

BOQ FOR INTERIOR AND FURNISHING WORKS OF INDIAN BANK BRANCH & ATM AT JAISALMER, RAJASTHAN.

S. NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	INTERIOR PART -1				
1	PARTITION				
	NOTE:-				
	Measurement and payment shall be done as per following.				
a)	Visible surface below false ceiling,				
b)	Measurement for one face of Partition,				
c)	In case of height difference of partition below false ceiling average ht. of both surfaces and sides shall be taken,				
d)	1mm laminate as per approved shade and make.				
1.1	FULL HT. PARTITION				
	Providing and fixing in position Full Height Partition consisting of Aluminium hollow section of 65mm x 37mm size,1.5mm thick, of JINDAL / INDAL as internal frame structure at required spacing but not exceeding 600mm centre to centre in either direction fixed to floor & ceiling by means of rawl plugs/dash fasteners on both ways finished with 6mm comm. ply on both sides & hits finished with laminate 1mm thick on both side as per approved shade complete with making as per architectural drawing inclusive of providing & making openings for 12mm th.Toughened glass panels & door, (etching with Birla 3M film digital lazer cut) on Glass as per approved design in all partitions etc. complete to the satisfaction of Architect/ Bank's Engineer	19	Sqm		
1.2	GYP SUM PARTITION				
	P/F 75mm the Full height Gypsum Partition fabricated out of G.I.frame work complete with P/F 12mm th.gypsum sheet on one side over the frame work & 1mm th. Laminate on other sides over 6mm comm. ply over G.I frame work I/C P/F 1mm skirting laminate as per appvd. with P/A 2-3 coats of OBD as per appvd.sample.	6	Sqm		
1.3	same as above with both sides Gypsum with all other Specifications as per item no.1.2	6	Sqm		
1.4	LOW HT. PARTITION				
	Providing and fixing in position Low Height Partition Public Counter(4'-0" & Cash Counter(7'-0") consisting of Aluminium hollow section of 65mm x 37mm size,1.5mm thick of JINDAL / INDAL as internal frame structure at required spacing but not exceeding 600mm centre to centre in either direction fixed to floor by means of rawl plugs/dash fasteners finished with 6mm comm. ply on both sides with screws & hits finished with laminate 1mm thick on both side as per approved shade & make complete as per architectural drawing inclusive of providing & fixing 10mm th. Glass free standing etching with Birla 3M film digital lazer cut)on Glass as per approved design in all partitions etc.maching cut with edge polish P/F SBW 65x31mm moulding on free end of low ht. partition. complete with P/A melamine spray finish on wooden surface to the satisfaction of Architect/Bank's Engineer.	7	Sqm		

3	DOORS				
3.1	Glazed Door with fixed glazing				
	P/F 12 mm thk,toughened glass,door and 18" long s.s handles on both sideswith Digital Lazer cut Birla 3M Film,as per arch.drg and appvd.Design. inclusive of P/f 12mm thk.Toughened ,Fixed, Side Glazing panels (etching same asDoor)with frameless fittings, of Dorma /Hettich,with following parts, viz: PT1040 forover/side panel,PT 1041 connector for Side/Upper Panel,PT1020 Upper patch,PT1010 Bottom Patch,PT1049 E floor Lock ,PT1052 Strike Plate Floor Spring BTS 84inclusive of of P/F digital Lazer Cut Birla 3mm Film as per appvd. Drg.				
a)	Toughened Door	5	Sqmt		
b)	Toughened Fixed Glazing	0	Sqmt		
3.2	Flush Door				
	Providing and fixing non decorative type 38mm thick Flush Door Shutters having core of having core of block board construction with frame of first class hardwood & well matched commercial 3ply veneering with vertical grains or cross bands & face veneers on both faces of shutters inclusive of providing and fixing lipping with second class SB wood battens having 25mm minimum depth on all edges of shutter,finished with1.0mm thick laminate on both sides & 40x100 mm SB wood frame,SBW 12x12mm beadings Item includes providing and fixing <u>4 no.s 100mm S.S hinges</u> & handles and all necessary hardware & providing and fixing 150 mm S.S tower bolt, <u>door closer of ISI make(without cover plate)</u> and S.S door stopper.All wooden surface shall be polished with melamine spray finish as per architectural drg.ncluding providing and fixing 37x3mm M.S flat iron 38mm long hold fast (6 nos minimum) screwed to frames embedded in cement concrete 1:3:6 mix (1cement 3 coarsesand: 6 hard stone aggregate in wall as per requirement. complete to the satisfaction of Architect / Bank's Engineer.inclusive of <u>P/F 7 lever godrej</u> , Mortise locks with pair of S.S handles.	4	Sqmt		
3.3	PARTLY GLAZED FLUSH DOOR				
	Providing and fixing 38mm thick Partly Glazed door having core of block board construction with frame of first class hard wood & well matched commercial 3ply veneering with vertical grains or cross bands and face veneers on both faces of shutters inclusive of lipping with second class SB wood battens having 75mm as minimum depth & 38mm wide on all edges of shutter,finished with 1.0mm thick laminate as per approved shade & make on both sides complete with providing and fixing S.S hinges of 100 mm (4no.s) & 5mm thick etched glass with Digital lazercut Birla 3M Film over the glass as per arch. Drg.& 40x100mm SBwood frame work complete with 12x12mm SB wood beadings. Item includes providing and fixing S.S (150mm) tower bolt, S.S door stopper & handles etc complete with <u>concealed door closer of ISI mark (door king)</u> with all wood/veneer surface to be polished with melamine finish and as per architectural drg.including providing and fixing <u>7 lever mortise Lock of Godrej</u> make with lock & latchand a pair of S.S. handles etc. complete to the satisfaction of Architect / Bank's Engineer.	7	Sqmt.		
3.3	Laminate on Existing Doors.				
	Extra for Providing and fixing 1mm thick laminate on both sides inclusive of providing and fixing 3mm thick commercial ply on both sides of existing doors complete with SBW Beading & edging 38x19mm Complete with <u>P/F Baby latch with S.S pair of handles</u> of Godrej in toilet and 7 lever mortise lock of Godrej on all other doors as per approved Make.	3.5	Sqmt.		

