

PROJECT - ESTIMATE FOR ELECTRICAL WORKS.

BANK - INDIAN BANK

AT PATRA BRANCH

S.NO	PARTICULARS	Unit	Qty	Rate	Amount
	A -Electrical wiring (All switches to be Modular type - Anchor/ Havells or equivalent approved by architect)				
	<u>Light & Fan points</u>				
1	Supply & Installation of concealed point wiring using 600 v grade 3x1.5 Sq.mm copper conductor PVC insulated wires (with proper R,Y,B color code) pulled through heavy gauge 19mm PVC conduit pipe heavy duty concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement including 2 Nos. 2.5 sqmm circuit wires from the relevant DB and also including 1.5 sqmm green color copper earth wire and switch plate, switches, etc. as approved by the Bank's Engineer/Architect. All switch & sokets shall be modular type complete with cover plate & GI/ MS box. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface.The rate should include the cost of all materials, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor				
a	Light points + AFF points including the cost of 6A switch	Point	18		
b	Ceiling Fan Point including the cost of 6A Switch along with electronic regulator	Point	2		
c	Wall Fan Point along with 6A switch	Point	6		
d	6A switch & Socket on SDb	Point	9		
2	<u>RAW POWER POINT</u>				
	Single Power Points - Supply & Installation of point wiring for Raw power plug points on workstations / table for computers using 2 X2.5 + 1x1.5 Sq.mm copper conductor PVC sheathed flexible wire pulled through heavy gauge 19mm PVC conduit pipe heavy duty concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. Each point consisting of 1 nos of 16A , 2/3/5 pin sockets & 1 No.16A Switch wired together forming one point. The earth wire of green color only. All switch & sokets shall be modular type complete with cover plate & GI/ MS box. The work shall also include for cutting chase for conduits and moulded boxes, if required, in the wall/ floor (Without damaging the building/wall) along with clamping the conduit at every 600mm interval & finally finishing the surface & matching the same with the existing surface.The rate should include the cost of all materials, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.The job shall be complete & to the entire satisfaction of the Bank.	Point	12		
3	<u>AIR CONDITIONING</u>				
1	AIR CONDITION POINTS - Circuit wiring with 2x4.0sq.mm + 1x 1.5sq.mm stranded Cu. conductor (Finolex/Anchor/Skytone) in 19mm M S conduit pipe heavy duty 16swg laid & concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The job includes supply & fixing of flush mounted 4in one appliance protector pre-wired, IP 20 with factory fitted 25A, 2P MCB and 25A socket (Hagers/ Siemens/ ABB). The rate should include the cost of all materials, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.The job shall be complete & to the entire satisfaction of the Bank.	Point	6		

4	<u>UPS</u>				
A	Sub Main Wiring/ Cabling - : SITC of sub main wiring 4nos. 10 sq.mm Stranded copper wires for UPS Input from main incoming panel to incoming Db of UPS power input system etc. in 25mm dia PVC haevy duty conduit complete to the satisfaction of the bank.	JOB	1		
B	UPS Power Input System: SITC of 4way TPN Double door Db IP 42 horizontal Complete with 1no. Incoming 32A. TP MCB and 3 x 32A 2P MCB's to regulate supply for UPS complete in all respect as required and to the satisfaction of the bank.	Set	1		
C	Wiring for UPS Input & UPS Output (For both Critical 2Kva & Non-Critical 3Kva UPS) with 2x4.0sq.mm + 1x 1.5sq.mm stranded Cu. conductor (Finolex /Anchor /Skytone) to be laid in 19mm PVC pipe heavy duty/ Flexible pipe laid & concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The rate should include the cost of all materials, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.The job shall be complete & to the entire satisfaction of the Bank.	JOB	1		
D	S/F of 32A 2P MCB in 2way metallic box including proper connectionbs thru lugs. Both the Db's shall be inter looped- Qty included in item 3. (2nos. For ATM and 2nos. For Branch)	Each	1		
E	UPS Output Power Distribution System: SITC of 12 way SPN Db Double door IP -43 Siemens make with 32A DP 10kA MCB and 09 nos. SP 10kA MCB complete in all respect and as required & to the satisfaction of the bank. Siemens/ L&T/ MDS/ Schnider	Set	1		
F	Input Wiring for UPS Db's with 2x4.0sq.mm + 1x 1.5sq.mm stranded Cu. conductor (Finolex /Anchor /Skytone) to be laid in 19mm PVC pipe heavy duty/ Flexible pipe laid & concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The rate should include the cost of all materials, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.The job shall be complete & to the entire satisfaction of the Bank.	JOB	1		
G	Supply & fixing of 4nos. 6A switches & sockets (Modular type c/w MS/GI box & cover plate) complete with computer point circuit wiring with 2x2.5sq.mm + 1x 1sq.mm stranded Cu. Single core Copper conductor (Finolex/Anchor/RPG) to be laid in PVC conduit 1" dia/ vertical drops heavy duty laid & concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement.	Per Node	16		
5	<u>MAIN INCOMING PANEL & DISTRIBUTION</u>				
A	SITC of 100A Kit kats fuse unit 3nos in wooden patra complete with 100Amp. Neutral link complete in all respect as required.	Set	1		
	1 No for Metre				
	1 no for Panel to Outer Side Of Wall (For Generator Connection)				
B	Main Incoming Panel (Existing Panel should be use if available)				
	Supply, Installation, Testing & Commissioning of main distribution board panel fabricated of 18swg (powder coated) comprising of	Nos.	1		
	Indicator lamps 3 nos.				
	Voltmeter & ammeter(one each)				
	Rotary selector switches 2 nos for voltmeter & ammeter				
	Busbar (each of RYB +N) copper 100 amp each				
	125 Amp MCCB(Siemens/ L&T/ ABB/ Schnider) incoming 3P adjustable 25kA				
	Changeover TPN 100 amp for DG set (Havells/ ABB/ Sochomac)				
	Outgoing 63A 3P MCB's - 6 nos.				
	Outgoing 32Amp 2P MCB's - 6 nos.				

