

EELCTRICAL AND LV WORKS AT GROUND FLOOR, VASHALI NAGAR BRANCH, JAIPUR, STATE BANK OF INDIA

S.No.	Description	Unit	Qty.	Rate	Amount
A)	POINT WIRING WITH MATERIAL:				
1	Supplying, laying, testing, rectification and commissioning of light point, wall fan, exhaust fan point with 2 x 1.5 Sq.mm + 1 x 1.0 Sq.mm PVC insulated, 1100V grade stranded copper conductor wire in concealed/surface mounted Medium duty 25 mm dia PVC Conduit including cost of cutting & filling chases as required with providing & fixing of modular switches (6A, single pole, 240V), approved Polycarbonate modular cover plate for switch boxes, 1.6 mm thick GI box with earthing terminal, screws, cup washers, making connections, testing complete with all accessories as required . The cost of circuit wiring with 2 x 2.5 Sq.mm + 1 x 1.5 Sq.mm PVC insulated copper conductor 1100 Volts grade wires shall be included in the cost of point wiring. Circuit wiring shall not be paid extra.				
a)	First Point	Nos.	85		-
b)	Loop Point	Nos.	62		-
2	Supplying, laying, testing, rectification and commissioning of 2 nos. single phase and neutral 6 amps switch socket outlet with 2 x 2.5 Sq.mm + 1 x 1.5 Sq.mm PVC insulated, 1100V grade stranded copper conductor wire in concealed/surface mounted Medium duty 25 mm dia PVC Conduit including cost of cutting & filling chases as required with providing & fixing of modular switches, plate, 1.6 mm thick GI box with earthing terminal, screws, cup washers, making connections, testing, and earthing with 1.5 Sq.mm PVC insulated green copper wire complete with all accessories as required (first point shall be used FRLSH 2.5 sq.mm 1100V grade PVC insulated copper wires & looping with 2.5mm Sq.mm FRLSH) . The cost of Circuit wiring shall not be paid extra.				
a)	First Point	Nos.	9		-
b)	Loop Point	Nos.	10		-
3	Supplying, laying, testing, rectification and commissioning of 1 nos. single phase and neutral 1 nos.6 amps switch socket outlet with 2 x 2.5 Sq.mm + 1 x 1.5 Sq.mm PVC insulated, 1100V grade stranded copper conductor wire in concealed/surface mounted Medium duty 25 mm dia PVC Conduit including cost of cutting & filling chases as required with providing & fixing of modular switches, plate, 1.6 mm thick GI box with earthing terminal, screws, cup washers, making connections, testing, and earthing with 1.5 Sq.mm PVC insulated green copper wire complete with all accessories as required (first point shall be used FRLSH 2.5 sq.mm 1100V grade PVC insulated copper wires & looping with 2.5mm Sq.mm FRLSH) . The cost of Circuit wiring shall be not paid extra.				
a)	First Point	Nos.	9		-
b)	Loop Point	Nos.	12		-
5	Supplying, laying, testing, rectification and commissioning of 2nos. single phase and neutral 6/16 Amps switch socket outlet with with 2 x 2.5 Sq.mm + 1 x 1.5 Sq.mm PVC insulated, 1100V grade stranded copper conductor wire in concealed/surface mounted Medium duty 25 mm dia PVC Conduit including cost of cutting & filling chases as required with providing & fixing of modular switches, approved Polycarbonate modular cover plate for switch boxes, 1.6 mm thick GI box with earthing terminal, screws, cup washers, making connections, testing complete with all accessories as required (first point shall be used FRLSH 4.0 sq.mm 1100V grade PVC insulated copper wires & looping with 2.5 sq.mm FRLSH) . The cost of circuit wiring with 2 x 4.0 Sq.mm + 1 x 1.5 sq. mm PVC insulated copper conductor 1100 Volts grade wires shall be included in the cost of point wiring. Circuit wiring shall not be paid extra.				
a)	First Point	Nos.	8		-
b)	Loop Point	Nos.	3		-

S.No.	Description	Unit	Qty.	Rate	Amount
6	Supplying, laying, testing, rectification and commissioning of 1nos. single phase and neutral 6/16 Amps switch socket outlet with 2 x 2.5 Sq.mm + 1 x 1.5 Sq.mm PVC insulated, 1100V grade stranded copper conductor wire in concealed/surface mounted Medium duty 25 mm dia PVC Conduit including cost of cutting & filling chases as required with providing & fixing of modular switches, approved Polycarbonate modular cover plate for switch boxes, 1.6 mm thick GI box with earthing terminal, screws, cup washers, making connections, testing complete with all accessories as required (first point shall be used FRLSH 2.5 sq.mm 1100V grade PVC insulated copper wires & looping with 2.5 sq.mm FRLSH) . The cost of circuit wiring with 2 x 2.5 Sq.mm + 1 x 1.5 sq. mm PVC insulated copper conductor 1100 Volts grade wires shall be included in the cost of point wiring. Circuit wiring shall not be paid extra.				
