BOQ FOR THE PROPOSED WORKS OF RENOVATION/INTERIOR/FURNISHING OF BRANCH FOR STATE BANK OF INDIA

BRANCH DETAIL: Omaxe City Branch, INDORE (M.P.)

ELECTRICAL WORKS

I.No.	Description of items Unit	Othy	in INR		
1.NO.	Description of items	Unit	Qty	Rate Rs	Amount Rs
(A)	ELECTRICAL WIRING WORK				
1	Note: Use of Flexible conduits & Elbows in Circuit wiring is not allowed except in exceptional site conditions with the approval of Bank's Engineer / Architect and All wiring laying in the MS/PVC conduit strickle follow IE(Indian Electricity) rules, IS code, follow in all items of project/ work execution. Proper ferrules, lux, thimble, gland termination to be done in all cabling & wiring from both load/source end. Conduit carrying submain will not carry circuit/point wiring. Similarly conduit carrying circuit wiring will not carry submain/point wiring. Conduit carrying point wiring will not carry submain/circuit wiring. All Electrical works (Cabling/wiring/panel etc.) to be carried out as per				
	layout/General Arrangement (GA)Drawing attached only.				
1	ELECTRICAL WIRING				
_	Wiring for light point/ fan point/ wall fan point/ exhaust fan/ light sockets etc. with 1.5 sq.mm. PVC insulated 1100 V Grade copper conductor (FRLS) wires & 1.5 sq.mm. copper earth wire in concealed/ surface using 16 SWG MS conduits, accessories such as bends, tees, saddles, draw boxes, mounting boxes, inner plates, cover plates, ceiling rose etc (whereever required) and chromium plates brass screws/ rowel plug etc. The circuit wiring starting from DB to point control box/ switch box using 2 X 2.5 sq.mm PVC insulated 1100 V grade multi- stranded copper conductor wire & 2.5 sq.mm. PVC insulated earth wire (color code to be used). (Flexible conduit/ elbow not allowed). The conduit to be laid in ceiling with proper clamps/ wall/ floor and flling the chase with cement mortar and finishing the same in original form/ wooden partition/ above false ceiling with proper clamps etc. all complete.				
	(Wherever required as per standard specifications).				
-	i) Each circuit shall have independent earth wire.				
	ii) Each point shall be earthed.				
	iii) Circuit wiring is to be included in point wiring				
а	One light points controlled by one 6 amp. Modular switch.	Nos.	27		
	Two to Four light points controlled by one 6 amp. Modular switch.	Nos	33		
С	One call bell point with ceiling rose/ 6amp. 3 pin socket controlled by one 6 amp. Push Modular switch. With call bell	Nos	2		
d	Celing fan point with one nos 6 amp switch and 2 module electronic regulator including wiring & ceiling rose	Nos.	10		
	One 5 pin socket controlled by one 6 amp. Modular switch complete assembly includes plate box etc. on same light switchboard	Nos	3		
2	6 AMP. POINTS ON SEPARATE BOARD:				

