

CONSTRUCTION OF IP BLOCK AT TALUK HOSPITAL, KADAKKAL,KOLLAM DISTRICT					
	Part II B- Electrical Works				
Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
DSR Items					
1	Wiring for light point/exhaust fan point/ wall fan point /call bell point with 1.5 sq:mm FRLS PVC insulated copper conductor single core cable in surface/ recessed PVC conduit, with modular switch, modular plate, suitable size G.I. box and earthing the point with 1.5 sq:mm FRLS PVC insulated copper conductor single core cable etc as required.				
1.1	Group C	Point	200		
2	Wiring for twin control light point with 1.5 sq:mm FRLS PVC insulated copper conductor single core cable in surface/recessed medium class PVC conduit, 2 way modular type switch, modular plate, suitable GI box and earthing the point with 1.5 sq mm. FRLS PVC insulated copper conductor single core cable etc as required.	Point	2		
3	Wiring for light/ power plug with 2x4 sq.mm FRLS PVC insulated copper conductor single core cable in surface/ recessed medium PVC conduit along with 1 No 4 sq mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	Rm	120		
4	Wiring for circuit sub main wiring alongwith earthwire with the following sizes of PVC insulated copper conductor, single core cable in surface/ recessed PVC conduit as required.				
4.1	2x1.5 sq mm +1x1.5 sq. mm earth wire	Rm	1500		
4.2	2x2.5 sq mm +1x 2. 5 sq.mm earth wire	Rm	550		
4.3	4x6 sq mm + 2x6 sq mm earth wire.	Rm	90		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
4.4	4x10 sq mm + 2x10 sq mm earth wire.	Rm	50		
5	Supplying and drawing following pair, 0.5 sq mm FRLS PVC insulated copper conductor, un armoured telephone cable in the existing surface/recessed steel/ PVC conduit.				
5.1	2 Pair	Rm	150		
6	Supplying and drawing co - axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/recessed steel/ PVC conduit as required.	Rm	30		
7	Supplying and fixing of following sizes of PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required.				
7.1	20 mm	Rm	400		
7.2	25 mm	Rm	50		
8	Supplying and fixing metal box of following sizes (Nominal size) on surface or recess with suitable size of phenolic laminated sheet cover in front including painting etc as required.				
8.1	200 mmx 300 mmx 60mm deep	Each	5		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
9	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc as required.				
9.1	Telephone socket outlet	Each	10		
9.2	TV antenna socket outlet	Each	1		
10	Supplying and fixing stepped type electronic fan regulator on the existing modular plate and switch box excluding modular plate but including connections etc as required.	Each	60		
11	Supplying and fixing modular blanking plate on the existing modular plate & switch box excluding modular plate as required.	Each	40		
12	Supplying and fixing following size/ modules,G.I box along with modular base, cover plate for modular switches in recess etc as required.				
12.1	1 or 2 module(75 mmx75 mm)	Each	70		
13	Supplying and fixing suitable size G. I box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 amps modular socket outlet and 5/6 amps modular switch, connection etc as required,	Each	75		
14	Supplying and fixing suitable size G. I box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 15/16& 5/6 amps modular socket outlet and 15/16 amps modular switch, connection,painting etc as required.	Each	25		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
15	Supplying and fixing 3 pin , 5 amps ceiling rose on the existing junction box / wooden block including connection etc as required.	Each	80		
16	Supplying and fixing call bell / buzzer suitable for D.C / A.C single phase, 230 volts, complete as required.	Each	6		
17	Installation testing and commissioning of pre-wired, fluroscnt fitting / compact fluroscnt fitting of all types, complete with all accessories and tube etc. directly on ceiling / wall, including connection with 1.5 sq mm FR PVC insulated,copper conductor, single core cable and earthing etc as required.	Each	90		
18	Installation ,testing and commissioning of ceiling fan, including wiring the down rods of standard length { Up to 30 Cm } with 1.5 sq mm FR PVC insulated, copper conductor, single core cable as reqjired.	Each	60		
19	Supplying and fixing extra down rod of 10 Cm length G. I pipe, 15 mm dia, heavy guage including painting etc. as required (Note: More than 5 Cm length shall be rounded to the nearest 10 Cm and 5 Cm or less shall be ignored)	Each	140		
20	Installation of exhaust fan up to 450 mm sweep in the existing opening, including, making the hole to suit the size of the above fan, making good the damage, connection, testing , commissioning etc as required.	Each	10		
21	Supplying and fixing following way, three pole and neutral, sheet steel,MCB distributon board consumer unit, 415 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, detachable gland plate, inter connections, phosphatized and powder painted including earthing etc as required.(But with out MCB/RCCB/Isolator)				

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
21.1	4 way, Double door	Each	2		
21.2	6 way, Double door	Each	2		
22	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 volts, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 amps tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCB's (but without MCB's and incomer) as required . (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
22.1	4 way, Double door	Each	2		
23	Supplying and fixing 5 amps to 32 amps rating, 240 Volts ' C ' series, miniature circuit breaker suitable for inductive load of the following poles in the existing MCB DB complete with connections, testing and commissioning etc as required.				