a)	First Point	Nos.	16		-
b)	Loop Point	Nos.	6		-
6	Supplying, laying, testing, rectification and commissioning of 1nos. single phase and neutral 6 Amps socket outlet with 2 x 1.5 Sq.mm + 1 x 1.5 Sq.mm PVC insulated, 1100V grade stranded copper conductor wire in concealed/surface mounted Medium duty 25 mm dia PVC Conduit including cost of cutting & filling chases as required with providing & fixing of modular switches, approved Polycarbonate modular cover plate for switch boxes, 1.6 mm thick GI box with earthing terminal, screws, cup washers, making connections, testing complete with all accessories as required .	Nos.	58		-
	Notes:				
1.0	All Wires shall be FRLSH PVC insulated multi stranded copper conductor.				
2.0	PVC Conduit Complying with IS 2509:1973 and IS 3419:1989 for rigid conduit and IS 9537:2000 for flexible conduits shall be Medium duty FRLSH type.				
3.0	All items related to point wiring shall include the cost of circuit wiring.				
	TOTAL CARRIED OVER TO SUMMARY				-
B)	LIGHTING FIXTURES & FANS:				
1	Provide & Fixing of IP20 LED Recessed / Surface Mounted, Round / Square Non-Dimmable Downlight with die-cast aluminum housing & Heat Sink for heat dissipation, high purity reflector with external driver having efficiency > 85% and in compliance to IEC standards. Power Consumption of ≤ 20W with ~ 500 / 750 / 1100 / 1250 lumens, System Lumen efficacy of 70 lm / watt output suitable to replace 1x18W / 2x18W / 2x 26W CFL Downlights, life time of 50000 Burning Hours with 70% of initial Lumen maintained. CCT 3000°K , 4000°K & 6000°K. Fixture shall be CE compliance.				
1.1	15Watt LED Downlight - Philips/Halonix	Nos.	16		-
2	Provide & Fixing of IP20 LED ceiling / recessed / suspended mounting light fixture made from CRCA sheet steel housing, high purity / transmissivity diffuser for uniform light distribution. High efficiency driver electronics having efficiency > 85% and in compliance to IEC standards (Integral with light fixture). Power Consumption of 40W / 50W / 60W ~ 3000 /3300 /4200 lumens, System lumen efficacy of 70 - 80 lm/Watt output suitable for 2x36WFTL / 2x36W CFL / 3x36W CFL light fixtures, life time of 50,000 burning hours with 70% initial lumens maintained. CCT 3000°K, 4000°K & 6000°K. Fixtures shall be CE compliance.				
	30watt Recessed Mounting - Philips - RC370B LED36S-6500 G6 L60W60 PSU OD S6 /Halonix				
	light fixture 600 X600MM	Nos.	66		-

S.No.	Description	Unit	Qty.	Rate	Amount
3	Provide & Fixing of IP20 LED batten type light fixture made from CRCA sheet steel housing suitable for mounting LED tube system (integral driver), Power Consumption of 18W 1500-3000 lumens, system lumen efficiency 80 lm/Watt output, life time of 50,000 burning hours with 70% initial lumen maintained. CCT 3000°K, 4000°K & 6000°K..				
	18watt LED Batten Light - Philips - BN021C LED22S PSU CW GR	Nos.	1		-
4	Providing & Fixing of IP20, 1100-1200 mm x 50-60 mm x 70-85 mm size Suspended mounting Mid power SMD type LED linear Light fixture made from Extruded Aluminium housing, PMMI diffuser for uniform light distribution. High efficiency with 4 KV internal/external surge protection BIS certified isolated driver having efficiency > 85% , with Short & Open circuit protection (Integral with light fixture). System lumen efficacy of ≥ 100 lm/Watt ,THD < 10 % , p.f.≥0.95,CRI >80 , life time of minimum 50000 Burning Hours with , 70% of initial Lumen maintained till life ends , CCT 3000°K / 4000°K / 5700°K /6000°K/6500°K (As per ANSI Bin) , maximum power consumption should not more than the specified rating and Fixture shall be of BIS standard and trade mark certificate (T.C.). Manufactures Word Mark/ Name Engraved/ Embossing/ Screen printing on housing. OEM must have its own in house NABL lab setup for all testing facilities for LED fixtures. (LM79 & LM80) certificate / Report from OEM shall be submitted				
					
	Minimum lumen output 2000 lm	Nos.	18		-
5	Provide & Fixing of Aesthetically Designed linear LED mirror light				
	10watt LED Mirror Light - Philips /Halonix	Nos.	3		-
6	Provide & Fixing of energy efficient / energy saving direct fit (Retrofit) LED Bulb .				
	12watt LED Bulb Light - Philips /Halonix	Nos	1		-
7	Provide & Fixing of Heavy duty capacitor start 900/1400 RPM single phase ISI marked Exhaust fan,IS:2312 marked in existing opening including making connections testing etc. as required. 300 mm Sweep 9 900 RPM)	Nos.	6		-
8	Supply of capacitor start, metal body, metal blade three speed wall mounting fan of following sweep with the help of anchor bolts including making connection testing etc. as required.	Nos.	15		-
	Notes :				
1)	Type of Light fittings/make will be decided after getting layout From interior designers. However, erection rate quoted shall hold good for a similar type of fittings and no extra charge will be paid on this account.				
