

Estimate for the Electrification of College of Engineering, Wadakkancherry

LT Electrification

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
1			Supply and wiring points according to IS 732-1989 through the existing conduit with 1.00 sq mmFR PVC insulated stranded single core <i>copper conductor cable</i> 650V grade, 1.5sqmm green coloured FR wire for earth, required qty of copper earth socket, brass bolt and nut crimping/ soldering etc complete with suitable size modular type metal switch boxes, <i>modular type front plates (white)</i> etc. up to and including 6 A modular type ROHS compliant SP switches and making good the surface of wall, colour washing etc. complete. All the terminations in the switch boards and DB's shall be tinned and the wires shall be drawn and fixed along the periphery of the box using suitable ties, tie mounts etc as required.		
a	1800	nos	Single control light point with 6A, 3 plate ceiling rose	676.00	1216800.00
b	75	nos	Twin control light point with 6A, 3 plate ceiling rose	1014.00	76050.00
c	50	nos	Single control light point without ceiling rose	657.00	32850.00
d	10	nos	Twin control light point without ceiling rose	1070.00	10700.00
2	1500	nos	Single control ceiling fan point with 6 A, 3 plate ceiling rose & with socket size stepped electronic regulator.	1309.00	1963500.00
3	21	nos	Call bell point with piano type 6 A bell push at one end and 6 A, 3 plate ceiling rose at other end	714.00	14994.00
4	495	nos	Combined plug point with 6 A, 5 pin plug socket controlled by 6 A switch in the same switch board as that of light points.	338.00	167310.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
5	20	nos	Supply and wiring 6A 3 pin sockets controlled by 6A SP switch in independent position.	340.00	6800.00
6	300	nos	Supply & fixing 2no 6A socket controlled by 2no 6A control switch modular type in company made box and front plate	674.00	202200.00
7	100	nos	Supply and installation of RJ 45 computer jack in suitable plastic box with front plate (modular)	385.00	38500.00
8	4	nos	Supply and fixing RJ 11 twin telephone sockets	405.00	1620.00
9	1150	nos	Supply and installation of suitable size <i>MS rod type fan clamp</i> as per IS 732 as required.	124.00	142600.00
10	500	nos	Supply and installation of suitable size <i>MS belt type fan clamp fabricated from MS flat (2 pieces)</i> as per IS 732 as required.	182.00	91000.00
			<i>Supply, conveyance installation testing and commissioning of pre-wired light fittings made of CRCA with 0.5mm thickness complete with all accessories and lamps etc. directly on wall or ceiling with PVCround block neatly painted to suit the fitting and giving connection with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS and giving connections as required.</i>		
11	750	nos	16W LED light fittings	2670.00	2002500.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
			Supply, conveyance, installation, testing and commissioning of pre-wired fitting made of CRCA sheet .5mm thick with all accessories and lamps etc. suspended from ceiling <i>using 2 nos steel chain of length not exceeding 30 cm</i> properly hooked to steel hooks anchored to the ceiling and giving connections with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS or extending the original wiring and giving connection etc. as required.		
12	200	nos	16wLED light fittings	2642.00	528400.00
			Supply, conveyance, installation, testing and commissioning of pre-wired light fittings made of .5mm thick CRCA sheet accessories and lamps etc. including supplying and fixing <i>ball and socket arrangements</i> on PVC round block, <i>suspension down rod of 19mm dia MS conduit up to 2x30cm</i> length including painting and wiring the down rod with 16/0.20mm 3 core round copper conductor flex wire conforming to relevant ISS or extending the original wiring and giving connections etc. a required.		
