

ESTIMATE

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NAME OF THE CLIENT: STATE BANK OF INDIA

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**ADDRESS: Ground Floor, South & North Wing, Commercial Client Group Branch,
Horniman Circle, Fort, Mumbai**

NATURE OF WORK: - ELECTRICAL WORK

SR.	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
	SECTION A - PANEL & DBs				
1	Supply, Installation, Testing & Commissioning of MAIN POWER PANEL, Refer SLD. Ref no :- SBI/FORT/ SLD/01	1	each		
a	1Nos 200A MCCB, 35kA, with all standard accessories as follows.				
	i) Thermal O/L Release Range: .08-1.0lr				
	ii) Instantaneous magnetic S/C Trip				
	iii) Rotary Operating Handle.				
	iv) Shunt release				
b	Indication lamps R,Y,B Cluster LED's -1 Nos.				
c	DIGITAL ENERGY METER IDICATING TRUE RMS VALUE OF Three voltages, Three Currents, three power factors, Frequency in HZ, KVA, KW, KVAR, KVAh, KVARh, Demand, Maximum demand ,with 16x1 LC Display with RS485 port & software.				
d	200A tinned Aluminum Bus Bars 3P+50%N Pole				
	Section-1				
	Sub-Incomer				
e	160A 4P MCCB with Shunt release -1Nos.				
f	160A tinned Aluminum Bus Bars 3P+50%N (TPN) Pole				
	Outgoing-				
g	63A TPN MCB -4Nos.				
h	40A TPN MCB -4Nos.				
i	20A/25A/32A SP MCB - 6Nos.				
	Section-2				
	Sub-Incomer				
j	63A 4P MCCB -1Nos.				
k	80A tinned Aluminum Bus Bars 3P+50%N (TPN) Pole				
	Outgoing-				
l	32A TPN MCB -1Nos.				
m	40A TPN MCB -1Nos.				
n	40A TPN MCB -1Nos. (D- CURVE)				
o	40A DP MCB - 1Nos.				
p	32A DP MCB - 1Nos.				
	Section-3				
	Sub-Incomer				
q	63A 4P MCCB -1Nos.				
r	80A tinned Aluminum Bus Bars 3P+50%N (TPN) Pole				
	Outgoing-				
s	32A TPN MCB -1Nos.				
t	32A DP MCB - 1Nos.				
u	25A DP MCB - 1Nos.				
v	40 kVAR Capacitor Banks : With Each bank seprate MCB with Heavy duty Contactor and 6 stag APCR Relay.				
	The rate shall include all components, MCB, Heavy duty contactor Bus Bars, Wiring & accessories.				

2	200 Amps 4P MCCB with Busbar arrangement (suitable for 3.5C x 150sqmm A2XFY Cable) enclosure complete with all mounting accessories.	1	Nos		
3	Supply, installation, testing & commissioning of 40Amp/63Amp ELCB / MCCB with weatherproof enclosure for For AC , Cost of MCB to be included.	1	Nos		
4	Supply, installation, testing & commissioning of 20Amp/25Amp TP MCB with weatherproof enclosure for For AC , Cost of MCB to be included.	2	Nos		
5	Supply, installation, testing & commissioning of 40Amp 4P MCB with enclosure for For UPS Input & Output, Cost of MCB to be included.	2	Nos		
6	Supply, Installation, Testing & Commissioning of Distribution Boards complete with MCBs/Isolators/ Bus bars and interconnections.No fabricated DBs shall be allowed.Only DBs of specified makes as per list of materials shall be used .				
a	TPN as follows (LDB-1) Incomer 40A TP MCB- 1 No. SUB Incomer 40Amp DP ELCB 30mA Outgoing 10A SP MCBs -12Nos.	2	each		
b	TPN as follows (RPDB-1) Incomer 32Amp TPN MCB Sub Incomer for each phase 32Amp DP RCCB (30mA) Outgoing 16A SP MCBs -12 Nos.	2	each		
c	TPN as follows (UPSDB-1) Incomer 40Amp TPN MCB Sub Incomer for each phase 40Amp DP RCCB SI / HPI TYPE (100mA) Outgoing 16A SP MCBs -12 Nos.	3	each		
f	SPN as follows (UPSDB-2) Incomer 32A DP ELCB 100mA DP MCCB SI / HPI TYPE (100mA)- 1 No. Outgoing 16A SP MCBs -6 Nos.	1	each		
g	SPN as follows (EMG LIGHTING) Incomer 25A DP MCB- 1 No. Outgoing 10A SP MCBs -5 Nos.	1	each		
	Note :1. All MCCBs in this section will be with rotary handle ,Breaking capacity of 25KA wherever not specified,with electronic release for short circuit , over current,&earth fault. Neutral links or proper neutral arrangement for TP MCCBs.				
	Total of `Section A'				
	<u>SECTION B - CABLE & WIRING</u>				
	<i>All cables in this tender are FR</i>				
1	Supply & Laying of Aluminum / Copper Armoured / Un Armoured XLPE Insulated cables fixed to walls, ceilings, on trays or laid in ready-made trench as follows:				
a	3.5 Core 120 sq. mm.A2XFY cable (Aluminum armoured XLPE cable)	50	mtr		
b	4 Core 25 sq. mm. A2XFY with bare two nos of 12 SWG GI earth wire	50	mtr		