2)	The rates shall include all components that may be required to make the installation complete in all respects such as suitable length of GI down rod, hanger and connecting wires, internal wiring between accessories, wires for connecting the fixtures to the point through connector block complete as required.				
3)	The rates shall include Drilling holes in supports wherever required. Fixing clamps, GI bolts and nuts, brass screws, saddles, rawl bolts and other fixing accessories as required.				
4)	The rates shall include Testing of all fixtures & fans before and after installation.				
	TOTAL CARRIED OVER TO SUMMARY				-
C)	WIRING FOR SUB MAIN :				
	(Copper Wire in Conduits)				

S.No.	Description	Unit	Qty.	Rate	Amount
1.0	Supplying, laying, testing, rectification and commissioning of wiring with all the required material for following sub-mains with PVC insulated copper conductor 1100 volts grade of suitable size wires (FRLSH) in concealed/surface mounted 25/40/32/50mm dia Medium duty(FRLSH) PVC Conduit either in slabs, partitions or overhead trusses terminating the wires in respective panels, DBs, switch boxes with suitable size earth wires and associated hardwares etc. (Cost of PVC conduit & Flexible Conduit shall be included in this item). Sizes are as follows : Note:- Circuit wire note included in this item.				
a)	4 x 10.0 Sq.mm + 1 x 6.0 Sq.mm PVC insulated copper wires 32mm dia conduit.	RM	43		-
b)	4 x 6.0 Sq.mm + 1 x 4.0 Sq.mm PVC insulated copper wires 32mm dia conduit.	RM	45		-
c)	4 x 4.0 Sq.mm + 1 x 2.5 Sq.mm PVC insulated copper wires	RM	12		-
d)	4 x 2.5 Sq.mm + 1 x 1.5 Sq.mm PVC insulated copper wires	RM	15		-
e)	2 x 10.0 Sq.mm + 1 x 6.0 Sq.mm PVC insulated copper wires 32mm dia conduit.	RM	52		-
f)	2 x 6.0 Sq.mm + 1 x 4.0 Sq.mm PVC insulated copper wires	RM	50		-
g)	2 x 4.0 Sq.mm + 1 x 2.5 Sq.mm PVC insulated copper wires	RM	20		-
e)	2 x 2.5 Sq.mm + 1 x 1.5 Sq.mm PVC insulated copper wires	RM	55		-
	TOTAL CARRIED OVER TO SUMMARY				-
D)	TELEPHONE SYSTEM				
1.0	Supply, Installation, testing & commissioning of telephone socket outlet (RJ-11) in G.I. junction box 1.6 mm thick as required by Architect / Consultants. along with Face Plate for Flush Mount on 2 Module box made of high impact plastic body ABS FRLSH grade with spring loaded collapsible shutters in jack recess suitable for cat 6A application with terminator caps for tooless termination Single Outlet. Complete in all respect.	Nos.	16		-
2.0	Supplying, laying, testing, rectification and commissioning of 4 pair ,100 Ohm, 24 AWG UTP cat 6A Cable as per latest amendments of TIA / EIA 568 B.2 specifications for Telephone points in 25 MM Dia. of Medium duty(FRLSH) PVC Conduit concealed/surface mounted including cutting/filling, chases, making connections to Information outlets and patch panels with ferruling at both ends for identification with necessary tools for punching ,stripping crimping and testing. complete as required.	RM	525		-
	<u>Note:</u> Fiber Cables & Head Equipments of Networking, Communication, Surveillance are not considered in this BOQ.				
	TOTAL CARRIED OVER TO SUMMARY				-
E)	TV SYSTEM:				
1.0	Supply, Installation, testing & commissioning of TV Co-Axial socket outlet in G.I. junction box 1.6 mm thick as required by Architect / Consultants. along with Face Plate for Flush Mount on 2 Module box made of high impact plastic body ABS FRLSH grade with spring loaded collapsible shutters in jack recess suitable application with terminator caps for tooless termination Single Outlet. Complete in all respect.	Nos.	1		-
2.0	Supplying and laying of following sizes of Medium duty(FRLSH) PVC Conduit concealed/surface mounted including cutting/filling chases along, flexible conduit as required along with all accessories etc. complete as required.				
a)	25 mm dia	RM	30		-
4.0	Supplying, laying, testing, rectification and commissioning of 4 pair ,100 Ohm, 24 AWG UTP cat 6A Cable as per latest amendments of TIA / EIA 568 B.2 specifications for Data / Telephone points in existing PVC conduits including making connections to Information outlets and patch panels with ferruling at both ends for identification with necessary tools for punching ,stripping crimping and testing as required. (For Smart TV Provision)	RM	10		-
	Supply, Installation, testing & commissioning of high speed hdmi cable with eathernet (E308600) UL type CL3 750C 28AWG length up to 3 meter	Nos.	1		-
	<u>Note:</u> Head Equipments are not considered in this BOQ.				