13	400	nos	16wLED light fittings	2868.00	1147200.00
14	20	mtr	Supply and providing every <i>additional length of down rod</i> of suitable size heavy gauge GI / WI pipe with 16/0.20mm PVC insulated and PVC sheathed 3 core round copper conductor flex wire conforming in relevant ISS or with original wiring extended including painting as required.	115.00	2300.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupees
			<i>Supply</i> conveyance, installation, testing and commissioning the following types of light fittings made from CRCA sheet 0.5mm thickness with all accessories and lamps <i>directly on wall</i> and giving connections with 16/0.20 mm 3 core PVC insulated and sheathed round copper conductor flex wire or extending the original wiring and giving connections as required		
15	180	nos	16W LED light fittings	2635.00	474300.00
16	200	mtr	Supplying and providing <i>extra H.G conduit down rod of 19 mm dia 2 x 1.00 m</i> long with 16/0.20 mm 3 core copper conductor flex wire conforming to relevant ISS or with the extended original wiring and giving connection etc. as required.	198.00	39600.00
			<i>Supply</i> , conveyance, installation, testing and commissioning of pre-wired light fitting made from 0.5mmCRCA sheet complete with all accessories and lamps etc. <i>directly on wall using 2 nos. 'C/U' brackets</i> made from 20 x 3 mm MS flat, painting the flat iron bracket and giving connections with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS or extending the original wiring and giving connection etc. as required.		
17	150	nos	16wLED light fittings	2678.00	401700.00
18	100	nos	Supply and fixing angle / straight brass lined skirt type, <i>bakelite batten holder</i> without shade and giving connection etc as required	63.00	6300.00
19	219	nos	Supply and fixing 8 W LED lamp in the existing holder	356.00	77964.00
20	500	nos	Supply and fixing ceiling mounting type LED fittings 8W	1000.00	500000.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
21	86	nos	Supply and fixing <i>cast aluminium stove enameled bulk head fitting</i> with deep drawn anodised aluminium body, epoxy powder coated, heat resistant prismatic glass cover suitable for 9 W CFL to wall / ceiling including giving connections with required length of 16/0.20mm PVC insulated and PVC sheathed 3 core round copper conductor flex wire conforming to relevant ISS or extending the original wiring and making good the surface as required.	601.00	51686.00
22	196	nos	Supply and fixing 6/16A shuttered socket with 16A control switch modular type in company made box and front plate.(Group B)	665.00	130340.00
23	2	nos	Supply and fixing modular switch and accessories in 3/4 module box with front plate with 20A starter, 20A socket and 20A plug top.	1648.00	3296.00
24	2	nos	Supply and fixing modular switch and accessories in 3/4 module box with front plate with 25A starter, 25A socket and 25A plug top.	1800.00	3600.00
25			Supply and laying <i>medium gauge PVC conduit</i> conforming to IS 9537/1983 Part III n roof slab, jointing the pipes with PVC solvent cement, tying & fixing the conduit firmly with the reinforcement etc. as required.		
a	3000	mtr	20 mm	41.00	123000.00
b	1200	mtr	25 mm	49.00	58800.00
26			Supply and fixing the following deep <i>PVC accessories</i> conforming to IS 3419/1988 along with the PVC conduits laid in concrete		
a	260	nos	20 mm 1 way deep junction box	50.00	13000.00
b	160	nos	20 mm two way through junction box	51.00	8160.00
c	120	nos	20 mm 3 way angle junction box	52.00	6240.00
d	200	nos	20 mm 4 way angle junction box	55.00	11000.00
e	10	nos	25 mm 1 way deep junction box	53.00	530.00
f	10	nos	25 mm two way through junction box	56.00	560.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
g	10	nos	25 mm 3 way angle junction box	58.00	580.00
h	10	nos	25 mm 4 way angle junction box	61.00	610.00
27			Supply and fixing the following sizes of <i>PVC Conduit</i> conforming to IS 9537 / 1983 part III along with all required accessories <i>in recess</i> including cutting the wall and making good the damages etc as required.		
a	2000	mtr	20mm (Medium)	124.00	248000.00
b	500	mtr	25mm (Medium)	136.00	68000.00
28			Supply and fixing the following sizes of <i>PVC Conduit</i> conforming to IS 9537 / 1983 part III along with all required accessories <i>on surface</i> including making good the damages etc as required.		
