

**INDIAN INSTITUTE OF TECHNOLOGY KANPUR****Tender Notice No. 112 /IWD/ED/562****SCHEDULE OF QUANTITY**

Name of work: Part-A: Providing service connection to machines and LED light fittings at MSE workshop. Part B: Renovation of electrical installation in SL-205 in academic area.

Name of the Contractor					
S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
Part-A:					
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	8.00	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	5.00	Mtr		
b	2 x 6 Sq.mm	25.00	Mtr		
c	4 x 16 Sqmm	25.00	Mtr.		
3	Supplying and fixing following of size/modules, GI box along with modular base & cover plate for modular switches in recess etc as reqd.				
a	2 module (75mm x 75mm)	3.00	Nos.		
b	6 module (200mm x 75mm)	1.00	Nos.		
4	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.)				

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
a	8 way (4 + 24) Double door	1.00	Nos.		
5	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)	6.00	Nos.		
b	Tripple Pole (5 Amp to 32 Amp)	8.00	Nos.		
c	Four Pole (5 Amp to 32 Amp)	8.00	Nos.		
d	Four Pole (40 Amp to 63 Amp)	1.00	Nos.		
6	Supplying, installation DLP mini- trunking 32mm x 20mm and accessories white-system with independent cover-without central partion etc. as reqd.	5.00	Mtr.		
7	Supply and fixing of following items for plastic trunking accessories suitable for size 32 mm x 20 mm				
a	End cap	1.00	Nos.		
b	Internal angle/ External angle	2.00	Nos.		
c	Changeable flat angle	1.00	Nos.		
d	Flat Junction	1.00	Nos.		
8	Providing and fixing DLP plastic trunking of size 105 mm x 50 mm without cover on surface as reqd.	4.00	Mtr.		
9	Providing and fixing 85 mm width flexible cover of DLP plastic trunking. (size 105 mm x 50 mm.)	4.00	Mtr.		
10	Supply and fixing of following items for plastic trunking accessories suitable for size 105 mm x 50 mm.				
a	End cap	1.00	Nos.		
b	Internal angle.	2.00	Nos.		
c	External angle	1.00	Nos.		
d	Flat Junction	1.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
e	Changeable flat angle	1.00	Nos.		
f	Separation partitions	2.00	Mtr.		
g	cover joint	2.00	Nos.		
h	Base joint	4.00	Nos.		
11	Supplying and fixing metal box of following sizes (nominal size) on surface or in recess with suitable size of phenolic laminated shet cover in front including painting etc as reqd.				
a	100 mm X 100 mm X 60 mm deep	15.00	Nos.		
12	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.				
a	5/6 amps switch	3.00	Nos.		
b	3 pin 5/6 amps socket outlet	3.00	Nos.		
c	Blanking Plate	1.00	Nos.		
13	Supplying and fixing 3 pin, 5 amp. Ceiling rose on the existing junction box/ wooden block including connection etc. as reqd.	5.00	Nos.		
14	S/F, connecting, testing and commissioning 2 x 20 watt LED tube fitting surface mounting luminaires suitable mounting rail for T-LED lamps with 2 Nos. 20 watt LED lamps and connection etc.as reqd.	5.00	Nos.		
15	S/F, wall mounting aircirculator fan 600 mm Cromplton make or equivalent make as reqd	3.00	Nos.		
16	Supply & Laying of 40 mm (6Kg / cm ²) HDPE pipe ISI mark of 2mm thick I/c cartage loading & unloading etc. as reqd.				
a	Fixing on surface with MS clamp	40.00	Mtr.		
b	In existing open duct.	5.00	Mtr.		
17	Supply and drawing PVC insulated copper conductor (Flexible) 4 core round cable 4.0 Sq.mm for connection of equipments / exhaust fan/AC & other work as reqd.	100.00	Mtr		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
18	Supplying and fixing, 25 Watt LED street light luminaries with pressure die cast aluminium housing IP66 complete with all accessories complete	1.00	Nos.		
19	Supplying and fixing of 32 mm dia X 2.00 metres long G.I. pipe (medium class) bracket for mounting of fluorescent / HPMV / HPSV street light fitting on pole including bending the pipe to the required shape, 2 nos 40 mm X 3 mm flat iron clamps with nuts, b	1.00	Nos.		
20	S/F, copper cable socket suitable for following size of conductor.				
a	4 Sqmm	120.00	Nos.		
b	6 Sqmm	4.00	Nos.		
c	16 Sqmm	8.00	Nos.		
21	S & F metal enclosure suitable for DP/FP MCB/ on surface or recessed etc as reqd.	1.00	Nos.		
22	Supplying & fixing Connecting , testing & commisioning,direct online (DOL) starter suitable upto 7.5 HP 3 phase indution motor 415V, 50Hz make Siemens or approved equivalent makes.	5.00	Nos.		
23	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	2 x 6 sqmm	4.00	Nos.		
24	Providing and fixing 6 SWG dia G.I wire on surface or in reces for loop earthing along with existing surface/ recessed conduit/ submain wiring cable/ cable as required.	50.00	Mtr		
25	Supplying & Laying of one no. PVC insulated & PVC sheathed aluminium conductor steel armoured cable of size 2 x 6 sqmm 1.1kV grade as reqd.				
a	direct in ground I/c excavation, sand cushioning, protective covering and refilling the trench etc. as reqd.	20.00	Mtr.		
b	In pipe	6.00	Mtr.		
c	In open duct	4.00	Mtr.		
	Part-B				

