## TENDER OF PROPOSED ELECTRICAL & AC WORKS AT SBI, BALOD SME BRANCH, BUS STAND ROAD, BALOD (C.G.)

S.No.	DESCRIPTION OF ITEM	Unit	Qty	Rate	Amount
(4)	TI TOTAL WITHING WORK				
(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				
1	ELECTRICAL WIRING				
	Providing, fixing, testing and commissioning of POINT				
	WIRING of any length for light point/ Wall fan point /				
	Exhaust fan point/ Call bell point/ including call bell/				
	including fan box (if required), 'S' type fan hook etc				
	with 3 X 1.5 Sq.mm(P/N/E) PVC 650V/1100V Grade FR				
	insulated copper conductor single core multi strended				
	wire in 16 SWG (Medium Gauge) stove enamelled rigid				
	steel conduit 20mm/25mm with conduit accessories like				
	bend, junction box etc in concealed/surface manner as				
	per site requirment with suitable Modular Switches /				
	Sockets with plate and Metal/PVC box, Scaddle, angle				
	bracket (if required), 3 plate ceiling rose/bulb holder				
	etc. The floor/roof/wall junction box shuold be of MS				
	(heavy duty) box of suitable size and covered with Steel				
	finish Steel cover sheet by screw tight and gasket to				
	insertion. The item includes Circuit wiring from DB to				
	the switch board with 3x2.5 Sq.mm. The above wiring				
	carried out surface or recess in wall/floor/roof should				
	be cutting by cutter/chiesling, replastering, curing,				
	painting with uniform and smooth finish by specilised				
	workman ship and making the surface neat afterwards				
	complete in all respect as per direction of Bank Engg.				
	(Each Circuit to take NOT MORE than 7-8 points) The				
	conduit/ Flexible conduit/junction box/metal modular				
	box etc must be joined by gland and check nut at both				
	ends. (each circuit to be controlled by one MCB). The				
	colour code of wire are as under: Phase- Red, Neutral-				
	Black, Earth-Green				
	Make of Material for items of BOQ:-				
	(i) Modular Type Switch/socket/step electronic fan				
	regulator plate, box, TV/telephone, bulb holder/3 pin				
	ceiling rose with all accessories:- Lergand/				
	Anchor(Roma)/MK/ Crabtree				
	(ii) MS conduit/PVC conduit with all accessories:-				
	BEC/AKG/NIC/Precision				
	(iii) PVC insulated copper wire(FR) 650V/1100 V grade:-	l .	1	1	

а	Providing and fixing of point wiring with above specifications. One light point controlled by one switch.	70	Nos.	
b	Providing and fixing of point wiring with same above specifications. Two light points to be controlled by one switch.	20	Nos	
С	Providing and fixing of ceiling fan point controlled as under  (i) one 6 amp switch  (ii)one no stepped electronic regulator of two module	16	Nos.	
d	providing and fixing 6 Amps Plug Points with same specs as above and install along with same light switchboard	8	Nos	
e.	Master switch of 16 Amps (Only Grey /Golden/ Wooden colour other than white colour) to install alongwith same light switch board to control all light as a master switch ON/OFF in each switch board	8	Nos	
2	6 AMP. POINTS ON SEPARATE BOARD:			
	Supply,fixing,testing and commissioning of 1 No 6 A Multi Socket with 1 No. 6A switch (Modular type) with cover plate, sheet steel box / PVC modular box etc on surface / concealed manner I/c electrical connections and making good all the damages, painting, cleaning the site etc complete including all accessories as per site requirement as directed.  (Minimum two and Maximum three points are loop with	8	Nos	
3	Power Wiring (6 / 16 AMP. POWER POINTS)			
	Supply, fixing, testing and commissioning of 1 No 16 A switch & 1 No.six pin 6/16 Amp. Multi Socket (Modular Type) with cover plate, sheet steel box etc on surface / concealed manner I/c electrical connections and making good all the damages, painting, cleaning the site etc complete including all accessories as per site requirement as directed.  (Maximum two points are loop with one circuit as	14	Nos	
4	SPECIAL POINTS : ( For Computers )			
5	Supply, fixing, testing and commissioning of following Modular type switch socket with cover plate, PVC modular box on Surface / sheet steel box in concealed manner I/c electrical connections and making good all the damages, painting, cleaning the site etc complete including all accessories as per site requirement directed.  2 Nos. 6 A Switch + 3 Nos. 6 A, 3 pin Socket (Minimum two and Maximum three points are loop with AC Point (Single phase)	16	Nos	
	Supply, Installation, Testing and commissioning of the	10	Nos	
a.	surface / recess mounting A.C. Cassette power point with the followings:  Metal enclose Four way with one Nos 32 Amp FP MCB with complete Enclosur plate and box 1 set i/c	10	INUS	
	damages, painting, cleaning the site etc complete as required as per site requirement and as directed. (Only one point is connectedwith one circuit as mentioned			
	helow			

