 Amps socket only	Each	138.00
8.12	Supplying and installing of RCBOs (Residual current circuit breaker with overload and short circuit protection) ISI marked complete as per I.S. standard confirming to IEC:61009-2-1 & IS:12640-2:2001,240/415V 50 Hz with 10 kA short circuit withstand capacity for earth leakage,overload & short circuit protection including connection in existing enclosure in approved manner as per specification.		
8.12.1	DP(4 module)		
1	2 pole 6 to 25 Amps, 30 mA sensitivity	Each	1980.00
2	2 pole 32 Amps, 30 mA sensitivity	Each	2075.00
3	2 pole 40 Amps, 30 mA sensitivity	Each	2165.00
4	2 pole 63 Amps, 30 mA sensitivity	Each	4013.00
5	2 pole 6 to 25 Amps, 100 mA sensitivity	Each	2069.00
6	2 pole 32 Amps, 100 mA sensitivity	Each	2177.00
7	2 pole 40 Amps, 100 mA sensitivity	Each	2243.00
8	2 pole 63 Amps, 100 mA sensitivity	Each	4281.00
8.12.2	FP(8 module)		
1	4 pole 16 Amps, 30 mA sensitivity	Each	3647.00
2	4 pole 25-32 Amps, 30 mA sensitivity	Each	3861.00
3	4 pole 40 Amps, 30 mA sensitivity	Each	3921.00
4	4 pole 63 Amps, 30 mA sensitivity	Each	4662.00
5	4 pole 16 Amps, 100/300 mA sensitivity	Each	4079.00
6	4 pole 25-32 Amps, 100/300 mA sensitivity	Each	4079.00
7	4 pole 40 Amps, 100/300 mA sensitivity	Each	4164.00
8	4 pole 63 Amps, 100/300 mA sensitivity	Each	4789.00
8.13	FIXING OF SFUs, DBs,BUSBAR,MCCBs,MCBs, ISOLATORs & RCBOs		

S.No.	Description of Items	Unit	Rate
	Fixing of metal clad enclosure on 25 X 5 mm flat iron clamps including supplying and fixing of clamps as required duly embedded in masonry including cable connection and other required material as per specification :-		
1	16 Amps SP/DP Switch /SPN DB up to 4 way	Each	83.00
2	32 Amps DP switch /SPN DB up to 8 way /16 Amp TPN DB up to 3 way per pole or 16 Amps TP or TPN switch / 16 Amps 415 V Isolator	Each	87.00
3	32 Amps TP or TPN switch/ 32 Amps 415 V Isolator / 16 Amps TPN DB up to 6 way per pole /32 Amps 415 Volt busbar 4 way	Each	94.00
8.14	Fixing of metal clad enclosure on 25X 25 X 5 mm angle iron clamps including supplying and fixing of clamps as required duly embedded in masonry including cable connection and other required material as per specification :-		
1	Fixing of 63 Amps TP or TPN main switches/ DB 63 Amps. 240/415 Volt 4 to 8 way or 63 Amps change over switch /63 Amps 415 Volt Isolator /30 Amps 415V TPN DB upto 6 way per pole and busbar 4 way	Each	146.00
2	Fixing of 100 Amps TP or TPN main switch or 100 Amps change over switch /100 Amps 415 Volt Isolators and busbar 4 way	Each	199.00
3	Fixing of 200 Amps TP or TPN main switch or 200 Amps change over switch /200 Amps 415 Volt Isolators and busbar 4 way	Each	263.00
8.15	Fixing of metal clad enclosure on 35X 35 X 5 mm angle iron clamps including supplying and fixing of clamps as required duly embedded in masonry including cable connection and other required material as per specification :-		
1	Fixing of 300/400 Amps TP or TPN main switch or 300/400 Amps change over switch /300/400 Amps 415 Volt Isolators and busbar 4 way	Each	280.00
2	Fixing of 500/600 Amps TP or TPN main switch or 500/600 Amps change over switch 500/600 Amps 415 Volt Isolators and busbar 4 way	Each	283.00

S.No.	Description of Items	Unit	Rate
8.16	Fixing of MCB /MCCB/ Isolator		
1	Fixing of MCB / Isolator SP/DP in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete (Labour only)	Each	8.00
2	Fixing of MCB /MCCB Isolator TP /TPN/FP in sheet steel enclosure as required as per accepted practice, including mounting on busbar and cable connection etc. complete.	Each	16.00
8.17	Labour charges for fixing sheet steel enclosure, MCB DB surface mounting type, as per accepted practice on 25x5mm flat iron clamps duly embedded in wall,cable connection etc. complete.		
	FOR S.No :-		
1	8.5 (1) to 8.5 (4)	Each	83.00
2	8.5 (5) & 8.5 to 8.6 (2)	Each	88.00
3	8.6 (3), 8.6(4) & 8.7 (1)	Each	94.00
8.18	Labour charges for fixing sheet steel enclosures, MCB DB surface mounting type,as per accepted practice on 25x25x 5 mm angle iron clamp,including supplying and fixing of clamps duly embedded in wall,cable connection etc. complete :-		
	FOR S.No :-		
1	8.5(6) & 8.5(7), 8.6(5) to 8.6 (7)	Each	146.00
	8.7(2) & 8.7(3) & 8.8(1) to 8.8 (3)		
8.19	Labour charges for fixing sheet steel enclosures, MCB DB flush mounting type, as per accepted practice, duly embedded and end plate completely flushed in wall, cable connection etc.complete :-		
	FOR S.No :-		
1	8.5(1) to 8.5(5), 8.6(1) to 8.6 (5) & 8.7(1)	Each	136.00
2	8.5(6) & 8.5(7), 8.6(6) to 8.6(7), 8.7(2) to 8.7(3) & 8.8(1) to 8.8(3)	Each	190.00

CHAPTER NO.- 9
ACCESSORIES, PANELS, LAMPS, TELEPHONE WIRES, FANS,
LUMINAIRES

1	Rates include all lead and lift for all materials for all items unless otherwise specified.
2	The provision of scaffolding of ladder or any tools and plants required shall be deemed to be included in the items unless otherwise stated.
3	Cutting through walls and floors, lifting up floor boards and re-fixing, cutting out plaster and making good all the work disturbed, notching or drilling holes through joists, etc. shall be deemed to be included with the item of work.
4	Description and Enumeration of fittings: -
	4.1 Ordinary Pendants
	4.1.1 Ordinary Pendants shall be described as including
	(a) Lamp holders, and
	(b) Required length of flexible cord.
	4.2 Stiff pendants.
	4.2.1 Stiff pendants shall be described as including-
	(a) Back plate,
	(b) Required length of conduit,
	(c) Adapter, and
	(d) Lamp holder,
	4.3 Plain Brackets.
	4.3.1 Plain brackets shall be described as including-
	(a) Back-plate,
	(b) Tumbling with nozzle, and
	(c) Lamp holder.
	4.4 Watertight Brackets,
	4.4.1 Watertight brackets shall be described as including –
	(a) Back-plate,
	(b) Conduit,
	(c) Gallery,
	(d) Reflector,
	(e) Well glass screw guard fitting,
	(f) Lamp holder, and
	(g) Rubber washers.
	4.5 Switches,
	4.5.1 When measured separately from point wiring, the switches shall be described stating the type and rated capacity. Cover plates, if any, shall be included with the item.
	4.5.2 Switch plug combination, comprising socket outlet, switch and plug shall be described, and the type and rated capacity shall be stated.
	4.6 Bulk-Head fittings,
	4.6.1 Bulk-head fittings shall be described as including-
	(a) Lamp holder (all insulated)
	(b) Reflector,
	(c) Water tight glass front, hinged and with wing nuts, and
	(d) Wire guard.

	4.7 Lamps,	
	4.7.1 Lamps shall be described stating the type, wattage and voltage.	
	4.8 Fluorescent-Lamp fittings,	
	4.8.1 Fluorescent-lamp fittings shall be described as including-	
	(a) Single tube or twin tube (stating the type and length),	
	(b) Choke (ballast),	
	(c) Capacitor,	
	(d) Starter,	
	(e) Lamp holders,	
	(f) Starter- holders,	
	(g) Reflector,	
	(h) Back-plate	
	(i) Inter-connecting wiring	
	(j) Make and type of fitting, and	
	(k) Louver or perplex panel	
5	The provisions of scaffolding or ladder or any tools and plants required shall be deemed to be included in the items, unless otherwise stated.	
6	Cutting through walls and floors, lifting up floor boards and refixing, cutting out plaster and making good all the work disturbed, notching or drilling holes through joists, etc. shall be deemed to be included with the item of work.	

The following Indian Standards may be referred to :- Chapter 9

S.No.	Standards	Title Codes of Practice/ Guide
1	IS:3646 (Part-1)- 1966	Code of practice for interior illumination Principles for good lighting and aspects of design.
2	IS:3646 (Part-2)-1966	Code of practice for interior illumination: Schedule of illumination and glare index.
3	IS:3646 (Part-3)-1968	Code of practice for interior illumination : Calculation of coefficients of utilization by the BZ method.
4	IS:4347-1967	Code of practice for hospital lighting.
5	IS:6665-1972	Code of Practice for industrial lighting.
6	IS:2672-1966	Code of Practice for library lighting.
7	IS:555-1979	Electric table type fans and regulators.
8	IS:1169-1967	Electric pedestal type fans and regulators.
9	IS:374-1979	Electric ceiling type fans and regulators.
10	IS:2997-1961	Air circulator type electric fans and regulators.
11	IS:2312-1967	Propeller type AC ventilating fans.
12	IS:3588-1987	Electrical axial flow fans.
13	IS:3963-1987	Roof Extractor units.
14	IS:1283-1981	Hor air fan.
15	IS:6272-1987	Industrial cooling fans (man coolers)
16	IS:4894-1987	Centrifugal fans
17	IS:11037-1984	Electronic type fan regulators.
18	IS:12155-1987	General and Safety requirements for fans and regulators for household and similar purposes.
19	IS:118-1978	Tungsten filament general service electric lamps.
20	IS:2118(Part-1)-1977	Tubular fluorescent lamps for general lighting service: Requirements and tests.
21	IS:9900(Part-1)-1981	High pressure mercury vapor lamps: Requirements and test.

22	IS:9974(Part-1)-1981	High pressure sodium vapor lamps: General requirements and tests.
23	IS:1258-1987	Bayonet lamp holders.
24	IS:3323-1980	B1-pin lamp holders for tubular fluorescent lamps.
25	IS:3324-1982	Holders for starters for tubular fluorescent lamps.
26	IS:2215-1984	Starters for fluorescent lamps.
27	IS:1534(Part-1)-1977	Ballast for fluorescent lamps: For switch start circuits.
28	IS:1569-1976	Capacitors for use in tubular fluorescent high pressure mercury and low pressure sodium vapor discharge lamp circuits.
29	IS:6616-1982	Ballasts for high pressure mercury vapor lamps.
30	IS:1913(Part-1)-1978	General and safety requirements for luminaries: Tubular flu (2)
31	IS:10322(Part-1)-1982	Luminaries : General requirements
32	IS:10322(Part-2)-1982	Luminaries : Constructional requirements
33	IS:10322(Part-5/Sec-1) 1987	Luminaries: Particular requirements : Recessed luminaries.
34	IS: 10322(Part-5/Sec-3) 1987	Luminaries: Particulars requirements: Luminaries for road and street lighting.
35	IS:10322 (Part-5/Sec-5) 1987	Luminaries: Particulars requirements: Portable general purpose luminaries
36	IS:10322(Part-5/Sec-5) 1987	Luminaries: Particulars requirements : Floodlight
37	IS: 3287-1965	Industrial lighting fittings with plastic reflectors.
38	IS: 1777-1978	Industrial luminaries with metal
39	IS:2206(Part-1)-1984	Flame proof electric lighting fittings : Well glass and bulk head types.
40	IS:3528-1966	Water proof electric lighting fittings.
41	IS:3553-1966	Water tight electric lighting fittings.
42	IS:8030-1976	Luminaries for hospitals.
43	IS:7537-1974	Road traffic signals.
44	IS:9583-1981	Emergency lighting units.
45	IS:302-1979	General and safety requirements for household and similar electrical appliances.
46	IS:2268-1988	Electric call bells and buzzers for indoor use.
47	IS:3412-1985	Electric water boilers.
48	IS:4770-1991	Rubber gloves for electrical purposes.
49	IS:5424-1969	Rubber mats for electrical purposes. (xv)
Note:- The above IS Codes shall be applicable with latest amendments if any.		

CHAPTER - 9			
Accessories/Pannel/Lamp/Telephone wires/Fans/Luminaries.			
S.No.	Description of Items	Unit	Rate
9.1	Supplying and fixing as per specification Bakelite pendent Holder of approved make including flexible cord up to 3 Meter length with necessary materials complete	Each	25.00
9.2	Supplying and fixing as per specification Bakelite Batten Holder / Angle Holder of approved make with necessary materials complete	Each	22.00
9.3	Supplying and fixing as per specification Bulk Head fitting of approved make suitable for 100 Watt lamp with necessary materials complete.		
	Ordinary	Each	78.00
9.4	Supplying and fixing as per specification Call bell / buzzer of approved make with necessary materials complete.		
1	Buzzer	Each	58.00
2	Ding Dong bell	Each	108.00
3	Musical bell	Each	257.00
4	Remote/cordless bell	Each	540.00
9.5	Supplying and fixing as per specification Call bell indicator 230 Volt A.C. of approved make with necessary materials complete.		
1	with 4 way Indicator	Each	1920.00
2	with 6 way Indicator	Each	2880.00
3	with 8 way Indicator	Each	3840.00
9.6	Supplying and fixing of multi core round HRFR / FR PVC insulated copper (flexible) conductor & PVC sheathed cables 1100 Volts as per IS:694-1990 of approved make		
1	(23/.0076) Three core	meter	15.00
2	(40/.0076) Three core	meter	30.00
9.7	Supplying and fixing in position incandescent lamp of approved make as per IS specification		
1	15 Watt 250 Volt	Each	12.00
2	25 Watt 250 Volt	Each	13.00
3	40 Watt 250 Volt	Each	13.00
4	60 Watt 250 Volt	Each	14.00
5	100 Watt 250 Volt	Each	14.00
6	200 Watt 250 Volt	Each	23.00
7	500 Watt 250 Volt	Each	78.00
8	1000 Watt 250 Volt	Each	138.00
9	5 Watt 250 Volt night lamp	Each	14.00
10	15 Watt 250 Volt coloured lamp	Each	15.00
9.8	Supplying and fixing as per specification socket outlet of approved make & ISI marked with necessary material complete		
1	6 Amp 250 Volt 3 Pin PB	Each	54.00
2	6 Amp 250 Volt 3 / 5 Pin Flush type	Each	25.00
3	16 Amp 250 Volt 3 Pin PB	Each	80.00
4	16 Amp 250 Volt 3 / 6 Pin Flush type	Each	78.00
5	10 Amps 250 Volt 3 Pin Modular type	Each	154.00
6	20 Amps 250 Volt 3 Pin Modular type	Each	250.00

S.No.	Description of Items	Unit	Rate
9.9	Supplying and fixing of approved make 3 pin plug top ISI marked		
1	6 Amp 250 Volt 3 Pin	Each	56.00
2	16 Amp 250 Volt Pin	Each	71.00
9.10	Supplying and fixing as per specification Ball Socket of approved make with necessary material complete.	Each	29.00
9.11	Supplying and fixing as per specification Caution / Danger Board as required of approved make & design with necessary material complete.		
1	Small Size	Each	96.00
2	Large Size	Each	192.00
9.12	Supplying and fixing as per specification bakelite Ceiling rose 3 Plate of approved make ISI marked with necessary material complete.	Each	25.00
9.13	Supplying and fixing as per specification Switch of approved make ISI marked with necessary material complete.		
1	6 Amp S.P. porcelain Base 250 Volt	Each	54.00
2	16 Amp S.P. porcelain Base 250 Volt	Each	80.00
3	6 Amp Flush type	Each	15.00
4	16 Amp Flush type	Each	44.00
5	6 Amp S.P. 250 Volt two way Flush type	Each	24.00
6	10 Amps S.P.250 Volt Modular Switch	Each	97.00
7	20 Amps S.P.250 Volt Modular Switch	Each	156.00
8	10 Amps S.P.250 Volt Modular Switch 2 way	Each	113.00
9.14	Supplying and fixing as per specification 6 Amp 250 Volt Bell Push switch of approved make ISI marked with necessary material complete.		
1	10 Amps S.P.250 Volt Modular Switch Bell Push	Each	113.00
2	Flush Type	Each	25.00
	Locking arrangement for Switch Gear Mounting		
9.15	Supplying, fixing, testing & commissioning wall / floor mounted LT Panel primer coated with two coat of enamel paint & provided with required gasket for dust/ vermin proof with degree of protection IP42 suitable for 415V 3 phase ,50 Hz ,4 wire system fabricated out of CRCA sheet upto 2 mm thick (1.6 mm for doors) with frame work of angle iron/ channel/ bolted type construction duly compartmentalised for incomer, bus section , outgoing , cable alleys & CT,PT Ampere Meter , Volt Meter , selector switches, Frequency Meter , phase indicating lamps , energy Meter complete including cost of busbar supports, detachable cable gland plates, 2 earthing terminals, internal wiring & fixing of separately supplied MCBs, MCCBs , panel mounted Changeover switch/SFUs, etc. as required but excluding cost of busbar strips, Ampere Meter, Volt Meter, Selector switch as per approved design & specification	Kg	105.00
9.16	Supplying and fixing of LT Panel accessories of approved make in existing LT Panel including connections etc. as required as per specification		
1	Digital Ampere Meter with CTs with selector switch	per set	2140.00
2	Digital Volt Meter with selector switch & HRC fuse	per set	2300.00
3	Frequency Meter	Each	1325.00

S.No.	Description of Items	Unit	Rate
4	Copper Bus bar strips with PVC sleeves	Kg	605.00
5	Aluminium bus bar strips with PVC sleeves	Kg	190.00
6	LED lamps	each	220.00
9.17	Supplying,Fixing and Testing of MPP condensor of approved make as required as per specification		
1	2.5 mfd.	Each	29.00
2	3.15 mfd	Each	38.00
3	4.00 mfd	Each	54.00
4	6.00 mfd	Each	90.00
5	10.00 mfd	Each	144.00
6	25.00 mfd	Each	216.00
7	30.00 mfd	Each	264.00
8	33.00 mfd	Each	312.00
9.18	Supplying,Fixing and Testing of Flourescent Tube rod ISI marked of approved make as required as per specification		
1	4' X 40 Watt	Each	54.00
2	4' X 36 Watt	Each	49.00
3	2' X 20 Watt	Each	49.00
4	2' X 18 Watt	Each	47.00
9.19	Supplying,Fixing and Testing of MV lamp ISI marked of approved make as required as per specification		
1	80 Watt	Each	180.00
2	125 Watt	Each	186.00
3	250 Watt	Each	444.00
4	400 Watt	Each	660.00
9.20	Supplying,Fixing and Testing of SV lamp SON-T (tubular clear type) ISI marked of approved make as required as per specification		
1	70 Watt	Each	468.00
2	150 Watt	Each	624.00
3	250 Watt	Each	696.00
4	400 Watt	Each	864.00
9.21	Supplying,Fixing and Testing of MH lamp Single ended type ISI marked of approved make as required as per specification		
1	70 Watt	Each	1110.00
2	150 Watt	Each	1200.00
3	250 Watt	Each	1500.00
4	400 Watt	Each	1590.00
9.22	Supplying,Fixing and Testing of MH lamp Double ended type ISI marked of approved make as required as per specification		
1	70 Watt	Each	780.00
2	150 Watt	Each	786.00
9.23	Supplying,Fixing and Testing of Compact Flourescent Lamp (CFL) with inbuilt electronic ballast ISI marked of approved make as required as per specification		
1	5 Watt	Each	134.00
2	8 Watt	Each	150.00

S.No.	Description of Items	Unit	Rate
3	11 Watt	Each	162.00
4	15 Watt	Each	174.00
5	18 Watt	Each	204.00
6	20 Watt	Each	270.00
7	25 Watt	Each	290.00
8	30 Watt	Each	300.00
9	36 watt	Each	480.00
10	45 Watt	Each	780.00
11	65 Watt	Each	900.00
12	85 Watt	Each	960.00
9.24	Supplying,Fixing and Testing of Helogen Rod of approved make as required as per specification		
1	500 Watt	Each	96.00
2	1000 Watt	Each	120.00
9.25	Supplying,Fixing and Testing of Ball Bearing of approved make as required as per specification		
1	6201	Each	83.00
2	6202	Each	88.00
3	6203	Each	108.00
4	6204	Each	160.00
9.26	suppling and drawing following pair,0.5 Sq mm PVC Insulated copper conductor unarmoured telephone cable in existing surface / concealed ,steel / PVC Conduit as required.		
1	(i) 1 Pair	meter	28.00
2	(ii) 2 Pair	meter	33.00
3	(iii) 4 Pair	meter	36.00
9.27	suppling and drawing Co-axial T.V. Cable RG-6 Grade , 0.7 mm Solid Copper conductor PE Insulated , Shielded with fine tined copper braid and protected with PVC Sheath in the existing surface / concealed ,steel / PVC. Conduit as required.	meter	40.00
9.28	Suppling and fixing of approved make Resistance type Fan regulator including connection etc. as required on existing board	Each	55.00
9.29	Suppling and fixing of approved make step type electronic Fan regulator including connection etc. as required on existing board		
1	450 Watt	Each	227.00
9.30	Suppling and fixing of approved make electronic dimmer / regulator including connection etc. as required on existing board		
1	650 Watt	Each	218.00
2	1000 Watt	Each	268.00
9.31	Suppling and fixing of approved make step type Modular electronic, Fan regulator single/double module including connection etc. as required on existing board		
1	upto 120 watt	Each	545.00

S.No.	Description of Items	Unit	Rate
9.32	Supplying, erection and testing of approved make electric Ceiling fan of double ball bearing complete with standard down rod, canopy, hanging shackle, Aluminium blades, without regulator, A.C. 230-250 volts including connections with all necessary material complete as required confirming to IS :374/1979 with upto date ammendments.		
1	Ceiling Fan (Energy Saver 50 W)-1200 mm Sweep	Each	1717.00
2	Ceiling Fan (Energy Saver 60 W)-1400 mm Sweep	Each	1817.00
9.33	Supplying, erection and testing of approved make Wall Mounting fan complete with Wall Bracket ,canopy, blades, speed Regulator etc .A.C 230-250 volts with connections and including raw bolt/Anchor hole fastener etc. complete finished and as required.		
1	300 sweep	Each	1785.00
2	400 sweep	Each	1890.00
9.34	Supplying, erection and testing of approved make Cabin fan oscillating type with base, blades, guard, speed regulator etc. AC 230-250 volts with connections and including raw bolt/Anchor hole fastener etc. complete finished and as required.		
1	300 sweep	Each	1811.00
2	400 sweep	Each	1945.00
9.35	Supplying, erection and testing of approved make 'Fresh Air Fan' AC 230-250 volts with connection and including frame bolt/Anchor hole fasteners etc. compelte finished and as required.		
1	225mm sweep	Each	1024.00
2	300mm sweep	Each	1224.00
9.36	Supplying, erecting and testing of approved make Exhaust Fan heavy duty with mounting frame, blades AC 230-250 complete connection and including, frame bolt/ Anchor hole fastners etc. complete finished and as required.		
1	300mm sweep 900 RPM	Each	2573.00
2	380mm sweep 900 RPM	Each	2755.00
3	450mm sweep 900 RPM	Each	3901.00
9.37	Supplying and testing of approved make Pedestal fan A.C. 230-250 volts with blades speed regulator 'pedestal etc duly wired with all necessary material complete as required		
1	400 mm Sweep	Each	2260.00
	<u>Fluorescent Tube Fitting</u>		
9.38	Supplying, fixing and testing of approved make fluorescent tube fitting 36/40 watt , rust resistant, stove enamelled paint, box type channel with cover, complete with electronic ballast (HF) complete duly wired (without tube rod) as per specification & fixing as below:		
1	I) Fixing on wall/Ceiling on wooden round block with 'J' hook / Anchor hole fastners/hollow bow with rod fixed in Ceiling and other necessary materials including connections etc. and as required.	Each	840.00
2	II) Fixing by stiff pendant arrangement with two pieces of steel conduit 19/20 dia 16 SWG and other necessary materials such as ball socket, wooden round block with 'J' hook/Anchor hole fasteners fixed in Ceiling including connection and as required for length upto 1.5 Meter	Each	1110.00

S.No.	Description of Items	Unit	Rate
3	III) Fixing by pendant arrangement with two pieces of approved metallic chain and other necessary materials such as wooden block with 'J' hook Anchor hole fastner fixed in Ceiling including connection as required for length up to 1.5Meter	Each	1050.00
9.39	Supplying, fixing and testing of approved make fluorescent tube fitting 36/40 watt, rust resistant, stove enamelled paint, CRCA sheet steel housing with white stove enamelled reflector complete with copper ballast complete duly wired (without tube rod) as per specification & fixing as below:	Each	588.00
9.40	Supplying, fixing and testing of approved make fluorescent single & double tube fitting 36/40 watt, rust resistant, stove enamelled paint, CRCA sheet steel housing with opal acrylic diffuser and decorative end plates complete with copper ballast complete duly wired (without tube rod) as per specification & fixing .		
1	1 x 40/36 watt	Each	1100.00
2	2x36/40 watt	Each	1848.00
9.41	Supplying, fixing and testing of approved make surface mounting mirror optics luminaires for single/twin 36/40 watt fluorescent lamp comprising of white powder coated CRCA sheet steel housing raw silk / navy brown / white colour M.S. low profile flat housing complete with all accessories i.e. electronic ballast (HF) duly wired (without tube rod) and high purity anodised aluminium reflector assmeby along with cross louvers as per specification and fixing as below.		
9.41.1	Fixing on wall/Ceiling on wooden round block with 'J' hook/Anchor hole fastener fixed in Ceiling and other necessary materials including connectons etc. and as requiried.		
1	1x36/40w	Each	2184.00
2	2x40w	Each	3420.00
9.41.2	Fixing by stiff pendant arragement with two pieces of steel conduit 19/20mm dia 16 SWG and other necesssary materials such as ball socket, T.W. block with 'J' hook/ Anchor hole fastner fixed in Ceiling including connections and as required for length upto 1.5 Meter.		
1	1x40w	Each	2286.00
2	2x36/40w	Each	3522.00
9.41.3	Fixing by pendant arrangment with two pieces of approved metallic chain and other necessary materials such as T.W. block with 'J' hook/ Anchor hole fastner fixed in Ceiling including connections and as required for length upto 1.5 Meter.		
1	1x40w	Each	2258.00
2	2x40w	Each	3462.00
9.42	Supplying, fixing and testing of approved make surface mounting mirror optics luminaires for single/twin 36/40 watt fluorescent lamp comprising of white powder coated CRCA sheet steel housing raw silk / navy brown / white colour M.S. low profile flat housing complete with all accessories i.e. copper ballast duly wired (without tube rod) and high purity anodised aluminium reflector assmeby along with cross louvers as per specification and fixing as below.		

S.No.	Description of Items	Unit	Rate
9.42.1	Fixing on wall/Ceiling on wooden round block with 'J' hook/Anchor hole fastener fixed in Ceiling and other necessary materials including connectons etc. and as required.		
1	1x36/40w	Each	1764.00
2	2x40w	Each	2580.00
	Mirror Optics (recessed/concealed)		
9.43	Supplying, fixing and testing of approved make recess mounting mirror optics luminaires for single/twin 36/40 watt fluorescent lamp comprising of white powder coated CRCA sheet steel housing raw silk / navy brown / white colour M.S. low profile flat housing complete with all accessories i.e. electronic ballast (HF) duly wired (without tube rod) and high purity anodised aluminium reflector assmebly along with cross louvers as per specification and fixing .		
1	1x40 Watt	Each	2100.00
2	2x40 Watt	Each	3300.00
9.44	<u>Street Lights</u>		
	Supplying, fixing and tesing of approved make street/ road light fitting complete with copper wound polyster choke, lamp holder,starter holder, starter duly wired, side entry with clear acrylic cover with fixing clamps (without tube rod) including fixing with 20mm dia G.I. pipe medium class of required length upto 2 Meter for mounting on wall/existing pole, on existing"D" Bracket including bending the pipe to required shape and connectios including all materials as required.		
1	1x40 Watt	Each	1353.00
2	2x40 Watt	Each	1744.00
9.45	<u>BULK HEAD</u>		
	Supplying, fixing and testing of approved make bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, delux type, including fixing on wall as required, with necessary material complete Fitting(suitable for GLS w/o lamp upto 11 watt Retorted CFL)	Each	510.00
9.46	Supplying, fixing and testing of approved make high pressure M.V. fitting, consisting of cast aluminium cotrol gear housing, highly polished reflector, highly transparent acrylic hinged cover, complete with taped polyster choke, capacitor, connector etc. suitable for end mounting duly wired (without lamp) including fixing with 25 / 30mm dia G.I. pipe medium class of required length upto 2 Meter for mounting on wall / existing pole/on existing 'D' bracket, including bending the pipe to required shape and connections including all materials as required.		
1	80 Watt	Each	2475.00
2	125 Watt	Each	2690.00
3	250 Watt	Each	3653.00
4	400 Watt	Each	4516.00
9.47	H.P. Sodium Vapour Fitting		

S.No.	Description of Items	Unit	Rate
	Supplying, fixing & testing of approved make H.D. Sodium vapour fitting consisting of matallic cast aluminium alloy housing highly polished anodised aluminium reflector clear acrylic cover, gasket and equipped with accessories; such as ballast, condensor, ignitor, skirted ceramic lamp holder (without lamp) suitable for end mounting duly wired, including fixing with 32/38 mm dia G.I. pipe medium class of required length upto 2 Meter for mounting on wall/exisiting pole/on existing D bracket including bending the pipe to required shape and connections including all materials as required.		
1	70 watt	Each	2757.00
2	150 watt	Each	3800.00
3	250 watt	Each	4751.00
4	400 watt	Each	5472.00
9.48	Supplying ,fixing and testing of approved make of H.P.Sodium vapour side road lighting/ main road lighting lantern consisting of single piece cast aluminium housing complete with all accessories suitable for tubular 70W /150W /250W/HPSV lamp pot type high purity ALGLAS coated electromechanically brightened anodized aluminium reflector/ with ripples embossing above the lamp, lamp holder, clear acrylic cover & 3/5 stainless steel toggle, ignitor & ballast, condensor(without lamp) i/c fixing with 32/38 mmdia G.I. pipe medium class of required length upto 2 mtr. for mounting on wall/existing pole/on existing "D" bracket i/c bending the pipe to required shape and connections, i/c all material as required & suitable for:		
1	70 Watt	Each	3200.00
2	150 Watt	Each	4776.00
3	250 Watt	Each	6030.00
9.49	<u>Flood Lighting</u>		
	Supplying, fixing & testing of approved make of intergal type compact flood light fitting consisting of cast aluminium housing complete with all accessories ALGLAS coated aluminium reflector, lamp holder heat resisting toughned clear glass cover and mounting bracket with aiming disc, including fixing & connections as required in position with all necessary materials required, suitable for single ended tubular lamp (without lamp)		
1	150 Watt S.V. Lamp	Each	5151.00
2	150 Watt metal halide Lamp	Each	5550.00
9.50	Supplying, fixing & testing of approved make H.D. asymmetrical beam flood light fitting suitable for tubular single lamp consisting of cast aluminium housing 'ALGLAS coated aluminium faceted reflector assly toughned glass cover, mounting bracket and aiming disc, seperate control gear box required for HPSV/M.H. Lamp (without lamp) including fixing & connection as required in position with all necessary material required		
1	250 watt S.V. Lamp/Metal Halide with control gear box.	Each	6800.00
2	400 Watt S.V. Lamp/metal Halide with control gear box	Each	7700.00
	<u>POST TOP LANTERNS</u>		

S.No.	Description of Items	Unit	Rate
9.51	Supplying, fixing & testing of approved make of integral type decorative post top lantern consisting of aluminium canopy opal acrylic bottom cover and cast aluminium spigot complete with all accessories and control gear box (without lamp) including fixing on gate pillars/ existing G.I. pipe, pole with connection and all required material on required size of G.I. pipe, suitable for -		
1	125 Watt M.V. lamp	Each	3700.00
2	70 Watt S.V. Lampwith ignitor	Each	3900.00
9.52	Supplying, fixing & testing of approved make of integral mushroom type roto moulded/Diamond shaped roto moulded post top lantern, consisting of cast aluminium spigot complete with all accessories, lamp holder, control gear box(without lamp) including fixing on gate Pillers/exiting G.I. pipe, pole with connection & all required materials on required size of G.I. pipe, suitable for		
1	125 Watt M.V. lamp	Each	3700.00
2	70 Watt S.V. Lampwith ignitor	Each	3800.00
9.53	<u>LOW WATT MOUNTINGS</u>		
	Supplying, fixing & testing of approved make of low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray including fixing on wall/ Ceiling on wooden round block including wiring & connection as required and suitable for CFL as following :- (without lamp)		
1	2 nos. 11 watt CFL	Each	1440.00
2	2 no. 18 watt CFL	Each	1452.00
3	2 Nos 36 watt CFL	Each	2436.00
4	3 Nos 36 watt CFL	Each	4116.00
9.54	Supplying, fixing & testing of approved make of low watt recessed mounting luminaire made of CRCA sheet steel housing with false Ceiling lips finished in stove enamelled white inside/outside fitted with high purity anodised aluminium mirror reflector and complete with control gear, including fixing with recessed mounting arrangement with necessary materials connection etc. complete as required and suitable for single/twin 9 & 11 watt CFL (without lamp)		
1	2 nos. 11 watt CFL aluminium mirror reflector	Each	1398.00
2	2 nos. 36 watt CFL (595 mm X 595 mm) aluminium darklight reflector	Each	3600.00
3	2 no. 36 watt CFL (295 mm X 595 mm) aluminium mirror reflector	Each	2724.00
4	3 Nos 36 watt CFL aluminium mirror reflector	Each	3756.00
5	3 Nos 36 watt CFL (597 mm X 597 mm) aluminium darklight reflector	Each	4644.00
9.55	Supplying, fixing & testing of approved make of low watt surface / recessed mounting CFL down lighter luminaire with white powder coated aluminium cover with anodised aluminium reflector with necessary materials connection etc. complete as required (without lamp)		
1	CFL 1 X 10 / 13 / 18 watt	Each	684.00
2	CFL 2 X 13 / 18 watt	Each	924.00

