## **INDIAN BANK**



## BRANCH: KASHIPUR-2, NEAR JASPUR BUS STAND, KASHIPUR (NEW PREMISES)

## **ELECTRICAL, UPS WIRING & AIR CONDITIONING WORKS (Branch & ATM)**

## **BILL OF QUANTITIES (BOQ) AND SPECIFICATIONS**

S.NO.	ITEM DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Rs. )
A)	ELECTRICAL WORKS:				
1	POINT WIRING				
	Supplying materials and fixing in position wiring for Light Points ,Fan Points, Wall Fan Point, Exhaust Fan point light sockets etc., with 1.5 Sq.mm. PVC insulated 1100V Grade copper conductor(FRLS) wires and 1.5Sq.mm. copper earth wire in concelled/surface using along with 1.5 PVC conduit with all accessories such as bends, inner plats, cover plat, Tees, sadles, drow boxes, Miunting boxes, ceiling rose etc. (Wherever required) and chrominum plate, brass screws, rowel plugs etc. The Circuit wiring stating from DB to Point control box/Switch box using 2x2.5 Sq mm PVc insulated 1100 V grade multi staranded copper conductor wires & 1.5 Sq. mm PVC insulated eath wire (Colour code to used). (Flexible conduit/elbows are not allowed.). The conduit to be laid in ceiling with propoer clamps wall, floor & filling the chese with cement mortar. and finishing the same in origional form/wooden partition/above false ceiling with proper clamps etc. complete all respect.				
1.1	One Light Points Controlled by one 6Amp. Moduler switch.	20.00	Nos.		
1.2	Two Light Points Controlled by one 6Amp. Moduler switch.	8.00	Nos.		
1.3	One ceiling fan Points Controlled by one 6Amp. Moduler switch.	2.00	Nos.		
1.4	Providing & Fixing light plug 6 Amp 3 pin sockets controlled by one 6 Amp moduler switch should be at switch board level. The item is including wiring for same as per above item, complete in all respect.	10.00	Nos.		
1.5	Providing & Fixing light plug 16 Amp 5 pin sockets controlled by one 16 Amp moduler switch should be at switch board level. The item is including wiring for same as per above item, complete in all respect.		Nos.		
		TOT	AL C/F		`

S.NO.	ITEM DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Rs. )
		TOTAL B/F			`
1.6	MAIN , SUB-MAIN & CIRCUIT WIRING				
	Supplying & drawing following sizes of PVC insulated copper conductor wires of 1100 V Grade (ISI marked) & fire authority approved laid in existing surface / recessed PVC / steel conduits / PVC casing and caping as required:-				
a)	2X1.5 Sq.mm+1.5Sq.mm PVC COPPER EARTH	400.00	Rmt		
<b>b</b> )	2X2.5Sq.mm+2.5Sq.mm PVC COPPER EARTH	300.0	Rmt		
c)	2X4.0Sq.mm+4.0 sq.mm.PVC COPPER EARTH	100.00	Rmt		
d)	2X6.0Sq.mm+4.0 sq.mm.PVC COPPER EARTH	50.0	Rmt		
e)	2X10.0Sq.mm+6.0 sq.mm.PVC COPPER EARTH	50.0	Rmt		
2.0	Providing & Fixing in position 63/40Amp. TPN for UPS input/Output	4.00	Nos.		
3.0	AC POINT	6.00	Nos.		
	Supplying & Fixing wiring for AC sockets by using 6 Sq. mm PVC insulated 1100v grade copper conductor wire incl. 32amp. 3 Pin (phase, Neutral & Earth) for one phase socket out let with 01No. 32Amp SP MCB. (One Out-let shall be connected to each cicuit only)				
4.0	3.5 Core X 16 sqmm Al armoured cable	0.00	Rmt.		
	Supplying & Laying of 1.1 KV grade Aluminium Armoured Cable including all materials for termination of cable with appropriate size of glands, clamps, rowl plug etc for fixing cable with wall/ceiling etc. Earth continuity copper wire 8 SWG (ISI marked) etc.				
5.0	TELEPHONE POINT AND WIRING				-
5.1	Supplying & fixing in position G.I. Box suitable for modular type Telaphone point switches for the Telephone outlet with cover plate with two pin switch socket/ Jack type socket as requires, complete in all respect as per instruction of Architect.		Nos.		
5.2	Supplying & Wiring for telephone point with following 2 paris of 0.51 mm Sq. dia. Annealed tinned copper conductor through PVC insulated rigid ISI marked pipe from telephone point to korne DB completed with RJ-11 telephone shockets with moduler type in M S concealed box.		R.mt.		
		TOT	AL C/F		

