

INDIAN INSTITUTE OF TECHNOLOGY KANPUR**Tender Notice No. 140/Elect/2020****SCHEDULE OF QUANTITY**

Name of Work: Electrical renovation and modification according to new machine layout in Imagineeny Lab at Central workshop and other associated work.

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. FRLS PVC insulated copper conductor single core cable etc as required.				
a)	Group 'C'	5.00	Points		
2	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 conduit including dismantling as required.				
a)	Group 'C'	5.00	Points		
3	Supplying & 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..	30.00	Mtr.		
b)	3 x 2.5 Sq.mm..	10.00	Mtr.		
c)	3 x 4 Sq.mm..	20.00	Mtr.		
4	Supply and drawing PVC insulated 3 core round cable 1.5 sq.mm. for connection of equipments / exhaust fan & other work as reqd.	50.00	Mtr.		
5	S & F of following size of steel conduit along with the accessories in surface/recess I/c 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	10.00	Mtr.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
b)	25 mm	25.00	Mtr.		
6	S/F following modular base & cover plate on existing modular metal boxes etc. as reqd.				
a)	1 or 2 module	2.00	Nos.		
b)	3 module	2.00	Nos.		
c)	4 module	3.00	Nos.		
d)	6/8 module	4.00	Nos.		
e)	12 module	2.00	Nos.		
7	Providing and fixing following rating and breaking capacity and pole MCCB with thermomagnetic release and terminal spreaders in exiting cubicle panel board including drilling holes in cubicle panel, making connections, etc as reqd.				
a)	125 Amp 36 kA FP	2.00	Nos.		
b)	200 Amp 36 kA FP	1.00	Nos.		
8	Supplying and fixing following way, single pole and neutral, sheet steel, MCB distribution board, 240 volts, on surface/ recess, complete with tinned copper bus bar, neutral bus bar, earth bar, din bar, interconnections, powder painted including earthing etc. as required. (But without MCB/RCCB/Isolator)				
a)	16-way , Double door	1.00	Nos.		
9	Supplying and fixing of following ways surface/ recess mounting, vertical type, 415 V, TPN MCB distribution board of sheet steel, dust protected, duly powder painted, inclusive of 200 A, tinned copper bus bar, common neutral link, earth bar, din bar for mounting MCBs (but without MCBs and incomer) as required. (Note : Vertical type MCB TPDB is normally used where 3 phase outlets are required.)				
a)	4-way Cat no. 607750 Legrand or equivalent	1.00	Nos.		
b)	8-way Cat no. 607751 Legrand or equivalent	1.00	Nos.		
c)	12-way Cat no. 607752 Legrand or equivalent	1.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
10	Supplying and fixing 5 amps to 32 amps rating, 240 volts, 'C' series, MCB suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as reqd.				
a)	Single Pole	10.00	Nos.		
b)	Single Pole & Neutral	2.00	Nos.		
c)	Triple Pole	24.00	Nos.		
d)	Triple pole & Neutral	12.00	Nos.		
11	S & F 40 amp to 63 amp rating 240 volts 'C' curve 10 kA MCB of following pole in the existing MCB DB complete with connection, testing & commissioning etc as reqd. (legrand)				
a)	Single Pole	1.00	Nos.		
b)	Double pole	1.00	Nos.		
c)	Triple Pole	24.00	Nos.		
d)	Triple pole & Neutral	35.00	Nos.		
12	S&F single pole blanking plates in existing MCB DB complete etc. as required.	2.00	Nos.		
13	Supplying and fixing 20 A, 240 V, SPN Industrial type socket outlet, with 2 pole and earth, metal enclosed plug top alongwith 20 A "C" curve, SP, MCB, in sheet steel enclosure, on surface or in recess, with chained metal cover for the socket out let and complete with connections, testing and commissioning etc. as required	2.00	Nos.		
14	S & F metal enclosure suitable for DP/TPN MCB / DP ELCB on surface or recessed etc as reqd.	35.00	Nos.		
15	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	4.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
16	Earthing with copper earth plate 600 mm X 600 mm X 3 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. (but without charcoal/ coke and salt) as required	2.00	Nos.		
17	P & F 6 SWG dia GI wire on surface or in recess for loop earthing as reqd.	500.00	Mtr.		
18	Supply and installation testing and commissioning of following surface/recess mounted, IP20, with metallic CRCA powder coated housing cover highefficiency diffuser, THD less than10, power factor above 0.9. Philips make or its equivalent.				
a)	40W LED surface light 1"X4" cat no. BN100C LED40S-6500 PSU L120 GR	15.00	Nos.		
b)	36W LED recessed light 2' X 2' cat no. RC 380B LED 36S-6500 G4	5.00	Nos.		
19	Supplying & Laying of one no. XLPE sheathed aluminum conductor steel armoured 1.1kV grade power cable of following size in open duct.				
a)	4 X 4 Sq.mm	100.00	Mtr.		
b)	4 X 6 Sq.mm	150.00	Mtr.		
c)	4 X 10 Sq.mm	100.00	Mtr.		
d)	4 X 16 Sq.mm	150.00	Mtr.		
e)	4 X 25 Sq.mm	50.00	Mtr.		
20	Supplying & Laying of one no. XLPE sheathed copper conductor steel armoured 1.1kV grade power cable of following size in open duct.				
a)	4 X 4 Sq.mm	70.00	Mtr.		
b)	4 X 10 Sq.mm	25.00	Mtr.		
c)	4 X 16 Sq.mm	30.00	Mtr.		
d)	4 X 25 Sq.mm	50.00	Mtr.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
21	Supplying and making indoor end termination with brass compression gland, coppor/aluminum lugs for following size of PVC insulated & PVC sheathed/XLPE aluminum cable of 1.1kV grade as reqd.				
a)	4x4,6,10 sq.mm.	28.00	Nos.		
b)	4x16 sq.mm.	10.00	Nos.		
c)	4x25. sq.mm.	15.00	Nos.		
22	Supply, fixing, following modular type switch / socket on existing modular plate & switch box including connectins but excluding modular plate etc. as reqd.				
a)	5/6 Amp switch	10.00	Nos.		
b)	15/16 Amp. switch	5.00	Nos.		
c)	3 Pin 5/6 Amp. socket outlet	10.00	Nos.		
d)	6 Pin 15/16 Amp. socket outlet.	5.00	Nos.		
e)	Telephone socket outlet	2.00	Nos.		
f)	Blanking plate	2.00	Nos.		
g)	Fan regulator socket type rotary step	2.00	Nos.		
23	Supplying and fixing 3 pin, 5 amp. Ceiling rose on the existing junction box/ wooden block including connection etc. as reqd.	50.00	Nos.		
24	Supply and installation of follwing sweep AC 230/250 volts, 50 Hz Air Circulator heavy duty wall mounting fan with brackets etc complete.				
a)	450 mm sweep	4.00	Nos.		
b)	600 mm sweep	6.00	Nos.		
25	Supply, Installation, testing & commissioning of AC ceiling fan of following sweep 220 volts without regulator I/c wiring the down rods of standard length up to 30 cm with 1.5 sq.mm. PVC insulated copper conductor single core cable etc as reqd.				

