

BOQ ELECTRICAL WORKS FOR CANARA BANK , AFTS GURUGRAM					
	(ELECTRICAL WORK)				
SL No	PARTICULARS	UNIT	QTY	RATE	AMOUNT
1	DISMENTALING OF EXISTING ELECTRICAL WORK AND DISPOSAL OF MALBA TO NEAREST MUNICIPAL GROUND INCLUDING TRANSPORTATION	JOB	1		
2	ELECTRICAL WIRING & EARTHING				
2.1	Supply,laying,connection & testing of light,fan point, wiring by 2x1.5mmsq(2x3/.029) +1x1mmsq PVC insulated, multistrand single core copper conductor FRLS wire maintating the colour code as per direction in PVC conduite of 20mm with ISI mark 1.5mm thickness to conceal in wall partition mending good the damage, complete with PVC circular box, bend to be done as per drawaing including 3 point ceiling rows wherever required GI saddle to be used for fixing,metal flexiable/PVC flexiable pipe may use if requied in partition wall. All PVC pipes should be with ISI mark. No joints will be allowed inside pipe,light, fan & plug point complete with modular type switch plate & MS box . rate Including the main circuite line 2x2.5mmsq+1x1.5mmsq earth PVC insulated Cu. Wire from DB to switch board ,maintaining the colour code. Circuite line for lighting switch board & 6Amps plug board are to be drawn from lighting DB to Lighting board & plug point board (independent), 6/16 Amps plug point line are to be draw from power DB.as per DBschedule /SLD				
a)	1 light by 1 switch	Nos.	22		
b)	2 light by 1 switch	Nos.	0		
c)	3 light by 1 switch	Nos.	0		
d)	4 light by 1 switch	Nos.	0		
e)	Ceiling fan point with step type electronic regulator	No	2.00		
f)	Same as above, but for exhaust fan excluding regulator.	No	3.00		
g)	Same as above 5A Point in the switchboard itself. (for branch 7 No & ATM 1 No)	No	10.00		
h)	same as above Wiring for call-bell point including buzzer	No	1.00		
i)	Wiring (2x2.5mmsq+1x1.5mmsq from power DBs) for independant 6A multi pin socket along with 6A modular type switches housed in painted MS box (upto 3 independent plug points can be taken in one circuit). For Fan	No	6.00		
2.2	Supply and installation of modular type 2 nos 6A & multi pin sockets with 2 nos 6 Amp one way switch housed in MS box to be fixed in partitions or concealed in wall. The box shall be painted with 2 coats of enamel paint over a coat of red oxide primer including wiring for Raw power socket outlet using 2 R runs of 2.50 Sqmm and single run of 1.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 20mm PVC conduit to be laid in floor, partitions, etc. complete with all accessories (looping 2 sets of 2x6A socket outlet in one circuit- from DB) (Raw power). for counter	No	5.00		
2.3	Supply and installation modular type 16A, 5-pin socket with 16A one way switch housed in MS box to be fixed in partitions or concealed in wall. The box shall be painted with 2 coats of enamel paint over a coat of red oxide primer , the rate shall include wiring fusing 2R 4.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm PVC conduit to be laid in floor, partitions, etc complete with all accessories (for line printer : or optional).(upto 2 independent plug points can be taken in one circuit)	Nos.	5.00		
2.4	Supply and installation of power supply disconnection arrangement for strong room consisting of 1 no 10A DP MCB housed in manufacturer's powder coated MS box to be fixed inside the strong room and connected with 1 no 3-pin metal clad plug with 2 metre long 3 core 2.5 sqmm PVC insulated flexible copper conductor cable.	Set	1.00		
