

Schedule of quantity for Electricalwork in Bijnore Branch

S no	Description of Item	Unit	Qty	rate	Amount
1*	Providing and fixing, testing and commissioning for point wiring two nos. 1.55 sq. mm/2.5 sq.mm or 4.0 sq.mm PVC insulated single core stranded copper conductor wire 1100 volt grade (for Ph&N) and one nos. 1.0 sq. mm/ 1.5 sq. mm PVC insulated single core stranded copper conductor wire 440 volt grade, for earth wire 1.6 mm th. 25 mm dia BEC / NIC / AKG make PVC conduit pipes. All wires are to be ISI mark approved / specified make Anchor/ Finolex / Havells complete with all drops upto boards, stapples, accessories and hardware etc. Installating the conduit in slabs, wall etc.The point shall include modular type switches of MK Anchor, Roma, Crab tree make as approved / specified in required combination including electronic regulator, 6 ASP control switch 3-plate ceiling rose, angle or staight holder adequate size to mount control switches for lights, fan sockets. Sockets for half points and ceiling fan regulator. rate must also include the cost of circuit wiring with 2x2.5 sqmm+1x1.5				
a	Light points. & exhaust fan points (Primary and Secondary)	No.	50		
b	Fan with regulator (ceiling + bracket) (2x1.50 sq.mm + 1x1.5 sq.mm)	No.	12		
c	Call bell points inclusive of call bell .	No.	1		
e	16 Amp 3/5 pin point (2x2.5 sq.mm + 1x1.5 sqmm)	No.	6		
f	Ac point -supply instalation of AC point with following item in surface / concealed manner 32A D.P. 1 way switch with neon, plate & box 20 amp. 10 amp. Twinsocket with plate & box including 2x4.0 + 1x1.5 sqmm cu. Wire with pvc conduit etc complete.	No.	0		
2	Telephone Socket Point -Supplying, fixing and testing of telephone socket point wiring withtwo line telephone wire of approved Anchor Havells/Finolex make in 1.6 mm th 1" dia PVC conduit pipe including double line tel-Jack (modular type) on the switch board.	No.	1		
3	INVERTER WIRING : Wiring for Lighting and fans l points with 1x1.5 Sqmm PVC insulated copper conductor recessed in wall/under counter in PVC pipe/flexible pipe/casing caping as required. Rate inclusive of 3 nos. 6 amp switch & socket (5pin) (modular) with fuse & indicatori/c of box, base plate & cover plate, making all connections complete. (Average length 15M)	No	5		
4	UPS POINTS: Wiring for computer terminal points with 2x1.5Sqmm + 1x1.5 Sqmm PVC insulated copper conductor recessed in wall/under counter in PVC pipe/flexible pipe/casing as required. Rate inclusive of 3 nos. 6 amp switch & socket (5pin) (modular) with fuse& indicator i/c of box, base plate & cover plate, making all connections complete. (Average length 15M)	No	13		
6	Supplying, installation with hanging support, testing and commissioning of following light fixtures with electronic Ballasts, Tubes, lamps, all fixing materials including connecting wires etc. all complete as per the directions of Engineer-in-charge (All LED Light Fixtures should be covered with minimum 3 Years onsite replacement warranty).				
i	Supply & fixing of LED 18 W tube 4'-0" As specified in tender document or approved by Bank/Architect. Approved Make- Havells/ Crompton/ Philips.	Nos.	33		
ii	Supply & fixing of FULL GLOW 2' X 2' LED 36 W slim Smart Panel of make As specified in tender document or approved by Bank/Architect. Approved Make- Havells/ Crompton/ Philips.	Nos.	2		
iii	Supplying, fixing, testing and commissioning of 15 W LED commercial type down lighter of make As specified in tender document or approved by Bank/Architect. Approved Make- Havells/ Crompton/Philips.	Nos.	4		
a	Supply & fixing of Wall mounted fans 400 mm dia. make As specified in tender document or approved by concerned office in charge. Approved Make- Havells/ Crompton/ USHA.	Nos.	3		
b	Supply & fixing of 230 mm exhaust fan 'Ventilair DX W' with self-closing louvers and plastic body with all accessories etc.. Approved Make- Havells/ Crompton/ USHA.	Nos.	1		
c	Supply & fixing of Ceiling Fan of approved/specified make ceiling fans Supplied by the bankcomplete with down rod, canopy, blades and Electronic speed regulator 230-250 volts including connection with all necessary materials as required. Make- Usha/ Havells/ Bajaj	Nos.	9		
7	circuit wiring in approved. make1.6 mm thick,25mm dia PVC pipes with approved make PVC insulated FRLS copper wire as under. The rate shall be inclusive of all necessary fittings like junction boxes, tees, bends, saddles screws etc complete. PVC pipe to be of BEC/NIC/AKG make and wire of Havells/RR/ Polycab make.				
a	10x4 sq.mm + 1x1.5 sq. mm	Rm	25		