a	2000	mtr	20mm (Medium)	87.00	174000.00
b	500	mtr	25mm (Medium)	99.00	49500.00
29			Supply and drawing 650/1100 V grade <i>PVC insulated stranded single core copper conductor cables</i> conforming to IS 694 part I 1990 in the existing surface / recess conduit as required including giving necessary connections of the following sizes.		
a	2000	mtr	1.5sq mm 3 run(R/Y/B/Black/Green)	77.00	154000.00
b	2000	mtr	1.5sq mm single run(green)	45.00	90000.00
c	2000	mtr	2.5sq mm 2 run	81.00	162000.00
d	500	mtr	4sq mm 2 run	106.00	53000.00
e	400	mtr	4sq mm 4 run	184.00	73600.00
f	400	mtr	6sq mm 4 run	260.00	104000.00
30	100	mtr	Supply and drawing No.14 SWG copper along with 4sq.mm mains	26.00	2600.00
31	1600	mtr	Supply and drawing No.10 SWG copper along wiring	62.00	99200.00
32	4	nos	Supply and providing superior quality copper earth socket suitable for No.14 SWG copper and Crimping	18.00	72.00
33	80	nos	-Do- No.10 -Do -	19.00	1520.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupees
34	400	mtr	Supplying and clamping 25 x 3 mm tinned Copper strip on wall / tray etc. Vertical & horizontal run.	152.00	60800.00
35			Supply and installation of sheet steel, phosphatised and painted, dust and vermin proof enclosure of MCB DB including copper /brass bus bar, neutral link, earth bus and DIN rail suitable for fixing MCB/ isolator etc. fixed on wall using suitable anchor bolts or fixed in recess including cutting hole on the wall , making good the damages, colour washing etc. as required		
a	36	nos	12 way single phase double cover (IP 42/43)	1899.00	68364.00
b	2	nos	6/8 way (8+18) - three phase double cover (IP 42/43)	4039.00	4039.00
c	4	nos	3ph 8W double cover TPN vertical DB with provision for fixing 4pole MCB/Isolator/RCCB as incomer and SP/TP MCB as outgoings IP54	9677.00	38708.00
d	8	nos	3ph 6W double cover TPN DB with provision for fixing 4pole MCB/Isolator/RCCB as incomer and SP/TP MCB as outgoings IP54	8960.00	71680.00
e	4	nos	3ph 4W double cover TPN DB with provision for fixing 4pole MCB/Isolator/RCCB as incomer and SP/TP MCB as outgoings IP54	7739.00	30956.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
36			Supply and installation of the following <i>accessories</i> suitable for 50 Hz , AC supply conforming to IS 8828-1995/ IEC 60898 of the following current ratings in the existing enclosure and giving connections as required		
a	18	nos	S&F 63A 4P Minibreak Isolator	752.00	13536.00
b	18	nos	S&F 40A 4P Minibreak Isolator	716.00	12888.00
c	2	nos	S&F 32A 4P Minibreak Isolator	667.00	1334.00
d	18	nos	Supply and fixing 40A 30mA FP RCCB	2780.00	50040.00
e	6	nos	Supply and fixing 25A 30mA FP RCCB	2744.00	16464.00
f	8	nos	Supplying and fixing 32A TP MCB 10kA	908.00	7264.00
g	4	nos	Supplying and fixing 40A TP MCB 10kA	1369.00	5476.00
h	452	nos	Supplying and fixing 6 to 32A SP MCB 10kA	219.00	98988.00
i	18	nos	Supply and installation of cable box for 3 ph DB	974.00	17532.00
37	1500	nos	<i>Supply</i> , conveyance, installation, testing and commissioning of ceiling fans of the following sizes using standard accessories <i>excluding resistance type regulator</i> , wiring the down rod with 16/0.20mm PVC insulated and PVC sheathed 650/1100V grade 3 core round copper conductor flex wire or with extended original wiring etc. as required. 1200 mm sweep- 5 Star rated.	1853.00	2779500.00
38			Supply, conveyance, installation, testing and commissioning of the following sizes of exhaust fans in the existing opening, fixing necessary bolt and nuts, making good the damages etc. as required including giving connections with required length of 24/0.20mm PVC insulated and PVC sheathed 3 core round copper conductor flex wire conforming to relevant ISS.		
