

<b>ELECTRICAL WORK</b>			
<b>Sr. No</b>	<b>Description</b>	<b>Unit</b>	<b>Total Qty</b>
<b>A</b>	<b>PANEL &amp; DBs</b>		
1	Supply, Installation, Testing & Commissioning of Following Panels as per below specs.		
	Floor/wall mounted cubicle type panel, Fabricated from 14 SWG CRCA sheet steel ,Totally compartmentalized, 7 tank powder coating treatment for rust proofing, with separate busbar chamber & cable chambers ,Front /Back access for switchgears, connectors , 2 nos earthing terminals, danger board , provisions for ventilations , door locks .Suitable for 430 V, 3 phase / 4 Wire System , 50 Hz supply,50 Deg Celcius ambient temp,Class 1 Type with 15VA burden, Provisionn for control wiring diagram, 3 MM openable gland plate on top and bottom of panel, 75 MM height channel base frame to panel. Proper labeling shall be done all chambers of panel showing feeder rating and location ( GA DRAWINGS OF ALL PANELS SHALL BE APPROVED BY BANK OR ARCHITECT)		
1.1	<b>MAIN LT Panel-1</b>	Nos	1.00
	<b>incommer-</b> 200A 4P MCCB 25KA, microprocessor based and with ELR and CBCT- 1 set		
	400A 4P ALUMINIUM BUSBAR, PVC INSULATED		
	RYB indicating lamps with control MCB- 1set		
	ON OFF TRIP indicating lamps with control MCB- 1set		
	<b>Metering</b> -Digital load manager with complete set of CT and control MCB- 1set		
	<b>OUTGOING</b>		
	32A 4P MCB- 4 nos.		
	63A 4P MCB- 1 nos		
	80A 4P MCB- 1 nos		
	20A 1P MCB- 1 nos		
	<b>AC SECTION</b>		
	160A 4PN MCCB , 25KA - 1nos		
	SHUNT trip coil with complete wiring and contacts.		
	63A 4P MCB- 4 nos		
	25A 4P MCB- 2 nos.		
	25 A 2P MCB - 6 nos		
	<b>APFC bank section</b>		
	Incommer- 63A TP MCB - 1 nos.		
	4 step APFC relay meter- 1 nos.		
	Auto manual switch with control wiring- 1set		
	10 KVAR heavy duty 3phase capacitor- 1 nos		
	5 KVAR heavy duty 3phase capacitor- 3 nos		
	PVC insulated Aluminium busbar- TPN		
	ON OFF TRIP indicating lamps with control MCB- 1set		
	RYB indicating lamps with control MCB- 1set		
	20Amps - TP contactors capacitor duty - 4 nos		
1.2	63A 4P RCCB, 300ma for AC ODU in IP 44 Powder coated metal box	Nos	2.00

BOQ OF INTERIOR RENOVATION FOR 2ND FLOOR, SBI, SECURITY SERVICE BRANCH , FORT .

1.3	32A 4P RCCB, 300ma for AC ODU in IP 44 Powder coated metal box	Nos	4.00
2	Supply, Installation, Testing & Commissioning of Wall mounted Distribution Boards complete with MCBs/Isolators/ Bus bars and interconnections. No fabricated DBs shall be allowed. Only DBs of specified makes as per list of materials shall be used all MCB 10 kA. (All DB will have MCB numbering, DB chart, DB number), DB should be fixed with Anchor fastner to wall with proper GI L angle fixed to wall. Proper earthing should be provided to DB body at 2 places.Cable tray , raceway used for DB drop,shall be earthed to DB earthing with 12 SWG CU wire and lugs		
a	<b>TPN as follows (LDB)</b> - Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	each	2.00
	Incomer 32A 4P MCB- 1 nos		
	Subincomer 32A DP RCCB, 100ma - 3 Nos.		
	Outgoing 10/ 16A SP MCBs -24 Nos.		
b	<b>TPN as follows (RDB)</b> - Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	each	2.00
	Incomer 63A 4P MCB- 1 nos		
	Outgoing 63A DP RCCB, 100ma - 3 Nos.		
	Outgoing 25A SP MCBs -24 Nos.		
c	<b>TPN as follows (UDB)</b> - Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	each	2.00
	Incomer 63A4P MCB- 1 No. D Curve		
	Outgoing 16A SP MCBs -36 Nos.D Curve		
d	<b>TPN as follows (UDB)</b> - Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	each	1.00
	Incomer 63A4P MCB- 1 No. D Curve		
	Outgoing 16A SP MCBs -24 Nos.D Curve		
e	<b>VTPN as follows (UDB)</b> - Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	each	1.00
	Incomer 63A 3P MCCB.25KA		
	Outgoing 63A TP MCBs -4 Nos.D Curve		