S.No.	Description of Items	Unit	Rate
9.56	Supplying, fixing & testing of approved make of low watt CFL roadway / street light luminaire with epoxy powder coated sheet aluminium / steel housing with epoxy white powder coated CRCA sheet steel gear tray ,clear acrylic cover with necessary materials connection including mounting with GI pipe 32 mm OD, clamps on existing wall / pole etc. complete as required (without lamp)		
1	CFL 1 X 9 / 11 watt	Each	1080.00
2	CFL 1 X 13 / 18 watt	Each	1140.00
3	CFL 2 X 11 watt	Each	1224.00
4	CFL 2 X 18 watt	Each	1380.00
5	CFL 1 X 36 watt	Each	1380.00
9.57	Supplying, fixing & testing of approved make of T- 5 lamp channel luminaire with plastic extruded housing with in-built electronic control gear with decorative end caps with necessary materials connection etc. complete as required (with lamp)		
1	T - 5 Lamp 1 X 28 watt	Each	744.00
9.58	Supplying, fixing & testing of approved make of T- 5 lamp channel luminaire with epoxy white powder coated CRCA sheet steel housing with reflector cover with necessary materials connection etc. complete as required (with lamp)		
1	T - 5 Lamp 1 X 28 watt	Each	1200.00
9.59	Supplying and fixing of Delux fresh air fan with louvers (ventilating fan) with self closing louvers of decorative PVC blades mounting square frame of approved maked complete with all necessary material as required		
1	150 mm	Each	1134.00
2	200 mm	Each	1200.00
3	250 mm	Each	1302.00
9.60	supplying and fixing of Cooler Kit including cooler fan 450 mm ISI marked and Vertical pump complete with all necessary material as required	Each	2160.00
9.61	supplying and fixing of cooler / A.C. MS angle iron stand including flat iron supports, including grouting in wall if required,welding ,painting with primer and two coat of superior quality paint complete.	Kg	54.00
9.62	Supplying,Fixing and Testing of Flourescent Tube rod T-5 ISI marked of approved make as required as per specification	Each	
1	14 watt T-5	Each	110.00
2	21 watt T-5	Each	120.00
3	24 watt T-5	Each	150.00
4	28 watt T-5	Each	120.00
9.63	Supplying,Fixing and Testing of Compact Flourescent Lamp (CFL) without electronic ballast ISI marked of approved make as required as per specification		
1	9 Watt	Each	75.00
2	11 Watt	Each	80.00
3	18 Watt	Each	185.00
4	36 watt	Each	200.00

CHAPTER - 10

Miscellaneous

S.No.	Description of Items	Unit	Rate
10.1	Fixing of Flourescent Tube fitting on wall /ceiling on wooden round block with anchor fastener /J hook & necessary material including connection with 3 core flexible wire etc. complete as required.	Each	72.20
10.2	Fixing of Flourescent Tube fitting on wall with two approved type swan neck steel conduit brackets on wooden round block with anchor fastener /J hook & necessary material including connection with 3 core flexible wire etc. complete as required.	Each	180.00
10.3	Fixing of Flourescent Tube fitting with pendant arrangement of two pieces of approved metalic chain with necessary material including connection with 3 core flexible wire etc. complete as required.		
1	For pendent length up to 1.5 meter	Each	169.00
2	Add additional pendent length in excess of 1.5 meter	meter	72.00
10.4	Fixing of Flourescent Tube fitting with stiff pendant arrangement of two pieces of steel conduit and with anchor fastener /J hook & other necessary material including connection with 3 core flexible wire etc. complete as required.		
1	For pendent length up to 1.5 meter	Each	308.00
2	Add additional pendent length in excess of 1.5 meter	meter	201.00
10.5	Fixing of Flourescent Tube recessed / concealed mounting Fitting in existing recesses with necessary material including connection with 3 core flexible wire etc. complete as required.	Each	87.00
10.6	Supplying and fixing fan clamps of 16 mm dia steel bar as per specification complete :-		
1	For stone slab roof "J" Type hook	Each	63.00
2	For R.C.C. Slabs / Beams	Each	22.00
3	For existing old R.C.C. Slabs / Beams	Each	63.00
10.7	Supplying and fixing fan clamps with hook on existing T.W. beam/ trusses with required size flat iron etc.as per specification complete :-	Each	57.00
10.8	Erection of ceiling fan in position with regulator on existing switch board including wiring , testing etc. with necessary material complete as required.	Each	95.00
10.9	Fixing of fan Regulator on existing switch board in position with necessary material connection etc.complete as required.	Each	16.00
10.10	Erection of exhaust fan / wall bracket fan/cabin fan in position with required PVC cable, rawl bolts etc. complete including connections and making wall surface good.	Each	70.00
10.11	Supplying and fixing down rod of MS pipe for ceiling fan including threading, painting, making holes etc. as required complete :-	meter	88.00

S.No.	Description of Items	Unit	Rate
10.12	Numbering of ceiling fans or fittings with approved paint including all labour material etc. complete as required :-		
1	Lettering up to 7 cm height	Each	1.00
2	Lettering above 7 cm but up to 15 cm height	Each	2.00
10.13	Providing and fixing pilot lamp over Main Distribution Fuse Boards / Boxes with 16 mm bracket with lamp holder , paw shade, controlling switch , including wiring and other necessary material as required	Each	44.00
10.14	Providing and fixing wooden board of suitable size (maximum 12" X 18") for fixing of house service meter with necessary materials and connection testing etc. complete as per specification :		
1	Single phase meter	Each	100.00
2	Three phase meter	Each	103.00
10.15	Chemical Servicing of Window /Split Air Conditioning unit 1.5 TR/2 TR capacity including cleaning of cooling & condensing units, filters, grills etc & all other parts oiling & greasing of fan motor testing of A.C unit etc.	Each	568.00
10.16	Providing & refilling of wood wool / Khas pads of normal size cooler panels 3 Nos including scraping of old paint, making surface even, painting with red oxide primer & two coats of paint of required shade including fixing new wiremesh complete.	Each	482.00
10.17	Servicing & overhauling of cooler fan motor, pump including replacement of distribution & delivery pipes, PVC elbows, painting etc. as reqd. complete with necessary material & labour including replacement of connection leads.	Each	228.00
10.18	Rewinding of fans by copper enamelled wire of suitable gauge including all required material, insulation, varnishing, connection leads, oiling .greasing etc complete with testing including dismantling & refitting of fan at site. Scrap old material is not returnable to the department.		
1	Ceiling Fan 1400 mm sweep new model / Exhaust Fan 380 mm sweep	Each	456.00
2	Ceiling Fan 1200 mm sweep new model / Exhaust Fan 300 mm sweep	Each	401.00
3	Fresh Air Fan up to 300 mm sweep / Wall Bracket /Cabin Fan 400 mm sweep	Each	285.00
10.19	Cleaning, overhauling, servicing of ceiling / Exhaust / Wall bracket fan by applying grease & oil, including testing with mounting / Hanging arrangement including replacement of safty pins, check nuts, lock nut, nut bolts etc. making perfect alignment & refitting at site as required.	Each	117.00
10.20	Supplying & Fixing of Batten type Tube fitting (Channel Type) single 4' x 40 / 36 watts complete with copper wound choke, rotor holders, starter holder, starter duly wired (without tube rod) on wooden block with necessary materials complete as reqd.	Each	316.00

S.No.	Description of Items	Unit	Rate
LABOUR RATES FOR WIRING			
10.21	Labour rate for point wiring a Light / Fan / Twin control light / Socket out let on seperate board / Call bell Point in (open) surface rigid steel conduit system.	Each	72.00
10.22	Labour rate for point wiring a Light / Fan / Twin control light / Socket out let on seperate board / Call bell Point in recessed/concealed rigid steel conduit system.	Each	233.00
10.23	Labour rate for point wiring a Light / Fan / Twin control light / Socket out let on seperate board / Call bell Point in (open) surface rigid PVC conduit system.	Each	75.00
10.24	Labour rate for point wiring a Light / Fan / Twin control light / Socket out let on seperate board / Call bell Point in recessed/concealed rigid PVC conduit system.	Each	405.00
10.25	Labour rate for point wiring a Power Point in surface rigid steel conduit system including labour for fixing earth continuity conductor .	Each	319.00
10.26	Labour rate for point wiring a Power Point in recessed/concealed rigid steel conduit system including labour for fixing earth continuity conductor .	Each	524.00
10.27	Labour rate for fixing rigid steel conduit in surface /concealed conduit wiring system, as per specification .		
1	20 mm Conduit	meter	32.00
2	25 mm & 32 mm Conduit	meter	32.00
3	40 mm & 50 mm Conduit	meter	33.00
10.28	Labour rate for rewiring a Light / Fan / Twin control light / Socket out let on seperate board / Call bell Point in rigid steel / rigid PVC non metallic conduit in (open) surface conduit wiring system.	each	109.00
10.29	Labour rate for rewiring a Light / Fan / Twin control light / Socket out let on seperate board / Call bell Point in rigid steel / rigid PVC non metallic conduit in recessed/concealed conduit wiring system.	each	109.00
10.30	Labour rate for fixing rigid PVC conduit as per specification in recessed/concealed conduit wiring system.		
1	20 mm Conduit	Each	20.70
2	25 mm & 32 mm Conduit	Each	20.64
3	40 mm & 50 mm Conduit	Each	24.66
10.31	Labour rate for drawing cables in existing rigid steel conduit (surface or recessed/concealed)		
	"A" 2 Wires --		
1	2.5 sq mm / 4 sq mm / 6 sq mm	meter	18.00
2	10 sq mm / 16 sq mm / 25 sq mm	meter	21.00
3	35 sq mm / 50 sq mm	meter	21.00
10.32	"B" 3 Wires & 4 Wires		
1	2.5 sq mm / 4 sq mm / 6 sq mm	meter	19.00
2	10 sq mm / 16 sq mm / 25 sq mm	meter	20.00
3	35 sq mm / 50 sq mm	meter	20.00

CHAPTER - 11			
Earthing			
S.No.	Description of Items	Unit	Rate
11.1	Earthing with G.I. Earth pipe 4.5 meter long and 40 mm dia with masonry enclosure in cement mortor, cover plate having locking arrangment on the top etc.(but without charcoal or coke and salt) complete as required.	Each	1712.00
11.2	Add Extra for using salt and charcoal / coke for pipe earth electrode as required including excavation & refilling.		
1	Excavation 2.5 cum by manual labour	Each	591.00
2	Excavation by making hole with Auger	Each	537.00
11.3	Earthing with G.I. Earth plate 600mm X 600mm X 6mm thick including accessories and providing masonary encloser in cement mortor, cover plate having locking arrangment on the top and G.I. watering pipe 20mm dia 2.7 meter long etc. (but without charcoal or coke and salt) complete as required.	Each	2314.00
11.4	Earthing with Copper Earth plate 600mm X 600mm X 3mm thick including accessories and providing masonary encloser in cement mortor, cover plate having locking arrangment on the top and G.I. watering pipe 20mm dia 2.7 meter long etc. (but without charcoal or coke and salt) complete as required.	Each	6930.00
11.5	Add Extra for using salt and charcoal / coke for G.I. Plate or Copper plate earth electrode as required including excavation & refilling.	Each	472.00
11.6	Supplying and laying 8 SWG copper wire at 0.5 meter below ground level as conductor earth electrode including soldering etc. as required.	meter	75.00
11.7	Supplying and laying 6 SWG G.I. wire at 0.5Meter below ground level as conductor earth electrode including soldering etc. as required.	meter	14.00
11.8	Supplying and laying 25mm X 5mm G.I. strip at 0.5 meter below ground level as strip earth electrode including soldering etc. as required.	meter	59.00
11.9	Supplying and laying 25mm X 6mm G.I. strip at 0.5 meter below ground level as strip earth electrode including soldering etc. as required.	meter	70.00
11.10	Providing & fixing 25mm X 5mm copper strip in 40mm dia G.I.pipe from earth electrode as required.	meter	890.00
11.11	Providing & fixing 25mm X 5mm G.I.strip in40mm dia G.I. Pipe(B class) from earth electrode as required.	meter	262.00

S.No.	Description of Items	Unit	Rate
11.12	Providing and laying earth connections from earth electrode with 4.00 mm dia G.I. wire in 15mm dia G.I. Pipe(B class) from earth electrode as required.	meter	90.00
11.13	Providing and laying earth connections from earth electrode with 4.00 mm dia copper wire in 15mm dia G.I. Pipe(B class) from earth electrode as required.	meter	145.00
11.14	Providing & fixing 25mm X 5mm copper strip on surface or recessed for connection etc. as required.	meter	754.00
11.15	Providing and fixing 25mm X 4mm G.I. strip on surface or in recessed/concealed for connection etc. as required.	meter	94.00
11.16	Providing and fixing 4.00mm G.I. wire on surface or in recessed/concealed for loop earthing as required.	meter	29.00
11.17	Providing and fixing 4.00mm copper wire on surface or in recessed/concealed for loop earthing as required.	meter	93.00
11.18	Supplying and drawing 4.00 sq.mm.Aluminium conductor wire for loop earthing in the existing surface/ recessed/concealed conduit along other wires as required.	meter	25.00
	LIGHTNING CONDUCTOR		
11.19	Providing and fixing of lightning conductor finial made of 25mm dia 300mm long copper tube having single prong at top with 85 mm dia 3 mm thick copper base plate including holes complete as required.	Each	1237.00
11.20	Providing and fixing of lightning conductor finial made of 25mm dia 300mm long G.I. tube having single prong at top with 85 mm dia 6 mm thick G.I. base plate including holes complete as required.	Each	446.00
11.21	Fixing of lightning conductor finial made of 25mm dia 300mm long copper tube / G.I. tube having single prong at top with base plate etc.complete as required.	Each	118.00
11.22	Rivetting / Sweating and soldering of copper / G.I. Tape (with another copper / G.I. Tape, base of finial or any other metallic object) as required.	Each	81.00
11.23	Providing and fixing copper tape 20mm X 3mm thick on parapet and surface of wall of lightening conductor as required (for Horizontal runs)	meter	332.00
11.24	Providing and fixing copper tape 20mm X 3mm thick on parapet and surface of wall of lightening conductor as required (for Vertical runs)	meter	344.00

S.No.	Description of Items	Unit	Rate
11.25	Providing and fixing G.I. tape 20mm X 3mm thick on parapet and surface of wall of lightening conductor as required (for Horizontal runs)	meter	41.00
11.26	Providing and fixing G.I. tape 20mm X 3mm thick on parapet and surface of wall of lightening conductor as required (for Vertical runs)	meter	53.00
11.27	Fixing of copper / G.I. Tape 20mm X 3mm thick on parapet and surface of wall for lightening conductor as required (for Horizontal runs)	meter	16.00
11.28	Fixing of copper / G.I. Tape 20mm X 3mm thick on parapet and surface of wall for lightening conductor as required (for Vertical runs)	meter	29.00
11.29	Providing and fixing " Testing Joint" made by 20mm X 3mm thick copper strip 125mm long with 4 Nos of tinned Brass bolts, Nut, check nuts and spring washers etc. complete as required .	Each	213.00
11.30	Providing and fixing " Testing Joint" made by 20mm X 3mm thick G.I. strip 125mm long with 4 Nos of G.I. bolts, Nut, check nuts and spring washers etc. complete as required .	Each	61.00
11.31	Providing and laying copper tape 32mm X 6mm thick for earth electrode directly in ground as required	meter	1026.00
11.32	Providing and laying G.I. tape 38mm X 6mm thick for earth electrode directly in ground as required .	meter	104.00
11.33	Laying of copper / G.I. tape 32mm X 6mm thick for earth electrode directly in ground as required.	meter	17.00
	EARTHING FOR DOMESTIC ELECTRIC INSTALLATION		
11.34	Providing and fixing earthing arrangement with 16mm dia 2.5 meter long galvanized iron or steel rod electrode including packing of charcoal powder and salt as per specification watering pipe 19mm dia G.I. Connection etc. complete with refilling the pit as required, but excluding the excavation of earth pit.	Each	614.00
11.35	Providing and fixing earthing arrangement with 38.1mm dia 2.5 meter long galvanized iron pipe electrode including packing of charcoal powder and salt as per specification watering pipe 19mm dia G.I. Connection etc. complete with refilling the pit as required, but excluding the excavation of earth pit.	Each	919.00
11.36	Supplying and laying G.I. earth lead duly installed on wall or in G.I. Pipe including connections etc.complete as required.		
1	13 sq mm (4 mm dia)	meter	9.00
2	25 sq mm (5.6 mm dia)	meter	13.00
3	40 sq mm (7.1 mm dia)	meter	18.00

S.No.	Description of Items	Unit	Rate
11.37	Providing and laying earth continuity conductor including fixing with		
(A)	Aluminium Earth Continuity Conductor :-		
1	6 Sq mm.	meter	8.00
2	10 Sq mm.	meter	11.00
3	16 Sq mm	meter	14.00
4	25 Sq mm.	meter	21.00
(B)	G.I. Or Steel Earth Continuity Conductor :-		
1	6 Sq mm.	meter	6.00
2	10 Sq mm.	meter	8.00
11.38	Providing and laying earth Continuity Conductor of 4 Sq mm Aluminium along the run of final sub circuit in PVC conduit in an approved manner.	meter	7.00
11.39	Supplying and drawing PVC insulated copper cable (Earth Continuity Conductor) of Green colour FR with copper multi strand conductor ISI marked in existing conduit along with other wires as required as per specification :		
1	4 Sq mm	meter	40.00
2	6 Sq mm.	meter	52.00
3	10 Sq mm.	meter	85.00
4	16 Sq mm	meter	132.00
11.40	Supplying and erecting earth pit of minmum bore dia 150 mm size, approved make safe earthing electrode consiting pipe in pipe tecnologie as per IS 3043-1987 made of corriosion free GI pipes having outer pipe dia of 50 mm having 80-200 micron galvanising, inner pipe dia of 25 mm having 20-250 micron galavinsing, connection teriminal dia of 12 mm with constent OHMIC value sourrounded by highly conductiv compund with high charge disipation sutible for effective and maintence free earthing		
1	with 2 mtr. Pipe in normal soil with 25 kg (one bag) back filling compound	each	7200
2	with 3 mtr. Pipe in normal soil with 50 kg (two bag) back filling compound	each	10800
3	with 2 mtr. Pipe of 80 mm outer dia, 40 mm inner dia and 14 mm terminal dia, in soft rock/marshy soil with 25 kg (one bag) back filling compound	each	8800
4	with 3 mtr. Pipe of 80 mm outer dia, 40 mm inner dia and 14 mm terminal dia, in soft rock/marshy soil with 25 kg (two bag) back filling compound	each	13300
11.41	Providing back filling compund suitable for safe earthing divice.	kg	36

CHAPTER - 12			
Dismantling of Civil and Electrical Works			
S.No.	Description of Items	Unit	Rate
12.1	Dismantling of existing light / Fan / Bell / Socket out let point on separate board / Wiring with insulated wire in casing / conduit / Batten complete with fitting and accessories	point	8.00
12.2	Making the site clear of the dismantling installation by refilling the hole with cement mortar & finished with paint gitties and replacing to match the colour of wall & ceiling.	point	10.00
12.3	Dismantling of existing socket outlet point on same board in any system of wiring	point	6.00
12.4	Dismantling the existing armoured / unarmoured cable or single core wires of submain, main , circuit in any system of wiring including recoiling.	meter	7.00
12.5	Dismantling of existing underground cable safely with its accessories and refilling the trench to ground level including recoiling of dismantled cable.	meter	14.00
12.6	Dismantling of D.F. Board, D.P. Switch, T.P. & T.P.N. Switch or D.B. of any size complete with board or angle / flat iron frame and making site clear including the refilling hole & repainting to match colour of wall.	Each	9.00
12.7	Dismantling of D.F. Board , D.P.Switch , T.P. & T.P.N. Switch or D.B. of any size only	Each	7.00
12.8	Dismantling the existing Ceiling / exhaust / cabin fan with complete accessories and making the site clear.	Each	16.00
12.9	Dismantling of existing steel pole, R.S.Joist, girder with bracket clamps insulator or stay from the cement concrete foundation and making the site clear by refilling the pit to ground level.	Each	324.00
12.10	Dismantling of existing water tight fluorescent tube fitting / M.V. Lamp fitting with making the site clear.	Each	12.00
12.11	Dismantling of existing water tight fitting / M.V. Lamp fitting with extension bracket, clamp from pole or wall with making the site clear.	Each	16.00
12.12	Dismantling of existing geyser or storage type water heater and making the site good by colour wash etc.as required.	Each	30.00
12.13	Providing recess in brick wall suitable for erection of exhaust fan up to 450 sweep complete with grouting of nut bolts, plastering and colour wash to match the colour of wall.		
1	For wall thickness up to 9"	Each	229.00
2	For wall thickness up to 15"	Each	392.00
3	For the stone wall thickness up to 15"	Each	501.00

CHAPTER- 13			
EXTERNAL ELECTRIFICATION AND OVERHEAD LINES			
S.No.	Description of Item	Unit	Rate (in Rs)
	<u>SUPPORT FOR OVER HEAD LINE</u>		
13.1	Supply of support for overhead line Rail pole of I.S. standard including welding, drilling of required hole etc. complete as required.		
1	Rail pole standard weight 52 kg per meter	meter	2240.00
2	Rail pole std. weight 26 kg per meter	meter	1155.00
3	Rail pole std. weight 21 kg per meter	meter	702.00
13.2	Supply of support for overhead line RS joist / H-beam of I.S. standard including welding, drilling of required hole etc. complete as required.		
1	R.S. Joist 100x200-25.4 kg per meter	meter	1129.00
2	R.S. Joist 175 x 90 - 19.3 kg per meter	meter	858.00
3	R.S. Joist 150 x 100 - 17 kg per meter	meter	755.00
4	R.S. Joist 150 x 80 - 14.9 kg per meter	meter	662.00
5	R.S. Joist 125 x 75 - 13 kg per meter	meter	578.00
6	H-Beam 152x152mm , Std weight 37.1 kg per meter	meter	1648.00
13.3	Supply of steel tubular pole swaged type as per IS:2713-1980 Complete with baseplate and top Canopy		
1	410 SP-2 - 7.00 meter	Each	6469.00
2	410 SP-5 - 7.50 meter	Each	6931.00
3	410 SP-8 - 7.50 meter	Each	8780.00
4	410 SP-11 - 8.00 meter	Each	7239.00
5	410 SP-14 - 8.00 meter	Each	9396.00
6	410 SP-17 - 8.50 meter	Each	7701.00
7	410 SP-20 - 8.50 meter	Each	9704.00
8	410 SP-23 - 8.50 meter	Each	12245.00
9	410 SP-26 - 9.00 meter	Each	7932.00
10	410 SP-29 - 9.00 meter	Each	10474.00
11	410 SP-32 - 9.00 meter	Each	12707.00
12	410 SP-35 - 9.50 meter	Each	10782.00
13	410 SP-38 - 9.50 meter	Each	13169.00
14	410 SP-41 - 10.00 meter	Each	11244.00
15	410 SP-44 - 10.00 meter	Each	13786.00
16	410 SP-47 - 10.00 meter	Each	17867.00
17	410 SP-50 - 11.00 meter	Each	12168.00
18	410 SP-53 - 11.00 meter	Each	14941.00
19	410 SP-56 - 11.00 meter	Each	19408.00
20	410 SP-59 - 12.00 meter	Each	16019.00
21	410 SP-62 - 12.00 meter	Each	20794.00
22	410 SP-65 - 12.00 meter	Each	24953.00
23	410 SP-68 - 13.00 meter	Each	22488.00
24	410 SP-71 - 13.00 meter	Each	18791.00
25	410 SP-73 - 14.50 meter	Each	24876.00
26	410 SP-76 - 14.50 meter	Each	30113.00
27	410 SP-77 - 16.00 meter	Each	27109.00
28	410 SP-80 - 16.00 meter	Each	32885.00
29	410 SP-10 (Bend type) 8.00 meter	Each	6685.00
30	410 SP-16 (Bend type) 8.50 meter	Each	7070.00
31	410 SP-25 (Bend type) 9.00 meter	Each	7301.00
32	410 SP-34 (Bend type) 9.50 meter	Each	10767.00
33	410 SP-40 (Bend type) 10.00 meter	Each	11229.00
34	410 SP-49 (Bend type) 11.00 meter	Each	12153.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.4	Supplying of prestressed cement concrete (PCC) pole conforming to IS 785 at work site including required transportation.		
1	PCC pole 8 mtrs. Long 140 kg	Each	1680.00
2	PCC pole 9.1 mtrs. Long 272 kg	Each	3290.00
13.5	Supplying and drawing All Aluminium Alloy conductor (AAAC) of approved make confirming to IS 398-1979 Pt. IV, including binding at existing insulator, jointing, jumpering, tearing off, connecting etc. as required including clearing of obstacles (if any)		
1	0.03 sq.inch / 20 sq.mm Alloy Aluminium Conductor	Km.	21740.00
2	0.04 sq.inch / 25 sq.mm Alloy Aluminium Conductor	Km.	35983.00
3	0.05 sq.inch / 30 sq.mm Alloy Aluminium Conductor	Km.	36233.00
4	0.075 sq.inch / 48 sq.mm Alloy Aluminium Conductor	Km.	53725.00
13.6	Supplying and drawing of stranded Aluminium Conductor Steel Reinforced (ACSR) confirming to IS:398-1976 of approved make, stringing, making off complete with binding at existing insulator, jointing, jumpering, tearing off, connecting etc. as required and clearing of obstacles (if any) etc.		
1	ACSR 6/1 - 2.11mm dia (Squirrel) with equivalent copper area 13Sq.mm (or 0.02Sq.inch) & calculated Alu. Area 20.71 Sq.mm.	Km.	18835.00
2	ACSR 6/1 - 2.36mm dia (Gopher) with equivalent copper area 16Sq.mm or 0.025 inches and calculated aluminium area 25.91 Sq.mm.	Km.	23489.00
3	ACSR 6/1 - 2.59mm dia (Weasel)with equivalent copper area 20.00 Sq.mm (0.03 sq inch) with calculated aluminium area 31.21 Sq.mm	Km.	28364.00
4	ACSR 6/1 - 3.00mm dia (Ferret) with equivalent copper area 25Sqmm (0.04 sq inch) calculated aluminium area 41.87 Sq.mm.	Km.	37892.00
5	ACSR 6/1 - 3.35mm dia (Rabbit) with equivalent copper area 30Sqmm (0.05 sq inch) calculated aluminium area 52.21Sq.mm.	Km.	49758.00
6	ACSR 6/1 - 3.66mm dia (Mink) with equivalent copper area 40 Sqmm (0.06 sq inch) calculated aluminium area 62.32 sq.mm.	Km.	59292.00
7	ACSR 6/1 - 3.99mm dia (Beaver)with equivalent copper area 45 Sqmm (0.07 sq inch) calculated aluminium area 74.07 Sq.mm	Km.	70452.00
8	ACSR 6/1 - 4.09mm dia (Raccoon) with equivalent copper area 48 Sqmm (0.075 sq inch) equivalent calculated Aluminium area 77.83 Sq.mm.	Km.	64085.00
13.7	Supplying and fixing guard insulator or split insulator complete:		
1	25x25mm	Pair	22.00
2	37x37mm	Pair	28.00
3	50x50mm	Pair	37.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.8	Supplying and drawing guard wire/earth wire/bearer wire 13mm ² (4mm. Dia) G.I. including stringing, binding at existing insulators or brackets, jointing, jumpering, connecting etc. as required and clearing of obstacles (if any)	Km.	8594.00
13.9	Supplying and erection of guards for existing overhead lines as required including split insulator required as per specification:		
1	Cradle type	Each	30.00
2	Hexagonal type	Each	20.00
3	Ring type	Each	17.00
13.10	Supplying and erection of water tight terminal box of 14 SWG M.S. Sheet 4mm thick box of required size to erect the suitable kit kat/ MCB/Switch with Top & bottom folded fitted with rubber ring to make it water tight with pole clamp made from 40x3mm M.S. flat iron with 2 Nos. Nut and Bolts duly painted with 2 coat of Red Oxide paint and 2 coat of Aluminium silver paint erected with cable gland but excluding the cost of the Kit Kat/MCB/Switch complete as per specification:		
1	20x15x15Cms.	Each	266.00
2	30x20x15 Cms.	Each	364.00
13.11	Installing iron clad weather proof cut outs on existing pole or surface board/boxes with necessary materials complete including fixing and connection etc. excluding cost of cutouts as required:		
1	15/16 Amps. 250 volts.	Each	26.00
2	15/16 Amps. 500 volts.	Each	43.00
3	30/32 Amps. 500 volts.	Each	51.00
4	60/63 Amps. 500 volts	Each	115.00
5	100 Amps. 500 volts.	Each	190.00
13.12	Supplying and installing (overhead) service main with PVC insulated & PVC sheathed cable suspended on existing bearer wire in approved manner as per specification with bobbin insulators etc. including drawing in existing G.I. pipe brackets or conduit pipe etc. wherever required, including connection, testing etc.:		
13.12.1	Aluminium Two wire (single core)		
1	2.5 Sq.mm	meter	15.46
2	4.0 Sq.mm	meter	17.67
3	6.0 Sq.mm	meter	21.66
13.12.2	Three Wire (Single core)		
1	4.0 Sq.mm	meter	23.00
2	6.0 Sq.mm	meter	28.00
3	10 Sq.mm	meter	41.00
4	16 Sq.mm	meter	49.00
13.12.3	Four Wire (Single core)		
1	4 Sq.mm	meter	28.00
2	6 Sq.mm	meter	35.00
3	10 Sq.mm	meter	52.00
4	16 Sq.mm	meter	64.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.13	Erection of steel tubular or steel rail pole or H-Beam of length exceeding 8 meters but not exceeding 10 meters in cement concrete 1:3:6 (1 cement : 3 coarse sand: 6 graded stone aggregate 40mm nominal size) foundation, base padding & muffing including excavation and refilling etc. as required.(4.55 bags of cement/cmt.)	Each	1494.00
13.14	Erection of steel tubular or steel rail pole or H-Beam of length exceeding 10 meters but not exceeding 13 meters in cement concrete 1:3:6 (1 cement :3 coarse sand: 6 graded stone aggregate 40mm nominal size) foundation , base padding & muffing including excavation and refilling etc. as required.(4.55 bags of cement/cmt.)	Each	1750.00
13.15	Erection of R.C.C./P.C.C. pole of length exceeding 8 meters but not exceeding 11 meters in brick ballast and ramming the foundation including excavation and refilling etc.as required.	Each	1532.00
13.16	Erection of R.C.C./P.C.C. pole of length exceeding 11 meters but not exceeding 13 meters in brick ballast and ramming the foundation including excavation and refilling etc. as required.	Each	1708.00
13.17	Erection of metallic street light standard of length exceeding 4.5 meters but not exceeding 6.5 meters in cement concrete 1:3:6 (1cement:3coarse sand:6 graded stone aggregate 40mm nominal size) foundation with cement concrete collar of size 0.4 meters dia x 0.5 meters height to accommodate the looping type cable end box including excavation and refilling etc. as required.	Each	1144.00
13.18	Erection of metallic street light standard of length exceeding 6.5 meters but not exceeding 8 meters in cement concrete 1:3:6 (1cement:3coarse sand:6 graded stone aggregate 40mm nominal size) foundation with cement concrete collar of size 0.4 meters dia x 0.5 meters height to accommodate the looping type cable end box including excavation and refilling etc. as required.	Each	1361.00
13.19	Erection of steel tubular or rail pole strut in cement concrete 1:3:6 (1cement:3coarse sand: 6 aggregate 40mm nominal size) foundation including excavation and refilling and secured with holding clamps, nuts and bolts, etc. as required.	Each	1818.00
13.20	Erection of RCC/PCC pole struct in bricballast and ramming the foundation including excavation and refilling and secured with holding clamps nuts and bolts etc. as required.	Each	1932.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.21	Supplying and erection of stay set complete (Galvanized) 19mm. Dia x 1.8 meter long stay rod anchor plate of size 300 mm x 300 mm x 6.4mm thimble stay clamps, turn buckle (19mm dia x 60cm), 7/4.00mm dia G.I. Stay wire and strain insulator etc. in cement concrete 1:3:6 (1 Cement : 3 Coarse sand : 6 graded stone aggregate 40mm nominal size) foundation including excavation and refilling etc. as required.	Each	2273.00
13.22	Supplying and erection of stay set complete (Galvanized) with 19mm dia x 1.8 meter long stay anchor plate of size 300mm x 300mm x 6.4mm thimble stay clamps turn buckle 19mmx560cm 7/3.15mm dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 Cement : 3 Coarse and : 6 graded stone aggregate 40mm nominal size) foundation including excavation and refilling etc. as required.	Each	2120.00
13.23	Supplying and erection of stay set complete (Galvanized) with 19mm.dia 1.8 meter long stay rod, anchor plate of size 300mm x 300mm x 6.4mm thimble stay clamps, bow tightener, 7/4.00 dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 Cement : 3 Coarse and : 6 graded stone aggregate 40mm nominal size) foundation including excavation and refilling etc. as required.	Each	2280.00
13.24	Supplying and erection of stay set complete (Galvanized) with 19mm.dia 1.8 meter long stay rod, anchor plate of size 300mm x 300 mm x 6.4mm thimble stay clamps, bow tightener, 7/3.15 dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 Cement : 3 Coarse and : 6 graded stone aggregate 40mm nominal size) foundation including excavation and refilling etc. as required.	Each	2127.00
13.25	Erection of stay set complete (Galvanized) in cement concrete 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) foundation including excavation and refilling etc. as required.	Each	929.00
13.26	Supplying and erection of bow stay set complete (galvanized) with 19mm dia x 1.8m long stay rod, anchor plate of size 300mmx300mm x 6.4mm thimble stay clamps, turn buckle 19mmx60cm, 7/4.00mm dia G.I. stay wire and strain insulator etc. in cement concrete 1:3:6 (1 Cement : 3 coarse sand : 6 graded stone aggregate 40mm nominal size) foundation including excavation and refilling and also with 0.6m long brace of size 50mmx 50mmx6mm angle iron with 50mm dia pulley fixed at one end of the brace as required.	Each	2567.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.27	Supplying and erection of bow stay set complete (galvanized) with 19mm dia. X 1.8m long stay rod anchor plate of size 300mmx300mmx6.4mm thimble stay clamps turn buckle 19mmx60cm, 7/3.15mm dia G.I. Stay wire and strain insulator etc. in cement concrete 1:3:6 (1cement : 3 coarse sand : 6 graded stone aggregate 400mm nominal size foundation including excavation and refilling and also with 0.6m long brace of size 50mmx50mmx6mm angle iron with 50mm dia pulley fixed at one end of the brace as required.	Each	2414.00
13.28	Supplying of channel iron 75mmx40mm (5.7kg/ m) cross arm for 2 wire overhead line complete with clamps, bolts and nuts etc.including painting as required	Set	301.00
13.29	Supplying of channel iron 75mmx40mm(5.7kg/ m) cross arm for 4 wire overhead line complete with clamps, bolts and nuts etc.including painting as required	Set	524.00
13.30	Supplying of channel iron 100mmx50mmx7.9kg.Per M cross arm for 4 wire overhead line complete with clamps, bolts and nuts etc..including painting as required	Set	892.00
13.31	Supplying of angle iron 50mmx50mmx6mm (4.5 kg /m) cross arm for 2 wire overhead line complete with clamps, bolts and nuts etc.including painting as required.	Set	234.00
13.32	Supplying of angle iron 50mmx50mmx6mm(4.5 kg /m) cross arm for 4 wire overhead line complete with clamps, bolts and nuts etc.including painting .as required.	Set	375.00
13.33	Erection of angle iron/channel iron cross arm on existing pole etc. as required.	Set	53.00
13.34	Supply and Erection of galvanized 'D' iron bracket complete with shackle insulator (75mmx90mm) bolts and nuts, coach screws etc..including painting as required.	Set	172.00
13.35	supply & Erection of galvanized 'D' iron complete with shackle insulator (100mmx110mm) bolts and nuts, coach screws etc..including painting as required.	Set	196.00
13.36	Erection of galvanized 'D' iron and insulator on pole as required.	Set	13.00
13.37	Supplying and erection of 75mm x 90mm shackle insulator with G.I. bolts, nuts and straps etc. as required.	Each	89.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.38	Supplying and erection of 100mmx110mm shackle insulator with G.I. bolts, nuts and straps etc. as required.	Each	112.00
13.39	Supplying and erection of 100mmx65mm pin insulator complete with G.I. spindle and nuts etc. as required.	Each	55.00
13.40	Supplying and erection of 100mmx80mm pin insulator complete with G.I. spindle and nuts etc. as required.	Each	52.00
13.41	Erection of shackle/pin insulator etc. as required.	Each	14.00
13.42	Erection of G.I. wire No.8 SWG including binding etc.as required.	Km.	543.00
13.43	Erection of hexagonal type guard as required (labour only)	Each	38.00
13.44	Erection of ring type guard as required (Labour only)	Each	13.00
13.45	Erection of cradle guard as required (Labour only)	Each	25.00
13.46	Supplying and erection of 15A aerial fuse complete as required.	Each	44.00
13.47	Supplying and erection of 30A aerial fuse complete as required.	Each	53.00
13.48	Erection of aerial fuse as required.	Each	19.00
13.49	Fixing of lightning arrestor (labour only)	Each	29.00
13.50	Supplying and fixing of 20mm dia. G.I. pipe A class 3 mtrs. in length for street light water tight bracket including bending to shape and wiring with 1.5sqmm W.P./PVC wire alongwith water proof controlling switch etc. as required.	Each	480.00
13.51	Supplying and fixing of 20mm dia. G.I. pipe A class 2 mtrs. Long for street light water tight bracket including bending to shape and wiring with 1.5sqmm W.P./PVC wire alongwith water proof controlling switch etc. as required.	Each	599.00
13.52	Supplying and fixing of 32mm dia. X 2.00 mtr. Long G.I. pipe B class bracket for mounting of flourescent street light fittings on poles including bending the pipe to the required shape and wiring with 1.5Sq.mm W.P./PVC wire etc. as required.	Each	488.00
13.53	Providing and fixing 50mmx3.2M.G.I. Long pipe (including accessories) complete with 50mmx50mmx6mm angle iron bracket on wall and 75mmx90mm shackle insulator with straps for house service connection.	Each	1088.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.54	Providing and fixing 50mmx5.6M.G.I. Long pipe (including accessories) complete with 50mmx50mmx6mm angle iron cross arm and M.S. flat iron, bends for guard wire 75mmx90mm shackle insulator with straps 7/3.15mm G.I. wire, stay set for house service connection.	Each	1712.00
13.55	Dismantling of over head lines comprising of copper / aluminium overhead conductor, G.I. wire, cross arm, insulators etc. as required.	Kg	960.00
13.56	Dismantling poles/street light standards/struts embedded in brick ballast etc. as required.	Each	354.00
13.57	Dismantling poles/street light standards/struts embedded in cement concrete foundation etc. as required.	Each	470.00
13.58	Supplying of angle/channel flat iron fitting for overhead lines such as cross arms, clamps, brackets, welding and other necessary materials as per specifications.	Kg.	51.00
13.59	Labour charges for fixing 'D' brackets of angle iron 50x50x6mm size on existing pole as required	Each	24.00
13.60	Labour charges for fixing 'D' brackets of angle iron 50x50x6 mm size on existing wall masonry with required materials complete.	Each	26.00
13.61	Supplying and erection of galvanised stay set for 11kV overhead line complete with 19/20mm dia x 1.8 meters long stay rod, anchor plate of size 45cm x 45cm x 7.5mm thick, thimble, stay clamps, turn buckle (20mmx 600mm), 7/4.00mm dia G.I. stay wire and 11kV strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm. nominal size) foundation including excavation and refilling etc. as required.	Set	2331.00
13.62	Supplying and erection of galvanised stay set for 33kV overhead line complete with 19/20mm dia x 1.8 meters long stay rod, anchor plate of size 45cm x 45cm x 7.5mm thick, thimble, stay clamps, turn buckle (20mmx 600mm), 7/4.00mm dia G.I. stay wire and 33kV strain insulator etc. in cement concrete 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40mm. nominal size) foundation including excavation and refilling etc. as required.	Set	2361.00
13.63	Supplying of channel iron 75mm x 40mm x 7.14 Kg/mtr. Pole top bracket/cross arm for single 11kV overhead line conductor complete with 50mm x 6mm flat iron clamp, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. 'and painting with primer and finish paint as required	Each	197.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.64	Supplying of channel iron 75mm x 40mm x 7.14 Kg/mtr. Pole top bracket/cross arm for single 33kV overhead line conductor complete with 50mm x 6mm flat iron clamp, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. 'and painting with primer and finish paint as required	Each	213.00
13.65	Supplying of 50mmx 8mm M.S. Flat iron pole top bracket/cross arm for single 11/22/33kV overhead line conductor complete with fixing bolts, nuts and washers drilling holes for insulator pins, painting with primer and finish paint as required.	Each	231.00
13.66	Supplying of channel iron 75mmx40mmx7.14Kg/Mtr.cross arm for two 11kV overhead line conductors complete with 50mm x 50mm x 6mm angle iron bracket welded to the channel iron and complete with 50mm x 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. and painting with primer and finish as required.	Each	1004.00
13.67	Supplying of channel iron 75mmx40mmx7.14Kg/Mtr.cross arm for two 33kV overhead line conductors complete with 50mm x 50mm x 6mm angle iron bracket welded to the channel iron and complete with 50mm x 6mm M.S. flat iron clamps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. and painting with primer and finish as required.	Each	1293.00
13.68	Supplying of channel iron 75mm x 40mm x 7.14 kg/Mtr. V-shape cross arm for two 11 kV overhead line conductors complete with 50 mm x 6mm M.S. flat iron clamp, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. and painting with primer and finish paint as required.	Each	783.00
13.69	Supplying of channel iron 75mm x 40mm x 7.14 kg/Mtr. V-shape cross arm for two 33 kV overhead line conductors complete with 50 mm x 6mm M.S. flat iron clamp, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. and painting with primer and finish paint as required.	Each	924.00
13.70	Erection of pole top/straight two wire/V-shape two wire/angle iron/channel iron, Cross arm on steel tubular/Rail/Channel iron/PCC pole for 11kV/33kV as required.	Set	96.00
13.71	Supplying of two lengths of channel iron 75mm x 40mm x 7.14 kg/mtr . Double pole cross arm for three wire 11kV overhead line conductors complete with through bolts and nuts for clamping to the poles, 50mm x 6mm m.s flats welded on one side to the channel iron and with bolts and nuts on the other side for tying the cross arms together, including drilling holes for insulator pins/fittings, bolts and nuts etc. and painting with primer and finish paint as required.	Set	2167.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.72	Supply and erection of a set of cross bracing frame work for 11 kv overhead line double pole structure having four members fabricated out of 50mmx50mmx6mm angle iron to form a rectangle of minimum size 1400mm width x 2500mm height, complete with 50mm x 6mm flat iron clamps, bolts and nuts including drilling holes and painting with primer and finish paint as required.	Set	2834.00
13.73	Supplying of channel iron 100mmx50mm x 9.56kg/mtr, pole top bracket/cross arm for single 33kV overhead line conductor complete with 50mmx6mm flat iron clamp, bolts and nuts including holes for insulator pins, bolts and nuts etc. and painting with primer and finish as required.	Each	267.00
13.74	Supplying of channel iron 100mmx50mm x 9.56kg/mtr, cross arm for two wire 33kV overhead line conductors complete with 50mmx50mmx6mm angle iron bracket welded to the channel iron and complete with 50mmx6mm flat iron clamps, bolts and nuts including drilling holes for insulator pins/fitting, bolts and nuts etc. and painting with primer and finish paint as required.	Each	1531.00
13.75	Supplying of channel iron 100mm x 50mm x 9.56Kg/Mtr. V-Shape cross arm for two 33kV overhead line conductors complete with 50mm x 6mm x M.S. flat iron clmps, bolts and nuts including drilling holes for insulator pins, bolts and nuts etc. painting with primer and finish paint as required.	Each	1189.00
13.76	Supplying of two lengths of channel iron 100mmx50mmx9.56kg/mtr. Double pole cross arm for three wire 33kV overhead line conductors complete with through bolts and nuts for clamping to the poles, 50mmx6mm m.s flat welded on one side to the channel iron and with bolts and nuts on the other side for tying the cross arms together including drilling holes for insulator pins/fittings, bolts and nuts etc. and painting with primer and finish paint as required.	Set	2891.00
13.77	Erection of double pole 3-wire cross arm for 11kV /22kV/33 overhead lines as required.	Each	223.00
13.78	Supplying and erection of a set of cross bracing frame work for 33kV overhead line double pole structure having four members fabricated out of 65mmx65mmx6mm angle iron to form a rectangle of minimum size 2400mm width x 2800mm height, complete with 50mmx6mm M.S. flat iron clamps, bolts and nuts including drilling holes and painting with primer and finish as required.	Set	4458.00
13.79	Supplying and erection of 11kV pin insulator complete with large steel head G.I. pin, nut, washer etc. as required.	Set	343.00
13.80	Supplying and erection of 11kV disc insulator for 11kV overhead lines with galvanised insulator fittings, ball and socket type, and complete with galvanised strain clamp, bolts, nuts washer etc. as required.	Set	1005.00