39	75	nos	300/ 305 mm, single phase light duty exhaust fan in metal frame (Group B)	1828.00	137100.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
40	75	nos	450 mm, single phase, heavy duty, 1400 rpm exhaust fan in metal frame	4157.00	311775.00
41	4	nos	Supply and providing <i>plate earthing</i> as per IS 3043 with 1200x1200x12 mm GI/CI earth plate, 50 mm GI watering pipe fixed to the earth plate with 25 x 3mm GI clamps, GI funnel with weld mesh, filling required quantity of charcoal including construction of inspection chamber with a bed concrete of 1:4:8 PCC using 40 mm broken stone (10 cm thick), brick work in cement mortar 1:6, plastering the surface of brick masonry and the exposed surface of PCC bed with cement mortar 1:4, 12 mm thick, (the finished inside dimension shall be 450 x 450 x 450 mm) but excluding test joint, earth continuity conductor to the plate, and covering at the top. (<i>in hard soil</i>)	11797.00	47188.00
42			Supply and providing <i>test joint for the earthing system</i> using 2 Nos of the following sizes of strips including cutting and bending to shape, drilling necessary holes and fixed to the watering pipe etc as required.		
43	4	nos	2x40x3mm GI strip	215.00	860.00
44			Supply and providing the following sizes of <i>cast iron gully trap with covering</i> at the top of the inspection chamber of earth pit as required		
45	4	nos	450x450x10mm	929.00	3716.00
46	10	mts	Supplying and connecting 2x25x6 GI strip from test joint to plate	242.00	2420.00
			Supply and laying the following sizes of <i>strips</i> laid 0.60 m below ground level including excavating trench of suitable size and refilling etc. as required (<i>in hard soil</i>).		
47	50	mts	25 x 3 mm copper strip tinned at the points of contacts	525.00	26250.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
			<i>Supply, conveyance, installation, testing and commissioning of pre-wired light fitting of the following types complete with all accessories and lamps etc. in the existing GI pipe and giving connections with required length of 16/0.20mm 3 core copper conductor flex wire conforming to relevant ISS or extending the original wiring and giving connection etc. as required.</i>		
48	25	nos	1x 16w LED street light fittings.	2564.00	64100.00
49	40	nos	Supplying and providing <i>extra steel chain</i> (16 SWG) 4 x 1.00 m long with 16/0.20 mm 3 core copper conductor flex wire conforming to relevant ISS or with the extended original wiring and giving connection etc. as required.	100.00	4000.00
50	50	nos	Conveyance, installation, testing and commissioning of <i>post-top lantern/ outdoor type FTL/ CFL fittings</i> of all types directly on the existing pipe/ pole and giving connections with the existing wiring etc as required	67.00	3350.00
51			Supply, conveyance and erection of the following sizes of 'B' class <i>GI pipe in single section for post top lantern fittings</i> of all types (excluding excavation & concrete base) and painting with 2 coats of synthetic enamel paint over a coat of zinc chromate primer etc. as required.		
a	100	mts	32 mm dia	199.00	19900.00
b	30	mts	40 mm dia	238.00	7140.00
c	20	mts	50 mm dia	330.00	6600.00
52	50	nos	Supply of suitable approvedmake post top lantern / out door type CFL / LED fittings qapproved make.	1500.00	75000.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
53			Supply and fixing the following types of superior quality 250V A.C <i>call bell</i> on existing M.S. box and giving connections with required length of 3 core, 16 / 0.20mm 650/1100V grade PVC insulated and PVC sheathed round copper conductor flex wire conforming to relevant ISS or with the extended original wiring, earthing the MS box and making good the surface as required.		
