

<b>CLIENT : STATE BANK OF INDIA</b>					
<b>SUBJECT: BOQ FOR ELECTRICAL WORKS AT PARTUR BRANCH, PARTUR</b>					
<b>No.</b>	<b>PARTICULARS</b>	<b>QTY.</b>	<b>UNIT</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>A</b>	<b><u>SECTION - A</u></b>				
	<b>MAIN/CAPCITOR PANEL &amp; DBS</b>				
<b>1</b>	Supply, Installation, Testing, Commissioning of 250ATPN SFU with 160 A HRC fuse (L&T/EE make),440 V, 3phase & neutral,50c/s AC23 duty on MS angle iron frame fabricated out of 40mmx40mmx5mm MS angle duly painted with cable end boxeses ,earthing,name plate danger board fixing accessories.The above complete with all accessories	1	NO.		
<b>2</b>	<b>Main Panel</b> -Supply and Installation of main LT panel floor ' mounted, front operated, dead back, totally enclosed vermin proof, indoor, non-drawout, cubicle type power dist. panel fabricated out of 2mm thick CRCA sheet having gasketed hinged door on each cubicle, fully powder coated / enamel painted after seven tank treatment, incorporating horizontal and vertical sleeved copper busbars 'complete with all internal wiring, danger board, two earthing lugs, cable chamber etc. as required 'housing below mentioned switchgears / meters	1	Set		
	Note :- GA & Control Drawing of the panel shall be approved by the Bank before fabrication. (Panel shall be CPRI approved only.)				
	<b>Incomings -</b>				
	i) 1 no. of 250A 3P 50kA MCCB with Rotary Handle Hager/Legrand make. ii) R-Y-B Phase LED type Signal Lamps Teknic, with 0.5A protection MCBs. iii) 100 X 100mm Danger Notice Board in English & Marathi. iv) Digital Voltmeter & Ammeter of HPL, L&T, Mecor or equivalent with CT's of Class 1.0, 15 VA, & required ratio				
	<b>Outgoing:</b>				
	i) 3 nos. of 100A 3P 36kA MCCB with Rotary Handle Hager/Legrand make & R-Y-B Phase LED type Indicating Lamps. ii) 3 nos. of 63A TPN MCBs for ACs, ATM, Water Pumps, & Spare. (All MCB'S must be 'C' series, 10 KA)				

<b>3</b>	<b>S.I.T.C of APFC PANEL – MCB's, APFC relay, contactors, capacitors, indicating lamps, etc. complete with all necessary hardware &amp; accessories as mentioned below :-</b>	1	Set		
a	<b>INCOMER</b> 1 No. 100A, TP, MCCB. The Breaker shall be suitable for 415 Volts, 50 Hz. AC supply. (For APFC Panel Main Incomer - 1 no.) (Legrand / Schneider / Hager / Siemens / L&T make)				
b	<b>S.I.T.C of BUSBARS</b> 1 Set of 120 Amps uniformly rated, continuous duty, 415V AC, 3-Phase & Neutral electrolytic grade 99.95% Purity Tinned Copper bus-bars with colour coded heat sink sleeves supported on SMC type grip supports. The Horizontal / Vertical sections of the busbars should all be uniformly rated for 120 Amps. 1 Set of high conductivity electrolytic quality shall be provided through out the panel for its earthing				
c	<b>INSTRUMENTS</b> -1 no. 0-500V Digital Voltmeter of suitable size & -1 no. suitable size Digital Ammeter -1 Set of phase indicating lamps, LED type, RYB. -1 Set of 2A 10kA C curve SP control MCB -1 no. 6 stage microprocessor based digital type -APFC relay 1 set overvoltage, undervoltage, phase protection relay. -6 set On, Off push button, auto manual selector switch. -6 set On, Off LED type indication lamp				
d	<b>OUTGOING</b> 2 Nos. 40A, TP, D curve, MCB 2 Nos. 25A, TP, D curve, MCB 2 Nos. 20A, TP, D curve, MCB  1 No. 2 kVAR MPP heavy duty capacitor with capacitor duty contactor 1 No. 3 kVAR MPP heavy duty capacitor with capacitor duty contactor 2 No. 5 kVAR MPP heavy duty capacitor with capacitor duty contactor 1 No. 10 kVAR MPP heavy duty capacitor with capacitor duty contactor 1 Nos. 15 kVAR MPP heavy duty capacitor with capacitor duty contactor The panel shall be provided with required nos of louvers in the capacitor chamber for its cooling. Also required nos of ventilation fans with auto Sensing thermostate shall be provided in the panel to improve capacitor life & ventilation fans				
<b>4.0</b>	<b>S/I/T/Commissioning 6 way VTPN DB having</b>	1	NO.		
a	<b>Incoming-</b> 160 A TP MCB 1 NOS				
b	<b>Outgoing-</b> (i)63 A TP MCB 4 NOS with all accessories				

