

SBI AO VARANASI- BOQ FOR ELECTRICAL WORKS .

SR.NO	DESCRIPTION	QTY.	UNIT	RATE	AMOUNT
1	Dismantling / reorganising existing wires/ cables/ fittings/ DBs/ Panel and depositing all reusable material in Bank's Store. Item includes making good all damaged surfaces and holes.	1.00	LS		
2	Supply instalation testing andcommissioning of new 415V, 3Phase electric panel, fully sheet enclosed, floor standing on suitable painted stand made of MS angle / each channel grouted to floor with the panel min 450mm above floor level including its grouting, fully compartmentalized bottom cable entry,front operated, dead back with following components each in separate compartment INCOMER -i) one Controlling, 4 Pole MCCB 35KA & neutral with adjustable O/L fixed magnetic release, with surge protection device, neutral protection relay, 0-500 A ammeter with set of CTs and 0-500 V Voltmeter with selector switch and LED Indicating lamp for each phase - 01 SET				
a	Main Incoming light/power/UPS Panel as above in two parts (i) with controlling 50 KA 400 A MCCB incoming and out going 4 pole MCCB, with adjustable O/L and fixed 35KA 320 Amp - 1No(For Light & Fan Main Supply), 25 KA 160 Amp -3 Nos. (Two for UPS Vertical DB in each wing and one spare), Part(ii) 160 Amp - 8 Nos(7 nos. Light and raw power, AC + 1 spare), 125 Amp - 3 Nos(Light, power and AC+Spare) 4 pole MCCB 63 Amp -3 Nos., 2 nos. 40A DP MCB for light and power DBS.	1.00	Job		
b	AC Panel on main power as above sl-02 incomer (-i) one 400 A 4 pole MCCB 50 KA & with outgoing 4 pole MCCB 35 KA with adjustable O/L and fixed 160 Amp- 2 Nos for outdoor unit +1 spare and 125 Amp 25KA -6Nos- (3 Nos. for outdoor unit and 2 nos. for indoor units two vertical DBs in each wing and one spare to be provided on rooftop.	1.00	Job		
	For a & b Specifications shall be as under: Separator sheet to be provided between all outgoing and incoming phases of all MCCBs. Panel to be fabricated of 16 swg CRCA sheet steel.Metallic partition to be provided between Adjacent cubicles, compartments.Cubicles should be made dust & vermin Proof by means of suitable gasket Around all door covers Removable gland plates to be provided Concealed hinges.Bottom cable entry for incoming & Outgoing cables.				

	<p><u>IMP: Pannel drg required to be approved from Electrical Engg.ITS. Factory test reports of insulation and resistance testing (meggering) and HV test should be sent with the panels.</u></p>				
	<p>Outgoing phase terminals of all MCCB To be provided with manufacturers Terminal extension busbar. Access of cabling from the respective Cable alley.Gland plates to be supplied un drilled (split type) without glands.Main Bus bars shall be of electrolytic Grade aluminum of size 50x5 for phase & for neutral. For inter connection From main busbar to outgoing MCCB Aluminum Busbar of size 50x5 to be used. DMC supports will be used for bus bars.</p>				
	<p>All bus bar will be sleeved by heat shrinkable PVC red, yellow, blue and black coloured sleeves. All wiring to be done by PVC insulated 1100V Grade copper flexible conductor of following size:CT circuit: 2.5 sq. mm. Potential: 1.5 sq. mm circuit. Colour Code for AC Control: Black. All control wiring to be provided with yellow coloured ferrule as per wiring diag. All wires to be provided with appropriate crimping type lugs/ferrules for termination.</p>				
	<p>Before painting all requisite pretreatment like cleaning,degreasing, derusting, poshphadising should be carried out and painting will be done with store enameled paint finish with at least 2 primary primer coats. Minimum clearances in Air between live parts shall be as under:-</p> <ol style="list-style-type: none"> 1. Phase to Phase – 32 mm 2. Phase to Earth – 26 mm. <p>Protection shrouds to be provided on incoming side of incomer and on normally live parts when cubicle door is opened. Bakelite barriers of 4 mm thickness shall be provided on incoming and outgoing side of incomer.Factory test reports of insulation and resistance testing (meggering) and HV test should be sent with the panels .</p>				