23.1	Single pole	Each	50		
23.2	Tripple pole and neutral	Each	2		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
24	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc as required.	Each	20		
25	Supplying and fixing following rating,four pole,415 volts, residual current circuit breaker { RCCB }, having a sensitivity current up to 300 milli amperes in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
25.1	25 amps	Each	2		
25.2	40 amps	Each	2		
26	Supplying and fixing following rating, four pole, 415 volts, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
26.1	40 amps	Each	2		
26.2	63 amps	Each	2		
27	Supplying and installing following size of perforated GI cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with GI suspenders including bolts & nuts, suspenders, bends, tees etc as required.				

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
27.1	300 mm width X 50 mm depth X 1.6 mm thickness	Rm	20		
28	Supplying and fixing 20 amps, 240 Volts, SPN industrial type, socket outlet, with 2 pole and earth, metal enclosed plug top along with 20 amps 'C' series, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket outlet and complete with connections, testing and commissioning etc. as required.	Each	3		
29	Earthing with G.I. earth plate 600 mm X 600 mm X 6 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with charcoal/ coke and salt as required.	Set	2		
30	Supplying and laying 25 mm X 5 mm G.I strip at 0.50 metre below ground as strip earth electrode, including connection/ terminating with G.I. nut, bolt, spring, washer etc. as required. (Jointing shall be done by overlapping and with 2 sets of G.I. nut bolt & spring washer spaced at 50mm)	Rm	40		
31	Providing and fixing 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Rm	40		
32	Providing and fixing 4 mm dia copper wire on surface or in recess for loop earthing as required.	Rm	40		
33	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
33.1	Above 95 sq. mm and upto 185 sq. mm	Rm	170		
34	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size in the existing RCC/HUME/METAL pipe as required.				
34.1	Above 95 sq. mm and upto 185 sq. mm	Rm	10		
35	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size on wall surface as required.				
35.1	Upto 35 sq. mm (clamped with 1mm thick saddle)	Rm	190		
35.2	Above 35 sq. mm and upto 95 sq. mm (clamped with 25x3mm MS flat clamp)	Rm	300		
35.3	Above 95 sq. mm and upto 185 sq. mm (clamped with 25/40x3mm MS flat clamp)	Rm	20		
36	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
a)	4 X 10 sq. mm	Each	6		
b)	4 X 16 sq. mm	Each	6		
c)	3½ X 35 sq. mm	Each	8		
d)	3½ X 95 sq. mm	Each	2		
e)	3½ X 150 sq. mm	Each	2		
37	Providing, laying & fixing 100mm dia GI pipe (medium class) in ground complete with GI fittings including trenching (75cm) deep and refilling etc as required.	Rm	10		
38	Supply of 1x28 watts surface mounted luminaire, CRCA powder coated housing, aluminium reflector, pre-wired complete with all accessories like electronic ballast, 28W T5 lamp etc complete as required. (Philips TMS 122 M 1xTL5-28W EBE / GE GET CI 1x28 C/S HF / Crompton T5RSF28EB).	Each	70		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
39	Supply of 1x28 watts flurosent tube fitting sleek with decorative end cap, powder coated CRCA steel channel complete with all electrical accessories like electronic ballast, lamp holder, 28W T5 lamp etc complete as required. (Philips TMS 540 HF / GE LMS 28 N N / Crompton T5GP28EBS9).	Each	10		
40	Supply of 2x18 watts surface mounted decorative luminaire, powder coated CRCA housing, paralite louver, complete with all accessories like electronic ballast, 18W CFL lamp etc complete as required.(Crompton TLE218EB/P5 / Equi).	Each	8		