## BOQ OF INTERIOR RENOVATION FOR 2ND FLOOR, SBI, SECURITY SERVICE BRANCH , FORT .

f	<b>SPN as follows (ELDB)-</b> Wall mounted MCB double door DBs,fabricated from 16/18 G CRCA sheet steel with powder coated, and all fixing hardware. DB size should be suitable for Below mentioned MCB combination	Sets	2.00
	Incomer 20A DP RCCB- 1 No. 30ma		
	Outgoing 10/16A SP MCBs -8 Nos.C Curve		
	<b>TOTAL</b>		
<b>BOQ for Cabeling and wiring</b>			
<b>Sr. No</b>	<b>Description</b>	<b>Unit</b>	<b>Total Qty</b>
<b>B</b>	<b>POWER MAINS CABLES AND TERMINATIONS</b>		
1	SITC of Aluminum / Copper armoured XLPE , <b>FRLS Grade</b> PVC Insulated cables as per IS 1554 to be fixed to walls, ceilings, on trays with suitable GI clamp, cable tie at every 450 mm or to be laid in ready-made trench . Cable tagging shall be done at both the ends of cable. Arrow marking shall be done at panel end to show flow direction of current.		
a	3.5 Core 240 sq. mm. AYFY.	mtr	100.00
b	3.5 Core 35 sq. mm. AYFY.	mtr	-
c	4 Core 10 sq. mm. AYFY	mtr	-
d	4 Core 16 sq. mm. AYFY	mtr	160.00
e	4 Runs x 16 sq. mm. CU flex	mtr	40.00
f	4 Runs x 6 sq. mm. CU flex	mtr	40.00
g	5 Runs x 10 sq. mm. CU flex	mtr	-
h	3 Runs x 10 sq. mm. CU flex	mtr	
i	4 Core 2.5 sq. mm Cu YWY For AC	mtr	100.00
j	4 Core 16 sq. mm Cu YWY	mtr	140.00
k	3 Core 10 sq. mm Cu YWY	mtr	-
l	3 Core 6 sq mm Cu YWY For ELDB	Mtrs	100.00
m	4 Core 25 sq. mm. AYFY For MLTP Cable	mtr	-
2	SITC of cables with Heavy duty Alu/ Cu. Lugs & Brass cable glands. All Cable should be Double compression gland for 16 Sqmm and Above cables.The glands should be earthed along with brass clips for Earthing.Bimetallic washers shall be utilise for Aluminium cables for terminations with cu busbar.		
a	3.5 Core 240 sq. mm. AYFY.	nos	2.00
b	3.5 Core 35 sq. mm. AYFY.	nos	-
c	4 Core 10 sq. mm. AYFY	nos	-
d	4 Core 16 sq. mm. AYFY	nos	8.00
e	4 Runs x 16 sq. mm. CU flex	nos	4.00
f	4 Runs x 6 sq. mm. CU flex	nos	4.00
g	5 Runs x 10 sq. mm. CU flex	nos	4.00
h	3 Runs x 10 sq. mm. CU flex	nos	
i	4 Core 2.5 sq. mm Cu YWY For AC	nos	4.00
j	4 Core 16 sq. mm Cu YWY	nos	8.00
k	3 Core 10 sq. mm Cu YWY	nos	-
l	3 Core 6 sq mm Cu YWY For ELDB	nos	4.00
m	4 Core 25 sq. mm. AYFY For MLTP Cable	nos	-