S.No.	Description of Item	Unit	Rate (in Rs)
13.81	Supplying and erection of 33kV pin insulator complete with large steel head G.I. pin, nut, washer etc. as required	Set	934.00
13.82	Supplying and erection of a set of three 11kV disc insulators for 33kV overhead lines with galvanised insulator fittings, ball and socket type, and complete with galvanised strain clamp, bolts, nuts, washers etc. as required.	Set	2832.00
13.83	Erection of disc/pin insulator for 11kV overhead line as required	Set	29.00
13.84	Supplying and erection of three piece nonlinear resistor type lightning arrestor suitable for 3 wire, 11kV overhead lines with rated voltage of 9kV (rms) with a nominal discharge current rating of 5 KA and complete with galvanised clamping arrangement, G.I. bolts, nuts, washer etc. as required.	Set	3972.00
13.85	Supplying and erection of single piece non-linear resistor type lightning arrestor for 3 wire, 33kV overhead lines with rated voltage of 30kV (rms) with a nominal discharge current rating of 5 KA and complete with galvanised clamping arrangement, G.I. bolts, nuts, washer etc. as required.	Set	36422.00

CHAPTER -14			
POWER CABLES & LAYING			
S.No.	Description of Item	Unit	rate
14.1	Supply of XLPE Insulated power cable (conforming IS-7098) 1100 Volt grade/Heavy duty power cable conforming to IS 1554-1100 Volts grade , 2 core /3½ core/4 core ISI MARKED with Alu. Stranded /solid conductor		
14.1.1	UNARMOURED 2 Core		
1	2.5 Sq.mm.(Heavy Duty)	meter	45.00
2	4 Sq.mm.(Heavy Duty)	meter	54.00
3	6 Sq.mm.(XLPE)	meter	67.00
4	10 Sq.mm.(XLPE)	meter	86.00
5	16 Sq.mm.(XLPE)	meter	113.00
14.1.2	ARMOURED 2 Core		
1	2.5 Sq.mm.(Heavy Duty)	meter	99.00
2	4 Sq.mm.(Heavy Duty)	meter	109.00
3	6 Sq.mm.(XLPE)	meter	131.00
4	10 Sq.mm.(XLPE)	meter	147.00
5	16 Sq.mm.(XLPE)	meter	171.00
14.1.3	UNARMOURED 3 Core		
1	6 Sq.mm.(XLPE)	meter	84.00
2	10 Sq.mm.(XLPE)	meter	110.00
3	16 Sq.mm.(XLPE)	meter	143.00
4	25 Sq.mm(XLPE)	meter	179.00
5	35 Sq.mm(XLPE)	meter	228.00
6	50 Sq.mm(XLPE)	meter	300.00
7	70 Sq.mm(XLPE)	meter	416.00
8	95 Sq.mm.(XLPE)	meter	529.00
14.1.4	ARMOURED 3 Core		
1	6 Sq.mm.(XLPE)	meter	150.00
2	10 Sq.mm.(XLPE)	meter	171.00
3	16 Sq.mm.(XLPE)	meter	188.00
4	25 Sq.mm(XLPE)	meter	234.00
5	35 Sq.mm(XLPE)	meter	298.00
6	50 Sq.mm(XLPE)	meter	373.00
7	70 Sq.mm(XLPE)	meter	494.00
8	95 Sq.mm.(XLPE)	meter	613.00
14.1.5	UNARMOURED 3½ CORE		
1	25 Sq.mm(XLPE)	meter	216.00
2	35 Sq.mm(XLPE)	meter	264.00
3	50 Sq.mm(XLPE)	meter	353.00
4	70 Sq.mm(XLPE)	meter	484.00
5	95 Sq.mm.(XLPE)	meter	618.00
6	120 Sq.mm.(XLPE)	meter	769.00
7	150 Sq.mm.(XLPE)	meter	928.00
8	185 Sq.mm.(XLPE)	meter	1166.00
9	240 Sq.mm.(XLPE)	meter	1511.00
10	300 Sq.mm.(XLPE)	meter	1858.00
11	400 Sq.mm.(XLPE)	meter	2370.00

S.No.	Description of Item	Unit	rate
14.1.6	ARMOURED 3½ CORE		
1	25 Sq.mm(XLPE)	meter	276.00
2	35 Sq.mm(XLPE)	meter	328.00
3	50 Sq.mm(XLPE)	meter	430.00
4	70 Sq.mm(XLPE)	meter	569.00
5	95 Sq.mm.(XLPE)	meter	704.00
6	120 Sq.mm.(XLPE)	meter	887.00
7	150 Sq.mm.(XLPE)	meter	1033.00
8	185 Sq.mm.(XLPE)	meter	1286.00
9	240 Sq.mm.(XLPE)	meter	1634.00
10	300 Sq.mm.(XLPE)	meter	1997.00
11	400 Sq.mm.(XLPE)	meter	2513.00
14.1.7	UNARMOURED 4 CORE		
1	6 Sq.mm.(XLPE)	meter	95.00
2	10 Sq.mm.(XLPE)	meter	118.00
3	16 Sq.mm.(XLPE)	meter	168.00
4	25 Sq.mm(XLPE)	meter	204.00
5	35 Sq.mm(XLPE)	meter	271.00
6	50 Sq.mm(XLPE)	meter	363.00
7	70 Sq.mm(XLPE)	meter	487.00
8	95 Sq.mm.(XLPE)	meter	637.00
9	120 Sq.mm.(XLPE)	meter	799.00
10	150 Sq.mm.(XLPE)	meter	987.00
14.1.8	ARMOURED 4 CORE		
1	6 Sq.mm.(XLPE)	meter	160.00
2	10 Sq.mm.(XLPE)	meter	175.00
3	16 Sq.mm.(XLPE)	meter	218.00
4	25 Sq.mm(XLPE)	meter	268.00
5	35 Sq.mm(XLPE)	meter	340.00
6	50 Sq.mm(XLPE)	meter	441.00
7	70 Sq.mm(XLPE)	meter	576.00
8	95 Sq.mm.(XLPE)	meter	737.00
9	120 Sq.mm.(XLPE)	meter	907.00
10	150 Sq.mm.(XLPE)	meter	1100.00
14.2	Supply of approved HighTension XLPE cable 11kVgrade as per ISI standard 3 core Armoured with Alu. Solid/stranded conductor ISI MARKED as required		
14.2.1	XLPE CABLE 11 KV GRADE		
1	50 Sq.mm	meter	1338.00
2	70 Sq.mm	meter	1502.00
3	95 Sq.mm.	meter	1646.00
14.2.2	XLPE CABLE 33 KV GRADE		
1	50 Sq.mm	meter	2000.00
2	70 Sq.mm	meter	2303.00
3	95 Sq.mm.	meter	2379.00

S.No.	Description of Item	Unit	rate
14.3	Providing & Erecting M-Seal Push - on Kit for 11 kV/33 kV XLPE-Cable with kit content, stress cone, H.L. pad, Top Cap, rain shed, self bounding insulating tape, sliding cone leakage current collector, P.V.C. boot earth continuity connection mould adhesive cum solvent, P.V.C. (N.A.) tape, silicon grease Aluminium lugs, Aluminium Oxide cloth,nylong string, copper binding wire, Adopter etc. duty erected on pole/support & connected to D.O. fuse unit as required as per accepted standard, as required complete.		
14.3.1	M-seal push on kit 33 kV XLPE cable		
1	M-seal push on kit 33 kV XLPE cable O.D. termination		
	a. 3x50 sq.mm	Each	43079.00
	b. 3x70to3x120 sq.mm.	Each	46952.00
2	M-seal push on kit 33 kV XLPE cable I.D. termination		
	a. 3x50 sq.mm	Each	17195.00
	b. 3x70to3x120 sq.mm.	Each	20556.00
14.3.2	M-seal push on kit 11 kV XLPE cable		
1	M-seal push on kit 11 kV XLPE cable O.D. termination		
	a. 3x25,3x35	Each	19751.00
	b. 3x50,3x70	Each	20171.00
	c. 3x95	Each	20998.00
2	M-seal push on kit 11 kV XLPE cable I.D. termination		
	a. 3x25,3x35	Each	10973.00
	b. 3x50,3x70	Each	11464.00
	c. 3x95	Each	13122.00
14.4	Providing & Making cable end termination with HEAT SHRINKABLE jointing kit complete with all accessories including lugs suitable for 33 kV/11 kV 3 core XLPE alum. conductor cable as required as per specification and as per accepted standard complete.		
14.4.1	Heat shrinkable joint,kit 33 kV XLPE		
1	Heat shr.jointg. kit 33 kV XLPE cable O.D. termination		
	a. 3x50	Each	33612.00
	b. 3x70,95	Each	34605.00
	c. 3x120,185	Each	54021.00
2	Heat shrinkable joint. kit 33 kV XLPE cable I.D. termination		
	a. 3x50	Each	23825.00
	b. 3x70,95	Each	27662.00
	c. 3x120,185	Each	54021.00
14.4.2	Heat shrinkable joint,kit 11 kV XLPE		
1	Heat shr.jointg. kit 11 kV XLPE cable O.D. termination		
	a. 3x25, 3x35	Each	26032.00
	b. 3x50, 3x70	Each	31222.00
	c. 3x95	Each	31222.00
2	Heat shrinkable joint. kit 11 kV XLPE cable I.D. termination		
	a. 3x25, 3x35	Each	14953.00
	b. 3x50, 3x70	Each	19239.00
	c. 3x95	Each	19239.00
14.5(A)	End termination		

S.No.	Description of Item	Unit	rate
14.5.1	Providing and erecting epoxy resin end termination/joint for low tension P.V.C./XPLE insulated cable of 1100 Volt grade complete with cable jointing compound, Harner, Plastic mould adhesive cum solvent epoxy putty, spacer, tapes etc. as per I.S. specification 8438. 1977 for cable duty erected on existing pole/support/switch gears and connection to supply for all core cable as under.		
14.5.1.	id/od epoxy resin end termination		
	a. 10-50 sqmm 2 / 3 / 3½ core	Each	500.00
	b. 70-120 sqmm 2 / 3 / 3½ / 4core	Each	669.00
	c. 150-300 sqmm 2 / 3 / 3½ / 4core	Each	1111.00
	d. 350-500sqmm 3½ core	Each	1566.00
14.5.2	Supply and making cable end termination with all necessary materials including lugs etc.Heat shr.jointg. kit 1.1 kV XLPE/HD cable O.D. termination		
	a. 10-50 sqmm 2 / 3 / 3½ / 4core	Each	7085.00
	b. 70-150 sqmm 2 / 3 / 3½ / 4core	Each	8252.00
	c. 150-300 sqmm 2 / 3 / 3½ / 4core	Each	9968.00
	d. 350-500 sqmm 2 / 3 / 3½ / 4core	Each	12084.00
14.5.3	Supply and making cable end termination with all necessary materials including lugs etc.Heat shr.jointg. kit 1.1 kV XLPE/HD cable I.D. termination		
	a. 10-50 sqmm 2 / 3 / 3½ / 4core	Each	3731.00
	b. 70-150 sqmm 2 / 3 / 3½ / 4core	Each	4500.00
	c. 150-300 sqmm 2 / 3 / 3½ / 4core	Each	7298.00
	d. 350-500 sqmm 2 / 3 / 3½ / 4core	Each	8515.00
14.5(B)	Cable Jointing		
14.5.1	Straight through cable jointing kit including compound, hardener, plastic mould with other accessories for the following aluminium conductor PVC insulated and PVC sheathed cable//XLPE of 1.1 kV grade:(I.D./O.D.)		
	a. 6-16 sqmm 2 / 3 / 3½ / 4core	Each	1011.00
	b. 25-35 sqmm 2 / 3 / 3½ / 4core	Each	1353.00
	c. 50-95 sqmm 2 / 3 / 3½ / 4core	Each	1716.00
	d. 120-240 sqmm 2 / 3 / 3½ / 4core	Each	2848.00
	e. 300-350 sqmm 2 / 3 / 3½ / 4core	Each	3624.00
	f. 400-500 sqmm 2 / 3 / 3½ / 4core	Each	5240.00
14.5.2	Supply and makingHeat shr.jointg. kit 1.1 kV XLPE/HD cable straightthrough jointing.kit complete with all accessories including lugs etc. (I.D../O.D.)		
	a. 6-16 sqmm 2 / 3 / 3½ / 4core	Each	2657.00
	b. 25-35 sqmm 2 / 3 / 3½ / 4core	Each	3588.00
	c. 50-95 sqmm 2 / 3 / 3½ / 4core	Each	4500.00
	d. 120-240 sqmm 2 / 3 / 3½ / 4core	Each	6835.00
	e. 300-350 sqmm 2 / 3 / 3½ / 4core	Each	12934.00
	f. 400-500 sqmm 2 / 3 / 3½ / 4core	Each	13655.00
14.6	BRASS COMPRESSION GLAND		
14.6.1	Supplying and fixing heavy duty cable gland for P.V.C. insulated armoured cable with brass washer, Rubber ring complete erected with cable and lead connection etc. as per specification complete.		

S.No.	Description of Item	Unit	rate
1	Gland Size 22mm suitable for cable 2,3,3½ & 4 x upto 6 Sq.mm	Each	36.00
2	Gland Size 22mm suitable for cable 2,3, 3½, 4 x 10 Sq.mm or 2x 16 Sq.mm	Each	41.00
3	Gland size 28mm for 3,4 x 16 Sq.mm	Each	63.00
4	Gland size 32mm for 2,3, 3½, 4 x 25 Sq.mm OR 2,3, 3½ x 35 Sq.mm OR 2,3 x 50 Sq.mm.	Each	73.00
5	Gland size 38mm 3½ x 70 Sq.mm, 3x95 Sq.mm	Each	113.00
6	Gland Size 45mm 3/3½ x 120 Sq.mm 3½ x 95 Sq.mm 3 x 150 Sq.mm.	Each	142.00
7	Gland Size 50 mm 3½ x 150 Sq.mm 3 x 185 Sq.mm	Each	181.00
8	Gland Size 57mm 3 x 225 Sq.mm 3 ½ x 185 Sq.mm	Each	236.00
9	Gland Size 70mm 3 x 240 Sq.mm 3½ x 300 Sq.mm	Each	336.00
10	Gland Size 82mm 3½ x 400 Sq.mm	Each	477.00
14.7	Supplying and fixing ferrules. (Aluminium in Line connector) As per IS - specification suitable for following size of cable with Aluminium stranded/solid conductor evenly cramped with high pressure tool including connection as required complete		
14.7.1	For Conductor Size-		
1	2.5 to 6.00 Sq.mm	Each	2.00
2	10.00 Sq.mm	Each	2.00
3	16.00 Sq.mm	Each	3.00
4	25.00 Sq.mm	Each	4.00
5	35.00 Sq.mm	Each	4.00
6	50.00 Sq.mm	Each	8.00
7	70.00 Sq.mm	Each	13.00
8	95.00 Sq.mm	Each	15.00
9	120.00 Sq.mm	Each	21.00
10	150.00 Sq.mm	Each	29.00
11	185.00 Sq.mm	Each	36.00
12	240.00 Sq.mm	Each	59.00
13	300.00 Sq.mm	Each	85.00
14	400.00 Sq.mm	Each	124.00
14.8	LUGS:-		
	Supplying and fixing cramping type Alum. lugs as per I.S.S. Specification suitable for following size of cable with Alu. /Copper solid/stranded conductor evenly cramped with high/pressure tool and connected to switch gear/Bus/M.C.C.B./ M.C.B. etc. as required complete.For Conductor Size-		
1	6mm to 16 Sq.mm	Each	4.00
2	25 Sq.mm	Each	7.00
3	35 Sq.mm	Each	9.00
4	50 Sq.mm	Each	13.00
5	70 Sq.mm	Each	21.00
6	95 Sq.mm.	Each	22.00
7	120 Sq.mm.	Each	32.00
8	150 Sq.mm.	Each	41.00
9	180 Sq.mm	Each	50.00
10	240 Sq.mm.	Each	88.00
11	300 Sq.mm.	Each	123.00
12	400 Sq.mm.	Each	180.00

S.No.	Description of Item	Unit	rate
14.9	Supplying & fixing pin terminal lugs as per ISS specification suitable for cable evenly cramped with high pressure tool & connection to switch gear terminal.		
1	Aluminum Lugs Pin Type		
	a. Upto 16 Sq.mm Conductor Size	Each	4.00
	b. Upto 25 Sq.mm Conductor Size	Each	7.00
	c. 35 Sq.mm Conductor Size	Each	9.00
2	Copper Lugs Pin Type		
	a. Upto 16 Sq.mm Conductor Size	Each	11.00
	b. Upto 25 Sq.mm Conductor Size	Each	25.00
	c. 35 Sq.mm Conductor Size	Each	26.00
3	Copper Lugs Tube Type		
	a. Upto 16 Sq.mm Conductor Size	Each	11.00
	b. Upto 25 Sq.mm Conductor Size	Each	25.00
	c. 35 Sq.mm Conductor Size	Each	26.00
	d. 50 Sq.mm. Conductor Size	Each	34.00
14.10	CABLE LAYING		
1	Laying of one number PVC insulated and PVC sheathed power cable of 1.1kV grade of size not exceeding 25 Sq.mm direct in ground including excavation, sand cushioning, protective covering and refilling the pit etc. as required.	meter	174.00
2	Laying of one number PVC insulated power cable of 1.1.kV grade of size exceeding 25Sq.mm but not exceeding 120 Sq.mm direct in ground including excavation, sand cushioning, protective covering and refilling the pit etc. as required.	meter	180.00
3	Laying of one number PVC Insulated and PVC sheathed power cable of 1.1.kV grade of size exceeding 120 Sq mm but not exceeding 400 Sq.mm direct in ground including excavation and cushioning protective covering and refilling the pit etc. as required.	meter	190.00
4	Laying of one number additional PVC insulated PVC sheathed power cable of 1.1kV grade of size not exceeding 25Sq.mm direct in ground in the same trench in one tier horizontal formation including excavation sand cushioning protective covering and refilling the pit etc. as required.	meter	121.00
5	Laying of one number additional PVC insulated and PVC sheathed power cable of 1.1kV grade of size exceeding 25 Sq.mm but not exceeding 120 Sq.mm direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the pit etc. as required.	meter	124.00
6	Laying of one number additional PVC insulated and PVC sheathed power cable of 1.1kV grade of size exceeding 120 Sq mm but not exceeding 400 Sq mm direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the pit etc. as required.	meter	127.00

S.No.	Description of Item	Unit	rate
7	Laying of one number PVC insulated and PVC sheathed power cable of 1:1 kV grade of size not exceeding 25 Sq.mm in the existing RCC Hume/Stone/Ware/G.I. pipe as required.	meter	16.00
8	Laying of one number PVC insulated and PVC sheathed power cable of 1.1 kV grade of size exceeding 25 Sq.mm but not exceeding 400 Sq mm in the existing RCC/Hume Stoneware/G.I. Pipe as required.	meter	22.00
9	Laying of one number PVC insulated and PVC sheathed power cable of 1.1 kV grade of size not exceeding 25 Sq.mm in th existing masonry open duct as required.	meter	13.00
10	Laying of one number PVC insulated and PVC sheathed power cable of 1.1kV grade of size exceeding 25Sq.mm but not exceeding 400 Sq.mm in the existing masonry open duct as required.	meter	99.00
11	Laying of one number PILC/PVC insulated and PVC sheathed power cable of grade exceeding 1.1kV but not exceeding 11kV of size not exceeding 120 Sq.mm direct in ground including excavation sand cushioning, protective covering and refilling the trench etc. as required.	meter	73.00
12	Laying of one number PILC/PVC insulated and PVC sheathed power cable of grade exceeding 11kV of size exceeding 120 Sq.mm but not exceeding 400 Sq.mm direct in ground including excavation sand cushioning, protective covering and refilling the trench etc. as required	meter	70.00
13	Laying of one number additional PILC/PVC insulated and PVC sheathed power cable of grade exceeding 1.1kV but not exceeding 11kV of size not exceeding 120 Sq.mm direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench as required.	meter	148.00
14	Laying of one number additional PILC/PVC insulated and PVC sheathed power cable of grade exceeding 1.1kV but not exceeding 11kV of size exceeding 120 Sq.mm but not exceeding 400 Sq.mm. direct in ground in the same trench in one tier horizontal formation including excavation, sand cushioning, protective covering and refilling the trench etc. as required.	meter	220.00
15	Laying of one number PILC/PVC insulated and PVC sheathed power cable of grade exceeding 1.1kV but not exceeding 11kV of size not exceeding 400 Sq.mm in the existing RCC / Hume / Stoneware / G.I. Pipe as required.	meter	32.00
16	Laying of one number PILC/PVC insulated and PVC sheathed power cable of grade exceeding 1.1kV but not exceeding 11kV of size not exceeding 400 Sq.mm. in the existing masonry open duct as required.	meter	25.00

S.No.	Description of Item	Unit	rate
17	Laying and fixing of one number PVC insulated and PVC sheathed aluminium conductor cable of 1.1kV grade of size not exceeding 25 Sq.mm on surface etc. as required.	meter	29.00
18	Laying and fixing of one number PVC insulated and PVC sheathed aluminium conductor cable of 1.1kV grade of size exceeding 25 Sq.mm but not exceeding 120 Sq.mm on surface etc. as required.	meter	70.00
19	Laying and fixing of one number PVC insulated and PVC sheathed aluminium conductor cable of 1.1kV grade of size exceeding 120 Sq.mm but not exceeding 300 Sq.mm on surface etc. as required.	meter	72.00
14.11	Excavation of the trenches in Hard Rock not exceeding 1.5 meter in width and lift upto 1.5 meter including getting out the excavated soil and disposal of surplus excavated soil as directed within the lead of 50 meter (without blasting)	Cu. Mtr.	342.00
14.12	Laying of underground cable armoured./ unarmoured as per specification in air with approved type of iron clamps complete.		
1	2 / 3 / 4 Core cable upto 16 Sq.mm	meter	16.00
2	3 / 3½ / 4 Core cable 25 Sq.mm to 120 Sq.mm	meter	22.00
3	3 / 3½ / 4 Core cable 150 Sq.mm and above	meter	28.00
14.13	Laying of cement concrete or approved type of cable cover/flag stone over L.T. cover trench as per specification.	meter	20.00
14.14	Supplying of approved type precast R.C.C. cable cover class EHV/HVP at site inclusive of transport required.		
1	Cable cover class EHV-type-I with peak size 450 x 230 x 50mm.	Each	56.00
2	Cable cover class EHV-type-I with peak size 600 x 230 x 50mm.	Each	76.00
3	Cable cover class HVP-type-I with peak size 300 x 180 x 40mm.	Each	29.00
4	Cable cover class HVP-type-II with peak size 450 x 180 x 40mm.	Each	43.00
5	Cable cover class HV-type-I flat size 300 x 180 x 40mm	Each	27.00
6	Cable cover class HV-type-II flat size 450 x 180 x 40mm	Each	42.00
7	Cable cover class LV-type-I flat size 250 x 150 x 40mm	Each	19.00
8	Cable cover class LV-type-II flat size 300 x 180 x 40mm	Each	27.00
9	Cable cover class LV-type-III flat size 450 x 180 x 40mm	Each	43.00
14.15	Fixing Route Marker with cement concrete 1:2:4 (1cement and 2 coarse sand :4graded stone aggregate 20mm nominal size) of size 60cm x 60cm at the bottom and 50cm x 50cm at the top with a thickness of 10cm including inspection duly engraved as required.	Each	133.00
14.16	Supplying Route Marker with 10cm x 10cm G.I. Plate 5mm. Thick with Inspection thereon bolted/welded to 35mm x 35mm x 6mm angle iron 60cm long and fixing the same in ground as required.	Each	175.00

	CHAPTER -15		
	TRANSFORMERS & FIRE EXTINGUISHER		
S.No.	Description of Item	Unit	Rate
15	Supplying, installing, testing and commissioning of 11/0.4 K.V. 3 Phase 50 Cycle oil immersed, naturally cooled, out door type transformer connected delta on H.T. side and star on L.T. side hand operated off load, Tap changer switch, above 100 kVA rating and diagram plate, two earthing terminal, lifting lugs, oil level guage, drain valve with plug, temperature not exceeding 50°C on load, oil conservator with drain plug, oil filling hole with plug dehydrating silica gel breather, four unidirectional roller, arcing horns, explosion vent, terminal arrangement bushing on H.V. side and cable box on LV side, first filling of oil upto desired level and transformer installing on existing structure with all Required materials arrangements as required as per IS specification.		
15.1	Aluminium wound		
1	25 kVA	Each	67230.00
2	63 kVA	Each	93642.00
3	100 kVA	Each	115252.00
4	200 kVA	Each	198089.00
15.2	Copper wound		
1	200 kVA	Each	300135.00
2	315 kVA	Each	444200.00
3	500 kVA	Each	480216.00
15.3	Supplying installing and testing of AB isolating switch assembly set gang operated suitable for 11/0.4 KV, DP structure with brass part contacts, operating rod with required GI pipe, handle locking arrangement on On-Off position conforming to IS complete with required material and installing on existing structure to complete the job as required as per specification.		
1	11 kV	set	6551.00
2	33kV	set	14235.00
15.4	Supplying, installing, testing of 11 KV D.O. fuse assembly with brass part contact for 11/0.4 KV DP Structure set of 3 with fuse with barrel with required fuse element & other materials as per specification on existing D.P. structure as required.(set of 3nos.)		
1	11kV	set	4336.00
2	33kV	set	10568.00
15.5	Supplying & fixing of Fire Extinguisher/Refills as per IS specification		
1	Dry chemical powder (DCP) type- 5kg duly refilled and ready to use	each	2446.00
2	ABC type duly refilled and ready to used	each	4747.00
3	Co2 type duly refilled and ready to used	each	7425.00
4	Dry chemical powder (DCP) type- 5kg refill only	each	458.00
5	ABC type refill only	each	858.00
6	Co2 type Refill only	each	572.00
7	4 bucket set with stand and sand dully painted red	each	1954.00

2	63 kVA	Each	93642.00
15.6	Supplying, installing, testing and commissioning of 11/root3/ KV 250V (Aluminium) core wound type distribution transformers :		
	(i) 10 KVA	Each	36016.00
	(ii) 16 KVA	Each	40818.00
	(iii) 25 KVA	Each	48022.00
15.7	Supplying, installing, testing and commissioning of LT Distribution Box with TPN isolator 200 amper on incoming,bus bar and 66 S.P.M.C.C.B.of 60 A" .on outgoing side for 63 KVA transformer		
	(i)Supplying, installing, testing and commissioning of LT Distribution Box with TPN isolator 200 amper on incoming,bus bar and 66 S.P.M.C.C.B.of 60 A" .on outgoing side for 63 KVA transformer	Each	14527.00
	(i)Supplying, installing, testing and commissioning of LT Distribution Box with TPN isolator 200 amper on incoming,bus bar and 6 S.P.M.C.C.B.of 90 A" .on outgoing side for 100 KVA transformer	Each	15847.00
	(i)Supplying, installing, testing and commissioning of LT Distribution Box with TPN isolator of 600 amper on incoming,bus bar and 6 S.P.M.C.C.B.of 120 A" .on outgoing side for 200 KVA transformer	Each	26412.00
15.8	Supplying, installing, or stay wires		
	(i) 7/4.00 mm (7/8 SWG)	KG	71.00
	(ii) M.S. Nuts and Bolts	KG	51.00
15.9	Supplying, installing, testing 1100 Volts Grade Aluminium conductor XLPE, LT Cable Single core Armored		
	(i) 25 Sq.mm.	Kms	27612.00
	(ii) 50 Sq.mm.	Kms	40818.00
	(iii) 120 Sq.mm.	Kms	101446.00
	(iv) 185 Sq.mm.	Kms	150068.00
15.10	Supplying, installing, testing and commissioning of 11 KV C.Ts. (Outdoor oil filled type) : with accuracy class 0.5		
	(i) 200-100/5 Amp	Each	9604.00
	(ii) 300-150/5 Amps	Each	9604.00
	(iii) 500-250/5 Amps	Each	11045.00
15.11	Supplying, installing, testing and commissioning of 33 KV C.Ts. (Outdoor oil filled type) : with accuracy class 0.5		
	(i) 200-100/5 Amp	Each	13926.00
	(ii) 300-150/5 Amps	Each	13926.00
	(iii) 500-250/5 Amps	Each	17408.00
15.12	Supplying, installing, testing and commissioning of Lightning Arrestors		
	(i) 11 KV Gapless, line type	Each	495.00
	(ii) 33 KV Gapless line type	Each	5282.00
	(iii) 33 KV Gapless StationType	Each	11705.00
15.13	Supplying, installing, testing of earth Coil (coil of 115 turns of 50mm dia, and 2.5 Mtrs. Lead of 4 mm G.I wire.	Each	195.00

Technical Specification of the High Mast Unit of 9 Mtrs. To 30 Mts. Length

MAST:-

Mast should be made of the hot dipped galvanized MS material, and shall be of one of approved

The types of the plates sheets used for the mast should be specified along with their sizes/gauges and also the national (IS) or international specifications to which these conform.