	Earth bus bar 25x5mm GI strip - 2nos. At the bottom.				
6	Supply Installation testing & commissioning of XLPE insulated Armoured Al.codutctor cable between main panel & DB's & generator of required thickness of approved make Skytone/ Havells based on the load assessment & confirmation of the same with architect. This rates include cost of lugs at both the ends				
	3.5 x50 sq.mm cable from Meter to Kit kat to the main panel & Pole (Approx - 20 mtr)	JOB	1		
	4c x20 sq.mm cable from Main Panel TO LHS DB (Approx - 20 mtr)	JOB	1		
	4c x 20 sq.mm cable from Main Panel to RHS DB (Approx - 20 mtr)	JOB	1		
	4c x 20 sq.mm cable from Main Panel to Kikat (Generator) (Approx - 40 mtr)	JOB	1		
7	Supply, installtion, testing & commissioning of VTPN Db double door with MCB as incomer IP 42 complete in all respects for AC, PP and L & F as under - Siemens/ Hager/ Lagrand/ ABB				
A	RHS 6way VTPN db - Loaction RHS wall opposite Cash cabins (From entrance to Rear record room & Toilet area) - Siemens 8GB0406VRC or				
	Incomer - 63A 3P MCB 10kA adjustable neutral to be directly connected to neutral bus	Each	1		
	3no. 32A 1P-MCBs 10 KA - AC's - 2nos. RHS & 1rear				
	3no. 16A 1P-MCBs 10 KA - for single power points - 2 cash & 1 May I help You & 2nos. D/W				
	4nos. 10A 1P-MCBs 10 KA for L&F				
	4os. 6A 1P-MCBs 10 KA for L&F				
	Blanking Plates - 2no.				
	All connections to be terminated thru lugs				
B	LHS 6way VTPN db - Loaction LHS wall behidn advance (From LHS LV Cash to Mgr Rm)- Siemens 8GB0406VRC or equivalent				
	Incomer - 63A 3P MCB 10kA adjustable neutral to be directly connected to neutral bus	Each	1		
	4o. 32A 1P-MCBs 10 KA - AC's - 3nos. LHS & 1 Mgr Rm				
	4no. 16A 1P-MCBs 10 KA - for single power points - (LV cash, 2 CRE, 1Advance, 2 MR & 2 Router)				
	2nos. 10A 1P-MCBs 10 KA for L&F				
	2os. 6A 1P-MCBs 10 KA for L&F				
	Blanking Plates - 2no.				
	All connections to be terminated thru lugs				
8	Glow sign Board - Circuit wiring with 2x2.5sq.mm + 1x 1.0sq.mm stranded Cu. conductor (Finolex/Anchor/Skytone) to be laid in 19 mm PVC pipe heavy duty laid & concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The rates should include the cost of all materials, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.The job shall be complete & to the entire satisfaction of the Bank.	JOB	1		

