

**INDIAN INSTITUTE OF TECHNOLOGY KANPUR****Tender Notice No. 111/IWD/ED/537****SCHEDULE OF QUANTITY**

Name of work: Renovation of Bio Diesel Plant (Tin shed) SH: Electrical Works (Layout for power points three phase &amp; single phase and internet ports enclosed).

Name of the Contractor					
S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 Sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed steel conduit, with modular switch, modular plate, suitable GI box and earthing the point with 1.5 Sq.mm. FR PVC insulated copper conductor single core cable etc as required.				
a	Group C	25.00	Point		
2	Supplying and drawing following sizes of FRLS PVC insulated copper conductor, single core cable in the existing surface/recessed steel/PVC conduit as reqd.				
a	3 X 1.5 Sq.mm	50.00	Mtr		
b	3 X 2.5 Sq.mm	200.00	Mtr		
c	3 x 4 Sq.mm	150.00	Mtr		
d	3 x 6 Sq.mm	100.00	Mtr		
e	3 x 10 Sqmm	100.00	Mtr.		
f	3 x 16 Sqmm	20.00	Mtr.		
3	Extra for cutting and drilling hole & panting of down rod of G.I pipe,15 mm dia for ceiling fan etc as required.	12.00	Job		
4	Supplying & fixing 15 mm dia GI pipe for down rod for fixing of ceiling fans etc as reqd.	15.00	Mtr.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
5	Supplying and fixing of following sizes of steel conduit along with 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 reqd.				
a	20 mm	1.00	Mtr		
b	25 mm	1.00	Mtr		
c	32 mm	1.00	Mtr		
6	Providing and fixing following rating and breaking capacity four pole 415V 50Hz MCCB in existing cubicle panel board including drilling holes in cubicle panel, making connections, etc as required.				
a	250 Amp, 35/36 KA	2.00	Nos.		
7	S&F connecting and commissioning independent mounting of MCCB enclosure suitable upto 200 amp MCCB as per approved make in surface/recess I/c cutting the wall and making good the same in case of recessed as per approved make etc as reqd.	2.00	Nos.		
8	S & F metal enclosure suitable for DP/FP MCB/ on surface or recessed etc as reqd.	8.00	Nos.		
9	Supplying and fixing following way prewired TP&N MCB distribution board of steel sheet for 415 volts on surface/recess complete with loose wire box, terminal connectors for all incoming and outgoing circuits, duly prewired with suitable size FR PVC insulated copper conductor up to terminal blocks, tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnections, powder painted including earthing etc. as required.(But without MCB/ RCCB/ Isolator)				
a	8 way ( 4 + 24 ), Double door	1.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
10	Supplying and fixing following way prewired vertical type TP&N MCB distribution board of steel sheet for 415 volts on surface/ recess complete with loose wire box 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, terminal connectors for all incoming and outgoing circuits, duly prewired with adequate size of FR PVC insulated copper conductor upto the terminal connector/ neutral link, earthing etc as required (But without MCB/ RCCB/ Isolator). (Note : Prewired vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
a	12 way (4 + 36) Double door	1.00	Nos.		
11	S & F following rating and pole, 240 volts 'C' curve 10 kA, lexic MCB of following pole in the existing MCB DB complete with connection, testing & commissioning etc as reqd.				
a	Single Pole ( 5 Amp to 32 Amp )	36.00	Nos.		
b	Tripple Pole ( 5 Amp to 32 Amp )	4.00	Nos.		
c	Four Pole ( 5 Amp to 32 Amp )	4.00	Nos.		
d	Tripple pole ( 40 Amp to 63 Amp )	4.00	Nos.		
e	Four Pole ( 40 Amp to 63 Amp )	4.00	Nos.		
12	S&F connecting and commissioning independent mounting of 320 Amp, 415 Volt four pole busbar in surface/recess I/C connection as reqd..	1.00	Nos.		
13	Earthing with GI earth electrode 50mm dia x 3 mtr length including earth enhancing compound (Jam Fill quality product) and PIT cover for earthing pit etc as reqd. (193GI JMV)	2.00	Set		
14	Providing & fixing 25mm x 5mm GI strip on surface or in recessd for connection etc. as reqd.	30.00	Mtr		
15	Supplying, installation DLP mini- trunking 32mm x 20mm and accessories white-system with independent cover-without central partion etc. as reqd.	20.00	Mtr.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
16	Supply and fixing of following items for plastic trunking accessories suitable for size 32 mm x 20 mm				
a	End cap	2.00	Nos.		
b	Internal angle/ External angle	4.00	Nos.		
c	Changeable flat angle	3.00	Nos.		
d	Flat Junction	1.00	Nos.		
17	Providing and fixing DLP plastic trunking of size 105 mm x 50 mm without cover on surface as reqd.	60.00	Mtr.		
18	Providing and fixing 85 mm width flexible cover of DLP plastic trunking. (size 105 mm x 50 mm.)	60.00	Mtr.		
19	Supply and fixing of following items for plastic trunking accessories suitable for size 105 mm x 50 mm.				
a	End cap	10.00	Nos.		
b	Internal angle.	6.00	Nos.		
c	External angle	2.00	Nos.		
d	Flat Junction	4.00	Nos.		
e	Changeable flat angle	2.00	Nos.		
f	Separation partitions	15.00	Mtr.		
g	cover joint	20.00	Nos.		
h	Base joint	30.00	Nos.		
20	Supplying and fixing following modular switch/socket on the existing modular plate & switch box/ DLP plastic trunking including connections but excluding modular plate etc as reqd.				

