

| BOQ for Electrical Maintenance Work | | | | | |
|-------------------------------------|---|------|------|----------|------------|
| S.No | Particulars | Unit | Qty. | Rate Rs. | Amount Rs. |
| 1 | Open Conduit System Supplying heavy gauge PVC conduit pipediamm thick conforming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. | | | | |
| a | 19/20mm dia 2mm thick | Mtr | 300 | | |
| b | 25mm dia 2mm thick | Mtr | 550 | | |
| | 40mm dia. 2.5mm thick | Mtr | 15 | | |
| | 75mm dia. pipe | Mtr. | 30 | | |
| 2 | Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multi strand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & conforming to GTP of GROUP -A. | | | | |
| a | 1.5sqmm | Mtr | 700 | | |
| b | 2.5sqmm | Mtr | 500 | | |
| c | 4 Sqmm | Mtr | 400 | | |
| 3 | Point wiring using Copper wire without switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multi strand FRLS PVC insulated, 2X1. 5Sq.mm Cable conforming to the GTP without switch, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block complete for each outlet. GROUP A | | | | |
| a | Short point up to 3Mtr from tapping point to out let via switch box | No's | 150 | | |
| b | Medium point above 3Mtr up to 6Mtr from tapping point to out let via switch box | No's | 150 | | |
| c | Long point above 6Mtr up to 10Mtr from tapping point to out let via switch box | No's | 150 | | |
| 4 | Supplying and fixing surface/flush mounting unbreakable PVC modular box suitable for mounting modular switch plates with due groove cutting in Brick/C.C wall, including necessary rawal plugs, Machine/NF screws etc., complete. | | | | |
| a | 1-3Way | No's | 100 | | |
| b | 6-8Way | No's | 80 | | |
| c | 10-12Way | No's | 60 | | |
| 5 | Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box. | | | | |
| | 1 to 3 Module | No's | 100 | | |
| | 6 Module | No's | 80 | | |
| | 12 Module | No's | 60 | | |
| 6 | Supplying and fixing of modular switch/ Socket/stepped electronic fan regulator/ dimmer/telephone socket etc. on existing modular switch plate as per IS 3854 and IS 1293 GROUP A | | | | |
| a | 6Amps one way. | No's | 50 | | |
| b | Stepped Fan Regulator. | No's | 50 | | |
| c | 16Amps one way switch | No's | 50 | | |
| d | 6Amps 3way socket. | No's | 50 | | |
| e | 6/16Amps universal socket | No's | 50 | | |
| f | TV/Telephone socket | No's | 50 | | |

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| g | RJ45/ I.O. outlet | No's | 50 | | |
| 7 | Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. | | | | |
| a | 5-32Amps SP | No's | 60 | | |
| b | 40-63Amps TPN | No's | 10 | | |
| 8 | Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, screws at an interval of 300mm etc. as required. | | | | |
| a | 20mm | Mtr | 100 | | |
| b | 25mm | Mtr | 710 | | |
| 9 | Supplying, fixing and wiring Earth Leakage Miniature Circuit Breaker [ELMCB] 240/450V up to 300mA sensitivity on existing wood/panel board. | | | | |
| a | 16-25 Amps 2 pole | No's | 12 | | |
| b | 63 Amps 4 pole | No's | 5 | | |
| 10 | Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.III - Double Door | | | | |
| a | 4Way SP&N | No's | 20 | | |
| b | 4Way TP &N | No's | 5 | | |
| c | 6Way TP &N | No's | 5 | | |
| 11 | Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system. 48" Sweep (1200mm) | | | | |
| a | Regular model | No's | 15 | | |
| 12 | Supplying And Fixing "S" Hook made out of 14mm dia .M. S .Rod. | No's | 20 | | |
| 13 | LED Indoor Supplying of 2' feet - LED PVC Square Batten .W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50Hz & Power factor >0.9 along with CE approved drivers. 5 years Warranty against any manufacturing | | | | |
| a | LED light fighting 4' - 28 watts | No's | 50 | | |
| 14 | Supplying and drawing UTP-CAT 6E LAN cable. | Mtr | 200 | | |
| 15 | Supplying and drawing PVC flexible one pair telephone unarmoured tinned copper cable. | | | | |
| a | 2Pair | Mtr | 200 | | |
| 16 | Fixing all types and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps. | | | | |
| a | On wall / ceiling / Rafter / Girders | No's | 700 | | |
| 17 | CABLES & ACCESSORIES | | | | |
| | Supplying of 1.1KV LT UG cable having aluminium conductor PVC insulated, Extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990(No. of strip indicated in GTP)& extruded PVC outer sheathed armoured cable with specified Is-1554 part-1:1988 & confirming to GTP of GROUP-A | 123 | | | |
| a | 3.5 core 50Sqmm | Mtr | 120 | | |
| 18 | Labour Charges for laying of 1.1 KV class UG cable in existing trench GI pipe/stoneware pipe/on wall/on pole as required I existing trench/duct. | Mtr | 120 | | |
| 19 | 50 Sqmm aluminium lux | No's | 10 | | |
| 20 | 25mm PVC flexible pipe | Mtr | 150 | | |
| 21 | 20mm PVC flexible pipe | Mtr | 150 | | |
| 22 | Existing ceiling fan Removing and fixing | No's | 50 | | |
| 23 | Existing LED Batten light removing and fixing (for fall ceiling purpose) | No's | 100 | | |

