

STATE BANK OF INDIA

ELECTRICAL BOQ FOR SBI TRANSIT HOUSE, NAINITAL

S.No.	DESCRIPTION OF WORKS	UNIT	QTY	RATE	AMOUNT
A. 1	Wiring for light point/ fan point/ wall fan point/ exhaust fan/ light sockets etc. with 1.5 sq.mm. PVC insulated 1100 V Grade copper conductor (FRLS) wires & 1.5 sq.mm. copper earth wire in concealed/ surface using 16 SWG MS conduits, accessories such as bends, tees, saddles, draw boxes, mounting boxes, inner plates, cover plates, ceiling rose etc (wherever required) and chromium plates brass screws/ rowel plug etc. The circuit wiring starting from DB to point control box/ switch box using 2 X 2.5 sq.mm PVC insulated 1100 V grade multi- stranded copper conductor wire & 2.5 sq.mm. PVC insulated earth wire (color code to be used). (Flexible conduit/ elbow not allowed). The conduit to be laid in ceiling with proper clamps/ wall/ floor and filling the chase with cement mortar and finishing the same in original form/ wooden partition/ above false ceiling with proper clamps etc. all complete.				
	(Wherever required as per standard specifications).				
	i) Each circuit shall have independent earth wire.				
	ii) Each point shall be earthed.				
	iii) Circuit wiring is to be included in point wiring rates.				
i	One light points controlled by one 6 amp. Modular switch	Nos.	50		
ii	Two light points controlled by one 6 amp. Modular switch	Nos.	24		
iii	Three light points controlled by one 6 amp. Modular switch	Nos.	8		
iv	Four light points controlled by one 6 amp. Modular switch	Nos.	3		
v	Five light points controlled by one 6 amp. Modular switch	Nos.	1		
vii	Ceiling fan/ exhaust fan point controlled by one 6 amp. Modular switch. The switch should be at switchboard level	Nos.	27		
viii	One 5 pin socket controlled by one 6 amp. Modular switch complete assembly includes plate box etc.				
a	Dependent	Nos.	7		
ix	Main specification as above for wiring / conduits, but using 2*2.5 + 1*2.5 Sqmm Copper Conductor FRLS wires from DB to first 6A, 5 Pin modular socket controlled by one 6A switch and looped to the nearest second point with same 2*2.5 + 1*2.5 Sqmm copper conductor wires FRLS insulated 1100V grade (max 6 points per circuit).				
a	Primary	Nos.	17		
b	Secondary	Nos.	70		

x	Same as serial no 1 but using 2*2.5 + 1*2.5 Sqmm Copper Conductor FRLS wires from DB to first 16 Amp MCB two Nos. , for Glow sign Board.				
a	Primary Point	Nos.	2		
2	POWER POINTS				
	Same as serial no.1, but wiring for 16 Amp, 6-pin sockets by using 2*4 sq.mm. PVC insulated 1100 V grade copper conductor wire with independent 1* 4.0 sq.mm earth wire from D.B. to first point 1 st socket and 1 st to 2 nd , socket with 2*2.5 sq.mm. and 1*2.5 earth wire including providing and fixing of 16 Amp, 6 –pin socket with 16 Amp. Switch. (Modular type switch/ socket/ plate etc. complete assembly). Maximum 3 points				
a)	Primary point	Nos.	10		
b)	Secondary point	Nos.	18		
B.	CONDUITING FOR TELEPHONE, COMPUTER & CONDUITING, WIRING FOR T.V. SYSTEM.				
1	TELEPHONE SYSTEM				
1.1	Wiring for VOICE from Jack Panel in data rack to computer workstation with Cat-6 voice cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for telephone socket with shutter, RJ 47 outlet, faceplate and mounting box complete of modular type. This work includes supply and laying of high speed CAT-6 cable in PVC conduits/raceway throughout the length, from the I/O hub to the point.	Nos.	9		
1.2	Supplying, laying, effecting terminations, testing and commissioning of 0.51 mm dia Cu. Conductor, twisted, colour coded with polythene capor barrier, telephone cables in the existing tray or in conduit including providing &fixing conduit pipe or cable tray as required from building tag block to the floor as required.				
a)	Supplying & fixing 12 pair krone tag block with enclosure.	Nos.	1		
2	COMPUTER NETWORKING				
	Wiring for computer networking from Jack Panel in data rack to computer workstation with Cat-6A computer cable in PVC conduits of size 20/ 25 mm including providing ferrules at both ends and termination at both ends including providing & fixing frame for Cat-6 with shutter, RJ 45 outlet, faceplate and mounting box complete of modular type, This work includes supply and laying of high speed CAT-6A cable in PVC conduits/raceway throughout the length, from the I/O hub to the point.	Nos.	9		