	TOTAL CARRIED OVER TO SUMMARY				-
F)	DATA NETWORKING :				

S.No.	Description	Unit	Qty.	Rate	Amount
1.0	Supply, Installation, testing & commissioning of data socket outlet (RJ-45) in G.I. junction box 1.6 mm thick as required by Architect / Consultants. along with Face Plate for Flush Mount on 2 Module box made of high impact plastic body ABS FRLSH grade with spring loaded collapsible shutters in jack recess suitable for cat 6A application with terminator caps for toolless termination Single Outlet. Complete in all respect.	Nos.	30		-
2.0	Supplying, laying, testing, rectification and commissioning of 4 pair ,100 Ohm, 24 AWG UTP cat 6A Cable as per latest amendments of TIA / EIA 568 B.2 specifications for Data points in 25 MM Dia. of Medium duty(FRLSH) PVC Conduit concealed/surface mounted including cutting/filling, chases, making connections to Information outlets and patch panels with ferruling at both ends for identification with necessary tools for punching ,stripping crimping and testing. complete as required.	RM	1050		-
	<u>Note:</u> Fiber Cables & Head Equipments of Networking, Communication, Surveillance are not considered in this BOQ.				
	TOTAL CARRIED OVER TO SUMMARY :				-
G)	CCTV SYSTEM				
1.0	Supplying, laying, testing, rectification and commissioning of 4 pair ,100 Ohm, 24 AWG UTP cat 6A Cable as per latest amendments of TIA / EIA 568 B.2 specifications for Data points in 25 MM Dia. of Medium duty(FRLSH) PVC Conduit concealed/surface mounted including cutting/filling, chases, making connections to Information outlets and patch panels with ferruling at both ends for identification with necessary tools for punching ,stripping crimping and testing as required	RM	1450		-
	<u>Note:</u> Fiber Cables & Head Equipments of Networking, Communication, Surveillance are not considered in this BOQ.				
	TOTAL CARRIED OVER TO SUMMARY :				-
H)	CABLE TRAY				
1	Supply, Fabricating & installing following sizes of perforated Hot dipped Galvanized iron cable tray (Galvanized thickness not less then 50 microns) with perforation not more then 17.5% in convenient section including horizontal and vertical bends, reducers tees,cross members and other accessories as required and duly suspended from the ceiling with GI suspenders including GI bolts & nuts , fastners, supports etc. as required.				
1.1	Perforated Type 1MM/0.6 MM THICK				
a)	100mm x 50mm x 1.6mm	RM	52		-
b)	150mm x 50mm x 1.6mm	RM	170		-
2.0	P & F junction boxes 300x300x100	Nos.	4		-
	TOTAL CARRIED OVER TO SUMMARY :				-
I)	LT Cables				
	The rate shall also include the following :				
1	Cable supporting structural members including spacers, clamps etc, bushes and other fittings				
2	Providing all fixing accessories such as clamping devices nuts, bolts and screws.				
3	Wherever the cables are of aluminium and bus bars of copper bimetallic lugs shall be used.				
4	All cable shall be laid with one diameter gap.				
5	All cables shall be IS approved.				
6	Double compression glands				
7	Burried LT cables to be laid atleast 750 mm below ground.				
1	Supply, Installation, Testing and Commissioning of following 1100 volt grade XLPE insulated PVC inner sheathed and FRLSH PVC outer sheathed Aluminium conductor Armoured/Un- Armoured LT cables in trenches, cable trays, ducts, clamped to wall with suitable clamps, buried in soft soil, including, saddles fixing bolts, connecting testing and commissioning.(Make: Cable- Polycab, RR Kabel, Havells.)				

S.No.	Description	Unit	Qty.	Rate	Amount
1.1	3.1/2 core 95 sq.mm Armoured	RM	165		-
1.2	3.1/2 core 35 sq.mm Armoured (from panel to ac odu panel)	RM	65		-
1.3	4 core 25 sq. mm Armoured	RM	25		-
2	Supply, Installation, Testing and Commissioning of following 1100 volt grade XLPE insulated PVC inner sheathed and FRLSH PVC outer sheathed Aluminium conductor Armoured/Un- Armoured LT cables with Cable end terminations, bimettalic crimping lugs(Heavy Duty), double compression Brass glands for Armoured cables as per specification. (Make: Lugs & Glands- Comet)				
2.1	3.1/2 core 185 sq.mm Armoured (from building panel to floor panel)	Nos.	4		-
2.2	3.1/2 core 35 sq.mm Armoured (from panel to ac odu panel)	Nos.	2		-
2.3	4 core 25 sq. mm Armoured	RM	4		-
3	Supply, Installation, Testing and Commissioning of following 1100 volt grade XLPE insulated PVC inner sheathed and FRLSH PVC outer sheathed Copper conductor Armoured/ Un-Armoured LT cables in trenches, cable trays, ducts, clamped to wall with suitable clamps, buried in soft soil, including, saddles fixing bolts, connecting testing and commissioning. (Make: Cable- Polycab, RR Kabel, Havells.)				