a	22	nos	Call bell	145.00	3190.00
b	2	nos	Gong bell - 300 mm - without MS box	1727.00	3454.00
54			Supply & Fixing the following types/ sizes of boxes suitable for modular accessories in surface/ recess including making good the damages, colour washing etc as required (<i>ROHS</i>)		
a	200	nos	1/2 module metal box in recess	165.00	33000.00
b	216	nos	3/4 module moulded plastic box on surface	194.00	41904.00
			Supply & Fixing the following types/ sizes of front plates on the existing modular boxes. (RoHS)		
55	14	nos	1/2 module white/ off-white	101.00	1414.00
56	10		Supply and Fixing the following modular switches & accessories in the existing front plates and giving necessary connections as required (Group B)		
a	112	nos	16 A SP 1 way switch	161.00	18032.00
b	56	nos	6 A SP 1 way switch	119.00	6664.00
c	64	nos	6 A Universal socket	147.00	9408.00
d	4	nos	6/16 A socket	223.00	892.00
57	2	nos	Supply an dfixing Single unit LED aviation obstruction light with yellow painted die-cast aluminium alloy housing, , heat resistant clear thick glass (IP 54) and giving connection with required length of suitable size 3 core PVC insulated round flex copper wire.	4710.00	9420.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
58			Supply & laying of one number PVC insulated and PVC sheathed armoured aluminium power cable of 1.1KV grade of the following sizes in ground including excavation of trench of size 35 x 75 cm, refilling the trench etc. as required but excluding sand cushioning and protective covering (in hard soil).		
a	30	mts	3.5x 150 sqmm	928.00	27840.00
b	20	mts	3.5x 120 sqmm MSB to UZMSB	806.00	16120.00
c	30	mts	3.5x 95 sqmm	634.00	19020.00
d	20	mts	3.5x 70 sqmm	573.00	11460.00
e	40	mts	3.5x 50 sqmm UZMSB to Lift/floor panels	473.00	18920.00
f	10	mts	3.5x 35 sqmm	395.00	3950.00
g	40	mts	4 x 10sqmm -do- Floor panel to VDB's	268.00	10720.00
59			Supply and laying 1runs of following sizes XLPE insulated armoured power cable of best conductivity Aluminium, 1.1KV grade conforming to IS 1554 using clamps noted along with the cables, spacing of clamps not exceeding 60cms, making good the damages, colour washing etc. as required.		
a	40	mts	3.5x 150 sqmm	889.00	35560.00
b	50	mts	3.5x 120 sqmm	628.00	31400.00
c	20	mts	3.5x 95 sqmm	600.00	12000.00
d	40	mts	3.5x 70 sqmm	502.00	20080.00
e	500	mts	3.5 x 50 sqmm	352.00	176000.00
f	100	mts	4 x 16 sqmm	231.00	23100.00
g	900	mts	4 x 10sqmm UZMSB to floor VDB	197.00	177300.00
h	100	mts	4 x 6 sqmm	186.00	18600.00
i	1800	mts	2x10 sq mm VDB to floor SPMCBDB	165.00	297000.00
60			Supply & laying of one No. PVC insulated and PVC sheathed armoured aluminium power cable of 1.1 KV grade of the following sizes in the existing masonry open duct as required.		
a	100	mts	3.5x 120 sqmm	705.00	70500.00

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b	150	mts	3.5x 95 sqmm	569.00	85350.00
c	150	mts	3.5x 70 sqmm	471.00	70650.00
d	400	mts	3.5 x 50 sqmm	371.00	148400.00
e	100	mts	4 x 16 sqmm	201.00	20100.00
f	900	mts	4 x 10sqmm UZMSB to floor VDB/3PDB	171.00	153900.00
g	150	mts	4 x 6 sqmm	167.00	25050.00
h	1800	mts	2x10 sq mm VDB to floor SPMCBDB	146.00	262800.00
61			Supplying siemens / tropodur type nickel plated <i>single compression brass cable gland</i> for PVC insulated and PVC sheathed armoured aluminium/ copper conductor cable 1.1 KV grade, and making end termination suitable for 2/ 3/ 3½/ 4 core cable of the following sizes as required.		
