

<b>PRICE BID OF ITEMS FOR ELECTRICAL WORK AT KASTURBA BRANCH BHOPAL (BHOPAL</b>					
<b>S.No</b>	<b>Description of items</b>	<b>Qty</b>	<b>Unit</b>	<b>Rate</b>	<b>Amount</b>
<b>(A)</b>	<b>ELECTRICAL WIRING WORK</b>				
	<b>Note: Use of Flexible conduits &amp; 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 strictly follow IE( Indian Electricity) rules follow in all items of project/ work execution. Proper ferrules, lux, thimble , gland termination to be done in all cabling &amp; 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.</b>				
<b>1</b>	<b>ELECTRICAL WIRING</b>				
	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 1.5 Sq.mm (Phase/Neutral/Earth) PVC 650V/1100V Grade FR insulated copper conductor single core multi stranded wire in 16 SWG(Medium Gauge) stove enameled rigid steel conduit 20mm/25mm with conduit accessories like bend, junction box etc in concealed/surface manner as per site requirement with suitable Modular Switches/Sockets with plate and Metal box,Saddle, angle bracket (if required), 3 plate ceiling rose/bulb holder etc. The floor/roof/wall junction box should 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 above wiring is to be				
	carried out on surface or recess in wall/floor/roof should be cutting by cutter/chiseling, re-plastering, curing, painting with uniform and smooth finish by specialized workman ship and making the surface neat after wards complete in all respect as per direction of Bank Engg. (EACH Circuit to take NOT MORE than 3 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:				

S.No	Description of items	Qty	Unit	Rate	Amount
	Phase- Red/yellow/blue, 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 conduit with all accessories:- BEC/AKG/NIC/Precision (iii) PVC insulated copper wire (FR) 1.5 sqmm multi strand 650V/1100 V grade:- Finolex/RR Kabel/ Polycab.				
a	Providing and fixing of point wiring with above specifications. One light point controlled by one switch.	65	Nos.		
b	Providing and fixing of point wiring with same above specifications. Two light points to be controlled by one switch.	20	Nos		
c.	Providing and fixing of ceiling fan point controlled as under (i) one 6/10 amp switch (ii) one no. stepped electronic regulator of two module type.	6	Nos.		
d	providing and fixing 6/10 Amps Plug Points with same specs as above and install along with same light switchboard	22	Nos		
<b>2</b>	<b>6/10 AMP. POINTS ON SEPARATE BOARD :</b>				
	Supply,fixing,testing and commissioning of 1 No 6/10 A Multi Socket with 1No. 6 A switch ( Modular type ) with cover plate , sheet steel box / PVC modular box etc on surface / concealed manner l/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 below circuit wiring to be paid separately) and two circuits in one 25sqmm MS Stove enamelled 16 SWG conduit pipe .	17	Nos		

S.No	Description of items	Qty	Unit	Rate	Amount
<b>3</b>	<b>Power Wring (6 / 16 AMP. POWER POINTS)</b>				
	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 l/c electrical wiring with 3 wires (Phase/Neutral/Earth in 4/4/2.5 sqmm PVC insulated copper conductor single core multi stranded wire in 16 swg stove enameled rigid steel conduit 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. <b>(circuit wiring Included)</b> )	13	Nos		
<b>4</b>	<b>SPECIAL POINTS : ( For Computers )</b>				
	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 l/c including wiring 3 X 2.5 sqmm ( For UPS Circuit/6 amp Separate Board) in suitable size of 16 SWG, stove enamelled MS conduit as per IS code, with Max of two circuits per conduit. and making good all the damages, painting, cleaning the site etc complete including all accessories as per site requirement and as directed. 2 Nos. 6/10 A Switch + 3 Nos. 6 /10 A, 3 pin Socket (Minimum two and Maximum three points are loop with one circuit as mentioned below. <b>(circuit wiring Included)</b> )	18	Nos		
<b>5</b>	<b>AC/Geyser Point (Single Phase)</b>				
	Supply, Installation, Testing and commissioning of the surface / recess mounting A.C. / GEYSER power point with the followings : Metal Plug and Socket DBs with one Nos 20 Amp SP MCB, 20 Amp plug and socket with complete Enclosure plate and box.- 1 set i/c electrical wiring with 3 wires (Phase/Neutral/Earth in 4/4/2.5 sqmm PVC insulated copper conductor single core multi stranded wire in 16 swg stove enameled rigid steel conduit 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. Note Only one Point is Connected on one Circuit) ( <b>circu wiring Included</b> )	11	Nos		