3.1	4 core 10.0 sq. mm. Armoured	RM	20		-
3.2	3 core 2.5 sq. mm. UnArmoured	RM	65		-
4	Supply, Installation, Testing and Commissioning of following 1100 volt grade XLPE insulated PVC inner sheathed and FRLSH PVC outer sheathed Copper conductor Armoured/Un- Armoured LT cables with Cable end terminations, bimettalic crimping lugs(Heavy Duty), double compression Brass glands for Armoured cables as per specification. (Make: Lugs & Glands- Comet)				
4.1	4 core 10.0 sq. mm. Armoured	Nos.	4		-
4.2	3 core 2.5 sq. mm. UnArmoured	Nos.	16		-
	TOTAL CARRIED OVER TO SUMMARY :				-
J)	DISTRIBUTION BOARDS				
1	Supply, installation, testing & commissioning of following Double door (IP-43 & IK-09) MCB Distribution boards as per drawing & specification fabricated out of 16 SWG CRCA sheet steel in compartmentalized design as per specification and drawings these distribution boards shall be surface/ recessed in walls. The rate includes the painting, ferruling, Blank Plate etc. as required and with complete accessories. Note :- Distribution boards & mcb shall be according to db detail.				
a)	18 WAY SPN DB	Nos.	1		-
	Incoming:				
	63A DP MCB (10kA) - 1 Nos.				
	63A DP RCCB (100 mA) - 1 Nos.				
	Outgoing:				
	6A to 32A SP MCB (10kA) - 14 Nos.				
	Neutral link:				
	Suitable netural link- 01 Nos.				
	Earthing link:				
	Suitable earthing link- 01 Nos.				
b)	16 WAY SPN DB	Nos.	1		-
	Incoming:				
	40A DP MCB (10kA) - 1 Nos.				
	40A DP RCCB (100 mA) - 1 Nos.				
	Outgoing:				
	6A to 32A SP MCB (10kA) - 12 Nos.				
	Neutral link:				
	Suitable netural link- 01 Nos.				
	Earthing link:				
	Suitable earthing link- 01 Nos.				
c)	12 WAY SPN DB	Nos.	2		-

S.No.	Description	Unit	Qty.	Rate	Amount
	Incoming:				
	40A DP MCB (10kA) - 1 Nos.				
	40A DP RCCB (100 mA) - 1 Nos.				
	Outgoing:				
	6A to 32A SP MCB (10kA) - 8 Nos.				
	Neutral link:				
	Suitable netural link- 01 Nos.				
	Earthing link:				
	Suitable earthing link- 01 Nos.				
d)	6 WAY TPN PPI DB	Nos.	4		-
	Incoming:				
	63A FP MCB (10kA) - 1 Nos.				
	63A DP RCCB (100 mA) - 3 Nos.				
	Outgoing:				
	6A to 32A SP MCB (10kA) - 18 Nos.				
	Neutral link:				
	Suitable netural link- 03 Nos.(Separate for each phase)				
	Earthing link:				
	Suitable earthing link- 01 Nos.				
	TOTAL CARRIED OVER TO SUMMARY :				-
K)	EARTHING INSTALLATION				
	Rates shall also include the following :				
1	Supply and installation of high tensile low carbon steel rod molecularly bonded with 99.9 % Copper thickness (250 microns) and confirming to UL 467, IS/IEC 62561-2 of following size and length and as per point mentioned (a), (b), (c), (d), (e), (f) below :- (a) Bore a hole of dia. 100 mm of required length, Place the rod in the centre of Hole (b) filled with anti corrosive conductive compounds with the permanent sealings at both the ends, CPRI/ ERDA tested with RMS capacity of minimum 30 KA for withstanding 1 second .To ensure the moisture content and electrical conductivity, 25 kg for 2000 mm & 50 Kgs for 3000mm of resistance lowering earth enhancement material shall be used as a backfill compound. The compound shall be tested form NABL acredeated lab for low resistivity (less than 0.12 Ohm - meter) & high conductivity in nature with carbon as a major content as per reference of IS 3043-1987,IEEE 80-2013 (clause 14.5d) , IEEE 837 & IER 1956 with latest amendemnts (c) Connect the rod with copper Strip/Conductor/Wire with suitable clamp made from tinned copper and SS 304 Bolt (d) Place Heavy duty weather proof poly-propylene earth pit chamber with lockable Jam free lid suitable for safe working load 5000 Kg or more of size Top Dia. 225 to 260 mm, Bottom Dia 300 to 350 mm. and Height 250 to 300 mm. (e) Testing of earth resistance for value of 5 ohms or less as required & must record by engineer in-charge during site visit and ensure to enter in measurment book. (f) Test certificates for confirming above standards from OEM is mandatory.				