2.5	Acs electrification :-				
(a)	Supply and fixing 25 Amps 3-pin modular socket with 25 Amp one way switch with indicator (near AC indoor unit) housed in manufacturers MS powder coated box to be concealed in wall including Wiring using 2R 6.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm PVC conduit to be laid in floor, partitions, etc complete with all accessories. (for cassette unit AC units) -(from Stabilzer to IDU)Supply.	Nos	0.00		
(b)	Supply and fixing 25 Amp - 3 pin metal clad socket with plug controlled by a 25 Amp SP MCB (for Ac wall mounted stabilizers) housed in manufacturers MS powder coated box to be concealed in wall including Wiring using 2R 6.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm PVC conduit to be laid in floor, partitions, etc complete with all accessories. (for casstte AC units) from AC DB to Stabilzer	Nos	0.00		

(c)	Supply and fixing 20A 3-pin modular socket with 20A one way switch with indicator (near AC indoor unit) housed in manufacturers MS powder coated box to be concealed in wall including Wiring using 2R 4.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm PVC conduit to be laid in floor, partitions, etc complete with all accessories. (for split AC units) -(from Stabilizer to IDU)Supply (2 Nos for ATM).	Nos	3.00		
(d)	Supply and fixing 20A - 3 pin metal clad socket with plug controlled by a 20A SP MCB (for Ac wall mounted stabilizers) housed in manufacturers MS powder coated box to be concealed in wall including Wiring using 2R 4.0 sqmm & single run of 2.5 sqmm PVC insulated multi stranded single core copper conductor FRLS wire in 25mm PVC conduit to be laid in floor, partitions, etc complete with all accessories. (for split AC units) from AC DB to Stabilizer (2 Nos for ATM)	Nos	3.00		
3	LAYING OF CABLE :				
3.1	Supply laying fixing main power with 50mm sq 3.5 core PVC insulated,PVC sheated Alu.Conductor, 1100 v. grade armoured cable complete with 02 nos 8 SWG bear Gl.wire as running earth .(Meter panel to Main Panel & Dgset to	Mts.	25		
3.2	End termination of 50mmsq 3.5 Core armoured cable,complete with brass cable gland , Alu. Lug, PVC tape.	Nos	4		
3.3	- Do - 3.5 x 16 sqmm with 02 nos 8 SWG bear Gl.wire as running earth. for Light D.B	Mts	20		
3.4	- Do - 3.5 x 25 sqmmth with 02 nos 8 SWG bear Gl.wire as running earth. for POWER & A.C D.B , UPS & ATM	Mts	50		
3.5	- Do - termination of 25 & 16 Sqmm 3.5 Core	Nos	6		
3.6	2C x 6 + 1x4 sqmm Copper as mentioned in pt 3.1	Mts	25		
3.7	2C x 10 + 1x6 Sqmm Copper as mentioned in pt 3.1	Mts	25		
3.8	4C x 10 Sqmm Copper as mentioned in pt 3.1	Mts	25		
3.9					
4	Out door type glow sign board wiring :-				
4.1	Supply laying of main line with 2x2.5 +1x1.5 mmsq through MS conduite from main panal to glow sign board.	Mts	30		
4.2	Supply installation of 16 amps DP MCB at main entrance Glow sign board & With Electronic timer as required.	Set	1		
5	EARTHING STATION :				
(i)	Earthing installation as per I.E. rule conforming to IS 3043-1987 or its latest amendent by making earth station with 600x600x3mm(mini-mun) thick copper plate electrode to be installed such that is top edge shall be at a minimum depth of 3.3mts below ground level after preparation of ground with charcoal, sand ,& salt, connecting the 25x3mm thick copper lead in strip (upto 10 mts length) by bolting and brazing to the copper plate complete with Brass bolt of suitable length double nuts & washer including supply & fixing of 50mm dia 2.3Mts long partly perforated G.I. Pipe with funnel for watering arrangement N.B :- <u>The Copper plate to be buried under 3.3Mts depth from ground level, including C.I. Pit 300x300mm with necessary brick wall (For UPS earthing).</u>	Set	2		