4.3	600MM Deep Storage (below Pantry Counter)				
	P/F in position 600mm deep storage cabinets (below pantry counter) having sides partitions,shelves,drawers & shutters, fabricated out of 19mm comm.board & 6mm th.comm Plywood back,with all exposed surfaces & to be finished with 1mm thk. Laminate and inside of shutters to be finished with 0.75mm th laminate of Shade as per approved Sample and make as per arch drg i/c P/F 31x31mm rounded steem beech wood moulding & 6x19 mm steem beech wood edging on edges of comm.board as per arch drg complete with shelves,shutter etc.i/c P/F necessary hardware,S.Steel piano hinges as/appvd.sample, 8" LONG S.S Hettich handles (as per appvd.sample) locking arrangement, 75mm S.S. tower bolts,Hettich/Godrej locks,magnet catcher Hettich telescopic channels painting the exposed all other internal surfaces of block board with 2-3 coats of synthetic enamel paint & melamine finish on wood surface with 6mm comm.ply at rear as per arch.drg.& as per site requirements.	2	Sqmt.		
4.4	LOUVERED SHUTTER CABINET FOR ELECTRICAL MAIN PANEL.				
	Providing and fixing cabinet for housing main electrical panel board, fabricated out of 19mmthick commercial board finished with 1mm thick Laminate of as per appvd.Sheet on exposed side surfaces. Front shutters to have 304 grade perforated SS Panels, 5 No's, on each shutters as per arch.drg.fabricated out of SB wood inside of shutters,vertical & horizontal and surfaces shall be covered.with 12mm thick gypsum board item shall include providing applying 2-3coats of melamine spray finish on wood surface & synthetic enamel paint in internal surface with all other specifications as per Item no.4.1 above complete to the satisfaction of of Architect /Bank's Engineer.	3	Sqmt.		
5	PANELLING				
	NOTE:-				
	Measurement and payment shall be done as per following				
a)	Visible surface below false ceiling,				
b)	1mm thick Laminate as per appvd. Sample & shade,				
5.1	P/F wall panelling consisting of Aluminium frame works 50X25MM of including fixed to wall, at a spacing of not more than 600mm c/c both ways or as per site inclusive of skirting which will have two members og 50x25mm finished with 6mm comm.Ply,finished with 1mm th. Laminate as per appvd sample and shade P/F steem beech wood beading(31x19mm) at edge of panelling complete with Polish & melamine spray finish on wooden surface/grooves as/arch.drg.	35	Sqm		
5.2	P/F wall panelling consisting of Aluminium frame works 50X25MM, including skirting which shall have two members of 50x25mm,fixed to wall, at a spacing of not more than 600mm c/c both ways and as per Manufacturer Specifications with 4mm Thk. ACP as/arch.drg. & fixed with Sillicon & complete with ACP skirting as per appvd.sample. (IN ATM)	25	Sqm		
5.3	P/F wall panelling consisting of Aluminium frame works 50X25MM, including skirting which shall have two members of 50x25mm,fixed to wall, at a spacing of not more than 600mm c/c both ways and as per Manufacturer Specifications with 4mm Thk. ACP as/arch.drg. & fixed with Sillicon & complete with ACP skirting as per appvd.sample. (In External Surface)	10	Sqm		

