

BLANK B.O.Q OF ELECTRICAL WORK FOR RELOCATED INDIAN BANK BRANCH AT SALON -DISTRICT - RAIBAREILLY					
B	SCHEDULE - 'B' (ELECTRICAL WORK)				
SL No	PARTICULARS	UNIT	QTY	RATE	AMT
1	ELECTRICAL WIRING & EARTHING				
1.1	Supply, laying, connection & testing of light, fan point, wiring by 2x1.5mmsq(2x3/.029) + 1x1mmsq PVC insulated, multistrand single core copper conductor FRLS wire maintaining the colour code as per direction in PVC conduit 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 drawing including 3 point ceiling rows wherever required GI saddle to be used for fixing, metal flexible/PVC flexible pipe may use if required 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 circuit line 2x2.5mmsq+1x1.5mmsq earth PVC insulated Cu. Wire from DB to switch board, maintaining the colour code. Circuit 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 DB schedule /SLD				
a)	1 light by 1 switch	Nos.	24		
b)	2 light by 1 switch	Nos.	14		
c)	3 light by 1 switch	Nos.	0		
e)	Ceiling fan point with step type electronic regulator	No	4		
f)	Same as above, but for exhaust fan excluding regulator.	No	2		
g)	Same as above 5A Point in the switchboard itself. (for branch 4 No & ATM 1 No)	No	7		
h)	same as above Wiring for call-bell point including buzzer	No	1		
i)	Wiring (2x2.5mmsq+1x1.5mmsq from power DBs) for independent 6A multi pin socket at walls along with 6A modular type switches board housed in painted MS box (upto 3 independent plug points can be taken in one circuit). For wall Fan	No	9		
1.2	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 (Each counter 1 Nos +BM :2 Nos, ATM 1No:,Pantry 1No.:)	No	6		

1.3	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) C.C :1No. BM.;1 No.: Alternative counter 2No + Banking Hall 1 No+ Pantry 1No ,ATM :1No)	Nos.	8		
1.4	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		
1.5	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 2R4.0 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), Stabilizer to be installed in the panel room.	Nos	5		
(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 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	5		
2	LAYING OF CABLE :				
2.1	Supply laying fixing main power with 50mm sq 3.5 core PVC insulated,PVC sheathed Alu.Conductor, 1100 v. grade armoured cable complete with 02 nos 8 SWG bear GI.wire as running earth .(Meter panel to Main Panel & Dgset to Main Panel)	Mts.	15		
2.2	End termination of 50mmsq 3.5 Core armoured cable,complete with brass cable gland , Alu. Lug, PVC tape.	Nos	4		
2.3	- Do - 3.5 x 16 sqmm with 02 nos 8 SWG bear GI.wire as running earth. for Light D.B	Mts	20		
2.4	- Do - 3.5 x 25 sqmmth with 02 nos 8 SWG bear GI.wire as running earth. for POWER & A.C D.B , UPS & ATM	Mts	20		
2.5	- Do - termination of 25 & 16 Sqmm 3.5 Core	Nos	8		
3	Out door type glow sign board wiring :-				
3.1	Supply laying of main line with 2x2.5 +1x1.5 mmsq through MS conduite from main panal to glow sign board.	Mts	25		
3.2	Supply installation of 16 amps DP MCB at main entrance Glow sign board & With Electronic timer as required.	Set	1		
4	EARTHING STATION :				
(i)	Earthing installation as per I.E. rule conforming	Set	2		

	Supply, Installation, Testing and Commissioning of Maintenance Free Earthing system made up of copperbonded rod of 10 feet length, 23 mm dia. (Minimum copper bonding shall be 0.25mm) along with Rod-to-Conductor connectors, Earth enhancement material, Pit Cover and other accessories as required and as per specification and other applicable codes (include chamber for earthing, Earthing certificate to be submitted along with the bill).				
(ii)	Supply laying 2x8SWG copper bare wire from earth spike to main panel. (Electrolite wire)	Mts	20		
5	MAIN ELECTRICAL DISTRIBUTION				
5.1	Main Panel (wall Mounted Type)				
	Supply, fabricating, assembling, internal- connection, testing & connecting with incoming, 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 Nos. outside of panel, same nut- bolt to tighten with internal earth busbar of panel situated inside loose wire box (on top portion of panel) On top side of panel cable entry arrangement to be done for incoming & out going of lines. Painting powder coating electrical grey/ seimens grey to be done. one 6"x4" enamel type 440 Volt Danger board to fix up on main panel 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				
	20mm dia LED indicator lamp 03 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.	Set	1		
	POWER DB & AC DB. Make standard/Legrand/ABB , Double door 6 way TPN MCB DB with TP MCB as incoming 63 TP&N MCB as main				
	16Amps SP MCB - 8 Nos (Ac : 3 Nos + 2X6amp : 4Nos and 1Nos spare) + 32AMPS SP X10 NOS. (Ac 3 Nos + 15 Amp: 6 Nos, 1No Spare)				
5.2	including Neutral Bar. 01 Set	Set	1		
	LIGHTING DB Make standard/Legrand/ABB 6 way TPN MCB DB with TP MCB as incoming 63A TP&N MCB as main				