c	4 Core 16 sq. mm. COPPER ARMoured CABLE with bare two nos of 12 SWG GI earth wire	110	mtr		
e	4 Core 10 sq. mm. COPPER ARMoured CABLE with bare two nos of 12 SWG GI earth wire	25	mtr		
f	3 Core 16 sq. mm. COPPER ARMoured CABLE	67	mtr		
g	3 Core 6 sq. mm. COPPER ARMoured CABLE	70	mtr		
h	4 Core 4sq. mm COPPER ARMoured CABLE bare two nos of 14 SWG Gi earth wire .	20	mtr		
i	3 Core 4sq. mm COPPER ARMoured CABLE	120	mtr		
j	Supply & laying of following flexible leads thro' suitable size of PVC flexible pipe fixed on walls/beams/columns with saddles, spacers and PVC Gland.				
i	One no of 16 sqmm FLEXIBLE Copper PVC insulated leads	80	mtr		
iii	One no of 4 sqmm FLEXIBLE Copper PVC insulated leads	20	mtr		
2	Termination of the above cables with Heavy duty Cu. Lugs & Brass cable glands. All Cable should have Double compression gland.				
a	3.5 Core 120 sq. mm.A2XFY cable (Aluminum armoured XLPE cable)	2	nos		
b	4 Core 25 sq. mm. A2XFY with bare two nos of 12 SWG GI earth wire	2	nos		
c	4 Core 16 sq. mm. C2XFY with bare two nos of 12 SWG GI earth wire	8	nos		
d	4 Core 16 sq. mm. 2XFY with bare two nos of 12 SWG GI earth wire	2	nos		
e	3 Core 16 sq. mm. C2XFY cable	4	nos		
f	4 Core 10 sq. mm. 2XFY with bare two nos of 12 SWG GI earth wire	2	nos		
g	3 Core 10 sq. mm. C2XFY cable	2	nos		
h	4 Core 4sq. mm 2XFY bare two nos of 14 SWG Gi earth wire .	2	nos		
i	3 Core 4sq. mm 2XFY	2	nos		
j	One no of 16 sqmm FLEXIBLE Copper PVC insulated leads	10	nos		
k	One no of 6 sqmm FLEXIBLE Copper PVC insulated leads	6	nos		
3	Supplying & fixing of 2mm thick GI Perforated type cable Trays of Asian /Profab Engineers make The cable tray shall be fixed to the ceiling/ wall with MS angle support with 35mmx2mm thick GI slotted 'C' channel Patti at an interval of 1 meter / or the MS angle iron fabricated support depending upon the location. The rate shall include the cost of Supports .				
a	Cable Tray=150 mm wide x50 mm height.	30	mtr		
b	Cable Tray=300 mm wide x50mm height.	25	mtr		