1.1	25 mm thick and 3 Mtr. Long	Nos.	10		-
2	Supply & Laying following size earth strip in horizontal or vertical run in surface by means of Earth strip DMC Insulator including riveting/ soldering/ welding, Jointing shall be done by overlapping and with 2 set of Brass (for Cu strip) / GI (for GI Strip) nut bolt & spring washer spaced at 50cm making connection etc. as required.				
2.1	25mm x 6mm G.I. (Hot Dipped) Strip	Mtr.	125		-
2.2	25mm x 5mm copper strip	Mtr.	20		-
2.3	8 SWG G.I. (Hot Dipped) Wire	Mtr.	15		-
2.4	8 SWG copper Wire	Mtr.	85		-
	TOTAL CARRIED OVER TO SUMMARY :				-
L)	ELECTRICAL PANEL				

S.No.	Description	Unit	Qty.	Rate	Amount
1	SITC of cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/ red oxide primer followed by two coats of synthetic enamel paint or powder coating in grey or required shade after rinsing . The panel having PU/ Neoprene rubber gasket of not less than 3mm thickness , separate detachable gland plate M.S. base channel ,hinged door with locking arrangement for equipment/switchgear . Thickness of sheet shall not be less than 1.6 mm up to 600 mm length / width of any compartment and be of 2.0 mm above 600 mm. Load bearing structure shall be of 2.0 mm thick sheet supported by base M.S. channel if required . 3 mm thick sheet for gland. Side walls and cable alley compartments having bolted type doors. double compression type cable glands, earth bus, hinged and lockable doors to achieve dust and vermin proof with not less than IP-42 (For Indoor Type) Protection.	Set	1		-
a)	Note: Panel Shall be Floor Mounted . Panel cable Entry & Exit from Top . MCCB are T/M, O/L.S/C, lcs=100%lcu				
	Note :- Panel shall be made according to panel sld.				
	INCOMER (For Main Meter supply)				
i.	MCCB 125 Amp FP 16 KA ,T/M, with ROM & Spredders, 1No.				
ii.	4P Contactor 125 Amp with Aux Contacts AC1 Duty, 1No.				
iii.	6 amps Protective SP MCB's , 6 Nos.				
iv.	indicating lights(Phase-R,Y,B,Contactor Open,Close) ,5Nos				
v.	Multi Function Meter , 1No.				
vi	Current Transformer 125/5 Amp Class-1 , 6No.				
	Incoming Section:				
	(For DG supply)				
i.	MCCB 125 Amp FP 36 KA ,T/M, with ROM & Spredders, 1No.				
ii.	4P Contactor 125 Amp with Aux Contacts AC1 Duty, 1No.				
iii.	Multi Function Meter , 1No.				
iv.	Reverse Protection Relay (RPR), 1No.				
v.	Indicating Lights(Phase-R,Y,B,Contactor Open,Close) 5No.				
vi	6 amps Protective SP MCB's , 4 Nos.				
vii	Current Transformer 125/5 Amp Class-1 , 3No.				
	OUTGOING				
	80A. FP, MCCB, 16kA - 1 Nos				
	63A. FP, MCCB, 10kA - 1 Nos				
	40A. FP, MCCB, 10kA - 2 Nos				
	63A. DP, MCB, 10kA - 1 Nos				
	40A. DP, MCB, 10kA - 3 Nos				
	25A. DP, MCB, 10kA - 1 Nos				
b)	Bus Bars				
i.	160 amps ,TPN,Electrolytic high conductivity Aluminium busbar with colour coded heat shrinkable insulating sleeves.				
c)	Miscellaneous				
	Missll.(Insulators, Acrylic Sheet , Backlight Sheet, Hardware, Wire, Name Plates, Lugs, PVC Channel , MCB Chanel , Lock, Hing , Bidding , Connectors, Neutral Links , Spiral , Saddle & Packing Material)				

S.No.	Description	Unit	Qty.	Rate	Amount
2	SITC of cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/ red oxide primer followed by two coats of synthetic enamel paint or powder coating in grey or required shade after rinsing . The panel having PU/ Neoprene rubber gasket of not less than 3mm thickness , separate detachable gland plate M.S. base channel ,hinged door with locking arrangement for equipment/switchgear . Thickness of sheet shall not be less than 1.6 mm up to 600 mm length / width of any compartment and be of 2.0 mm above 600 mm. Load bearing structure shall be of 2.0 mm thick sheet supported by base M.S. channel if required . 3 mm thick sheet for gland. Side walls and cable alley compartments having bolted type doors. double compression type cable glands, earth bus, hinged and lockable doors to achieve wheather and vermin proof with not less than IP-67 (For outdoor Type) Protection.	Set	1		-
a)	Note: Panel Shall be Floor Mounted . Panel cable Entry & Exit from Bottom . MCCB are T/M, O/L.S/C, lcs=100%lcu				
	Note :- Panel shall be made according to panel sld.				