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| 24 | Supplying of 1.1 KV LTUG cable having aluminium conductor PVC insulated, extruded inner sheathed, galvanized, steel strip confirming to IS-3975:1990 armoured cable with specified IS-1554 Part-1: 1988 & Confirming to GTP of GROUP-A | | | | |
| a | 2 Core-10 sq. Mm UG Cable | meter | 40 | | |
| b | 4 Core-16 sq.mm UG Cable | meter | 25 | | |
| 25 | Digging of trench of 0.6m deep x 0.50-meter-wide refilling the trench to the required ground level and consolidating etc., complete. (As per Civil SR KSRB I-2,P-7) | | | | |
| a | In Soil (Ordinary) | meter | 40 | | |
| 26 | Supply and laying double walled corrugated (DWC) HDPE Pipe including all necessary connecting Sockets/Couplings/ Tees/ Bends/ End-caps of same materials in existing trench as per IS 14930 part – II suitable for drawing underground cables. | | | | |
| a | 32 mm ID | meter | 35 | | |
| 27 | Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe/ stoneware pipe/ on wall/ on pole as required. On wall/ Structure. | | | | |
| a | 10 sq. mm to 16/4 sq. mm | meter | 50 | | |
| 28 | Supplying & fixing pout head | Nos | 1 | | |
| 29 | 32 Amps Porcelain fuse cut-out | Nos | 3 | | |
| 30 | Earth grounding | Each | 1 | | |
| 31 | Supplying & fixing control panel box | Each | 1 | | |
| 32 | Supplying high pressure metal halide flood light luminary suitable for use with high pressure metal halide lamp with integrated control gear. The fitting Shall be non-corrosive high pressure die cast aluminium housing powder coated with toughened and heat resistant glass with low copper content black /grey powder coated paint finish with EPDM gasket. Reflector shall be made of high purity per- anodized aluminium. Cable entry through a cable gland with toggle clips. IP 65 protection for both and optical and electrical compartment. Bottom cover may be with polycarbonate/ tempered/ toughened glass. Luminaries efficiency should be > 60% & ambient temperature > 35 deg .C. High intensity discharge electromagnetic ballast with copper winding of octo cyclic winding coil. Class H insulated dual coated copper wire. Compliance to ICE 61347- 2-9 safety and IEC 60923 performance. Winding temperature for HID Ballast tw= 130 deg. C & temperature rise ? T -70 deg. C. Luminaire shall be suitable to operate on 230/250 volts 50 Hz Ac supply finish including wiring, igniters, condenser. SS toggles for opening front hinge able glass , pre wired to terminal block | | | | |
| a | 400 watts | Each | 2 | | |
| b | 2.5 sq. mm 3 Core round cable | meter | 20 | | |
| c | Flood light fixing M.S. pole | Each | 2 | | |
| d | Flood light connecting pole box | Each | 2 | | |
| 33 | Supplying of 1.1 KV LTUG cable having aluminium conductor PVC insulated, extruded inner sheathed, galvanized, steel strip confirming to IS-3975:1990 armoured cable with specified IS-1554 Part-1: 1988 & confirming to GTP of GROUP-A | | | | |
| a | 2 Core-10 sq. mm. UG Cable | Mtr. | 75 | | |

