

**INDIAN INSTITUTE OF TECHNOLOGY KANPUR****Tender Notice No. 02/Elect./2019****SCHEDULE OF QUANTITY****Name of Work: Electrical work for expansion / shock tube Hypersonic Facility Aerospace.****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'	106.00	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	80.00	Mtr		
b	3 X 2.5 Sq.mm	150.00	Mtr		
c	3 x 4 Sq.mm	110.00	Mtr		
d	3 X 10 Sq.mm	50.00	Mtr		
e	6 X 16 Sq.mm	90.00	Mtr		
3	Supplying and drawing following pair 0.5 Sq.mm FRLS PVC insulated copper conductor, unarmoured telephone cable in the existing surface/recessed steel/PVC conduit as reqd.				
a	2 Pair	50.00	Mtr		
4	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	150.00	Mtr		
b	25 mm	200.00	Mtr		
c	32 mm	50.00	Mtr		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
5	Supplying and fixing following of size/modules, GI box along with modular base & cover plate for modular switches in recess etc as reqd.				
a	1 or 2 module (75mm x 75mm)	1.00	Nos.		
b	3 module (100mm x 75mm)	17.00	Nos.		
c	6 module (200mm x 75mm)	5.00	Nos.		
d	8 module (125mm x 125mm)	4.00	Nos.		
e	12 module (200mm x 150mm)	2.00	Nos.		
6	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	2.00	Nos.		
7	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	4 way (4 + 12) Double door	2.00	Nos.		
8	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)	30.00	Nos.		
b	Double Pole (5 Amp to 32 Amp)	1.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
c	Tripple Pole (5 Amp to 32 Amp)	2.00	Nos.		
d	Four Pole (5 Amp to 32 Amp)	2.00	Nos.		
e	Single Pole (40 Amp to 63 Amp)	2.00	Nos.		
f	Double Pole (40 Amp to 63 Amp)	1.00	Nos.		
g	Tripple Pole (40 Amp to 63 Amp)	2.00	Nos.		
h	Four Pole (40 Amp to 63 Amp)	4.00	Nos.		
9	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 soc	3.00	Nos.		
10	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)	4.00	Set		
11	Providing & fixing 25mm x 5mm GI strip on surface or in recessd for connection etc. as reqd.	30.00	Mtr		
12	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	100 Amp, 25 KA	3.00	Nos.		
b	200 Amp, 35/36 KA	1.00	Nos.		
13	S&F connecting and commissioning indipendent 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.	4.00	Nos.		
14	S & F metal enclosure suitable for DP/FP MCB/ on surface or recessed etc as reqd.	4.00	Nos.		
15	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	20.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
b	15/16 amps switch	23.00	Nos.		
c	3 pin 5/6 amps socket outlet	20.00	Nos.		
d	6 pin 15/16 amps socket outlet	23.00	Nos.		
e	Blanking Plate	2.00	Nos.		
16	Supplying and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate etc. as required.	24.00	Nos.		
17	S & F following rating modular RJ-11 telephone jack (1M) complete with modular box i/c modular base & cover plate etc as reqd.	6.00	Nos.		
18	Fixing, Internet Box of size 75mm x 75mm x 40 mm including brass screw on surface / recessed as reqd.	16.00	Nos.		
19	Drawing of computer network cable/ PVC insulated flexible cooper/ Aluminium single core cable of size 1.5sqmm to 25 sqmm/ telephone cable upto 10 pair in existing pipe / casing and capping as reqd including numbering the wires at both the ends.	500.00	Mtr.		
20	S/F, connecting, testing and commissioning 1 x 20 watt LED tube fitting surface mounting/ceiling suspended luminares suitable mounting rail for T-LED lamps with 1 No. 20 watt T-LED lamps and connection etc.as reqd	2.00	Nos.		
21	S/F, connecting, testing and commissioning 2 x 20 watt LED tube fitting surface mounting/ceiling suspended luminares suitable mounting rail for T-LED lamps with 2 No. 20 watt T- LED lamps and connection etc.as reqd	20.00	Nos.		
22	S/F, connecting, testing and commissioning 34/35/36 watt LED recess mounted luminares with diffuser suitable for 600 mm X 600 mm modular POP/Gypsem ceiling etc.as reqd.	28.00	Nos.		
23	Supplying and fixing, 25 Watt LED street light luminaries with pressure die cast aluminium housing IP66 complete with all accessories complete	2.00	Nos.		
24	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	24.00	Nos		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
25	S & F of 400 mm sweep AC 230/250 volts, 50 HZ wall mounting revolving fan with brackets etc. complete	2.00	Nos.		
26	S/F, copper cable lug suitable for following size of conductor.				
a	10 Sqmm	12.00	Nos.		
b	16 Sqmm	12.00	Nos.		
27	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	2.00	Nos.		
28	Supply & laying of one no. PVC insulated and PVC sheathed aluminium conductor steel armoured cable of size 3-1/2 x 120 Sqmm grade 1.1 kV as reqd.				
a	In ground i/c excavation sand cushioning protective covering, refilling of earth as reqd.	120.00	Mtr.		
b	Fixing on surface with MS clamp	5.00	Mtr.		
c	In existing pipe	20.00	Mtr.		
d	In existing open duct.	30.00	Mtr.		
29	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.		
30	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	80 mm	20.00	Mtr.		
31	Supply & Laying of 32 mm (8Kg / cm ²) HDPE pipe ISI mark of 2mm thick I/c cartage loading & unloading etc. as reqd.				
a	In ground i/c excavation sand cushioning protective covering, refilling of earth as reqd.	100.00	Mtr.		
32	Fixing of telephone DP/network rack (HUB) on wall floor with suitable brick foundation on bolts and nut etc. as reqd.	1.00	Nos.		
	Total Rs.				