7	FALSE CEILING				
	Note:-Only Horizontal Base area shall be measured for false ceiling.				
7.1	GYP SUM				
	P/F of 12.5mm th.Gypsum ceiling board false ceiling in horizontal & vertical surfaces & moulded corners & offset as per arch.drg.which include P/F roll formed G.I.Perimeter channels of sizes 27x.5mm th.having one flange of 30mm along the perimeter of the ceiling fixed to the brick wall or partition with help of rawl plug or screw i/c ending of G.I.intermediate channels of size 45x9mm th.with two flanges of 15mm th.each from the soffit @ 1200 c/c with steel/G.I.hanger of with 25mm &0.5mm th.fixed soffit with G.I.cleat & steel expansion fasteners of 0.5mm thickness having knurle dwedge of 51.5mm & two flanges of 26mm each with tips of 10.5mm fixe to the intermediate channel with the help of converting clips in a direction perpendicular to the intermediate channel of 350mm c/c12.5mm tapered edge gypsum plaster board(confirming to I.S.2095,1982)Screwed 230mm c/c screw fixing to be done mechanically with suitable attachment The tapered & squared edges of the boards(as recommended by the manufacturer)finish with <u>P/A two or more coats of OBD paint over a coat of primer</u> ,extra frame work for necessary hatch doors/opening upto 600mm x600mm(or as per requirement) with 19mm th.comm.board wherever required i/c necessary S.S hinges,screws finish smooth asdirected.The rate shall include the cost of extra frames for A.c.openings & light fixtures & speakers etc.making covers as per arch.drg.inclusive of providing and fixing Strip light of Havells make(15 watts) I/C of transformer in cove fixed end to end complete with making,P/F all electrical connections &wiring & conduits in cove (bill of strip light to be provided with final bill.)	55	Sqmt		
7.2	ARMSTRONG				
	P/F false ceiling with mineral fibre accoustic ceiling tiles of Armstrong with <u>Microlook Edges</u> & having noise reduction properties laid on exposed grid system with 15mm side Silhoutte type'T' section flanges colour white,main runners are spaced at1200mm centers securely fixed to the structure soffit with appvd.hangers at 1200mm max centers,filush fitting 1200mm crossed tees to be interlocked between main runners at 600mm centers to from 1200x600 modules,1200mm cross tees shall be crimped 600x600 mm module to be formed by fixing 600 mm long flush fitting cross tees centrally between the 1200cross tees,ceiling tiles of prime dune plus tiles in size 600x600x15 mm to be placed in the grid rate to i/c making necessary cut outs or openings for light fixtures etc.complete in all respects.	35	Sqmt		
8	Blinds				
8.1	P/F Roller Blinds of VISTA make of Rate not less than Rs.1900/- per sqm.i/cP/f 150mm wide VALENCE with Powder coated channel on top complete with bearer chain mechanism for Rolling up complete with all accessories P/F pelmet fabricated out of19mm comm. board finished with 1mm th. laminate.	8	Sqmt		
9	PAINTING & WALL FINISH				
9.1	Providing and applying Texture Paint of Acro Paints/Berger make of approved shade & texture on walls & partitions of base rate not less than Rs.45/-per sqft.(Pearlskin Series /Sorrento Series / Mediterraneo Series of Acro Paint) in staircase,coves,entrance,of cash safe,wall & else over P\A 6mm thick POP with a coat of primer.as per manufacturers satisfaction and instructions of Architect / Bank's Engineer.	35	Sqmt.		

(PART-II) FURNITURE WORK					
S. NO.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1	TABLES				
1.1	P/F in position Table with all exposed top,side,front & rear internal surfaces to be fabricated out of 19mm th.comm.board & <u>all exposed surfaces to be finished with 1mm th. Laminate</u> as per approved sample,and all internal surfaces,Leg space all CPU area, inside of keyboard drawers, inside of shutters & base surface of drawers to be finished with 0.75mm th.laminate & all other surfaces to be finished with 2-3coats of synthetic enamel paint,100mm wide skirting of 1mm thk. Laminate as per appvd. Shade inclusive of P/F of key board drawer, <u>4no set of drawers</u> and CPU stand fabricated out of 19mm comm. Board as /arch .drg. (38mmx38mm) SBW moulding & footrest fabricated out of with hard wood section 2.5"x2.5" with duco finish & inclusive of P/placing 12mm th.etched plate glass over table top & necessary hardware,Hettich/Godrej locks in all drawers&shutters,locking arrangement ,including 12x12mm SBW beading & i/c all necessary Hardware,Hettich/Godrej locks,locking arrangement,Hettich telescopic steel channel runner fordrawers 8" long Hettich SS handles (as/appvd.sample)magnet catcher & polishing of wood grooves surface with melamine spray finish ,inclusive of p/f S.S.cable manager,inclusive of cutting & making hole complete with making good the surface CPU platform size:(600x450mm)				
a)	Table Size = 4'-9" x 2'-6" x 2'-6"	1	No.		
2	SIDE CABINET				
2.1	Providing & placing in position side cabinet having side partition, set of drawers 4 No's, shelves & shutter fabricated out of 19mm th.commercial block board with 6mm th.commercial ply wood backing & all exposed surfaces top side & front rear (wherever exposed)finished with 1.0 mm thk laminate & as /appvd. sample inside of shutter to be finished with 0.75 thk. Laminate & top to be covered <u>with 12 mm th.Glass</u> with edge polish on all sides i/c P/f 100mm wide skirting of 1.0mm th. laminate (as per appvd sample and shade) i/c P/Fnecessary hardware, SS. Piano hinge(Hettich), locking arrangement with Hettich locks, telescopic steel channel runners (Hettich)for drawer,100mm ssHettich handles as/appvd samplecomplete with painting the exposed internal surfaces of drawers, shelves,shutter with synthetic enamel paint & polish on exposed wood surface with melamine spray finishi/cP/F 75mm S.S tower bolts & magnet catcher.				
a)	(Side Cabinet size 3'-6"x1'-4"x2'-6")	1	No.		
3	P/S 750mm Dia and 750mm hight waiting/writing Table Fabricated out of 12mm Toughened Glass fixed with s.s. studs over S.S(grade 304) Frame.complete as per arch. Drg.	1	Nos		
	SUB TOTAL				
	RUPEES:-				