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| 34 | LED Street Light supply of LED streetlight with pressure die cast aluminium housing body with optimal heat sink for better thermal dissipation. Diffuser with injection moulded and is made of polycarbonate material with high transmission index, delivering superior light output. Rated life burning hrs. 50,000 hrs. @ Lumen Maintenance of 70%. CCT > 5500K, IP 66 optical and electrical compartment and impact resistance of complete laminar > IK08. Power Factor >0.9 with mains Current should not be greater than 0.1 A to 0.7A & Surge Protection –Min 4Kv along with over voltage/ Overload, short circuit/ wiring protection. Compatible for pole mounting with outer diameter of 40mm to 50mm. Universal Voltage driver to operate wide voltage range from 100V to 270V 50/60Hz application. Over load & short circuit protection ensures reliable operation in spite of problem in output side. Compliance to IS 10322/IEC 60598, LM 79 & LM 80 Adherence with RoHS. UL approved MCPCB. Top access street light with single screw to ensure ease of maintenance at the sight site location with minimized minimal tools. LED light fixture with w system power consumption. LED Efficiency>130lm/w at 1W & Fixture Efficiency >80lm/w with nominal CRI >75. Luminaire manufacturer should have in-house facility accredited by NABL/CPRL & any Government certified agency & Design & Development facility certified by ISO 9001:2008. Housing with supplier work mark/name shall be Engraved/Embossing on the die cast housing/Body part. Warranty of 5 years against | | | | |
| | LED Streetlight 48Watt | Nos | 2 | | |
| 35 | Supplying & Fixing mm diameter class A GI pipe bracket up to 2.7 meters long terminated with a reducing collar of 40x25mm to which extra pipe of 175mm length is fixed for fixing MV/SV/MH/FTL street light fitting of all capacities on rail/RCC/wall/tubular pole, using suitable clamps, bolts, nuts & wiring using suitable capacity wires | | | | |
| | Using 40mm diameter G.I. bend | Each | 2 | | |
| | Earthing, Grounding for pump panel | Each | 1 | | |
| 36 | Supplying and fixing submersible assembly pump panel | | | | |
| | A) 32 amps I.C.TP (1) | | | | |
| | B) 32 amps Fuse (3) | | | | |
| | C) Voltmeter and Amps meter | | | | |
| | D) Indicator lamp | | | | |
| | E) 7.5 HP Preventer | | | | |
| | F) Wooden Sheet 2 ½ x3 ft. (1) | | | | |
| | G) 30 amps DP switch (1) | | | | |
| | H) Complete wiring, testing, and commissioning | | | | |
| | Supply and fixing 3 Core 4 sq.mm Submersible cable | Mtr | 20 | | |
| | Providing and fixing 16/4 Pout head fixing | Nos | 1 | | |
| 37 | <u>Item Description:</u> | | | | |
| 38 | Providing and fixing LED flood light 60 watt to name board fixed near main security guard facing Bangalore highway with require conduit, wiring, ELCB, MCB, excavation, chemical earthing etc. complete | NO | 1 | | |
| 39 | Supplying & Fixing of 1440rpm light duty exhaust fan with bracket blades suitable to operate on 230V 50Hz, AC Supply complete | | | | |
| | 12" Sweep (300mm) | No | 2 | | |
| 40 | Supplying & Fixing 3-ph 440V & Earth industrial type socket with Enclosed M.S box complete set with top | No | 6 | | |
| 41 | Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. | | | | |
| | 5-32Amps TPN | No | 6 | | |
| | 32Amps DPMCB | No. | 1 | | |
| 42 | Supplying & Laying of 1.1 KV LT UG cable having aluminium conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A. | | | | |
| | 4 core 16 sq. mm | RMT | 95 | | |
| 43 | Supplying and fixing/replacing for ceiling fan/MV/SV/MH and other luminaries. | | | | |
| | up to 4mfd | Nos | 40 | | |
| | 8mfd | Nos | 30 | | |
| | 10mfd | Nos | 60 | | |
| | 15mfd | Nos | 15 | | |
| | 20mfd | Nos | 20 | | |
| 44 | Supplying and replacing ceiling fan regulator 900mm to 1500mm | Nos | 60 | | |