The design of the Mast for bearing the wind pressure should be as per the requirements of the Indian and International Standards for SAFETY. It shall be the sole responsibility of the company supplying and installing the high mast unit to study record and assess the wind pressure in the location proposed for high mast installation and to supply and install the high mast unit accordingly so that it is a totally safe and hazard-free installation. This shall be based on the HIGHEST wind pressure recoded in LAST 25 YEARS IN THE REGION where the High Mast Unit is to be installed.

The number of pieces that will constitute this mast and the overall length of the Mast above the ground level should be clearly specified. The overlapping MUST be as per the I.S Standards/International Standard.

The welding and bolting or breaking due to wind pressure and / or due to its own weight and / or due to the weights of flood lights, control gear boxes, lamps or due to improper design. The relevant or International standards to which this conforms should be specified.

FOUNDATION:-

The foundation of the complete High Mast Unit shall be RCC Foundation suitable for the soil where the High Mast Unit is proposed to be installed complete with the required foundation bolts.

The soils at that proposed location should be tested by the bidding company, at its own cost and the design of the proposed foundation with its foundation bolts should be prepared and certified by a registered structural engineer/ consultant having at least 15 years experience and should be got approved from the Civil Department of desired local Engineering College before the execution of the foundation.

The curing of the foundation must be done very thoroughly as per standard practice. The cured foundation should be got certified by a licensed structural engineer/consultant having at least 15 years experience.

These certificates should be given in original to the Engineer-in charge.

WIRE ROPES:-

Non corrodible, ISI mark, stainless steel wire ropes of AISI 316 grade should only provided to raise and lower the lantern carriage and should be of flexible type as is recommended for use in such Masts and it should be of such a size that the factor of safety is 500%. These stainless steel wire ropes shall be ISI marked and the test certificate or rope should be supplied after installation of the unit but before commissioning it. These wire ropes should have no joints.

WINCH ASSEMBLY:-

A suitable winch assembly should be provided having required winch drums so that raising, lowering and leveling of lantern carriage is possible and that no inter winding of the wire ropes takes place. This should be self lubricating type by means of oil-bath having recommended lubricant.

The driver spindle must be able to be positively locked, when not in use, by automatic means.

The winch assembly should be capable of operation by hand and also by means of a power device.

ELECTRIC DRIVE OR POWER TOOL:-

If power tool or electric drive is specified in the schedule of items then heavy duty ISI marked electric motor should be provided as the electric drive. The specifications of this motor must be mentioned in the offer.

LANTERN CARRIAGE:-

A suitable and a totally safe and hot dipped galvanized lantern carriage with 300% factor of safety, should be provided having provision for installation of flood light fittings and their CG boxes and the required balancing weights etc.

OUTDOOR TYPE ELECTRICAL CONTROL PANEL:-

The necessary outdoor type electrical control panel provided with a suitable circuit breaker, earth fault protection, inter connections and double earthing arrangement should be provided. This should have a facility to lock. This shall be as per enclosed technical specification for external electrification.

AVIATION OBSTRUCTION LIGHT:-

One number twin dome type Aviation obstruction light with 100 W GLS lamp is to be supplied and commissioned with all required cable at the top of the High Mast Unit to meet the statutory requirements of Department of Civil Aviation.

EARTHING & LIGHTING PROTECTION:-

Two numbers, 300 mm x 300 mm x 6 mm GI plate earthing with 2 Mt. long 19 mm dia "B" class GI pipe wood coal, salt lumps etc, as per IS: 3043 should be provided and 25 mm x 3 mm GI strips should be laid at least 600 mm below ground and should be firmly connected to the two earth terminals of the Mast. Lightning Final should be solidly fixed to the centre of the head frame and should be earthed as per relevant IS by a separate earthing other than those mentioned above.

TEST CERTIFICATES:-

The certificates of the Mast, winch drive, stainless steel wire ropes etc. duly signed by the competent Authority of the Company should be submitted to the Engineer-in-Charge after installation of the Unit but before commissioning it.

APPROVAL FROM ELECTRICAL INSPECTORATE:-

The complete installations should be got approved from the Competent Authority of the Electrical Inspectorate and it should be submitted to the Engineer –in-charge before commissioning of the High

LITERATURE:-

Your literature giving the details of High Mast Unit and lanterns should be submitted with the offer.

TECHNICAL SPECIFICATION SHEETS:-

These technical specification sheets should be duly signed by the authorized signatory of the manufacturing company on every page and these should also be enclosed with the offer.

ERECTION OF THE HIGH MAST UNIT:-

The use of proper erection devices and equipments should be made all persons involved with erection & commissioning must be insured and no persons unauthorized should be allowed by the erecting company to be present in 50 mts. Radius form the foundation till the erection is completed.

Any accident caused because of falling, breaking, crippling or bending of the High Mast at any point of time shall be the total responsibility of the company which is supplying and erecting the High Mast Unit.

GUARANTEE:-

The complete High Mast Unit should be guaranteed for two years from the date of commissioning.

APPLICABLE STANDARDS:

The following will be applicable:

a) IS 875 (Part 3) – 1987 Code of practice for Design Loads (other than Earth-quakes) for

Buildings and structures.

- b) BE EN 10025/DIN 17100: Grades of M. S.Plates.
- c) BS ISO 1461 Galvanizing
- d) BS 5135/AWS Welding
- e) TR No. 71996 of ILE, UK: Specification for Mast and foundation.

Chapter - 16			
High Mast			
S.No.	Description of Item	Unit	Rate
16.1	Providing and erecting 12.5mt High Mast Lighting sytem with 6 No. 2 x 400 w flood light fixture flood light fitting 250 Watt each complete with control gear and lamps with integral Power tool, weight 340 kg. comprising of 1 section of hot dipped galvanized materials as per BSEN ISO 1461 thickness 3 mm, dia 100mm & 360mm for top and bottom respectively, stress fitting arrangement on site with 350mm overlap dynamic loading to withstand max wind pressure as per -IS 875 part III, parameters for structural & foundation design must be taken from Wind Tunnel test. Lightning protection of GI single spike 800mm at top and at base inside compartment with double internal lock with adequate size of MCB erected on PVC board complete with base plate of 25mm thick 520mm dia. and foundation bolts having 4 nos. bolts of 24mm dia (6.8E grade) Anchor plate 445 PCD, including accessories viz.(1) Lantern carriage of 50 NB ERW class-B,PI pipe covered with PVC sleeve suitable to carry 250kg. load and upto 6 fittings symmetrically.(2) Trailing Copper cable 5x2.5 sq.mm, EPR insulated PCP Sheatehed (3) Double Drum Winch having gear 53:1, oil bath	each	313431.00
	(SAE90/140) arrangement (4)2 nos. Stainless steel wire ropes 5mm dia (7/19) breaking load capacity 1600 kg.x2,(5) Integral power tool 3-phase, 1HP 2m/min single speed. (6) Feeder pillar fabricated out of 14 SWG CRCA sheet and comprise of incoming 32 A TPN switch, HRC fuses, single dial timer,suitable size of contactors for lighting and power tool, 2 nos. outgoing, reversing switch for motor.		
16.2	Providing and erecting 16mt High Mast Lighting sytem with8 No. 2 x 400 w flood light fitting 400 Watt each complete with control gear and lamps with integral Power tool, weight 550 kg. comprising of 2 sections of hot dipped galvanized materials as per BSEN ISO 1461 thickness 3 mm &4 mm, dia 150mm & 460mm for top and bottom respectively, stress fitting arrangement on site with 500mm overlap dynamic loading towithstand max wind pressure as per -IS 875 part III, parameters for structural & foundation design must be taken from Wind Tunnel test. Lightning protection of GI single spike 1200mm at top and at base inside compartment with double internal lock with adequate size of MCB erected on PVC board complete with base plate of 25mm thick 670mm dia. and foundation bolts having 8 nos. bolts of 30mm dia 850 mm long (E 6.8 grade) Anchor plate 590 PCD,670X670x8mm including accessories viz.(1) Lantern carriage of 50 NB ERW class-B ,PI pipe covered with PVC sleeve suitable to carry 500kg. load and upto 8 fittings symmetrically.(2) Trailing Copper cable 5x2.5 sq.mm, EPR insulated PCP Sheatehed (3) Double Drum	each	394821.00

S.No.	Description of Item	Unit	Rate
	Winch having gear 53:1, oil bath (SAE90/140) arrangement (4)2 nos. Stainless steel wire ropes 6 mm dia (7/19) breaking load capacity 2400 kg.x2,(5) Integral power tool 3-phase, 1HP 2m/min single speed .torque limiter upto 500 kg adjustable (6)Twin door aviation light of type of BJAOL 2 with two numbers 100W lamps (7) Feeder pillar fabricated out of 14 SWG CRCA sheet and comprise of incoming 32 A TPN switch, HRC fuses, single dial timer, suitable size of contactors for lighting and power tool, 2 nos.outgoing, reversing switch for motor.		
16.3	Providing and erecting 9 mtrs. High hot dipped galvanized octagonal poles with bottom of 200mm A/F, top 100mm, A/F made from 3mm thick HT plate & 290x290x16mm base plate with 1500mm long decorative sword type double arm bracket complete erected in an approved manner on provided foundation. Suitable size & type of foundation bolts. 4 nos. bolts type M20x750mm 'J' type foundation bolts (EN8 grade)	each	32898.00
16.4	Providing and erecting 9mtrs. High hot galvanized octagonal poles with bottom of 155mm A/F, top 70mm A/F made from 3mm thick HT plate & 260x260x16mm base plate with 1500mm long decorative sword type double arm bracket complete erected in an approved manner on provided foundation. Suitable size & type of foundation bolts. 4 nos. bolts type M20x750mm 'J' type foundation bolts (EN8 grade)	each	24071.00
16.5	Designing & casting of Open raft shallow footing foundation with M-20 cement concrete suitable for 12.5mtrs. High Mast considering the safe soil bearing capacity at site as 10 T/sqm at 2mtrs. Depth including excavation, foundation nut bolts in an approved manner.	each	38500.00
16.6	Designing & casting of Open raft shallow footing foundation with M-20 cement concrete suitable for 16mtrs. High Mast considering the safe soil bearing capacity at site as 10 T/sqm at 2mtrs. Depth including excavation, foundation nut bolts in an approved manner.	each	52000.00
16.7	Designing & casting with M-20 cement concrete foundation suitable for 9 mtrs. Octagonal poles considering the safe soil bearing capacity at site as 10 T/sqm at 2 mtrs. Depth including excavation, foundation nut bolts in an approved manner.	each	13500.00

S.No.	Description of Item	Unit	Rate
16.8	<p>Providing and erecting 12.5 mt high mast lighthing system with 6 nos metal halide flood light fittings of 250 watt each complete with control gear and lamps with integral power tool, weight 340 kg having two section ho hot dip galvanized material as per BSEN ISO 1461 thick of 3 mm dia 100 top and 360 bottom respectively. the mast shall be stress fitted at site with 250 mm over dynamic loading to without maximum wind pressure as per IS 875 part III and parmeters of structures and foundation desingn should be taken form wind tunnel test. the mast shall have lighting protection of GI single spike of designated length at top. the base inside compartment with double internal locak with adequate size of MCB mounted on PVC board complete with base palte of 25 mm thick 520 mm diameter and foundation bots having 4 nos bots of 24 mm daimeter (TS 600) anchor plate 445 PCD including accessories Viz</p>	each	275000.00
	<p>(1) Lnatern carriage of 50 OD ERW calss B pipe covered with PVC sleeves suitable to carry 250 KG load and upto 6 fitting symmmetricaly (2) Trailing copper cable of 5x2.5 samm PVC insulated PVC shetehed (3) Double drum winch having gear ration 5:3:1 oil bath (SAE/90/140) arrangement to be Type tested from NIT or IIT for (4) 2 nos stainless wire ropes 6 mm diameter(7/19) oreaing load capacity 1450 kg x2 (5) integral power tool 3 phase 0.75 HP 2 m/min single speed (6) Feeder pillar out of 14 SWG CRCA sheet and comparaise of incoming 32 A TPN MCB single dial timer, sutiabile size of contractotrs for lighting and power tool, 2 nos. outgoing and reversing switch of motor.</p>		
16.9	<p>Providing and erecting 16 mt high mast lighthing system with 6 nos metal halide flood light fittings of 2x400 watt each complete with control gear and lamps with integral power tool, weight 550 kg having two section hot dip galvanized material as per BSEN ISO 1461 thick of 3 mm & 4 mm dia 150 top and 410 bottom respectively. The mast shall be stress fitted at site with 500 mm over dynamic loading to without maximum wind pressure as per IS 875 part III and parmeters of structures and foundation desingn should be taken form wind tunnel test. The mast shall have lighting protection of GI single spike of designated length at top. The base inside compartment with double internal lock with adequate size of MCB mounted on PVC board complete with base palte of 25 mm thick 570 mm diameter and foundation bots having 8 nos bots of 30 mm/850 MM daimeter (TS 600) anchor plate 445 PCD including accessories Viz</p>	each	375000
	<p>(1) Lnatern carriage of 50 OD ERW calss B pipe covered with PVC sleeves suitable to carry 750 KG load and upto 8 fitting symmmetricaly (2) Trailing copper cable of 5x2.5 samm PVC insulated PVC shetehed (3) Double drum winch having gear ration 531 oil bath (SAE/90/140) arrangement to be Type tested from NIT or IIT for (4) 2 nos stainless wire ropes 6 mm diameter(7/19) oreaing load capacity 2400 kg x2 (5) integral power tool 3 phase 1 HP 2 m/min single speed Tourque 750 Kg (6) Feeder pillar out of 14 SWG CRCA sheet and comparaise of incoming 32 A TPN MCB single dial timer, sutiabile size of contractotrs for lighting and power tool, 2 nos. outgoing and reversing switch of motor. Twin avation light 2 no.s 100 watt lamp</p>		

S.No.	Description of Item	Unit	Rate
16.10	<p>Providing and erecting 20 mt high mast lighthing system with 6 nos metal halide flood light fittings of 2x400 watt each complete with control gear and lamps with integral power tool, weight 680 kg having two section hot dip galvanized material as per BSEN ISO 1461 thick of 3 mm & 4 mm dia 150 top and 460 bottom respectively. The mast shall be stress fitted at site as per IS overlap dyanamic loading to with standard maximum wind pressure as per IS 875 part III and parmeters of structures and foundation desingn should be taken form wind tunnel test. The mast shall have lighting protection of GI single spike of designated length at top. The base inside compartment with double internal lock with adequate size of MCB mounted on PVC board complete with base palte of 25 mm thick 570 mm diameter and foundation bots having 8 nos bots of 30 mm/850 MM daimeter (TS 600) anchor plate 590 PCD including accessories Viz</p>	each	415000
	<p>(1) Lnatern carriage of 50 NB ERW calss B pipe covered with PVC sleeves suitable to carry 750 KG load and upto 12 fitting symmmetricaly (2) Trailing copper cable of 5x4 sqmm EPR insulaed PVC shetehed (3) Double drum winch having gear ration 531 oil bath (SAE/90/140) arrangement to be Type tested from NIT or IIT for (4) 2 nos stainless wire ropes 6 mm diameter(7/19) oreaing load capacity 2400 kg x2 (5) integral power tool 3 phase 1 HP 2 m/min single speed Tourque limited 500 Kg (6) Feeder pillar out of 14 SWG CRCA sheet and comparaise of incoming 63 A TPN MCB single dial timer, sutiabile size of contractotrs for lighting and power tool, 2 nos. outgoing and reversing switch of motor. Twin doam avation light 2 no.s 100 watt lamp.</p>		
16.11	<p>Providing and erecting 25 mt high mast lighthing system with 12 nos metal halide flood light fittings of 2x400 watt each complete with control gear and lamps with integral power tool, weight 1000 kg having 3 section hot dip galvanized material as per BSEN ISO 1461 thick of 3 mm & 4 mm dia / 5 mm 150 top and 460 bottom respectively. The mast shall be stress fitted at site as per IS overlap dyanamic loading to with standard maximum wind pressure as per IS 875 part III and parmeters of structures and foundation desingn should be taken form wind tunnel test. The mast shall have lighting protection of GI single spike of 1200 mm length at top. The base inside compartment with double internal lock with adequate size of MCB mounted on PVC board complete with base palte of 30 mm thick 670 mm diameter and foundation bots having 8 nos bots of 30 mm/850 MM daimeter (TS 600) anchor plate 590 PCD including accessories Viz</p>	each	4750000.00
	<p>(1) Lnatern carriage of 50 NB ERW calss B pipe covered with PVC sleeves suitable to carry 750 KG load and upto 16 fitting symmmetricaly (2) Trailing copper cable of 8x2.5 sqmm EPR insulaed PVC shetehed (3) Double drum winch having gear ration 531 oil bath (SAE/90/140) arrangement to be Type tested from NIT or IIT for (4) 2 nos stainless wire ropes 6 mm diameter(7/19) oreaing load capacity 2400 kg x2 (5) integral power tool 3 phase 1.5 HP 2 m/min single speed Tourque limited 750 Kg (6) Feeder pillar out of 14 SWG CRCA sheet and comparaise of incoming 63 A TPN MCB single dial timer, sutiabile size of contractotrs for lighting and power tool, 2 nos. outgoing and reversing switch of motor. Twin doam avation light 2 no.s 100 watt lamp.</p>		

S.No.	Description of Item	Unit	Rate
16.12	Providing and erecting 30 mt high mast lighthing system with 16 nos metal halide flood light fittings of 2x400 watt each complete with control gear and lamps with integral power tool, weight 1650 kg having 3 section hot dip galvanized material as per BSEN ISO 1461 thick of 4 mm & 4 mm dia / 6 mm 150 top and 610 bottom respectively. The mast shall be stress fitted at site as per IS overlap dyanamic loading to with standard maximum wind pressure as per IS 875 part III and parmeters of structures and foundation desingn should be taken form wind tunnel test. The mast shall have lighting protection of GI single spike of 1200 mm length at top. The base inside compartment with double internal lock with adequate size of MCB mounted on PVC board complete with base palte of 30 mm thick 840 mm diameter and foundation bots having 12 nos bots of 30 mm/850 MM daimeter (TS 600) anchor plate 740 PCD including accessories Viz	each	550000.00
	(1) Lnatern carriage of 50 NB ERW calss B pipe covered with PVC sleeves suitable to carry 1000 KG load and upto 20 fitting symmmetricaly (2) Trailing copper cable of 8x4 sqmm EPR insulaed PVC shetehed (3) Double drum winch having gear ration 531 oil bath (SAE/90/140) arrangement to be Type tested from NIT or IIT for (4) 2 nos stainless wire ropes 6 mm diameter(7/19) oreaing load capacity 3450 kg x2 (5) integral power tool 3 phase 2 HP 2 m/min single speed Tourque limited 1000 Kg (6) Feeder pillar out of 14 SWG CRCA sheet and comparaise of incoming 63 A TPN MCB single dial timer, sutiable size of contractotrs for lighting and power tool, 2 nos. outgoing and reversing switch of motor. Twin doam avation light 2 no.s 100 watt lamp.		
16.13	Supply of non integral flood fittings of 2x400 watt MH asymmmercial 6 folld light type BGENF 22 (without lamp)	eahc	16150.00
16.14	Supply of non integral flood fittings of 1x400 watt MH asymmmercial 7 folld light type BGENF 21 S (without lamp)	each	9000.00

Chapter-17			
G.I. Pipes and Pump Sets			
S.No.	Description of Item	Unit	Rate
17	Supplying & installing G.I. Pipe for protection of underground cable fixed on wall/support/in trench/fixed between two rigid existing support of wall/beam for erection of ceiling Fan/down rod for stiff pendent for light luminaries /fan/protective for earthing, lightening conductor down strip/everhead service line/for submer cable or centrifugal pump for water supply with necessary iron clamp coupler, bend, te, elbow, nuts and bolts etc. complete in an approved manner as required to complete the job excluding cost of excavation/dismateling & other finished masonry Item complete.		
17.1	For 'B' Class G.I.pipe ISI Marked (IS-1161-68)		
1	15mm	meter	101.00
2	20.00mm	meter	128.00
3	25.00mm	meter	177.00
4	32.00mm	meter	232.00
5	40.00mm	meter	284.00
6	50.00mm	meter	369.00
7	65.00mm	meter	484.00
8	80.00mm	meter	602.00
9	100.00mm	meter	869.00
10	125.00mm	meter	1120.00
11	150.00mm	meter	1318.00
17.2	A' Class G.I.Pipe ISI Marked (IS-1161-69)		
1	32.00mm	meter	204.00
2	40.00mm	meter	242.00
3	50.00mm	meter	311.00
4	65.00mm	meter	392.00
5	80.00mm	meter	521.00
6	100.00mm	meter	733.00
17.3	Supply and laying rigid PVC single socket end, non-metallic pipe ISI Marked (IS-4985-2000)class 5 for protection of under ground cable/or for water pump delivery side, for water supply complete with necessary clamp coupler, band, Tee, Elbow etc. in an approved manner excluding cost of excavation etc.		
1	50.00mm O.D	meter	102.00
2	75.00mm O.D	meter	221.00
3	110.00mm O.D	meter	466.00
17.4	Supplying and installing Double wall corrugated pipes (DWC) of HDPE (IS 14930 Part II -marked) for cable laid under ground with necessary connecting sockets/ couplings,tees of same material and at required depth upto 90cm. below road/ground surface,including excavation, back filling with excavated material with ramming and making the surface good.		
1	50.00mm outside dia.	meter	197.00
2	63.00mm outside dia.	meter	210.00

S.No.	Description of Item	Unit	Rate
3	77.00mm outside dia.	meter	222.00
4	90.00mm outside dia.	meter	254.00
5	110.00mm outside dia.	meter	309.00
6	120.00mm outside dia.	meter	333.00
7	145.00mm outside dia.	meter	376.00
8	160.00mm outside dia.	meter	407.00
9	175.00mm outside dia.	meter	432.00
10	200.00mm outside dia.	meter	481.00
17.5	"B" Monoblock type pumping sets		
	(a) 2 H.P.	Each	11478.00
	(b) 3 H.P.	Each	14308.00
	(c) 5 H.P.	Each	18038.00
	(d) 7.5 H.P.	Each	22424.00
	(e) 10 H.P.	Each	29308.00
17.6	Supplying of ISI Marked Direct On-Line Starters confirming to IS : 13947-4 with suitable over load relay range and contactor size, 415 V , 3 -Phase with two earthing terminals		
17.6.1	0.75 / 1.0 / 2.0 / 3.0 / 5.0 / 7.5 HP	Each	1420.00
17.6.2	10 HP	Each	1630.00
17.7	Supplying of ISI Marked Automatic Star-Delta Starters confirming to IS : 13947-4 with suitable over load relay range and contactor size & timer 415 V , 3 -Phase with two earthing terminals		
1	10.0 HP	Each	5325.00
2	12.5 / 15.0 HP	Each	5550.00
3	20 HP	Each	6500.00
4	25 HP	Each	6725.00
5	30 HP	Each	8500.00
6	35 HP	Each	10800.00
7	50 HP	Each	16350.00
8	60 HP	Each	26500.00
9	75 HP	Each	27200.00
17.8	Labour charges for taking out the submerisable pumping set for tubewell after completion of yield test or development of tubewell.		
1	submerisable pumping sets upto 2.2 KW	Each	687.00
2	submerisable pumping sets upto 2.2 KW to 7.5 KW	Each	766.00
3	submerisable pumping sets above 7.5 KW	Each	806.00
note:-	rate for item no. 17.9 adopted from DUAD SSR part 1 of PHE works 2010 chapter 14		

SOLAR DRIVEN LED STREETLIGHT

Advantages:

Low-cost installation. No trenching, no heavy cable, quick and easy installation anywhere, has lights in days not months.

Ultra-low maintenance and long product life. LED/Induction lighting fixture is rated for 60,000 hours of maintenance free operation, sealed deep cycle maintenance free battery.

Green light source. 40-70% less power consumption than traditional light sources. Global green LED/Induction lights emit no light pollution, provides bright white light which improves color recognition and improves night visibility from 400%-1000% over traditional light sources.

Flexible configuration. Global Green solar lights can be easily configured to suite your requirements with solar module, wind module and battery of various sizes.



Solar light controller provides easy configuration, automatic operations and advanced work modules.



3-5 days backup power for rainy, cloudy days.

Grid-independent and No Bill to pay. Global Green Street light still operates even when the power grid is down, and there will never be an electricity bill to pay.

Solar Street Light vs. Traditional Street Light.

Traditional street light		Solar street light
Installation cost	Avg. installation cost range from Rs. 3500-7000	No trenching, no cabling low, installation cost of LED solar streetlight.
Equipment cost	Less investment initially	Initially the investment is high due to high cost of solar PV, battery and LED lamps
Running cost	Very high electricity cost per street light annually.	No running cost, free renewable power from SUN.
Maintenance cost	Higher maintenance cost Re planning 5000-8000 Hrs	Long life of solar panel and LED lamp makes system maintenance free or minimal.

Envoimental	Avg. streetlight consumes 600 KWH of fossil fuel energy annually which translates to about 500 kg of carbon dioxide emission, Light glare, tree pass and pollution	Does not generate any gases envoirment friendly.		
Performance	Low CRI and recognition	Excellent CRI (>80-90) hence quick recognitions.		
Safety	Risk prone to construction with glass and gasses. Risky in case of short circuit.	No glass or any risk prone parts, Electrically protected from short circuit.		
Applications				
v Major Roadways				
v Residential Streets				
v Pedestrian Walkways				
v Docks and Piers				
v Remote & Rural Location				
v High Crime areas				
Carbon Credit				
Use of solar and wind energy and LED lighting helps in reducing generation of carbon and other gases thus helps in generating carbon credits which are saleable.				
				
SOLAR LIGHTING				
ABOUT SOLAR POWER				

About Photovoltaic				
Photovoltaic are best known as a method for generating solar power by using solar cells packaged in photovoltaic modules, often electrically connected in multiples as solar photovoltaic arrays to convert energy from the sun into electricity.				
Advantages of Solar PV System			Traditional Solar Panels	
Long Life – 25 years of long operational life span.				
Utilizes solar energy : Free, Abundant , Clean			New Generation Concentrated PV Panels (CPV)	
Modular : flexibility while designing PV system				
Reliable : works efficiently				
No need of long transmission lines, hence savings				
Can be installed right at the place of utility.				
Environment friendly, no net greenhouse gas emissions.				



Solar - LED lit Hoarding & Signage

**PV Panel with reflector
Product Advantage**

Technical Specification

Battery voltage :	12V	Solar photo-voltaic based stand alone lighting system with
Battery capacity :	12AV	long life LED's
LED output power :	2W-5W	High efficiency crystalline silicon cell based solar modules
Daily operation :	4 Hours	In-built battery for operation during no-sunny days
Autonomy :	3 Days	Easy to install and maintain
Operating Temperature :	-10° to 50° c	High efficiency electronics ensures long life of the system
		Ideal for small homes, shops, clinics, banks, postal offices and small living and working places.