BILL OF QUANTITY FOR ELECTRICAL WORKS FOR INDIAN BANK, BRANCH & ATM AT JAISALMER, RAJASTHAN.					
S.NO.	PARTICULARS	Qty.	Unit	Rate	Amount
	THE CONTRACTOR SHALL ENSURE THAT THE TOTAL LOAD FOR BRANCH IS BALANCED ON ALL THE 3PHASES, AS FAR AS IS POSSIBLE, WITH ALL THE AIR CONDITIONERS, COMPUTERS & OTHER LOAD POINTS IN RUNNING CONDITION.				
	A - Light, Fan, 16A & 6A points - All switch & sokets shall be modular type complete with cover plate & GI/ MS box.				
1	wiring for light point/fan point /wall fan point /exhaust fan/light sockets etc.with 2x 1.5sq mm.copper conductor FRLS insulated wires & 1.5 Sqmm copper earth wire in concealed/surface using 20/25mm rigid M.S. conduit 16SWG th.with all heavy duty accessories,chromium plated brass screws, M.S.draw boxes, bends, tees, saddles, mounting boxes, coverplate, ceiling rose etc wherever required etc. & chromium plated brass screws/rawl plug etc.The circuit wiring shall start from DB to point control boxes/switch box using 2x 2.5 sq.mm.copper conductor FRLS insulated 1100V Grade wires & 1.5 sq mm copper conductor FRLS insulated wires for earth,The conduit must be fixed every 80 cm on surface & conduits to be laid in ceiling with proper clamps/wall/floor& filling the chase with <u>cement mortar & finish</u> the same in original form/wooden partition/above False Ceiling chases be filled with cement mortar as required at site. Each circuit shall have separate earth wire.All switch socket must be of modular type with M.S. boxes & plate etc as required				
	Note:- each circuit shall have independent earth wire & each point shall be earthed.				
	Circuit wiring is to be included in point wiring.				
	All wiring in FRLS 1.1 Grade wries .				
i)	one light controlled by one switch.	13	Nos.		
ii)	two lights controlled by one switch.	11	Nos.		
iii)	Three lights controlled by one switch.	0	Nos.		
iv)	Supply/Installation of musical type cordless Remote call bell and push etc.	1	Nos.		
v)	one ceiling fan controlled by one switch & one electronic type 5step fan Regulator(cost of fan regulator is included with the supply of ceiling fans)(Note:Regulator is not providing in point rate because the the regulator cost is Rs.500/- & switch cost is Rs.100/-	1	Nos.		
vi)	one wall fan controlled by one 5amp modular switch with switch at switch board but 5Amp.3 pin socket has to provided near the wall fan for connections	10	Nos.		
vii)	one exhaust fan controlled by one switch including ceiling rose to be provided near the exhaust fan for connections.	2	Nos.		
viii)	One 6amp ,5 pin socket controlled by one 6amp modular one way switch at switch board level.				
a	Dependent	4	Nos.		
b	Independent	4	Nos.		

2	POWER POINTS				
	Do-as above but using 4sqmm copper conductor wires for the first 16A,6 pin modular socket controlled by 16A switch & 2nd point looped with 2.5sq mm copper conductor wires FRLS insulated 1100V grade (max 2 points on one MCB), Earth wire shall be 2.5 sq mm copper conductor FRLS insulated wire.				
2.1	<u>Twin power points</u> - with 1st POWER Point with 4.0 Sq.mm Copper conductor wire + 1x2.5sq.mm earthwire.The 2nd point shall be looped with 2 x 2.5sq mm copper conductor wires FR LSH 1100V (Max 2 points on one MCB), Earth wire shall be 2.5 sq mm copper conductor FRLSH insulated wire. The rates shall include cost of Circuit wiring & cost of 2sets of 16A 6pin modular socket & 16A switch	4	Nos.		
2.2	Single POWER Point with 2.5Sqmm Cu conductor wire & 2.5 sq.mm Cu conductor earthwire. The rates shall include cost of Ckt wiring & cost of 1set of 16A 6pin modular socket & 16A switch	4	Nos.		
2.3	Both twin Power Point with 2.5 SQMM Cu conductor wire with 2no's 16Amp swieth & 2no's socket,one 6Amp Indicator. The 2nd point shall be looped with 2.5sq mm copper conductor wires FR LSH 1100V (Max 2 points on one MCB), Earth wire shall be 2.5 sq mm copper conductor FRLSH insulated wire. The rates shall include cost of Ckt wiring & cost of 2sets of 16A 6pin modular socket & 16A switch	2	Nos.		
3	A.C. POINT				
3.1	Supply and installation of metal clad Reyrolle 20A, 3pin modular type A.C socket with matching plug top and 25/32A SP MCB C Series in factory fabricated AC MS box c/w circuit wiring with 2x4sqmm FRLSH Copper wire & 1x2.5sqmm FRLSH for earthing.	7	Nos.		
4	DISTRIBUTION MAINS				
4.1	S/F of 3 nos.100Amp 415V Kit kats Havells IHKRN4100 c/w 5 hole heavy duty terminals with shroud & cover including making of connection from electronic meter c/w wooden board etc.	1	Set		
4.2	Supply, Installation, Testing & commissioning of Main L T panel fabricated from CRCA sheet 1.8mm dust proof, vermin proof as under - All switchgears to be of Siemens/ ABB/ L& T. Incomer - 100A 3P MCCB 25Ka with adjustable thermal & Magnetic trip unit OUTGOINGS - 63A 3P MCB 10Ka for AC panel 63Amp 3P MCB - 2no. - 10kA for 2nos. VTPN Db's 63A 3P MCB - 1no. Common for UPS 1 & 2 for 63A SFU 63Amp 3P MCB - 1nos. Spare -10kA 32Amp -2P MCB 3nos. - for Sign Board, Fire alarm & spare Bus Bar - 100Amp c/w Ammeter & its selector switch, voltmeter & its selector switch, Indication lamps etc.	1	Set		