I.No.	Description of items	Unit	Qty	in I	NR
	<u> </u>			Rate Rs	Amount Rs
а	Same as serial no 1 but using 2*2.5 + 1*2.5 Sqmm Copper				
	Conductor FRLS wires from DB to first 6A, 5 Pin modular				
	socket controlled by one 6A switch and looped to the				
	nearest second point with same 2*2.5 + 1*2.5 Sqmm				
	copper conductor wires FRLS insulated 1100V grade (max 3 points per circuit).				
:\		Non	1.4		
,	Primary Point Secondary Point looped	Nos Nos	14 7		
	Power Wiring (6 / 16 AMP. POWER POINTS)	INUS			
J	Same as serial no.1, but wiring for 16 Amp, 6-pin sockets				
	by using 2*4 sq.mm. PVC insulated 1100 V grade copper				
	conductor wire with independent 1* 4.0 sq.mm earth wire				
	from D.B. to first point 1st socket and 1st to 2nd, socket				
	with 2*2.5 sq.mm. and 1*2.5 earth wire including providing				
	and fixing of 16 Amp, 6 -pin socket with 16 Amp. Switch. (Modular type switch/ socket/ plate etc. complete				
	assembly) max 2 points per circuit.				
	assembly) max 2 points per circuit.				
i)	Primary Point	Nos	13		
	Secondary Point looped	Nos	7		
4	AC/Geyser Point (Single Phase)	Noo	4		
	Same as serial no.1, but wiring for A/C socket by using 2*4 sq.mm. PVC insulated 1100 V grade copper conductor wire	Nos	4		
	and earthing with 1*4.0 sq.mm. PVC insulated 1100 V				
	grade copper conductor wire with modular type AC box(tiny				
	trip type) with socket complete in all respects controlled by				
	25/32 A SP MCB to be provided near indoor unit. The point				
	starts from DB to stabilizer to the point near the indoor unit				
	including top.				
	AC Point (Three Phase)				
	Same as serial no.1, but wiring for A/C socket by using 4*6	Nos	4		
	sq.mm. PVC insulated 1100 V grade copper conductor wire				
	and earthing with $1*6.0$ sq.mm. PVC insulated 1100 V				
	grade copper conductor wire of weather proof type 4 way				
	SPN DB complete in all respects controlled by with 40 Amp				
	TPN (10 KA) MCB to be provided near outdoor unit. The point starts from DB to the point near the outdoor unit.				
	(includes wires for terminal connection of outdoor unit from				
	TPN)				
	SPECIAL POINTS : (For Computers)				
	Wiring with 2x2.5 sq.mm. + 1x2.5 sq.mm. PVC insulated	Nos	13		
	1100 V grade multi stranded copper conductor wires in 2				
	mm thick PVC conduit from UPS DB to computer point. Each				
	point to have 3 nos. 6 amps. 5 pin modular type sockets,				
	one 6 amps modular swtich with all accessories, inner/				
	outer plates, metal box etc. and to be fixed on wooden				
	partitions/ by grouting on wall etc. as per requirement at site. The switch should be fixed above the top of counter				
	with indicator and sockets under the counter				
	b) Same as above but looped from the above 1st point to				
	2nd , point and 2nd point to 3rd point. (Maximum 3 points				
	in a circuit)				
رز ا	Primary Point	Nos	12		
	Secondary Point looped	Nos	7		
	CONDUITING FOR TELEPHONE, COMPUTER &	56			
<u>_</u>	CONDUITING, WIRING FOR T.V. SYSTEM.				
7	TELEPHONE POINT				

I.No.	Description of items	Unit	Qty	in I	.NR
		•	4-1	Rate Rs	Amount Rs
а	Wiring for VOICE from Jack Panel in data rack to computer workstation with Cat-6 voice cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type. This work includes supply and laying of CAT-6 cable in PVC conduits throughout the lenght, from the I/O hub to the point.	Nos	14		
	Supplying, laying, effecting terminations, testing and commissioning of 0.51 mm dia Cu. Conductor, twisted, colour coded with polythene capor barrier, telephone cables in the existing tray or in conduit including providing &fixing conduit pipe or cable tray as required from building tag block to the floor as required.				
	Supplying & fixing 20 pair krone tag block with enclosure.	Nos	1		
	P/L 10 Pair of PVC insulated PVC sheathed multi core jelly filled armored telephone. COMPUTER NETWORKING	Mtr	60		
	Wiring for computer networking from Jack Panel in data rack to computer workstation with Cat-6 computer cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type, This work includes supply and laying of CAT-6 cable in PVC conduits throughout the length, from the I/O hub to the point.	Nos	28		
b	Supplying and fixing 9 U (Rack with glass door, opening in the front power panel 1 (horizontal), cable manager 1 lock & key).	Nos	1		
С	Supply, Installation, Testing & Commissioning of 16 port Jack Panel.	Nos	2		
d	Providing and fixing Patch Panels 8 port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)	Nos	3		
е	Providing and fixing of flowing factory fabricated Patch cords. (DBPS Mounting Cord) (UTP/CAT 6 complete with				
i)	connector on both side.) Supplying and fixing Patch Cord-2 Meter- (DBPS Mounting Cord)	Nos.	28		
	Supplying and fixing Patch Cord-1 Meter- TV Point	Nos	28		
	Supply and fixing of 1.6 mm thick G.I. Box along with RG 6	Nos	1		
b	T.V Co axial socket with Cover Plate. Supply, drawing, connecting, testing and commissioning of	R.Mtr	25		
(C)	T.V Coaxial cable RG 6 in existing conduit. CABLES AND DISTRIBUTION BOARDS				
10	CABLES, MAINS & SUBMAINS Supplying all materials and laying/ pulling 1100 volts grade PVC insulated copper conductor wires (FRLS) in MS conduit with all fixing accessories after cutting the floor, wall and the like etc. and replastering the floor level to original. Conduit must be 30 mm below the floor finish level. 1 X 10 sq mm Cu wire for earthing.	Mtr	15		
a	I A TO SY IIIII CU WIIE IUI Editiiiiy.	ויונרן	12		