S.No	Description of items	Qty	Unit	Rate	Amount
<b>6</b>	<b>AC Point (Three Phase)</b>				
a.	Supply, Installation, Testing and commissioning of the surface / recess mounting A.C. Cassette power point with the followings : Metal enclose Four way with one Nos 32 Amp MCB with complete Enclosure plate and box.- 1 set i/c with wiring 4 wires (R,Y,B Phase /Earth in 4/4/4/2.5 sqmm PVC insulated copper conductor single core multi stranded wire in 16 swg stove enameled rigid steel conduit and making good all the damages, painting, cleaning the site etc complete as required as per site requirement and as directed. (Only one point is connected with one circuit as mentioned below : <b>Note circuit wiring to be paid separately)</b>	2	Nos		
<b>7</b>	<b>CIRCUIT WIRING :</b>				
	Supplying, providing circuit wiring for Power/UPS with following PVC insulated copper conductor single core multi stranded 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 etc with 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 should 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/requirement 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				
<b>a</b>	3 X 2.5 sqmm ( For Light Circuit) in suitable size of 16 SWG, stove enamelled MS conduit as per IS code with Max of two circuits per conduit	400	Mtr	#REF!	
<b>b</b>	3 X 4 Sqmm copper multi strand wire in suitable size of 16 SWG, stove enamelled MS conduit as per IS code.	10	R.Mtr		
<b>C</b>	5 X 4 Sqmm. Copper multi strand wire in suitable size of 16 SWG, stove enamelled MS conduit as per IS code. ( For Cassette AC)	125	R.Mtr		

S.No	Description of items	Qty	Unit	Rate	Amount
d	3 X 6 Sqmm copper multi strand wire in suitable size of 16 SWG, stove enamelled MS conduit as per IS code.	10	R.Mtr		
e	2 x 10 Sqmm copper multi strand wire in 25 mm 16 SWG, stove enamelled MS conduit as per IS code.( UPS INPUT DB TO UPS)	20	R.Mtr		
<b>8</b>	<b>DISTRIBUTION BOARDS</b>				
	<b>All MCB to be "C" series</b>				
	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 16KA and ALL MCB/ELCB has breaking capacity has 10 KA.				
a	<b>MAIN DISTRIBUTION BOARD ITEM</b> Supplying, installation, testing and commissioning of indoor type , thereon complete with enclosures , gaskets and interconnections, connection as per following specification complete Cable entry : Provision at bottom and upper sides.				
	<b>INCOMER -</b>				
	1 Nos.- 63 A -3 phase with Neutral Manual onload change over switch with Encloser (manual) 'C" Line or EQ	1	Nos		
	1 Set - 3 Nos Kit Kat Rewirable Porcelian fuse carrier & base with wooden frame of 125 amp/415 Volt near meter box	1	Nos		
	2 – Nos 63 Amp 10 Ka TPMCB (for Generator & Main Supply before Change over switch)	2	Nos		
b	Providing & fixing 6 way vertical load line D.B with Metal door for main supply,				
	<b>INCOMER -</b>				
	100 Amp 16 KA MCCB				
	<b>OUTGOINGS</b>				
	1 Nos 63 Amp 10 KA TPN				
	2 Nos TPMCB 10 KA 25 Amp				
	9 Nos 20 Amp 10 KA SPN				
	<b>SET AS Above</b>	1	NOS		

S.No	Description of items	Qty	Unit	Rate	Amount
C	1 Nos. 100 Amp. Electrolytic grade Aluminum Bus Bars insulated with colored Heat Shrin Kabel PVC Sleeves & duly supported on SMC/DMC molded supports with Antitracking barriers for main supply ISI Marked	1	Nos		
d	Providing and fixing 12 way SPN double door DB for LIGHT/ POWER POINTS				
	<b>INCOMER -</b>				
	32 Amp DP 10 KA				
	<b>OUTGOINGS</b>				
	6/10/16/32 Amp SPMCB 10 Nos.				
	<b>SET AS Above</b>	2	NOS		
e	Providing and fixing (4) way TPNDDB For UPS INPUT/ OUTPUT				
	<b>INCOMER</b>				
	32 A TP MCB 10 KA				
	<b>OUTGOINGS</b>				
	32 A DP MCB 10 KA FOR UPS OUTPUT				
	10 NOS. 10 AMP SP MCB	2	NOS		
<b>9</b>	<b>CABLES</b>				
	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/XLPE Armoured cable:- Finolex, RR Kabel, KEI, Polycab, (ii) Cable Termination:- Dowells, Comet				
a	3.5 X 35 Sq.mm XLPE. Al. armoured Cable for Main Supply.	60	Mtr		