	Cable entry from top & bottom - removable gland plates (bottom at 2 points) c/w powder coated Grey paint (two coats) with name labels for all incoming & outgoing feeders. The panel shall be complete in all respects including all accessories such as earthing bus, Air ventilators, lifting hooks etc.				
4.3	Supply, Installation, Testing & commissioning of AC panel fabricated from CRCA sheet 1.8mm dust proof, vermin proof as under - All switchgears to be of Siemens/ ABB/ L& T.	1	Set		
	Incomer - 63A 3P MCCB 25kA with adjustable thermal & Magnetic trip unit				
	OUTGOINGS -				
	63A 2P MCB - 2no. - 10kA for 2nos. For 2TR Cassette				
	32Amp -2P MCB 3nos. - 10kA - 1 for 1.5 TR split AC & 1spare 3nos. For 1.0 TR Split AC for Sign Board, Fire alarm & spare				
	25Amp -2P MCB 3nos. - 10kA - 2nos. For 1.0TR Split AC & 1 spare				
	Bus Bar - 63A c/w Ammeter & its selector switch, voltmeter & its selector switch, Indication lamps etc.				
	Cable entry from top & bottom - removable gland plates (bottom at 2 points) c/w powder coated Grey paint (two coats) with name labels for all incoming & outgoing feeders. The panel shall be complete in all respects including all accessories such as earthing bus, Air ventilators, lifting hooks etc.				
4.4	S/ laying of XLPE insulated armoured Cu Conductor cable including cost of lugs, cable glands etc. The cable should be laid on surface with proper clamps @750mm or laid & concealed in wall/ floor/ PVC Conduit/ false ceiling complete in all respect. The work also includes cutting chases for conduits in the wall/ floor (Without damaging the building) along with clamping the cable.				
	4c x 16sq.mm from existing main panel to the fuse Kit Kats	25	m		
	4c x 10sq.mm for AC panel	15	m		
	4cx6sq.mm for AC, L&F and PP VTPN Db	25	m		
	4cx6sq.mm for 63A SFU for UPS 1 & UPS 2	20	m		
4.5	Supply & fixing of Flush mounted VTPN Db IP - 42 double door complete in all respects. Siemens/ L&T/ MDS/ Schnider (The load shall be distributed equally on all phases)				
a	Entrance side AC, PP and L & F 6way VTPN Db's IP 42 - Siemens 8GB0406 VRC (Location LHS wall near entrance)	1	Each		
	Incoming - 415V 63A 3P MCB -10kA				
	OUTGOINGS				
	3Nos. 20A 1P MCB 10kA for twin PP- 2nd power point to be looped from 1st PP- one for 2PP in AGM & 2 for 4 officers IDO opposite Server room				
	5Nos. 16A 1P MCB 10kA for single PP - 2 separate ckts for Server, 1 cash, 1 for TV & 1 for D/w				
	4Nos. 10A 1P MCB 10kA for L & F				
	4Nos. 6A 1P MCB 10kA for L & F				
	2nos.Blanking plate				

	All connection thru lugs				
b	AC, PP and L &F - 4way VTPN Db's IP 42 - Siemens 8GB0404 VRC (Location outside toilet area)	1	Each		
	Incoming - 415V 63A 3P MCB -10kA				
	OUTGOINGS				
	3No. 20A 1P MCB 10kA for twin PP- 2nd power point to be looped from 1st PP-				
	2Nos. 16A 1P MCB 10kA for single separate ckts				
	3Nos. 10A 1P MCB 10kA for L & F				
	2Nos. 6A 1P MCB 10kA for L & F				
	2nos. - Blanking plate				
	All connection thru lugs				
4.6	Glow sign Board - Circuit wiring with 2x2.5sq.mm + 1x 1.5sq.mm stranded Cu. conductor (Finolex/Anchor/Skytone) to be laid in 20mm MS conduit heavy duty laid & concealed in wall/ floor/ panelling/ partitions or above false ceiling as per requirement. The rates should include the cost of all materials, labour, T&P, taxes & levies, scaffolding, shifting of furniture, carting away the debris and cleaning the floor etc.The job shall be complete & to the entire satisfaction of the Bank.	20	m		
5	DG SET SUPPLY				
	S/laying of 4cx16sq.mm XLPE insulated Copper conductor armoured cable from proposed DG set to Changeover switch including its connections at both ends to be laid in rigid PVC /flexible conduit	0	m		
6	EARTHING				
	The items listed below shall be undertaken directly by M/s Sanushaa Technolgies(contact person Shri S.Tiwari 9871668400,0120-6450701)& Tanviya Technology(contact person Sh.Amar Singh Badal 9958467363)The contractor shall provide the rates of getting the same executed by the agency.The representative of the agency shall measure and submit the test report of the earth directly to the branch & one copy to the Elect.Engr.The agency is also required to test and provide the test report of the earthing measurement every six months to the branch and Elect.Engr. For monitoring upto a period of three years.				
6.1	Panel/ Power earthing - Supply and installation of pipe-in-pipe technology Ashlok Earthing system.Model T-19 with outer diameter of 50mm length 2000 mm embedded in the soil with masonry inspection pit along with cover etc.complete in all respect.Earth pit installation test certificate to be submitted after measurement of earthresistance as per the provision in IS3043. (Panel & ATM Earthing)	2	Nos.		
6.2	S/fixing 25x3mm copper strip insulated by heat pressurized heavy gauge PVC sleeve duly jointed by full lap brazing and drawn underground in 40 mm class B GI pipe from the inspection pit to the inside of the branch premises	20	Meter		

