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

#### BRANCH DETAIL:

Manawar Branch, Distt. Dhar (M.P.)

#### ELECTRICAL WORKS

[.No.	Description of items	Unit	Qty	in IN	
			_	Rate Rs	Amount R
(A)	ELECTRICAL WIRING WORK				
	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 filing the				
	chase with cement mortar and finishing the same in original				
	form/ wooden partition/ above false ceiling with proper				
	clamps etc. all complete.				
	ciamps 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.				
а	One light points controlled by one 6 amp. Modular switch.	Nos.	29		
b	Two to Four light points controlled by one 6 amp. Modular switch.	Nos	30		
с		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	Nos.	15		
	electronic regulator including wiring & ceiling rose				
e	One 5 pin socket controlled by one 6 amp. Modular switch	Nos	3	T	
	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 INR		
	•			Rate Rs	Amount Re	
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	19			
	Secondary Point looped		6			
	Power Wiring (6 / 16 AMP. POWER POINTS)	Nos	0			
	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.					
i)	Primary Point	Nos	11			
	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	7			
	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.					
5	AC Point (Three Phase)					
	Same as serial no.1, but wiring for A/C socket by using $4*6$	Nos	2			
	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					
	t i i i i i i i i i i i i i i i i i i i					
	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)					
i)	Primary Point	Nos	11			
	Secondary Point looped	Nos	6			
	CONDUITING FOR TELEPHONE, COMPUTER &					
	CONDUITING, WIRING FOR T.V. SYSTEM.					
7	TELEPHONE POINT					

I.No.	. Description of items		Qty	in INR		
	-			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	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. 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	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			
e	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			
а	Supply and fixing of 1.6 mm thick G.I. Box along with RG 6 T.V Co axial socket with Cover Plate.	Nos	1			
b	Supply, drawing, connecting, testing and commissioning of T.V Coaxial cable RG 6 in existing conduit.	R.Mtr	25			
	CABLES AND DISTRIBUTION BOARDS					
10	<b>CABLES , MAINS &amp; SUBMAINS</b> 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	25			
u		1 101				

I.No.	Description of items	Unit	Qty	in IN	IR
				Rate Rs	Amount Re
	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	20		
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	5		
e	Supplying, laying, testing & commissioning of 4 C x 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.				

<b>T</b> • *			-	in INR		
I.No.	Description of items	Unit	Qty	in I Rate Rs	NR Amount Rs	
	Inside each DB, a DB chart is to be fixed.			Rate KS	Amount KS	
	6-way TPN DB (LIGHT DB)	No.	2			
	Incomer:-		1			
	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					
		NL-	2			
C C	4-way V-TPN DB (AC )	No.	2			
	Incomer:-					
	1 No. 80 Amp 4 Pole (16 KA) MCCB					
	Outgoing:-					
ļ	4 No. 40 Amp (16 KA) TP MCB					
	3Nos.10/16/25/32 Amp (10 KA) SP MCB					
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					
	Lights, Power & spare, OPS etc					
е	4-way SPN DB with 2 No 40A (10KA) DP MCB (For UPS	No.	2			
-	Input)					
	LIGHT FITTINGS, FANS, CALL BELL					
12	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).					
a	FULL GLOW 2 X 2 LED 36 W slim Smart Panel of make As	Nos	24			
	specified in tender document or approved by SBI/Architect.					
b	Supplying, fixing, testing and commissioning of 15 W LED	Nos	21			
-	commercial type RECESSED down lighter of make As					
	specified in tender document or approved by SBI/Architect.					
	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.					
	,					
	Complete fining testing and the training of the test		-			
d	Supplying, fixing, testing and commissioning of 3 W LED		8			
	commercial type spot down lighter of make As specified in tender document or approved by SBI/Architect.					
	tender document of approved by SDI/Architect.					

I.No.	Description of items	Description of items Unit	Qty	in INR		
	• •			Rate Rs	Amount Rs	
e	LED 18 watt Tube Light 1200mm with all accessories.make As specified in tender document or approved by bank	Nos	13			
f	LED 9 watt Tube Light 600mm with all accessories.make As specified in tender document or approved by bank	Nos	6			
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	51			
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	16			
ii)	Oscillating wall fan (Metallic Body) Sweep 400/450 mm , RPM 1300	Nos	1			
i	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	4			
j	CALL BELL: Electronic Bell with battery backup, simple ding- dong 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					
	<b>EARTHING SYSTEM</b> Supply, Installation, Testing and Commissioning of Maintenace Free Earthing system made up of copper- bonded 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			

[.No.	Description of items Unit	Qty	in INR		
	- p	-		Rate Rs	Amount R
С	Providing and fixing of Copper/ GI strips in surface or in recess for loop earthing etc. as required.				
i)	Copper Strip 25 mm x 3 mm with proper clamps	Mtr.	10		
ii)	G.I.Strip 25 X 5 mm	Mtr	38		
iii)	Providing and fixing 2 X 8 SWG dia. Cu earth wire in PVC	Mtr.	30		
	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				
а	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.				
			İ		
	Floor panel shall consists of : -				

.No.	Description of items	Unit	Qty	in IN	in INR	
	-			Rate Rs	Amount R	
	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.					
	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					
	100/ SA Tatio, 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.					
1	(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.					
	Supplying, installation, testing & commissioning of 12.5	set	1	T		
	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					
4	Providing and fixing of Kit Kat Rewirable Porcelian fuse	Set	1			
		Set	1			
	carrier & base with wooden frame of 400 amp/415 Volt near					
	meter box TOTAL OF ELECTRICAL WORKS			Rs		
				КS		
n Wo	ords Rs.					