S.No	Description of items	Qty	Unit	Rate	Amount
b	4X 16 Sq.mm XLPE Al.armoured Cable to supply power to UPS Room, AC & Power Distribution board,etc.	50	Mtr		
C	1X10 Sq.mm Single Core Copper Cable (for Inter Connecting Supply from Vertical Load Line DB to Out Going Distribution Board.	30	Mtr		
<b>10</b>	<b>EARTHING</b>				
(i)	<p><b>COPPER PLATE EARTH STATION: (Dedicated earthing to UPS Supply Only)</b></p> <p>Preparation of the Plate Earth Station:( As per IS:3043)</p> <p>(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.</p> <p>(b) Supply and fixing of Copper Plate of Size 600 mm X 600 mm X 3.0 mm thick.</p> <p>(c) Fixing of 50 mm X 6 mm, 3 Mtrs copper strips from Copper Plate to earth terminal including brazing/welding at plate etc.</p> <p>(d) Supply and laying in position 19 mm, 2 Mtrs G.I "B" Class pipe for watering with reducer/funnel with mesh.</p> <p>(e) Supply and Fixing of the following in the earth station.</p> <p>(i) 75 Kg. Charcoal.</p> <p>(ii) 15 Kg. Original Salt.</p> <p>(iii) Black Cotton soil of adequate amount.</p> <p>(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 requirement.</p>	1	Nos		

S.No	Description of items	Qty	Unit	Rate	Amount
(ii)	<p><b>G.I.PLATE EARTH STATION : (Dedicated Each Earthing to Power supply &amp; Neutral Earthing)</b></p> <p>Preparation of the Plate Earth Station: (as per IS:3043)</p> <p>(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.</p> <p>(b) S/F of G.I. plate of size 600 x 600 x 6.0 mm thick.</p> <p>(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.</p> <p>(d) Supplying and laying in position 19 mm, 2 mtrs G.I. `B' class pipe for watering.with reducer/funnel with mesh.</p> <p>(e) S/F of the following in the earth station. 75 Kg. Charcoal, 15 Kg. Original Salt. And Black Cotton soil of adequate amount.</p> <p>(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.</p>	2	Nos		

S.No	Description of items	Qty	Unit	Rate	Amount
(iii)	Providing and fixing Copper/GI strip as per specification complete including connection to earth electrode revetting/sweating/soldering, burying 15 cms below in all types of soil/rocks etc complete as required				
	(a) Copper Strip 25 X 5 mm	20	Mtr.		
	(b) G.I.Strip 25 X 5 mm	20	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.( <b>Dedicated Earthing for UPS output DB only</b> )	35	Mtr.		
<b>11</b>	<b>OCCUPANCY SENSORS:-</b> Supply, installation , testing and commissioning of occupancy sensor surface/recess mounted as per site condition complete with all wiring/conduit/Switch etc complete in all respect as per site condition as required Honeywell Make K5015/16, Siemens/Johnson Control OR Equivalent as per Bank's approved.	2	Nos		
<b>12</b>	<b>TELEPHONE POINT</b>				
	Supplying, Installation, testing and commissioning of the telephone point with the followings				
(i)	Two pair, 0.61 mm dia. 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,1.5mm (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,re plastering, painting, cleaning the site etc complete as required as per site condition. The floor/roof/wall junction box should 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 Kabel	12	Nos		

S.No	Description of items	Qty	Unit	Rate	Amount
(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 tinned 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) 10 Pair tag block	1	Nos		
<b>13</b>	<b>DATA CABLING FOR LAN</b>				
	Supply and fixing of modular type Information Outlets ( RJ-45 ) with suitable size 1.5mm PVC Conduit, modular boxes complete with insulation displacement connectors etc suitable for CAT 6 UTP Cabling.				
<b>a</b>	One Port.	26	Nos.		
<b>b</b>	Providing, fixing, testing and commissioning of CAT 6 LAN cable in suitable size of 20/25mm 1.5mm PVC conduit including all accessories to interconnect the switches from different location.	850	Mtr	#REF!	
<b>C</b>	Providing and fixing 10/100 /1000Mbps DGS series Rack mounted switch ) CAT 6 suitable for auto-sense the network speed of the connected nodes to run at either 10 /100/1000 Mbps. The pt also auto negotiate between full/ half duplex and cable cross over. 24 RJ 45 10 base-T/100 base - TX Port . 24 ports complete D-Link make	1	Nos.		
<b>d</b>	Providing and fixing Patch Panels 24 port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)	1	Nos		
<b>e</b>	Providing and fixing Patch Panels 24 port (100 base TX) CAT 6 patch/jack panel with connector, out lets and necessary connectivity complete as required & (D-Link make)	1	Nos		
<b>f)</b>	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 necessary complete. 9 U wall mounted RACK	1	Nos		
<b>g</b>	Providing and fixing of flowing factory fabricated Patch cords. (UTP/CAT 6 complete with connector on both side.)				
<b>i)</b>	for 1 Mt. long	20	Nos.		
<b>ii)</b>	for 2 Mt. long	20	Nos		