	32 AMPS DB MCB 1No: For Strong room)				
	16 Amps SP MCB - 03 Nos.+ (BM +Toilet) each 1No + 1No spare				
	12 Amps SP MCB - 12 Nos. (Hall - 4Nos + Store room 1 No +Exteranl Lighting 1No.:+ Ups 1No + wall Fan 3 Nos.2 No spare)				
5.3	Including Neutral Bar. 01 Set	Set	1		
5.4	S/F of 3 nos. 100Amps Kit kat set link type with heavy duty neutral link and making its connection from electronic meter c/w wooden board etc.	Set	1		
6	UPS SYSTEM (Branch)				
6.1	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 – 3 Nos. as OUTGOING (UPS :2Nos and 1 set ,: Spare Including all interconnections & accessories etc Make standard/Legrand/ABB	Nos	1		
6.2	Supply & Fixing of 32A DP MCB in 2way SPN Db IP 20 metallic directly on wall Raw power Incoming & OutGoing supply for UPS (Branch :2 Nos)	Nos	2		
6.3	UPS DB-1 & 2 combined				
	12 Way SPN MCB DB with 'C" curve MCBs. Incoming : 2 No. 40A DP MCB Outgoing : 8 Nos 6/10A (BM: 1+1 Nos with lighting : Server & Data Rack (1+1) Nos:C.C 2Nos with lighting :counter :2 Nos) SPO MCBs Make standard/Legrand/ABB . Repective UPS lighting to be connected.(BM,C.C,Banking hall 2Nos) or as per SLD	Nos	1		
6.4	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,C.C,Sever each 2Nos.) +5 Nos for Counter+Rack 1Nos)	Nos	8.00		
6.5	Supply and Installation of Moduler type 2 X 20A plug & socket housed in for UPS output control (Branch 2 Nos & ATM 1No.)	Nos	2.00		
6.6	Supply & Laying of 2 runs of 4.0 Sqmm and 1 run of 2.5 sqmm, PVC insulated, single core, multistranded copper conductor cable in suitable rigid / flexible metal conduitfrom 3 KVA UPS to UPS DB	mtr	20.00		
	sub total I				

8	ELECTRICAL FITTINGS (S/I/T/C				
8.1	Supply and Installation Recess mounted 2'-0"X2'-0" watt ,38 W LED FULL GLOW Philips MAKE . Light should be fixed through SS threaded bolt tighted the upper end on ceiling using anchor bolt and lower end on Light fitting with nut and bolt (RC380B G2 LED35S-6500/4000 PSU OD WH) PHILIPS/WIPRO MAKE	Nos.	12		
8.3	SQUARE SHAPE DOWNLIGHTER - INTEGRA 15W, 3000K, LHEBGP5Z1W015, PHILIPS Razor/WIPRO MAKE	Nos.	27		
8.4	TUBELIGHT - TITANIA SLEEK NEW LED TUBELIGHT 36 W, PHILIPS/WIPRO MAKE.	Nos	8		
8.5	HANGING LIGHT - LHECDOL5PW1W040 (40WATTS), PHILIPS/WIPRO MAKE	NOS.	4		
8.6	150 mm dia Heavy Duty Exhaust fan 230 voltA.C.(Havells / Crompton make). (UPS & Toilet)	Nos	2		
8.7	Metal body Wall mountaing fan 450 mm dia 230 volt A.C. PHILIPS/WIPRO MAKE	Nos.	9		
8.8	Supply of Ceiling fan with 1200mm sweep, double ball bearing motor, capacitor, three MS blades die cast Al housing in stove enameled white with, suspension rod including all accessories of approved make.(5 star rated) (ORIENT/KHAITAN).(UPS,Strong room & Store room)	Nos.	2		
SUB TOTAL					
TOTAL FOR ELECTRICAL WORK (B)					
C	SCHEDULE - 'C' (LAN & TELEPHONE WORK)				
S.NO.	DESCRIPTION	UNIT	QTY.	RATE	AMOUNT
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). separate IO box to be provided for Telephone	Nos.	2		
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.				
a	0.5mm , 5 pair armoured telephone cable from telephone connection in the premises to the crone box.	rmt	25		
b	Supplying & fixing 20 pair krone tag block with enclosure.	Nos.	1		
2.0	DATA SYSTEM - CONDUITING & CABLING				

