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

BRANCH DETAIL: Makdone Branch, Ujjain (M.P.)

### **ELECTRICAL WORKS**

		ite to site. Only t		<u> </u>	
I.No.	Description of items	Unit	Qty	in I	
(4)	ELECTRICAL WIRING WORK			Rate Rs	Amount Rs
	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.				
	ELECTRICAL WITHING				
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 rates.				
a	One light points controlled by one 6 amp. Modular switch.	Nos.	24		
b	Two to Four light points controlled by one 6 amp. Modular switch.	Nos	27		
С	One call bell point with ceiling rose/ 6amp. 3 pin socket	Nos	2		
	controlled by one 6 amp. Push Modular switch. With call bell				
d	Celing fan point with one nos 6 amp switch and 2 module electronic regulator including wiring & ceiling rose	Nos.	11		
е	One 5 pin socket controlled by one 6 amp. Modular switch	Nos	3		
	complete assembly includes plate box etc. on same light				
	switchboard				
2	6 AMP. POINTS ON SEPARATE BOARD :				

I.No.	Description of items	Unit	Qty	in I	NR
	p		~·)	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).				
i)	Primary Point	Nos	12		
ii)	Secondary Point looped	Nos	6		
3	Power Wiring (6 / 16 AMP. POWER POINTS)				
	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	17		
	Secondary Point looped	Nos	6		
	AC/Geyser Point (Single Phase)				
	Same as serial no.1, but wiring for A/C socket by using 2*4	Nos	6		
	sq.mm. PVC insulated 1100 V grade copper conductor wire				
	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.				
	including top.				
5	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)				
6	SPECIAL POINTS: (For Computers)				
	Wiring with 2x2.5 sq.mm. + 1x2.5 sq.mm. PVC insulated	Nos	12		
	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)				
	,		. =		
	Primary Point	Nos	15		
	Secondary Point looped	Nos	6		
(R)	CONDUITING FOR TELEPHONE, COMPUTER & CONDUITING, WIRING FOR T.V. SYSTEM.				
7	TELEPHONE POINT				
	-				

I.No.	Description of items	Unit	Qty	in I	NR
	2 22 2 1 2 1 1 2 1 1 2 1 2		Z*)	Rate Rs	Amount Rs
a	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	13		
	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.	Mtr	62		
	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	26		
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 connector on both side.)				
i)	Supplying and fixing Patch Cord-2 Meter- (DBPS Mounting Cord)	Nos.	26		
	Supplying and fixing Patch Cord-1 Meter- TV Point	Nos	26		
	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		
	T.V Coaxial cable RG 6 in existing conduit.  CABLES AND DISTRIBUTION BOARDS				
	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.				
a	1 X 10 sq mm Cu wire for earthing.	Mtr	23		

I.No.	Description of items	Unit	Qty	in I	NR
	•			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	27		
	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	15		
d	Supplying, laying, testing & commissioning of 4 C $\times$ 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	5		
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	21		
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.				

7 3:	Description of items	11	Oto.	in INR	
I.No.	Description of items	Unit	Qty		
		ļ		Rate Rs	Amount Rs
a	6-way TPN DB (LIGHT DB)	No.	2		
	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				
	10 12 10010/10/25 / timp (10 10 t) 51 1105				
-	A TON DD / DOWED DD)	NI-	2		
D	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				
	4-way V-TPN DB (AC )	No.	2		
		INO.	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				
	31403.10/10/23/32 / timp (10 10 t) 31 / 16B				
<u> </u>					
d	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				
	,,				
е	4-way SPN DB with 2 No 40A (10KA) DP MCB (For UPS	No.	2		
	Input)		_		
	1115407				
(D)	LIGHT FITTINGS, FANS, CALL BELL				
	LIGHT FITTINGS, FANS, CALL BELL LIGHT FITTINGS & ACCESSORIES				
12	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).				
	FULL GLOW 2 X 2 LED 36 W slim Smart Panel of make As	Nos	21		
a	specified in tender document or approved by SBI/Architect.	INUS	'l 21		
	specified in tender document of approved by 361/Architect.				
h	Supplying, fixing, testing and commissioning of 15 W LED	Nos	21		
"	commercial type RECESSED down lighter of make As		'l 21		
	specified in tender document or approved by SBI/Architect.	1			
L		<u> </u>			
С	Supplying, fixing, testing and commissioning of 15 W LED	Nos	5		
	commercial type SURFACE down lighter of make As				
	specified in tender document or approved by SBI/Architect.				
		1			
d	Supplying, fixing, testing and commissioning of 3 W LED	Nos	8		
	commercial type spot down lighter of make As specified in	1			
	tender document or approved by SBI/Architect.	1			
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I.No.	Description of items	Unit	Qty	in I	NR
	2 cocription of feeling	٥٠	۲۰۶	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	12		
f	LED 9 watt Tube Light 600mm with all accessories.make As specified in tender document or approved by bank	Nos	3		
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	60		
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	14		
	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	3		
j	CALL BELL: Electronic Bell with battery backup, simple dingdong type, each unit to have a different sound.	Nos	2		
	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		
С	Providing and fixing of Copper/ GI strips in surface or in recess for loop earthing etc. as required.				
	Copper Strip 25 mm x 3 mm with proper clamps	Mtr.	15		
	G.I.Strip 25 X 5 mm  Providing and fixing 2 X 8 SWG dia. Cu earth wire in PVC 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)	Mtr. Mtr.	35 30		

I.No.	. Description of items Unit	Unit	Qty	in INR		
		Oilit	Qty	Rate Rs	Amount Rs	
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					
	Fabrication, supply, installation, testing and commissionings					
۵	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.					
	Sampleto parior accombed as above.					
h	Floor panel shall consists of : -					
<u>₽.</u>	INCOMER					
-	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.					
	realease, Earth Taute					
	BUSBARS					
	160 amps TPN pole busbar chamber of suitable length with					
	copper busbars. All busbars and interconnections shall be of					
	suitable size copper strips.					
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# 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	Unit	Qty	in INR	
				Rate Rs	Amount Rs
	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.)				
	(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	Set	1		
	complete.				
С	Supplying, installation, testing & commissioning of 12.5	set	1		
	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				
Ч	Providing and fixing of Kit Kat Rewirable Porcelian fuse	Set	1		
u	carrier & base with wooden frame of 400 amp/415 Volt near		-		
	meter box				
	TOTAL OF ELECTRICAL WORKS			Rs.	
	and De			13.	

In Words Rs.