S.No	Description of items	Qty	Unit	Rate	Amount
14	<b>TV POINT:-</b> Supply, installation, testing and commissioning of TV point(Modular) with RG-6 cable in the 1.5 mm PVC Conduit with all accessories complete in all respect	1	Nos		
15	Supply and installation of Vinyl sticker for on Electrical DBs like, " Switch Off at Night" , Switch Off For Safety, PDB, LDB, VDB etc	10	Nos		
16	Making & Providing of 3 sets of built Drawing with coloured print for entire Electrical work (Power/UPS/Light/Data/Telephone/AC etc.) as advised by the Bank's Authority.	1	Lum sum		
	<b>TOTAL:- (B) ELECTRICAL WORK</b>				
	<b>TOTAL IN WORDS:-</b>				
<b>(B)</b>	<b>LIGHT AND FAN FIXTURES</b>				
	<b>Description of light /fan fixture</b>				
	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 fastener 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 fastener/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.				
(a)	<b>LED LUMINARES:- 2' x2' (FULL GLOW TYPE)</b> LED light fittings (600 X600mm) dimension suitable for grid/gypsum ceiling complete with its electronic driver as required per instruction of Bank's Model No are as under:- MAKE -PHILIPS, WIPRO,CROMPTON,BAJAJ & JAGUAR,  <b>32 W fitting</b>	40	Nos		
(b)	<b>LED DOWNLIGHTER:</b> 15 Watt, recessed mounted circular down lighter , 6" dia with complete its electronic driver are as under:- MAKE -PHILIPS, WIPRO,CROMPTON,BAJAJ & JAGUAR, <b>15 Watt Fitting</b>	29	Nos		
(d)	5 W spot light LED (yellow 3000k) complete with electronic driver are as under:- MAKE -PHILIPS, WIPRO,CROMPTON,BAJAJ & JAGUAR,	5	NOS		

S.No	Description of items	Qty	Unit	Rate	Amount
(e)	<b>LED COVE/ STRIP LIGHT WITH ITS ELECTRONIC DRIVER( BLUE COLOUR):-</b> Supply, installation, testing and commissioning of bright LED strip light with its electronic driver complete as required. MAKE -PHILIPS, WIPRO,CROMPTON,BAJAJ & JAGUAR,	60	Mtr		
(f)	<b>BOX TYPE LUMINAIRE: LED TUBE FITTINGS,</b> 1200mm, 18/20 Watt MAKE -PHILIPS, WIPRO,CROMPTON,BAJAJ & JAGUAR,	22	Nos		
(g)	<b>CEILING FAN:</b> Single phase heavy duty grease filled double ball bearing, aerodynamically designed heavy gauge aluminium blades, copper wound and impregnated silicon stamping motors etc 1200 mm sweep, brilliant white energy saver ES 50 Five star CG/BAJAJ/ ORIENT	6	Nos		
(h)	<b>EXHAUST FAN:-</b> Single phase, 300mm sweep, 900 rpm, metallic Energy Efficient 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 wound, 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/BAJAJ/ ORIENT/ALMONARD/ALSTOM, with metal body & fan Blades	2	Nos		
(j)	<b>WALL FAN:-</b> Oscillating wall fan with regulator i/c connections etc complete as required as per approved make, Sweep 400 mm , RPM 1300 with metal body & Metal Blades,Energy Efficient CG/BAJAJ/ ORIENT	17	Nos		
	<b>TOTAL:- (B) LIGHT AND FAN FIXTURE</b>				
	<b>TOTAL IN WORDS:-</b>				

S.No	Description of items	Qty	Unit	Rate	Amount
<b>ABSTRACT SHEET</b>					
<u>SNO.</u>	<u>SUBHEAD</u>				<u>AMOUNT</u>
1	(A) TOTAL OF ELECTRICAL WORK				
2	(B) TOTAL OF LIGHT AND FAN FIXTURE				
	<b>GRAND TOTAL( A+ B )</b>				
	<b>SEAL AND SIGNATURE OF CONTRACTOR</b>				
	GST will be paid additionally by the Bank as applicable subject to GST Number.				