	<b>TOTAL FOR POWER MAINS CABLES AND TERMINATIONS</b>		
<b>C</b>	<b>POINT WIRING</b>		
6	SITC of Light Point wiring through 20/25 mm <b>MS CONDUIT</b> with all required accessories with 2 Nos of 1.5 sqmm & 1 no of 1.5 sqmm ( for earth) PVC insulated Copper <b>FRLS wires</b> with Modular type switches complete with all accessories as detailed in the specifications. The switch boxes shall be flush mounted with partition /walls works or as directed by the consultants and shall be done in co-ordination with furniture works. The rate shall include circuit wiring From LDB to Switchboard Box & Switchboard Box to Switchboard . 2 Nos of 1.5 sqmm & 1 no of 1.5 sqmm ( for earth) Copper conductor PVC insulated FRLS Wire , conduit, back box, switch plate and modular type switch . Conduit shall be fixed on wall / trays or ceiling with spacers & saddles. The wires will be terminated in a separate connector before fixtures. All phase neutral and earthing wire shall be terminated in SB level. No direct looping of Neutral and earthing shall be done. All circuit/ Looping circuits shall have ferrule on both ends and shall have lugs on both end. Circuit and point wire shall have same colour code. Switch board have proper stickering showing DB and circuit number. wall chasing and back filling will be in scope of electrical contractor wherever required		
a	Primary light points (Switch control) <b>3 x 1.5 Sqmm Cu FRLS PVC insulated wires</b>	Nos	70.00
b	Secondary light points with <b>3 x 1.5 Sqmm FRLS wires PVC insulated wires</b> (Loop points after primary points)	Nos	70.00
c	DB MCB controlled primary point with <b>3 x 1.5 Sqmm Cu FRLS PVC insulated wire</b>	Nos	8.00
d	Secondary light points with <b>3 x 1.5 Sqmm Cu FRLS PVC insulated wire</b> (Loop points after MCB controlled primary points)	Nos	20.00
e	Wiring for PIR sensor from cabin SB to sensor and till first light point	Nos	-
f	Primary light points (Switch control) <b>3 x 1.5 Sqmm Cu FRLS PVC insulated wires for emergency lights</b>	Nos	20.00
g	Secondary light points with <b>3 x 1.5 Sqmm Cu FRLS PVC insulated wires .for emergency lights</b>	Nos	-

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h	DB MCB controlled primary point with <b>3 x 1.5 Sqmm Cu FRLS PVC insulated wires .for emergency lights</b>	Nos	-
i	Secondary light points with <b>3 x 1.5 Sqmm Cu FRLS PVC insulated wires .for emergency lights</b>	Nos	-
1	Supply, Installation , Testing & Commissioning of following Power Sockets mounted with specified switchgear inside the specified enclosure confirming to .The rate to include termination of incoming wires/cables with appropriate size of lugs & applicable PVC/Brass cable glands		
a	32Amps two Pin & Earth ,Single phase IP 44 PLUG and socket with 32 A 2P MCB and box for server rack(IEC 60309-1/60309-2) with 3cx 6 Sqmm CU flex FRLS wires in MS conduit. Approx length of wire per point - 15 mtrs	Nos	4.00
b	Supply & Fixing of RG 6 TV socket with Approx 35 Mtrs cable in MS conduit including all accessories	Nos	4.00
2	SITC of modular type shuttered power sockets, data-outlets, telephone sockets complete with chrome-plated mounting box. The switch box shall be fixed in partition works. The rate shall be inclusive of connecting of switches / sockets. . Proper care to be taken while passing wires from bends, wire entry from floor JB to modular, bends in module. Contractor shall use PVC Sleeves to avoid damage of wire. All sockets shall have label with DB and circuit number. All main circuits shall have numbered ferrules. All circuit and looping wire color code shall be same.		
a	UPS POWER Primary point - 3 Nos of sockets 6A/13A installed below table and controlled by 1nos 15A switch below table - Double cover type face plate with 3cx 2.5 sqmm cu flex FRLS wires inside already laid raceways and Pipes. From DB to first point on tables	set	45.00
b	UPS POWER Secondary point - 3 Nos of sockets 6A/13A installed below table and controlled by 1nos 15A switch below table - Double cover type face plate with 3cx 2.5 sqmm cu flex FRLS wires inside already laid raceways and Pipes. From first point on tables to next point. Max four tables shall be looped in one circuit	set	95.00
c	RAW POWER Primary point - 1No. of 6A Switch & socket combine for without back box for workstation raw power.Double cover type face plate with 3cx 2.5 sqmm cu flex FRLS wires inside already laid raceways and Pipes. From DB to first point on tables	Set	45.00