	INCOMER				
	80A. FP, MCCB,16kA - 1 Nos				
	OUTGOING				
	40A. FP, MCB, 10kA - 3 Nos				
	40A. FP, RCCB, 300 mA - 2 Nos				
b)	Bus Bars				
i.	80 amps ,TPN,Electrolytic high conductivity Aluminium busbar with colour coded heat shrinkable insulating sleeves.				
c)	Miscellaneous				
	Missll.(Insulators, Acrylic Sheet , Backlight Sheet, Hardware, Wire, Name Plates, Lugs, PVC Channel , MCB Chanel , Lock, Hing , Bidding , Connectors, Neutral Links , Spiral , Saddle & Packing Material)				
3	SITC of cubical panel made out of CRCA sheet, required hardware, duly painted by either two coats of zinc/ red oxide primer followed by two coats of synthetic enamel paint or powder coating in grey or required shade after rinsing . The panel having PU/ Neoprene rubber gasket of not less than 3mm thickness , separate detachable gland plate M.S. base channel ,hinged door with locking arrangement for equipment/switchgear . Thickness of sheet shall not be less than 1.6 mm up to 600 mm length / width of any compartment and be of 2.0 mm above 600 mm. Load bearing structure shall be of 2.0 mm thick sheet supported by base M.S. channel if required . 3 mm thick sheet for gland. Side walls and cable alley compartments having bolted type doors. double compression type cable glands, earth bus, hinged and lockable doors to achieve wheather and vermin proof with not less than IP-42 (For indoor Type) Protection.	Set	2		-
a)	Note: Panel Shall be Floor Mounted . Panel cable Entry & Exit from Bottom . MCCB are T/M, O/L.S/C, lcs=100%lcu				
	Note :- Panel shall be made according to panel sld.				
	INCOMER				
	63A.DP, MCCB,10kA - 1 Nos				
	OUTGOING				
	63A. DP, MCB, 10kA - 5 Nos				
b)	Bus Bars				
i.	63 amps ,PN,Electrolytic high conductivity Aluminium busbar with colour coded heat shrinkable insulating sleeves.				
c)	Miscellaneous				
	Missll.(Insulators, Acrylic Sheet , Backlight Sheet, Hardware, Wire, Name Plates, Lugs, PVC Channel , MCB Chanel , Lock, Hing , Bidding , Connectors, Neutral Links , Spiral , Saddle & Packing Material)				
	Panel shall be interlocking with ups working and stand by				
	TOTAL CARRIED OVER TO SUMMARY :				-
M)	LOW VOLTAGE				

S.No.	Description	Unit	Qty.	Rate	Amount
	Supply and Installation of unshielded Information outlets made of high impact plastic body with ABS, FRGrade with provision for protection against dust in jack/FP, suitable for Cat6/6A application complying to latest ammendments, According to Cat.6/6A channel, It should support channel as well as components requirements of Cat.6/6A standard sat frequencies of upto 250 to 500Mhz. Cat6/6A unshielded/ shielded Jack should be suitable to terminate 4pair, 23/24 AWG solid/ stranded wire diameters, using 100 Ohm unshielded/ shielded balance twisted pair cable, the jack should have too less/impact punch termination on reliable copper tin plated Insulation displacement contact, It complied with ANSI/ TIA/ EIA568 standard.In existing modular/ MS Boxes along with necessary connections as required complete in all respect. All as per preapproved by Engineer incharge. For additional technical parameters of products/work,				
	cat 6A, Un-sheilded Information Outlet	Nos	30		-
	Supply & fixing of square Face plate for Flush/ Surface Mount Information Outlets Single/ Dual or Quad Aperture, material should be PC+ ABS body, Suitable for RJ45 unshielded/ shielded connection modules. Should match with I.O. OEM. Dimensions should be 86mmX86mm as required complete in all respect. All as per preapproved by Engineer incharge. For additional technical parameters of products/work ,				
	Single Aperture	Nos	25		-
	Dual Aperture	Nos	5		-
	Supply, Installation, Testing and Comissioning of Rack mounted 19" 1U, 24 Port Unloaded, 1.5-1.6 MM CRS chasis, powder coated, sheet steel, made of plastic(ABS), Modular Patch Panels (without I.O.)with Rear Cable management system and mounting hardware to mount the patch panel. Should have port identification numbers printed/engraved on front of the panel,. There should be a provision for each port/jack on the panel and reusable removable onfield from the panel complete in all respect. All as per preapproved by Engineer incharge.For additional technical parameters of products/work,	Nos	2		-
	Supply, Installation and Testing of 4pair, 100 Ohm impedance, Cat6/6A patchcords should be constructed of minimum 23/24 AWG, stranded bare Copper cable with FRPVC/LSZH Jacket, with an enhanced performance by factory moulded RJ45 connectors as per ANSI/TIA/EIA568 suitable for Cat6/6A application complying to latest ammendments Category 6/6A Standards, According. to TIA 568, minimum requirement for 1G BASE-T/10G BASE-T performance. Patchcords shall be straight thru cable compatible with both T568-A and T568-B wiring schemes, Minimum 750 to 1000 mating cycles in plug contacts for long durability complete in all respect. All as per pre approved by Engineer incharge. For additional technical parameters of products/work ,				
