

Central Mechanical Engineering Research Institute, Durgapur
Electrical Engineering Services Group

**Name of the work : Electrification works for Control station cum underwater testing around the -
water tank in the back of Surface Robotics lab, CMERI Durgapur.**

S.No	Description	Qty.	Unit	Rate (Rs)	Amount (Rs)
1	Wiring for light point / fan point / exhaust fan point / call bell point with 1.5 sq. mm. PVC insulated copper conductor cable in surface / recessed steel conduit, with piano type switch, phenolic laminated sheet, suitable size M.S. box and earthing the point with 1.5 sq.mm. FR PVC insulated copper conductor single core cable etc as required : Group C	26	Point		
2	Supply and Fixing of Recessed mounting T5 energy efficient compact optic luminaire Fitting suitable for 2nos.4ft. 28 Watt Energy efficient T-5 Fluorescent Tube lamps. The Lighting Fitting shall be provided with 2nos. 28 Watt T-5 Tube lamps complete including all accessories for recessed mounting in false ceiling with flexible hose, suspension rod/chain, clamps etc. connection, testing, commissioning as required. (LUHCTP8228333 of Havell's or equivalent.)	13	Nos		
3	Supply & Installation of Industrial Powder coated batten luminair for 2X28W T5 fluorescent lamp with pre-anodised aluminium reflector with Lamp & accessories, connection, testing, commissioning etc. as required.(LHIT01228033, LHYT20228099 of Havell's or equivalent)	22	Nos		
4	Supply & Installation of Integral Floodlight luminaire with pressure dia cast aluminium housing (IP65) complete including 1XMHN-TD 250W lamps with all accessories as required. (LUHFY36125C36 of Havell's or equivalent)	2	Nos		
5	Supply and fixing of 400 mm sweep, 230 Volt, 55 watt 1320 rpm oscillating type wall mounted fan with pressure die cast Ash Grey base, aluminium Super White blades and built in regulator, connection, testing and commissioning etc. as required. (WM SDX 120 of CG or equivalent.)	6	Each		
6	Supply of 600 mm sweep, 230 Volt, 180 watt 1430 rpm oscillating type Air circulators Pedestal fan with pressure die cast Blue blades and rod with silver base & guard, connection, testing and commissioning etc. as required. (AC600PED-1 of CG or equivalent.)	2	Nos		
7	Supply & fixing metal box of 150 mm x 75 mm x 60 mm deep (normal size) on surface or in recess with suitable size phenolic laminated sheet cover in the front including providing and fixing 3 pin 5/6 Amps.Socket outlet and 5/6 Amps. piano type switch, connections, painting etc. complete as required. (For light plugs to be used in non residential building)	10	Each		
8	Supply & fixing metal box of 180 mm x 100 mm x 60 mm deep (normal size) on surface or in recess with suitable size phenolic laminated sheet cover in the front including providing and fixing 6 pin 5/6 & 15/16 Amps. Socket outlet and 15/16 Amps. piano type switch, connections, painting etc. complete as required.	25	Each		
9	Supply of 1.1 KV grade PVC insulated, PVC sheathed, Aluminium conductor armoured power cables conforming to IS 1554 (Part - 1)and ISI marked of following sizes.				
a)	4 x 16 sq mm AYWY cable.	50	Mtr		
b)	4 x 25 sq mm AYWY cable.	40	Mtr		
10	Laying and fixing of one number PVC insulated and PVC sheathed/XLPE aluminium conductor cable 1.1 KV grade of size not exceeding 25 sq. mm. on surface/recess as required.	90	Metre		
11	Supplying and drawing 2.24 mm dia. Copper conductor wire for loop earthing in the existing surface / recessed steel / PVC conduit / PVC casing and capping / wood batten along with other wires as required.	180	Metre		