BOQ OF INTERIOR RENOVATION FOR 2ND FLOOR, SBI, SECURITY SERVICE BRANCH , FORT .

d	RAW POWER SECONDARY point - 1No. of 6A Switch & socket combine for without back box for workstation raw power.Double cover type face plate with 3cx 2.5 sqmm cu flex FRLS wires inside already laid raceways and Pipes.From first point on tables to next point. Max six tables shall be looped in one circuit	set	95.00
e	RAW POWER Primary point -1 Nos of sockets 6A 3pin controlled by 6A switch Power Switch Socket combine with indicator Complete with G.I. mounting box for VAV Boxes, FCU , AV points, Low voltage equipments. In 20/25 MM MS conduit and 3 x 2.5sqmm CU FRLS wire from DB to 1st point	set	15.00
f	RAW POWER secondary point -1 Nos of sockets 6A 3pin controlled by 6A switch Power Switch Socket combine with indicator Complete with G.I. mounting box for VAV Boxes, FCU , AV points, Low voltage equipments. In 20/25 MM MS conduit and 3 x 2.5sqmm CU FRLS wire from 1st point to next point	set	25.00
g	RAW POWER Primary point -1 Nos of sockets 16A 3pin controlled by 16A switch Power Switch Socket combine with indicator complete with G.I. mounting box for Convenience sockets. Double cover type face plate In 20/25 MM MS conduit and 3 x 2.5sqmm CU FRLS wire from DB to 1st point	set	19.00
h	RAW POWER secondary point -1 Nos of sockets 16A 3pin controlled by 16A switch Power Switch Socket combine with indicator complete with G.I. mounting box for Convenience sockets. Double cover type face plate In 20/25 MM MS conduit and 3 x 2.5sqmm CU FRLS wire from 1st point to next point	set	25.00
I	METAL Back boxes required for data voice outlets boxes on wall or partitions	Nos	20.00
	<b>TOTAL FOR POINT WIRING</b>		
<b>D</b>	<b>FLOOR RACEWAY AND FLOOR JUNCTION BOXES</b>		
1	Floor preparation for raceway laying-Raceways / conduits shall be fixed to the flooring with GI clamps for finished levels as per the site conditions or through partitions with all accessories. The rate shall include preparation of trenches upto 450 mm wide by carefully removing the floor tiles / IPS & malwa below the tiles for laying Raceways/conduits . The depth of the trenches shall be at least 2 inches from the finished floor level or upto RCC of the slab. The rate shall also include the activity of clearing the debris generated at designated area by PM . <b>(Breaking and back Filling the same with PCC 1:2:3 with metal wiremesh not part of electrical contractor scope. Contractor shall take prior permission before execution of this work wherever required)</b>	RMT	-

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	Supply and laying Raceways / Conduits Raceways / conduits shall be fixed to the flooring with GI clamps for finished levels as per the site conditions or through partitions with all accessories. Raceway and JB shall be closed properly with plastic bags to avoid entering of cement mortar. All JB and raceway to be earthed at each contact point and at DB level with 16 SWG cu wire.		
a	100 mm x 38 mm ALU floor raceway , 2 mm thick with cover	mtr	600.00
b	25mm pvc conduits of wall thickness of 2 mm thick	mtr	100.00
c	floor breaking for raceway - size of trench 400 x 50 mm - removal of debris included	Mtrs	155.00
2	<b>Junction Boxes</b>		
a	Supplying and fixing <b>350 mm x 350 mm x55mm deep GI finish.</b> The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With stainless steel Plate. The knock out shall be removed at site as per requirements. Junction boxes shall be leveled at the time of installation. Junctions boxes shall be earthed with raceway with 18 Swg cu wire. Junction boxes and raceway shall be covered with plastic bags during back filling of concrete work.	Nos	10.00
b	Supplying and fixing <b>250 mm x 250 mm x55mm deep GI finish.</b> The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With stainless steel Plate. The knock out shall be removed at site as per requirements. Junction boxes shall be leveled at the time of installation. Junctions boxes shall be earthed with raceway with 18 Swg cu wire. Junction boxes and raceway shall be covered with plastic bags during back filling of concrete work.	Nos	8.00
c	Supplying and fixing <b>150 mm x 150 mm x55mm deep GI finish.</b> The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With stainless steel Plate. The knock out shall be removed at site as per requirements. Junction boxes shall be leveled at the time of installation. Junctions boxes shall be earthed with raceway with 18 Swg cu wire. Junction boxes and raceway shall be covered with plastic bags during back filling of concrete work.	Nos	65.00
	<b>TOTAL FOR FLOOR RACEWAY AND FLOOR JUNCTION BOXES</b>		
<b>E</b>	<b>CABLE TRAY</b>		