S.NO.	ITEM DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Rs. )
		TOTAL B/F		,	
6.0	MAIN DISTRIBUTION BOARD	1.00	Nos.		
	Supplying, Installing, Testing & Commissioning of cubicle type dust and vermin proof & alluminium bus bar, 16 SWG CRCA sheet steel having seprate chambers, change over switch. The Panel should be suitable for wall mounting with lockable double hinged door construction and painted with stove enammelled paint of desired shade.				
	Complete in all respects as follows:-				
	INCOMING 100Amp, 4 Pole MCCB 50 KA - 1 No.				
	OUTGOING				+
	2 Nos. 40 amps 415 volt 3 phase 50 Hz TPN				
	M.C.C.B.'s of 35 KA rupturing capacity.				
	Upto 1No. 100 Amps TPN MCCB of 25KA rupturing				
	capacity.				
	Upto 1 No. Changeover 100 amps 4 Pole TPN (ATS)				
	Copper Bus Bar, Neutral & Copper Earth links.				
	Upto 1No. 63 Amps TPN 415Volt				
7.0	SUB-DISTRIBUTION BOARD				
a)	Supplying & Fixing 8 way MCB SPN DB, three pole & neutral, 415 volts, made out of sheet steel, on surface / recess, including FP 40 amps 415 volts and 8 Nos SP MCB 16-25 Amp. of various capacities, complete with tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnection, including 100 Amp isolator FP, earthing, painting etc. (For AC)		Nos.		
b)	Supplying & Fixing 8-12 way MCB SPN DB, three pole & neutral, 415 volts, made out of sheet steel, on surface / recess, incl. FP 40 amps 415 volts and 10-12 Nos SP MCB 6-32 Amp. of various capacities, complete with tinned copper bus bar, neutral link, earth bar, din bar, detachable gland plate, interconnection, including 40 Amp isolator FP, earthing, painting etc. (For UPS - Branch & ATM)		Nos.		
		TOTAL C/F		•	

S.NO.	ITEM DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Rs. )
		TOTAL B/F		•	,
c)	Supplying & Fixing 12 way MCB SPN DB, three pole & neutral, 415 volts, made out of sheet steel, on surface / recess, including FP 40 amps 415 volts and 10-12 Nos SP MCB 6-32 Amp. of various capacities, complete with tinned copper Bus Bar, Neutral link, earth bar, din bar, detachable gland plate, interconnection, including 40 Amp isolator FP, Earthing, painting etc. (For Power Plug-Branch)		Nos.		
8.0	Providing & fixing Bell for Branch Manager as per direction & instruction of the bank/ Architect	1.00	Nos.		
9.0	Recessed mirror optic luminaire 2x2 ft. with CFL 36 W	12.00	Nos.		
10.0	Mounting Rail luminaire with 1x 36w/40w fluorescent lamps	5.00	Nos.		
11.0	Down Light incl. 12w CFL Fittings	20.00	Nos.		
12.0	FANS, EXHAUST FANS				
i)	Supplying & fixing ,connecting ,testing and commissioning of Ceiling Fans of 1200mm sweep complete with petty material as required High Speed.	2.00	Nos.		
ii)	Supplying & fixing ,connecting ,testing and commissioning of Wall Fans of standard size complete with petty material as required High Speed.	8.00	Nos.		
iii)	Supplying ,Fixing ,Connecting, testing & Commissioning of Exhaust Fans of 300mm sweep complete with petty material and including making a hole in wall and fixing of cowl & louvers as required.	3.00	Nos.		
13.0	EARTHING WORKS				
13.1	Supplying & Making maintiance free Copper coated Earthing of 40 mm Dia & 2m. Length Copper coated rod & pit size of 300X25000 depth with covered with 2bags chemical compound into the pit.	1.00	Nos.		
13.2	Supplying ,Fixing, Connecting & Testing of PVC insulated 1x10 with 12mm dia GI Pipe casing	20.00	R.mt.		
	TOTAL FOR ELECTR				

