

**INDIAN INSTITUTE OF TECHNOLOGY KANPUR**



**Tender Notice No. 88/Elect/2020**

**SCHEDULE OF QUANTITY**

**Name of Work: Laying of fiber optical cable from Academic gate no.5 to Engineering core lab Aerosol building-cyber security building animal house international housing at IIT Kanpur.**

Name of the Contractor					
S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
1	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..	20.00	Mtr.		
2	S & F following piano type switch /socket on existing switch box/cover I/c connection etc as reqd.				
a)	5/6 Amp switch	5.00	Nos.		
b)	3 Pin 5/6 Amp. socket outlet	5.00	Nos.		
3	Supplying and fixing following size/ modules, GI box alongwith modular base & cover plate for modular switches in recess etc. as required				
a	2 Module	5.00	Each		
4	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	Double pole	3.00	Nos.		
5	Supplying and fixing DP sheet steel enclosure on surface/ recess along with 25/32 A 240 V "C" curve DP MCB complete with connections, testing and commissioning etc. as required.	3.00	Nos.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
6	Earthing with G.I earth pipe 4.5 mtr long. 40 mm dia including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe etc. with charcoal and salt as required.	1.00	Set		
7	Laying of one number Fiber optical cable / HDPE pipe(6kg/cm <sup>2</sup> ) of following size upto 35sqmm. in the existing RCC/ HUME/ METAL as required.				
a	Laying charges direct in pipe	4000.00	Mtr.		
b	Laying charges direct in open duct	200.00	Mtr.		
c	Laying charges on surface	200.00	Mtr.		
8	Laying of one number PVC insulated and PVC sheathed /PLB Duct pipe (6kg/cm <sup>2</sup> ) /HDPE pipe grade of 35 sq. mm and upto 95 sq. mm size including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
a	Laying direct in ground	300.00	Mtr.		
b	Laying charges direct in pipe	100.00	Mtr.		
c	Laying charges direct in open duct	50.00	Mtr.		
d	Laying charges on surface	50.00	Mtr.		
9	Supplying and making indoor end termination with brass compression gland, aluminum lugs for following size of PVC insulated & PVC sheathed/XLPE aluminum cable of 1.1kV grade as reqd.				
a)	2 X 6 sq. mm (19mm)	2.00	Sets		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
10	Excavation for cable trenches in soft soil, depth upto 1.2 m including dressing of sides lift upto 1.5 m, including getting out the excavated soil, refilling with sand and or good soil after laying of cable/ pipe etc in layers of 20 cm, ramming, watering and disposal of surplus excavated soil as directed, within a lead of 50 metres.	30.00	Cum		
11	Providing brick work (in width 225 mm or more) with F.P.S. bricks of class designation 7.5 in cement mortar 1:4 (1 cement : 4 coarse sand) at all levels.	5.00	Cum		
12	Providing 15mm thick cement plaster of mix 1:4 (1 cement : 4 fine sand) at all levels.	20.00	Sqm		
13	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)	50 mm	100.00	Mtr.		
b	80 mm	100.00	Mtr.		
14	Providing, laying and fixing following dia RCC pipe NP2 class (light duty) in ground complete with RCC collars, jointing with cement mortar 1:2 (1 cement : 2 fine sand) including trenching (75 cm deep) and refilling etc as required.				
a	150 mm dia	50.00	Mtr.		
15	Supplying & Laying of one no. XLPE sheathed aluminum conductor steel armoured power cable of size 2 x 6 sq.mm. 1.1kV grade in following manners.				
a	Laying direct in ground	20.00	Mtr.		
b	Laying charges direct in pipe	10.00	Mtr.		
c	Laying charges direct in open duct	10.00	Mtr.		
d	Laying charges on surface	10.00	Mtr.		

S. No	Description of Items	Qty	Unit	Rate in Figures in Rupees	Amount
16	Fixing internet rack / Telephone DP suitable etc from store to site as reqd complete.	5.00	Nos.		
17	Laying of Permanently Lubricated (PLB) HDPE DUCT pipe ISI mark (IS: 4984: 2016) of following OD40/ID33mm size (6Kg /cm <sup>2</sup> ) inner dia, direct in ground below 2 mtr. By HDD machine as per complete requirment.	4500.00	Mtr.		
18	Supply of HDPE pipe ISI mark of following size 25 mm (6Kg / cm <sup>2</sup> ) inner dia, I/c cartage loading & unloading etc. as reqd.	500.00	Mtr.		
19	Supply of Permanently Lubricated (PLB) HDPE DUCT pipe ISI mark of following OD40/ID33mm size (6Kg /cm <sup>2</sup> ) inner dia, I/c cartage loading & unloading etc. as reqd.	4500.00	Mtr.		
20	Drawing of optical cable enhanced cat 5/cat 6/telephone/ networking /power cable in existing steel conduit pipe/GI /HDPE pipe including numbering of networking wire from room to rack as reqd.	300.00	Mtr.		
	<b>Total Rs.</b>				