BOQ OF INTERIOR RENOVATION FOR 2ND FLOOR, SBI, SECURITY SERVICE BRANCH , FORT .

	SITC of 1.6 mm thick GI Perforated type cable Trays of Asian /Profab / Equivalent make The cable tray shall be fixed to the ceiling/ wall with suitable size of GI clamp, appropriate dia threaded rod & 35mmx2mm thick GI slotted 'C' channel Patti OR suitable size of MS angle support (MS support to be painted with two coats of red oxide & two coats of enamelled paint ).Supports to be provided at an interval of 800mm or lesser depending upon the location. <b>The rate shall include the cost of GripeSupports/ GI rods and MS angle support .</b>		
a	Cable Tray=100mm wide x50 mm height. IBMS works, DATA works, Electrical works in passage-2 mm thickness		-
b	Cable Tray=150 mm wide x50 mm height. IBMS works, DATA works, Electrical works in passage 2 mm thickness	mtrs	60.00
c	Cable Tray=200 mm wide x50 mm height. IBMS works, DATA works, Electrical works in passage 2 mm thickness	mtr	-
d	Cable Tray=300 mm wide x50 mm height. Electrical works, IBMS , data inside shaft works 2 mm thickness	mtr	60.00
e	Cable Tray=450 mm wide x50 mm height. Electrical works 2 mm thickness	mtr	-
f	Cable Tray=600 mm wide x75mm height. Electrical works 2 mm thickness	mtr	-
g	SITC of Powder coated 100mmx 75mm GI Trunking 2mm thick with cover to be used for running the wires/cables <b>near Db and DB drop.</b> Trunking to be fixied on Wall or flooring with suitable size of GI clamp, appropriate dia threaded rod & 35mmx2mm thick GI slotted 'C' channel Patti OR suitable size of MS angle support (MS support to be painted with two coats of red oxide & two coats of enamelled paint ). The rate shall include the cost of Supports . Trunking should have knock outs on both side at each 600mm distance as per site requirents	mtr	20.00
h	Fabrication in MS .The rate shall include the cost for painting with 3 Coats of enameled / metal applied after rust treatment of two coats of red oxide. The colour of the paint & cable trays shall be as approved by Architect.	Kgs	60.00



BOQ OF INTERIOR RENOVATION FOR 2ND FLOOR, SBI, SECURITY SERVICE BRANCH , FORT .

	Supply & installations of MS Powder coated sheet steel, Raceways in red or blue in colour made of 2.0mm thk, with removable top cover & knock outs of 25dia mm at every 300mm for entry/exits of cables , complete with couplers, bends etc. The raceway shall be fixed to the flooring with 40 x 40 mm x 4mm GI angle bracket with required hard ware such as anchor fasteners threaded rods, clamps etc.This management should be sufficient enough to cater the fixing & removal force of 32amps IP 44 socket. Additional support for each socket to be considered in the rate.. The brackets/Straps shall be spaced at 500mm apart & on either sides of bends.(TO BE USED ONLY FOR THE NETWORK ROOM & HUB Room & Server room)		
i	300mm wide x 40 mm ht 2 MM Thick with cover	mtr	5.00
j	200mm wide x 40 mm ht 2 MM Thick with cover	mtr	-
k	100mm wide x 50mm ht 2 MM Thick with cover	mtr	5.00
l	300 x 75 MM GI perforated tray for data cable below false floor	Mtrs	-
	<b>TOTAL FOR CABLE TRAY</b>		
<b>F</b>	<b>EARTHING</b>		
1	50 MM, 3M long dia GI Rod, Chemical earthing system with Chamber cover with civil brick works, test link with 4 nos SS nutbolts , and proper marking on earthing cover shall be provided for body earthing	Nos	-
2	SITC of main earth stations comprising of 600 * 600 * 6 mm GI plate buried 4.0 meters below ground with adequate coal & salt covering as per IS standards3043, Including 10 mtrs long GI pipe with funnel, Chamber cover with civil brick works, test link with 4 nos SS nutbolts , and proper marking on earthing cover shall be provided for body earthing	Nos	-
3	SITC of of <b>50mm x 6mm thick G.I.</b> earthing strip from earthing chamber to the main power panel and it's termination. The portion of the strip under ground shall be laid to a depth of at least 75cms. The portion on building wall upto the main panel shall be laid on cable trays or to be saddled to the wall as per the site conditions. GI flats tobe painted with two coats of enamelled paint	mtrs	-
4	SITC of <b>25 mm x 5 mm thick G.I.</b> earthing strip from the GI earthing grid inside the panel room to the body earth connections of the individual panels.GI flats tobe painted with two coats of enamelled paint	mtr	100.00
5	SITC of <b>25mm x 3 mm thick G.I.</b> earthing strip from the GI earthing grid inside the panel room to the body earth connections of the individual panels.GI flats tobe painted with two coats of enamelled paint	mtrs	100.00