	cat 6A, UTP (Un-sheilded Twisted Pair) Patch Cord	Nos	1		-
	1 Mtr/3 ft	Nos	35		-
	3 Mtr / 10 ft.	Nos	1		-
	Supply, Installation, Testing and Commissioning of Wall mounted ISO9001:2015&14001 or higher level certified company made Communication enclosure(Rack)of Minimum 500MM Depth with made from CRCA & hot dip powder coated, front sturdy sheet steel frame folded from one piece and welded with minimum 5mm toughened glass door,Vertical Mounting Rail 1.6MM with 'U' Marking, with All round protective channel on the door aperture, lock integrated on front door,top and bottom cover with cable entry provision with gland plates, integrated side walls, 2 pair of 19"angles with wall mounting provision on wall. Accessories like:1Noof 19" 1 U Horizontal Cable manager, 2No of 90cfm 230VAC Fan with 1mts long cable, mounting hardware, 1No of 19" 1U, mountable socket strips with 6 nos of 5A universal sockets with 2mts long power chord for supplying power to switches,fans etc along with earth continuity kit, indicator, moulded power supply cable. fixing on wall with fastner of suitable capacity etc as required complete in all respect. All as per pre approved by Engineer in charge. For additional technical parameters of products/work ,				

S.No.	Description	Unit	Qty.	Rate	Amount
	32 U floor mounted Enclosure	Nos	1		-
	AC1350 Wireless MU-MIMO Gigabit Ceiling Mount Access Point Fast Dual-Band Wi-Fi: Simultaneous 450 Mbps on 2.4 GHz and 867 Mbps on 5 GHz totals 1317 Mbps Wi-Fi speeds.*Integrated into Omada SDN: Zero-Touch Provisioning (ZTP)‡, Centralized Cloud Management, and Intelligent Monitoring. Centralized Management: Cloud access and Omada app for ultra convenience and easy management. Seamless Roaming: Even video streams and voice calls are unaffected as users move between locations.* PoE Support: Support both standard 802.3af/at and Passive PoE (PoE adapter included)△ for flexible installations. Secure Guest Network: Along with multiple authentication options (SMS/Facebook Wi-Fi/ Voucher, etc.) and abundant wireless security technologies. Advanced Wireless Tech: Optimize network performance with MU-MIMO, Band Steering, Airtime Fairness and Beamforming technologies	Nos	2		-
	TOTAL CARRIED OVER TO SUMMARY :				-
	Taxes are extra applicable 18% and Some item at 28% .				
	SUMMARY				
A	POINT WIRING WITH MATERIAL				-
B	LIGHTING FIXTURES & FANS				-
C	CABLING / WIRING FOR SUB MAIN				-
D	TELEPHONE SYSTEM				-
E	TV SYSYTEM				-
F	DATA NETWORKING				-
G	CCTV SYSTEM				-
H	CABLE TRAY				-
I	LT CABLES				-
J	DISTRIBUTION BOARDS				-
K	EARTHING INSTALLATION				-
L	ELECTRICAL PANEL				-
M	LOW VOLTAGE				-
	GRAND TOTAL				-
	Terms & Conditions :				
1	The contractor shall include in his scope the following.				
2	All kind of tools for execution work shall be arrange by the contractor.				
3	All kind of consumable like Cutter blades, Hacksaw blade, Hacksaw Frame etc. shall be arrange by the contractor.				
4	Testing kit like earth testing, multimeter, Continuity tester and all kind of testing tools/ equipments shall be arranged by the contractor.				
5	Testing shall be performed by the contractor as desired by the site engineers.				
6	Contractor shall bear all kind of ESI/PF/Medical liabilities as applicable by goveenment rules				
7	The contractor shall be responsible for any type of misshaping /accident with labour				
8	All safety accessories like (helmet safety belt, safety shoes) shall be provided by Contractor to the labour.				
9	Contractor shall manage all kind of licenses and insurance required for the execution works if required.				
10	Any wastage or scrap of material shall not be out of the property without gate pass and security officer signature/seal.				
11	Any damaged/manufacturing defect of material shall be informed to project manager.				
12	Contractor shall get his material issued from the main store keeper as per his requirement.				
13	Contractor shall take complete responsibility of the issued material any loss or damage to that shall be deducted from his bill.				
14	Labour accommodation shall be arranged by the contractor.				
15	Water & electricity shall be provided by the client to the contractor at the place of work.				
16	Store room for the tools & equipment shall be arranged by the client to the contractor at the place of work.				
17	Scaffolding (PEDA) requirement above 3 Meter height shall be arrange by the client.				