4	Point wiring through 20/25 mm PVC HMS Conduit with all required accessories with 3 Nos of 1.5 sqmm PVC insulated Copper FR wires with Modular type switches complete with all accessories as detailed in the specifications. The switch boxes shall be flush mounted with partition works or as directed by the architects and shall be done in co-ordination with interior furniture works. The rate shall include circuit wiring from DB to switchboard & from switchboard to switchboard. 3 no of 2.5 sqmm (for earth) PVC insulated Copper FR Conduit shall be fixed on wall / trays or ceiling with spacers & saddles. The wires will be terminated in a separate connector before fixtures.				
a	Primary light points	90	Nos		
b	Secondary light points	44	Nos		
c	DB controlled primary point (Cost of the switch not to be considered . Only wiring from DB to first point needs to be considered .)	4	Nos		
Total of `Section B'					
SECTION C - POWER OUTLETS					
1	Supply, Installation , Testing & Commissioning of 20/25A Reyroll Plug-Sockets with 3 Pin Metal Top Housed in powder coated metal board with 20/25A DP MCB The rate shall be inclusive of 2 nos 4 sq.mm & 1 no of 2.5 sqmm (for earth)PVC insulated copper flexible FR in 20/25 mm PVC Conduit	4	Nos		
2	Supply and fixing of modular type shuttered power sockets complete with chrome-plated mounting box. The switch box shall be fixed in partition works. The rate shall be inclusive of connecting of switches / sockets.				
i	Supply, Installation , Testing & Commissioning of Point Wiring for UPS power sockets 3 Nos of Universal sockets 6/13A 3pin & controlled by 1 nos 16A switch (for UPS Power) with 3 core 2.5 sq.mm Cu conductor PVC insulated , PVC Sheathed (White Colour) FR CABLE in already laid Raceways/Trunking/Conduits for UPS power points.				
a	Primary Point (DB to the First workstation)	40	set		
b	Secondary Loop Points	36	set		
ii	Supply, Installation , Testing & Commissioning of Point Wiring for Raw power sockets 1 No. of Universal Type 6 A 3 pin Socket controlled by 1 nos 6A switch (for WORKSTATION Raw Power) with 3 core 2.5 sq.mm Cu conductor PVC insulated , PVC Sheathed (White Colour) FRLS CABLE in already laid Raceways/Trunking/Conduits for UPS power points.				
a	Primary Point (DB to the First workstation)	30	set		
b	Secondary Loop Points	20	set		
iii	Supply, Installation , Testing & Commissioning of Point Wiring for Raw power sockets 1 No. of Universal Type 16 A 3 pin Socket controlled by 1 nos 16A switch (for WORKSTATION Raw Power) with 3 core 2.5 sq.mm Cu conductor PVC insulated , PVC Sheathed (White Colour) FRLS CABLE in already laid Raceways/Trunking/Conduits for UPS power points.				
a	Primary Point (DB to the First workstation)	20	set		
b	Secondary Loop Points	5	set		