6.3	S/fixing 25x3mm copper strip,insulated by heat pessurized heavy gauge PVC sleeve,duly jointed by full lap brazing and fixed on wall with copper saddles & brass	15	Meter		
7	SUPPLY & FIXING ITEMS				
7.1	S/F of Energy efficient recessed mounted LED luminaire - GreenSquare, profiled recess mounted luminaire, energy efficient with longer life, resulting in lower operational cost Panasonic/ Anchor ABL13B367, Philips - RC170B LED29S-6500 PSE WH 220-240V 50Hz / or equivalent Wipro/ Crompton Greaves or any other make approved by Bank/ architect	8	Each		
7.2	S/F of recessed LED downlighter - Recessed mounted LED down lights Philips BBS170 1xDLED -5000 PSU WH complete in all respects or equivalent Wipro/ Crompton Greaves or any other make approved by Bank/ architect	14	Each		
7.3	S/F of 1x28w T-5 4' long - Slim smart & efficient Electronic decobatten with High Power factor >0.9 with end brackets with Blue' grey caps (colour to be decided bt Architect) - Philips ASPIRE T5 28W complete with TMS 097x TL5 - 28W tube light	4	Each		
7.4	S/F of 2x18w CFL square fitting - Recessed mounted square downlight suitable for twin PLC 18W lamps with electronic ballast - Philips make FBS033 2xPL-C/4P18W RG-FR EBW complete 2nos. 18w CFL/ PL lamps	13	Each		
6	S/F of wall mounted fan 400mm sweep - Havells Palatina model or equivalent Bajaj / Crompton/ Alstom/ Usha	10	Each		
7	S/F of ceiling fan 1200mm sweep double ball bearing type - Havells Velocity/ Velocity HS or Equivalent Bajaj / Crompton/ Alstom/ Usha	1	Each		
	S/F of electronic modular regulator Anchor 22546 - Fan step regulator Tiny EME 100w	1	Each		
8	Supply & Fixing of fresh air fan 12" - Havells venti Air DSP metallic range model or equivalent Bajaj / Crompton/ Alstom/ Usha	2	Each		
	TELEPHONE CABLING				
1	Supply & fixing on wall/ furniture/ partition recessed type modular telephone jack single without shutter outlet RJ-11 c/w mounting box & front plate. The job includes chase cutting, mending good etc. as required includinhg Supply & laying of 2 pair unarmoured 0.61mm dia. PVC insulated twisted pairs bunched together telephone cables through rigid 20mm OD PVC medium duty conduit pipe as directed by the Bank/ Architect from telephone junction box to telephone socket outlet including interconnection mending good etc. as required complete in all respects.	8	Each		
2	Supply & fixing of MDS box	1	Each		
3	Supply & fixing of 10 pair Crone boxes	1	Each		

UPS POWER STATIONS WIRING, SPECIFICATIONS AND BILL OF QUANTITY				
	Alternate Computer points shall be connected to UPS1 & UPS 2.			
	For Manager Room & server room- one point shall be from UPS 1 & other from UPS 2. It shall have 4nos. 6A switches in computer power station.			
	For note counting - computer power station shall have 4nos. 6A switches			
	For server switch - computer power station shall have 3nos. Power points.			
	FOR UPS -1			
1	Supply & Fixing of 32A 4P MCB in a 4way SPN Db IP-20 Metallic directly on wall for UPS -1 complete in all respects	1	Each	
2	Supply & Fixing of 63A 3phase rotary switch heavy duty including all connections thru lugs complete in all respects to the entire satisfaction of the bank.	1	Each	
3	Supply & Fixing of 32A 2P MCB in 2way SPN Db IP 20 metallic directly on wall for UPS Incoming supply	1	Each	
4	Supply & running the following size of 660V grade, Finolex brand PVC insulated, multi stranded Cu conductor in suitable size of MS conduit on wall/ wooden partitions under the floor as per site requirements in the case of running the conduit under the flooring or concealed in the wall. The flooring/ wall shall be neatly finished with cement mortar.			
4.1	3 runs of 2.5sq.mm UPS Db's to power stations of 3 plug each (As explained in Item -1) to be connected to each circuit	50	m	
4.2	2 runs of 6.0sq.mm with one run of 2.5sq.mm As explained in Item - 6 from change over switch to Db for individual Power station through phase selector & UPS	10	m	
4.3	2 runs of 4.0sq.mm with one run of 2.5sq.mm for connections of UPS Incomer & UPS Outgoing in PVC flexible conduit	10	m	
4.4	2 runs of 4.0sq.mm with one run of 2.5sq.mm for UPS controlled power point strip for server switch in MS conduit	20	m	
5	Supply & fixing of computer power stations			
5.1	6A 5Pin 3nos. sockets surround controlled by 1no. 16A switch & 4nos. apertures with blank plugs - Schnider Clipsal office wonder for work station (H2015/ 6E4X - WE)/ MK DW109WHI-A or equivalent as approved by Architect complete in all respects. The box shall be fixed on wall or Partition (wooden) concealed or open as required at site.	4	Each	
5.2	Manager Cabin & Server Room and Note Counting room - 6A 5Pin 4nos. sockets surround controlled by 1no. 16A switch & 2nos. apertures with blank plugs - Schnider Clipsal office wonder for work station (H2015/ 6E4X - WE)/ MK DW109WHI-A or equivalent as approved by Architect complete in all respects. The box shall be fixed on wall or Partition (wooden) concealed or open as required at site.	2	Each	