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	Supplying, providing circuit wiring for Power/UPS with				
	following PVC insulated copper conductor single core				
	multi strended wire ( HRFR ) in mentioned conduit i/c				
	electrical connections in suitable size MS / PVC modular				
	boxes and it laying, fixing, testing and commissioning				
	in suitable size 20/25 mm dia,16 SWG (Medium Gauge)				
	thickness rigid MS conduit with conduit accessories like				
	bend/junction box/ fan box etcwith cover plate, sheet				
	steel box/ PVC modular box etc on surface/ concealed				
	manner i/c electrical connections and making goods all				
	the damages, replastering, painting, cleaning the site etc				
	complete as required as per site condition. The				
	floor/roof/wall junction box shuold be of MS(heavy				
	duty) box of suitable size and covered with Steel finish				
	Steel cover sheet by screw tight and gasket to avoid				
	water/dust insertion. The length of circuit upto 30				
	meter length or less as per site condition/requirment.				
	Make of material				
	(i) MS conduit/PVC conduit with all accessories:-				
	BEC/AKG/NIC/Precision				
	(ii) PVC insulated copper wire(FR) 650V/1100 V grade:-				
	Finolex/RR cable/ Havells				
а	3 X 2.5 sqmm ( For UPS Circuit/6 amp Separate Board	12	Nos		
	) in suitable size of 16 SWG (MMS) steel conduit as per				
	IS code.				
b	3 X 4.0 sqmm ( For AC/Power Circuit ) in suitable size	7	Nos		
	of 16 SWG (MMS) steel conduit as per IS code.				
7	UPS Outgoing & Other wiring as per requirment.				
(a)	3 x 10 Sqmm copper multi strand wire in 25 mm 16	20	R.Mtr		
	SGW (MMS) steel conduit.( UPS INPUT DB TO UPS)				
(b)	3 X 1.5 Sqmm copper multi strand wire in suitable size	25	R.Mtr		
	of 16 SWG (MMS) steel conduit.				
(c)	3 X 2.5 Sqmm copper multi strand wire in suitable size	25	R.Mtr		
	of 16 SWG (MMS) steel conduit.				
(d)	3x4 Sqmm copper multi strand wire in suitable size of				
	16	1.0	D 141		
	SWG (MMS) steel conduit.	16	R.Mtr		
(f)	3 X 6 Sqmm copper multi strand wire in suitable size of	14	R.Mtr		
8	16 SWG (MMS) steel conduit.				
0	DISTRIBUTION BOARDS				
_	All MCB to be "C" series				
a	Supply, installation, Testing and commissioning of the				
	surface/recess mounting following ways MCB DB's				
	230/415 Volts with tinned copper busbar, neutral bar,				
	earth bar, din bar detachable gland plate,				
	interconnection and making good all the damages,				
	painting, cleaning the site etc complete as required as				
	per site requirement. All MCCB has braking capacity is				
	25KA and ALL MCB/ELCB has breaking capacity has 10				
	KA. Make of Materials				
	Panel- As per IS Standards/CPRI Tested.				
	DB/MCCB/MCB-Legrand/Siemens/Hagger/Schneider				
	(Note:- Before Placing the Panel order, firstly it Passed				
	by The Bank Authority, otherwise it will not considered)				