	(ii)- 32/20 A SP MCB 6 NOS with all accesses				
	Separate Neutral Bus for Each Phase to be given				
5	S/I/T/Commissioning 6 way <b>VTPN</b> DB having	1	No.		
	<b>Incoming</b> - 160 A TP MCB 1 NOS				
	<b>Outgoing</b> - 63 A TP MCB 6 NOS with all accessories				
6	<b>LIGHTING CUM RAW POWER DISTRIBUTION BOARD</b>				
	<b>ETPN</b> LDB consist of				
a	<u>Incomer</u> : - 40/32 Amps TPN MCB - 1 No. 40A, 100mA, 2 Pole RCCB per phase				
b	<u>Outgoing</u> : - 10 / 16Amps SP MCB, C-curve - 12 Nos. ( <u>Make</u> : -L&T/ Legrand / Siemens / Merlin Gerin)	2	SET		
5	<b>UPS/RAW POWER DISTRIBUTION BOARD</b>				
	8 WAY SPN UPS DB consist of				
a	<u>Incomer</u> : - 40/32 Amps DP MCB - 1 No.				
b	<u>Outgoing</u> : -16/10 Amps SP MCB , D-curve- 8 Nos. ( <u>Make</u> : - L&T/ Legrand / Siemens / Merlin Gerin)	4	SET		
6	<b>UPS OUT PUT DISTRIBUTION BOARD</b>				
	6 WAY SPN UPSDB consist of				
a	<u>Incomer</u> : - 63 Amps DP MCB - 1 No.				
b	<u>Outgoing</u> : -32 Amps DP MCB , D-curve- 03 Nos. ( <u>Make</u> : - L&T/ Legrand / Siemens / Merlin Gerin)	1	SET		
7	<b>UPS INPUT/OUT PUT</b>				
a	INPUT of Branch UPS Complete with encloser 63 Amp TP MCB	1	NO.		
b	OUTPUT of Branch UPS Complete with encloser 63 Amp DP MCB	1	NO.		
8	<b>S.I.T.C of Signages Timer</b> -S/I/T/Commissioning of Automatic Timer control for Signages with Automatic Power On / Off to sign board with required capacity of Automatic 24 Hrs Time Delay operation designed for cyclic mode as per I.S. standard etc. complete. (Basic Cost Not Less Than Rs.2500/- Only) (L&T make)	1	NOS.		
9	<b>AC Cyclic Timer</b> Supply, Installation & Commissioning of Automatic AC Cyclic for 2 nos. of Split/ Window ACs with 1 no. of Real Time Electronic Timer Switch DW219BLK of MK & 2 nos. Contactor/ High Power Relay, Mains ON & AC-1 & AC-2 indicating LED type Lamps, 2A HRC fuse with base for contactor coil & 1 no. 32A DP MCB with Auto/ Manual Switch, in Powder coated MS. Box & all accessories with Elmax make terminals for outgoing/ incoming connections	1	NO		