3	<p>Note Supply, Installation, Testing & Commissioning (S.I.T.C.) Of All Items described below should be Factory Manufactured & Tested & ISI marked. Proposed location & route should be as per the drawing. However , if any obstruction is encountered at site suitable modification may be made as per site condition. After completion of work the contractor must supply 3 copies of "As-Built" drawing of actual route & location of items . All UPS & Raw Power points to be Marked as U1,U2,----- & R.P.1, R.P.2 – etc on each work-Station/Desk etc. Similarly load/points connected on Each M.C.B. to be indicated with a chart pasted inside the cover of each Distribution Board. Insulation testing of Wiring with Meggar & Testing of E.L.C.B. with Test lamp should be carried out before charging system & Insulation test report as well as RCCB/RCBO test report to be submitted with the Bill. LOAD should be equally BALANCED on 3 PHASES. All D.B.'s and UPS + Raw power Points should have an earth wire Connection in their socket earth terminal.</p>				
	<p>Distribution System.S.I.T.C. of Factory Manufactured Single/ 3 Phase & Neutral Double Door Distribution board made out of 16 SWG sheet steel enclosure with cutouts for operating MCB / MCCB / RCCB etc. knobs & consisting of Phase, Neutral & Earth Busbars with tapped holes , phase barriers, & covers with removable plates on Top & bottom for Incoming & Outgoing Cables . D.B.'s shall be flush mounting type for both single & three phase. . All wires / Cables should be terminated with Ring / PIN Type copper Lugs in Each MCB in D.B. as well as in each Of NEUTRAL & EARTH Link Strips.</p>				
a	<p>S.I.T.C. of 3 phase 6 Way Double Door Vertical Distribution Board with following M.C.B./M.C.C.B./RCCB & cable end boxes at Input & Output.</p>				
	<p>(4Pole 160 Amp 25 KA adjustable M.C.C. B. as Incomer -1 No), (63 Amp SP M.C.B.-3 No For R.P.D.B. Input) & (40 Amp SPMCB-3 No for L&F DB) , (3 Pole 63 Amp M.C.B- 1No For horizontal TPN LDB Incomer), (25 Amp SP MCB -1No For RM AC), (S.P. 10 Amp MCB -3 No For lobby, conference room), (spare 25 SP MCB-3 No, blanking plate-2 No) L& F and Power DB each wing.</p>	6.00	No		
b	<p>S.I.T.C. of 3 phase 6 Way Double Door Vertical Distribution Board with following M.C.B./M.C.C.B./RCCB & cable end boxes at Input & Output.</p>				