b	Supplying, installation, testing and commissioning of indoor type, sectionalised, compartmentalized, MV Panel board of suitable size fabricated from CRCA sheet of 2 mm thick for frame work,enclosure and doors, 3 mm thick for gland plates with stiffers where required, having vibration free structure chemically treated with seven tank process before painting for surface treatment and powder coated,with aluminum busbar with DMC / SMC busbar supports suitable for 3 Phase 415 V 50 Hz AC supply i/c providing and fixing the following switchgear mounted thereon complete with gaskets and interconnections, connection as per specification complete as required.  ( The board shall be dust & vermin proof with suitable degree of IP protection ) NOTE: All switchgears Ics shall be equal to 100% Icu.  Sheet 14 swg: panel sides,upper,lower,and Ft.doors Sheet 16 swg: back side and compartments.  Glande plates: 3 mm thick.  Cable entry: Provision at bottom and upper sides.  The above panel belongs following as under:  A. 4 Nos. 300 Amp. Electrolytic grade Aluminum Bus Bars insulated with colored Heat Shrinkable PVC Sleeves & duly supported on SMC/DMC molded supports with Antitracking barriers.  B.INCOMING SWITCHGEARS: (RYB LED Indicators for Both Main/DG)  (i) 1 No. FP. 250 A, 25 KA MCCB with thermal magnetic trip unit WTH Digital Voltmeter & Digital Ammeter sutiable size of CTS, selector switches etc.	1	Nos	
	C. OUTGOING SWITCHGEARS:  (i) 1 Nos- 160 Amp TP MCCB for main with 300 amp bus bar with indicator.			
С	Supply & Installation of SDP (Surge Protector Devicve) for general protection of main Distribution Board Legrad			
	Make Cat No. 412247 (3P+N), 40 KA, T2- Imax	1	Nos	
d	40KA/pole with complete wiring. Providing and fixing 6 way TPN double door DB for LIGHT /POWER POINTS with 63 Amp TPN , controlling 18 Nos. 10/16/32 Amps SPMCBs & complete.	1	Nos	
e.	Providing and fixing 4 way TPN double door DB for LIGHT /POWER POINTS with 63 Amp TPN , controlling 12 Nos. 16/32 Amps SPMCBs & complete.	2	Nos	
f	Providing and fixing (8) way SPDB double door type For Light DB only for Emergency Lights like glow sign etc with 1x32 Amps DP, controlling 6 NO.10 A./16 AMP SPMCB	1	Nos.	
g	Providing and fixing of Kit Kat Rewirable Porcelian fuse carrier & base with wooden frame of 200 amp/415 Volt near meter hox	1	Set	
9	CABLES			

	Supplying, unloading, storage, laying, testing and commissioning of PVC/XLPE insulated (Heavy Duty) Al/Cu conductor armoured cable suitable for working voltage upto and including 1100 V grade, laid and tied on existing overhead cable trays, or laid and tied over MS supports in masonry trenches with copper/al cable lugs, single compression brass cable glands, tapping, crimping etc. as required and all cables run with double run ( 2 No.) of GI wire of 8 SWG size. The size of cables are as under:- Make of Material:- (i) PVC/XLPC Armoured cable:- Finolex, Havells, RR cable, CCI(Cable Corp. of India) (ii) Cable Termination:- Dowells, Comet			
а	3.5 X 50 Sq.mm XLPE. Al. armoured Cable(AC VTPN & BUS BARS)/Main cable	10	Mtr	
b	3.5 X35 Sq.mm XLPE.Al.armoured Cable (POWER)	10	Mtr	
С	4X25 Sq.mm XLPE Al armoured Cable	20	Mtr	
d	(POWER/LIGHT/UPS) 4X 16 Sq.mm XLPE.Al.armoured Cable (LIGHT/UPS)	20	Mtr	
10 (i)	EARTHING  COPPER PLATE EARTH STATION:  Preparation of the Plate Earth Station: (As per IS:3043)  (a) Excavation of hard rocky earth, soft murrum, hard murrum etc and back filling with black cotton soil for the earth station, the earth pit size is 1000 mm X 1000 mm X 2500 mm.			
(::)	(b) Supply and fixing of Copper Plate of Size 600 mm X 600 mm X 3.0 mm thick.  (c) Fixing of 50 mm X 6 mm, 3 Mtrs copper strips from Copper Plate to earth terminal including brazing/welding at plate etc.  (d) Supply and laying in position 19 mm, 2 Mtrs G.I "B" Class pipe for watering with reducer/funnel with mesh.  (e) Supply and Fixing of the following in the earth station.  (i) 75 Kg. Charcoal.  (ii) 15 Kg. Original Salt.  (iii) Black Cotton soil of adequate amount.  (f) Construction of earth pit chamber including necessary brick work concrete, plastering, S/F of C.I Cover of size 12" X 12" complete as per site	2	Nos	
(ii)	G.I.PLATE EARTH STATION :  Preparation of the Plate Earth Station: (as per IS:3043)	2	Nos	
	(a) Excavation of rocky earth, soft murrum, hard murrum etc and back filling with black cotton soil for the earth station, the earth pit size is 1000 mm x 1000 mm x 2500 mm deen (b) S/F of G.I. plate of size 600 x 600 x 6.0 mm thick.			
	(c) S/F fixing 50 mm x 6 mm, 3 mtrs G.I, strips from G.I.plate to earth terminal including brazing / welding at plate etc.			
	(d) Supplying and laying in position 19 mm, 2 mtrs G.I. `B' class pipe for watering.with reducer/funnel with mesh.			
	(e) S/F of the following in the earth station.			

