## STATE BANK OF INDIA LOCAL HEAD OFFICE, BHUBANESWAR

## **PRICE BID**

BILI	BILL OF QUANTITIES FOR INTERNAL ELECTRICAL WORKS FOR JATNI BRANCH (2071) AT BANK'S OWN PREMISES, RBO KHURDA.						
SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)		
	INTERNAL ELECTRICAL AND ALLIED EL	ECTRIC	CAL INSTALL	ATION WORKS			
	1. ELECTRICAL WIRING WORK						
	1.1 LIGHT & POINT WIRING WORK						
1.0	Concealed / ressessed / surface point etc. wiring using 1100V FRLS grade 3R (P+N+E) x 1.5 Sq.mm FRLS multi stranded copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through rigid FR/FRLS PVC conduits of 20mm Dia 1.5 mm thick laid concealed over false ceiling or in wall chases or on the ceiling in case of an open ceiling, with modular type switch plate, switches, GI concealed back box, etc. of legrand mylinc or equivalent make. S.I.T.C.( Supply Installation Testing And Commissioning) as directed by the Engineer-in-charge. (Each circuit shall not feed more than 8 points OR 800 watts as per following configuration.)						
	NOTE:- 1. Only FRLS wire shall be used; 2. The wires from ceiling junction to light points / light fixture shall be drawn in flexible PVC conduit with adptor & cover for junction box & crimp type lugs at both the ends alongwith necessary hardware & accessories, etc. as required; 4. Looping of Neutral / Earth wire between two seperate Primary / Full Points is strictly not allowed; 5. Looping of Neutral / Earth wire between two separate circuits on similar or other phase is strictly not allowed; 6. Ferulling / numbering / taggning to wires with circuit number & db name for all lighting & raw / ups power shall be strictly followed at both DB & switch board / switch socket boards ends.						
	Primary light/Ceiling fan/Exhaust fan/Call bell points including the cost of clip in type 6A Modular switch of legrand mylinc or equivalent make. S.I.T.C. as directed by the Engineer-in-charge.( 1 light controlled by one switch)		192.00				
1.2	Subsequent point ( Looped From Primary)	Nos	69.00				
1.3	Independent point using one 6 Amp Modular Switch and one 6 Amp, 2/3 pin Modular scoket mounted on a sutable size Box for wall fans.		25.00				
	6 Amp 2/3 pin Modular scoket with 6A Modular switch. ( on common switch Board.)	Nos.	20.00				
	Primary light points including the cost of clip in type 6A Modular switch of legrand mylinc or equivalent make & model as approved by project in charge. (1 light controlled by one switch UPS point)		12.00				
	TOTAL FOR LIGHT & POINT WIRING WORK			Rs.	-		

SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
	1.2 POWER POINT WIRING WORK				
1.0	Concealed power point using 16 Amp 3 Pin plug socket with 16 Amp Modular switch of legrand mylinc or equivalent make mounted on separate board using suitable size galvanized iron junction & switch boxes & clip in type modular type switch plate, etc. Supply taken from R.D.B./ Nearest L.D.B wiring using 1100V FRLS grade 3R (P+N+E) x 4 Sq.mm FRLS multi stranded copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through rigid FR/FRLS PVC conduits of 20mm Dia 1.5 mm thick. The point should not taken from any switch Board. S.I.T.C. as directed by the Engineer-in-charge.		15.00		
2.0	Concealed raw power point using 6 Amp, 2/3 Pin Modular plug socket with 6 Amp Modular switch of legrand mylinc or equivalent make on separate board using galvanized iron junction & switch boxes & clip in type modular type switch plate, switches, GI/PVC concealed back box, etc. Supply taken from Nearest L.D.B.wiring using 1100V FRLS grade 3R (P+N+E) x 2.5 Sq.mm FRLS multi stranded copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through rigid FR/FRLS PVC conduits of 20mm Dia 1.5 mm thick. Maximun 3 Points per Circuit for counter & Table		24.00		
3.0	Supply of all required materials and wiring to circuits/ submains with following number and sizes of PVC insulated 1100 volt grade multi standard <b>FRLS</b> copper wire run inside rigid <b>FR/FRLS</b> PVC conduits of 20mm Dia 1.5 mm thick of ISI mark as required and copper wire as earth continuity conductor and complete in all Recessed wiring with (3R X 2.5sqmm) copper wire		528.00		
3.1	(RDB to work station Points)				
	TOTAL FOR POWER POINT WIRING WORK			Rs.	-
	1.3 GENERATOR SET WIRING WORK				
1.0	Supply of 1100V grade Aluminium armoured cable having sector / circular shaped aluminium Conductor PVC insulated cores,				
1.1	Supply of 35 sq.mm 4 core XLPE Armoured Cables ISI Marked. ( Generator to main panel) (2 Run 1 stand by)	Mts	90.00		
2.0	LV / MV CABLE TRENCHING AND LAYING WITH SAND AND PROTECTIVE COVERING		00.00		
2.1	Laying of one number of PVC insulated and PVC seathed / XLPE power cable of 1.1 KV grade of size excedding 25 sq.mm but not exceeding 120 sq.mm direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.		90.00		
	GLANDING & TERMINATION :- Supply & Installation of end termination of above mentioned cables including compressed type brass glands, crimping type aluminium lugs, insulation tape etc. as required complete with earthing of glands in following sizes :-				
3.1	(35 sqmm) 4 core armored almunium cable	Nos	4.00		
	TOTAL FOR GENERATOR SET WIRING WORK			Rs.	-
	1.4 COMPUTER WIRING WORK				

SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
1.0	Supply and fixing of concealed UPS power points using 1 nos. of 16 Amp, Modular switches to be provided on table top + 4 nos. 6 Amp 3 Pin Modular socket below table top of legrand mylinc or equivalent make taken from Nearest C.D.B with sutable size galvanized iron/PVC junction & switch boxes & clip in type modular type switch plate, GI/PVC concealed back box, etc. Maximun 3 Points per Circuit for counter & Table. S.I.T.C. as directed by the Engineer-in-charge.		24.00		
2.0	Supply and fixing of concealed UPS power points using clip in modular type 5 No. of 6/16 amp socket points controlled by 2 No of 16 amp modular switch with indicator of legrand mylinc or equivalent make taken from Nearest C.D.B with galvanized iron junction & switch boxes & clip in type modular type switch plate, switches, GI concealed black box, etc The point should not from any switch Board S.I.T.C. as directed by the Engineer-in-charge.		3.00		

SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
3.0	Supply of all required materials and wiring to circuits/submains with following number and sizes of PVC insulated 1100V FRLS grade 3R (P+N+E) x folling size FRLS multi stranded copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through rigid FR/FRLS PVC conduits of 20mm Dia 1.5 mm thick ISI mark laid concealed over false ceiling or in wall chases or on the ceiling in case of an open ceiling including of as required and multy stranded copper wire of folling size as earth continuity conductor and complete in all respect including making good to all damages caused and as per the direction of Consultant and Engineer-in-charge.				
3.1	Concealed wiring with ( 3Rx2.5sqmm ) copper wire ( C.D.B. to Computer Points )		528.00		
3.2	Concealed wiring with (3Rx4.0 sqmm)copper wire (U.P.S. OUTPUT to C.D.B.)	Mts	74.00		
	TOTAL FOR COMPUTER WIRING WORK			Rs.	-
	1.5 A.C. WIRING WORK				
1.0	Supply and Installation of all required materials and wiring to circuits/ submains with following number and sizes of PVC insulated 1100 volt grade standard FRLS copper wire run through rigid FR/FRLS PVC conduits of 20mm/32mm Dia 1.5 mm thick ISI mark as required and copper wire as earth continuity conductor and complete in all respect including making good to all damages caused and as per the direction of Consultant and Engineer-in-charge.				
1.1	Concealed/Surface wiring with 6 sq. mm 3 Core, PVC Insulated Copper Cable ( From ACDB/ Main supply to Cassette A.C outdoor and Split AC)	Mts.	180.00		
	TOTAL FOR AC WIRING WORK			Rs.	-
	1.7 CABLE, MAINS & SUBMAINS.				
1.0	Supply of all required materials and wiring to circuits/ submains with following number and sizes of PVC insulated 1100 volt grade multi standard <b>FRLS</b> copper wire run inside rigid <b>FR/FRLS</b> PVC conduits of 20mm Dia 1.5 mm thick of ISI mark as required and copper wire as earth continuity conductor and complete in all respect including making good to all damages caused and as per the direction of Consultant and Engineer-incharge.				
1.1	Recessed wiring with (3Rx2.5sqmm) copper wire (LDB/RDB to Common Switch board/ Points)		225.00		
1.2	Recessed wiring with (3Rx4.0sqmm) copper wire (LDB/RDB to Common Switch board and Points)		240.00		
1.3	Recessed wiring with (4R x 6.0sqmm + 1R x 6.0sqmm ) copper wire (Main Panel to Light DB/ Raw DB/ UPS Input DB)		200.00		
2.0	S & I of 1100V grade Aluminium armoured cable having sector / circular shaped aluminium conductor PVC insulated cores, laid up, PVC tape wrapped inner sheathed, GI strip / wire armoured and overall extruded PVC sheathed confirming to IS: 1554, laid on wall or ceiling using GI clamps and spacers as per route shown at site and further as directed by Bank / Architect in the following sizes.				
2.1	Surface wiring with 70sqmm, 4 core, XLPE armored almunium cable. ( Main Panel Input) (2 Run 1 stand by )		90.00		

SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
	Surface wiring with 25sqmm, 4 core, XLPE armored almunium cable. ( Main Panel to VTPN ACDB)	Mts	40.00		
3.0	LV / MV CABLE TRENCHING AND LAYING WITH SAND AND PROTECTIVE COVERING				
3.1	Laying of one number of PVC insulated and PVC seathed / XLPE power cable of 1.1 KV grade of size exceeding 25 sq.mm but not exceeding 120 sq.mm direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.		90.00		
3.2	Laying of one number of PVC insulated and PVC seathed / XLPE power cable of 1.1 KV grade of size up to 25 sq.mm direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc. as required.		40.00		
4.0	GLANDING & TERMINATION :- Supply & Installation of end termination of above mentioned cables including compressed type brass glands, crimping type aluminium lugs, insulation tape etc. as required complete with earthing of glands in following sizes:-				
	70sqmm, 4 core armored XLPE almunium cable	Nos	4.00		
4.2	25sqmm, 4 core armored XLPE almunium cable	Nos	2.00	_	
	TOTAL FOR CABLE, MAINS & SUBMAINS.			Rs.	-

SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
1101	2.PANEL BOARD & DISTRIBUTION BOARDS.				
1.0	Main Panel Board	Set	1.00		
	Supply, delivery, installation, testing, commissioning,		1100		
	of indoor wall mounted, type distribution boards made				
	out of 2 mm thk. CR sheet metal painted with 2 coats of				
	enamel paint compartment arrangement for each equipment & bus bar chamber on the top of the panel				
	running horizontal through, vermin proof having				
	provision cable by conduit entry, earthling stud as per				
	specification mentioned below duly factory wired				
	confirming to the relevant ISS & as per special condition of contract, making good the damages M.S.				
	Cubical type Panel board should have hinged door at				
	the front. The panel shall be provided with all				
	accessories & following arrangements complete in all				
	respect & direction of EIC (before fabrication of panel board drawing is to be approved by Engineer-in-charge				
	). The Contractor should Submit The Testing Cartificate				
	to the Client after Installation. ( <i>Note: The panel shall be</i>				
	fabricated by the CPRI approved vendor only.)				
	Incoming :-				
	1No 200A- 36kA - 4POLE -MCCB.				
	With Thermal Magnetic Trip unit with adjustable O/L and				
	S/C, Adjustable Overload from 80% to 100 % , Neutral				
	Protection for all 4P breakers as standard (option of				
	OFF / 50% / 100% Neutral setting) 1 set of 200A TPN copper bus bar (20mm X 7mm)				
	, , , , , , , , , , , , , , , , , , , ,				
	1 No 100A, 4-POLE Change over 1 set of 100 A TPN copper bus bar (25 X 5 mm)				
	Out going :-				
	1 Nos 36 kA TPN SPD				
	2 Nos 63A, 4P MCB for L.D.Bs/R.D.Bs				
	2 Nos 63A, 4P MCB for Spare.				
	2 Nos 63A, 4P MCB, for U.P.S.				
	2 Nos 32A, 4P MCB for ATM.				
	1 Nos 125A, 25kA, 4P MCCB for A.C.D.B.				
	2 Nos 32A, 4P MCB, Spare.				
	1 Nos 25A RCCB 30mAwith digital timer for Glow sign				
<u> </u>	board & Outer Lighting				
<u> </u>	1 Nos 25 A DP MCB Spare				
	All MCB must be class C Type  1No. Digital Volt meter with Volt meter selector switch &				
	Control fuse.				
	1No. Digital Ammeter with Ammeter selector switch &				
	CT.				
	Cable tray.				
	Termination bar for each out put				
<u></u>	6 Nos Phase indicator L.E.D. lamps				
2.0	Supplying & Fixing Main Switch Disconnecter Fuse Unit TPN - 160A HRC Fuse Unit - SS Enclosure		1.00		
	Supply and installation of SPN, Double Door, Metal type				
	Distribution Board. (hager IP43, legrand make Ekinox3 model or equivalent make as approved by Engineer-in-				
	charge), surface / flush mounted on wall, interconnected				
3.0	wiring complete with earthing lugs, including DB wiring,				
	termination of circuits with ping type copper lugs, blank				
	plates, etc. housing following switchgears :				
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SL.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
NO.					
3.1	L.D.B (Light Distribution Board)	Set	3.00		
	12 way SPN DB				
	Incoming :- 1 No. 32A DP MCB				
	Outgoing :- 10 No. 6-10 A SP MCB				
	All MCB must be 'C' Series				
3.2	C.D.B (Computer Distribution Board)	SET	3.00		
	12 way SPN DB				
	Incoming :- 1 No. 32A DP-10 kA - MCB				
	Outgoing :- 10 No. 6-10 A SP-10 kA - MCB				
	All MCB must be class C Type				
3.3	U.P.S Incoming DB	SET	1.00		
	8 way SPN DB				
	40 Amp 4P-10 kA - MCB – 2 nos (1 main & 1 spare).				
	All MCB must be class C Type				
3.4	U.P.S Outgoing DB	SET	1.00		
	8 way SPN DB				
	Incoming :- 63 Amp DP-10 kA - MCB – 1 No				
	Out going :- 3 No. 25 A DP-10 kA - MCB				
	All MCB must be class C Type				
	Supply and installation of VTPN, Double Door, Metal				
	type (hager IP43, legrand make Ekinox3_model or				
	equivalent make as approved by Architect / Engineer in				
4.0	charge.), surface / flush mounted on wall, interconnected wiring complete with earthing lugs,				
	including DB wiring, termination of circuits with ping type				
	copper lugs, blank plates, etc. housing following				
	switchgears:				
4.1	A.C.D.B. ( AC Distribution Board)	Set	1.00		
	6 way VTPN DB				
	Incoming :- 1 No. 125A 4P MCB-10kA				
	Out going :- 10 No. 32A DP -10 kA - MCB				
	All MCB must be class C Type				
4.2	AC point	Set	10.00		
	DP Metal Encloser				
	1 No. 25A - 230V - DP MCB.				
4.3	Master Control (for light/fan/misc.)	Set	1.00		
	4 way SPN DB				
	1 No. 100A -415V-4P Isolator.				
	TOTAL FOR PANEL BOARD & DISTRIBUTION BOARD	S.		Rs.	-

SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
	3. FITTINGS OF FIXTURES				
	(NOTE: ANY OF FIXTURES AND FITINGS SHALL BE RECONFIRMED WITH THE ARCHITECTS / CONSULANTS BEFORE ORDERING THEM.				
	Supply, Installation, testing and commissioning of lighting fixtures with lamps and LED driver as per the details below including necessary hardware such as clamps, nuts, bolts, nails, screws and suspension rods as required for fixing the fixtures in position as directed by architect / consultant / client including supply and fixing flexible wires from holder to fixtures hardwares etc.  Note:- All Light Fixtures, Fans, Exhaust Fans & other fittings samples shall be approved by the Client / Architect / Consultant before placing order to the Light Fixture Vendor / Supplier makes are specified. Client / Architect / Consultant reserves right to approve / select final Light Fixtures from any make as required.				
	Supply, installation and testing of recess LED lights fittings (34 - 36W) of square type (2'-0"x2'-0") with all accessories complete of Wipro LM29-451-57GRD or equivalent Make as required as per direction of Engineer in charge.		47.00		
	Supply,installation and testing of recess LED lights fittings (2/3W) of spot type with all accessories complete of Crompton LSCRM-2W-CDL/NW/WW Equivalent Make as required as per direction of Engineer in charge.		30.00		
	Supply,installation and testing of surface mounted LED lights fittings (15W) of (Round / Squre Type) with all accessories complete of Crompton LCDSPLN-R-12-CDL Equivalent Make as required as per direction of Engineer in charge.		22.00		
4.0	Providing and fitting of 450 mm sweep High Flo Wall fan of Crompton Greaves Champ Air or Equivalent Make as required as per direction of Engineer in charge.		17.00		
5.0	Providing and fitting of 225 mm sweep heavy duty Exhust fan of Orient/ Crompton Equivalent Make as required including fixing the louvers/ shutters complete with frame for an exhaust fan as per direction of Engineer in charge.		7.00		
	Providing and fitting of 380 mm sweep heavy duty Exhust fan of Orient/ Crompton Equivalent Make as required including fixing the louvers/ shutters complete with frame for an exhaust fan as per direction of Engineer in charge.		2.00		
	Providing and fitting of 1200 mm sweep BLDC ceiling fan of Orient/ Crompton High Speed or Equivalent Make as required as per direction of Engineer in charge.		30.00		
8.0	Providing and fitting of Modular type step fan regulator of approved make .		30.00		
9.0	Supply & fixing of fan-hook,by cutting roof slab and welding 10 mm dia.Fan hook with main re-Inforcemerit of roof slab complete in all respect.		30.00		

SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
	Supplying , fixing of 1x20W LED Batten lights (Aluminimum body) fittings with aall accessories complete of Philips BN021C LED20S PSU CDL/NW GR Equivalent Make as required as per direction of Engineer in charge.		41.00		
12.0	Supplying, fixing of 1x36W LED Batten lights (Aluminimum body) fittings with aall accessories complete of Philips BN021C LED20S PSU CDL/NW GR Equivalent Make as required as per direction of Engineer in charge.		12.00		
13.0	Providing ,Installation and testing of twin Batten LED lights fittings (2x20W) of Philips MAS LED tube 1200mm 18W865 T8 I Equivalent Make with all accessories (including Down rod & Mounting rail of Philips TMC 501 P 2xT-LED 22W P3242 Equivalent Make complete as required as per direction of Engineer in charge.		20.00		
14.0	Supply,installation and testing of LED Bulb fittings (1x12wt) with angle holder of Philips/ Crompton/ Syska or equivelent as required as per direction of Engineer in charge.		12.00		
15.0	Providing and fitting of call bell Remote Controlled with Battery of approved make.	Nos.	3.00		
16.0	Providing and fitting of LED Strip Light of Crompton LSTGL20-CDL/LSTGL20-WW/LSTGL20-BLU Equivalent Make as required as per direction of Engineer in charge. (1 No each is 5 Mtr Length)		60.00		
	TOTAL FOR FITTINGS OF FIXTURES			Rs.	-
	4. EARTHING				
		Niss	4.00		
1.0	Supplying and fixing Earthing with G.I. earth plate of size 600 mm X 600 mm X 6.36 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.		4.00		
2.0	Supplying and fixing Earthing with G.I. earth plate of size 600 mm X 600 mm X 6.36 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of	SET	1.00		
1.0	Supplying and fixing Earthing with G.I. earth plate of size 600 mm X 600 mm X 6.36 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and fixing of Earthing with copper earth plate of size 600 mm X 600 mm X 3.18 mm thick including accessories, and providing masonry enclosurewith cover plate having locking arrangement and watering pipeof 2.7 metre long etc. with alternative layer of 150mm thick	SET			
2.0	Supplying and fixing Earthing with G.I. earth plate of size 600 mm X 600 mm X 6.36 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and fixing of Earthing with copper earth plate of size 600 mm X 600 mm X 3.18 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipeof 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and laying 25 mm X 5 mm G.I. strip in 40 mm dia G.I.pipe from earth electrode including connection with G.I. nut, bolt, spring, washer excavation and re-	SET	1.00		
2.0	Supplying and fixing Earthing with G.I. earth plate of size 600 mm X 600 mm X 6.36 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and fixing of Earthing with copper earth plate of size 600 mm X 600 mm X 3.18 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipeof 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and laying 25 mm X 5 mm G.I. strip in 40 mm dia G.I.pipe from earth electrode including connection with G.I. nut,bolt, spring, washer excavation and refilling etc. as required.  Supplying and laying 25 mm X 5 mm G.I. strip on	SET Mts	1.00		
2.0 3.0 4.0 5.0	Supplying and fixing Earthing with G.I. earth plate of size 600 mm X 600 mm X 6.36 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and fixing of Earthing with copper earth plate of size 600 mm X 600 mm X 3.18 mm thick including accessories, and providing masonry enclosurewith cover plate having locking arrangement and watering pipeof 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and laying 25 mm X 5 mm G.I. strip in 40 mm dia G.I.pipe from earth electrode including connection with G.I. nut,bolt, spring, washer excavation and refilling etc. as required.  Supplying and laying 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.	Mts Mts Mts	12.00		
2.0 3.0 4.0 5.0	Supplying and fixing Earthing with G.I. earth plate of size 600 mm X 600 mm X 6.36 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and fixing of Earthing with copper earth plate of size 600 mm X 600 mm X 3.18 mm thick including accessories, and providing masonry enclosurewith cover plate having locking arrangement and watering pipeof 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and laying 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut,bolt, spring, washer excavation and refilling etc. as required.  Supplying and laying 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.  Supplying and laying 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.  Supplying and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with	Mts Mts Mts	1.00 12.00 100.00 50.00		
2.0 3.0 4.0 5.0	Supplying and fixing Earthing with G.I. earth plate of size 600 mm X 600 mm X 6.36 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipe of 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and fixing of Earthing with copper earth plate of size 600 mm X 600 mm X 3.18 mm thick including accessories, and providing masonry enclosure with cover plate having locking arrangement and watering pipeof 2.7 metre long etc. with alternative layer of 150mm thick charcoal/ coke and salt as required.  Supplying and laying 25 mm X 5 mm G.I. strip in 40 mm dia G.I. pipe from earth electrode including connection with G.I. nut,bolt, spring, washer excavation and refilling etc. as required.  Supplying and laying 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.  Supplying and laying 25 mm X 5 mm G.I. strip on surface or in recess for connections etc. as required.  Supplying and laying earth connection from earth electrode with 4.00 mm dia copper wire in 15 mm dia G.I. pipe from earth electrode including connection with copper thimble excavation and re-filling as required.  Supplying and laying 4.00 mm dia copper wire on	Mts Mts Mts	1.00 12.00 100.00 50.00 6.00	Rs.	

	DECODIDATION OF ITEMS		OHANITITY/	DATE (D.)	AMOUNT/D
SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
	Supply of all required materials and laying of CAT-6 LAN wairing from server to Hub and Hub to computer I/O Points of approved brand ((D-Link/Digilink/Amps) laid through rigid FR/FRLS PVC conduits of 20mm Dia 1.5 mm thick of ISI mark duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. completeas in all respect including making good to all damages caused and as per the direction of Consultant and Engineer-in-charge.		1,050.00		
1.0	Supply, fixing of RJ 45 information outlet (I/O) Dual- port with safey sutter of D-link make with front modular cover plate, flush box metallic or PVC for trucking system etc.		6.00		
2.0	Supply, fixing of RJ 45 information outlet (I/O) Single- port with safey sutter of D-link make with front modular cover plate, flush box metallic or PVC for trucking system etc.		18.00		
3.0	Supply & fixing 9" 9 U wall mounted modem rack with power distribution box, cable manager, cantilever self, fan & mounting kit etc all complete. ( Make Valrack, Comrack, HCL)	Set	2.00		
4.0	Supply & fixing 24 port PATCH PANEL(Make D-LINK, AMP, HCL)	No	2.00		
5.0	Supply & fixing 1Mtr long E-CAT 6 PATCH Cord (Make D-LINK,AMPor Equivalent Make)		30.00		
6.0	Supply & fixing 2Mtr long E-CAT 6 PATCH Cord (Make D-LINK,AMP or Equivalent Make)	No.	30.00		
	TOTAL DATA / TELEPHONE WIRING			Rs.	-