Chapter-18			
SOLAR STREET LIGHT SYSTEM			
S.No.	Description of Item	Unit	Rate
18.1	Porviding,erecting, testing and commissioning solar street light system on 80 mm heavy duty galvanised iron pipe 6 meter high with 30cm x 30cm x 2mm base plate installed own cement concrete padestal casing complete with solar panel, solar battery with charger,other accessories with control panel in weather proof pole box,solar fitting LED type or CFL type 18 watt to 20 watt (set of 2 nos.)	each	30700.00
18.2	Porviding,erecting, testing and commissioning solar powered 30w LED street light system comprising		
1	LUMINAIRE		
	Housing Die cast/extr. Aluminum IP 65 rated, Laboratory vetitied with light		
	distribution curve		
	Gasket EPDM		
	Lens 5 mm Toughened glass		
	Mounting pipe 50 mm Dia		
2	Charge controller with charge discharge indicator		
3	Power supply constant current driver		
4	LIGHT SOURCE power LED With LM 80 Test report		
	Input voltage 12 v dc		
	Color Temp (CT) 5000-6500k		
	Beam agnle 120° (with 120°x60° lens-optional)		
	Wattage per LED 1.2 w		
	No. of LED 24		
	Total Wattage 30w + 4w driver losses		
	Lumen per Watt 90-100lm		
	Luminous flux 2700-3000 lm		
	Illumination under Luminaire height. >20 lux at waist hight from 3.5 mtr pole height.		
	Area Illuminated 20 ft on either side		
	Life 50,000-60,000 burning hrs		
	Source philios/osram/cree/edison		
	Control of Light Brite White		
5	POLE 3.5 mtr height MS pole		
	Finish Painted over primer coat		
	Arm for Luminaire ^{3/4} Meter single arm		
	Bracket for panel Thick steel L channel		
	Base Plate 8" x 8" x 10 mm thick		
6	SOLAR PANEL		
	Wattage Total 90 Wp		
	Cell/crystalline silicon cells 156 mm Mono/ Multi/ Poly crystalline		
	Application DC 12V		
	Maximum system voltage DC 600 V		
	Maximum power Total 90WP		
	Size of pannel Sutting pole bracket		

S.No.	Description of Item	Unit	Rate
	Operating temperature -40 to + 90 degree C		
	Battery Tubular battery / optional		
	GEL filled SMF (maintenance free)		
	total Ah>100Ah with 2 days autonomy		
	Volatage 12V		
	Capacity 100 Ah in total		
	Dimension Accommodated in CRCA box		
	Charge setting @ of 27° degree Charging Voltage per 12 V module		
	Float 13.5 V		
	Boost 13.8 V	1 job	67831.00
18.3	Porviding,erecting, testing and commissioning solar powered 36w LED street light system comprising		
1	LUMINAIRE		
	Housing Die cast/extr. Aluminum IP 65		
	rated, Laboratory vetitied with light		
	distribution curve		
	Gasket EPDM		
	Lens 5 mm Toughened glass		
	Mounting pipe 50 mm Dia		
2	Charge controller with charge discharge indicator		
3	Power supply constant current driver		
4	LIGHT SOURCE power LED With		
	LM 80 Test report		
	Input voltage 12 v dc		
	Color Temp (CT) 5000-6500k		
	Beam agnle 120° (with 120°x60° lens-optional)		
	Wattage per LED 1.2 w		
	No. of LED 24		
	Total Wattage 30w + 4w driver losses		
	Lumen per Watt 90-100lm		
	Luminous flux 2700-3000 lm		
	Illumination under Luminaire height. >20 lux at waist hight from 3.5 mtr pole height.		
	Area Illuminated 20 ft on either side		
	Life 50,000-60,000 burning hrs		
	Source philios/osram/cree/edison		
	Control of Light Brite White		
5	POLE 3.5 mtr height MS pole		
	Finish Painted over primer coat		
	Arm for Luminaire ^{3/4} Meter single arm		
	Bracket for panel Thick steel L channel		
	Base Plate 8" x 8" x 10 mm thick		
6	SOLAR PANEL		
	Wattage Total 90 Wp		
	Cell/crystalline silicon cells 156 mm Mono/ Multi/ Poly crystalline		
	Application DC 12V		
	Maximum system voltage DC 600 V		
	Maximum power Total 90WP		
	Size of pannel Sutting pole bracket		
	Operating temperature -40 to + 90 degree C		
	Battery Tubular battery / optional		

S.No.	Description of Item	Unit	Rate
	GEL filled SMF (maintenance free) total Ah>100Ah with 2 days autonomy		
	Volatage 12V		
	Capicity 100 Ah in total		
	Dimension Accommodated in CRCA box		
	Charge setting @ of 27° degree Charging Voltage per 12 V module		
	Float 13.5 V		
	Boost 13.8 V	1 job	74433.00
18.4	Porviding,erecting, testing and commissioning solar powered 18w LED street light system comprising		
1	LUMINAIRE		
	Housing Die cast/extr. Aluminum IP 65 rated, Laboratory vetitied with light		
	distribution curve		
	Gasket EPDM		
	Lens 5 mm Toughened glass		
	Mounting pipe 50 mm Dia		
2	Charge controller with charge discharge indicator		
3	Power supply constant current driver		
4	LIGHT SOURCE power LED With LM 80 Test report		
	Input voltage 12 v dc		
	Color Temp (CT) 5000-6500k		
	Beam agnle 120° (with 120°x60° lens-optional)		
	Wattage per LED 1.2 w		
	No. of LED 24		
	Total Wattage 30w + 4w driver losses		
	Lumen per Watt 90-100lm		
	Luminous flux 2700-3000 lm		
	Illumination under Luminaire >20 lux at waist high from 3.5 mtr pole height.		
	Area Illuminated 20 ft on either side		
	Life 50,000-60,000 burning hrs		
	Source philios/osram/cree/edison		
	Control of Light Brite White		
5	POLE 3.5 mtr height MS pole		
	Finish Painted over primer coat		
	Arm for Luminaire ^{3/4} Meter single arm		
	Bracket for panel Thick steel L channel		
	Base Plate 8" x 8" x 10 mm thick		
6	SOLAR PANEL		
	Wattage Total 90 Wp		
	Cell/crystalline 156 mm Mono/ Multi/ Poly crystalline silicon cells		
	Application DC 12V		
	Maximum system voltage DC 600 V		
	Maximum power Total 90WP		
	Size of pannel Sutting pole bracket		
	Operating temperature -40 to + 90 degree C		
	Battery Tubular battery / optional		
	GEL filled SMF (maintenance free) total Ah>100Ah with 2 days autonomy		
	Volatage 12V		

S.No.	Description of Item	Unit	Rate
	Capacity 100 Ah in total		
	Dimension Accommodated in CRCA box		
	Charge setting @ of 27° degree Charging Voltage per 12 V module		
	Float 13.5 V		
	Boost 13.8 V	1 job	30014.00
18.5	Porviding,erecting, testing and commissioning solar powered 60w LED street light system comprising		
1	LUMINAIRE		
	Housing Die cast/extr. Aluminum IP 65		
	rated, Laboratory vetitied with light		
	distribution curve		
	Gasket EPDM		
	Lens 5 mm Toughened glass		
	Mounting pipe 50 mm Dia		
2	Charge controller with charge discharge indicator		
3	Power supply constant current driver		
4	LIGHT SOURCE power LED With		
	LM 80 Test report		
	Input voltage 12 v dc		
	Color Temp (CT) 5000-6500k		
	Beam agnle 120° (with 120°x60° lens-optional)		
	Wattage per LED 1.2 w		
	No. of LED 24		
	Total Wattage 30w + 4w driver losses		
	Lumen per Watt 90-100lm		
	Luminous flux 2700-3000 lm		
	Illumination under Luminaire height. >20 lux at waist high from 3.5 mtr pole height.		
	Area Illuminated 20 ft on either side		
	Life 50,000-60,000 burning hrs		
	Source philios/osram/cree/edison		
	Control of Light Brite White		
5	POLE 3.5 mtr height MS pole		
	Finish Painted over primer coat		
	Arm for Luminaire ^{3/4} Meter single arm		
	Bracket for panel Thick steel L channel		
	Base Plate 8" x 8" x 10 mm thick		
6	SOLAR PANEL		
	Wattage Total 90 Wp		
	Cell/crystalline silicon cells 156 mm Mono/ Multi/ Poly crystalline		
	Application DC 12V		
	Maximum system voltage DC 600 V		
	Maximum power Total 90WP		
	Size of pannel Sutting pole bracket		
	Operating temperature -40 to + 90 degree C		
	Battery Tubular battery / optional		
	GEL filled SMF (maintenance free)		
	total Ah>100Ah with 2 days autonomy		
	Volatage 12V		
	Capacity 100 Ah in total		
	Dimension Accommodated in CRCA box		

S.No.	Description of Item	Unit	Rate
	Charge setting @ of 27° degree Charging Voltage per 12 V module		
	Float 13.5 V		
	Boost 13.8 V	1 job	119934.00
18.6	Porviding,erecting, testing and commissioning solar powered 20w LED street light system comprising		
1	LUMINAIRE		
	Housing Die cast/extr. Aluminum IP 65 rated, Laboratory vetitied with light		
	distribution curve		
	Gasket EPDM		
	Lens 5 mm Toughened glass		
	Mounting pipe 50 mm Dia		
2	Charge controller with charge discharge indicator		
3	Power supply constant current driver		
4	LIGHT SOURCE power LED With LM 80 Test report		
	Input voltage 12 v dc		
	Color Temp (CT) 5000-6500k		
	Beam agnle 120° (with 120°x60° lens-optional)		
	Wattage per LED 1.2 w		
	No. of LED 24		
	Total Wattage 30w + 4w driver losses		
	Lumen per Watt 90-100lm		
	Luminous flux 2700-3000 lm		
	Illumination under Luminaire height. >20 lux at waist high from 3.5 mtr pole height.		
	Area Illuminated 20 ft on either side		
	Life 50,000-60,000 burning hrs		
	Source philios/osram/cree/edison		
	Control of Light Brite White		
5	POLE 3.5 mtr height MS pole		
	Finish Painted over primer coat		
	Arm for Luminaire ^{3/4} Meter single arm		
	Bracket for panel Thick steel L channel		
	Base Plate 8" x 8" x 10 mm thick		
6	SOLAR PANEL		
	Wattage Total 90 Wp		
	Cell/crystalline silicon cells 156 mm Mono/ Multi/ Poly crystalline		
	Application DC 12V		
	Maximum system voltage DC 600 V		
	Maximum power Total 90WP		
	Size of pannel Sutting pole bracket		
	Operating temperature -40 to + 90 degree C		
	Battery Tubular battery / optional		
	GEL filled SMF (maintenance free)		
	total Ah>100Ah with 2 days autonomy		
	Volatage 12V		
	Capicity 100 Ah in total		
	Dimension Accommodated in CRCA box		
	Charge setting @ of 27° degree Charging Voltage per 12 V module		
	Float 13.5 V		
	Boost 13.8 V	1 job	35896.00

Chapter 19
Supply of Material List
ELECTRICAL INTERNAL MATERIAL LIST

SNO.	Description of Item	Unit	Rate
1	1.5 sq mm ISI marked FR PVC insulated, single core copper Multi strand conductor cable.	100meters	1034.00
2	2.5 sq mm ISI marked, FR PVC insulated, single core copper Multi strand conductor cable.	100meters	1704.00
3	4.0 sq mm ISI marked, FR PVC insulated, single core copper Multi strand conductor cable.	100meters	2511.00
4	6.0 sq mm ISI marked, FR PVC insulated, single core copper Multi strand conductor cable.	100meters	3877.00
5	10 sq mm ISI marked, FR PVC insulated, single core copper Multi strand conductor cable.	100meters	6993.00
6	16 sq mm ISI marked, FR PVC insulated, single core copper conductor cable	100meters	11318.00
7	25 sq mm ISI marked, FR PVC insulated, single core copper conductor cable	100meters	18299.00
8	16/0.20 mm twin core FR PVC sheated, flat flexible copper cable	100meters	554.00
9	16/0.20 mm twin circular FR PVC sheated, workshop flexible copper cable	100meters	738.00
10	16/0.20 mm twin twisted, flexible FR PVC sheathed, flexible copper cable	100meters	758.00
11	1 pair, 0.5 sq mm copper conductor, FR PVC insulated unarmoured, telephone cable	100meters	3.00
12	2 pair, 0.5 sq mm copper conductor, FR PVC insulated unarmoured, telephone cable	1 meters	6.00
13	4 pair, 0.5 sq mm copper conductor, FR PVC insulated, unarmoured, telephone cable	1 meters	7.00
14	Co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with FR PVC sheath	1 meters	9.00
15	20 mm dia. ISI marked, steel conduit	1 meters	6791.00
16	25 mm dia. ISI marked, steel conduit	100 mtrs	4370.00
17	32 mm dia. ISI marked, steel conduit	100 mtrs	5729.00
18	40 mm dia. ISI marked, steel conduit	100 mtrs	7396.00
19	50 mm dia. ISI marked, steel conduit	100 mtrs	10505.00
20	20 mm inspection/ solid bends	100 mtrs	1098.00
21	25 mm inspection/ solid bends	100 no.	826.00
22	32 mm inspection/ solid bends	100 no.	2162.00
23	40 mm inspection/ solid bends	100 no.	4250.00
24	50 mm inspection/ solid bends	100 no.	6076.00
25	20 mm sockets	100 no.	284.00
26	25 mm sockets	100 no.	331.00
27	32 mm sockets	100 no.	401.00
28	40 mm sockets	100 no.	435.00
29	50 mm sockets	100 no.	473.00
30	20 mm junction box, one way	100 no.	1134.00
31	20 mm junction box, two way	100 no.	1134.00
32	20 mm iron stabpples/ saddles/screws	100 no.	99.00
33	25 mm iron stabpples/ saddles/screws	100 no.	270.00
34	32 mm iron stabpples/ saddles/screws	100 no.	174.00

SNO.	Description of Item	Unit	Rate
35	40 mm iron stabpples/ saddles/screws	100 no.	201.00
36	50 mm iron stabpples/ saddles/screws	100 no.	307.00
37	20 mm dia ISI marked, PVC conduit	100 no.	2079.00
38	25 mm dia ISI marked, PVC conduit	100 mtrs	2573.00
39	32 mm dia ISI marked, PVC conduit	100 mtrs	2032.00
40	40 mm dia ISI marked, PVC conduit	100 mtrs	2807.00
41	50 mm dia ISI marked, PVC conduit	100 mtrs	4460.00
42	20 mm PVC bends	100 mtrs	386.00
43	25 mm PVC bends	100 no.	486.00
44	32 mm PVC bends	100 no.	662.00
45	40 mm PVC bends	100 no.	1134.00
46	50 mm PVC bends	100 no.	1701.00
47	20 mm PVC couplers	100 no.	189.00
48	25 mm PVC couplers	100 no.	236.00
49	32 mm PVCcouplers	100 no.	378.00
50	40 mm PVC couplers	100 no.	614.00
51	50 mm PVC couplers	100 no.	851.00
52	20 mm PVC junction box, one way	100 no.	763.00
53	20 mm PVC junction box, two way	100 no.	763.00
54	20 mm M.S clamps	100 no.	454.00
55	25 mm M.S clamps	100 no.	605.00
56	75 mm X 75 mm X 50 mm PVC box	100 no.	907.00
57	Modular GI box for 2 module	100 no.	16.00
58	Modular GI box for 4 module	1 no.	56.00
59	Modular GI box for 6 module	1 no.	34.00
60	Modular GI box for 8 module	1 no.	42.00
61	Modular GI box for 12 module	1 no.	57.00
62	75 mm X 75 mm X 60 MM deep metal box	1 no.	2245.00
63	100 mm X 100 mm X 60 MM deep metal box	100 nos	1985.00
64	150 mm X 75 mm X 60 MM deep metal box	100 nos	2174.00
65	150 mm X 150 mm X 60 MM deep metal box	100 nos	3024.00
66	180 mm X 100 mm X 60 MM deep metal box	100 nos	2693.00
67	200 mm X 125 mm X 60 MM deep metal box	100 nos	3638.00
68	200 mm X 150 mm X 60 MM deep metal box	100 nos	3544.00
69	200 mm X 150 mm X 75 MM deep metal box	100 nos	3780.00
70	200 mm X 250 mm X 75 MM deep metal box	100 nos	5387.00
71	200 mm X 150 mm X 100 MM deep metal box	100 nos	5670.00
72	200 mm X 250 mm X 100 MM deep metal box	100 nos	6237.00
73	200 mm X 300 mm X 100 MM deep metal box	100 nos	7088.00
74	250 mm X 300 mm X 100 MM deep metal box	100 nos	7371.00
75	200 mm X 250 mm X 60 MM deep metal box	100 nos	4914.00
76	200 mm X 300 mm X 60 MM deep metal box	100 nos	5576.00
77	250 mm X 300 mm X 60 MM deep metal box	100 nos	6332.00
78	3 mm thick phenolic laminated sheet	100 nos	95.00
79	50 mm X 50 mm X 6 mm angle iron	1000sq cm	32.00
80	35 mm X 35 mm X 6 mm angle iron	1 kg	32.00
81	25 mm X 25 mm X 3 mm angle iron	1 kg	39.00
82	25 mm X 6 mm flat iron	1 kg	38.00
83	25 mm X 4 mm flat iron	1 kg	38.00
84	20 mm X 3 mm flat iron	1 kg	38.00
85	1.6 mm thick M.S sheet	1 kg	38.00

SNO.	Description of Item	Unit	Rate
86	3 mm thick M.S sheet	1 kg	38.00
87	15 mm dia G.I pipe, medium class	1 kg	5920.00
88	20 mm dia G.I pipe, medium class	100 mtrs	7810.00
89	25 mm dia G.I pipe, medium class	100 mtrs	11235.00
90	40 mm dia G.I pipe, medium class	100 mtrs	14175.00
91	15 mm dia G.I bend, medium class	100 mtrs	15.00
92	20 mm dia G.I bend, medium class	1 no.	23.00
93	25 mm dia G.I bend, medium class	1 no.	35.00
94	40 mm dia G.I bend, medium class	1 no.	57.00
95	15 mm dia G.I pipe, heavy class	1 no.	7182.00
96	20 mm dia G.I pipe, heavy class	100 mtrs	8505.00
97	Ceiling rose, 3 plate, 5 amps bakelite	100 mtrs	1260.00
98	S.P 5/6 amps, one way modular switch, ISI marked	100 no.	32.00
99	S.P 5/6 amps, two way modular switch, ISI marked	1 no.s	33.00
100	S.P 15/16 amps, one way modular switch, ISI marked	1 no.s	102.00
101	3 pin 5/6 amps, modular socket outlet, ISI marked	1 no.s	50.00
102	6 pin 15/16 amps, modular socket outlet, ISI marked	1 no.s	174.00
103	Modular bell push, ISI Marked	1 no.s	34.00
104	Stepped type Modular fan regulator	1 no.s	217.00
105	Telephone socket outlet modular type	1 no.s	45.00
106	T.V socket outlet modular type	1 no.s	44.00
107	Modular blanking plate	1 no.s	7.00
108	Modular base & cover plate for 1 module	1 each	36.00
109	Modular base & cover plate for 2 module	1 no.s	38.00
110	Modular base & cover plate for 4 module	1 no.s	55.00
111	Modular base & cover plate for 6 module	1 no.s	80.00
112	Modular base & cover plate for 8 module	1 no.s	93.00
113	Modular base & cover plate for 12 module	1 no.s	123.00
114	S.P 5/6 amps, one way switch, piano type ISI marked	1 no.s	1302.00
115	S.P 5/6 amps, two way switch, piano type ISI marked	100 no.	2025.00
116	S.P 15/16 amps, one way switch, piano type ISI marked	100 no.	2381.00
117	3 pin 5/6 amps, socket outlet, piano type ISI marked	100 no.	2122.00
118	3 pin 15/16 amps, socket outlet, piano type ISI marked	100 no.	2797.00
119	Bell push, piano type	100 no.	1860.00
120	Telephone socket outlet piano type	1 no.s	14.00
121	T.V socket outlet piano type	1 no.s	14.00
122	Brass pendant holder	1 no.s	1966.00
123	Brass batten/angle holder	100 no.	1871.00
124	Brass bracket holder 16 mm	100 no.	1966.00
125	call bell/ buzzer, AC/DC, single phase	100 no.	1260.00
126	Ball and socket	100 no.	1040.00
127	Iron swcrews, 35 mm X 6 mm	100 no.	38.00
128	Iron swcrews, 40 mm X 6 mm	100 no.	42.00
129	Iron swcrews, 45 mm X 6 mm	100 no.	47.00
130	200 amps, TPN, rising mains with aluminium bushbar	100 no.	3675.00
131	300 amps, TPN, rising mains with aluminium bushbar	1 mtr	3780.00
132	400 amps, TPN, rising mains with aluminium bushbar	1 mtr	4242.00
133	600 amps, TPN, rising mains with aluminium bushbar	1 mtr	5702.00
134	800 amps, TPN, rising mains with aluminium bushbar	1 mtr	7140.00
135	16 amps, TPN, one way, tap off box with ISI marked HRC fuses for rising mains	1 mtr	2121.00

SNO.	Description of Item	Unit	Rate
136	32 amps, TPN, one way, tap off box with ISI marked HRC fuses for rising mains	1 no	3255.00
137	63 amps, TPN, one way, tap off box with ISI marked HRC fuses for rising mains	1 no	5775.00
138	100 amps, TPN, one way, tap off box with ISI marked HRC fuses for rising mains	1 no	8190.00
139	200 amps, TPN, one way, tap off box with ISI marked HRC fuses for rising mains	1 no	8610.00
140	16 amps, TPN, 2 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	2914.00
141	16 amps, TPN, 4 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	4337.00
142	16 amps, TPN, 6 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	6098.00
143	16 amps, TPN, 8 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	6767.00
144	32 amps, TPN, 2 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	3864.00
145	32 amps, TPN, 4 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	5832.00
146	32 amps, TPN, 6 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	9345.00
147	32 amps, TPN, 8 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	11146.00
148	63 amps, TPN, 2 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	6836.00
149	63 amps, TPN, 4 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	9815.00
150	63 amps, TPN, 6 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	13776.00
151	63 amps, TPN, 8 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	19079.00
152	100 amps, TPN, 4 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	19562.00
153	100 amps, TPN, 6 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	29379.00
154	100 amps, TPN, 8 way, distribution tap off box with ISI marked HRC fuses for rising mains	1 no	39123.00
155	200 amps, TPN, adaptor box with cable end box, and brass compression gland for rising mains	1 no	6930.00
156	300 amps, TPN, adaptor box with cable end box, and brass compression gland for rising mains	1 no	8190.00
157	400 amps, TPN, adaptor box with cable end box, and brass compression gland for rising mains	1 no	8568.00
158	600 amps, TPN, adaptor box with cable end box, and brass compression gland for rising mains	1 no	10710.00
159	800 amps, TPN, adaptor box with cable end box, and brass compression gland for rising mains	1 no	11970.00
160	800 amps. TPN,bus trunking with aluminium bushbars	1 no	7130.00
161	1000 amps. TPN,bus trunking with aluminium bushbars	1 no	8006.00
162	1250 amps. TPN,bus trunking with aluminium bushbars	1 no	8794.00

SNO.	Description of Item	Unit	Rate
163	1400 amps. TPN,bus trunking with aluminium bushbars	1 no	10500.00
164	1600 amps. TPN,bus trunking with aluminium bushbars	1 no	12327.00
165	200 amps. TPN,overhead bushbars with aluminium bushbars	1 no	2310.00
166	400 amps. TPN,overhead bushbars with aluminium bushbars	1 no	3465.00
167	32 amps. TPN,plug-in-box with ISI marked HRC fuses for overhead bushbars	1 no	1733.00
168	63 amps. TPN,plug-in-box with ISI marked HRC fuses for overhead bushbars	1 no	2573.00
169	100 amps. TPN,plug-in-box with ISI marked HRC fuses for overhead bushbars	1 no	5145.00
170	32 amps, TPN , switch disconnecter fuse unit (Pannel mounted type) with ISI marked HRC fuses	1 no	668.00
171	63 amps, TPN , switch disconnecter fuse unit (Pannel mounted type) with ISI marked HRC fuses	1 no.	986.00
172	100 amps, TPN , switch disconnecter fuse unit (Pannel mounted type) with ISI marked HRC fuses	1 no.	2079.00
173	125 amps, TPN , switch disconnecter fuse unit (Pannel mounted type) with ISI marked HRC fuses	1 no.	2363.00
174	160 amps, TPN , switch disconnecter fuse unit (Pannel mounted type) with ISI marked HRC fuses	1 no.	2876.00
175	200 amps, TPN switch fuse unit with ISI marked HRC fuses	1 no.	3191.00
176	320 amps, TPN switch fuse unit with ISI marked HRC fuses	1 no.	4996.00
177	400 amps, TPN switch fuse unit with ISI marked HRC fuses	1 no.	6143.00
178	4 pole MCCB, 100 A, 10KA	1 no.	1449.00
179	4 pole MCCB, 100 A, 16KA	1 no.	2142.00
180	4 pole MCCB, 125 A, 16KA	1 no.	3276.00
181	4 pole MCCB, 150 A, 16KA	1 no.	3591.00
182	4 pole MCCB, 200 A, 16KA	1 no.	3843.00
183	4 pole MCCB, 200 A, 25KA	1 no.	5040.00
184	4 pole MCCB, 250 A, 25KA	1 no.	5985.00
185	4 pole MCCB, 250 A, 35KA	1 no.	7875.00
186	4 pole MCCB, with adjustable thermal setting 315 A, 35 KA	1 no.	10710.00
187	4 pole MCCB, with adjustable thermal setting 400 A, 35 KA	1 no.	10710.00
188	4 pole MCCB, with adjustable thermal setting 500 A, 35 KA	1 no.	11781.00
189	4 pole MCCB, with adjustable thermal setting 630 A, 35 KA	1 no.	11781.00
190	4 pole MCCB, with adjustable thermal setting 800 A, 35 KA	1 no.	14490.00
191	6 amps.to 32 amps. Rating, SP MCB, "B" series, 10 KA breaking capacity	1 no.	68.00
192	6 amps.to 32 amps. Rating, SPN MCB, "B" series, 10 KA breaking capacity	1 no.	147.00
193	6 amps.to 32 amps. Rating, DP MCB, "B" series, 10 KA breaking capacity	1 no.	158.00
194	6 amps.to 32 amps. Rating, TP MCB, "B" series, 10 KA breaking capacity	1 no.	242.00
195	6 amps.to 32 amps. Rating, TPN MCB, "B" series, 10 KA breaking capacity	1 no.	315.00
196	6 amps.to 32 amps. Rating, SP MCB, "C" series, 10 KA breaking capacity	1 no.	76.00

SNO.	Description of Item	Unit	Rate
197	6 amps.to 32 amps. Rating, SPN MCB, "C" series, 10 KA breaking capacity	1 no.	214.00
198	6 amps.to 32 amps. Rating, DP MCB, "C" series, 10 KA breaking capacity	1 no.	233.00
199	6 amps.to 32 amps. Rating, TP MCB, "C" series, 10 KA breaking capacity	1 no.	347.00
200	6 amps.to 32 amps. Rating, TPN MCB, "C" series, 10 KA breaking capacity	1 no.	454.00
201	Single pole, blanking plate	1 no.	2.00
202	40 amps., 2 pole isolator	1 no.	143.00
203	63 amps., 2 pole isolator	1 no.	170.00
204	40 amps., 4 pole isolator	1 no.	302.00
205	63 amps., 4 pole isolator	1 no.	318.00
206	100 amps., 4 pole isolator	1 no.	410.00
207	25 amps. Rating, 2 pole RCCB, 100 mA/300mA	1 no.	857.00
208	40 amps Rating, 2 pole RCCB, 100 mA/300mA	1 no.	910.00
209	63 amps Rating, 2 pole RCCB, 100 mA/300mA	1 no.	1222.00
210	25 amps. Rating, 4 pole RCCB, 100 mA/300mA	1 no.	1040.00
211	40 amps Rating, 4 pole RCCB, 100 mA/300mA	1 no.	1077.00
212	63 amps Rating, 4 pole RCCB, 100 mA/300mA	1 no.	1279.00
213	16/25 amps. Rating, 2 pole ELCB + MCB 100 Ma / 300 Ma sensitivity	1 no.	1037.00
214	32/40 amps. Rating, 2 pole ELCB + MCB 100 Ma / 300 Ma sensitivity	1 no.	1093.00
215	63 amps. Rating, 2 pole ELCB + MCB 100 Ma / 300 Ma sensitivity	1 no.	1213.00
216	16/25 amps. Rating, 4 pole ELCB + MCB 100 Ma / 300 Ma sensitivity	1 no.	1151.00
217	32/40 amps. Rating, 4 pole ELCB + MCB 100 Ma / 300 Ma sensitivity	1 no.	1187.00
218	63 amps. Rating, 4 pole ELCB + MCB 100 Ma / 300 Ma sensitivity	1 no.	1425.00
219	10 amps, SPN, industrial type socket outlet,with plug top and metal chained cover in sheet steel enclosure	1 no.	294.00
220	20 amps, SPN, industrial type socket outlet,with plug top and metal chained cover in sheet steel enclosure	1 no.	305.00
221	10 amps, TPN, industrial type socket outlet,with plug top and metal chained cover in sheet steel enclosure	1 no.	546.00
222	20 amps, TPN, industrial type socket outlet,with plug top and metal chained cover in sheet steel enclosure	1 no.	751.00
223	2 way, SPN, single door, MCB DB	1 no.	76.00
224	4 way, SPN, single door, MCB DB	1 no.	205.00
225	8 way, SPN, single door, MCB DB	1 no.	271.00
226	12 way, SPN, single door, MCB DB	1 no.	356.00
227	16 way, SPN, single door, MCB DB	1 no.	435.00
228	4 way, SPN, double door, MCB DB	1 no.	343.00
229	8 way, SPN, double door, MCB DB	1 no.	583.00
230	12 way, SPN, double door, MCB DB	1 no.	617.00
231	16 way, SPN, double door, MCB DB	1 no.	743.00
232	2+4 way, SPN, MCB DB consumer unit with acrylic cover	1 no.	444.00
233	2+8 way, SPN, MCB DB consumer unit with acrylic cover	1 no.	532.00
234	2+12 way, SPN, MCB DB consumer unit with acrylic cover	1 no.	624.00
235	2+16 way, SPN, MCB DB consumer unit with acrylic cover	1 no.	714.00
236	4 way (4+12), TPN, MCB DB, single door, horizontal type	1 no.	674.00
237	6 way (4+18, TPN, MCB DB, single door, horizontal type	1 no.	803.00

SNO.	Description of Item	Unit	Rate
238	8 way (4+24), TPN, MCB DB, single door, horizontal type	1 no.	1201.00
239	4 way (4+12), TPN, MCB DB, double door, horizontal type	1 no.	1130.00
240	6 way (4+18), TPN, MCB DB, double door, horizontal type	1 no.	1429.00
241	8 way (4+24), TPN, MCB DB, double door, horizontal type	1 no.	1586.00
242	4 way (8+12), TPN, vertical type, MCB DB, single door	1 no.	1578.00
243	8 way (8+24), TPN, vertical type, MCB DB, single door	1 no.	2073.00
244	12 way (8+36), TPN, vertical type, MCB DB, single door	1 no.	2567.00
245	4 way (8+12), TPN, vertical type, MCB DB, double door	1 no.	2255.00
246	8 way (8+24), TPN, vertical type, MCB DB, double door	1 no.	2873.00
247	12 way (8+36), TPN, vertical type, MCB DB, double door	1 no.	3714.00
248	4 way, TPN, vertical type, single door, MCB DB with 100 amps, 10 KA, MCCB	1 no.	2687.00
249	8 way, TPN, vertical type, single door, MCB DB with 100 amps, 10 KA, MCCB	1 no.	3207.00
250	12 way, TPN, vertical type, single door, MCB DB with 100 amps, 10 KA, MCCB	1 no.	3686.00
251	2 + 4 way, SPN, prewired MCB DB with extended loose wire box, single door	1 no.	1259.00
252	2 + 8 way, SPN, prewired MCB DB with extended loose wire box, single door	1 no.	1530.00
253	2 + 12 way, SPN, prewired MCB DB with extended loose wire box, single door	1 no.	1819.00
254	4 + 4 way, SPN, prewired MCB DB with extended loose wire box, double door	1 no.	1894.00
255	4 + 8 way, SPN, prewired MCB DB with extended loose wire box, double door	1 no.	2714.00
256	4 + 12 way, SPN, prewired MCB DB with extended loose wire box, double door	1 no.	3581.00
257	4 way, (4 + 4) TPN, prewired MCB DB with extended loose wire box, single door	1 no.	4377.00
258	6 way, (4 + 6) TPN, prewired MCB DB with extended loose wire box, single door	1 no.	6009.00
259	8 way, (4 + 8) TPN, prewired MCB DB with extended loose wire box, single door	1 no.	6889.00
260	12 way, (4 + 12) TPN, prewired MCB DB with extended loose wire box, single door	1 no.	8247.00
261	4 way, (4 + 4) TPN, prewired MCB DB with extended loose wire box, double door	1 no.	4897.00
262	6 way, (4 + 6) TPN, prewired MCB DB with extended loose wire box, double door	1 no.	6329.00
263	8 way, (4 + 8) TPN, prewired MCB DB with extended loose wire box, double door	1 no.	7623.00
264	12 way, (4 + 12) TPN, prewired MCB DB with extended loose wire box, double door	1 no.	9009.00
265	4 way, (4 + 4) TPN, vertical type prewired MCB DB with extended loose wire box, single door	1 no.	5833.00
266	6 way, (4 + 6) TPN, vertical type, prewired MCB DB with extended loose wire box, single door	1 no.	7594.00
267	8 way, (4 + 8) TPN, vertical type prewired MCB DB with extended loose wire box, single door	1 no.	9182.00

SNO.	Description of Item	Unit	Rate
268	12 way, (4 + 12) TPN, vertical type prewired MCB DB with extended loose wire box, single door	1 no.	11030.00
269	4 way, (4 + 4) TPN, vertical type prewired MCB DB with extended loose wire box, double door	1 no.	6122.00
270	6 way, (4 + 6) TPN, vertical type prewired MCB DB with extended loose wire box, double door	1 no.	7912.00
271	8 way, (4 + 8) TPN, vertical type prewired MCB DB with extended loose wire box, double door	1 no.	9529.00
272	12 way, (4 + 12) TPN, vertical type prewired MCB DB with extended loose wire box, double door	1 no.	11435.00
273	250 mm X 200 mm H.T. danger notice plate	1 no.	32.00
274	200 mm X 150 mm M.V. danger notice plate		26.00
275	600 mm X 600 mm X 6 mm thick G.I plate		529.00
276	600 mm X 600 mm X 3 mm thick (10.5 kg) copper plate		2079.00
277	25 mm X 5 mm G.I strip (1.0 kg / mtr)		32.00
278	25 mm X 6 mm G.I strip (1.2 kg / mtr)		38.00
279	25 mm X 5 mm copper tape (1.15 kg / mtr)		239.00
280	6 SWG G.I wire		40.00
281	8 SWG G.I wire (4.0 mm dia)		36.00
282	8 SWG copper wire (4.0 mm dia)		239.00
283	40 mm to 20 mm reducer		15.00
284	Lightning finial, 25 mm dia X 300 mm long, Copper		357.00
285	Lightning finial, 25 mm dia X 300 mm long, G.I		142.00
286	Looking arrangement with hinged cover plate		194.00
287	Charges for making holes with auger		151.00
288	Locking arrangement with key		34.00
289	G.I wire, 10 SWG		33.00
290	2.24 mm dia bare copper earth wire		1050.00
291	50 mm X 5 mm copper tape (2.30 kg/ mtr)		236.00
292	25 mm PVC junction box, one way		810.00
293	25 mm steel junction box two way	100 no.	2054.00
294	20 mm PVC casing capping	100 no.	861.00
295	25 mm PVC casing capping	100 no.	1369.00
296	16 amps switch socket combined flush type	100 no.	7745.00
297	35 sq mm ISI marked, FR PVC insulated, single core copper conductor cable	100 no.	24528.00
298	50 sq mm ISI marked, FR PVC insulated, single core copper conductor cable	100meters	37519.00
299	Iron clad/metal clad Main switch 16 Amps. 250 Volts	100meters	255.00
300	Iron clad/metal clad Main switch 32 Amps. 250 Volts	Each	674.00
301	15/16 amps DP Switch Flush type with indicator	Each	66.00
302	Iron clad TPN Main switch 16 Amps. 415/500 Volts.	Each	852.00
303	Iron clad TPN Main switch 32 Amps. 415/500 Volts.	Each	1183.00
304	Iron clad TPN Main switch 63 Amps. 415/500 Volts.	Each	2479.00
305	Iron clad TPN Main switch 100 Amps. 415/500 Volts.	Each	4619.00
306	Iron clad TPN Main switch 200 Amps. 415/500 Volts.	Each	7493.00
307	Iron clad TPN Main switch 320 Amps. 415/500 Volts.	Each	10351.00
308	Iron clad TPN Main switch without HRC 16 Amps. 415/500 Volts.	Each	778.00
309	Iron clad TPN Main switch without HRC 32 Amps. 415/500 Volts.	Each	1087.00
310	Iron clad TPN Main switch without HRC 63 Amps. 415/500 Volts.	Each	2327.00
311	Iron clad TPN Main switch without HRC 100 Amps. 415/500 Volts.	Each	4345.00