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
1	Rewiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS PVC insulated copper conductor single core cable and 1.5 sq.mm FRLS PVC insulated copper conductor single core cable as earth wire in existing surface/ recessed steel/PVC conduit including dismantling as required.				
a	Group 'C'	6.00	Nos.		
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	20.00	Mtr		
b	3 X 2.5 Sq.mm	100.00	Mtr		
c	3 x 4 Sq.mm	40.00	Mtr		
d	3 X 10 Sq.mm	30.00	Mtr		
3	Supplying, installation DLP mini- trunking 32mm x 20mm and accessories white-system with independent cover-without central partion etc. as reqd.	10.00	Mtr.		
4	Providing and fixing DLP plastic trunking of size 105 mm x 50 mm without cover on surface as reqd.	30.00	Mtr.		
5	Providing and fixing 85 mm width flexible cover of DLP plastic trunking. (size 105 mm x 50 mm.)	30.00	Mtr.		
6	Supply and fixing of following items for plastic trunking accessories suitable for size 105 mm x 50 mm.				
a	End cap	4.00	Nos.		
b	Internal angle.	4.00	Nos.		
c	External angle	4.00	Nos.		
d	Changeable flat angle	2.00	Nos.		
e	Separation partitions	20.00	Mtr.		
f	cover joint	10.00	Nos.		
g	Base joint	20.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
7	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 the sheet steel enclosure, on surface or in recess, with chained metal cover for the socket.	2.00	Nos.		
8	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.		
9	Supplying and fixing following rating, 240 volts, 'C' series, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc as reqd.				
a	Single Pole (5 Amp to 32 Amp)	24.00	Nos.		
b	Four Pole (40 Amp to 63 Amp)	1.00	Nos.		
10	S/F, connecting, testing and commissioning 4 feet long 40/36 watt LED fitting with diffuser surface mounting/ceiling suspended luminaires alongwith suspended kit SPAN make Crompton or equivalent approved make.	12.00	Nos.		
11	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.				
a	5/6 amps switch	12.00	Nos.		
b	15/16 amps switch	12.00	Nos.		
c	3 pin 5/6 amps socket outlet	24.00	Nos.		
d	6 pin 15/16 amps socket outlet	12.00	Nos.		
12	Supplying and fixing following Modular GI/plastic base & cover plate on existing modular metal boxes/DLP plastic trunking etc. as required.				
a	3 Module	12.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
b	6 Module	12.00	Nos.		
13	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 sweep	2.00	Nos		
14	Supplying and fixing connecting and commissioning of AC 230/250 volts, 50 HZ, 250 mm sweep fresh air fan including providing nuts, bolts, mounting frame and other accessories etc. complete	1.00	Nos.		
	Total Rs. (Part-A + Part-B)				