TENDER & SPECIFICATIONS OF ELECTRICAL WORK OF NEW BRANCH PREMISES AND ON SITE A.T.M. ROOM AT AT BORAWA BRANCH					
S.No	**Description of items**	**Qty**	**Unit**	**Rate**	**Amount**
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 **FRLS WIRE** 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 avoid water/dust 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:- Finolex/RR cable/ Havells				
a	Providing and fixing of point wiring with above specifications. One light point controlled by one switch.	45	Nos.		
b	Providing and fixing of point wiring with same above specifications. Two light points to be controlled by one switch.	7	Nos		
C	Providing and fixing of ceiling fan point controlled as under (i) one 6 amp switch (ii) one no stepped electronic regulator of two module type.	8	Nos.		
d	providing and fixing 6 Amps Plug Points with same specs as above and install along with same light switchboard	10	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 1No. 6 A 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 and as directed. (Minimum two and Maximum three points are loop with one circuit as mentioned beolw)	8	Nos		
3	Power Wring (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 and as directed. (Maximum two points are loop with one circuit as mentioned below)	12	Nos		

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S.No	Description of items	Qty	Unit	Rate	Amount
4	SPECIAL POINTS : (For Computers). 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 and as directed. 2 Nos. 6 A Switch + 3 Nos. 6 A, 3 pin Socket (Minimum two and Maximum three points are loop with one circuit as mentioned beolw)	10	Nos		
5	**AC/Geyser Point (Single Phase).** Supply, Installation, Testing and commissioning of the surface / recess mounting A.C. / GEYSER power point with the followings : Metra Plug and Socket DBs with one Nos 20 Amp SP MCB, 20 Amp plug and socket with complete Enclosur plate and box.- 1 set i/c electrical connections and making good all the damages, painting, cleaning the site etc complete including all accessories as required as per site requirement and as directed by Bank Engineer. **OR** Modular 32A DP 1 way switch with plate & box 1 set. + 25A & 10A twin socket (Only one point is connected with one circuit as mentioned below)	9	Nos		
6	***CIRCUIT WIRING :(FRLS WIRE)*** *Supply , installation, testing & commissioning of FRLS circuit wiring measured in numbers with suitable size of MS conduit 1.6 mm thick and 25mm dia. The wiring in MS conduit is as per IS code. The average length of wiring around between(25-30) Mtr.*				
6. a	3 X 2.5 sqmm (For UPS Circuit/6 amp Separate Board) in suitable size of 16 SWG (MMS) steel conduit as per IS code.	12	Nos		
6. b	3 X 4.0 sqmm (For AC/Power Circuit) in suitable size of 16 SWG (MMS) steel conduit as per IS code.	8	Nos		
7	**UPS OUTGOING & OTHER FRLS WIRING, As Per Requirment.**				
a	3 X 1.5 Sqmm copper multistreand FRLS wire in suitable size of 16 SWG (MMS) steel conduit.	10	R.Mtr		
b	3 X 2.5 Sqmm copper multistreand FRLS wire in suitable size of 16 SWG (MMS) steel conduit.	20	R.Mtr		
c	3 X 4 Sqmm copper multistreand FRLS wire in suitable size of 16 SWG (MMS) steel conduit.	20	R.Mtr		
(f)	3 X 6 Sqmm copper multistreand FRLS wire in suitable size of 16 SWG (MMS) steel conduit.	10	R.Mtr		
8	**DISTRIBUTION BOARDS**				
	All MCB to be "C" series				
	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. DBs/MCCB/MCBs- Legrand/Siemens/Hagger/Schneider only				

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S.No	Description of items	Qty	Unit	Rate	Amount
	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 side				
a	B.INCOMING SWITCHGEARS :(RYB LED Indicators for Both Main/DG) (i) 1 No. FP.**125** Amp , 25 KA MCCB with thermal magnetic trip unit WITH Digital Voltmeter & Digital Ammeter sutiable size of CTS, selector switches etc. C. OUTGOING SWITCHGEARS: (i) 1 Nos- **100** Amp TP MCCB for main with 200amp bus bar with indicator. (ii) 160 amp onload changeover with 1 Nos 100 amp 25 KA, TP MCCB for DG supply with 200 amp bus bar with indicator (iii) 200 amp bus bar for parallel connection with DG changeover output (Note:- Before Placing the Panel order, firstly it Passed by The Bank Authority, otherwise it will not considered)	1	Nos		
b	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 40KA/pole with complete wiring.	1	Nos		
c	Providing & fixing 4 way vertical load line double door D.B for AC with 80 Amp. TP MCCB incomer and outgoing to be 4 Nos 32 amp TP MCB, 6 Nos 32 amp SP MCB FOR AC	1	Nos		
d	Providing and fixing 6 way TPN double door DB for LIGHT /POWER POINTS with 63 Amp TPN , controlling 18 Nos. 10/16/32 - (10-8nos. / 16- 6nos./ 32-4nos.) 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.	1	Nos		
f)	Providing and fixing (12) way SPDB double door type For UPS points with 1x32 Amps DP , controlling 10 Nos, 16 AMP SPMCB	1	Nos.		
g	Providing and fixing (8) way SPDB double door type For Light DB only for Emergency Lights like glow sign etc with 1x32 Amps DP, with 25 A DP RCCB(100 mA) controlling 4Nos .10 A./16 AMP SPMCB	1	Nos.		
h	Providing and fixing (4) way TPN double door type For UPS INPUT with 1x63 Amps TPN and 63 amp DP MCB- 3 Nos & 3 Nos, 32 amp SP MCB complete (E-lobby/UPS Output)	2	Nos.		
i	Providing and fixing of Kit Kat Rewirable Porcelian fuse carrier & base with wooden frame of 200 amp/415 Volt near meter box	1	Set		