9	DISTRIBUTION BOARD				
	Supplying, installing, testing & commissioning of surface/recessed mountings, Double door 415 volts TPN MCB distribution board of steel, 1.6 mm thick dust phosphatized and painted, inclusive of 100 amps, tinned copper bus bars, earth bar, common neutral link, din bar for mounting of MCB's detachable gland / knock out plate & with built in loose wire box, and superior make terminal connectors for all incoming and outgoing circuits duly prewired with adequate size of PVC insulated copper wires between the bus bars and the MCB's as well as the incomer and upto the terminal connectors/ neutral link and ready for installation of following ways as required.				
	Use 'B' curve MCB's for lighting & small power circuits, 'C' curve for motor duty i.e. for pumps, AC motors, window and split AC's etc. & 'D' curve for UPS DB's i.e. for computers/ PC's circuit. Main incomer & outgoing circuit MCB's shall be selected accordingly i.e. type B, C & D. Contractor to select the MCB's accordingly as per the nature of the circuit/ load.				
	Each DB shall have separate neutral links of rating not less than 100A for each phase. The main incoming neutral link shall be in addition to three outgoing neutral links and shall be of 125 A.				
	UPS DB's shall have a dedicated Earthing link fixed on insulated supports, which will be in addition to body earth link.				
	All internal inter connecting wiring within the DB's shall be PVC insulated flexible copper conductor wires of adequate capacity as per the current rating. Inside each DB, a DB chart is to be fixed. Items should be executed after approval from Bank/Architects				
A*	4-way TPN DB (LIGHT DB/ Power DB)	No.	1		
	Incomer :-				
	1 No. 40 Amp TPN (10 KA) MCB with 40 A DP MCCB (100 MA) each phase				
	Outgoing :-				
	6 Nos. 6/10 Amp (10 KA) SP MCB				
B*	4-way TPN DB (AC DB)	No.	0		
	Incomer :-				
	1 No. 63 Amp TPN (10 KA) MCB with 63 A DP MCCB (100 MA) each phase				
	Outgoing :-				
	6 Nos. 10/16/25/32 Amp (10 KA) SP MCB				
c	4-way SPN DB with 2 Nos. 40 A (10 KA) DP MCB (For UPS Input)	No.	2		
d	(2+8)-way SPN DB (For UPS Sub DB)	No.	1		
	Incomer:-				
	1 No. 40 Amp DP (10 KA) MCB with 25 A DP MCCB (100 MA)				
	Outgoing:-				
	6 Nos. 6/10/16/25 Amp (10 KA) SP MCB				
e	8 Way SPN DB for ATM complete with lock & Key Arrangement with 40A DP MCB & 32 A DPRCCB (100 mA) and Outgoing as 4 No's of 6/10/16/25/32 A SP MCB as directed by the engineer in charge for E-Lobby AC- 2 No's and Light.	Nos.	1		
f	6 Way SPN DB for ATM complete with lock & Key Arrangement with 25 A DP MCB & 25 A DPRCCB (100 mA) and Outgoing as 4 No's of 6/10/16/ SP MCB as directed by the engineer in charge for ATM UPS points.	Nos.	1		
10	MAIN PANEL AND METER BOARD				
*	Designing, fabrication, supply, installation, testing and commissioning of front operated cubicle type compartmentalized, front access, free standing on 75MM "I" MS channel, dust and vermin proof (IP 42 degree protection) panel suitable for use at 415V, 3 phase, 4-wire 50Hz system suitable for fault level of required value symmetrical at 415V fabricated from 2mm thick CRCA MS sheets with hinged, gasketted (Metal based neoprene) lockable doors having structural reinforcement including 3mm thick gland plates on top and bottom, lifting hooks, Gearth strip of required size with 2 no's earth terminals, 2 no's 230V AC operated 250 mm X 250 mm size axial fans for exhaust of heat with On-Off toggle switches including 2 coated primer and 2 power coated paint finish of approved shade over metal surface cleaned and treated with seven tank process complete with interconnections etc. as per specifications as required. Main panel board of approved make (Should be CPRI Approved, Type of Approval as instructed by the concerned office in charge)				