a	10	nos	3.5x 150 sqmm	1008.00	10080.00
b	15	nos	3.5x 95 sqmm	807.00	12105.00
c	15	nos	3.5x 70 sqmm	714.00	10710.00
d	10	nos	3.5x 50 sqmm	646.00	6460.00
e	10	mts	3.5x 120 sqmm	874.00	8740.00
f	15	mts	4 x 16 sqmm	319.00	4785.00
g	288	mts	4 x 10sqmm	271.00	78048.00
h	12	mts	4 x 6 sqmm	252.00	3024.00
i	15	nos	35 sq mm	469.00	7035.00
62			Supplying and providing <i>earth clamps</i> for siemens/ tropodur type cable glands of suitable length and other dimensions noted along with each size of glands for the following sizes of cables as required.		
a	4	mts	3.5x 120 sqmm	99.00	396.00
b	4	mts	4 x 16 sqmm	18.00	72.00
c	288	mts	4 x 10sqmm UZMSB to floor VDB	18.00	5184.00
d	4	mts	4 x 6 sqmm	18.00	72.00
e	4	nos	35sq mm	27.00	108.00

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63			Supply of superior quality <i>aluminium tubular cable socket</i> and making core termination of cables of the following sizes including crimping etc. as required.		
a	72	nos	35 sq mm	16.00	1152.00
b	16	nos	25 sq mm	14.40	230.40
c	12	mts	120 sqmm	42.00	504.00
d	16	mts	16 sqmm	13.70	219.20
e	720	mts	10sqmm	12.70	9144.00
f	16	mts	6 sqmm	12.60	201.60
g	4	mts	50sq mm	19.00	76.00
64	40	nos	Supply route marker with 152mmx152mm <i>cast iron, spike</i> 5mm thick with inscription ' <i>LT Cable</i> ' there on bolted / welded to 35x35x6mm angle iron 60cm long and fixing the same in ground as required.	207.00	8280.00
65	1000	nos	Painting letters or figures of 2.5cm/4cm/5cm height (Block, Roman, Italic, Indian) with white enamel paint as identifications marks to SSB, DBs, cables, switch boxes, etc.,	12.00	12000.00
66	2400	kg	Supplying and installation including all manner of supports/ suspenders, anchor bolts etc for <i>cable trays</i> made out of suitable size channel sections, slotted angles, flats, MS plates etc as required including painting with 2 coats of synthetic enamel paint over a coat of zinc chromate primer, making good the damages, colour washing etc as required.	110.00	264000.00
67	26	nos	Supply and fixing of dry chemical powder type fire extinguishers of 5kg (ABC type)	2324.00	60424.00
68	2	set	supply and delivery at site of 4Nos fire buckets on one stand. The buckets shall be of round bottom, painted with post office red and marked "FIRE" in English and " FIRE" in Malayalam.	624.00	1248.00
69	2	mts	Supply and providing <i>First Aid Chart</i> duly framed and placed in a conspicuous location for clear vision.	204.00	408.00

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70	8	sq m	Supply and providing 2.5mm thick Elastomeric fire retardent insulating mat as per IS 15652/2006 to withstand 11 KV dielectric strength.	2261.00	18088.00
71	4	nos	Supply of 11KV grade rubber gloves	300.00	1200.00
72	2	nos	Providing and fixing HT danger notice plate of size 200mmx150mm made of MS sheet steel at least 2mm thick and vitreous enamelled white on both sides and inscription in single red colour on front side as required	140.00	280.00
73	100	mts	Supply and laying Class 'B' GI pipe of 75mm dia with required accessories in ground including excavation of trench of size 1M x 30cm, refilling the trench, etc., as required as protective covering for cable at road crossing / vehicle traffic places.	473.00	47300.00
74	100	kg	Supply and providing MS chequered plate of suitable thickness including cutting, welding, painting etc. as required for the cable trench covering.	63.00	6300.00
			LIGHTNING PROTECTION SYSTEM		
75	100	nos	Riveting , sweating and soldering of one GI/ aluminium/ copper tape with another GI/ aluminium/ copper tape using 2 nos. 6mm dia. GI bolt and nut/ rivets including drilling holes, tinning etc. as required.	52.00	5200.00
			Providing and fixing testing joint made of 2 no. strips as mentioned below of the following sizes provided on either side of the conductors with 4 nos of GI bolts, nuts check nuts and spring washers etc. complete as required (for down conductors).		