	Incomer -4Pole 125 Amp adjustable 25 KA M.C.C. B. Outgoing as 3 Nos., 63 Amp TP M.C.B. for Ist Floor Conference Hall cassette AC and outgoing- 9 Nos 6-32A SPMCB for DGM Chamber light, fan and AC for hall. All MCB to be 10 KA and C-Curve. AC DB for 1st Floor A wing DGM section and ground floor control room.	2.00	No		
c	SITC MS Box of 04 way VTPN DB with double door at suitable Ht. comprising <u>with</u> incomer as 4 pole <u>100 Amp MCCB and in out going SPMCB 63 A Amp -4 No and 63 A TP MCB- 3No</u> . All MCB To be of C series, with blanking plates for blank slots. Complete connection testing etc. in all Respect on wall. (for UPS DB on Ground Floor both wings)	2.00	No		
d	Supply & installation on angle iron frame of 4 way TPN distribution board double door comprising with 63 A TPN MCB 10 KA incomer and 3 X 63 A SP MCB and 3 nos. 6-32 A outgoing, all MCB to be of C curve, 10 KA breaking capacity and board with blanking plates (One UPS DB to be provided in UPS Room on first and second floor).	4.00	No.		
e	Supply & installation on angle iron frame of 4 way TPN distribution board double door comprising incomer 63 A 4P ELCB 300 mA and with 11 Nos 6-32 A SPMCBs as outgoing. All MCB to be of C series with blanking plates for blank slots. Complete connection testing etc. in all respect (for Light Circuit + Power circuit in hall and for split AC in RM chamber/full hieght chambers) in each wing and Two DB for VRF indoor units.	8.00	No.		
f	S.I.T.C. Of L.D.B. 1 S.I.T.C. of Single Phase 2+12 way Double door D.B. with Double pole 30Milliamp & 40 Amp R.C.C.B. as Incomer -1 No, 10 Amp S.P. Amp M.C.B. -12 Nos with all wiring connections. 10 Amp Spare MCB - Nil. Blanking Plates- Nil	14.00	No		
g	b1. S.I.T.C. of Single Phase 4 way Double door Emergency L. D.B. with Double pole 30 MilliAmp & 25 Amp RCCB as Incomer- 1 Nos and 2 Nos of 6 Amp S.P. MCB;s with Blanking plates- Nil (emergency lights shown in drawing to be connected to L.D.B. 2)	6.00	No		
h	S.I.T.C. Of R.P.D.B. S.I.T.C. of Single Phase 2+12 way Double door Horizontal D.B. with 2 pole 100 Milliamp & 63 Amp R.C.C.B. as Incomer-- 1 No . Out-Going : 10 Amp S.P. M.C.B. 8 Nos. and 25 Amp S.P. MCB -4 Nos. Power Point . Spare MCB - Nil & Blanking plates. - Nil Nos with all wiring connections.(Max. 2 work-Station Points to be looped on one MCB.)	14.00	No		

i	S.I.T.C. of Single Phase 2+8 way Double door R.P. D.B. 2 with Double pole 100 MilliAmp & 40 Amp RCCB as Incomer- 1 Nos and 8 Nos of 10 Amp S.P. MCB;s with Blanking plates- Nil (Max-2 work station points to be looped on one MCB-- R.P.D.B. 2	1.00	No		
j	S.I.T.C. of Single Phase 2+6 way Double door R.P. D.B. 2 with Double pole 100 MilliAmp & 25 Amp RCCB as Incomer- 1 Nos and 6 Nos of 10 Amp S.P. MCB;s with Blanking plates- Nil (Max-2 work station points to be looped on one MCB-- R.P.D.B.	1.00	No		
k	U.P.S. D.B. : (Output) S.I.T.C. of Double phase 2+12 way Horizontal double door D.B. with 2 Pole 100 Milliamp & 40 Amp R.C.C.B. as Incomer-- 1 No and 6 Amp S.P. M.C.B. - 12 Nos with all wiring connections. No Blanking Plates - Nil Nos (2 UPS pts to be looped on one MCB. In exceptional case 3 Nos on one ckt.)	15.00	No		
l	S.I.T.C. of Single Phase 2+ 8 way Double door UPS. D.B- . 2 with Double pole 30 MilliAmp & 40 Amp RCCB as Incomer- 1 Nos and 8 Nos of 6 Amp S.P. MCB;s with Blanking plates- Nil (Max-2 work station points to be looped on one MCB-- UPS .D.B. 2- spn ups output control room.	1.00	No		
m	S.I.T.C. of 20 Amp. D.P. MCB inn Separate Metallic box for Inverter I./P. & O/P.to LDB	2.00	No		
n	S.I.T.C. of 63 A Four Pole M.C.B.in Separate Metallic box for UPS I./P.& O./P.	4.00	No		
o	S.I.T.C. of 63 A Double Pole M.C.B.in Separate Metallic box for UPS I./P.& O./P.	8.00	No		
p	S.I.T.C. of Single Phase 2+ 4 way Double door UPS. D.B- with Double pole 100 MilliAmp & 63 Amp RCCB as Incomer- 1 Nos and 3 Nos of 40 Amp S.P. MCB;s with Blanking plates- Nil (Max-2 work station points to be looped on one MCB-- UPS .D.B. on ups output.	8.00	No		
q	Providing & Installation on angle iron frame of manufactures sheet steel 20/25A socket board with cover and 2 pole & earth metal plug and socket /Modular socket board and 25/32 Amp SPMCB complete in all respect for air conditioners.	40.00	No		
r	S/F <u>One 20/25 Amp</u> , ELCB 2 pole 100 MA, in a suitable MS box to be connected <u>before the AC stabilizer</u> , complete testing fixing / installation complete in all respect. (Near DB for AC indoor units)	40.00	Nos.		