**BOQ OF INTERIOR RENOVATION FOR 2ND FLOOR, SBI, SECURITY SERVICE BRANCH , FORT .**

6	SITC of 50 mm x 3 mm thick Copper earthing strip for interconnecting the earth pits. The portion of the strip under ground shall be laid to a depth of at least 600mm with PVC Sleeve. All joints shall have 2 nos nutbolts .	mtr	-
7	SITC of 25 mm x 3 mm thick Copper earthing strip for interconnecting the earth pits. The portion of the strip under ground shall be laid to a depth of at least 600mm with PVC Sleeve. All joints shall have 2 nos nutbolts .	mtr	30.00
8	SITC of Following sizes of Earthing bare conductor wires with clamps,/saddles /brass clips etc.		
a	8 SWG GI Wire for AC earthing and outdooe USE	mtrs	500.00
b	12 SWG CU Wire for DB earthing and indoor USE	mtrs	300.00
9	SITC of 1Cx 70 sq mm COPPER flexible cable for earth in PVC HMS Conduit inside the building premises PDU.	mtrs	-
10	SITC of 1Cx 25 sq mm COPPER flexible cable for earth in PVC HMS Conduit inside the building premises.	mtrs	-
11	SITC of 1Cx 16 sq mm COPPER flexible cable for earth in PVC HMS Conduit inside the building premises.	mtrs	50.00
12	SITC of 1Cx 10 sq mm COPPER flexible cable for earth in PVC HMS Conduit for UPS BODY EARTH	mtrs	50.00
13	SITC of 1Cx 6 sq mm COPPER flexible cable for earth along with the supply cable in 20mm PVC HMS Conduit .The rate shall include GI Conduit	mtrs	60.00
14	SITC of 1C x 2.5 sq mm COPPER flexible cable with for earth along with brass clips for termination on MODULAR WORKSTATION METALIC BODY.	mtrs	60.00
15	Supply,installation,testing & commissioning of GI earth bus of size 50 mm x6mmx 600 mm ( WxBxL) mounted on insulators , Driectly on wall or channel or flooring as directed . Bus should have 10 nos of holes with GI nut bolts of suitable size	No	1.00
16	Supply,installation,testing & commissioning of copper earth bus of size 25 mm x 3 mmx 600 mm ( WxBxL) mounted on insulators ,in suitable size MS Powder Coated box ( Acrylic to be provided on front cover to view termination ). Bus should have 10 nos of holes with brass nut bolts of suitable size	No	1.00
	Total for earthing works		
<b>G</b>	<b>MISCELLANEOUS WORKS</b>		

BOQ OF INTERIOR RENOVATION FOR 2ND FLOOR, SBI, SECURITY SERVICE BRANCH , FORT .