41	Supply and installation of 3x36W recess mounted, decorative Mirror Optic luminaire with P5 paralite louver, powder coated CRCA housing complete with all electrical accessories like electronic ballast, lamp holder, 36W CFL lamp etc complete with all mounting accessories like chain, anchor fastner etc as required. (Philips FBS300 M3xPI-L36W / GE GECFLC 3x36 MO PR -300 / Crompton CSFQ11336EB/P5).	Each	2		
42	Supplying and fixing 1x28W Decorative compact street light luminaire with sheet steel aluminium housing, UV stabilized acrylic cover, aluminium reflector, lamp etc complete with all mounting accessories as required. The item shall also include suitable size lamp bracket fabricated out of B class G.I pipe to suit the lamp fitting with its clamping accessories, painting etc as required. (Philips HGS120 1xTL5-28W EBE / GE NA214NG V2 / Crompton T5SFE28EB)	Each	10		
43	Supply of ceiling fan 1200 mm sweep, double ball bearing, approved colour and quality with original down rod, suspension shackle, canopy etc with out regulator complete with all accessories as required. (Usha Sonata Max or equivalent)	Each	60		
44	Supply of medium duty exhaust fan 300 mm sweep, metal blades of approved colour, for single phase 230 volt, 50Hz AC supply complete with motor, capacitor, metal grill cover and all accessories as required complete. (Usha Turbo Hi speed or equivalent)	Each	10		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
45	Supply and installation of 400 mm sweep, wall fan, swinging type with speed control, necessary adapter, of approved colour, for single phase 230 volt, 50Hz AC supply complete with motor, capacitor all accessories as required complete. (Usha Max Air or equivalent)	Each	5		
46	Supply & fixing PVC straight / Angle batten holder with ISI marking including connection etc complete with all accessories as required.	Each	20		
47	Supply and fixing ISI marked Compact Flurosent Lamp (CFL), 15 watts of approved quality.	Each	20		
48	Supply and fixing Polished aluminium reflector on the PVC straight / angle batten holder etc complete as required.	Each	20		
49	Supply of the following size 1.1kV grade XLPE insulated PVC sheathed, armoured Aluminium conductor power cable confirming to IS 7098 (part 1) ammended upto date.				
a)	4 x 10 Sq mm	Rm	60		
b)	4 x 16 Sq mm	Rm	90		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
c)	3.5 x 35 Sq mm	Rm	40		
d)	3.5 x 95 Sq mm	Rm	60		
e)	3.5 x 150 Sq mm	Rm	110		
50	Supplying and fixing following rating, 415 Volts, "C" curve, miniature circuit breaker suitable for power loads of following poles in the existing MCB DB complete with connections, testing and commissioning etc as required.				
a	40A TP MCB	Each	2		
b	63A TP MCB	Each	3		
51	Supplying and fixing TP sheet steel enclosure on surface/ recess along with 63 amps 415 volts "C" curve TP MCB complete with connections, testing and commissioning etc. as required.	Each	1		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
52	Supply & fixing modular type computer outlet (RJ-45) with modular base and cover plate, GI box complete with all accessories, connection etc. complete as required.	Each	5		
53	Supply and laying CAT 6 cable in the existng surface / recessed steel / PVC conduit as required.	Rm	80		
54	Supply and Installation of 10 pair MDF box, back mount frame and original krone connectors with all accessories.	Each	2		
55	Supply, Installation, Testing & Commissioning of LT floor panel, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP42, free standing, floor mounting, dust and vermin proof, powder coated, indoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system, including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
	Incomer				
	1 no. 160A, FP, AC23, 415V, 50Hz switch disconnector Fuse unit complete with handle assembly and door interlock and suitable rating HRC fuse.				