SL.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
NO.	6. TELEPHONE SYSTEM				
1.0	Supply of all required materials & laying 2 pairs 0.51 cross section telephone wires of ITI approved laid through rigid FR/FRLS PVC conduits of 20mm Dia 1.5 mm thick of ISI mark duly burried under floor with necessary chasing / breaking in floor and to be refinished with all necessary civil material etc. or to be cleated on wall / ceiling with saddles / spacer etc. necessary termination etc. completeas in all respect including making good to all damages caused and as per the direction of Consultant and Engineer-in-charge.		300.00		
2.0	Supply , fixing , testing of RJ11 Modular Telephone socket point with suitable GI boxes complete in all respect as per direction of EIC .		8.00		
3.0	Panasonic Electronic Modular Switching System MODEL NS-300 (Digital IP PBX SYSTEM) For 6 CO Lines 2 Digital Extension and 8 Extensions, with DISA Greeting Message.		2.00		
	TOTAL DATA / TELEPHONE WAIRING			Rs.	-
	7.PUBLIC ADRESSING SYSTEM				
	Supply, installation and testing of the following items with ncessary M.S. iron frame/enclosure as nessary as per specification including cutting necessary ceiling fixing all accessories, G.I boits, nuts, washers, etc painting, earthing complite as required with other details asper enclosed specification AHUJA Make.				
1.0	60 Watt PA system with control desk Comprising 1 nos of Microphone With Press to talk switch and stand (Ahuja Make PRO - 3200), selector switch, mixing Amplifier 75 Watt Ahuja Make DPA 770),Digital player, mp3 Player with USB Reader & Remote control cables with with sockets, interconnections, earthing Complete as required		1.00		
2.0	Supply, installation and testing of External speaker 8 watt unit (AHUJA Make: CS 6081T) in finished enclosure suitable for wall/celling mountinting with external colour matching asper the final finish as required and having the following rating. Wiring from PA system Amplifier (4 points in One Circuit )Make Ahuja/Boss (Should be Ahuja Make: CS6081T Equivalant Speaker) (6" Dia Speaker)		15.00		
3.0	Supply of all required materials and laying of speaker wire (2R X 1.0 Sqmm )FRLS multi stranded copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through heavy gauge PVC conduits from spiker point to amplifiar including cost of all labour materials.		450.00		
	TOTAL PUBLIC ADRESSING SYSTEM			Rs.	-
	8. AUTOMATIC POWER FACTOR CONTROL (APFC) PANEL				

SL.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
NO.	DESCRIPTION OF THEMS	Oldi	GOANTIT	10412 (110.)	Amoon (its.)
1	Enclosure: Wall mounted with CRCA Sheet Steel (11 Tank Processed) with Copper Bus-Bar and ventilated fan. Ensure Capacitor Bank in the lower section of enclosure and circuit wiring in the upper section having separate door opening and internally shall be mechanically isolated.				
	Panel shall be fabricated/ manufactured by CPRI approved/ authorized/ certified fabricator/ manufacturer only confirming to International standards (IS) & in accordance to the Rules and regulations of IEC. The contractor has to take prior approval from the Bank after the completion of design part. The contractor shall provide CPRI tested certification for the LT panel board without fail.				
	INCOMINGS  100 Amp, 25k, 4P MCCB complete with operating handle - 1 No.  Metering: 0-500V Digital Voltmeter with selector switch and MCBs-1 set 0-200A Digital Ammeter with CTs of ratio 200/5A, Class 1 Accuracy and 15VA burden and selector switch -1 set LED Phase indication lamps with individuals MCBs and control with toggle switches- 1 set 8 Stage Automatic PF Controller Relay (Microprocessor based) with PF Meter - 1set Each Capacitor Bank shall have the following: ON/OFF Indication lamps Ammeter with CTs and selector switch Auto/ Manual Selector switch with 1set of ON/OFF Push buttons for Manual Operation.  Busbars: 125 TPN Aluminium Busbars - 1 set  Outgoings: 32A, 10kA TP MCB TM O/L & S/C release, with 12.5kVAr Capacitor duty contactor and 12.5kVAr CAPACITOR, 440V MPP TYPE HEAVY DUTY - 3 Nos; 20A, 10kA TP MCB TM O/L & S/C release, with 10kVAr Capacitor duty contactor and 7.5kVAr CAPACITOR, 440V MPP TYPE HEAVY DUTY - 1 Nos; 10A, 10kA TP MCB TM O/L & S/C release, with 3kVAr Capacitor duty contactor and 3kVAr CAPACITOR, 440V MPP TYPE HEAVY DUTY - 1 Nos; 6A, 10kA TP MCB TM O/L & S/C release, with 3kVAr Capacitor duty contactor and 3kVAr CAPACITOR, 440V MPP TYPE HEAVY DUTY - 1 Nos; 6A, 10kA TP MCB TM O/L & S/C release, with 3kVAr Capacitor duty contactor and 2kVAr CAPACITOR, 440V MPP TYPE HEAVY DUTY - 1 Nos;	Nos	1.00		
				SUB-TOTAL	

SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
110.	9. THIRTEEN PASSENGER LIFT AND ALLIED				
	WORKS				
1	Supply, delivery & installation of 13 passenger Machine Room Less Lift having following specification: Assembled Product: Passenger Elevator Capacity: 13 Persons, 884 kg Speed: 1.00 m/s Stops & Openings: 02 Stops, 02 Openings - Same side Floor designations: G, 1 Type: Machine Room Less Machine type & Location: Permanent Synchronise (PMS) Gearless machine located in the shaft on top of the guiderails Control: Simplex Collective Selective Control Drive: ACVVVF Power supply: 415 volts, 3 phase, 50Hz, AC Hoist way dimensions: 2300 mm (D) x 1800 mm (W); Car travel: 8 mtr; Overhead: 4656mm Pit depth: 1200mm; Car dimensions : 1100mm (Wide) x 2000 mm (Deep) x 2200 (High); Door opening: 800mm (Wide) x 2000mm (internal Height); Car door: 2 panel automatic Center opening door Handrail: Round handrail in Stainless steel finish provided on rear wall of car Landing.  operating panel: Individual landing operating panel for each elevator Features: ACVVVF closed loop drive, Alarm button in car operating panel with battery back- up, Automatic operation for car fan, Adjustable door open time, Blower fan in car for ventilation, Braille Button in Car operating panel and Landing operating panel, Car call cancellation by double pressing floor button in car operating panel, Door open and door close buttons in car operating panel, Door open and door close buttons in car operating panel, Door closing retries, Door nudging, Emergency light, Full load by-pass, Full Length Infra-red screen for car door, intercom, Motor overheat protection, Overload function with audio-visual indication in car operating panel and Phase failure.	Set	1		
	supply and fixing of suitable control MCBs, electrical cable, lights and other allied accessories required to complete in all respects for the operation of LIFT as per the direction of engineer-in-charge.				
				SUB-TOTAL	-
	TOTAL				#REF!
	4 4 LIQUE O POINT WERE WORK			2.55	
	1.1 LIGHT & POINT WIRING WORK 1.2 POWER POINT WIRING WORK			0.00	
KS	1.3 GENERATOR SET WIRING WORK			0.00	
OR	1.4 COMPUTER WIRING WORK			0.00	
ELECTRICAL WORKS	1.5 A.C. WIRING WORK			0.00	
CA	1.6 CABLE, MAINS & SUBMAINS.			0.00	
N. N.	2.PANEL BOARD & DISTRIBUTION BOARDS.			0.00	
EC.	3. FITTINGS OF FIXTURES			0.00	
	4. EARTHING 5. COMPUTER NETWORKING			0.00	
NAL	6. TELEPHONE SYSTEM			0.00	
Z	O. TELET HORE OTOTEW			1 0.00	

SL. NO.	DESCRIPTION OF ITEMS	UNIT	QUANTITY	RATE (Rs.)	AMOUNT(Rs.)
ER	7. PUBLIC ADRESSING SYSTEM			0.00	
Z	8. APFC PANEL			0.00	
_	9. THIRTEEN PASSENGER LIFT AND ALLIED WORKS			0.00	
	GRAND TOTAL (Excl. GST. GST will be extra as applicable)			0.00	