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
a	5/6 amps switch	40.00	Nos.		
b	2 way 5/6 A switch	2.00	Nos.		
c	15/16 amps switch	20.00	Nos.		
d	3 pin 5/6 amps socket outlet	40.00	Nos.		
e	6 pin 15/16 amps socket outlet	20.00	Nos.		
f	Blanking Plate	2.00	Nos.		
21	Supplying and fixing following Modular GI/plastic base & cover plate on existing modular metal boxes/DLP plastic trunking etc. as required.				
a	1 or 2 Module	2.00	Nos.		
b	3 Module	4.00	Nos.		
c	6 Module	30.00	Nos.		
22	Supplying and fixing following Module Plastic box for fixing modular switches/sockets in surface/recess etc as required.				
a	1 or 2 Module	2.00	Nos.		
23	Supplying and fixing stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	12.00	Nos.		
24	S/F, connecting, testing and commissioning 4 feet long 40 watt LED fitting with diffuser surface mounting/ceiling suspended luminaires make Havells STOUT PLUS cat no. STOUTPLUS1200BS40WLED or its equivalent approved make.	4.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
25	S/F, connecting, testing and commissioning 34/35/36 watt LED recess mounted luminaires with PMMA diffuser suitable for modular ceiling etc.as reqd.	12.00	Nos.		
26	S & F fan hook I/c cutting the slab and fixing with the reinforcement and making damage, painting etc as the same.	22.00	Nos.		
27	Supply, Installation, testing & commissioning of Ceiling fan of following 220 volts 50 Hz without regulator I/c wiring the down rods of standard length up to 30 cm with 1.5 sqmm PVC insulated copper conductor single core cable etc as reqd.				
a	1200 mm	12.00	Nos.		
28	Supply,Installation of exhaust fan 220 volt, 50 Hz of following sizes in the existing opening I/c connection, testing, commissioning etc as reqd.				
a	450 mm	2.00	Nos.		
b	600 mm	1.00	Nos.		
29	S/F, Exhaust fan shutter of following sizes on rag bolts as reqd.				
a	450 mm	2.00	Nos.		
b	600 mm	1.00	Nos.		
30	Drawing of computer network cable in existing pipe / casing and capping as reqd including numbering the wires at both the ends.	75.00	Mtr.		
31	Fixing, Internet Box of size 75mm x 75mm x 40 mm including brass screw on surface / recessed as reqd.	2.00	Nos.		
32	S/F, copper cable lug suitable for following size of conductor.				
a	6 Sqmm	36.00	Nos.		
b	10 Sqmm	36.00	Nos.		
c	16 Sqmm	12.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
33	S & F of following size of steel flexible pipe alongwith the accessories on surface etc as required.				
a	20 mm	5.00	Mtr.		
b	25 mm	5.00	Mtr.		
34	Supplying & Laying of one no. PVC insulated & PVC sheathed aluminium conductor steel armoured cable of size 3-1/2x120 sqmm 1.1kV grade .				
a	In pipe	10.00	Mtr.		
b	In open duct	5.00	Mtr.		
c	In surface	35.00	Mtr.		
35	Supplying and making end termination with brass compression gland with aluminium lugs for following size of PVC insulated & PVC sheathed/XLPE aluminium cable of 1.1kV grade as reqd.				
a	3-1/2x 120 sqmm	2.00	Nos.		
36	Providing, laying and fixing following dia G.I. pipe (medium class) in ground complete with G.I. fittings including trenching (75 cm deep)and re-filling etc as required				
a	65 mm	10.00	Mtr.		
37	Dismantling the old conduit pipe/wood batten of all sizes from surface/recessed & making good the damages I/c filling the holes of the surface etc as reqd.	100.00	Mtr.		
38	Dismantling damaged DB/TPN Switches/ loose wire boxes/ M.S. boxes alongwith all accessories and depositing the same in the store as reqd.	18.00	Nos.		
39	Dismantling of ceiling fan / rally fan / all type fitting without regulator I/c depositing in store etc as reqd.	20.00	Nos.		
	<b>Total Rs.</b>				