SNO.	Description of Item	Unit	Rate
312	Iron clad TPN Main switch without HRC 200 Amps. 415/500 Volts.	Each	6211.00
313	Iron clad TPN Main switch without HRC 400 Amps. 415/500 Volts.	Each	11817.00
314	Iron clad TPN Main switch without HRC 500 Amps. 415/500 Volts.	Each	14352.00
315	Iron clad TPN Main switch without HRC 600 Amps. 415/500 Volts.	Each	17135.00
316	Isolator in sheet steel enclosure 32 Amps. 415/500 Volts.	Each	483.00
317	Isolator in sheet steel enclosure 63 Amps. 415/500 Volts.	Each	500.00
318	Isolator in sheet steel enclosure 100 Amps. 415/500 Volts.	Each	652.00
319	Iron clad four pole change over switch 16 Amps. 415/500 Volts.	Each	1374.00
320	Iron clad four pole change over switch 32 Amps. 415/500 Volts.	Each	1653.00
321	Iron clad four pole change over switch 63 Amps. 415/500 Volts.	Each	3362.00
322	Iron clad four pole change over switch 100 Amps. 415/500 Volts.	Each	6763.00
323	Iron clad four pole change over switch 200 Amps. 415/500 Volts.	Each	9677.00
324	Iron clad four pole change over switch 300 Amps. 415/500 Volts.	Each	12310.00
325	Iron clad four pole change over switch 400 Amps. 415/500 Volts.	Each	16053.00
326	Iron clad four pole change over switch 6300 Amps. 415/500 Volts.	Each	24638.00
327	Iron clad four pole change over switch 800 Amps. 415/500 Volts.	Each	30718.00
328	On-Load Change over switch40 Amps. (open - execution)	Each	3018.00
329	On-Load Change over switch63 Amps. (open - execution)	Each	3179.00
330	On-Load Change over switch100 Amps. (open - execution)	Each	4058.00
331	On-Load Change over switch125 Amps. .(open - execution)	Each	6067.00
332	On-Load Change over switch160 Amps. (open - execution)	Each	6282.00
333	On-Load Change over switch200 Amps. (open - execution)	Each	7728.00
334	On-Load Change over switch250 Amps. (open - execution)	Each	11047.00
335	On-Load Change over switch320 Amps. .(open - execution)	Each	11682.00
336	On-Load Change over switch400 Amps. .(open - execution)	Each	17014.00
337	On-Load Change over switch630 Amps. .(open - execution)	Each	19688.00
338	On-Load Change over switch800 Amps. .(open - execution)	Each	28360.00
339	On-Load Change over switch40 Amps. (With enclosure)	Each	4084.00
340	On-Load Change over switch63 Amps. (With enclosure)	Each	4427.00
341	On-Load Change over switch100 Amps.(With enclosure)	Each	5258.00
342	On-Load Change over switch125 Amps. .(With enclosure)	Each	7420.00
343	On-Load Change over switch160 Amps. .(With enclosure)	Each	9016.00
344	On-Load Change over switch200 Amps. .(With enclosure)	Each	9946.00
345	On-Load Change over switch320 Amps. .(With enclosure)	Each	14809.00
346	On-Load Change over switch400 Amps. .(With enclosure)	Each	20476.00
347	On-Load Change over switch630 Amps. .(With enclosure)	Each	23498.00
348	On-Load Change over switch800 Amps. .(With enclosure)	Each	33349.00
349	AutomaticTransfer Switch100 Amp (open execution)	Each	23824.00
350	AutomaticTransfer Switch160 Amp (open execution)	Each	30835.00
351	AutomaticTransfer Switch200 Amp (open execution)	Each	38124.00
352	AutomaticTransfer Switch315 Amp (open execution)	Each	45126.00
353	AutomaticTransfer Switch400 Amp (open execution)	Each	55294.00
354	AutomaticTransfer Switch630 Amp (open execution)	Each	68263.00
355	AutomaticTransfer Switch100 Amp (with enclosure)	Each	26073.00
356	AutomaticTransfer Switch160 Amp (with enclosure)	Each	33079.00

SNO.	Description of Item	Unit	Rate
357	AutomaticTransfer Switch200 Amp (with enclosure)	Each	40368.00
358	AutomaticTransfer Switch315 Amp (with enclosure)	Each	47379.00
359	AutomaticTransfer Switch400 Amp (with enclosure)	Each	59644.00
360	AutomaticTransfer Switch630 Amp (with enclosure)	Each	72608.00
361	25 Amps, Double Pole (DP)	Each	670.00
362	40 Amps, Double Pole (DP)	Each	909.00
363	25 Amps, Four Pole (FP)	Each	1170.00
364	40 Amps, Four Pole (FP)	Each	1774.00
365	i) 32 Amps	Each	1257.00
366	i) 63 Amps	Each	1679.00
367	i) 100 Amps	Each	3170.00
368	i) 125 Amps	Each	3492.00
369	i) 32 Amps	Each	1670.00
370	i) 63 Amps	Each	2083.00
371	i) 100 Amps	Each	3601.00
372	i) 125 Amps	Each	3923.00
373	i) 32 Amps	Each	1453.00
374	i) 63 Amps	Each	1944.00
375	i) 100 Amps	Each	3405.00
376	i) 125 Amps	Each	4019.00
377	i) 160 Amps	Each	5184.00
378	i) 200 Amps	Each	5436.00
379	i) 250 Amps	Each	6393.00
380	i) 320 Amps	Each	8420.00
381	i) 400 Amps	Each	10003.00
382	i) 630 Amps	Each	15896.00
383	i) 32 Amps	Each	2157.00
384	i) 63 Amps	Each	2549.00
385	i) 100 Amps	Each	4593.00
386	i) 125 Amps	Each	4936.00
387	i) 160 Amps	Each	6776.00
388	i) 200 Amps	Each	7089.00
389	i) 250 Amps	Each	7811.00
390	i) 320 Amps	Each	9968.00
391	i) 400 Amps	Each	11386.00
392	i) 630 Amps	Each	18923.00
393	i) 0.75 / 1.0 / 2.0 / 3.0 / 5.0 / 7.5 HP Strater	Each	1079.00
394	ii) 10 HP Strater	Each	1166.00
395	i) 10.0 HP Strater	Each	4001.00
396	ii) 12.5 / 15.0 HP Strater	Each	4175.00
397	iii) 20 HP Strater	Each	4871.00
398	iv) 25 HP Strater	Each	4958.00
399	v) 30 HP Strater	Each	6350.00
400	vi) 35 HP Strater	Each	7785.00
401	vii) 50 HP Strater	Each	11830.00
402	viii) 60 HP Strater	Each	16961.00
403	ix) 75 HP Strater	Each	19136.00
404	20 Amp. to 32 AmpHBC Fuses	Each	35.00
405	36 Amp to 63 AmpHBC Fuses	Each	55.00
406	80 Amp to 125 AmpHBC Fuses	Each	122.00
407	160 Amp to 250 AmpHBC Fuses	Each	183.00

SNO.	Description of Item	Unit	Rate
408	300 Amp to 315 AmpHBC Fuses	Each	257.00
409	400 Amp to 500 AmpHBC Fuses	Each	548.00
410	630 Amp HBC Fuses	Each	1048.00
411	20 Amp. to 100 AmpHBC Fuses din type	Each	161.00
412	125 Amp to 160 AmpHBC Fuses din type	Each	178.00
413	200 Amp to 315 AmpHBC Fuses din type	Each	348.00
414	350 Amp to 400 AmpHBC Fuses din type	Each	418.00
415	425 Amp to 630 AmpHBC Fuses din type	Each	609.00
416	porecelain rewirable fuse unit 16 Amps./240 Volts	Each	24.00
417	porecelain rewirable fuse unit 16 Amps./415 Volts or 32 Amps/240 Volts	Each	33.00
418	porecelain rewirable fuse unit 32 Amps /415 Volts	Each	68.00
419	porecelain rewirable fuse unit 63 Amps /415 Volts	Each	106.00
420	porecelain rewirable fuse unit 100 Amps /415 Volts	Each	217.00
421	porecelain rewirable fuse unit 200 Amps /415 Volts	Each	618.00
422	porecelain rewirable fuse unit 300 Amps /415 Volts	Each	739.00
423	32 AMP 440/500 VOLTS (BUSBAR) 4 way	Each	507.00
424	60/63 AMP 440/500 VOLTS (BUSBAR) 4 way	Each	991.00
425	100 AMP 440/500 VOLTS (BUSBAR) 4 way	Each	1476.00
426	200 AMP 440/500 VOLTS (BUSBAR) 4 way	Each	2650.00
427	300 AMP 440/500 VOLTS (BUSBAR) 4 way	Each	3166.00
428	400 AMP 440/500 VOLTS (BUSBAR) 4 way	Each	3484.00
429	500 AMP 440/500 VOLTS (BUSBAR) 4 way	Each	4675.00
430	MCCB 25kA Current Rating -25 to100 Amps & 70% -100% adjustable	Each	3595.00
431	MCCB 25kA Current Rating -125 Amps & 70% -100% adjustable	Each	4543.00
432	MCCB 25kA Current Rating -160 Amps & 70% -100% adjustable	Each	6339.00
433	MCCB 25kA Current Rating -200 Amps & 70% -100% adjustable	Each	6244.00
434	MCCB 35kA Current Rating -160 Amps & Adjustable: 70% -100% thermal & 5-10 times magnetic setting	Each	10146.00
435	MCCB 35kA Current Rating -200 Amps & Adjustable: 70% -100% thermal & 5-10 times magnetic setting	Each	10481.00
436	MCCB 35kA Current Rating -250 Amps & Adjustable: 70% -100% thermal & 5-10 times magnetic setting	Each	12961.00
437	MCCB 35kA Current Rating -315 Amps & Adjustable: 70% -100% thermal & 5-10 times magnetic setting	Each	15216.00
438	MCCB 35kA Current Rating -400 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	15216.00
439	MCCB 35kA Current Rating -500/630 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	16906.00
440	MCCB 35kA Current Rating -800 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	20287.00
441	MCCB 50kA Current Rating -400 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	16346.00
442	MCCB 50kA Current Rating -500/630 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	18597.00
443	MCCB 50kA Current Rating -800 Amps & Adjustable: 70% -100% thermal & 4-10 times magnetic setting	Each	21412.00
444	Air Circuit Breaker (ACB)	Each	0.00
445	630 Amp,manual,fixed		53626.00
446	800 Amp,manual,fixed	Each	55541.00

SNO.	Description of Item	Unit	Rate
447	1000 Amp,manual,fixed	Each	58414.00
448	1250 Amp,manual,fixed	Each	82354.00
449	1600 Amp,manual,fixed	Each	85705.00
450	2000 Amp,manual,fixed	Each	97196.00
451	630 Amp,manual,drawout	Each	89775.00
452	800 Amp,manual,drawout	Each	90733.00
453	1000 Amp,manual,drawout	Each	95425.00
454	1250 Amp,manual,drawout	Each	119125.00
455	1600 Amp,manual,drawout	Each	128271.00
456	2000 Amp,manual,drawout	Each	154940.00
457	MCB SP 0.5 Amp to 4 Amp Rating	Each	177.00
458	MCB SP 6 Amp to 32 Amp Rating	Each	121.00
459	MCB SP For 40 Amps. Rating only.	Each	249.00
460	MCB SP 50 Amp to 63 Amp Rating	Each	292.00
461	MCB SPN 0.5 Amp to 5 Amp Rating	Each	407.00
462	MCB SPN 6 Amp to 32 Amp Rating	Each	364.00
463	MCB SPN For 40 Amps. Rating only.	Each	503.00
464	MCB SPN 50 Amp to 63 Amp Rating	Each	570.00
465	MCB DP 0.5 Amp to 5 Amp Rating	Each	488.00
466	MCB DP 6 Amp to 32 Amp Rating	Each	407.00
467	MCB DP For 40 Amps. Rating only.	Each	546.00
468	MCB DP 50 Amp to 63 Amp Rating	Each	666.00
469	MCB TP 0.5 Amp to 5 Amp Rating	Each	670.00
470	MCB TP 6 Amp to 32 Amp Rating	Each	603.00
471	MCB TP For 40 Amps. Rating only.	Each	833.00
472	MCB TP 50 Amp to 63 Amp Rating	Each	967.00
473	MCB TPN 0.5 Amp to 5 Amp Rating	Each	905.00
474	MCB TPN 6 Amp to 32 Amp Rating	Each	790.00
475	MCB TPN For 40 Amps. Rating only.	Each	1039.00
476	MCB TPN 50 Amp to 63 Amp Rating	Each	1221.00
477	MCB FP 0.5 Amp to 5 Amp Rating	Each	991.00
478	MCB FP 6 Amp to 32 Amp Rating	Each	876.00
479	MCB FP For 40 Amps. Rating only.	Each	1116.00
480	MCB FP 50 Amp to 63 Amp Rating	Each	1288.00
481	ISOLATOR SP Current rating upto 40 Amps.	Each	153.00
482	ISOLATOR SP Current rating upto 63 Amps.	Each	172.00
483	ISOLATOR DP Current rating upto 40 Amps.	Each	239.00
484	ISOLATOR DP Current rating upto 63 Amps.	Each	302.00
485	ISOLATOR TP Current rating upto 40 Amps.	Each	436.00
486	ISOLATOR TP Current rating upto 63 Amps.	Each	474.00
487	ISOLATOR FP Current rating upto 40 Amps.	Each	531.00
488	ISOLATOR FP Current rating upto 63 Amps.	Each	551.00
489	ISOLATOR FP Current rating upto 80 Amps.	Each	718.00
490	ISOLATOR FP Current rating upto 100 Amps.	Each	718.00
491	SPN MCB DB 2 way single door	Each	144.00
492	SPN MCB DB 4 way single door	Each	350.00
493	SPN MCB DB 4 way double door	Each	603.00
494	SPN MCB DB 6 way double door	Each	709.00
495	SPN MCB DB 8 way double door	Each	814.00
496	SPN MCB DB 12 way double door	Each	1049.00
497	SPN MCB DB 16 way double door	Each	1302.00

SNO.	Description of Item	Unit	Rate
498	TPN MCB DB Metal Double Door 4 way (4+12)	Each	1637.00
499	TPN MCB DB Metal Double Door 6 way (4+18)	Each	2073.00
500	TPN MCB DB Metal Double Door 8 way (4+24)	Each	2394.00
501	TPN MCB DB Metal Double Door 4 way (8+12)	Each	1724.00
502	TPN MCB DB Metal Double Door 6 way (8+18)	Each	2131.00
503	TPN MCB DB Metal Double Door 8 way (8+24)	Each	2538.00
504	TPN MCB DB Metal Double Door 12 way (8+36)	Each	3433.00
505	MCB TPDB For 9 Nos to 12 Nos M.C.B. per pole 40 TO 80 isolator	Each	3739.00
506	Vertical TPN MCB DB Metal Double Door 4 way (8+12)	Each	3739.00
507	Vertical TPN MCB DB Metal Double Door 6 way (8+24)	Each	6153.00
508	Vertical TPN MCB DB Metal Double Door 12 way (8+36)	Each	8236.00
509	Vertical TPN MCB DB Metal Double Door with MCCB 100A TP 10kA 4 way with MCCB	Each	6244.00
510	Vertical TPN MCB DB Metal Double Door with MCCB 100A TP 10kA 8 way with MCCB	Each	6928.00
511	Vertical TPN MCB DB Metal Double Door with MCCB 100A TP 10kA 12 way with MCCB	Each	7924.00
512	SPN PLUG SOCKET DB SPN 10 Amps	Each	531.00
513	SPN PLUG SOCKET DB SPN 20 Amps	Each	546.00
514	TPN PLUG SOCKET DB TP 20 Amps	Each	1049.00
515	TPN PLUG SOCKET DB TP 30 Amps	Each	1460.00
516	metal plug & socket, 3 pin	Each	0.00
517	10 Amps Plug only		86.00
518	10 Amps socket only	Each	86.00
519	20 Amps Plug only	Each	96.00
520	20 Amps socket only	Each	110.00
521	RCBOs 2 pole 6 to 25 Amps, 30 mA sensitivity	Each	1585.00
522	RCBOs 2 pole 32 Amps, 30 mA sensitivity	Each	1661.00
523	RCBOs 2 pole 40 Amps, 30 mA sensitivity	Each	1733.00
524	RCBOs 2 pole 63 Amps, 30 mA sensitivity	Each	3213.00
525	RCBOs 2 pole 6 to 25 Amps, 100 mA sensitivity	Each	1657.00
526	RCBOs 2 pole 32 Amps, 100 mA sensitivity	Each	1743.00
527	RCBOs 2 pole 40 Amps, 100 mA sensitivity	Each	1796.00
528	RCBOs 2 pole 63 Amps, 100 mA sensitivity	Each	3427.00
529	RCBOs 4 pole 16 Amps, 30 mA sensitivity	Each	2920.00
530	RCBOs 4 pole 25-32 Amps, 30 mA sensitivity	Each	3091.00
531	RCBOs 4 pole 40 Amps, 30 mA sensitivity	Each	3139.00
532	RCBOs 4 pole 63 Amps, 30 mA sensitivity	Each	3733.00
533	RCBOs 4 pole 16 Amps, 100/300 mA sensitivity	Each	3265.00
534	RCBOs 4 pole 25-32 Amps, 100/300 mA sensitivity	Each	3265.00
535	RCBOs 4 pole 40 Amps, 100/300 mA sensitivity	Each	3333.00
536	RCBOs 4 pole 63 Amps, 100/300 mA sensitivity	Each	3834.00
537	35 X 35 X5 mm Iron clamps	Each	35.00
538	25 X 5mm / 25 X 25 X5 mm Iron clamps	100 kg	35.00
539	Nut & bolt of required size	100 kg	4.00
540	Washers	100 Each	1.00
541	Suppling and fixing of bacalite pandent holder	100 Each	19.00
542	Suppling and fixing of bacalite Angle / Batten holder	Each	16.00
543	Suppling and fixing water tight bracket complete	Each	0.00
544	Suppling and fixing Bulk Head fitting ORDINARY	Each	57.00
545	Buzzer	Each	42.00

SNO.	Description of Item	Unit	Rate
546	Ding Dong Bell	Each	79.00
547	Musical bell	Each	189.00
548	Remote / Cordless bell	Each	397.00
549	With 4 Way Indicator	Each	1411.00
550	With 6 Way Indicator	Each	2117.00
551	With 8 Way Indicator	Each	2822.00
552	Flexible Cable 23 / .0076 Three Core	Each	11.00
553	Flexible Cable 40 / .0076 Three Core	per meter	22.00
554	15 Watt 250 Volts Bulb	per meter	9.00
555	25 Watt 250 Volts Bulb	Each	9.00
556	40 Watt 250 Volts Bulb	Each	10.00
557	60 Watt 250 Volts Bulb	Each	10.00
558	100 Watt 250 Volts Bulb	Each	11.00
559	200 Watt 250 Volts Bulb	Each	17.00
560	500 Watt 250 Volts Bulb	Each	57.00
561	1000 Watt 250 Volts Bulb	Each	101.00
562	0 / 5 Watt 250 Volts night Lamp	Each	11.00
563	15 Watt 250 Volts coloured Lamp	Each	11.00
564	5 Amps. 250 Volts 3/5 pin ordinary	Each	40.00
565	5 Amps. 250 Volts 3/5 pin Flush type	Each	19.00
566	15 Amps. 250 Volts 3/5 pin ordinary	Each	59.00
567	15 Amps. 250 Volts 3/5 pin Flush type	Each	57.00
568	10 Amps 250 Volt 3 Pin Modular type	Each	113.00
569	20 Amps 250 Volt 3 Pin Modular type	Each	184.00
570	6 Amps. 250 Volts 3 pin Flush type	Each	41.00
571	16 Amps. 250 Volts 3 pin Flush type	Each	52.00
572	BALL SOCKET'S	Each	21.00
573	Round Globe 225 mm with brackets	Each	0.00
574	Small size	Each	71.00
575	Large size	Each	141.00
576	Ceiling Rose 3 Plate	Each	19.00
577	5 Amps S.P. poracelain Base 250 Volt ordinary	Each	40.00
578	15 Amps S.P. poracalane Base 250 Volt ordinary	Each	59.00
579	5 Amps S.P. 250 Volt Deluxe (Piano key type)	Each	11.00
580	15 Amps S.P. 250 Volt Deluxe (Piano key type)	Each	33.00
581	5 Amps S.P. 250 Volt two way (Piano key type)	Each	18.00
582	10 Amps S.P.250 Volt Modular Switch	Each	71.00
583	20 Amps S.P.250 Volt Modular Switch	Each	115.00
584	10 Amps S.P.250 Volt Modular Switch 2 way	Each	83.00
585	10 Amps S.P.250 Volt Modular Switch Bell Push	Each	83.00
586	Angle iron 40mm X 40mm X 6mm	Each	83.00
587	M.S. Sheet 1.6 mm thick	Kg	41.00
588	M.S. Sheet 3 mm thick	Kg	41.00
589	Locking arrangment with key	Kg	88.00
590	Condencer 2.5 mfd	Nos	21.00
591	Condencer 3.15 mfd	Each	28.00
592	Condencer 4.00 mfd	Each	40.00
593	Condencer 6.00 mfd	Each	66.00
594	Condencer 10.00 mfd	Each	106.00
595	Condencer 25.00 mfd	Each	159.00
596	Condencer 30.00 mfd	Each	194.00

SNO.	Description of Item	Unit	Rate
597	Condencer 33.00 mfd	Each	229.00
598	Flourecent tube rod 4' X 40 watt	Each	40.00
599	Flourecent tube rod 4' X 36 watt	Each	36.00
600	Flourecent tube rod 2' X 20 watt	Each	36.00
601	Flourecent tube rod 2' X 18 watt	Each	34.00
602	M.V. Lamp 80 Watt	Each	132.00
603	M.V. Lamp 125 Watt	Each	137.00
604	M.V. Lamp 250 Watt	Each	326.00
605	M.V. Lamp 400 Watt	Each	485.00
606	S.V. Lamp 70 Watt	Each	344.00
607	S.V. Lamp 150 Watt	Each	459.00
608	S.V. Lamp 250 Watt	Each	512.00
609	S.V. Lamp 400 Watt	Each	635.00
610	S.V. Lamp 70 Watt (son-T type)	Each	331.00
611	S.V. Lamp 150 Watt (son-T type)	Each	494.00
612	S.V. Lamp 250 Watt (son-T type)	Each	547.00
613	S.V. Lamp 400 Watt (son-T type)	Each	670.00
614	M.H. Lamp 70 Watt (Single ended type)	Each	816.00
615	M.H. Lamp 150 Watt(Single ended type)	Each	882.00
616	M.H. Lamp 250 Watt(Single ended type)	Each	1103.00
617	M.H. Lamp 400 Watt(Single ended type)	Each	1169.00
618	M.H. Lamp70 Watt (Double ended type)	Each	573.00
619	M.H.Lamp150 Watt(Double ended type)	Each	578.00
620	C.F.L 5 Watt	Each	99.00
621	C.F.L 8 Watt	Each	110.00
622	C.F.L 11 Watt	Each	119.00
623	C.F.L 15 Watt	Each	128.00
624	C.F.L 18 Watt	Each	150.00
625	C.F.L 20 Watt	Each	198.00
626	C.F.L 23 Watt	Each	213.00
627	C.F.L 26 Watt	Each	221.00
628	C.F.L 36 Watt	Each	353.00
629	C.F.L 45 Watt	Each	573.00
630	C.F.L 65 Watt	Each	662.00
631	C.F.L 85 Watt	Each	706.00
632	Helogen lamp 500 Watt	Each	71.00
633	Helogen lamp 1000 Watt	Each	88.00
634	Ball bearing 6201	Each	61.00
635	Ball bearing 6202	Each	64.00
636	Ball bearing 6203	Each	79.00
637	Ball bearing 6204	Each	117.00
638	resistanc type Fan regulator	Each	40.00
639	step type fan regulator	Each	167.00
640	dimmer / regulator 650 Watt	Each	161.00
641	dimmer / regulator 1000 Watt	Each	197.00
642	step type Modular fan regulator 450 Watt	Each	220.00
643	step type Modular fan regulator 650 Watt	Each	328.00
644	step type Modular fan regulator 1000 Watt	Each	481.00
645	Woodne round block / 4"X4" sunmica board	Each	6.00
646	swan neck of steel conduit	each	43.00
647	Flexible wire 23/.0076	each	11.00

SNO.	Description of Item	Unit	Rate
648	Metalic Chain	mtr	16.00
649	Steel conduit for fixing of tube light & down rod	mtr	54.00
650	Iron rod of 16 mm dia	mtr	32.00
651	Flat iron clamp for wooden beam	Kg	36.00
652	Rag bolt with nut (for fixing of exhaust fan)	each	8.00
653	Wooden board 12" X 18"	each	65.00
654	Wooden board 12" X 18"	each	65.00
655	switch 5 Amps F/T	each	10.00
656	lamp holder	each	0.00
657	Air Filters	each	69.00
658	Oil	Each	231.00
659	Grease	1000 Gms	420.00
660	Caustic Soda	1000 Gms	58.00
661	Enamel Pint	1000 Gms	231.00
662	Copper wound choke 40 Watt VPIT	1000 Gms	167.00
663	Starter 40 watts & 250 V & Holders	Each	12.00
664	Matalic chanel patti 4' with holder [Heavy duty]	Each	52.00
665	Copper PVC insulated wire	Each	9.00
666	Round Block /PVC Box 3"x3"	Mtr	6.00
667	watering pipe 19 mm dia 1.5 mtr long	Each	77.00
668	cover plate with hing and locking arrangement	meter	221.00
669	G.I. Earth plate 600mm X 600mm X6mm thick	Each	1155.00
670	Copper Earth plate 600mm X 600mm X3mm thick	Each	5250.00
671	Copper strip 32 mm X 6 mm thick (1.705 Kg / mtr)	Each	525.00
672	Copper Strip 25 mm X 5 mm @1.15 kg/ mtr	kg	525.00
673	Copper tape 20mm X 3 mm Thick (0.533 kg / meter)	kg	525.00
674	G.I. Band	kg	22.00
675	G.I. tube finial with singal prong at top including base etc.	Each	294.00
676	Copper tube finial 25 mm dia 300 mm long with singal prong at top including base.	Each	998.00
677	Steel or G.I. Rod 16 mm dia 2.5 mtr long	Each	55.00
678	Aluminium E.C.C. 4 Sq mm	meter	2.00
679	Aluminium E.C.C. 6 Sq mm	Meter	4.00
680	Aluminium E.C.C. 10 Sq mm	Meter	6.00
681	Aluminium E.C.C. 16 Sq mm	Meter	9.00
682	Aluminium E.C.C. 25 Sq mm	Meter	15.00
683	copper E.C.C. 6 Sq mm	Meter	3227.00
684	copper E.C.C. 10 Sq mm	100Meter	4292.00
685	copper E.C.C. 16 Sq mm	100Meter	7172.00
686	copper E.C.C. 25 Sq mm	100Meter	11363.00
687	Copper Wire 4.00 mm dia	100Meter	525.00
688	G.I. strip 20mm X 3 mm Thick 125 mm long	kg	47.00
689	G.I. strip 38 mm X 6 mm thick (1.475 Kg / mtr)	Kg	525.00
690	G.I. pipe 38.1 mm 2.5 meter long	Kg	163.00
691	300 mm Sweep (Wall Mounting fan)	meter	1785.00
692	400 mm Sweep (Wall Mounting fan)	Each	1890.00
693	300 mm Sweep (Cabin fan)	Each	1811.00
694	400 mm Sweep (Cabin fan)	Each	1945.00
695	225 mm Sweep ('Fresh Air Fan')	Each	1024.00
696	305 mm Sweep('Fresh Air Fan')	Each	1224.00
697	300 mm Sweep (Exhaust Fan heavy duty)	Each	2573.00

SNO.	Description of Item	Unit	Rate
698	380 mm Sweep (Exhaust Fan heavy duty)	Each	2755.00
699	450 mm Sweep (Exhaust Fan heavy duty)	Each	3901.00
700	400 mm Sweep (Pedestal fan)	Each	2260.00
701	450 mm Sweep (Pedestal fan)	Each	2116.00
702	500 mm Sweep (Pedestal fan)	Each	2620.00
703	Ceiling Fan 1200 mm Sweep	Each	1717.00
704	Ceiling Fan 1400 mm Sweep	Each	1817.00
705	SPN PLUG SOCKET DB SPN 10 Amps	Each	531.00
706	SPN PLUG SOCKET DB SPN 20 Amps	Each	545.00
707	Wall / floor mounted LT Panel primer coated with two coat of enamel paint & provided with required gasket for dust/ vermin proof etc.	Each	75.00
708	Digital Ampere Metre with CTs with selector switch	KG	1558.00
709	Digital Volt Metre with selector switch & HRC fuse	Per set	1674.00
710	Frequency Metre	Per set	964.00
711	Copper Bus bar strips with PVC sleeves	Each	440.00
712	Aluminium bus bar strips with PVC sleeves	KG	139.00
713	LED lamps	KG	160.00
714	fluorescent tube fitting 36/40 watt, rust resistant, stove enamelled paint, box type channel with cover, complete with electronic ballast (HF) complete duly wired (without tube rod)	Each	683.00
715	wooden round block with 'J' hook / Anchor hole fastners/hollow bow with rod	Each	44.00
716	steel conduit 19/20 dia 16 SWG	Each	94.00
717	metallic chain	Each	50.00
718	fluorescent tube fitting 36/40 watt, rust resistant, stove enamelled paint, CRCA sheet steel housing with white stove enamelled reflector complete with copper ballast complete duly wired (without tube rod)	meter	429.00
719	fluorescent Double tube fitting 36/40 watt, rust resistant, stove enamelled paint, CRCA sheet steel housing with opal acrylic diffuser and decorative end plates complete with copper ballast complete duly wired (without tube rod)	Each	1349.00
720	surface mounting mirror optics luminaires for single/twin 1x36/40 watt fluorescent lamp comprising of white powder coated CRCA sheet steel housing raw silk / navy brown / white colour M.S. low profile flat housing complete with all accessories i.e. electronic ballast (HF) duly wired (without tube rod) etc.	Each	1775.00
721	surface mounting mirror optics luminaires for single/twin 2x40 watt fluorescent lamp comprising of white powder coated CRCA sheet steel housing raw silk / navy brown / white colour M.S. low profile flat housing complete with all accessories i.e. electronic ballast (HF) duly wired (without tube rod) etc.	Each	2714.00
722	surface mounting mirror optics luminaires for single/twin 36/40 watt fluorescent lamp comprising of white powder coated CRCA sheet steel housing raw silk / navy brown / white colour M.S. low profile flat housing complete with all accessories i.e. copper ballast duly wired (without tube rod) etc.	Each	1418.00

SNO.	Description of Item	Unit	Rate
723	surface mounting mirror optics luminaires for single/twin 2x40 watt fluorescent lamp comprising of white powder coated CRCA sheet steel housing raw silk / navy brown / white colour M.S. low profile flat housing complete with all accessories i.e. copper ballast (HF) duly wired (without tube rod) etc.	Each	1987.00
724	street/ road light fitting complete with copper wound polyster choke, lamp holder,starter holder, starter duly wired, side entry with clear acrylic cover with fixing clamps (without tube rod) 1x40 Watt	Each	866.00
725	20mm dia G.I. pipe medium class	Each	105.00
726	street/ road light fitting complete with copper wound polyster choke, lamp holder,starter holder, starter duly wired, side entry with clear acrylic cover with fixing clamps (without tube rod) 2x40w	meter	1129.00
727	Bulk head luminaire consisting of pressure die aluminium housing lamp holder, prismatic glass cover, rubber gasket and wire guard, delux type	Each	368.00
728	high pressure M.V. fitting, consisting of cast aluminium cotrol gear housing, highly polished reflector, highly transparent acrylic hinged cover, complete with taped polyster choke, capacitor, connector etc. suaitable for end mounting duly wired (without lamp) 80 watt	Each	1680.00
729	high pressure M.V. fitting, consisting of cast aluminium cotrol gear housing, highly polished reflector, highly transparent acrylic hinged cover, complete with taped polyster choke, capacitor, connector etc. suaitable for end mounting duly wired (without lamp) 125 watt	Each	1678.00
730	high pressure M.V. fitting, consisting of cast aluminium cotrol gear housing, highly polished reflector, highly transparent acrylic hinged cover, complete with taped polyster choke, capacitor, connector etc. suaitable for end mounting duly wired (without lamp) 250 watt	Each	2783.00
731	high pressure M.V. fitting, consisting of cast aluminium cotrol gear housing, highly polished reflector, highly transparent acrylic hinged cover, complete with taped polyster choke, capacitor, connector etc. suaitable for end mounting duly wired (without lamp) 400 watt	Each	3549.00
732	H.D. Sodium vapour fitting consisting of matallic cast aluminium alloy housing highly polished anodised aluminium reflector clear acrylic cover, gasket and equipped with accessories; such as ballast, condensor, ignitor, skirted ceramic lamp holder (without lamp) 70 watt	Each	1650.00
733	H.D. Sodium vapour fitting consisting of matallic cast aluminium alloy housing highly polished anodised aluminium reflector clear acrylic cover, gasket and equipped with accessories; such as ballast, condensor, ignitor, skirted ceramic lamp holder (without lamp) 150 watt	Each	2851.00
734	H.D. Sodium vapour fitting consisting of matallic cast aluminium alloy housing highly polished anodised aluminium reflector clear acrylic cover, gasket and equipped with accessories; such as ballast, condensor, ignitor, skirted ceramic lamp holder (without lamp) 250 watt	Each	3329.00