2.2	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 required) in chases from the I/O hub to the point. The cost includes testing, commissioning etc complete. Note : Do not run more than 3 wire in single pipe & should be concealed. (Server,BM,CC & ATM each 2Nos and counter 5Nos)	Nos.	7		
2.3	Supply of Cat - 6 D-Link patch cord 7' 0" (ATM 1No)	Nos.	7		
2.4	Supply of Cat - 6 D-Link patch cord 3' 0"(ATM 2No)	Nos.	7		
2.5	Supply & fixing 24 Port Jack Panel Make:-D-Link	Nos.	1		
2.6	19" Rack 9U with Glass Door , Locking system Make: APW	Nos.	1		
2.7	24PORT 10/100Mbps Switch	Nos.	1		
	GRAND TOTAL FOR LAN & TELEPHONE (C)				
	GRAND TOTAL-B+C				
	NOTE :- GST TAX WILL BE EXTRA.				

**LIST OF APPROVED AND NOMINATED MANUFACTURERS / SUPPLIERS OF
MATERIALS FOR BANK UTTAR PRADESH.**

S.NO.	MATERIALS	APPROVED BRANDS
1	PVC fittings	Polycab/ AKG / Precision
2	Wires – PVC insulated copper	Finolex/ Rallison/Polycab/Skytone
3	Cables (armored)	Gloster / Rallison / Havells
4	A.C Starter, Plug Socket	Crabtree / Northwest/ Legrand
5	Light & Power switch socket	Crabtree / Northwest /Philips
6	Telephone Socket	RJ-11 Crabtree/ Philips/MK
7	DB MCB	Legrand/ Hager/ Standard/ Schneider
8	MCB	Legrand/ Havells/ Hager/ Schneider
9	Telephone cable	0.51 Netco / Delton / National
10	Light fitting	PHILIPS/Wipro/Havells
11	Fuse Switch	L&T / Havell's
12	Telephone Connector	Corn
13	Ceiling/ Wall fan	Crompton / Orient / Khaitan
14	Exhaust fan	Crompton / Orient / Khaitan
15	P.V.C tape	Steel Greep
16	Call bell	Max
17	Cable Lug	Dowell's
18	Cable gland	Brass heavy type good quality
19	Distribution board	L&T/ Havells,legrand
20	MS conduit	Heavy duty with ISI mark 16 SWG
21	Starter & single phasing preventer	SEIMENS
22	SPN, TPN, Sheet metal	Havell's / Legrand
23	Pipe Metal	M.S Conduit 16 S.W.G
24	Metal Pipe Fittings	Cast iron with thread & inspection cover
25	Pipe PVC (Rigid Conduit)	AKG / Polypack/Super/Precision
26	PVC fitting for Rigid	-Do-

Contractor sign

27	PVC Roll Pipe	Super Dalda or equivalent heavy guage
28	PVC Casing & Casing Fittings	Good quality heavy guage (colour white)
29	Lugs	Dowells
30	Terminals	Essen/Elmex
31	Burglar alarm	Godrej/ Globe detective
32	E-cat 6 Patch panel	Schneider Electric/ Avaya
33	P.A. System	Bosch/ Ahuja
34	CCTV camera	Sony/ Bosch
35	CCTV camera wiring	Crompton/ KEI
36	UPS wiring	Crompton/KEI
37	Aluminum ducting sheet	Jindal/ SAIL
38	AC	Blue Star/ Hitachi/ Daikin Only Copper Coil (Minimum 3 Star rated)
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NOTE:-

1. In case of unavailability of any material of specific make an equivalent make can be used only after a written approval of the Architect / Bank. The preference of make/brand of the material listed above will be decided by the Architect/ Bank. The make/brand of any item will be as mentioned in the drawings issued by the Architect.

2. The contractor shall provide samples of all materials mentioned in the list of makes as required by the Architect. A written approval of these samples shall be sought prior to commencement of any work. Architect / Bank reserves the right to enquire the genuineness of any material used at site directly from the manufacturer/dealer.