	<u>E -EARTHING</u>				
9	For Main Panel - S/burying of Dual pipe technology (Pipe in Pipe) earthing electrode having GI 80mm O/D pipe with 25 micron coating, 3metres long. The space between two pipes to be filled with Highly conductive & Non corrosive chemical compound. The installation shall be thru earth auger. The vacant space between pipe & hole shall also be filled with compound all around. The job also includes S/F of GI strip clamp with two holes (with SS/GI bolts & nuts) on the electrode & taking two earthing leads of 25 x 5 mm GI strip (Assumed length of 10m - beyond 10m to be paid extra) upto Main panel complete in all respects with guaranteed E/N voltage of less than 3 volts and resistance less than 1 ohms. The distance between two earthing pits to be 10ft or more INCLUDING Earth wire 4 sq mm copper wire . Approx -80 mtr (2 FOR BRANCH & 1 ATM)	Per Icn.	2		
10	<u>F - FIXTURES & FITTINGS</u>				
A	a) Supplying and fixing Philips make 36W LED FLAT PANEL after disconnection of existing fitting 2'x2' size in grid type false ceiling, 600x600 suitable for recess mounting,CRCA sheet, asthetic looking, or eqv Philips/havells	Each	6		
B	b) Supplying and fixing Philips make or eqv 10 W LED round type downlighter (Philips/ wipro /Jaguar)	Each	16		
C	Supply installation testing and commissioning of 1*20watt Batten type tubular LED light fitting with LEDs, driver, diffuser, and housing complete in all respects in UPS room and record /wc/bath room /suitable place with complete in all respect with required color on need basis.	Each	5		
D	S/F of angle holder for bulbs including cost of 11w CFL lamp for Toilets	Each	2		
E	i) Supply & installation of wall bracket fan 450 MM METAL BODY (Heavy duty/ high speed) Make Bajaj/crompton greaves/havells/Orient (to be supplied after consultation with architect/Electrical Engineer as per approved drawing)	Each	6		
F	g) Supply & fixing of the 1200 mm 48") Sweep Ceiling fan (Orient PSPO/crompton greaves/havells) with downward rod(below false ceiling), canopy etc. including of PVC flexible copper wire.(white colour)(High speed) (Warranty Certificate is necessary)with downward rod, circular boxes, ball sockets, ceiling plates,suitable arm bracket etc. including connection with wire)White colour (WITH REGULATOR)	Each	2		
G	Supply & Fixing of fresh air fan 12" - Crompton Greaves/ Usha/ Khaitan/ Bajaj	Each	2		
H	e) Supplying and fixing LED strip 3000 K 24 watt 5 mtr length with driver (Philips or Havells or Cormpton)	SET	0		
11	<u>H - TELEPHONE</u>				
A	P/f Krone or equivalent box in the server room & out side of the Branch with a ten pair connecting strip for telephone with lock & key	Each	2		
B	10 Pair Cable with Connection from main Panel to entrance of the Branch	JOB	1		

C	Supply & fixing on wall/ furniture/ partition recessed type non modular telephone socket outlet (RJ-11) with mounting box & front plate complete with chase cutting, mending good etc. as required complete with Supply & laying of 2pair 0.61mm dia. PVC insulated telephone cables through 19mm dia rigid PVC conduit of suitable diameter as directed by the consultant from telephone junction box to telephone socket outlet including interconnection mending good etc. as required complete in all respects.	Each	2		
D	Wireless Call Bell of Approved Quality (Orient,Sunshine)	No.	1		
12	I - DATA CABLING				
A	Supply & Fixing of XL RJ 45 toolless information outlet with Duplex face plate with dual connectors Grey colour cat 6e including cost of supplying & laying CAT 6e (as directed by Architect from Server to Switch, Switch to computer I/O data socket as required complete in all respects) in 25mm dia rigid PVC conduit (including laying of GI draw wire complete with junction box, circular box, elbows, bends & other accessories as required by chase cutting on floor, wall, through partition or over false ceiling.The data cabling pipe should be laid at a minimum distance of 3ft from pipes laid down for power distribution) including interconnection with connectors as required complete in all respects.	Each	13		
B	Supply & fixing of 7ft Grey colour Patch chord Giga speed Systimax/ D link make	Each	13		
C	Supply & fixing of 3ft Grey colour Patch chord Giga speed Systimax/ D link make	Each	13		
D	S/F of 24Port Jack Panel fully loaded systimex make	Each	1		
E	S/F of 9 U wall mounted rack c/w fan etc as required	Each	1		
F	S/F of Cable Manager as required	Each	1		
	All Existing material which is in good condition use first.				
	GRAND TOTAL AMOUNT (gst extra)				-
	List of approved materials				
	Materials	Approved manufacturers/suppliers			
1	MCCB	MDS legrands, ABB, GE, SIEMENS			
2	Changeover	Indo Asian/ HPL Socomec / GE/ Standard stangaurd			
3	Distribution board	MDS / Standard / Indo Asian / HPL			
4	MCB	MDS / Standard / Indo Asian / HPL			
5	Cable	Gloster / Rallison / Incab / CCI			
6	Copper wire	Finolex/anchor			
7	Switch / Socket / Call bell and accessories	Anchor / Havells / CPL / MDS / Philips			
8	Electrical Light Fittings / Fixtures Complete	Philips			
9	Wall Fan / Ceiling Fan / Exhaust Fan	Khaitan/Havells			