s	SITC of 16/20/25 Amp Industrial (Reroll Type) metallic switch-socket boxes with MCB's for Different tonnage Split A.C.'s. & 16 A. Pantry Pt.	10.00	No		
4	Sub- Mains Cabling & Wiring : For Lighting, Raw Power, & U.P.S. D.B.'s. S.I.T.C. of I.S.I. marked 1.1 KVA grade multi-strand F.R.L.S. Copper P.V.C. wires in 19/25/32 mm Medium grade I.S.I. marked PVC pipes to be laid in Underground trench/On wall/above false ceiling etc complete with all conduit accessories like bends, tees, Junction boxes with necessary fixing hardware etc. including re-surfacing of the floor/wall etc. wherever necessary with Resurfacing material.				
4(A)	<u>DISTRIBUTION CABLE:</u>				
	<u>SUPPLY AND LAYING OF CABLE:</u>				
	Supply of following sizes of 1.1KV grade aluminium conductor XLPE insulated and FRLS PVC sheathed armoured cable conforming to relevant IS. (Cable shall be purchased only after approval of cable schedule by Engineer In charge/ architect / consultant).				
a	3.5 core, 300 sq.mm.	170.00	Meter		
b	3.5 core, 95 sq.mm.	150.00	Meter		
c	3.5 core, 70 sq.mm.	80.00	Meter		
d	3.5 core, 50 sq.mm.	60.00	Meter		
e	3.5 core, 35 sq.mm.	300.00	Meter		
f	3.5 core, 25 sq.mm.	400.00	Meter		
g	4 core, 16 sq.mm.	20.00	Meter		
4(B)	Laying of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade of following size direct in ground including excavation, sand cushioning, protective covering and refilling the trench etc as required.				
a	Above 95 sq. mm and upto 185 sq. mm	0.00	Meter		
b	Above 185 sq. mm and upto 400 sq. mm	170.00	Meter		
4(c)	Laying and fixing of one number PVC insulated and PVC sheathed / XLPE power cable of 1.1 KV grade with 2 nos. 8SWG GI wire of following size on cable tray as required.				
a	Upto 35 sq. mm (clamped with cable tie)	720.00	Meter		
b	Above 35 sq. mm and upto 95 sq. mm (clamped with cable tie)	290.00	Meter		
4(D)	Supplying and making end termination with brass compression gland and aluminium lugs for following size of PVC insulated and PVC sheathed / XLPE aluminium conductor cable of 1.1 KV grade as required.				
a	3½ X 300 sq. mm (82mm)	6.00	Each		
b	3½ X 95 sq. mm (50mm)	4.00	Each		
c	3½ X 70 sq. mm (38mm)	8.00	Each		