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S.No	Description of items	Qty	Unit	Rate	Amount
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				
a	3.5 X 50 Sq.mm XLPE. Al. armoured Cable(AC VTPN & BUS BARS/ Panel to DG	30	Mtr		
b	4X 25 Sq.mm XLPE.Al.armoured Cable (POWER /LIGHT/ UPS)	15	Mtr		
c	4X 16 Sq.mm XLPE.Al.armoured Cable (LIGHT/UPS)	20	Mtr		
10	**EARTHING**				
(i)	**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)Supply & 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 requirment.	2	Nos		
(ii)	**G.I.PLATE EARTH STATION :** Preparation of the Plate Earth Station: (as per IS:3043) (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 deep. (b) S/F of G.I. plate of size 600 x 600 x 6.0 mm thick. (c) Supply and fixing of 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.	2	Nos		

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(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	5	Mtr.		
	(b) G.I.Strip 25 X 5 mm	5	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)**	15	Mtr.		
11	**TELEPHONE POINT**				
(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. Make of Material:- Delton/Finolex/RR cable	7	Nos		
(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 fully accessible. (A) 20 Pair tag block	1	Nos		
12	**DATA CABLING FOR LAN**				
a	Providing, fixing, testing and commissioning of all nodes of four pair UTP CAT 6 LAN cables length upto 30 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	12	Nos		
b	Providing and fixing Patch Panels 24port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)	1	Nos		

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S.No	Description of items	Qty	Unit	Rate	Amount
c	Providing, assembling, fixing, testing and commissioning Floor/Wall mounted RACKS for gig switches, patch panels etc including cooling DUAL fan trays, a 10 Point PDU, Fixed Trays as necessarycomplete. 9 U wall mounted RACK	1	Nos		
d	Providing and fixing of flowing factory fabricated Patch cords. (UTP/CAT 6 complte with connector on both side.)				
i)	for 1 Mt. long	12	Nos.		
ii)	for 2 Mt. long	12	Nos		
e	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.	40	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 accessories complete in all respect	1	Nos		
14	Supply and installation of Vinyl sticker for on Electrical DBs like, " Switch Off at Night" , Switch Off For Safety, etc	10	Nos		
15	Making & Providing of 3 sets of Asbuilt Drawing with coloured print for entier Electrical work (Power/ UPS/ Light/ Data/ Telephone/ AC etc.) as advised by the Bank's Authority. -	1	Lum sum		
	Description of light /fan fixture				
16	LED LUMINARES:- 2' x2' **(FULL GLOW TYPE)** LED light fittings (600 X600mm) 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 **(FULLGLOW)** WIPRO:- CRCO1ORO 38 HP57 HAVELLS:- LHECDIL7IL1W036 **(Edge- Lit)** CG:- LCTAR3-40-CDL	16	Nos		
17	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,	27	Nos		
18	LED DOWNLIGHTER: (SURFACE MOUNTED) 15 Watt, surface 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,	6	Nos		
19	External Street LED Light- Providing & Fixing of 30 watt LED light fixture, pressure die cast aluminium housing, heat resistant glass, IP 65 protection & better optics for uniform distribution. PHILIPS, WIPRO, HAVELLS, CG	3	Nos		
20	LED Spot Light, 3 Watt, 2/3”(Inches) size as per site requirment. PHILIPS, WIPRO, HAVELLS, CG	5	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	25	Mtr		

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22	**Providing & fixing of "Digital Clock" /Digital Panel indicating Time, Day, Date, Temperature at outside of big size, Ajanta** as suitable over the facade as advised by the Bank with standard power back up. Make:- Ajanta, Titan- Basic Rate @ Rs. 3500/- to 4000/-	1	Nos		
23	BOX TYPE LUMINAIRES: LED TUBE FITTINGS, 1200mm, 18/20 Watt PHILIPS/WIPRO/HAVELLS/CG	10	Nos		
24	**WALL FAN:-(Only Metallic Body)** Oscillating wall fan with regulator i/c coonections etc complete as required as per approved make, Sweep 400/450 mm , RPM 1300 make are as under: CG/USHA/ ORIENT/HAVELLS	1	Nos		
25	CEILING FAN:(5 Star rating, BLDC Fan) Single phase heavy duty grease filled double ball bearing, aerodynamically designed heavy gauge aluminium blades, copper wounded and impregnated silicon stamping motors etc 1200 mm sweep, brilliant white CG/USHA/ ORIENT/HAVELLS	8	Nos		
26	**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	2	Nos		
27	Electronic Timer for auto swith on/off to Exhaust of UPS room for 4Hr/8Hr. Make:- Legrand, L&T, and other Eq. ISI make	1	Nos		
28	Electronic Timer for auto swith on/off of Emergency light in day and night. Make:- Legrand, L&T, and other Eq. ISI make	1	Nos		
	(A) SUB- TOTAL OF ELECTRICAL WORK				

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