3	Supply & Laying Circuit Mains for DBs through 25mm PVC Conduit, as follows: (The rate shall include the cost of conduits & all accessories)				
b	3 Nos of 2.5 sq.mm. Cu conductor PVC insulated FR	20	mtr		
b	2 Nos of 4 sq.mm. and 1 Nos of 2.5 sq.mm. Cu conductor PVC insulated FR	10	mtr		
4	Back boxes if required for data outlets boxes	10	set		
Total Of `Section C'					
SECTION - D(Lighting Fixtures & Fittings)					
1	Supply, Installation, Testing & Commissioning of 2 x 2 (600 x 600mm) 38 Watt LED light tile. The fitting shall be fixed with chain ,screws etc. The fitting shall be recessed mounted suitable for Armstrong Ceiling , with full acrylic diffuser and delivered lumens > 2500 lumen , The rate shall include connection with 3 core 1.5 sqmm. flexible copper cable with Flexible Conduit. The brief specification of Fixture is as under :	50	Nos		
Make : Wipro-CR010R038HP57OR / PHILIPS / CROMPTON / HAVELLES					
2	Supply, Installation, Testing & Commissioning of 15/17 Watt LED smart spot light. The fitting shall be fixed with chain ,screws etc. The fitting shall be recessed mounted, The rate shall include connection with 3 core 1.5 sqmm. flexible copper cable with Flexible Conduit. The brief specification of Fixture is as under :	100	Nos		
Make : Wipro-CRDL14R015HP60 / PHILIPS / CROMPTON / HAVELLES					
3	Supply, Installation, Testing & Commissioning of 10 Watt LED smart spot light. The fitting shall be fixed with chain ,screws etc. The fitting shall be recessed mounted, The rate shall include connection with 3 core 1.5 sqmm. flexible copper cable with Flexible Conduit. The brief specification of Fixture is as under :	6	Nos		
Make :Philips / Wipro / CROMPTON / HAVELLES					
4	Supply, Installation, Testing & Commissioning of PIR Sensors with contact rating of 10 Amps inductive, covering area of 8 meters at mounting height of 3 meter,occupancy as well as day light linking.	2	Nos		
5	Supply, Installation, Testing & Commissioning of 9w Mirror light fixture complete lamp etc.	2	Nos		
Model no : FMS 200/111 of philips make or Equivalent					
Make : Philips / Wipro/ Thorn					
Lamp : Philips / Osram					
Model no WCQ 22150 WH with control gear box of Wipro make or Equivalent					
8	Supply, Installation, Testing & Comissioning of LED STRIP in cove	100	Meter		
LED LIGHTS in COVE- linear /flexible strip					
Distance between LED-12 LED'S /meter					
wattage of each LED-7.5 WATTS /meter					
Colour of each LED-WARMWHITE 3000K					
Make of LED-Luxeon,Nishia.Philips					
Cost of SMPS power supply to be considered for each distance of 3.5 meter					
9	Supply, Installation, Testing & Commissioning of 9" Exahust fan 1200rpm heavy duty. Make : Crompton, Bajaj, GE.	2	No		
Total of `Section D'					
SECTION - E (Miscellenous Work)					

1	Preparation and commissioning of earthpits with 600x600x3mm thick copper electrode with watering arrangement, chamber, funnel, charcoal salt etc. The electrode shall be connected with 25 mm x6mm thick Copper Strip and terminated into the chamber with nut bolt arrangement. The rate shall include cost of earthing strip upto the chamber. For BODY Earth	1	Nos		
2	Preparation and commissioning of earthpits with 600x600x3mm thick GI electrode with watering arrangement, chamber, funnel, charcoal salt etc. The electrode shall be connected with 25 mm x6mm thick GI Strip and terminated into the chamber with nut bolt arrangement. The rate shall include cost of earthing strip upto the chamber. For BODY Earth	1	Nos		
3	Supply and laying of 25mm x 6mm thick GI. earthing strip from earthing chamber to the main power panel and it's termination. The portion of the strip under ground shall be laid to a depth of at least 75cms. The portion on building wall upto the main panel shall be fixed with spacers and clamps.	30	mtrs		
4	Supply and laying of 1Cx 25 sq mm COPPER flexible Pvc cable for earth in PVC HMS Conduit inside the building premises.	60	mtrs		
5	Supply and laying of 1Cx 6 sq mm COPPER flexible Pvc cable for earth in UPS DB supply cable in 20mm PVC HMS Conduit .The rate shall include PVC Conduit. .	20	mtrs		
8	This item is inclusive of making necessary temporary arrangement for lighting with fixtures to attain a minimum 100Lux lighting level for area of 5500Sqft & provision of substantial number of power points for carpenters, electricians & other fellow contractors. The supply should be routed through MCB DB having ELCB of suitable rating. Cost of energy meter at main incoming to be considered .Contractor to provide multiple DBs & services being multiple services. This items includes cost of supply & installations of main panel with energy meter, DBs at each levels, Its cabling, Temp wiring for Lighting fixtures & Power sockets. Lighting Fixtures, Power sockets ,required hardware & associated material.	1	LS		
Total of `Section E`					
SECTION - F RACEWAYS & WIRING					
1	Supply and laying Raceways / Conduits (for under floor trenches / On trays) on existing flooring. Raceways / conduits shall be fixed to the flooring with GI clamps for finished levels as per the site conditions or through partitions with all accessories. The rate shall Preparation of trenches upto 22" wide by carefully removing the floor tiles & malwa below the tiles for laying Raceways/conduits for power, telephones etc. The depth of the trenches shall be at least 2 inches from the finished floor level or upto RCC of the slab. The rate shall include the cost of the Raceways/conduits. The rate shall include the activity of clearing the debris generated from the preparation of trenches.				
a	100mm x 40mm Aluminium raceways, 1.6mm thick	40	mtr		
b	82mm x 38mm Aluminium raceways, 1.6mm thick	30	mtr		
c	63mm x 38mm Aluminium raceways, 1.6 mm thick	30	mtr		
d	25mm PVC conduits of wall thickness of 1.6 mm thick	200	mtr		