5.3	Server switch - 13A multi pin 3nos. sockets surround controlled by 1no. 16A switch & 3nos. apertures with blank plugs - Schnider Clipsal office wonder for work station (AAKH2015/ 13E4X - WE) or equivalent as approved by Architect complete in all respects. The box shall be fixed on wall or Partition (wooden) concealed or open as required at site.	1	Each		
6	Supply & Fixing of 12way SPN Db double door IP - 43 with 9nos.10A 1P +1no.16A 1P MCB's (10kA rapturing capacity) controlled thru incomer 40A 2P MCB fixed on the wall or concealed with necessary adopter box on out going side to facilitate for terminating the 6nos. conduits with necessary holes. The distribution board & MCB's should be of the same make - "Make - STANDARD"/ Siemens	1	Each		
	FOR UPS -2				
1	Supply & Fixing of 32A 4P MCB in a 4way SPN Db IP-20 Metallic directly on wall for UPS -1 complete in all respects	1	Each		
2	Supply & Fixing of 63A 3phase rotary switch heavy duty including all connections thru lugs complete in all respects to the entire satisfaction of the bank.	1	Each		
3	Supply & Fixing of 32A 2P MCB in 2way SPN Db IP 20 metallic directly on wall for UPS Incoming supply	1	Each		
4	Supply & running the following size of 660V grade, Finolex brand PVC insulated, multi stranded Cu conductor in suitable size of MS conduit on wall/ wooden partitions under the floor as per site requirements in the case of running the conduit under the flooring or concealed in the wall. The flooring/ wall shall be neatly finished with cement mortar.				
4.1	3 runs of 2.5sq.mm UPS Db's to power stations of 3 plug each (As explained in Item -1) to be connected to each circuit	50	m		
4.2	2 runs of 6.0sq.mm with one run of 2.5sq.mm As explained in Item - 6 from change over switch to Db for individual Power station through phase selector & UPS	10	m		
4.3	2 runs of 4.0sq.mm with one run of 2.5sq.mm for connections of UPS Incomer & UPS Outgoing in flexible/ MS conduit	10	m		
4.4	2 runs of 4.0sq.mm with one run of 2.5sq.mm for UPS controlled power point strip for server switch in MS conduit	20	m		
5	Supply & fixing of computer power stations				
5.1	6A 5Pin 3nos. sockets surround controlled by 1no. 16A switch & 4nos. apertures with blank plugs - Schnider Clipsal office wonder for work station (H2015/ 6E4X - WE)/ MK DW109WHI-A or equivalent as approved by Architect complete in all respects. The box shall be fixed on wall or Partition (wooden) concealed or open as required at site.	4	Each		

5.2	Manager Cabin & Server Room and Note Counting room - 6A 5Pin 4nos. sockets surround controlled by 1no. 16A switch & 2nos. apertures with blank plugs - Schnider Clipsal office wonder for work station (H2015/ 6E4X - WE)/ MK DW109WHI-A or equivalent as approved by Architect complete in all respects. The box shall be fixed on wall or Partition (wooden) concealed or open as required at site.	2	Each		
5.3	Server switch - 13A multi pin 3nos. sockets surround controlled by 1no. 16A switch & 3nos. apertures with blank plugs - Schnider Clipsal office wonder for work station (AAKH2015/ 13E4X - WE) or equivalent as approved by Architect complete in all respects. The box shall be fixed on wall or Partition (wooden) concealed or open as required at site.	1	Each		
6	Supply & Fixing of 12way SPN Db double door IP - 43 with 8nos.10A 1P +1no.16A 1P MCB's (10kA rapturing capacity) controlled thru incomer 40A 2P MCB fixed on the wall or concealed with necessary adopter box on out going side to facilitate for terminating the 6nos. conduits with necessary holes. The distribution board & MCB's should be of the same make - "Make - STANDARD"/ Siemens	1	Each		
COMMON FOR BOTH UPS 1 & 2					
Earthing - The items listed below shall be undertaken directly by M/s Sanushaa Technolgies(contact person Shri S.Tiwari 9871668400,0120-6450701)& Tanviya Technology(contact person Sh.Amar Singh Badal 9958467363)The contractor shall provide the rates of getting the same executed by the agency.The representative of the agency shall measure and submit the test report of the earth directly to the branch & one copy to the Elect.Engr.The agency is also required to test and provide the test report of the earthing measurement every six months to the branch and Elect.Engr. For monitoring upto a period of three years.					
1	UPS earthing - Supply and installation of pipe-in-pipe technology Ashlok Earthing system.Model T-39 with outer diameter of 80mm length 2000 mm embedded in the soil with masonry inspection pit alongwith cover etc.complete in all respect.Earth pit installation testcerificate to be submitted sfter measurement ofearth resistance as per the provision in IS 3043.(UPS connection)	1	Nos.		
2	S/fixing 25x3mm copper strip insulated by heat pressurized heavy gauge PVC sleeve duly jointed by full lap brazing and drawn underground in 40 mm class B GI pipe from the inspection pit to the inside of the branch premises	15	Meter		
3	S/fixing 25x3mm copper strip,insulated by heat pessurized heavy gauge PVC sleeve,duly jointed by full lap brazing and fixed on wall with copper saddles & brass	20	Meter		
4	Supply & Fixing of 63A TPN SFU (Siemens 3KL8151-3TA10 or equivalent) with HRC fuses (Havells IHHTSS0063) on suitable angle iron frame/ wall	1	Nos.		
5	Supply & Fixing of 40 A 2P Hagers SFT240N manual single phase changeover switch (or any other equivalent brand)	1	Nos.		