d	3½ X 50 sq. mm (35mm)	6.00	Each		
e	3½ X 35 sq. mm (32mm)	16.00	Each		
f	3 X 25 sq. mm (28mm)	16.00	Each		
g	4 X 16 sq. mm (28mm)	4.00	Each		
5	Sub- Mains Wiring : For Lighting, Raw Power, & U.P.S. D.B.'s. S.I.T.C. of I.S.I. marked 1.1 KVA grade multi-strand F.R.L.S. Copper P.V.C. wires in 19/25/32 mm Medium grade I.S.I. marked PVC pipes to be laid in Underground trench/On wall/above false ceiling etc complete with all conduit accessories like bends, tees, Junction boxes with necessary fixing hardware etc. including re-surfacing of the floor/wall etc. wherever necessary with Resurfacing material.				
a	S.I.T.C. of Bunch of 3 X 10 Sq.mm. F.R.L.S. Copper wires in Suitable size PVC conduit from Main D.B. to U.P.S. Input/Output MCB/ELCB Box . (body to be earthed.)	150.00	Mtr		
b	End termination of above wires at both ends in D.B.s with Pin type copper lugs.	30.00	Set		
c	S.I.T.C. of Bunch of 3 X 6 Sq.mm. F.R.L.S. Copper wires in Suitable size medium duty PVC conduit from Main D.B. to U.P.S. Input MCB Box and Main DB to RP DB. (body to be earthed.)	750.00	Mtr		
d	End termination of above wires at both ends in D.B.s with Pin type copper lugs.	49.00	Set		
e	S.I.T.C. of 3X 4 Sq.mm. FRLS Copper flexible wires in 19/20mm. Medium duty PVC conduit from Main D.B. to split A.C.'s.(1/1.5/2 Tr. A.C.'s).+ 2/3/4 Tr. Cassette AC indoor units.	620.00	Mtr		
f	End termination of above wires at both ends with copper Lugs	66.00	Set		
g	SITC of inverter wiring 2.5 sqmm + 1x 1.5 sqmm earth, FRLC copper wire in rigid PVC conduit from inverter output to points.	30.00	Rmt		
	CIRCUIT WIRING : (Lighting Switch Boards)+ UPS Pt.+ R.P. Points + power points				
h	S.I.T.C. of 3 X 2.5 Sq.mm. F.R.L.S. copper flexible PVC wires laid in 19/20 mm. medium duty Middle gauge PVC conduits laid on wall/above false ceiling/Concealed as per requirement with all accessories etc. from L.D.B. to Switch- Boards. & From UPS O.P. D.B. to Work-station+ From R.P.D.B. To R.P. Pts on work-Stations(Max. 2 Nos of UPS & Raw power points to be connected on one circuit.) Quantity considered for long circuits only.	6700.00	Rmt		

i	S.I.T.C. of 3 X 1.5 Sq.mm. F.R.L.S. copper flexible PVC wires laid in 19/20 mm. Middle gauge PVC conduits laid on wall/above false ceiling/Concealed as per requirement with all accessories etc.	100.00	Rmt		
6	Supplying and installing following size of perforated painted with powder coating M.S. cable trays with perforation not more than 17.5%, in convenient sections, joined with connectors, suspended from the ceiling with M.S. suspenders including bolts & nuts, painting suspenders etc as required. (item includes all accessories like bends, tees, cross, reducers etc)				
a	150 mm width X 50 mm depth X 1.6 mm thickness	190	Rmt		
b	300 mm width X 50 mm depth X 1.6 mm thickness	150	Rmt		
7	Distribution wiring including circuit wiring from TPNDB/SPNBDs to switch boards with 1100 V grade, PVC insulated, FRLS, multi strand Cu wire of size 2.5 sq.mm. for P, N & E in ISI marked PVC conduit and point wiring from switch board to point outlet with 1100 V grade, PVC insulated, FRLS, multi strand Cu wire of size 1.5 sq.mm. for P, N & E in ISI marked PVC conduit with same make accessories in concealed/ surface or in double lock PVC casing/ capping and with modular type switches in metallic modular box, front plate, cover plate, 3 plate ceiling rose, angular holder, with two internal earthing terminals/ studs for earthing. Junction boxes to be covered with ISI mark 3 mm thick phenolic laminated sheet cover, brass screws and cup washers for cover fixing PVC conduit and other accessories. (Circuit wiring 3X2.5 sq mm copper FRLS wire in medium duty PVC conduit for earth neutral phase from DB to switch board point to be considered upto 8 meters) beyond additional circuit wiring shall be paid no additional point wiring shall be paid.				