1	This item is inclusive of making necessary temporary arrangement lighting with fixtures to attain a minimum 200 Lux lighting level for area of 7500 <b>Sqft</b> Floor & provision of substantial number of power points for welders ,carpenters, electricians & others . The supply should be routed through MCB DB having ELCB of suitable rating. Cost of energy meter at main incoming to be considered (if required by client).Contractor to provide multiple DBs & services being multiple services. This items includes cost of supply & installations of main DB with energy meter,Small DBs at each levels, Its cabling,Temp wiring for Lighting fixtures & Power sockets. Lighting Fixtures, Power sockets ,required hardware & associated material.Also vendor shall maintain the same till completion of project. All temp light material shall be removed and taken back by electrical contractor.	Job	1.00
2	Supply & Installation of Metallic caution/Danger boards of voltage grade as given below with red colour base & white painted in English, Hindi & local language. <u>Grade Caution Boards.</u>		
	a. 415 V	No	1.00
3	Supply & Installation of rubber mats of 1000 mm. width & thickness of 10mm 1.1 KV Voltage grade.	Mtrs	2.00
4	Supply & Installation of shock treatment chart in English & local language. Shock treatment chart to be printed & framed.	No	1.00
5	Supply & Installation of first aid kit with wall mounting wooden stand.	No	1.00
	TOTAL FOR MISCELLANEOUS WORKS		
	<b>TOTAL</b>		
<b>Light fittings</b>			
<b>Sr. No</b>	<b>Description</b>	<b>Unit</b>	<b>Total Qty</b>
<b>H</b>	<b>LIGHT FITTINGS &amp; FIXTURES</b>		
A	Supply, Installation, Testing & Commissioning of the following fixtures complete with all tubes, lamps, HF electronic ballast with THD less than 10%, , fixing arrangements ball and sockets and suspension conduits connections, earthing complete with all hardware, clamps, etc as per specification & as per architects approved colour temperature. All fittings shall be suitable for dimming. Vendor shall take approval on each fittings before delivering to site		

## BOQ OF INTERIOR RENOVATION FOR 2ND FLOOR, SBI, SECURITY SERVICE BRANCH , FORT .

1	Supply, Installation, Testing & Commissioning of 70 x 1200 mm liner light , 40 W ( system wattage )LED light suspended type , with full diffuser 84% transerancy 6000k color temp and CRI >80%. The fitting shall be fixed with chain ,screws etc. The fitting shall be recessed mounted suitable for gypsum Ceiling , with full acrylic diffuser and delivered lumens 95 lumen> per watts , The rate shall include connection with 3 core 1.5 sqmm. flexible copper cable with Flexible Conduit. The brief specification of Fixture is as under : LED chip used. cost to include linking metal strips, wires, connectrors, and hardware material. Vendor shall order light fitting in each row is per site requirment( light shall give avg 300- 350 lux on workstation)- Gear suspension wire included in cost with level adjustment studs	Nos	35
2	Supply, Installation, Testing & Commissioning of 70 x 2400 mm liner light , 40 W ( system wattage )LED light suspended type , with full diffuser 84% transerancy 6000k color temp and CRI >80%. The fitting shall be fixed with chain ,screws etc. The fitting shall be recessed mounted suitable for gypsum Ceiling , with full acrylic diffuser and delivered lumens 95 lumen> per watts , The rate shall include connection with 3 core 1.5 sqmm. flexible copper cable with Flexible Conduit. The brief specification of Fixture is as under : LED chip used. cost to include linking metal strips, wires, connectrors, and hardware material. Vendor shall order light fitting in each row is per site requirment( light shall give avg 300- 350 lux on workstation)- Gear suspension wire included in cost with level adjustment studs	Nos	9
3	Supply, Installation, Testing & Commissioning 15 w LED down light with heat sink on backside surface mounted lights . with full diffuser 84% transerancy 6000k color temp and CRI >80%. The fitting shall be fixed with chain ,screws etc.	Nos	35
3	Supply, Installation, Testing & Commissioning 30 w LED circular lights with 1200mm dia for meeting room . with full diffuser 84% transerancy 6000k color temp and CRI >80%. The fitting shall be fixed with chain ,screws etc.	Nos	2
4	2 x 20W Box type recess / surface lights - movable lamps, eyebowl type	Nos	8
5	Supply Installation of EXIT Signage's with LED lamp with 90 minutes battery backup type & LED lamps as per NFPA standard. These signages may be mounted on wall OR can be fixed on ceiling with gear wire /recessed.	Nos	0

BOQ OF INTERIOR RENOVATION FOR 2ND FLOOR, SBI, SECURITY SERVICE BRANCH , FORT .