	As per the following specifications, (Part IV - Substation) and IS: 8623 comprising of followings panel mounting switchgears etc. as required, should be CPRI Approved. IS: 8623 comprising of followings panel mounting switchgears etc. as required, should be CPRI Approved. Note: Type of CPRI testing shall be as per Architect/ Bank's instructions. All switchgears shall have provision for entry of cables from the top or bottom through Cable Alley.				
	All live accessible parts shall be shrouded and all equipment shall be finger touch proof. The busbars insulation shall be with heat shrinkable sleeves SMC/ DMC shrouds and busbar supports shall be used. Padlocking facility shall be provided on all outgoing feeders' doors and switch handles shall be lockable in OFF position.				
	Suitable arrangement shall be made for termination of multiple incoming cables.				
	All KA values indicated shall be ICS breaking capacity				
	GA drawings shall be got approved by concerned office in charge.				
a.	Floor panel shall consists of :-				
	INCOMER				
	1 no. 100 Amp 4P On Load Change over switch with 1 No. 100 Amps, TPN MCCB (25 KA) with extendable rotary handle each thermal over current, instantaneous, Short circuit release, Earth fault.				
	BUSBARS				
	125 amps TPN pole bus bar chamber of suitable length with copper bus bars. All bus bars and interconnections shall be of suitable size copper strips.	Set	1		
b.	INDICATING PANEL				
	Digital flush type class-1.0 accuracy multifunction meter showing V, A, PF etc. with 3 Nos.				
	Current Transformers of 125/5A ratio, 15 VA Class-1.0 metering. - 1 sets				
	Red/Green/Amber ON/ OFF/ TRIP indicating lamps with 2A SP MCB backup protection.				
	1 set of three phase indicating lamps along with 2A SP MCB backup protection.				
	Restricted Earth fault relay with 3 Nos. current transformers of 125/5 ratio, 15 VA Class 5P 10				
	Under voltage, Overvoltage & phase reversal relay for persisted voltage of 105-180% & 20-95% of rated voltage (Numeric Relay not required).				
	OUTGOINGS: -				
	2 Nos 40 A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (For Light DB & Spare)				
	3 Nos 40 A DP MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars.				
	2 Nos 63 A TPN MCB (10 kA) terminals suitable to receive cable on one side and wire connection to Bus bars. (for AC and Power DB)				
	The electrical panel as described above and specifications complete.	Set	1		
11	LAN- (LOCAL AREA NETWORKING) FOR COMPUTERS :				
a	Supply and Installation of following factory fabricated patch cords (UTP-CAT 6) complete with connectors on both sides. Two Meter length.	Nos.	12		
b	Supply and laying of Four Pair UTP CAT 6 LAN cables in 1 mm thick 20 or 25 mm dia pvc conduit / Floor trunking with RJ-45 connector. including Supply and fixing of modular type Information Outlets with suitable size M.S./ PVC modular boxes complete with insulation displacement connectors etc suitable for CAT 6 UTP Cabling	m	230		
13	EARTHING: 600 x 600 x 3mm copper plate earthing i/c of watering, GI pipe with funnel, salt & coal filling, 10" x 10" masonry chamber with sand plaster, CI lid, 10SWG copper wire in PVC pipe from bottom of pit to existing ground level.	Nos.	3		
14	Earth wire 6sqmm COPPER WIRE	Rm	45		
	Total				
	GST				
	GRAND TOTAL				

SR.	DESCRIPTION	MAKE / BRANDS
1	PVC Conduit	Precision/AKG
2	Ceiling Junction Boxes	Home lite/ANCHOR
3	Wires & cables	R.R./Havells /Polycab
4	Modular Switches, Sockets etc	Legrand/Havells/L. & T.
5	Lighting Fixtures	Philips/Havells/Crompton
6	M.C.B./RCCB/RCBO etc	Legrand/Havells/L&T
7	Distribution Boards	Same As Above
8	MCCB	A.B.B./Schneider/Legrand/L. & T.
9	Change Over Switches	H.P.L./A.B.B./Standard/ L. & T.
10	End Termination accessories	Dowells/Usha/Brecco/Cosmos
11	Telephone Cables & accessories	Havells, Krone, Finolex,
12	Fans/Exhaust fans	Crompton/Havell/USHA
16	CAT6 cables/Telephone wires	Legrand, Molex, D'Link ,AMP

NOTE:

- 1- The contractor is strictly advised to use the makes specified/approved by the Bank/Architect, unspecified items will not be paid until they are changed with the specified ones.
- 2- The Plywood used for the work shall be BWR (Boiling water proof range) confirming to IS 303.
- 3- No escalation shall be paid to the contractor for material or labour.

Place:

Date:

Signature of contractor with seal