

Bill of Qty Electrical

N/W Construction of Cafeteria at Visitor Hostel - 1 , IIT KANPUR.

Estimate ID : Making cafe area

NIT No. 47/Composite/D1/2025-26

SLNo	Description	Qty	Unit	Rate	Amount
16	ELECTRICAL WORK				
16.1	Wiring for light point/ fan point/ exhaust fan point/ call bell point with 1.5 sq.mm FRLS/HFFR 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/HFFR PVC insulated copper conductor single core cable etc. as required. (a) Group A.	10	Each	1440.00	14400.00
16.2	Wiring for group controlled (looped) light point/fan point/exhaust fan point/ call bell point (without independent switch etc.) with 1.5 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed steel conduit, and earthing the point with 1.5 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable etc. as required. (a) Group A.	10	Each	914.00	9140.00
16.3	Wiring for light/ power plug with 2X4 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 1 No. 4 sq. mm FRLS PVC insulated copper conductor single core cable for loop earthing as required.	300	Metre	480.00	144000.00
16.4	Wiring for light/ power plug with 4X4 sq. mm FRLS/HFFR PVC insulated copper conductor single core cable in surface/ recessed steel conduit along with 2 Nos. 4 sq.mm FRLS/HFFR PVC insulated copper conductor single core cable for loop earthing as required.	10	Metre	724.00	7240.00
16.5	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in surface/ recessed steel conduit as required. 4 X 16 sq. mm + 2 X 6 sq. mm earth wire .	25	Metre	1760.00	44000.00

16.6	Supplying and drawing following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. (a) 2 x 1.5 sq. mm	10	Metre	77.00	770.00
16.7	Supplying and drawing following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. (a) 3 x 1.5 sq. mm.	20	Metre	104.00	2080.00
16.8	Supplying and drawing following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. (a) 6 x 1.5 sq. mm.	20	Metre	195.00	3900.00
16.9	Supplying and drawing following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in the existing surface/ recessed steel/ PVC conduit as required. (a) 3 x 4 sq. mm.	10	Metre	222.00	2220.00
16.1	Supplying and fixing following size/modules, GI box alongwith modular base & cover plate for modular switches in recess etc.as required. (a) 1 or 2 Module (75mmX75mm)	2	Each	354.00	708.00
16.11	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 3 pin 5/6 A modular socket outlet and 5/6 A modular switch, connections etc. as required.	14	Each	545.00	7630.00
16.12	Supplying and fixing suitable size GI box with modular plate and cover in front on surface or in recess, including providing and fixing 6 pin 5/6 A modular socket outlet and 15/16 A modular switch, connections etc. as required.	11	Each	659.00	7249.00
16.13	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 required. (a) 25 mm	150	Metre	289.00	43350.00

16.14	Supplying and fixing of following sizes of medium class PVC conduit along with accessories in surface/recess including cutting the wall and making good the same in case of recessed conduit as required. (a) 50 mm .	50	Metre	316.00	15800.00
16.15	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 stell 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.	4	Each	1806.00	7224.00
16.16	Supplying, drawing, Installation, Testing and commissioning of CAT6 UTP LSZH 23AWG Twisted Pair Cable in existing conduit/ on surface, Category 6 Unshielded Twisted Pair, 4 pair should be complied as per UL/ETL verification program for compliance with ANSI/TIA-568.2-D standard. Outer diameter should be in the range of 6.1mm nominal with Operating Temperature Range : -5° to +60°C, Bending Radius : < 4 X Cable Diameter at -5°C ± 1°C and Pulling Force : 11.5Kg etc. complete as required. (a) 1 run of cable.	20	Metre	60.00	1200.00
16.17	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc.as required. (a) Telephone socket outlet .	1	Each	168.00	168.00
16.18	Supplying and fixing following modular switch/ socket on the existing modular plate & switch box including connections but excluding modular plate etc.as required. (a) TV antenna socket outlet.	1	Each	168.00	168.00
16.19	Supplying, Installation, Testing and commissioning of CAT6A Copper Information Outlet (IO) with face plate of color as per site requirement, should have ETL/UL verification program certificate for compliance with ANSI/TIA-568.2-D. All copper Cable and Components should be from same OEM to maintain compatibility and interoperability etc. complete as required.	1	Each	302.00	302.00