	DATA/ MOLEX/ AMP				
	Each data points for BM & server shall have 2nos. Information outlets				
	Each information outlet shall be fed from separate Cat 6e cable.				
	Distance between data pipe/ PVC channel & power pipe shall be 300mm & above.				
1	Information outlet per number with face plate and base box- Supply & Fixing of XL RJ 45 toolless information outlet Grey colour cat 6e Giga speed Systimax/ D link make including interconnection with single connectors as required complete in all respects.	7	Nos.		
2	Patchmax Panel # 24 Ports - Supply & fixing of 24 Port Cat 6e Patch Panel/ Jack panel D - Link/ systimex fully loaded in the rack to be provided by purchaser complete in all respect to the entire satisfaction of the Bank.	1	m		
3	Patch Chord - 1metre - Supply & fixing of 1 metre length Grey colour Patch chord Giga speed Systimax/ D link make for connections to nodes	7	Nos.		
4	Patch Chord - 2 metres - Supply & fixing of 2metre length Grey colour Patch chord Giga speed Systimax/ D link make for making connections between patch panel & switch thru cable manager	7	Nos.		
5	UTP cable (ECAT # 6) - Supply & laying of CAT - 6e cables Giga speed D -Link/ Systimex make through pre-laid rigid PVC conduit/channel as directed by the consultant from Server to Switch, Switch to computer data socket including interconnection with connectors as required complete in all respects. The data cabling pipe/channel should be laid at a minimum distance of 3ft from pipes laid down for power distribution. (Two separate cables to be laid for each information outlet)	200	m		
6	Switch 24 Port - D Link/ systimex	1	Nos.		
7	PVC Channel Flat 1.5mm and above (Make - Modi) 1" size	100	m		
8	9U, 19", 450mmD x300mmW closed wall mount MS 18/20swg powder coated rack with glass door opening in the front with power panel, cable manager & lock & key (Universal make)	1	Nos.		
	TOTAL ESTIMATE FOR ELECTRICAL, UPS & DATA				
	The items given in this BOQ are provisional. The vendor shall be paid for the actual work executed at				
	All the items of work given in this BOQ of quantities shall be executed strictly in accordance with the				
	All electrical items body earthing connections to be made properly & checked throughly.				
	All cable connections to be properly terminated thru lugs.				

BOQ AIR CONDITIONING WORKS OF INDIAN BANK BRANCH & ATM AT FOR JAISALMER, RAJASTHAN.					
S.No	ITEM	QTY	UNIT	RATE	AMOUNT
a)	Rates quoted should include all dismantling work of brick masonry, chiselling of wall, sadling & clamping of drain & copper pipes and making good the chiseled or is mantled surface.				
b)	Removal of all malba to municipal dumping ground.				
	MACHINES				
1	Supply, installation, testing & commissioning of CASSETTE TYPE Split A.C Air-conditioning units, complete with SCROLL compressors Aircooled condenser with fan / cooling coil & refrigerant piping with controls & first charge of refrigerant R-22 gas & oil. The enclosure shall be factory painted to a smooth finish. The quoted rate shall include all necessary electrical work/ cabling right from DB onwards upto MCB Board to be provided near machine) & Refrigerant Piping as required. upto 5Rmtr. per circuit. (with insulation)				
1.1	Supply and installation of HI wall type BEE certified 5 Star 1.0TR, Hr split type air conditioners (Daikin, Blue Star, Carrier, Hitachi, Carrier Midea) with cordless remote controller including connection of external & internal units and also including refrigerant piping upto 5 mtr. The indoor & Outdoor unit should be copper winding.	5	Nos		
1.2	Supply and installation of HI wall type BEE certified 5 Star 2.0TR, Hr split type air conditioners (Daikin, Blue Star, Carrier, Hitachi, Carrier Midea) with cordless remote controller including connection of external & internal units and also including refrigerant piping upto 5 mtr. The indoor & Outdoor unit should be copper winding.	2	Nos		
2	REFRIGERANT PIPING				
2.1	Refrigerant piping upto 5 RM per circuit & first charge of Refrigerant and oil (TO BE INCLUDED)				
2.2	Extra Refrigerant piping beyond 5RM per circuit (with insulation) in split a.c	60	Rmt		
3	STANDS & CAGES				
3.1	M.S. Stands for outdoor condensing units of 50x50x6mm angle Iron frame with anti-vibration rubber pipes & painted with primer 2 coat of black paint.				
i	Split A.C.	7	Nos		
3.2	Supplying, erection of M.S. Cages made from 35x35 x5mm M.S angle 25x5 m.s flat, door and locking arrangement (for maintenance) for the outside units the cages shall be properly welded grinded & painted with primer 2 coat of black with anti vibration rubber pipes and jali 1"x1" of 123 with wire grovtecl 6" cliep with 1:3:6 pcc.				
i	Split A.C.	7	Nos		
4	Supply and installation of additional drain pipe with proper slope by heavy gauge 25mm dia HDPE pipe. the drain pipe has to be led out to the toilets or drain outlet of the building outside the building with proper slope it must be ensured that the pipe is embedded in the wall and the wall properly finished. (with insulation)	60	Rmt		