	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 :		
12			
a)	4 x 16 sq. mm.	6	Set
b)	4 x 25 sq. mm.	2	Set
13	Wiring for circuit/submain wiring alongwith earth wire with the following size of FR PVC insulated, copper conductor, single core cable in one surface / recessed steel conduit as required. 2 x 6 sq.mm. + 1x 6 sq.mm earth wire	200	Metre
14	Wiring for circuit/submain wiring alongwith earth wire with the following size of FR PVC insulated, copper conductor, single core cable in one surface / recessed steel conduit as required. 2 x 2.5 sq.mm. + 1x 2.5 sq.mm earth wire	600	Mtr
15	Wiring for circuit/submain wiring alongwith earth wire with the following size of FR PVC insulated, copper conductor, single core cable in one surface / recessed steel conduit as required. 2 x 1.5 sq.mm. + 1x 1.5 sq.mm earth wire	200	Meter
16	Supplying and fixing of 4 way ETPN (IP43 protection) distribution board with suitable of cable end box for single phase Outgoing with provision for MCB/Isolator as incomer with tinned copper busbar, neutral link, earth bar, din bar,detachable gland plate,interconnection including painting,earthing, connection, testing, commissioning etc as required. Incomer -63 Amp FP MCB(10KA) - 1No. Outgoing - 10 to 32 Amp SP MCB(10KA) - 12Nos. (Legrand or equivalent.)	2	Set
17	Supplying and fixing of 4 way VTPN (IP43 protection) distribution board with suitable of cable end box for single phase Outgoing with provision for MCB/Isolator as incomer with tinned copper busbar, neutral link, earth bar, din bar,detachable gland plate,interconnection including painting,earthing, connection, testing, commissioning etc as required. Incomer - 63 Amp FP MCB(10KA) - 1No. Outgoing - 32 Amp TP MCB(10KA) - 1Nos. 10 to 32 Amp SP MCB(10KA) - 9Nos. Legrand or equivalent.	1	Set
18	Supplying and fixing of following sizes of steel conduit along with the accessories in surface / recess including painting in case of surface conduit, or cutting the wall and making good the same in case of recessed conduit as required :		
a)	20 mm	25	Metre
19	Supplying & fixing of following size of PVC conduit alongwith the accessories in surface/recess including painting in case of surface conduit or cutting the wall and making good the same in case of recessed conduit as required.		
a)	20 mm	200	Metre
20	Providing & fixing of Sheet steel enclosed A C switching unit complete with 1 no. 32 Amp, 'C' curv-10 KA, DP MCB and Din Channel for installing it including connection & body earthing complete as required.	5	each
21	Providing & fixing of Sheet steel encloser with 1 no. 63 Amp, 'C' curv-10 KA, FP MCB and Din Channel for installing it including connection & body earthing complete as required.	3	each
22	Earthing with G.I. earth pipe 3000 mm long, T-19 (50mm Dia) Outer and Inner Pipe along with CCM, 2 Bages Back fill Compound Mixed, Down conductor GI wire/GI flat, Sleeve, Handle etc. and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc Including all accessories complete as required. (Ashlok make or equivalent.)	1	Set
23	Providing and fixing 25 mm X 5 mm G.I strip on surface or recess for connection etc. as required.	20	Mtr
24	Supplying & drawing CAT 6, PVC insulated copper cable in existing surface access PVC conduit complete as reqd.	600	Meter

25	Providing & fixing of RJ 45 Gang connector for LAN wiring including Module Box, Front Plate, connector, supply of all accessories outlet complete with connection etc as required and directed by E/C.	12	Each
26	Supply and Fixing of Emergency Lighting Unit suitable for 1x11 Watt fluorecent lamps. The Lighting Fitting shall be provided with lamps including all accessories, connection, testing, commissioning as required. (61734 of Legrand or equivelent.)	4	Nos
27	Providing & fixing of Grey plexo box and adopter (IP55) with PVC membrane-4 module including 6/16 A - 3 pin combined Socket shuttered -3 module, Switch with indicator/locator - 16 A one way - SP - 1 module, supply of all accessories outlet complete with connection etc as required and directed by E/C. (680614, 674515, 674506 of Legrand or equivelent.)	8	Set

Total Rs.