I.No.	Description of items	Unit	Qty	in I	NR
	2 cochipation of feeting		٧٠)	Rate Rs	Amount Rs
b	Supplying, laying, testing & commissioning of 4 C X 10 sq.mm. at 1100 volts grade PVC insulated copper conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification from main board to UPS Room	Mtr	23		
С	Supplying, laying, testing & commissioning of 4 C X 16 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification (Light DB).	Mtr	18		
d	Supplying, laying, testing & commissioning of 4 C X 25 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification (Power DB, AC DB).	Mtr	7		
е	Supplying, laying, testing & commissioning of 4 C \times 50 sq.mm. at 1100 volts grade PVC insulated aluminum conductor armoured cable with 10 gauge earth copper wire including cables end termination using appropriate Lugs, Glands, termination acessories, Clamps etc. as required as per specification (Mains).	Mtr	30		
11	DISTRIBUTION BOARDS				
	Note:-The Panel shall be approved by The Bank				
	Authority before Placing the Panel order, otherwise it will not considered				
	Supplying, installing, testing & commissiong of surface/recessed mountings, Double door 415 volts TPN MCB distribution board of steel steel, 1.6mm thick dust phosphatized and painted, inclusive of 100 amps, tinned copper busbars, earthbar, common neutral link, din bar for mounting of MCB's detachable gland / knock out plate & with built in loose wire boxl, and superior make terminal connectors for all incoming and outgoing circuits duly prewired with adequate size of PVC insulated copper wires between the bus bars and the MCB's as well as the incomer and upto the terminal connectors/ neutral link and ready for installation of following ways as required.				
	Use 'B' curve MCB's for lighting & small power circuits, 'C' curve for motor duty i.e. for pumps, AC motors, window and split AC's etc. & 'D' curve for UPS DB's i.e. for computers/ PC's circuit. Main incomer & outgoing circuit MCB's shall be selected accordingly i.e. type B,C & D. Contractor to select the MCB's accordingly as per the nature of the circuit/ load.				
	Each DB shall have separate neutral links of rating not less than 100A for each phase. The main incoming neutral link shall be in addition to three outgoing neutral links and shall be of 125 A.				
	UPS DB's shall have a dedicated Earthing link fixed on insulated supports, which will be in addition to body earth link.				
	All internal inter connecting wiring with in the DB's shall be PVC insulated flexible copper conductor wires of adequate capacity as per the current rating.				
	Inside each DB, a DB chart is to be fixed.				

I.No.	Description of items	Unit	Otv	in INR		
1.140.			Qty	Rate Rs	Amount Rs	
а	6-way TPN DB (LIGHT DB)	No.	2	7.550 110		
	Incomer:-					
	1 No. 40 Amp TPN (10 KA) MCB with 40 A DP RCCB (100					
	MA) each phase					
	Outgoing:-					
	10-12 Nos.6/10/25 Amp (10 KA) SP MCB					
b	4-way TPN DB (POWER DB)	No.	2			
	Incomer:-					
	1 No. 63 Amp TPN (10 KA) MCB with 40 A DP RCCB (100					
	MA) each phase					
	Outgoing:-					
	12-14 Nos.6/10/25 Amp (10 KA) SP MCB					
С	4-way V-TPN DB (AC)	No.	2			
	Incomer:-	-				
	1 No. 80 Amp 4 Pole (16 KA) MCCB					
	Outgoing:-					
	4 No. 40 Amp (16 KA) TP MCB					
	3Nos.10/16/25/32 Amp (10 KA) SP MCB					
	3NOS.10/10/23/32 AIIIP (10 KA) 3P MCB					
—	4 TRN DR UDG DOOM	NI-	-			
a	4-way TPN DB UPS ROOM	No.	1			
	Incomer:-					
	1 No. 40 Amp TPN (10 KA) MCB with 40 A DP RCCB (100					
	MA) each phase Outgoing:-					
	10 -12Nos. 6/10/16/25/32 Amp (10 KA) SP MCB, For Lights, Power & spare, UPS etc					
	Lights, Power & Spare, OPS etc					
	4-way SPN DB with 2 No 40A (10KA) DP MCB (For UPS	No	2			
-	Input)	NO.	2			
	Input					
(D)	LIGHT FITTINGS, FANS, CALL BELL					
	LIGHT FITTINGS & ACCESSORIES					
	Supplying, installation with hanging support, testing and					
	commissioning of following light fixtures with electronic					
	Ballasts, Tubes, lamps, all fixing materials including					
	connecting wires etc. all complete as per the directions of					
	Engineer-in-charge (All LED Light Fixures should be covered					
	with minimum 3 Years onsite replacement warranty).					
а	FULL GLOW 2 X 2 LED 36 W slim Smart Panel of make As	Nos	20			
۱ "	specified in tender document or approved by SBI/Architect.	1103	20			
	specified in territor document of approved by 351/11 cinteet.					
<u></u>						
b	Supplying, fixing, testing and commissioning of 15 W LED		38			
	commercial type RECESSED down lighter of make As					
	specified in tender document or approved by SBI/Architect.					
С	Supplying, fixing, testing and commissioning of 15 W LED	Nos	6			
	commercial type SURFACE down lighter of make As					
	specified in tender document or approved by SBI/Architect.					
	· · · · · · · · · · · · · · · · · · ·					
			_			
l d	Supplying, fixing, testing and commissioning of 3 W LED		6			
	commercial type spot down lighter of make As specified in					
	tender document or approved by SBI/Architect.	Ī				