16.2	Supplying and drawing co-axial TV cable RG-6 grade, 0.7 mm solid copper conductor PE insulated, shielded with fine tinned copper braid and protected with PVC sheath in the existing surface/ recessed steel/ PVC conduit as required.	10	Each	54.00	540.00
16.21	Supplying & fixing suitable size GI box with modular plate and cover in-front on surface or in recess including providing and fixing 25 A modular socket outlet and 25 A modular SP MCB, "C" curve including connections, painting etc. as required.	1	Each	807.00	807.00
16.22	"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.)" 12 way (4 + 36), Double door	1	Each	13512.00	13512.00
16.23	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required (a) Single pole .	21	Each	285.00	5985.00
16.24	Supplying and fixing single pole blanking plate in the existing MCB DB complete etc. as required.	9	Each	14.00	126.00
16.25	Supplying and fixing following rating, four pole, 415 V, isolator in the existing MCB DB complete with connections, testing and commissioning etc. as required. (a) 63 amps .	1	Each	1115.00	1115.00
16.26	Supplying and fixing following rating, double pole, (single phase and neutral), 240 V, residual current circuit breaker (RCCB), having a sensitivity current 30 mA in the existing MCB DB complete with connections, testing and commissioning etc.as required. (a) 63 amps	3	Each	2722.00	8166.00

16.27	Supplying and fixing Cable End Box (Loose Wire Box) suitable for following triple pole and neutral, sheet steel, MCB distribution board, 415 Volts, on surface/ recess, complete with testing and commissioning etc.as required. (a) For 8 way, Double door TPN MCBDB.	1	Each	1448.00	1448.00
16.28	Supply of light fixtures suitable for fluorescent / LED with all components and accessories including but not restricted to reflectors, housings, lamp holders and including cost of ballasts and cost of lamps complete as required and as below. (as per drawings) Colour temperature shall be finalized by the architect (A) Supply of LED Pendant Up-Down 22 UP - 36 DnW Down Efficacy: 110lm/w CRI :>80 Up Color Temperature: 4000K Down Color Temperature: 4000K SDCM 3 Life Time: L70 50'000h 230V Light Throw: Direct-Indirect light emission Optics: APD Prismatic Diffuser beam up Not Applicable° Finish: White Finish: Not to be Filled. only for automation purpose Control Gear: Electronic Control Protection Class: I IP 40 L:1175 ,W 52 MM, H: 60.00mm Similar to Regent LED 0561 Slash S or Equivalent"	8	Each	17886.00	143088.00
16.29	"Supply of LED Pendant 12 UP - 35 DnW Efficacy: 105lm Lumen: 1440lm Up - 3500 lm Down CRI :>80 Color Temperature: 4000K Life Time: L70 50000Hrs Light Throw: Direct-Indirect light emission Material: Aluminium Optics: Prismatic Diffuser Finish: White Control Gear: Electronic Contro Dia:0450mm H: 40mm Similar to Regent SOLO SLIM LED 0116 or Equivalent"	1	Each	43173.00	43173.00
16.3	"Supply of LED Recessed 15W Down Efficacy: Not Applicablelm Down Lumen: 1650 CRI :>80 Up Color Temperature: Not ApplicableK Down Color Temperature: 5000K SDCM 3 Life Time: L70 50,000Hrs 230V Light Throw: Direct light emission Optics: Prismatic Diffuser beam up Not Applicable° Finish: Not to be Filled. only for automation purpose Finish: Black Control Gear: Electronic Control Protection Class: II IP 40 Dia:0171 H: 60.00mm Similar to Regent Trim Blaire or Equivalent"	4	Each	5119.00	20476.00

16.31	Installation, Testing, Commissioning of wall bracket /ceiling fittings of all sizes and shapes containing upto two GLS/CFL/LED lamps per fitting, complete with all accessories including connections etc. as required. (a) Brush Less Direct Current (BLDC) Fan with Remote .	13	Each	151.00	1963.00
16.32	Supply, Installation, Testing and Commissioning of ceiling fan with Brush Less Direct Current (BLDC) Motor, class of insulation: B, 3 nos. metal(Aluminium alloy) blades, 30 cm long down rod, 2 nos. canopies, shackle kit, safety rope, copper winding, steel/Al body. Power Factor not less than 0.9, Service Value (CM/M/W) minimum as below, 350 RPM (tolerance as per IS : 374-2019), THD (Total Harmonic Distortion) less than 10%, remote (preferably mobile app based) for speed control and all remaining accessories including safety pin, nut bolts, washers, temperature rise=75 OC (max.), insulation resistance more than 2 mega ohm, suitable for 230 V, 50 Hz, single phase AC supply Ceiling Fan compliant to IS 374:2019 fan i/c external connections with 1.5 sq.mm FRLS/HFFR, PVC insulated copper conductor single core cable and earthing etc. as required. (a)1200mm, service value ≥ 6.0 CM/Min/Watt, air delivery 210 CM/Min (Minimum)	4	Each	2882.00	11528.00
	Total				563,476.00