6	Supply, Installation, Testing & Commissioning 30w LED panel lights 1200mm length with heat sink on backside . For VP cabins	Nos	3
7	Supply, Installation, Testing & Commissioning 15 w LED surface light , suspended type , cylindrical in shape with heat sink on backside . For passage ( light shall give avg 150- 200 lux on workstation)	Nos	23
8	Day light sensor- with Timmer and adjustable lux level	Nos	0
9	Occupancy IR sensors with timmer control	Nos	0
10	5W per Meter LED strip lights with driver- cove light	Mtrs	60
11	LED Hangging lights with driver as directed by architect for conf room	Nos	1
13	20W LED tube light fittings , 1200mm	Nos	26
	Total Amount		
<b>I</b>	<b>PUBLIC ADDRESS SYSTEM</b>		
<b>Sr.</b>	<b>Description</b>	<b>Unit</b>	<b>Qty</b>
	<b>Note- Vendor shall include cost of integration with BMS, Access, PA and Elect system. All cables and hardware required for the same.</b>		
1	SITC of Dual Tone Ceiling mounted speaker with all requisite mouting accessories to mount the speaker on False Ceiling / True Ceiling.		
a	6 Watts speaker with metal box	Nos	25.00
b	Box type IP 66 12 watt speaker wallmounted type suitable for noisy area	Nos	-
2	SITC of 8 Zone Voice Alarm controller/ Preamplifier/ Mixer amplifier Auto fire evacuation message with USB MP3 AM FM CAT 6 connectivity for Mic with	Nos	-
3A	SITC of Power Amplifier 500 W	Nos	-
3B	SITC of Power Amplifier 200 W with inbuilt connectivity for 2 mic, usb cable, CD player <b>Make-Honeywell/ Bosch</b>		
4	SITC of Background music source CD/DVD/ AM-FM Tuner (BGM Source) . <b>Sony/ Phillips</b>		
5	SITC of Call Station With 6 Zone Selection Switch with wired mic with cat 6 cable connectivity	Nos	-
6	SITC of 6W Volume Control, with ON/OFF with auto over ride option	Nos	6.00

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7	1 nos. mics with cable direct from amplifire		
8	SITC of ISI Marked FRLS Armoured 2 core x 1.5 mm <sup>2</sup> , Multistandard Copper Conductor, PVC sheathed Cable with The cable shall be laid on surface with GI saddle-spacers every 0.3 meters. Complete with GI Junction Box, lugs, cable glands, cable tags and Ferruling. Avg 20 mtrs per point	points	25.00
<b>J</b>	<b>BUYBACK OF EXISTING SYSTEM</b>		
<b>Sr.No</b>	<b>Description</b>	<b>Unit</b>	<b>QTY</b>
	DEDUCTION OF EXISTING SYSTEM(ELECTRICAL,LIGHT FIXTURES)(	LS	(1.00)

<b>INTERIOR RENOVATION OF 2ND FLOOR, SBI, SECURITY</b>			
<b>SUMMARY OF BILL OF QUANTITIES</b>			
<b>SR. NO.</b>	<b>ITEM SUB-HEAD</b>		
<b>A</b>	<b>ELECTRICAL/DATA &amp; SECURITY SYSTEM</b>		
A	DB & PANELS	Rs.	
B	<b>POWER MAINS CABLES AND TERMINATIONS</b>	Rs.	
C	<b>POINT WIRING</b>	Rs.	
D	<b>FLOOR RACEWAY AND FLOOR JUNCTION BOXES</b>	Rs.	
E	<b>MISCELLANEOUS WORKS</b>	Rs.	
F	<b>EARTHING</b>	Rs.	
<b>G</b>	<b>MISCELLANEOUS WORKS</b>	Rs.	
H	<b>LIGHT FITTINGS &amp; FIXTURES</b>	Rs.	
I	<b>PUBLIC ADDRESS SYSTEM</b>	Rs.	
J	<b>BUYBACK OF EXISTING SYSTEM</b>	Rs.	
	<b>TOTAL EXCLUDING GST</b>	Rs.	
<b>Rupees in Words (Grand Total Amount) :</b>			

NOTE: TAXES AS PER ACTUALS