S.NO.	ITEM DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Rs. )
В:	UPS WORKS:(Incl. ATM)				
1.0	UNINTRERUPTED POWER SUPPLY	14.00	Nos.		
	Supplying materials and wiring for UPS points wiring for 5 pin 6/16 Amp. 250 V plug point with 2 x2.5mm sq. PVC insulated copper conductor cables in recessed conduit i/c P/F of 3 nos. 5 pin 16Amps switch socket unit & earthing of third pin with 1mm sq. PVC Copper conducter as required. Item is including providing 5amp moulded switches and sockets (MK or equivalent) in right size of M.S. Boxes concealed & flush with wall /partitions. laid in slabs /walls/ above false ceiling along with 1mm sq. PVC insulated Copper earth wire with all accessories in appropriate size of medium gauge PVC conduit complete with accessories such as bends, junction boxes, pull boxes etc. Pls. note that each ups point will have seprayte circite from UPS DB to Out-let switch/shocket.The each switch will have 4 points: 03 points shall be 5 Amps from UPS and 01point shall be 16 Amp from main supply.				
2.0	Supplying & Laying 25mm PVC conduits for computer terminal points for lan wiring including junction box at every terminal as required.		RMT		
3.0	EARTHING WORKS				
3.1	Supplying ,Fixing, Connecting & testing of 25x3mm Copper. flat from earth electrode to switch board with necessary clamps, bolts & nuts etc. as required.		Nos.		
3.2	Supplying ,Fixing, Connecting & Testing of PVC insulated 1x10 sqmm copper wire from earth electrode to switch board with necessary M.S. conduit, clamps, bolts & nuts etc as required.		RMT		
	TOTAL FOR	•			

S.NO.	ITEM DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Rs. )	
C:-	AIR CONDITIONING WORKS (ACCSESSORIES ONLY)					
1.0	STABILIZER 90 TO 240 V	0.00	Nos.			
	Supply & fixing 4Kva Stabilizers input 90-275 and output 180-245 (Copper Binding)in postion. The stabilizers shall of high-low disply with countdown timer and instant start button type. The stabilizer shall be of branded co./make with copper binding etc. as per Bank/Architect approvals is must taken.					
2.0	DRAIN PIPE FOR SPLIT AC	75.00	R. Mt			
	Supplying & Laying of 2" dia Ridge PVC drain Pipe below finish floor level & 3/4" Dia PVC Drain pipe along the wall/panelling/partitions in position. The drain out pipe shall be from indoor unit to nearest out let drain pipeat floor level. The item is inclusive of allnecessary accesseries & fittings etc. completed as per satisfaction of Bank & Architect.					
3.0	Copper Gas Pipe with Insulation	0.00	R Mt			
	Providing & Suppling Insulated AC Copper Pipe in postion. The Standred Insulated Copper pipe for Gas outdoor to Indoor units, the copper dia shall be 3/8 & 5/8 size (incoming & outgoing). The insulated pipe shall be fixed proper clamping & necessary slope etc. The connection of insulated pipe shall be properly ridged & leakage free.					
4.0	S/F GI BRACKETS	4.00	Each			
	Suppling & Fixing of G I Brackets in position. The GI brackets shall be fixed at external wall with necessary deshfastners etc.					
	Fixing of A.C Units indoor units as per location specified by the architect/Bank.	0.00	Each			
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	TOTAL FOR AIR CONDITIONING WOR			,		

S.NO.	ITEM DESCRIPTION	QTY	UNIT	RATE	AMOUNT (Rs. )			
	ABSTRACT COST SUMMARY							
	ADSTRACT COST SO.	IVIIVIA	<u>X 1</u>					
	TOTAL FOR ELECTRICAL WORKS							
	TOTAL FOR UPS WORKS							
	TOTAL FOR AIR CONDITIONING WORKS							
	TOTAL	BEFOR	RE GST	`				
	A	DD: GS	ST 18%	`				
	TOTA	L AFTE	R GST	`				
	SAY -							
Amoui	Amount in Words: Rupees							
	contractor's Under taking: 1- I/my represantaive	have ins	pected th	ne said Bran	ch			
	premisess personly.  2- I have read and understand all the specifications and terms & conditions properly.							
	Contractor's Sign and Stamp	Z	O: INDL	AN BANK. I	DEHRADUN			