TOTAL OF SECTION A					
No.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
<b>B</b>	<b>SECTION - B</b>				
1	<b>POWER CABLE &amp; TERMINATION</b>				
a	Supplying, Installation, Testing & Commissioning of LT Cable rated for 1100 Volts AC as per IS Standard with necessary accessories with fine resistance cable. ( <u>Make:</u> - Finolex-FR / Polycab Havells)				
a1	3.5 Core X 95 Sq.mm. Aluminum Armoured cable from Meter Room to MPDB with 8 swg GI wires for earthing	45	Mtrs.		
a2	3.5 Core X 35 Sq.mm. Aluminum Armoured cable with 8 swg GI wires for earthing	35	Mtrs		
a3.	4 Core X 10 Sq.mm. Cu. Armoured XLPE Cable	220	Mtrs.		
a4	4 Core X 6 Sq.mm. Cu. Armoured XLPE Cable	60	Mtrs.		
a5	3 Core X 4 Sq.mm.Copper Armoured XLPE Cable For UPS/AC	110	Mtrs.		
a6	3 Nos. X 10 Sq.mm. PVC insulated Copper flexible cable in 32mm pvc pipe with suitable size PVC Glands for Termination for UPS	30	Mtrs.		
a7	3 Core X 2.5 Sq.mm.Copper Armoured XLPE Cable For for sign board/street light etc.	130	Mtrs.		
b	S/I/T/Commissioning of LT Cable Termination ( <u>Make:</u> - Dowells /Jainsons) ( <b>Note: Incoming and outgoing termination consider one set.</b> )				
b1	3.5 Core X 95 Sq.mm. Aluminum Armoured Cable.	4	set		
b2	3.5 Core X 35 Sq.mm. Aluminum Armoured Cable.	6	set		
b3	4 Core X 10 Sq.mm / 4C X 10 Sq mm	8	set		
b4	4 Core X 6 Sq.mm / 4C X 10 Sq mm	4	set		
b5	3/4Core X 2.5/4/6 Sq.mm.	10	set		

TOTAL OF SECTION B					
No.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
C	SECTION - C				
1	<b>LIGHT POINT WIRING</b>				
	Supplying, Installation, Testing & Commissioning of Light Point Wiring using 1100 Volts grade with 3 Nos. of 1.5 Sq.mm. Copper PVC insulated FRLS ( flame retardant low smoke ) through PVC conduits of 25mm of 16 Gauge thickness. All the wiring below false ceiling on wall must be concealed. All the drops wire from the junction box to the light point must be in flexible pipe with gland at the junction box. (Make: - Finolex / RR / Polycab - FR) Rate quoted must include the cost of circuit wiring from DB Switchboard & switchboard to switchboard, switches, Conceal Box, Plate and Required Accessories etc. (Make as per list)				
1a	Primary Light Point	95	NOS.		
1b	Secondary Light Point Looped from above Primary Light Point.	40	NOS.		
1c	Half Socket Point on Lighting Board.	30	NOS.		
1d	Bell Point With Indicator Type Bell.	2	NO.		
1e	Exhaust Fan Point	6	NOS.		
1f	Ceiling Fan Point With Fan Hook, 120W step type Fan Regulator etc.	30	NOS.		
1g	<b>POWER POINTS-</b> wiring for 16 Amp-6-pin sockets by using 4sq.mm PVC insulated 1100v grade copper conductor wire with independent 2.5 sq.mm earth wire from DB to first and fixing of 16amp. 6-pin socket with 16amp. Switch	15	Nos		
1h	<b>A.C. point-</b> wiring with 2 X 4 sq. mm copper conductor & 1 X 2.5sq. mm copper conductor form AC DB to AC point in 16 swg PVC conduit AC point including supplying and fixing of metal AC box with 3 pin metal clad top and 25 amp SPMCB "C" series. ( Wiring must be from DB to stabilizer to MCB near indoor unit to indoor unit) Make - C&S, Legrand	6	Nos		
<b>TOTAL OF SECTION C</b>					
No.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT

D	<b>SECTION - D</b>				
1	<b>FLOOR RACEWAYS / CONDUITS</b>				
	Supplying, Installation, Testing & Commissioning of following raceways / conduits manufactured as per sizes given below in flooring. The rate shall be inclusive of removing the flooring by cutter & back filling the same with required Sand, Cement etc. and giving the finishing upto the floor level as per instructions of Architect/bank engineer /Consultant.				
1a	60mm X 40mm X 2mm Aluminum Raceways.	15	Mtrs.		
1b	25mm Dia PVC Heavy Conduit.(MMS Grade) ( <u>Make</u> - Precision / Asian)	620	Mtrs.		
2	<b>FLOOR JUNCTION BOX</b>				
	Supplying, Installation, Testing & Commissioning of following GI Junction Boxes in floor of 16 SWG thick duly powder coated. The rate shall be inclusive of providing Sand, Cement etc. and finishing the same upto the floor level as per instructions of the Architect/bank engineer /Consultant.				
2a	150mm X 150mm X 50mm, 16 SWG Junction Box with Stainless Steel Cover Plate.	5	NOS.		
2b	200mm X 200mm X 50mm, 16 SWG Junction Box with Stainless Steel Cover Plate.	20	NOS.		
3c	300mm X 300mm X 40mm, 16 SWG Junction Box with Stainless Steel Cover Plate.	6	NOS.		
<b>TOTAL OF SECTION D</b>					
<b>No.</b>	<b>PARTICULARS</b>	<b>QTY.</b>	<b>UNIT</b>	<b>RATE</b>	<b>AMOUNT</b>
E	<b>SECTION - E</b>				
1	<b>RAW POWER POINT</b>				
	Supplying, Installation, Testing & Commissioning of raw power socket point on Skirting, Walls, for tables using heavy duty PVC pipe run concealed within Walls / Partition / Work Station etc. The rate shall be inclusive of MS concealed box, switch, socket, surface plate,pvc pipe from junction to point. Rate quoted must include the cost of circuit wiring by using 3 X 2.5 sqmm Copper conductor PVC FRLS wiresfrom DB Switchboard & switchboard to switchboard (Make as per list)				

1a	6 Amps 3 Pin Or 5 Pin Socket and 6 Amps Switch Point.	50	NOS.		
2	<b>COMPUTER SOCKET POINT</b>				
2a	Supplying, Installation, Testing & Commissioning of computer socket point on Skirting, Walls for for tables using PVC pipe run concealed within Walls / Partition / Work Station etc. The rate shall be inclusive of MS concealed box, switch, socket, surface plate pvc pipe from junction to point. (Make - MDS /MK / North West) Rate quoted must include the cost of circuit wiring from DB Switchboard & switchboard to switchboard with <b>3 Nos. X 2.5 Sq.mm. PVC insulated Copper flexible cable in 32mm pvc pipe with suitable size PVC Glands for Termination for 3 Nos. of 6 Amps below work station on 8 module plate &amp; 1 No. of 16 Amps SP switch with indicator above work station.</b>	50	NOS.		
2b	1 No. of 6/16 Amps socket with 1 Nos. of 5/16 Amps SP indicator switch.	50	NOS.		
<b>TOTAL OF SECTION E</b>					
<b>No.</b>	<b>PARTICULARS</b>	<b>QTY.</b>	<b>UNIT</b>	<b>RATE</b>	<b>AMOUNT</b>
F	<u>SECTION - F</u>				
1	<b>LIGHT FIXTURE</b>				
	Supplying, Installation, Testing & Commissioning of following light fixtures complete of approved make as per specification with all fitting, accessories such as Junction Box, Hardware, Starter, Connector, Lamps, Tube etc. (Before Installation Sample must be shown to Architect / Engineer)				
1a	2x2 LED FIXTURE suitable for recess mounting. (Make - Philips /GE / Crompton/Wipro) <b>Philips Mod No. RC380B LED-30S-6500,L60W60 PSU OD S1</b> .OR equivalent (wipro,bajaj,Crompton) with all accessories complete with in built Driver & all required accessories	45	NOS.		
1b	15 watts led downlighter Philips Mod No. BBS170 1xDLED-5000 PSU WH or equivalent(wipro,bajaj,Crompton)complete with in built Driver & all required accessories	100	NOS.		
1c	30 Watts LED street light fixtures				