I.No.	Description of items	Unit	Qty	in I	
	-		- *	Rate Rs	Amount Rs
е	LED 18 watt Tube Light 1200mm with all accessories.make As specified in tender document or approved by bank	Nos	9		
f	LED 9 watt Tube Light 600mm with all accessories.make As specified in tender document or approved by bank	Nos	7		
g	LED Strip for cove lighting 15 W per 5 M with driver and necessary installation fittings Led strip light (5 mtr.) make as specified in tender document or approved by SBI/Architect.	Mtr	76		
h	Supply, installation, testing and commissioning of following fans with all fixing materials like white Polycarbonate 2 mm Hylem sheet cover, down rods, fan box as required etc. all complete as per the directions of Engineer-in-charge.				
i)	ceiling fan 1200mm dia	Nos	13		
ii)	Oscillating wall fan (Metallic Body) Sweep 400/450 mm , RPM 1300	Nos	5		
ī	EXHAUST FAN:- Single phase, 300mm sweep, 900 rpm, metallic exhaust fan of the following single phase Exhaust fan continuously rated, capacitor start and run type, totally enclosed and ruggedly built, pre lubricated double ball bearing, copper wounded, A & E class insulation, dynamically balanced, below 40 db sound level etc, front cover with grill/gravity louver for protection purpose with 12 mm plywood complete in all respect make as under: CG/USHA/ORIENT/HAVELLS/ALMONARD/ALSTOM	Nos	2		
j	CALL BELL: Electronic Bell with battery backup, simple dingdong type, each unit to have a different sound.	Nos	2		
k	LED Track Light Supplying, fixing, testing and commissioning of 5 X 9 W LED track light (black body) lighter of make As specified in tender document or approved by SBI/Architect.	Nos	1		
	EARTHING, MAIN PANEL, METER BOARD				
	EARTHING SYSTEM Supply, Installation, Testing and Commissioning of Maintenace 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).	Nos	2		
b	Supply, Installation, Testing and Commissioning of Maintenace Free Earthing system made up of GI rod of 10 feet length, 17.2 mm dia. 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).	Nos	1		