	75 Kg. Charcoal, 15 Kg. Original Salt. and Black Cotton soil of adequate amount.  (f) Construction of earth pit chamber including necessary brick work concrete, plastering, S/F of C.I. Cover of size 12" x 12" complete as per site req.and marking its value and identification etc.			
(iii)	Providing and fixing Copper/GI strip as per specification compete including connection to earth electrode revetting/sweating/soldering, burying 15 cms below in all types of soil/rocks etc complete as requiued.			
	(a) Copper Strip 25 X 5 mm	15	Mtr.	
	(b) G.I.Strip 25 X 5 mm	10	Mtr	
(iv)	Supply and laying of 10 Sq.mm 650V/1100 V PVC grade insulated copper wire in 15 mm G.I. Pipe ISI grade including all accessories complete as required. (Dedicated Earthing for UPS output DB only)	10	Mtr.	
11	TELEPHONE POINT			
	Supplying, Installation, testing and commissioning of the telephone point with the followings			
(i)	Two pair, 0.61 mm dla. telephone cable tinned copper conductor, P.V.C. insulated and sheathed, fire retarding, anti termite, colour coded twisted pairs and rip cord, Double outlet The length of telephone cable upto 35 meter length or less as per site condition with shutter modular type Telephone Outlets (RJ — 11) wth suitable size MS / PVC modular boxes and it laying, fixing, testing and commissioning in suitable size 20/25 mm dia,16 SWG (Medium Gauge) thickness rigid PVC conduit with conduit accessories like bend/junction box/cover plate/sheet steel/PVC box on surface/concealed manner i/c electrical connections and making goods all the damages,replastering, painting, cleaning the site etc complete as required as per site condition. The floor/roof/wall junction box shuold be of MS(heavy duty) box of suitable size and covered with Steel finish Steel cover sheet by screw tight and gasket to avoid water/dust insertion.	6	Nos	
	Make of Material:- Delton/Finolex/RR cable			
(ii)	Supplying and fixing of krone telephone tag block on surface/ recess mounted with its accessories suitable for the multi core telephone cable and shall accommodate tin-plated phosphor bronze connectors, the connectors shall splice unskinned cables up to 0.61 mm dia and shall be terminate both incoming and out going lines, the tag blocks shall be mounted inside, water proof box and locking arrangement and shall be (A) 20 Pair tag block	1	Nos	
(iii)	Supply, installation, testing and commissioning of the	40	Mtr	
	following size jelly filled armoured tehephone cable.			
	20 pair			
	6			