a	Supplying and fixing 6 U (Rack with glass door, opening in the front power panel 1 (horizontal), cable manager 1 lock & key).	Nos.	1		
C.	CABLES, MAINS & SUBMAINS				
1	Supplying all materials and laying/ pulling 1100 volts grade PVC insulated copper conductor wires (FRLS) in MS conduit with all fixing accessories after cutting the floor, wall and the like etc. and replastering the floor level to original. Conduit must be 30 mm below the floor finish level.				
ii	Supplying, laying, testing & commissioning of 4 C X 10 sq.mm. at 1100 volts grade PVC insulated aluminium conductor armoured cable with 10 SWG GI earthing wire including cables end termination using appropriate Lugs, Glands, termination accessories, Clamps etc. as required as per specification (LIGHT).	RM	25		
ii	Supplying, laying, testing & commissioning of 4 C X 16 sq.mm. at 1100 volts grade PVC insulated aluminium conductor armoured cable with 10 SWG GI earthing wire including cables end termination using appropriate Lugs, Glands, termination accessories, Clamps etc. as required as per specification (POWER DB,).	RM	25		
iii	Supplying, laying, testing & commissioning of 4 C X 25 sq.mm. at 1100 volts grade PVC insulated aluminium conductor armoured cable with 10 SWG GI earthing wire including cables end termination using appropriate Lugs, Glands, termination accessories, Clamps etc. as required as per specification (VTPN DB).	RM	60		
D	CABLE TRAY & RACEWAY				
	Supplying and fixing of following size of Perforated hot dipped GI cable tray with perforation not more than 17.5% in convenient section, joined with connector, suspended from the ceiling with M.S. suspenders including bolts, nuts & washer, painting suspenders etc as required. Rates shall be included tee, elbows & reducers etc				
i)	150x75 mm, 2mm thick Cable tray	RM	40		
ii)	Fabricating, supplying to site & installation in the floor including chase cutting of floor,leveling, refilling and making good the same 1.6 mm thick G.I raceways of height 40 mm and 2.0 mm thick openable cover, totally enclosed,The two lengths of channels and junction box shall be nut bolted together to make it dust and water proof. complete with all fixing accessories as required.				
	150 mm (wide) x 50 mm (height)	RM	10		
E	DISTRIBUTION BOARD				

	Supplying, installing, testing & commissioning of surface/recessed mountings, Double door 415 volts TPN MCB distribution board of steel steel, 1.6mm thick dust phosphatized and painted, inclusive of 100 amps, tinned copper busbars, earthbar, common neutral link, din bar for mounting of MCB's detachable gland/ knock out plate & with built in loose wire boxl, 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 with in 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.				
a	8-way TPN DB (Light & POWER DB)	No.	2		
	Incomer:-				
	1 No. 40 Amp TPN (10 kA) MCB with 40 A DP RCCB (100 mA) each phase				
	Outgoing:-				
	18 Nos.10/16/25 Amp (10 kA) SP MCB				
b	4-way VTPN DB (Distribution at Transit House)	No.	1		
	Incomer:-				
	1 No. 63 A TPN (16 KA) MCCB				
	Outgoing:-				
	4 Nos.40 Amp (10 kA) TP MCB				
	For BM Quarter				

	Supplying, installing, testing & commissioning of surface/recessed mountings, Double door 415 volts TPN MCB distribution board of steel steel, 1.6mm thick dust phosphatized and painted, inclusive of 100 amps, tinned copper busbars, earthbar, common neutral link, din bar for mounting of MCB's detachable gland/ knock out plate & with built in loose wire boxl, 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 with in 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.				
c	6-way TPN DB (POWER DB)	No.	1		
	Incomer:-				
	1 No. 40 Amp TPN (10 kA) MCB with 40 A DP RCCB (100 mA) each phase				
	Outgoing:-				
	12 Nos.10/16/25 Amp (10 kA) SP MCB				
d	4-way TPN DB (LIGHT DB)	No.	1		
	Incomer:-				
	1 No. 40 Amp TPN (10 kA) MCB with 40 A DP RCCB (100 mA) each phase				
	Outgoing:-				
	6 Nos.10 Amp (10 kA) SP MCB				
F.	(LIGHT FITTINGS & ACCESSORIES)				
	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 Fixures should be covered with minimum 1 Years onsite replacement warranty).				