	Supply, Installation, Testing & Commissioning of 30 Watts LED street light fixtures to be mounted on wall with appropriate diameter of pre-coated MS Pipe with all fixing accessories required. Wipro make Garment cat.no-D923065	10	NOS.		
1d	LED strip light for reverse light.	0	MTR		
1e	LED 4' T5 type Light Fixture	16	NOS.		
1f	48" Ceiling Fan of Bajaj/CG/Havells/ Usha with Double ball bearing	10	NOS.		
1g	16" Wall Fan of Crompton / Havells/ GEC Make	5	NOS.		
1h	9" Exhaust Fan modular type with bird louvers of Unique / GEC / Crompton make.	2	NOS.		
1i	5 watt decorative spot light.	0	NOS.		
<b>TOTAL OF SECTION F</b>					
<b>No.</b>	<b>PARTICULARS</b>	<b>QTY.</b>	<b>UNIT</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>G</b>	<b>SECTION - G</b>				
<b>TELEPHONE CABLING</b>					
1a	Supplying, Installation, Testing & Commissioning of 50 pair telephone unarmoured cable in 32mm Pvc Pipe. (Make - Polycab)	NIL	RMT		
1b	Supplying, Installation, Testing & Commissioning of 20 pair telephone unarmoured cable in 32mm Pvc Pipe. (Make - Polycab)	45	RMT		
2a	S/I/T/Commissioning of 50 pair telephone tag block with 10 Pair krone module with termination and crimping etc. complete. (Make - Delton / ITL)	NIL	NO.		
2b	S/I/T/Commissioning of 20 pair telephone tag block with 10 Pair krone module with termination and crimping etc. complete. (Make - Delton / ITL)	2	NOs.		
3	Supply & installation of Telephone point wiring on workstations/tables/partitions by using 2-pair cable pulled through already laid floor raceways/conduits and taken upto the table top using PVC rigid / flexible conduits run concealed. Each point consists of one RJ-11 jack type telephone socket, MS box flush to the surface, front plate etc & hardware as required.	35	NOS.		