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
a)	1200 mm	2.00	Nos		
26	Laying UTP/ RJ-11/ RJ-6/ Telephone wire/ cable in existing steel conduit pipe/ GI pipe/ HDPE pipe as reqd. (The cost shall also include numbering of networking wire from room to rack as reqd.)	500.00	Mtr.		
27	Supplying and fixing extra conduit down rod of 20 cm length G.I. pipe 15 mm dia, heavy gauge 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)	5.00	Nos.		
28	Fixing of RJ-45 modular box with cover plate or I/o box for internet on surface/ recessed cutting the wall making good the same as required. (box and cover plate will be supplied by dept.)	5.00	Nos.		
29	Supplying, installation DLP plastic trunking 105mm x 50mm and accessories plastic trunking without cover, for trunking, covers and partitions etc. as reqd.				
a)	Plastic trunking without cover	10.00	Mtr.		
b)	Flexible Cover 85mm width	5.00	Mtr.		
c)	End caps	2.00	Nos.		
d)	Internal angle adustable from 80°-100°	1.00	Nos.		
e)	external angle adustable from 60°-120°	1.00	Nos.		
f)	Flat angle	2.00	Nos.		
30	Supplying, installation DLP mini- trunking 32mm x 20mm and accessories white-system with independent cover- without central partion etc. as reqd.				
a)	Mini- trunking	20.00	Mtr.		
b)	End cap left or right	5.00	Nos.		
c)	Internal/ external angle	2.00	Nos.		
d)	Flat angle	1.00	Nos.		
e)	Flat junction	5.00	Nos.		
	TOTAL Rs.				