	Busbar				
	1 Set of 200 TPN busbars of high conductivity electrolytic quality Aluminium alloy.				
	1 Set of 25 x 3 mm copper busbars of high conductivity electrolytic quality shall be provided throught out the panel for its earthing.				
	Instruments				
	1 No 3 phase Digital Multi function meter to read V, A, F, Acc class 1.				
	1 Set of phase indicating lamps, LED type, RYB.				

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
	1 Set of 2A 10kA C curve SP control MCB				
	1 Set of 100/5A, Class 1.0, 10VA, Cast Resin CT				
	Outgoing				
	5 nos. 63A, TPN, C curve, MCB.				
	3 nos. 40A, TPN, C curve, MCB.	Each	1		
56	Supply, Installation, Testing & Commissioning of Three phase meter box, cubicle type, made out of 2mm thick CRCA sheet, totally enclosed, IP54, wall / floor mounting, dust and vermin proof, powder coated, outdoor, compartmentalised, suitable for operation on 3 phase and neutral, 415 V, 50Hz AC system including internal wiring with suitable size wires, rotary handle, spreaders, 3mm thick gland plate, hinged type door with neoprene gasket etc. The panel shall include supply & installation of following switchgears, metering instruments and accessories as per specification.				
	Space provision for accomodating 3 phase CT operated energy meter from KSEB with all connections, glass view panel, control MCB, lockable compartment etc.				
	3 nos. Suitable ratio CT (as per KSEB) with Acc. Class 0.5, 10VA in locakable compartment.				
	3 nos 200A rewirable type baklite fuse unit with 1 no. Neutral link.				
	1 no. 200A, FP, AC23A, 415V, 50Hz switch disconnecter fuse unit with Din type HRC fuse of suitable rating (as per KSEB) in separate cubical.				
	The meter board shall have 250 Amp TPN busbars of high conductivity electrolytic quality Aluminium alloy, earth bus of required size, 4P terminal connectors, control wiring with all required accessories complete.	Each	1		
57	Supplying and laying 10 SWG copper wire on surface / recess / groundloop earthing, including soldering connection / termination with Cu thimble etc as required	Rm	150		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
58	Preparation, submission of drawings and applications for the installation and service connection to KSEB and obtaining Power allocation, sanction and energising of the installation, road cutting permission, including obtaining sanction from the authorities complete Including providing necessary assistance to the client for obtaining sanctions.	Job	1		
59	Supply and providing 6 mm thick & 1 m wide electrical grade chequered type rubber mat to withstand 3.3 KV dielectric strength conforming to IS 5429/ 1969.	Rm	3		

Sl. No.	Description of item	Unit	Qty	Rate Rs (in figures&words)	Amount in Rs
Air Conditioning Works					
60	Supply, installation, testing and commissioning of High Wall mounted Split Air Conditioner of 2TR capacity consisting of high wall mounted type room unit (fan coil) with cordless remote control and one number outdoor condensing unit comprising of energy efficient suitable rotary compressor for operation on single phase, 230 V, 50Hz supply, fixing the outdoor unit on a raised platform as per manufacturers recommendation and fixing of room (fan coil) unit on wall, upto 10 m distance refrigerant copper piping with 13mm nitrile rubber insulation, providing and making interconnection between room & condenser as per site conditions, comprising of 1" dia drain PVC pipe with insulation 10m, canvas connections, full electrical cabling from power plug near indoor unit and to outdoor unit, vibration isolators, first charge refrigerant gas, min 4star rated as per BEE suitable stabilizer etc complete as required. Make: Carrier /Hitachi/Panasonic/LG/Samsung/ Blue star / Voltas	Set	1		
61	Supply and laying of electrical cabling for 2 TR split unit (between indoor & outdoor unit)	Rm	50		
62	Supply laying and fixing of additional length suitable dia copper refrigerant piping between indoor and out door unit for 2TR machine with suitable dia nitrile runer insulation.	Rm	10		
TOTAL PART B ELECTRICAL & AC WORKS					
GRAND TOTAL - PART A + PAART B					