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| 45 | Releasing the existing fan checking, testing and installation at same place. | Nos | 50 | | |
| 46 | Releasing the existing fan checking, testing and installation at New place. | Nos | 50 | | |
| 47 | Supplying and fixing/replacing of LED fittings. | Nos | | | |
| | 18 to 40 watts | Nos | 50 | | |
| | 65 to 80 watts | Nos | 50 | | |
| 48 | Supply and fixing/replacement of 230 volts pendent Holder | Nos | 60 | | |
| 49 | Fixing one Exhaust fan in the nitch already lefty in the wall with bolts and nuts and 5 amps ceiling rose with sufficient length of 23/0.0076 inch PVC insulated twin core wire. | Nos | 40 | | |
| 50 | Erection charges for fixing a ... litres capacity wall mounting electric geysers using bolts, flat at one end nut and washers at the other end for through bolts and nuts and washers with 150x450x600mm back plate and wiring complete with 15 A 3pin top. | | | | |
| | up to 30liters | Nos | 20 | | |
| | 35 to 50 Litres | Nos | 20 | | |
| | 70 to 100 litres | Nos | 20 | | |
| 51 | Rewinding a...mm ceiling fan/after using necessary gauge annealed and insulated copper wire with necessary insulating, separators vibration arresting shellac, etc. including replacement of bearings if any transportation to and from the spot to workshop inclusive of realising the refixing. | | | | |
| | 900mm | Each | 10 | | |
| | 1050mm | Each | 10 | | |
| | 1200mm | Each | 10 | | |
| | 1400mm | Each | 10 | | |
| 52 | Supplying and fixing/replacement of heating element for Geyser/Boiler. | | | | |
| | 2KW Capacity | Nos | 5 | | |
| | 3KW Capacity | Nos | 5 | | |
| 53 | Fixing ofAmps TPST/Change over Switch/ contactor along with neutral link with screws,bolts,nuts and wiring using required capacity wires and circuit labelling. | | | | |
| | 15A to 63A TPST | Each | 10 | | |
| | 100A to 250A TPST | Each | 10 | | |
| | 300A to 400A TPST | Each | 10 | | |
| | 15 A to 63A TPDT/COS | Each | 10 | | |
| | 100A to 250A TPDT/COS | Each | 10 | | |
| | 300A to 400A TPDT/COS | Each | 10 | | |
| 54 | On load change over switch | | | | |
| | 63A | Each | 10 | | |
| | 100-125A | Each | 5 | | |
| | 200A | Each | 2 | | |
| | 250A | Each | 2 | | |
| 55 | Four pole auxiliary No/NC Contacts | | | | |
| | 25A | Each | 10 | | |
| | 40A | Each | 10 | | |
| | 60-70A | Each | 5 | | |
| | 100-125A | Each | 2 | | |
| | 160-200A | Each | 2 | | |
| 56 | Supply of Labour -Wirman | Man days | 365 | | |
| | Helper | Man days | 365 | | |
| | TOTAL Rs. | | | | |

Note:

1. These quantities are Tentative and may vary.

2. Items to be executed as and when it needs attention.

3. Extra items will be paid as per market rate. Contractor has to produce invoice for the material.

4 Payment will be done as per Measurement of actual work done.