SNO.	Description of Item	Unit	Rate
735	H.D. Sodium vapour fitting consisting of matallic cast aluminium alloy housing highly polished anodised aluminium reflector clear acrylic cover, gasket and equipped with accessories; such as ballast, condensor, ignitor, skirted ceramic lamp holder (without lamp) 400 watt	Each	4358.00
736	H.P.Sodium vapour side road lighting/ main road lighting lantern consisting of single piece cast aluminium housing complete with all accessories suitable for tubular 70W /150W /250W/HPSV lamp pot type high purity ALGLAS coated electromechanically brightened anodized aluminium reflector/ with ripples embossing above the lamp, lamp holder, clear acrylic cover & 3/5 stainless steel toggle, ignitor & ballast, condensor(without lamp)70 watt	Each	2041.00
737	H.P.Sodium vapour side road lighting/ main road lighting lantern consisting of single piece cast aluminium housing complete with all accessories suitable for tubular 70W /150W /250W/HPSV lamp pot type high purity ALGLAS coated electromechanically brightened anodized aluminium reflector/ with ripples embossing above the lamp, lamp holder, clear acrylic cover & 3/5 stainless steel toggle, ignitor & ballast, condensor(without lamp)150 watt	Each	3482.00
738	H.P.Sodium vapour side road lighting/ main road lighting lantern consisting of single piece cast aluminium housing complete with all accessories suitable for tubular 70W /150W /250W/HPSV lamp pot type high purity ALGLAS coated electromechanically brightened anodized aluminium reflector/ with ripples embossing above the lamp, lamp holder, clear acrylic cover & 3/5 stainless steel toggle, ignitor & ballast, condensor(without lamp)250 watt	Each	3917.00
739	intergal type compact flood light fitting consisting of cast aluminium housing complete with all accessories ALGLAS coated aluminium reflector, lamp holder heat resisting toughned clear glass cover and mounting bracket with aiming disc (150 watt)	Each	2949.00
740	intergal type compact flood light fitting consisting of cast aluminium housing complete with all accessories ALGLAS coated aluminium reflector, lamp holder heat resisting toughned clear glass cover and mounting bracket with aiming disc (250 watt)	Each	2995.00
741	H.D. asymmetrical beam flood light fitting suitable for tubular single lamp consisting of cast aluminium housing 'ALGLAS coated aluminium faceted reflector assly toughned glass cover, mounting bracket and aiming disc, seperate control gear box required for HPSV/M.H. Lamp (without lamp) 250Watt	Each	4725.00
742	H.D. asymmetrical beam flood light fitting suitable for tubular single lamp consisting of cast aluminium housing 'ALGLAS coated aluminium faceted reflector assly toughned glass cover, mounting bracket and aiming disc, seperate control gear box required for HPSV/M.H. Lamp (without lamp) 400 Watt	Each	6618.00
743	integral type decorative post top lantern consisting of aluminium canopy opal acrylic bottom cover and cast aluminium spigot complete with all accessories and control gear box (without lamp) 125 watt	Each	3043.00

SNO.	Description of Item	Unit	Rate
744	integral type decorative post top lantern consisting of aluminium canopy opal acrylic bottom cover and cast aluminium spigot complete with all accessories and control gear box (without lamp) 70 watt	Each	3283.00
745	integral mushroom type roto moulded/Diamond shaped roto moulded post top lantern, consisting of cast aluminium spigot complete with all accessories, lamp holder, control gear box(without lamp) 125 watt	Each	3043.00
746	integral mushroom type roto moulded/Diamond shaped roto moulded post top lantern, consisting of cast aluminium spigot complete with all accessories, lamp holder, control gear box(without lamp) 70 watt	Each	3193.00
747	low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray without lamp (2nos. 11 watt CFL)	Each	1137.00
748	low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray without lamp (2nos. 18 watt CFL)	Each	1148.00
749	low watt surface mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray without lamp (2nos. 36 watt CFL)	Each	2041.00
750	wooden round block	Each	26.00
751	low watt surface/recess mounting luminaires, made of white powder coated CRCA sheet steel housing with aluminium mirror reflector complete with control gear, wired upto terminal block on a detachable tray without lamp (2nos. 36 watt CFL)	Each	3062.00
752	2 nos. 11 watt CFL (295 mm X 595 mm) aluminium mirror reflector	Each	1113.00
753	2 nos. 36 watt CFL (595 mm X 595 mm) aluminium darklight reflector	Each	3089.00
754	2 no. 36 watt CFL (295 mm X 595 mm) aluminium mirror reflector	Each	2303.00
755	3 Nos 36 watt CFL (595 mm X 595 mm) aluminium mirror reflector	Each	3203.00
756	3 Nos 36 watt CFL (597 mm X 597 mm) aluminium darklight reflector	Each	3953.00
757	low watt surface / recessed mounting CFL down lighter luminaire with white powder coated aluminium cover with anodised aluminium reflector with necessary materials connection etc. complete as required (without lamp) CFL 1 X 10 / 13 / 18 watt	Each	476.00
758	low watt surface / recessed mounting CFL down lighter luminaire with white powder coated aluminium cover with anodised aluminium reflector with necessary materials connection etc. complete as required (without lamp) CFL 2 X 13 / 18 watt	Each	693.00

SNO.	Description of Item	Unit	Rate
759	low watt CFL roadway / street light luminaire with epoxy powder coated sheet aluminium / steel housing with epoxy white powder coated CRCA sheet steel gear tray ,clear acrylic cover with necessary materials connection including mounting with GI pipe 32 mm OD, clamps on existing wall / pole etc. complete as required (without lamp) CFL 1 X 9 / 11 watt	Each	834.00
760	low watt CFL roadway / street light luminaire with epoxy powder coated sheet aluminium / steel housing with epoxy white powder coated CRCA sheet steel gear tray ,clear acrylic cover with necessary materials connection including mounting with GI pipe 32 mm OD, clamps on existing wall / pole etc. complete as required (without lamp) CFL 1 X 13 / 18 watt	Each	888.00
761	low watt CFL roadway / street light luminaire with epoxy powder coated sheet aluminium / steel housing with epoxy white powder coated CRCA sheet steel gear tray ,clear acrylic cover with necessary materials connection including mounting with GI pipe 32 mm OD, clamps on existing wall / pole etc. complete as required (without lamp) CFL 2 X 11 watt	Each	964.00
762	low watt CFL roadway / street light luminaire with epoxy powder coated sheet aluminium / steel housing with epoxy white powder coated CRCA sheet steel gear tray ,clear acrylic cover with necessary materials connection including mounting with GI pipe 32 mm OD, clamps on existing wall / pole etc. complete as required (without lamp) CFL 2 X 18 watt	Each	1106.00
763	low watt CFL roadway / street light luminaire with epoxy powder coated sheet aluminium / steel housing with epoxy white powder coated CRCA sheet steel gear tray ,clear acrylic cover with necessary materials connection including mounting with GI pipe 32 mm OD, clamps on existing wall / pole etc. complete as required (without lamp) CFL 1 X 36 watt	Each	1106.00
764	T- 5 lamp channel luminaire with plastic extruded housing with in-built electronic control gear with decorative end caps with necessary materials connection etc. complete as required (with lamp) T - 5 Lamp 1 X 28 watt	Each	558.00
765	T- 5 lamp channel luminaire with epoxy white powder coated CRCA sheet steel housing with reflector cover with necessary materials connection etc. complete as required (with lamp) T - 5 Lamp 1 X 28 watt	Each	970.00
766	Delux fresh air fan with louvers (ventilating fan) with self closing louvers of decorative PVC blades mounting square frame of approved maked complete (150 mm)	Each	859.00
767	Delux fresh air fan with louvers (ventilating fan) with self closing louvers of decorative PVC blades mounting square frame of approved maked complete (200 mm)	Each	919.00
768	Delux fresh air fan with louvers (ventilating fan) with self closing louvers of decorative PVC blades mounting square frame of approved maked complete (250 mm)	Each	1012.00
769	cooler kit	Each	257.00
770	cooler fan 450mm ISI mark	Each	1162.00
771	cooler vertical pump	Each	368.00

SNO.	Description of Item	Unit	Rate
772	cooler / A.C. MS angle iron stand including flat iron supports	Each	33.00
773	fluorescent Single tube fitting 36/40 watt, rust resistant, stove enamelled paint, CRCA sheet steel housing with opal acrylic diffuser and decorative end plates complete with copper ballast complete duly wired (without tube rod)	Kg	803.00
774	step type Modular fan regulator upto 120 Watt	Each	401.00
ELECTRICAL EXTERNAL MATERIAL LIST			
SNO.	Description of Item	Unit	Rate
1	Brass compression gland for 2 x 6 sq.mm 1.1 KV grade cable	1 set	29.00
2	Brass compression gland for 2 x 10 sq.mm 1.1 KV grade cable	1 set	34.00
3	Brass compression gland for 2 x 16 sq.mm 1.1 KV grade cable	1 set	58.00
4	Brass compression gland for 2 x 25 sq.mm 1.1 KV grade cable	1 set	75.00
5	Brass compression gland for 2 x 35 sq.mm 1.1 KV grade cable	1 set	75.00
6	Brass compression gland for 2 x 50 sq.mm 1.1 KV grade cable	1 set	91.00
7	Brass compression gland for 3 x 10 sq.mm 1.1 KV grade cable	1 set	58.00
8	Brass compression gland for 3 x 16 sq.mm 1.1 KV grade cable	1 set	75.00
9	Brass compression gland for 3 x 25 sq.mm 1.1 KV grade cable	1 set	75.00
10	Brass compression gland for 3 x 35 sq.mm 1.1 KV grade cable	1 set	75.00
11	Brass compression gland for 3 x 50 sq.mm 1.1 KV grade cable	1 set	75.00
12	Brass compression gland for 3 x 70 sq.mm 1.1 KV grade cable	1 set	112.00
13	Brass compression gland for 3 x 95 sq.mm 1.1 KV grade cable	1 set	112.00
14	Brass compression gland for 3 x 120 sq.mm 1.1 KV grade cable	1 set	143.00
15	Brass compression gland for 3 x 150 sq.mm 1.1 KV grade cable	1 set	188.00
16	Brass compression gland for 3 x 185 sq.mm 1.1 KV grade cable	1 set	188.00
17	Brass compression gland for 3 x 225 sq.mm 1.1 KV grade cable	1 set	227.00
18	Brass compression gland for 3 x 240 sq.mm 1.1 KV grade cable	1 set	266.00
19	Brass compression gland for 3 x 300 sq.mm 1.1 KV grade cable	1 set	266.00
20	Brass compression gland for 3½ x 25 sq.mm 1.1 KV grade cable	1 set	75.00
21	Brass compression gland for 3½ x 35 sq.mm 1.1 KV grade cable	1 set	75.00
22	Brass compression gland for 3½ x 50 sq.mm 1.1 KV grade cable	1 set	75.00
23	Brass compression gland for 3½ x 70 sq.mm 1.1 KV grade cable	1 set	112.00
24	Brass compression gland for 3½ x 95 sq.mm 1.1 KV grade cable	1 set	112.00
25	Brass compression gland for 3½ x 120 sq.mm 1.1 KV grade cable	1 set	143.00
26	Brass compression gland for 3½ x 150 sq.mm 1.1 KV grade cable	1 set	188.00
27	Brass compression gland for 3½ x 185 sq.mm 1.1 KV grade cable	1 set	223.00

SNO.	Description of Item	Unit	Rate
28	Brass compression gland for 3½ x 225 sq.mm 1.1 KV grade cable	1 set	227.00
29	Brass compression gland for 3½ x 240 sq.mm 1.1 KV grade cable	1 set	266.00
30	Brass compression gland for 3½ x 300 sq.mm 1.1 KV grade cable	1 set	266.00
31	Brass compression gland for 3 x 10 sq.mm 1.1 KV grade cable	1 set	58.00
32	Brass compression gland for 4 x 16 sq.mm 1.1 KV grade cable	1 set	75.00
33	Brass compression gland for 4 x 25 sq.mm 1.1 KV grade cable	1 set	75.00
34	Brass compression gland for 4 x 35 sq.mm 1.1 KV grade cable	1 set	91.00
35	Brass compression gland for 4 x 50 sq.mm 1.1 KV grade cable	1 set	91.00
36	Aluminium lugs for 6 sq.mm cable	1 set	1.00
37	Aluminium lugs for 10 sq.mm cable	1 each	2.00
38	Aluminium lugs for 16 sq.mm cable	1 each	2.00
39	Aluminium lugs for 25 sq.mm cable	1 each	3.00
40	Aluminium lugs for 35 sq.mm cable	1 each	4.00
41	Aluminium lugs for 50 sq.mm cable	1 each	6.00
42	Aluminium lugs for 70 sq.mm cable	1 each	9.00
43	Aluminium lugs for 95 sq.mm cable	1 each	10.00
44	Aluminium lugs for 120 sq.mm cable	1 each	14.00
45	Aluminium lugs for 150 sq.mm cable	1 each	18.00
46	Aluminium lugs for 185 sq.mm cable	1 each	23.00
47	Aluminium lugs for 225 sq.mm cable	1 each	32.00
48	Aluminium lugs for 240 sq.mm cable	1 each	39.00
49	Aluminium lugs for 300 sq.mm cable	1 each	55.00
50	Aluminium lugs for 400 sq.mm cable	1 each	68.00
51	Aluminium ferrules for 6 sq.mm cable	1 each	1.00
52	Aluminium ferrules for 10 sq.mm cable	1 each	1.00
53	Aluminium ferrules for 16 sq.mm cable	1 each	2.00
54	Aluminium ferrules for 25 sq.mm cable	1 each	2.00
55	Aluminium ferrules for 35 sq.mm cable	1 each	3.00
56	Aluminium ferrules for 50 sq.mm cable	1 each	5.00
57	Aluminium ferrules for 70 sq.mm cable	1 each	8.00
58	Aluminium ferrules for 95 sq.mm cable	1 each	9.00
59	Aluminium ferrules for 120 sq.mm cable	1 each	12.00
60	Aluminium ferrules for 150 sq.mm cable	1 each	17.00
61	Aluminium ferrules for 185 sq.mm cable	1 each	21.00
62	Aluminium ferrules for 225 sq.mm cable	1 each	29.00
63	Aluminium ferrules for 240 sq.mm cable	1 each	33.00
64	Aluminium ferrules for 300 sq.mm cable	1 each	49.00
65	Aluminium ferrules for 400 sq.mm cable	1 each	65.00
66	Out door cable jointing kit with cast resin compound with lugs for 2 x 16 sq.mm 1.1 KV grade cable	1 set	147.00
67	Out door cable jointing kit with cast resin compound with lugs for 2 x 25 sq.mm 1.1 KV grade cable	1 set	155.00
68	Out door cable jointing kit with cast resin compound with lugs for 2 x 35 sq.mm 1.1 KV grade cable	1 set	155.00
69	Out door cable jointing kit with cast resin compound with lugs for 2 x 50 sq.mm 1.1 KV grade cable	1 set	155.00

SNO.	Description of Item	Unit	Rate
70	Out door cable jointing kit with cast resin compound with lugs for 3 x 16 sq.mm 1.1 KV grade cable	1 set	155.00
71	Out door cable jointing kit with cast resin compound with lugs for 3 x 25 sq.mm 1.1 KV grade cable	1 set	155.00
72	Out door cable jointing kit with cast resin compound with lugs for 3 x 35 sq.mm 1.1 KV grade cable	1 set	174.00
73	Out door cable jointing kit with cast resin compound with lugs for 3 x 50 sq.mm 1.1 KV grade cable	1 set	174.00
74	Out door cable jointing kit with cast resin compound with lugs for 3 x 70 sq.mm 1.1 KV grade cable	1 set	174.00
75	Out door cable jointing kit with cast resin compound with lugs for 3 x 95 sq.mm 1.1 KV grade cable	1 set	186.00
76	Out door cable jointing kit with cast resin compound with lugs for 3 x 120 sq.mm 1.1 KV grade cable	1 set	186.00
77	Out door cable jointing kit with cast resin compound with lugs for 3 x 150 sq.mm 1.1 KV grade cable	1 set	186.00
78	Out door cable jointing kit with cast resin compound with lugs for 3 x 185 sq.mm 1.1 KV grade cable	1 set	298.00
79	Out door cable jointing kit with cast resin compound with lugs for 3 x 225 sq.mm 1.1 KV grade cable	1 set	298.00
80	Out door cable jointing kit with cast resin compound with lugs for 3 x 240 sq.mm 1.1 KV grade cable	1 set	365.00
81	Out door cable jointing kit with cast resin compound with lugs for 3 x 300 sq.mm 1.1 KV grade cable	1 set	365.00
82	Out door cable jointing kit with cast resin compound with lugs for 3½ x 25 sq.mm 1.1 KV grade cable	1 set	155.00
83	Out door cable jointing kit with cast resin compound with lugs for 3½ x 35 sq.mm 1.1 KV grade cable	1 set	174.00
84	Out door cable jointing kit with cast resin compound with lugs for 3 x 50 sq.mm 1.1 KV grade cable	1 set	174.00
85	Out door cable jointing kit with cast resin compound with lugs for 3½ x 70 sq.mm 1.1 KV grade cable	1 set	174.00
86	Out door cable jointing kit with cast resin compound with lugs for 3½ x 95 sq.mm 1.1 KV grade cable	1 set	186.00
87	Out door cable jointing kit with cast resin compound with lugs for 3½ x 120 sq.mm 1.1 KV grade cable	1 set	186.00
88	Out door cable jointing kit with cast resin compound with lugs for 3½ x 150 sq.mm 1.1 KV grade cable	1 set	186.00
89	Out door cable jointing kit with cast resin compound with lugs for 3½ x 185 sq.mm 1.1 KV grade cable	1 set	298.00
90	Out door cable jointing kit with cast resin compound with lugs for 3½ x 225 sq.mm 1.1 KV grade cable	1 set	365.00
91	Out door cable jointing kit with cast resin compound with lugs for 3½ x 240 sq.mm 1.1 KV grade cable	1 set	365.00
92	Out door cable jointing kit with cast resin compound with lugs for 3½ x 300 sq.mm 1.1 KV grade cable	1 set	365.00
93	Out door cable jointing kit with cast resin compound with lugs for 4 x 16 sq.mm 1.1 KV grade cable	1 set	155.00
94	Out door cable jointing kit with cast resin compound with lugs for 4 x 25 sq.mm 1.1 KV grade cable	1 set	155.00

SNO.	Description of Item	Unit	Rate
95	Out door cable jointing kit with cast resin compound with lugs for 4 x 35 sq.mm 1.1 KV grade cable	1 set	174.00
96	Out door cable jointing kit with cast resin compound with lugs for 4 x 50 sq.mm 1.1 KV grade cable	1 set	174.00
97	Straight through cable jointing kit with cast resin compound with ferrules for 2 x 16 sq.mm.1.1 KV grade cable	1 set	372.00
98	Straight through cable jointing kit with cast resin compound with ferrules for 2 x 25 sq.mm.1.1 KV grade cable	1 set	372.00
99	Straight through cable jointing kit with cast resin compound with ferrules for 2 x 35 sq.mm.1.1 KV grade cable	1 set	405.00
100	Straight through cable jointing kit with cast resin compound with ferrules for 2 x 50 sq.mm.1.1 KV grade cable	1 set	405.00
101	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 16 sq.mm.1.1 KV grade cable	1 set	372.00
102	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 25 sq.mm.1.1 KV grade cable	1 set	372.00
103	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 35 sq.mm.1.1 KV grade cable	1 set	405.00
104	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 50 sq.mm.1.1 KV grade cable	1 set	405.00
105	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 70 sq.mm.1.1 KV grade cable	1 set	507.00
106	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 95 sq.mm.1.1 KV grade cable	1 set	515.00
107	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 120 sq.mm.1.1 KV grade cable	1 set	555.00
108	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 150 sq.mm.1.1 KV grade cable	1 set	555.00
109	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 185 sq.mm.1.1 KV grade cable	1 set	872.00
110	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 225 sq.mm.1.1 KV grade cable	1 set	1007.00
111	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 240 sq.mm.1.1 KV grade cable	1 set	1118.00
112	Straight through cable jointing kit with cast resin compound with ferrules for 3 x 300 sq.mm.1.1 KV grade cable	1 set	1208.00
113	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 25 sq.mm.1.1 KV grade cable	1 set	372.00
114	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 35 sq.mm.1.1 KV grade cable	1 set	405.00
115	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 50 sq.mm.1.1 KV grade cable	1 set	405.00

SNO.	Description of Item	Unit	Rate
116	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 70 sq.mm.1.1 KV grade cable	1 set	515.00
117	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 95 sq.mm.1.1 KV grade cable	1 set	555.00
118	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 120 sq.mm.1.1 KV grade cable	1 set	555.00
119	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 150 sq.mm.1.1 KV grade cable	1 set	872.00
120	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 185 sq.mm.1.1 KV grade cable	1 set	1007.00
121	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 225 sq.mm.1.1 KV grade cable	1 set	1007.00
122	Straight through cable jointing kit with cast resin compound with ferrules for 3½ x 240 sq.mm.1.1 KV grade cable	1 set	1208.00
123	Straight through cable jointing kit with cast resin compound with ferrules for 3½x 300 sq.mm.1.1 KV grade cable	1 set	1447.00
124	Straight through cable jointing kit with cast resin compound with ferrules for 4 x 16 sq.mm.1.1 KV grade cable	1 set	372.00
125	Straight through cable jointing kit with cast resin compound with ferrules for 4 x 25 sq.mm.1.1 KV grade cable	1 set	405.00
126	Straight through cable jointing kit with cast resin compound with ferrules for 4 x 35 sq.mm.1.1 KV grade cable	1 set	405.00
127	Straight through cable jointing kit with cast resin compound with ferrules for 4 x 50 sq.mm.1.1 KV grade cable	1 set	405.00
128	Indoor cable jointing kit with cast resin compound with lugs for s11 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	3114.00
129	Indoor cable jointing kit with cast resin compound with lugs for s11 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	3325.00
130	Indoor cable jointing kit with cast resin compound with lugs for s11 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	4142.00
131	Indoor cable jointing kit with cast resin compound with lugs for s11 KV grade XLPE cable for 3 core 300 sq.mm.	1 set	4142.00
132	Outdoor cable jointing kit with cast resin compound with lugs for s11 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	4658.00
133	Outdoor cable jointing kit with cast resin compound with lugs for s11 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	5730.00
134	Outdoor cable jointing kit with cast resin compound with lugs for s11 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	7009.00
135	Outdoor cable jointing kit with cast resin compound with lugs for s11 KV grade XLPE cable for 3 core 300 sq.mm.	1 set	7702.00
136	Straight through cable jointing kit with cast resin compound with ferrules for 11 KV grade XPLE cable for 3 core 70 sq.mm.	1 set	5333.00
137	Straight through cable jointing kit with cast resin compound with ferrules for 11 KV grade XPLE cable for 3 core 120 sq.mm.	1 set	6206.00

SNO.	Description of Item	Unit	Rate
138	Straight through cable jointing kit with cast resin compound with ferrules for 11 KV grade XPLE cable for 3 core 240 sq.mm.	1 set	7070.00
139	Straight through cable jointing kit with cast resin compound with ferrules for 11 KV grade XPLE cable for 3 core 300 sq.mm.	1 set	7136.00
140	Indoor heat shrinkable cable jointing kit with lugs for 11 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	2335.00
141	Indoor heat shrinkable cable jointing kit with lugs for 11 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	2712.00
142	Indoor heat shrinkable cable jointing kit with lugs for 11 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	3070.00
143	Indoor heat shrinkable cable jointing kit with lugs for 11 KV grade XLPE cable for 3 core 300 sq.mm.	1 set	3070.00
144	Outdoor heat shrinkable cable jointing kit with lugs for 11 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	3658.00
145	Outdoor heat shrinkable cable jointing kit with lugs for 11 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	3927.00
146	Outdoor heat shrinkable cable jointing kit with lugs for 11 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	4150.00
147	Outdoor heat shrinkable cable jointing kit with lugs for 11 KV grade XLPE cable for 3 core 300 sq.mm.	1 set	4150.00
148	Straight through heat shrinkable cable jointing kit with ferrules for 11 KV grade XPLE cable for 3 core 70 sq.mm.	1 set	6717.00
149	Straight through heat shrinkable cable jointing kit with ferrules for 11 KV grade XPLE cable for 3 core 120 sq.mm.	1 set	7832.00
150	Straight through heat shrinkable cable jointing kit with ferrules for 11 KV grade XPLE cable for 3 core 240 sq.mm.	1 set	8810.00
151	Straight through heat shrinkable cable jointing kit with ferrules for 11 KV grade XPLE cable for 3 core 300 sq.mm.	1 set	8810.00
152	Indoor cable jointing kit with cast rasin compound lugs for 33 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	4674.00
153	Indoor cable jointing kit with cast rasin compound lugs for 33 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	5544.00
154	Indoor cable jointing kit with cast rasin compound lugs for 33 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	7441.00
155	Outdoor cable jointing kit with cast rasin compound lugs for 33 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	12760.00
156	Outdoor cable jointing kit with cast rasin compound lugs for 33 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	13870.00
157	Outdoor cable jointing kit with cast rasin compound lugs for 33 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	15773.00
158	Straight through cable jointing kit with cast rasin compound ferrules for 33 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	16493.00
159	Straight through cable jointing kit with cast rasin compound ferrules for 33 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	18838.00
160	Straight through cable jointing kit with cast rasin compound ferrules for 33 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	22757.00
161	Indoor heat shrinkable cable jointing kit with lugs for 33 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	5506.00
162	Indoor heat shrinkable cable jointing kit with lugs for 33 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	7590.00

SNO.	Description of Item	Unit	Rate
163	Indoor heat shrinkable cable jointing kit with lugs for 33 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	8109.00
164	Outdoor heat shrinkable cable jointing kit with lugs for 33 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	8348.00
165	Outdoor heat shrinkable cable jointing kit with lugs for 33 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	9828.00
166	Outdoor heat shrinkable cable jointing kit with lugs for 33 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	11283.00
167	Straight through heat shrinkable cable jointing kit with ferrules for 33 KV grade XLPE cable for 3 core 70 sq.mm.	1 set	13262.00
168	Straight through heat shrinkable cable jointing kit with ferrules for 33 KV grade XLPE cable for 3 core 120 sq.mm.	1 set	16758.00
169	Straight through heat shrinkable cable jointing kit with ferrules for 33 KV grade XLPE cable for 3 core 240 sq.mm.	1 set	23495.00
170	Stay rod (1.8 M long, 19/20 mm dia.) with anchor plate 45 cm x 45 cm x 7.5 mm complete with thimble etc.	1 set	625.00
171	Stay wire (7/4.00 mm dia.)	1 kg	50.00
172	stay wire (7/3.15 mm dia.)	1 kg	50.00
173	Turn buckle (20 mm x 60 cm)	1 No.	120.00
174	Stain insulator	1 each	26.00
175	Bow tightner	1 No.	126.00
176	Shackle insulator (75 mm x 90 mm) with G.I bolts and nuts	1 each	38.00
177	shackle insulator (100 mm X 110 mm) with G.I bolts and nuts	1 each	60.00
178	pin insulator (100 mm x 65 mm) with G.I. spindle and nuts	1 each	38.00
179	pin insulator (100 mm x 80 mm) with G.I. spindle and nuts	1 each	34.00
180	MV horn gap lightning arrestor with pin insulator (100 mm x 65 mm), spindle and brass metal parts etc.	1 set	101.00
181	Water tight switch 5 amps complete as required	1 No.	42.00
182	1.5 sq. mm twin core weather proof aluminium cable	100 mtrs	471.00
183	Pulley of 50 mm dia	1 No.	59.00
184	15 amps aerial fuse complete with porcelain tube as required	1 each	23.00
185	30 amps aerial fuse complete with porcelain tube as required	1 each	31.00
186	Clamps, bolts nuts etc.	1 set	84.00
187	Stay clamp	1 set	67.00
188	Brace (50 mm x 50 mm x 6 mm angle iron)	1 mtrs	227.00
189	Angle iron bracket (50 mm x 50 mm x 6 mm) 65 cm long	1 each	92.00
190	M.S rag bolts	1 each	7.00
191	flat iron clamps (50 mm x 6 mm) for G.I pipe	1 each	25.00
192	Eye hook	1 each	13.00
193	guy clamp	1 each	67.00
194	nipple 50 mm dia	1 each	17.00
195	G.I. plate (10 cm x 10 cm x 5 mm)	1 kg	48.00
196	G.I. pipe 20 mm dia (light class)	100 mtrs	6727.00
197	G.I. pipe 32 mm dia. (light class)	100 mtrs	10450.00
198	G.I pipe 50 mm dia. (light class)	100 mtrs	16216.00
199	G.I pipe 80 mm dia. (light class)	100 mtrs	27267.00
200	G.I pipe 100 mm dia. (light class)	100 mtrs	41081.00
201	G.I bend 90 degree, 50 mm dia	1 No.	67.00
202	Saddles	100 nos	48.00

SNO.	Description of Item	Unit	Rate
203	Iron screws 45 mm x 6 mm	100 Nos	42.00
204	D' iron clamp (with coach screws)	1 each	96.00
205	Bricks second class as per CPWD specifications	1000 Nos	5250.00
206	Sand	1 cum	525.00
207	Bricks ballast	1 cum	200.00
208	Excavation including refilling as required	1 cum	165.00
209	Cement concrete 1:2:4 (1 cement:2 coarse sand : 4 graded stone aggregate 20 mm nominal size)	1 cum	2129.00
210	Cement concrete 1:3:6 (1 cement:3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	1 cum	1789.00
211	Cartage for brick ballast	1 cum	92.00
212	Strain insulator 11 kv	1 No.	38.00
213	Strain insulator 33 kv	1 No.	66.00
214	11 KV pin insulator with pin washers and nuts	1 set	256.00
215	11 KV disc insulator	1 set	726.00
216	Galvanised insulator hardware fitting ball and socket type with strain clamps, bolts, nuts and washers	1 set	151.00
217	33 KV pin insulator with pin washers and nuts	1 set	812.00
218	Galvanised insulator hardware fitting ball and socket type with strain clamps bolts, nuts and washers for 3 Nos 11 KV disk insulator	1 set	300.00
219	3 Piece lightning arrestor set for 11 kv O.H lines complete with G.I clamps bolts and nuts with washers	1 set	2703.00
220	single piece lightning arrestor set for 33 kv O.H lines complete with G.I clamps, bolts, and nuts with washers	1 set	27027.00
221	100 mm x 50 mm channel iron (9.56 kg/ mtr)	1 kg	36.00
222	75 mm x 40 mm channel iron (7.14 kg/mtr)	1 kg	36.00
223	50 mm x 6 mm flat iron	1 kg	36.00
224	16 mm x 50 mm bolts and nuts with washers	1 set	7.00
225	50 mm x 50 mm x6 mm angle iron	1 kg	36.00
226	16 mm x 40 mm bolts and nuts with washers	1 set	6.00
227	16 mm x 125 mm bolts and nuts with washers	1 set	25.00
228	16 mm x 150 mm bolts and nuts with washers	1 set	29.00
229	65 mm x 65 mm x 6 mm angle iron	1 kg	36.00
230	40 mm x 3 mm flat iron	1 kg	36.00
231	35 mm x 35 mm x 6 mm angle iron	1 kg	36.00
232	G.I. strap for shackle insulator	1 No.	30.00
233	50 mm x 8 mm flat iron	1 kg	36.00
234	MS perforated cable tray 100 x 50 x 1.6 mm	1 mtrs	166.00
235	MS perforated cable tra 150 x 50 x 1.6 mm	1 mtrs	208.00
236	MS perforated cable tray 225 x 50 x 1.6 mm	1 mtrs	270.00
237	MS perforated cable tray 300 x 50 x 1.6 mm	1 mtrs	338.00
238	MS perforated cable tray 375 x 50 x 2 mm	1 mtrs	451.00
239	MS perforated cable tray450 x 50 x 2 mm	1 mtrs	529.00
240	MS perforated cable tray 600 x 50 x2 mm	1 mtrs	673.00
241	MS perforated cable tray300 x62.5 x 2 mm	1 mtrs	383.00
242	MS perforated cable tray375 x 62.5x 2mm	1 mtrs	481.00
243	MS perforated cable tray 450 x 62.5 x 2 mm	1 mtrs	554.00
244	MS perforated cable tray600 x62.5 x 2 mm	1 mtrs	698.00
245	MS perforated cable tray750 x62.5 x 2 mm	1 mtrs	780.00
246	MS perforated cable tray900 x62.5 x 2 mm	1 mtrs	988.00
247	MS perforated cable tray600 x75 x 2 mm	1 mtrs	682.00

SNO.	Description of Item	Unit	Rate
248	MS perforated cable tray750 x75 x 2 mm	1 mtrs	721.00
249	MS perforated cable tray900 x75 x 2 mm	1 mtrs	865.00
250	Connector 100 x 50 x 1.6 mm	1 No.	19.00
251	Connector 150 x 50 x 1.6 mm	1 No.	19.00
252	Connector 225 x 50 x 1.6 mm	1 No.	19.00
253	Connector 300 x 50 x 1.6 mm	1 No.	19.00
254	Connector 375 x 50 x 2 mm	1 No.	19.00
255	Connector 450 x 50 x 2 mm	1 No.	19.00
256	Connector 600 x 50 x 2 mm	1 No.	19.00
257	Connector 300 x 32.5 x 2 mm	1 No.	26.00
258	Connector 375 x 62.5 x 2 mm	1 No.	26.00
259	Connector 450 x 62.5 x 2 mm	1 No.	26.00
260	Connector 600 x 62.5 x 2 mm	1 No.	26.00
261	Connector 750 x 62.5 x 2 mm	1 No.	26.00
262	Connector 900 x 62.5 x 2 mm	1 No.	26.00
263	Connector 600 x 75 x 2 mm	1 No.	32.00
264	Connector 750 x 75 x 2 mm	1 No.	32.00
265	Connector 900 x 75 x 2 mm	1 No.	32.00
266	Bend 100 x 50 x 1.6 mm	1 No.	416.00
267	Bend 150 x 50 x 1.6	1 No.	513.00
268	Bend 225 x 50 x 1.6 mm	1 No.	541.00
269	Bend 300 x 50 x 1.6 mm	1 No.	832.00
270	Bend 375 x 50 x 2 mm	1 No.	902.00
271	Bend 450 x 50 x 2 mm	1 No.	1058.00
272	Bend 600 x 50 x 2 mm	1 No.	1338.00
273	Bend 300 x 62.5 x 2 mm	1 No.	949.00
274	Bend 375 x 62.5 x 2 mm	1 No.	962.00
275	Bend 450 x 62.5 x 2 mm	1 No.	1107.00
276	Bend 600 x 62.5 x 2 mm	1 No.	1396.00
277	Bend 750 x 62.5 x 2 mm	1 No.	1754.00
278	Bend 900 x 62.5 x 2 mm	1 No.	1975.00
279	Bend 600 x 75 x 2 mm	1 No.	1442.00
280	Bend 750 x 75 x 2 mm	1 No.	1715.00
281	Bend 900 x 75 x 2 mm	1 No.	2046.00
282	Reducer 100 x 50 x 1.6mm	1 No.	249.00
283	Reducer 150 x 50 x 1.6mm	1 No.	305.00
284	Reducer 225 x 50 x 1.6mm	1 No.	405.00
285	Reducer 300 x 50 x 1.6mm	1 No.	578.00
286	Reducer 375 x 50 x 2.0 mm	1 No.	686.00
287	Reducer 450 x 50 x 2.0 mm	1 No.	747.00
288	Reducer 600 x 50 x 2.0 mm	1 No.	1010.00
289	Reducer 300 x 62.5 x 2mm	1 No.	613.00
290	Reducer 375 x 62.5 x 2mm	1 No.	721.00
291	Reducer 450 x 62.5 x 2mm	1 No.	829.00
292	Reducer 600 x 62.5 x 2mm	1 No.	1046.00
293	Reducer 750 x 62.5 x 2mm	1 No.	1263.00
294	Reducer 900 x 62.5 x 2mm	1 No.	1479.00
295	Reducer 600 x 75 x 2mm	1 No.	1016.00
296	Reducer 750 x 75 x 2mm	1 No.	1298.00
297	Reducer 900 x 75 x 2mm	1 No.	1515.00
298	Tee 100 x 50 x 1.6 mm	1 No.	296.00