	APPROVED MAKE LIST (	)F	ELECTRICAL MATERIALS
SL. NO	MATERIAL DESCRIPTION		APPROVED MAKES
1	PVC CONDUIT (FR Grade, ISI Mark)	:	PRECISION / AKG/BEC/AVON PLAST/GM/CLIPSAL
2	STEEL CONDUIT (ISI MARKED)		BEC/BHARAT/GUPTA/AKG/RMCON/STEEL KRAFTS
3	PVC FRLS COPPER WIRES (ISI MARK/Telephone Cables/ Co-axial TV Cable	:	KEI / POLYCAB / ANCHOR / RR CABLE / HAVELLS/FINOLEX
4	MODULAR SWITCH / SOCKET /TV SOCKET /DATA SOCKETS/ ELECTRONICS REGULATOR/ AC STARTER SWITCH etc.	:	LEGRAND (Myrius) / ABB (IVIE)/ SCHNEIDER ( ZENCELO)/WIPRO-NORTHWEST – ARTISA/MK-BLENZE PRO
5	MCBs/ ELCB/RCBO/ISOLATOR	:	LEGRAND / L & T / ABB /Siemens/Schneider/Hager
6	MCB DB/ INDUSTRIAL SCOKET OUTLET.		LEGRAND(Ekinoxe) / L & T (AU) / ABB(Itus )/Siemens- Betaguard/Schneider- Acti9
7	APFC RELAY	:	L&T/BELUK/SIEMNS/EPCOS/ABB/SCHNEIDER/N EPTUNE
8	HV / MV XLPE INSULATED CABLE	:	KEI / POLYCAB / RR CABLE / HAVELLS/FINOLEX/NICCO/UNIVERSAL/CCI
9	HT CABLE TERMINATION KIT	:	RAYCHEM / M-SEAL/3M
10	PVC BATTEN/ANGLE HOLDER		ARISTO/ANTEX/PRAKASH/KINJAL/ANCHOR
11	GI CABLE TRAYS & RACEWAYS	:	NIEDEX / PROFAB / JKR / CLASSIC / SHRUTI / PATNY
12	EXHAUST FAN/ CEILING FAN/ WALL FAN	:	ALMONARD / HAVELLS / CROMPTON /CG/ ORIENT/BAJAJ/ATOMBERG
13	LED LIGHT FITTINGS	:	PHILIPS / HAVELLS / WIPRO/CROMPTON/BAJAJ
14	ACB	:	L & T (OMEGA)/ABB (FORMULA)/ SCHNEIDER (NW)/SIEMENS (3WL)
15	MCCBs	:	L & T ( D-Sine) / ABB ( Formula) / SCHNEIDER ( NSX) /SIEMENS (3VA) /LEGRAND (DPX3)
16	CONTACTOR AND OVER LOAD RELAY	:	L & T / ABB / SCHNEIDER /SIEMENS/C&S
17	DIGITAL METERS	:	CONSERV ( SCHNEIDER) / L&T / ABB/ SECURE/MECO/RISHAB/AE
18	CAPACITOR ALL PP / HEAVY DUTY MPP	:	SCHNEIDER / L&T / EPCOS/SIEMENS/MIHIR
19	CTs & PTs	:	KAPPA / KALPA / AE/SCHNIDER/L&T/GILBERT
20	CONTROL SWITCHES	:	KAYCEE/GEC/ALSTOM /L&T- SALZER/SCHNIDER/HPL
21	ELR / EARTH FALUT RELAY	<u> </u>	ALSTOM / PROK DIVS / ER /SIEMENS/SCHNIDER/ABB
22	PROTECTVE RELAY	:	ALSTOM / PROK DIVS / ER /SIEMENS/SCHNIDER/ABB
23	PUSH BUTTONS	<u>:</u>	TECHNIC / ABB /SCHNEIDER / L&T/SCHNIDER
24	INDICATING LAMPS (LED)	<u> </u>	TECHNIC / ABB /SCHNEIDER / L&T/SCHNIDER/BCH/EMCO/KAYPEE
25	LUGS / GLANDS	:	DOWELLS / JAISON/ COMET / BRACO
26	TERMINALS & CONNERCTORS	:	ELMEX /CONNECTWELL/ESSEN-FINGER TOUCH PROOF OR AS EQUIVALENT.
27	FERRULES	:	MAYFAIR/Balaji Industries OR AS EQUIVALENT.
28	RAISING MAIN, BUS BAR TRUNKING, ATP-OFF BOXES		C&S/ SCHNEIDER /LEGRAND/ABB/L&T
29	BUS BAR SUPPORTS	:	C&S/ SCHNEIDER /LEGRAND/ABB/L&T
			1

30	UPS / INVETERS	:	VERTIVE/NUMERIC/BPE/APC/ABB
31	BATTERY	:	AMRARAJA/EXIDE/AMCO
32	STABILIZER	:	DUBAS / EMERSON / POWERTRONIX/SERVO
33	Load Monitors / Controller	:	Ducati / Electrex / Enercon / CIRCUTOR
34	Control Cables	:	KEI / POLYCAB / RR CABLE / HAVELLS
35	Battery charger	:	AMERON/ EXIDE/AMCO/ARMARA RAJA
36	ATS/SPD	:	L & T / ABB / SCHNEIDER /SIEMENS/LEGRAND/HAGER
37	DAY Light/ OCCUPANCY Sensor	:	LEGRAND/SCHNEIDER/ABB/JONSHON CONTROL/HAGER/WIPRO/LUTRON
38	MV PANEL	:	TTA/CPRI FABRICATORS WITH PANEL CLEARED BY CPRI.
39	ANGLE IRON/CHANNEL IRON	:	SAIL ,TATA, JINDAL
40	EARTHING	:	Ashlok, Indelec, Doksun, LPI
41	NETWORK RACK	:	NETRACK/WQ/PANDUIT/RITTAL/EMERSON/VAL RACK
42	GI PIPE	:	TATA/JINDAL/ZENITH/SURYA/SAIL
43	CELING ROSE	:	ANTEX/LEADER/EMPEROR/ANCHOR
44	WEATHER PROOF BOXES	<u> -</u>	HANSEL/LEGRAND/OBO BETTERMAN/C&S
45	ELECTRIC INSULATION MAT	:	DOZZ/PADMINI/RAYCHEM/JYOTHI RUBBER UDYOG
46	TELEPHONE JACK	:	BELDEN/SYSTIMAX/PANDUIT/SIEMON
47	HDMI Cable		Crestron / Extron / Kramer / Beldan/ Lightware/AMX/Nt
48	HRC FUSES	:	L&T/siemens/Alstom/GE
49	FUSE SWITCH UNITS/DISCONNETINING SWITCH FINAL UNITS	:	L&T/siemens/Alstom/GE/Legrand/Merlin Gerin
51	LIFT (suggested Make)	:	Kone/ Otis/ Mitsubishi/ Schindler/ ThyssenKrupp
52	All others items not Covered Above		As per approval of the Bank