12	DATA CABLING FOR LAN			
a	Providing, fixing, testing and commissioning of all nodes of four pair UTP CAT 6 LAN cables length upto 20.00 meter length or less as per site conditionin suitable size 20/25 mm dia, 16 SWG wall thickness rigid PVC conduit with conduit accessories like bend/junction box/fan box etc on surface/recessed manner and making good all the damages, painting, cleaning the site etc complete as required as per site condition and as directed as required. Junction box shuld be covered with Stainless steel plate with screw with gasket for protection of water/dust. Providing, fixing, testing and commissioning of modular type Information Outlets with suitable size of MS/PVC modular boxes complete, all accessories with insulation displacement connectors etc suitable for CAT 6 UTP cabling with RJ-45 socket with testing and commissioning of STP cabling with scanner for all the nodes/switches/jack panel complete (Each point/circuit/cable from both load and source end to be marked with ferrules.)  Make of Material:-  (i) Data Cable, Cat 6 cable, Switch, Jack panel, Rack, Patch cords & Other accessories:- D-Link, Legrand	18	Nos	
b	Providing and fixing of flowing factory fabricated Patch cords. (UTP/CAT 6 complte with connector on both			
i)	side ) for 1 Mt. long	18	Nos.	
ii)	for 2 Mt. long	18	Nos	
h	Providing, fixing, testing and commissioning of four pair CAT 6 LAN cable in suitable size of 20/25mm PVC medium gauge 16SWG conduit including all accessories to interconnect the switches from different location.	180	Mtr	
13	TV POINT:-Supply, installation, testing and commissionig of TV point (Modular) with RG-6 cable in the Medimum Gauge 1.6 mm PVC Conduit with all	1	Nos	
14	Supply and installation of Vinyl sticker for on Electrical DBs like, " Switch Off at Night", Switch Off For Safety, etc.	12	Nos	
15	Making & Providing of 3 sets of As built Drawing with coloured print for entier Electrical work (Power/UPS/Light/Data/Telephone/AC etc.) as advised by the Bank's Authority Description of light /fan fixture	1	Lum sum	
	Supply and Installation, Testing and commissioning of the following fittings / equipments in surface/recess mounted as directed etc down rods of size upto 300 mm where ever required with ball sockets, anchor fastner etc complete as per site conditions. All fittings should be hang with suitable size of GI wire to four corner of fittings to the RCC rooftop with suitable size of anchor fastner/heavy gauge screw. The necessary arrangement is made by the contractor to install fittings in false ceiling especially 2'X2' and 4'X1' etc. as per instruction of Bank Engg.			

17	LED LUMINARES:- 2'x2' <b>(FULL GLOW TYPE)</b> LED light fittings (600X600mm) dimension suitable for grid/gypsum ceiling complete with its electrionic driver as required per instruction of Bank's Model No are as under:- PHILIPS:- RC380B G2 LED 35S-6500 PSU OD WH LED				
18	(FULLGLOW) WIPRO:- CRCO1ORO 38 HP57 HAVELLS:- LHECDIL7IL1W036 (Edge- Lit) CG:- LCTAR3-40-CDL	26	Nos		
19	LED DOWNLIGHTER: 15 Watt, recessed mounted circular down lighter , 6" dimension with complete its electronic driver are as under:- PHILIPS:- GREENLED-DN193B LED-12S-6500 PSU WIPRO:- IRIS LED LD 71-121-XXX-50-XX HAVELLS:- LHEBJNP ZPZ 1W 015(ENDURA LOW DEPTH) CG:- LC DD-15-CDL	34	Nos		
20	LED Spot Light, 3 Watt, 2/3"(Inches) size as per site requirment.  PHILIPS WIPRO HAVELLS CG	10	Nos		
21	LED COVE/ STRIP LIGHT WITH ITS ELECTRONIC DRIVER( BLUE COLOUR):- Supply, installation, testing and commissioning of bright LED strip light with its electronic driver complete as required.  PHILIPS WIPRO HAVELLS CG	40	Mtr		
22	BOX TYPE LUMINAIRES: LED TUBE FITTINGS, 1200 mm, 18/20 Watt PHILIPS/WIPRO/HAVELLS/CG	20	Nos		
23	CEILING FAN: Single phase heavy duty grease filled double ball bearing, aerodynamically designed heavy gauge aluminium blades, copper wounded and impregnated silicon stamping motors etc1200 mm sweep, brilliant white	15	Nos		
24	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 12mm plywood complete in all respect make as under: CG/USHA/ ORIENT/HAVELLS/	1	Nos		
25	WALL FAN:- (Only Metallic Body) Oscillating wall fan with regulator i/c connection etc complete as required as per approved make sweep 400/450 mm , RPM 1300 make are as under: CG/LISHA/ORIENT/HAV/ELLS SUB TOTAL (E) ELECTRICAL WORKS	2	Nos	Rs.	
	(-,				
26	Buy Back item				
i	Tube lights	-8	nos		
ii	Ceiling fans	-12	nos		
iii	2'x2' LED Panel light	-8	nos		
iv	Exhaust fan	-1	nos		
27	Total of buy back items				

3	FINAL SUB TOTAL (A) ELECTRICAL WORKS				
				Rs.	
				_	
				Rs.	
	Place:	Se	al & Sign	ature of the	contractor
	Date:			· ·	