76	8	nos	2 Nos 25x6 mm GI strip 150mm long	92.00	736.00

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76			Supplying, threading, laying, jointing & <i>clamping</i> of the following sizes of <i>PVC pipe</i> (8 Kgf/ cm ²) with all required accessories and clamp including cutting and making good the walls, colour washing etc. on surface of wall / parapet etc. as required.		
a	20	mts	32 mm dia	58.00	1160.00
b	20	mts	40 mm dia	71.00	1420.00
			Supply and laying the following sizes of <i>strips</i> laid 0.60 m <i>below ground</i> level including excavating trench of suitable size and refilling etc. as required (<i>in hard soil</i>).		
77	100	mts	25 x 6 mm GI strip	178.00	17800.00
			Supply and <i>clamping</i> the following sizes of <i>strips</i> on surface of wall/ parapet/ existing cable tray using clamps fabricated from 20 x 3 mm GI flat duly painted or heavy duty GI spacer saddles, spacing of clamps not exceeding 1m, making good the damages, colour washing etc. as required (<i>for horizontal run</i>).		
78	400	mts	20 x 3 mm GI strip	105.00	42000.00
			Supply and <i>clamping</i> the following sizes of <i>strips</i> on surface of wall/ parapet/ existing cable tray using clamps fabricated from 20 x 3 mm GI flat duly painted or heavy duty GI spacer saddles, spacing of clamps not exceeding 1m, making good the damages, colour washing etc. as required (<i>for vertical run</i>).		
79	200	mts	20 x 3 mm GI strip	141.00	28200.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupees
80	8	nos	Supply and providing <i>plate earthing</i> as per IS 3043 with 600x600x6.30 mm GI/CI earth plate , 20 mm GI watering pipe fixed to the earth plate with 20 x 3 mm GI clamps, GI funnel with weld mesh, filling required quantity of charcoal including construction of inspection chamber with a bed concrete of 1:4:8 PCC using 40 mm broken stone (10 cm thick), brick work in cement mortar 1:6, plastering the surface of brick masonry and the exposed surface of PCC bed with cement mortar 1:4, 12 mm thick, (the finished inside dimension shall be 300 x 300 x 300 mm) but excluding test joint, earth continuity conductor to the plate, and covering at the top. (<i>in hard soil</i>)	4448.00	35584.00
			Supply and providing the following sizes of <i>cast iron gully trap with covering</i> at the top of the inspection chamber of earth pit as required		
81	8	nos	300 x 300 x 10 mm cast iron gully trap with covering	395.00	3160.00
			Supply and providing <i>test joint for the earthing system</i> using 2 Nos of the following sizes of strips including cutting and bending to shape, drilling necessary holes and fixed to the watering pipe etc as required.		
82	2	mts	2x25x6	242.00	484.00
83	700	nos	Supply and fixing suitable size FRP/ DMC supports on floor/wall/parapet/ etc.	100.00	70000.00

Item No	Qty	Unit	Specification of Items	Rate in rupees	Amount in Rupess
84	4	nos	Supply, installation, testing and commisioning of 5 HP monoblock centrifugal pump and motor set with all standard accessoriesfixed in the pupm room as per site conditionand giving all electrical connection with double earthing by using required copper conductor. Excluding cost of suction and delivery lines.	75000.00	300000.00
85	1	nos	Supply, installation, testing and commisioning of 10 HP submercible pump (as per approved make) set with all standard accessories as per site conditionand giving all electrical connection with double earthing by using required copper conductor. Inclusive of required starterand Excluding cost of suction and delivery lines.	80000.00	80000.00
86	75	Mtr	Supply and drawing 10 Sq.mm PVC insulated & sheathed 650/1100 V grade 3 <i>core copper conductor flat cable for submersible pump motor</i> conforming to IS 694 part I 1990 as required including giving necessary connections	359.00	26925.00
			Total		17876791.20