2	Supplying and fixing 450 mm x 450 mm x50mm deep GI finish. The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With PAINTED GI Plate The knock out shall be removed at site as per requirements.	5	Nos		
3	Supplying and fixing 400/350 mm x 400/350 mm x50mm deep GI finish. The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With PAINTED GI Plate The knock out shall be removed at site as per requirements. (Refer the Images.)	10	Nos		
4	Supplying and fixing 300/250 mm x 300/250 mm x50mm deep GI finish. The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With PAINTED GI Plate The knock out shall be removed at site as per requirements.	15	Nos		
5	Supplying and fixing 200 mm x 200 mm x50mm deep GI finish. The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With PAINTED GI Plate The knock out shall be removed at site as per requirements.	20	Nos		
6	Supplying and fixing 150 mm x 150 mm x50mm deep GI finish. The junction boxes shall have knock-outs on all sides suitable for Raceways/conduits. With PAINTED GI Plate The knock out shall be removed at site as per requirements.	55	Nos		
7	Supply & Laying of RG6 Cable in 25/20 mm PVC Conduits on walls, ceiling or through partitions with spacers and saddles as per standard practice.(Conduit cost to be considered HMS Conduits)	50	mtr		
8	Supply & fixing of 1 No. of RG 6 socket outlet	1	Nos		
TOTAL of `Section - F`					
SECTION - G -VOICE NETWORKING					
1	Supply & Installation of RJ-11 Telephone socket outlet point alongwith PVC back box including 2 pair telephone cable from Telephone MDF upto individual Telephone socket outlet through already laid trenches / raceways / conduits including all necessary hardware & accessories etc complete as required.	75	Nos.		
2	Supply, Installtion, testing & Commissioning of indoor type telephone main distribution Frame (MDF) / Box with suitable S.S frame for mounting tag module, cable, wires & incorporated in 16 SWG MS box with proper lockable cover. The box should be fixed on wall with suitable fastners including painting & earthing. This also includes fixing the cable, distribution chart sufficient space for the cables, wires etc. to be provided in the box for:-				
2.1	Supply & Installtion of 50 Pair MDF with krone module including all hardware & accessorieed etc. complete as required	2	Nos.		
3	Supply & laying of 10 pair armoured telephone cable through heavy guage PVC conduit including all necessary hardware & accessories etc.	50	Mtrs		

	TOTAL of `Section - G'				
	GRAND TOTAL				
	SUMMARY				
1	SECTION - A : PANELS & D.B's				
2	SECTION - B : CABLES & WIRING				
3	SECTION - C : POWER OUTLETS				
4	SECTION - D : LED LIGHTING FIXTURES				
5	SECTION - E : MISCELLENOUS WORK				
6	SECTION - F : RACEWAYS & WIRING				
6	SECTION - G : VOICE NETWORKING				
	Total				
7	DISMENTILING & BUYBACK OF ALL OLD NOT USABLE ELECTRICAL ITEMS INCLUDING PANELS,DBs, LIGHT FITTINGS, FANS ETC	1	Lot		
	GRAND TOTAL				
	GST EXTRA				