A-i	Supplying, fixing, testing and commissioning of surface mounted 12 W Deco COB light of make As specified in tender document or approved by SBI/ Architect.	Nos.	4		
A-ii	Supply, fixing, testing & commissioning surface mounted / hanging from ceiling 20W vivid pentant lights of individual length joined together complete and necessary installation fittings LED colour & make as specified in tender document or approved by SBI/ Architect.	Nos	6		
A-iii	Supplying, fixing, testing and commissioning of 10 W Wall Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	5		
A-iv	Supplying, fixing, testing and commissioning of 10 W Rectangular wall Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	8		
A-v	Supply, fixing, testing & commissioning 15W wall lights of individual length joined together complete and necessary installation fittings LED colour & make as specified in tender document or approved by SBI/ Architect.	Nos	5		
A-vi	Supplying, fixing, testing and commissioning of 10 W Linea sharp slim Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	36		
A-vii	Supplying, fixing, testing and commissioning of 5 W Radiant surface 1 way wall washer Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	10		
A-vii	Supplying, fixing, testing and commissioning of 7 W COB pro Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	9		
A-ix	Supplying, fixing, testing and commissioning of 12 W Picture Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	9		
A-x	Supplying, fixing, testing and commissioning of 18 W Dura slim recessed Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	4		
A-xi	Supplying, fixing, testing and commissioning of 6 W Space glow Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	8		
A-xii	Supplying, fixing, testing and commissioning of 23 W Linear slim Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	2		

A-xiii	LED Strip (NEON) for cove lighting 6.5 W per mtr. with driver, jointer and necessary installation supporting fittings of Led strip light (50 mtr.) make as specified in tender document or approved by SBI/ Architect. Code : DF82827- wipro / 120 led (2700K) / meter type or higher as per SBI's approval. Note : to be fixed with clips / clamps with the base surface for straight & permanent alignment.	Nos.	4		
A-xiv	Supply & fixing of LED scehendelier of ANKUR RECTANGULAR MANOOI - CLEAR CRYSTAL CHANDELIER, size 5' X 2', lamp typ e- LED SMD , surface mounted (with necessary haging arrangenents), golden body, all complete of make as specified or approved by SBI/ Architect. Make: ANKUR / JAIN SONS / HDC / Jhoomarwala	Nos.	3		
A-xv	Ceiling fans 1300 mm dia. Dragon-fly ORB make as specified in tender document or approved by SBI/ Architect. Make: ANEMOS	Nos.	13		
A-xvi	Supply & fixing of 150 mm exhaust fan with louvers and plastic body with all accessories etc. complete of make As specified in tender document or approved by SBI/ Architect. Make: Orient (Smart Air), white body colour, with fins or higher	Nos.	7		
	For BM Quarter				
B-i	Supplying, fixing, testing and commissioning of surface mounted 12 W Deco COB light of make As specified in tender document or approved by SBI/ Architect.	Nos.	1		
B-ii	Supplying, fixing, testing and commissioning of 12 W Wall Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	4		
B-iii	Supplying, fixing, testing and commissioning of 5 W Radiant surface 1 way wall washer Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	4		
B-iv	Supplying, fixing, testing and commissioning of 18 W Dura slim recessed Light, make As specified in tender document or approved by SBI/ Architect.	Nos.	26		
B-v	LED Strip (NEON) for cove lighting 6.5 W per mtr. with driver, jointer and necessary installation supporting fittings of Led strip light (50 mtr.) make as specified in tender document or approved by SBI/ Architect. Code : DF82827- wipro / 120 led (2700K) / meter type or higher as per SBI's approval. Note : to be fixed with clips / clamps with the base surface for straight & permanent alignment.	Nos.	1		
B-vi	Ceiling fans 1200 mm dia. Stricker Neo make as specified in tender document or approved by SBI/ Architect. Make: USHA	Nos.	3		
B-vii	Wall mounted fans 450 mm dia. TURBO 180 make As specified in tender document or approved by SBI/ Architect. (METAL BODY). Make: USHA	Nos.	2		

B-viii	Supply & fixing of 150 mm exhaust fan with louvers and plastic body with all accessories etc. complete of make As specified in tender document or approved by SBI/ Architect. Make: Orient (Smart Air), white body colour, with fins or higher	Nos.	4		
	NOTE : Incase rate for the same fixture or item is quoted differently for the Transit house & BM quarter, then the lower rate will be considered for both the sites				
	TOTAL FOR ELECTRICAL WORKS				
Note:- The rates quoted includes all other taxes , duties , loading, unloading , transportation, other expenses etc to site. only GST will be paid Extra					

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