(ii)	Supply laying 2x8SWG copper bear wire from earth spike to main panal.(Electrolite wire)	Mts	50		
6	MAIN ELECTRICAL DISTRIBUTION				
	Main Panel (wall Mounted Type)				
	Supply, fabricating,assembling,internal- connection, testing & conncting with incomming, out going power cables & lines as required to complete the job of cubical type electrical panel made from 14SWG CRC. M.S. sheet with proper earthing terminal(Nut- bolt &washer) 02 No.outside of panal, same nut- bolt to tighten with internal earth busbar of panal situated inside loose wire box(on top portion of panel) On top side of panel cable entry arrangement to be done for incomming & out going of lines. Painting powder coating electrical grey/ seimensgrey to be done.one 6"x4" enamel type 440Volt Danger board to fix up on main panal bus-bar cover, components are as follows :-All switches are front handle operated & all MCB knob should be visual, all component to provide in separate compartment only DBs in one compartment. Incomer - 100A 4P MCCB 25Ka with adjustable thermal & Magnetic trip unit -1 Nos OUTGOINGS -				

	63 Amps 4 pole MCB. = 04 Nos.(AC & Power DB,ATM ,UPS,spare) 40 Amp 4 Pole MCB :2 nos (Lighting DB,Spare) 25 Amps DP MCB = 02 Nos.(sign board , Fire Alarm) Amps Meter 0-100 Amps with 3 Nos. CT & selector switch 96x96mm 01 Set (Changeover should be ON-LOAD type.) 100Amps 4pole Cu. Bus Bar. 01 Set. 100Amps 4 pole Change over switch. 01 No. 100 Amps FP MCCB 25KA as Gen - Set main incoming 01 NO. Volt meter 0-500volt A.C. 50 Hz.96x96mm with selector switch. AE make.n 01 Set 20mmdia LED indicator lamp 06 Nos. 02 Amps Sliding Fuse. 06 Set. 150x100mm enamel Danger board 440 volt. (to set on bus bar cover). 01 No. Cable entry from top & bottom - removable gland plates (bottom at 2 points) c/w powder coated Grey paint (two coats) with name labels for all incoming & outgoing feeders. The panel shall be complete in all respects including all accessories such as earthing bus, Air ventilators, lifting hooks etc.					
6.1		Set	1			
	POWER DB & AC DB. Make standard/Legrand/ABB 6 way TPN MCB DB with 63 TP&N MCB as main 16Amps SP MCB - 9 Nos+32AMPS SP X9 NOS. including Neutral Bar. 01 Set					
6.2		Set	1			
	LIGHTING DB Make standard/Legrand/ABB 6 way TPN MCB DB with 63A TP&N MCB as main 16 Amps SP MCB - 03 Nos.+ 10 Amps SP MCB - 09 Nos. Including Neutral Bar. 01 Set					
6.3		Set	1			
7	UPS SYSTEM (Branch)					
7.1	UPS Main DB Supply, erection, testing and commissioning of three phase 4 WAY, TPN MCB DB double door type with "C" Curve MCBs, IP 42 powder coated for UPS with 63A 4P MCBs – 1No as INCOMER 32A TP MCBs – 4 Nos. as OUTGOING Including all interconnections & accessories etc MAKE standard/Legrand/ABB	Nos	1			
7.2	UPS DB-1 & 2 12 Way SPN MCB DB with "C" curve MCBs. Incoming : 2 No. 40A DP MCB Outgoing :8 Nos 6/10A SPO MCBs Make standard/Legrand/ABB	Nos	1			