I.No.	Description of items	Unit	Qty	in I	ND
1.110.	Description of items	Oille	QLY	Rate Rs	Amount Rs
	Providing and fixing of Copper/ GI strips in surface or in	1		Rute RS	Amount RS
۲	recess for loop earthing etc. as required.				
	recess for loop eartifling etc. as required.				
i)	Copper Strip 25 mm x 3 mm with proper clamps	Mtr.	14		
	G.I.Strip 25 X 5 mm	Mtr	38		
	Providing and fixing 2 X 8 SWG dia. Cu earth wire in PVC	Mtr.	30		
1 ′	conduit on surface or in recess for loop earthing along with				
	the existing surface/ recess cable as required. (Dedicated				
	Earthing for UPS output DB only)				
	. , ,,				
14	MAIN PANEL AND METER BOARD				
	Designing, fabrication, supply, installation, testing and				
	commissionings of front operated cubicle type				
	compartmentalised, front access, free standing on 75MM "["				
	MS channel, dust and vermin proof (IP 42 degree				
	protection) panel suitable for use at 415V, 3 phase, 4-wire				
	50Hz system suitable for fault level of required value				
	symmetrical at 415V fabricated from 2mm thick CRCA MS				
	sheets with hinged, gaskettted (Metal based neoprene)				
	locable doors having structural reinforcement including				
	3mm thick gland plates on top and bottom, lifting hooks, GI				
	earth strip of required size with 2 nos earth terminals, 2				
	nos 230V AC operated 250mm X 250mm size axial fans for				
	exhaust of heat with On-Off toggle switches including 2				
	coated primer and 2 power coated paint fnish of approved				
	shade over metal surface cleaned and treated with seven				
	tank process complete with interconnections etc as per				
	specifications as required main panel board of approved				
	make (KRYPTON POWER				
	CONTROLS/NEPTUNE/TRICOLITE/AMPTECH Or should be				
	CPRI Approved, Type of Approval as instructed by the				
	SBI/Architect)as per the following specifications, should be				
	All live accessible parts shall be shrouded and all equipment				
	shall be finger touch proof. The busbars insulation shall be				
	withheat shrinkable sleeves SMC/ DMC shrouds and busbar				
	supports shall be used. Padlocking facility shall be provided				
	on all outgoing feeders doors and switch handles shall be				
	locable in OFF position.				
	Suitable arrangement shall be made for termination of multiple incoming cables.				
	All kA values indicated shall be Ics breaking capacity				
	GA drawings shall be got approved by SBI				
a	Fabrication, supply, installation, testing and commissionings				
	of cubicle type floor/wall mounted L.T. panel made out of 2				
	mm thick CRCA sheet including connection, inter-connection				
	alongwith 4 strip aluminium busbar as per CPWD				
	specifications,(Part IV-Sub-station) etc. as required.(Meter				
	Board)				
	Incoming :-				
	i) 1no. 125 Amp 4P MCCB (25 KA) thermal over current,				
	instantaneous, Short circuit realease,Earth fault.				
	ii) Busbar :-200 Amps 4P aluminum conductor bus bar				
	(BPTM type Heat-shrinkable busbar insulation) supported				
	by DMC / FRP insulators.				
	Space shall be provide for the BSES Meter				
	Meter board shall be lockable.				
	Complete panel described as above.				
-	complete parier described as above.				
<u></u>	Floor panel chall consists of t				
В.	Floor panel shall consists of : - INCOMER				
	INCOMER				

Note:- The rates quoted includes all other taxes , duties , loading, unloading , transportation, other expenses etc to site. only GST will be paid Extra

I.No.	. Description of items	Unit	Qty	in INR	
L				Rate Rs	Amount Rs
	1no. 125 Amp 4P On Load Change over switch with 1 No. 125 Amps,TPN MCCB (25 KA) with extendeble rotary handle each thermal over current, instantaneous, Short circuit realease.Earth fault.				
	BUSBARS				
	160 amps TPN pole busbar chamber of suitable length with copper busbars. All busbars and interconnections shall be of suitable size copper strips.				
	INDICATING PANEL				
	Digital flush type class-1.0 accuracy multifunction meter showing V, A, PF etc. with 3 Nos. current transformers of 100/5A ratio, 10 VA Class-1.0 metering 1 sets				
	Red/Green/Amber ON/OFF/TRIP indicating lamps with 2A SP MCB backup protection.				
	1 set of three phase indicating lamps along with 2A SP MCB backup protection.				
	Restricted Earth fault relay with 3 Nos. current transformers of 160/5 ratio, 15 VA Class 5P 10 (Numeric Relay not required.)				
	Undervoltage, Overvoltage & phase reversal relay for persisted voltage of 105-180% & 20-95% of rated voltage. (Numeric Relay not required.)				
-	OUTGOINGS:-				
	2 Nos 63A TPN MCCB (16 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. For capacitor Bank AND AC VTPN,				
	2 Nos 63A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For PDB,UPS)				
	1 Nos 40A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For LDB)				
	2 Nos 40A DP MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars.				
	The electrical panel as described above and specifications complete.	Set	1		
С	Supplying, installation, testing & commissioning of 12.5 KVAR, APFC Panel autooperation and power factor should be nearing unity complete as required inluding all contactors, relays, indivating units etc. as required at site". Capacitor make: L&T/ ABB/ Siemens/ Neptune	set	1		
d	Providing and fixing of Kit Kat Rewirable Porcelian fuse carrier & base with wooden frame of 400 amp/415 Volt near meter box	Set	1		
	TOTAL OF ELECTRICAL WORKS			Rs	
T 14	lords Ds				

In Words Rs.