<b>TOTAL OF SECTION G</b>					
<b>I</b>	<b>SECTION - H</b>				
<b>1</b>	<b>PUBLIC ADDRESS SYSTEM</b>				
1a	Supplying, Installation, Testing & Commissioning of 8 OHMS 6 Watts 4" dia speaker of Ahuja / Bosch/Philips make recessed on the false ceiling complete with line matching transformer.	16	NOS.		
1b	S//T/Commissioning of Volume Controller in cabin	6	NO.		
1c	S//T/Commissioning of point wiring of speaker with 1 No. of 2 Core 14/36 SWG or 0.2m stranded tin copper flexible wire run in 25mm dia PVC conduits. All conduits shall run above false ceiling fixed to ceiling with PVC spacers, clamps etc. complete. (Make - Polycab-FR / Finolex)	16	NOS.		
1e	S//T/Commissioning of 4 channels / ways 150 WATT amplifire suitable for 6 Nos. 6 Watts speakers. (Make - Ahuja / Philips/ Bosch)	NIL	NO.		
<b>TOTAL OF SECTION H</b>					
<b>No.</b>	<b>PARTICULARS</b>	<b>QTY.</b>	<b>UNIT</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>J</b>	<b>SECTION - I</b>				
	<b>MISCELLANEOUS WORK</b>				
1	Supplying/Installation/Testing & Commissioning of Earthing station with 600 X 600 X 6mm thick <b>GI plate</b> as per IS rule. Rate shall be inclusive of supply installation of GI plate, 25mm dia GI pipe with funnel for water and 450mm Cast Iron cover with its frame. Necessary digging of earth pit, excavation, back filling of earth, electrode, charcoal, salt layer & brick masonry work in proper manner. (The electrode should be buried not less than 4.5 Meters deep and resistance should be not less than 0.5 ohms.)	2	NOS.		
2	Supplying/Installation/Testing & Commissioning of Earthing station with 600 X 600 X 6mm thick <b>CU plate</b> as per IS rule. Rate shall be inclusive of supply installation of GI plate, 25mm dia GI pipe with funnel for water and 450mm Cast Iron cover with its frame. Necessary digging of earth pit, excavation, back filling of earth, electrode, charcoal, salt layer & brick masonry work in proper manner. (The electrode should be buried not less than 4.5 Meters deep and resistance should be not less than 0.5 ohms.)	1	NOS.		

3	S//T/Commissioning of 1 No. of 10 Sq.mm. single core PVC flexible copper wire for UPS in 25mm PVC conduit with all required accessories etc.	40	Mtrs.		
3a	S//T/Commissioning of 25mm X 3mm GI Earthing Strip.	65	Mtrs.		
4	Arranging temporary Power & Lighting for all agencies to work . The rate shall include statutory aproval from Local Electrical Inspectorate & other required satatutory bodies, preparation of AS-BUILT drawings, Testing of the installation & preparation of test report as required by statutory bodies. Note: The rate to include cost of suitable temporary Lighting for all areas as per requirement during work.	1	nos		
5	S//T/Commissioning of light cencors for cabins	0	nos		
<b>TOTAL OF SECTION I</b>					
<b>No.</b>	<b>PARTICULARS</b>	<b>QTY.</b>	<b>UNIT</b>	<b>RATE</b>	<b>AMOUNT</b>
<b>J</b>	<b>SECTION - J</b>				
	<b>NETWORKING &amp; DATA CABLING</b>				
1a	Supply, Installation, Termination & Testing of Data point including approved make Cat - 6 UTP cable through underfloor trenches / raceways / MMS PVC conduits & including cheiseling in case of concealed in wall / on surface for above false ceiling,Rates are inclusive of RJ45 cat-6 I/O information outlet, single / dual / quad type face plate, PVC back box etc. including Termination, Testing,Certification and Documentation of UTP Pointsand complete system as required. (Cat-6 cable - D-link make or equivalent approved make).Rate are inclusive of PVC pipe/cap on casing/flexible pipe of suitable size with all accessories, Floor cutting - Preparation of trenches and re- filling the trenches with rich mix of 1 : 2 PCC after laying of the PVC pipe	60	Nos		
1b	Supply of 3 feet Cat-6 patch cord	60	Nos		
1c	Supply of 7 feet Cat-6 patch cord	60	Nos		
1d	S//T/Commissioning of Gigabyte Cat-6 24 port patch panel. (DLINK)	3	No		
1e	S//T/Commissioning of 9U Rack.( D - Link )	2	No		

TOTAL OF SECTION J					
No.	PARTICULARS	QTY.	UNIT	RATE	AMOUNT
<b>SUMMARY</b>					
A	SECTION A				
B	SECTION B				
C	SECTION C				
D	SECTION D				
E	SECTION E				
F	SECTION F				
G	SECTION G				
H	SECTION H				
I	SECTION I				
J	SECTION J				
	TOTAL				
	ADD GST				
<b>GRAND TOTAL</b>					