	Supply and installation of modular type 3 nos 6A multi pin sockets with 2 nos 6A one way switch with indicator housed in MS box to be fixed in partitions or concealed in wall. The box shall be painted with 2 coats of enamel paint over a coat of red oxide primer including making connections complete the rate inclusive of Supplying and running of 3 runs of 2.5 sq.mm UPS DB's to individual powerstation through .(looping 2 sets of 3X6 A socket outlet in one circuit / or as per SLD the following size of 660 volts grade, Finolex brand PVC insulated wire (For UPS point only).(For B.M. , Server & C.C.) & ATM 1 No. from separate ATM UPS.	Nos	6.00			
	SUB TOTAL I					
8	ELECTRICAL FITTINGS (S/I/T/C)					
8.1	Surface Mounted 2' X2' 36W, PHILIPS/WIPRO MAKE (ATM 2 No)	Nos.	7			
8.2	Surface Mounted DOWNLIGHTER - INTEGRA 15W, PHILIPS/WIPRO MAKE (ATM 2NOS)	Nos.	12			
8.3	TUBELIGHT - TITANIA SLEEK NEW T5 LED TUBELIGHT 18W, LHLDCNVENL8Z018, PHILIPS/WIPRO MAKE. ATM 1 No	Nos	15			
8.4	HANGING LIGHT - LHECDOL5PW1W040 (40WATTS), PHILIPS/WIPRO MAKE	NOS.	0			
8.5	225 mm dia Heavy Duty Exhust fan 230 voltA.C.(Havells / Crompton make).(UPS & Toilet)	Nos	3			
8.6	Wall mountaing fan Complete M.S. Body 400 mm dia 230 volt A.C. PHILIPS/WIPRO MAKE	Nos.	6			
8.7	36" CEILING FAN WHITE COLOUR(ORIENT/KHAITAN).(UPS,Strong room & Store room)	Nos.	3			
	SUB TOTAL II					

1.0	TELEPHONE SYSTEM				
1.1	Wiring for telephone points with 2 pair 4/5 pair .51mm dia ATC (annealed tinned Cu wire) with PVC insulated PVC sheathed telephone cable from tag block to the point including providing ferrules at both ends and termination at both ends including providing & fixing RJ 11 outlet, faceplate and mounting box complete of modular type 9 where 2 such points are shown, 2 such wires shall be provided) This work includes providing PVC conduits in chases from the raceway to the point. (1 each for branch manager, C.C. P. officer & Clerck).	Nos.	5		
1.2	Supplying, laying effecting terminations, testing and commisioning of 0.51mm dia Cu. Conductor, twisted, colour coded with polythene capor barrier, telephone cables in the existing tray or in conduit includinig providing & fixing conduit pipe or cable tray as required from building tag block to the floor as required.				
1.3	1 X 10 pair armoured cable from telephone connection in the premises to the crone box.	rmt	30		
1.4	Supplying & fixing 20 pair krone tag block with enclosure.	Nos.	1		
	SUB TOTAL III				
	TOTAL FOR ELECTRICAL WORK				
	SCHEDULE - (LAN & TELEPHONE WORK)				
1.0	DATA SYSTEM - CONDUITING & CABLING				
1.1	providing and laying UTP Cat 6 data cable for nodes through 25mm dia PVC conduit through floor, wall and partitions etc including all necessary materials from main Hub to building tag block(BSNL) & Branch to ATM	rmt	120		
1.2	Wiring for computer networking from I/O hub to computer workstation with UTP Cat-6 computer cable including providing ferrules at both ends and termination at both ends including providing & fixing frame for with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type, This work includes providing PVC conduits (1/2", 3/4" size or as required0 in chases from the I/O hub to the point. The cost includes testing, commisioning etc complete. Note : Do not run more than 3 wire in single pipe & should be concealed. (2Nos of ATM)	Nos.	6		
1.3	Supply of Cat - 6 D-Link patch cord 7' 0" (ATM 1No)	Nos.	6		
1.4	Supply of Cat - 6 D-Link patch cord 3' 0" (ATM 1No)	Nos.	6		
1.5	Supply & fixing 24 Port Jack Panel Make:-D-Link	Nos.	1		
1.6	19" Rack 9U with Glass Door, Locking system Make: APW	Nos.	1		
1.7	24PORT 10/100Mbps Switch	Nos.	1		
	GRAND TOTAL FOR LAN & TELEPHONE				
	TOTAL ELECTRICAL WORK & LAN				
	* GST EXTRA AS APPLICABLE				