SNO.	Description of Item	Unit	Rate
299	Tee 150 x 50 x 1.6 mm	1 No.	464.00
300	Tee 225 x 50 x 1.6 mm	1 No.	608.00
301	Tee 300 x 50 x 1.6 mm	1 No.	748.00
302	Tee 375 x 50 x 2 mm	1 No.	1014.00
303	Tee 450 x 50 x 2 mm	1 No.	1190.00
304	Tee 600 x 50 x 2 mm	1 No.	1514.00
305	Tee 300 x 62.5 x 2mm	1 No.	858.00
306	Tee 375 x 62.5 x 2mm	1 No.	1081.00
307	Tee 450 x 62.5 x 2mm	1 No.	1244.00
308	Tee 600 x 62.5 x 2mm	1 No.	1568.00
309	Tee 750 x 62.5 x 2mm	1 No.	1893.00
310	Tee 900 x 62.5 x 2mm	1 No.	2218.00
311	Tee 600 x 75 x 2 mm	1 No.	1623.00
312	Tee 750 x 75 x 2 mm	1 No.	1948.00
313	Tee 900 x 75 x 2 mm	1 No.	2137.00
314	Cross member 100 x 50 x 1.6 mm	1 No.	499.00
315	Cross member 150 x 50 x 1.6 mm	1 No.	619.00
316	Cross member 225 x 50 x 1.6 mm	1 No.	811.00
317	Cross member 300 x 50 x 1.6 mm	1 No.	998.00
318	Cross member 375 x 50 x 2 mm	1 No.	1371.00
319	Cross member 450 x 50 x 2 mm	1 No.	1587.00
320	Cross member 600 x 50 x 2 mm	1 No.	2019.00
321	Cross member 300 x 62.5 x 2mm	1 No.	1221.00
322	Cross member 375 x 62.5 x 2mm	1 No.	1442.00
323	Cross member 450 x 62.5 x 2mm	1 No.	1659.00
324	Cross member 600 x 62.5 x 2mm	1 No.	2092.00
325	Cross member 750 x 62.5 x 2mm	1 No.	2525.00
326	Cross member 900 x 62.5 x 2mm	1 No.	2956.00
327	Cross member 600 x 75 x 2 mm	1 No.	2163.00
328	Cross member 750 x 75 x 2 mm	1 No.	2596.00
329	Cross member 900 x 75 x 2 mm	1 No.	3115.00
330	Cable cover class EHV-type-I with peak size 450 x 230 x 50mm.	Each	53.00
331	Cable cover class EHV-type-I with peak size 600 x 230 x 50mm.	Each	71.00
332	Cable cover class HVP-type-I with peak size 300 x 180 x 40mm.	Each	27.00
333	Cable cover class HVP-type-II with peak size 450 x 180 x 40mm.	Each	40.00
334	Coble cover class HV-type-I flat size 300 x 180 x 40mm	Each	25.00
335	Cable cover class HV-type-II flat size 450 x 180 x 40mm	Each	39.00
336	Cable cover class LV-type-I flat size 250 x 150 x 40mm	Each	18.00
337	Cable cover class LV-type-II flat size 300 x 180 x 40mm	Each	25.00
338	Cable cover class LV-type-III flat size 450 x 180 x 40mm	Each	40.00
339	High mast lighting system with 6 no. 2 x 400 w flood light fixture flood light fitting 250 watt each with all accessories 12.5 meter hight as per standdard disegin mention in chapter 16.1	Each	262500.00
340	High mast lighting system with 6 no. 2 x 400 w flood light fixture flood light fitting 250 watt each with all accessories 16.5 meter hight as per standdard disegin mention in chapter 16.2	Each	330750.00
341	9 mtrs. High hot dipped galvanized octagonal poles with bottomof 200mm A/F, top 100mm, A/F made from 3mm thick HT plate & 290x290x16mm base plate with 1500mm long decorative sword type double arm bracket.	Each	27300.00

SNO.	Description of Item	Unit	Rate
342	Suitable size & type of foundation bolts, type M20x750mm 'J' type foundation bolts (EN8 grade) for item E 343	Each	210.00
343	9mtrs. High hot galvanized octagonal poles with bottom of 155mm A/F, top 70mm A/F made from 3mm thick HT plate & 260x260x16mm base plate with 1500mm long decorative sword type double arm bracket.	Each	19950.00
344	Suitable size & type of foundation bolts, type M20x750mm 'J' type foundation bolts (EN8 grade) FOR item E 345	Each	158.00
345	80 mm G.I POLE 6 meter hight with 30 mm x 30 mm x 2 mm padestal	each	2625.00
346	solar battery	each	9450.00
347	Battery charger with other accessories	each	2100.00
348	control panel with weather proof pole box	each	8400.00
349	solar fittings LED type and CFL type 18 to 20 watt (set of 2nos)	set	3360.00
350	Concrete 1:2:4 (1 cement : 2 sand : 4 metal 20 mm size)	cum	3511.00
351	Rail pole standard weight 52 kg/per metre	Per Metre	40.00
352	Rail pole std. weight 26 kg/per metre	Per Metre	42.00
353	Rail pole std. weight 21 kg/per metre	Per Metre	31.00
354	R.S. Joist 100x200-25.4 kg/per metre	Per Metre	42.00
355	R.S. Joist 175 x 90 - 19.3 kg/per metre	Per Metre	42.00
356	R.S. Joist 150 x 100 - 17 kg/per metre	Per Metre	42.00
357	R.S. Joist 150 x 80 - 14.9 kg/per metre	Per Metre	42.00
358	R.S. Joist 125 x 75 - 13 kg/per metre	Per Metre	42.00
359	H-Beam 152 x 152 mm std. Wt.-37.1kg/mtr	Per Metre	42.00
360	410 SP-2 - 7.00 metre	Each	6054.00
361	410 SP-5 - 7.50 metre	Each	6486.00
362	410 SP-8 - 7.50 metre	Each	8216.00
363	410 SP-11 - 8.00 metre	Each	6775.00
364	410 SP-14 - 8.00 metre	Each	8793.00
365	410 SP-17 - 8.50 metre	Each	7207.00
366	410 SP-20 - 8.50 metre	Each	9081.00
367	410 SP-23 - 8.50 metre	Each	11459.00
368	410 SP-26 - 9.00 metre	Each	7423.00
369	410 SP-29 - 9.00 metre	Each	9802.00
370	410 SP-32 - 9.00 metre	Each	11892.00
371	410 SP-35 - 9.50 metre	Each	10090.00
372	410 SP-38 - 9.50 metre	Each	12324.00
373	410 SP-41 - 10.00 metre	Each	10523.00
374	410 SP-44 - 10.00 metre	Each	12901.00
375	410 SP-47 - 10.00 metre	Each	16721.00
376	410 SP-50 - 11.00 metre	Each	11387.00
377	410 SP-53 - 11.00 metre	Each	13982.00
378	410 SP-56 - 11.00 metre	Each	18162.00
379	410 SP-59 - 12.00 metre	Each	14991.00
380	410 SP-62 - 12.00 metre	Each	19459.00
381	410 SP-65 - 12.00 metre	Each	23351.00
382	410 SP-68 - 13.00 metre	Each	21045.00
383	410 SP-71 - 13.00 metre	Each	17586.00
384	410 SP-73 - 14.50 metre	Each	23279.00
385	410 SP-76 - 14.50 metre	Each	28180.00
386	410 SP-77 - 16.00 metre	Each	25369.00

SNO.	Description of Item	Unit	Rate
387	410 SP-80 - 16.00 metre	Each	30775.00
388	410 SP-10 (Bend type) 8.00 metre	Each	6256.00
389	410 SP-16 (Bend type) 8.50 metre	Each	6616.00
390	410 SP-25 (Bend type) 9.00 metre	Each	6832.00
391	410 SP-34 (Bend type) 9.50 metre	Each	10076.00
392	410 SP-40 (Bend type) 10.00 metre	Each	10508.00
393	410 SP-49 (Bend type) 11.00 metre	Each	11373.00
394	PCC pole 8 mtrs. Long 140 kg	Each	1764.00
395	PCC pole 9.1 mtrs. Long 272 kg	Each	3455.00
396	0.03 sq.in/20 sq.mm Alloy Aluminium Conductor	K.g	197.00
397	0.04 sq.in/25 sq.mm Alloy Aluminium Conductor	K.g	197.00
398	0.05 sq.in/30 sq.mm Alloy Aluminium Conductor	K.g	197.00
399	0.075 sq.in/48 sq.mm Alloy Aluminium Conductor	K.g	197.00
400	ACSR 6/1- 2.11mm dia with equivalent copper area (13Sq.mm or 0.02Sq.inch with equivalent copper & calculated Alu. Area 20.71 Sq.mm.	K.g	171.00
401	ACSR 6/1-2.36mm dia with equivalent copper area 16Sq.mm or 0.025 inches and calculated aluminium area 25.91 Sq.mm.	K.g	171.00
402	ACSR 6/1-2.59mm dia with equivalent with calculated copper area 0.03 inch (20.00 Sq.mm with calculated aluminium area 31.21 Sq.mm	K.g	171.00
403	ACSR 6/1 - 3.00mm dia with equivalent copper area 25Sqmm 0.04 inch calculated aluminium area 41.87 Sq.mm.	K.g	171.00
404	ACSR 6/1- 3.35mm dia with equivalent copper area 0Sqmm.0.05 inch calculated aluminium area 62.32Sq.mm.	K.g	171.00
405	ACSR 6/1- 3.66mm dia with equivalent copper area 40 Sqmm 0.06 inch calculated aluminium area 62.32 sq.mm.	K.g	171.00
406	ACSR 6/1- 3.99mm dia with equivalent copper area 45 Sqmm 0.07 inch calculated aluminium area 74.07 Sq.mm	K.g	171.00
407	ACSR 6/1-4.09mm dia with equivalent copper area 48 Sqmm 0.075 equivalent calculated Aluminium area 77.83 Sq.mm.	K.g	142.00
408	25 X 25 guard insulator	Each	16.00
409	37 X 37 guard insulator	Each	21.00
410	50 X 50 guard insulator	Each	25.00
411	4.00 Dia GI wire	K.g	69.00
412	Cradle type	Each	19.00
413	Hexagonal type	Each	14.00
414	Ring type	Each	12.00
415	20x15x15Cms.	Each	184.00
416	Flat iron 40 x 3 mm pole clamp	Each	19.00
417	GI wire 4.0 mm dia	meter	8.00
418	PVC ins & std Alu wire 10.0 sq mm	meter	15.00
419	PVC ins & std Alu wire 16.0 sq mm	meter	20.00
420	100mmx50mm (7.9Kg./M) channel Iron	Kg	8.00
421	50mmx50mmx6mm (4.5Kg./M) channel Iron	Kg	36.00
422	50mmx6mm Flat Iron	Kg	36.00
423	Nut Bolt 16mmx50mm	Set	8.00
424	2.5 Sq.mm.(Heavy Duty) UNARMOURED 2 Core	1000Meter	42.00
425	4 Sq.mm.((Heavy Duty) UNARMOURED 2 Core	1000Meter	50.00
426	6 Sq.mm.(XLPE) UNARMOURED 2 Core	1000Meter	63.00
427	10 Sq.mm.(XLPE) UNARMOURED 2 Core	1000Meter	81.00

SNO.	Description of Item	Unit	Rate
428	16 Sq.mm.(XLPE) UNARMOURED 2 Core	1000Meter	106.00
429	2.5 Sq.mm.(Heavy Duty) ARMOURED 2 Core	1000Meter	92.00
430	4 Sq.mm.(Heavy Duty) ARMOURED 2 Core	1000Meter	102.00
431	6 Sq.mm.(XLPE) ARMOURED 2 Core	1000Meter	123.00
432	10 Sq.mm.(XLPE) ARMOURED 2 Core	1000Meter	138.00
433	16 Sq.mm.(XLPE) ARMOURED 2 Core	1000Meter	161.00
434	6 Sq.mm.(XLPE) UNARMOURED 3 Core	1000Meter	79.00
435	10 Sq.mm.(XLPE) UNARMOURED 3 Core	1000Meter	103.00
436	16 Sq.mm.(XLPE) UNARMOURED 3 Core	1000Meter	134.00
437	25 Sq.mm(XLPE) UNARMOURED 3 Core	1000Meter	168.00
438	35 Sq.mm(XLPE) UNARMOURED 3 Core	1000Meter	214.00
439	50 Sq.mm(XLPE) UNARMOURED 3 Core	1000Meter	281.00
440	70 Sq.mm(XLPE) UNARMOURED 3 Core	1000Meter	390.00
441	95 Sq.mm.(XLPE) UNARMOURED 3 Core	1000Meter	496.00
442	6 Sq.mm.(XLPE) ARMOURED 3 Core	1000Meter	141.00
443	10 Sq.mm.(XLPE) ARMOURED 3 Core	1000Meter	161.00
444	16 Sq.mm.(XLPE) ARMOURED 3 Core	1000Meter	176.00
445	25 Sq.mm(XLPE) ARMOURED 3 Core	1000Meter	219.00
446	35 Sq.mm(XLPE) ARMOURED 3 Core	1000Meter	279.00
447	50 Sq.mm(XLPE) ARMOURED 3 Core	1000Meter	350.00
448	70 Sq.mm(XLPE) ARMOURED 3 Core	1000Meter	463.00
449	95 Sq.mm.(XLPE) ARMOURED 3 Core	1000Meter	574.00
450	25 Sq.mm(XLPE) UNARMOURED 3½ CORE	1000Meter	203.00
451	35 Sq.mm(XLPE) UNARMOURED 3½ CORE	1000Meter	248.00
452	50 Sq.mm(XLPE) UNARMOURED 3½ CORE	1000Meter	331.00
453	70 Sq.mm(XLPE) UNARMOURED 3½ CORE	1000Meter	454.00
454	95 Sq.mm.(XLPE) UNARMOURED 3½ CORE	1000Meter	580.00
455	120 Sq.mm.(XLPE) UNARMOURED 3½ CORE	1000Meter	721.00
456	150 Sq.mm.(XLPE) UNARMOURED 3½ CORE	1000Meter	870.00
457	185 Sq.mm.(XLPE) UNARMOURED 3½ CORE	1000Meter	1093.00
458	240 Sq.mm.(XLPE) UNARMOURED 3½ CORE	1000Meter	1416.00
459	300 Sq.mm.(XLPE) UNARMOURED 3½ CORE	1000Meter	1742.00
460	400 Sq.mm.(XLPE) UNARMOURED 3½ CORE	1000Meter	2222.00
461	25 Sq.mm(XLPE) ARMOURED 3½ CORE	1000Meter	258.00
462	35 Sq.mm(XLPE) ARMOURED 3½ CORE	1000Meter	308.00
463	50 Sq.mm(XLPE) ARMOURED 3½ CORE	1000Meter	403.00
464	70 Sq.mm(XLPE) ARMOURED 3½ CORE	1000Meter	533.00
465	95 Sq.mm.(XLPE) ARMOURED 3½ CORE	1000Meter	660.00
466	120 Sq.mm.(XLPE) ARMOURED 3½ CORE	1000Meter	832.00
467	150 Sq.mm.(XLPE) ARMOURED 3½ CORE	1000Meter	968.00
468	185 Sq.mm.(XLPE) ARMOURED 3½ CORE	1000Meter	1205.00
469	240 Sq.mm.(XLPE) ARMOURED 3½ CORE	1000Meter	1532.00
470	300 Sq.mm.(XLPE) ARMOURED 3½ CORE	1000Meter	1872.00
471	400 Sq.mm.(XLPE) ARMOURED 3½ CORE	1000Meter	2356.00
472	6 Sq.mm.(XLPE) UNARMOURED 4 CORE	1000Meter	89.00
473	10 Sq.mm.(XLPE) UNARMOURED 4 CORE	1000Meter	110.00
474	16 Sq.mm.(XLPE) UNARMOURED 4 CORE	1000Meter	158.00
475	25 Sq.mm(XLPE) UNARMOURED 4 CORE	1000Meter	191.00
476	35 Sq.mm(XLPE) UNARMOURED 4 CORE	1000Meter	254.00
477	50 Sq.mm(XLPE) UNARMOURED 4 CORE	1000Meter	340.00
478	70 Sq.mm(XLPE) UNARMOURED 4 CORE	1000Meter	457.00

SNO.	Description of Item	Unit	Rate
479	95 Sq.mm.(XLPE) UNARMoured 4 CORE	1000Meter	597.00
480	120 Sq.mm.(XLPE) UNARMoured 4 CORE	1000Meter	749.00
481	150 Sq.mm.(XLPE) UNARMoured 4 CORE	1000Meter	925.00
482	6 Sq.mm.(XLPE) ARMoured 4 CORE	1000Meter	150.00
483	10 Sq.mm.(XLPE) ARMoured 4 CORE	1000Meter	164.00
484	16 Sq.mm.(XLPE) ARMoured 4 CORE	1000Meter	205.00
485	25 Sq.mm(XLPE) ARMoured 4 CORE	1000Meter	251.00
486	35 Sq.mm(XLPE) ARMoured 4 CORE	1000Meter	319.00
487	50 Sq.mm(XLPE) ARMoured 4 CORE	1000Meter	414.00
488	70 Sq.mm(XLPE) ARMoured 4 CORE	1000Meter	540.00
489	95 Sq.mm.(XLPE) ARMoured 4 CORE	1000Meter	691.00
490	120 Sq.mm.(XLPE) ARMoured 4 CORE	1000Meter	851.00
491	150 Sq.mm.(XLPE) ARMoured 4 CORE	1000Meter	1031.00
492	50 Sq.mm (XLPE CABLE 11 KV GRADE)	1000Meter	1255.00
493	70 Sq.mm (XLPE CABLE 11 KV GRADE)	1000Meter	1408.00
494	95 Sq.mm. (XLPE CABLE 11 KV GRADE)	1000Meter	1544.00
495	50 Sq.mm (XLPE CABLE 33 KV GRADE)	1000Meter	1875.00
496	70 Sq.mm (XLPE CABLE 33 KV GRADE)	1000Meter	2159.00
497	95 Sq.mm. (XLPE CABLE 33 KV GRADE)	1000Meter	2230.00
498	3x50 sq.mm(M-seal push on kit 33 kV XLPE cableO.D. termination)	Each	40386.00
499	3x70to3x120 sq.mm.(M-seal push on kit 33 kV XLPE cableO.D. termination)	Each	44017.00
500	3x50 sq.mm(M-seal push on kit 33 kV XLPE cable I.D. termination)	Each	16121.00
501	3x70to3x120 sq.mm.(M-seal push on kit 33 kV XLPE cable I.D. termination)	Each	19272.00
502	3x25,3x35(M-seal push on kit 11 kV XLPE cable O.D. termination)	Each	18517.00
503	3x50,3x70 (M-seal push on kit 11 kV XLPE cable O.D. termination)	Each	18911.00
504	3x95 (M-seal push on kit 11 kV XLPE cable O.D. termination)	Each	19685.00
505	3x25,3x35(M-seal push on kit 11 kV XLPE cable I.D. termination)	Each	10287.00
506	3x50,3x70 (M-seal push on kit 11 kV XLPE cable I.D. termination)	Each	10748.00
507	3x95 (M-seal push on kit 11 kV XLPE cable I.D. termination)	Each	12302.00
508	3x50 (Heat shr.jointg. kit 33 kV XLPE cable O.D. termination)	Each	31512.00
509	3x70,95 (Heat shr.jointg. kit 33 kV XLPE cable O.D. termination)	Each	32442.00
510	3x120,185 (Heat shr.jointg. kit 33 kV XLPE cable O.D. termination)	Each	50645.00
511	3x50 (Heat shr.jointg. kit 33 kV XLPE cable I.D. termination)	Each	22336.00
512	3x70,95 (Heat shr.jointg. kit 33 kV XLPE cable I.D. termination)	Each	25933.00
513	3x120,185 (Heat shr.jointg. kit 33 kV XLPE cable I.D. termination)	Each	50645.00
514	3x25, 3x35 (Heat shr.jointg. kit 11 kV XLPE cableO.D. termination)	Each	24405.00
515	3x50, 3x70 (Heat shr.jointg. kit 11 kV XLPE cableO.D. termination)	Each	29271.00
516	3x95 (Heat shr.jointg. kit 11 kV XLPE cableO.D. termination)	Each	29271.00
517	3x25, 3x35(Heat shr.jointg. kit 11 kV XLPE cableI.D. termination)	Each	14019.00
518	3x50, 3x70 (Heat shr.jointg. kit 11 kV XLPE cableI.D. termination)	Each	18037.00
519	3x95 (Heat shr.jointg. kit 11 kV XLPE cableI.D. termination)	Each	18037.00
520	10-50 sqmm 2 / 3 / 3½ core (id/od epoxy resin end termination)	Each	468.00
521	70-120 sqmm 2 / 3 / 3½ / 4core (id/od epoxy resin end termination)	Each	627.00

SNO.	Description of Item	Unit	Rate
522	150-300 sqmm 2 / 3 / 3½ / 4core (id/od epoxy resin end termination)	Each	1042.00
523	350-500sqmm 3½ core (id/od epoxy resin end termination)	Each	1468.00
524	10-50 sqmm 2 / 3 / 3½ / 4core(Heat shr.jointg. kit 1.1 kV XLPE/HD cable O.D. termination)	Each	6642.00
525	70-150 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable O.D. termination)	Each	7736.00
526	150-300 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable O.D. termination)	Each	9345.00
527	350-500 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable O.D. termination)	Each	11328.00
528	10-50 sqmm 2 / 3 / 3½ / 4core(Heat shr.jointg. kit 1.1 kV XLPE/HD cable I.D. termination)	Each	3498.00
529	70-150 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable I.D. termination)	Each	4219.00
530	150-300 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable I.D. termination)	Each	6842.00
531	350-500 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable I.D. termination)	Each	7983.00
532	6-16 sqmm 2 / 3 / 3½ / 4core (PVC sheathed cable//XLPE of 1.1 kV grade:(I.D./O.D.))	Each	948.00
533	25-35 sqmm 2 / 3 / 3½ / 4core (PVC sheathed cable//XLPE of 1.1 kV grade:(I.D./O.D.))	Each	1268.00
534	50-95 sqmm 2 / 3 / 3½ / 4core (PVC sheathed cable//XLPE of 1.1 kV grade:(I.D./O.D.))	Each	1609.00
535	120-240 sqmm 2 / 3 / 3½ / 4core (PVC sheathed cable//XLPE of 1.1 kV grade:(I.D./O.D.))	Each	2670.00
536	300-350 sqmm 2 / 3 / 3½ / 4core (PVC sheathed cable//XLPE of 1.1 kV grade:(I.D./O.D.))	Each	3398.00
537	400-500 sqmm 2 / 3 / 3½ / 4core (PVC sheathed cable//XLPE of 1.1 kV grade:(I.D./O.D.))	Each	4913.00
538	6-16 sqmm 2 / 3 / 3½ / 4core(Heat shr.jointg. kit 1.1 kV XLPE/HD cable including lugs (I.D../O.D.))	Each	2491.00
539	25-35 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable including lugs (I.D../O.D.))	Each	3364.00
540	50-95 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable including lugs (I.D../O.D.))	Each	4219.00
541	120-240 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable including lugs (I.D../O.D.))	Each	6408.00
542	300-350 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable including lugs (I.D../O.D.))	Each	12125.00
543	400-500 sqmm 2 / 3 / 3½ / 4core (Heat shr.jointg. kit 1.1 kV XLPE/HD cable including lugs (I.D../O.D.))	Each	12802.00
544	Gland Size 22mm suitable for cable 2,3,3½ & 4 x upto 6 Sq.mm	Each	34.00
545	Gland Size 22mm suitable for cable 2,3, 3½, 4 x 10 Sq.mm or 2x 16 Sq.mm	Each	39.00
546	Gland size 28mm for 3,4 x 16 Sq.mm	Each	59.00
547	Gland size 32mm for 2,3, 3½, 4 x 25 Sq.mm OR 2,3, 3½ x 35 Sq.mm OR 2,3 x 50 Sq.mm.	Each	68.00
548	Gland size 38mm 3½ x 70 Sq.mm, 3x95 Sq.mm	Each	106.00

SNO.	Description of Item	Unit	Rate
549	Gland Size 45mm 3/3½ x 120 Sq.mm 3½ x 95 Sq.mm 3 x 150 Sq.mm.	Each	133.00
550	Gland Size 50 mm 3½ x 150 Sq.mm 3 x 185 Sq.mm	Each	170.00
551	Gland Size 57mm 3 x 225 Sq.mm 3 ½ x 185 Sq.mm	Each	222.00
552	Gland Size 70mm 3 x 240 Sq.mm 3½ x 300 Sq.mm	Each	315.00
553	Gland Size 82mm 3½ x 400 Sq.mm	Each	447.00
554	Conductor Size- 2.5 to 6.00 Sq.mm	Each	2.00
555	Conductor Size- 10.00 Sq.mm	Each	2.00
556	Conductor Size- 16.00 Sq.mm	Each	3.00
557	Conductor Size- 25.00 Sq.mm	Each	4.00
558	Conductor Size- 35.00 Sq.mm	Each	4.00
559	Conductor Size- 50.00 Sq.mm	Each	7.00
560	Conductor Size- 70.00 Sq.mm	Each	13.00
561	Conductor Size- 95.00 Sq.mm	Each	14.00
562	Conductor Size- 120.00 Sq.mm	Each	20.00
563	Conductor Size- 150.00 Sq.mm	Each	27.00
564	Conductor Size- 185.00 Sq.mm	Each	34.00
565	Conductor Size- 240.00 Sq.mm	Each	56.00
566	Conductor Size- 300.00 Sq.mm	Each	80.00
567	Conductor Size- 400.00 Sq.mm	Each	117.00
568	LUGS- 6mm to 16 Sq.mm	Each	4.00
569	LUGS- 25 Sq.mm	Each	6.00
570	LUGS- 35 Sq.mm	Each	8.00
571	LUGS- 50 Sq.mm	Each	13.00
572	LUGS- 70 Sq.mm	Each	20.00
573	LUGS- 95 Sq.mm.	Each	21.00
574	LUGS- 120 Sq.mm.	Each	30.00
575	LUGS- 150 Sq.mm.	Each	39.00
576	LUGS- 180 Sq.mm	Each	47.00
577	LUGS- 240 Sq.mm.	Each	83.00
578	LUGS- 300 Sq.mm.	Each	116.00
579	LUGS- 400 Sq.mm.	Each	169.00
580	Upto 16 Sq.mm Conductor Size (Aluminum Lugs Pin Type)	Each	4.00
581	Upto 25 Sq.mm Conductor Size (Aluminum Lugs Pin Type)	Each	6.00
582	35 Sq.mm Conductor Size (Aluminum Lugs Pin Type)	Each	8.00
583	Upto 16 Sq.mm Conductor Size (Copper Lugs Pin Type)	Each	11.00
584	Upto 25 Sq.mm Conductor Size (Copper Lugs Pin Type)	Each	23.00
585	35 Sq.mm Conductor Size (Copper Lugs Pin Type)	Each	24.00
586	Upto 16 Sq.mm Conductor Size (Copper Lugs Tube Type)	Each	11.00
587	Upto 25 Sq.mm Conductor Size (Copper Lugs Tube Type)	Each	23.00
588	35 Sq.mm Conductor Size (Copper Lugs Tube Type)	Each	24.00
589	50 Sq.mm. Conductor Size (Copper Lugs Tube Type)	Each	32.00
590	Nut Bolt 16 x 45 mm	Each	6.00
591	Flat Iron 40 x 3 mm	Kg	28.00
592	25 kVA (Aluminium wound)	Each	58800.00
593	63 kVA (Aluminium wound)	Each	81900.00

SNO.	Description of Item	Unit	Rate
594	100 kVA (Aluminium wound)	Each	100800.00
595	200 kVA (Aluminium wound)	Each	173250.00
596	200 kVA (Copper wound)	Each	262500.00
597	315 kVA (Copper wound)	Each	388500.00
598	500 kVA (Copper wound)	Each	420000.00
599	AB isolating switch assembly set gang operated suitable for 11/0.4 KV	SET	5775.00
600	AB isolating switch assembly set gang operated suitable for 33/0.4 KV	SET	12600.00
601	11 KV DO fuse assembly with brass part contact for 11/4.0 KV DP structure	SET	1260.00
602	12 KV DO fuse assembly with brass part contact for 33/4.0 KV DP structure	SET	2940.00
603	Dry chemical powder (DCP) type- 5kg duly refilled and ready to use	Each	2100.00
604	ABC type duly refilled and ready to used	each	4305.00
605	CO2 type duly refilled and ready to used	Each	6668.00
606	Dry chemical powder (DCP) type- 5kg refill only	Each	420.00
607	ABC type refill only	Each	788.00
608	Co2 type Refill only	Each	525.00
609	4 bucket set with stand and sand	Each	1575.00
610	10 kVA (core wound type)	Each	31500.00
611	16 Kva (core wound type)	Each	35700.00
612	25 kVA (core wound type)	Each	42000.00
613	For 63 KVA Transformer	Each	12705.00
614	For 100 KVA Transformer	Each	13860.00
615	For 200 KVA Transformer	Each	23100.00
616	7/4.00 mm (7/8 SWG)	Kg	65.00
617	M.S. Nuts and Bolts	Kg	47.00
618	25 Sqm (LT Cable Single)	Each	24150.00
619	50 Sqm (LT Cable Single)	Each	35700.00
620	120 Sqm (LT Cable Single)	Each	88725.00
621	185 Sqm (LT Cable Single)	Each	131250.00
622	200-100/5 Amp with complete accessories (11 KV C.Ts.)	Each	8400.00
623	300-150/5 Amps with complete accessories (11 KV C.Ts.)	Each	8400.00
624	500-250/5 Amps with complete accessories (11 KV C.Ts.)	Each	9660.00
625	200-100/5 Amp with complete accessories (33 KV C.Ts.)	Each	12180.00
626	300-150/5 Amps with complete accessories (33 KV C.Ts.)	Each	12180.00
627	500-250/5 Amps with complete accessories (33 KV C.Ts.)	Each	15225.00
628	11 KV Gapless, line type	Each	3911.00
629	33 KV Gapless line type	Each	4620.00
630	33 KV Gapless Stn. Type	Each	10238.00
631	Earth coil (coil of 115 turns of 50 mm dia, 2.5 mtrs. Lead	Each	137.00
632	15mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	94.00
633	20.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	120.00
634	25.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	165.00
635	32.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	217.00
636	40.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	265.00
637	50.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	345.00
638	65.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	453.00
639	80.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	564.00

SNO.	Description of Item	Unit	Rate
640	100.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	814.00
641	125.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	1048.00
642	150.00mm (For 'B' Class pipe ISI Marked (IS-1161-68))	Each	1233.00
643	32.00mm (A' Class G.I.Pipe ISI Marked (IS-1161-69))	Each	191.00
644	40.00mm (A' Class G.I.Pipe ISI Marked (IS-1161-69))	Each	226.00
645	50.00mm (A' Class G.I.Pipe ISI Marked (IS-1161-69))	Each	291.00
646	65.00mm (A' Class G.I.Pipe ISI Marked (IS-1161-69))	Each	367.00
647	80.00mm (A' Class G.I.Pipe ISI Marked (IS-1161-69))	Each	487.00
648	100.00mm (A' Class G.I.Pipe ISI Marked (IS-1161-69))	Each	686.00
649	50.00mm O.D A' Class G.I.Pipe ISI Marked (IS-1161-69)	Each	96.00
650	75.00mm O.D A' Class G.I.Pipe ISI Marked (IS-1161-69)	Each	207.00
651	110.00mm O.D A' Class G.I.Pipe ISI Marked (IS-1161-69)	Each	436.00
652	50.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	185.00
653	63.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	196.00
654	77.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	208.00
655	90.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	237.00
656	110.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	289.00
657	120.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	312.00
658	145.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	352.00
659	160.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	381.00
660	175.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	404.00
661	200.00mm outside dia. For 'B' Class pipe ISI Marked (IS-1161-68)	Each	450.00
662	2 HP A' Class G.I.Pipe ISI Marked (IS-1161-69)	Each	10742.00
663	3HP A' Class G.I.Pipe ISI Marked (IS-1161-69)	Each	13390.00
664	5HP A' Class G.I.Pipe ISI Marked (IS-1161-69)	Each	16881.00
665	7.5HP A' Class G.I.Pipe ISI Marked (IS-1161-69)	Each	20985.00
666	10HP A' Class G.I.Pipe ISI Marked (IS-1161-69)	Each	27427.00
667	0.75/1.0/2.0/3.0/5.0/7.5 HP 3 -Phase with two earthing terminals	Each	1329.00
668	10 HP 3 -Phase with two earthing terminals	Each	1526.00
669	10 HP timer 415 V , 3 -Phase with two earthing terminals	Each	4983.00
670	12.5/15.0 HP timer 415 V , 3 -Phase with two earthing terminals	Each	5194.00
671	20HP timer 415 V , 3 -Phase with two earthing terminals	Each	6083.00
672	25 HP timer 415 V , 3 -Phase with two earthing terminals	Each	6294.00
673	30 HP timer 415 V , 3 -Phase with two earthing terminals	Each	7955.00
674	35 HP timer 415 V , 3 -Phase with two earthing terminals	Each	10107.00
675	50 HP timer 415 V , 3 -Phase with two earthing terminals	Each	15301.00
676	60 HP timer 415 V , 3 -Phase with two earthing terminals	Each	24799.00
677	75 HP timer 415 V , 3 -Phase with two earthing terminals	Each	25454.00