	(i) All switch boards and regulators to be modular type, MS box should be 16 swg with 3 mm thick ISI marked phenolic laminated cover, brass screws and cup washers and Modular type 6/10 A switch/socket. (ii) Point wiring should be inclusive of continuous wire length (P, N & E) upto connection block of light fitting/fans. However, if there are more one light/fan point on one switch board than Neutral and Earth can be looped from one point to another point upto the 8 points/fittings with 1100 V grade, PVC insulated, FRLS, multi strand Cu wire of size 1.5 sq.mm. Beyond eight point new wire from the switch board is to be provided (iii) Provision for fan regulators shall be electronic step type 400 W rating. (iv) Ceiling fan point shall be provided with regulators wherever specified. The switch boards to be considered accordingly.				
a	Single Light points controlled by 6 Amp switch.	250.00	No		
b	Two Light points controlled by one 6 Amp Switch.	232.00	No		
c	Three Light Points controlled by one 6 Amp Switch	15.00	No		
d	Call bell point.	12.00	No		
e	Ceiling Fan point with regulator.	14.00	No		
f	Dependant 6 Amp s 3/5 Pin combination type Universal socket with indicator mounted on switch-box. (except toilets & passages.	48.00	No		
g	Wall Fan/Exhaust Fan Points Switch to be provided on light switch board independent socket away from board .	224.00	No		
h	Twin Control points.	20.00	No		
i	S.I.T.C. of Light point with Timer for Sign-board.	2.00	No		
8	Raw & UPS Points + Pantry Point				

a	S.I.T.C. of Two Nos of 6Amp Universal Sockets and one nos. 20 A Twin socket controlled by One 10A and one 16 Amp Indicator switch housed in a Modular PVC switch Box (Work Stn+ 2 each in server & training rooms etc)with Recessed surface plate for UPS Switch pts on Work-Stns with circuit wiring 3X2.5 sq mm copper FRLS wire in medium duty PVC conduit for earth neutral phase from DB to point(3 No sockets in box with surface plate will be below table. Only one 16 Amp Control and one 10A switches for these points with Recessed Surface Plate will Be above table. All wires to be drawn through cable/wire channel inside work-station. No surface conduit/casing to be seen below work-station. Conduit junction boxes should be below work-Station table & not below chair.(UPS Points). (Circuit wiring 3X2.5 sq mm copper FRLS wire in medium duty PVC conduit for earth neutral phase from DB to point to be considered upto 8 meters)) beyond 8 meter additional circuit wiring shall be payable.	240.00	No		
b	Item same as above (One Nos of 6 / 10Amp Universal Socket and one no. 16Amp Universal Socket controlled by Two 16 Amp switch). For Raw Power On Work-Stns. (Above work table area) etc. Wires to be drawn from Wire/cable manager/channel inside the work-station from underground metal box containing the conduits located below the work- station. No surface conduit to be seen below work-Station. (Raw Power Points). (Circuit wiring 3X2.5 sq mm copper FRLS wire in medium duty PVC conduit for earth neutral phase from DB to point to be considered upto 8 meters)) beyond 8 meter additional circuit wiring shall be payable	250.00	No		
c	Item same as above 8(a) (One 16Amp Universal Sockets controlled by one 16 Amp switch) .For Power in Work-Stns area near outer wall.etc. Wires to be drawn from Wire/cable manager/channel inside the work-station from underground metal box containing the conduits located below the work- station. No surface conduit to be seen below work-Station. (Circuit wiring 3X2.5 sq mm copper FRLS wire in medium duty PVC conduit for earth neutral phase from DB to point to be considered upto 8 meters)) beyond 8 meter additional circuit wiring shall be payable	80.00	No		
9	LIGHTING FIXTURES :				

a	SITC of LED recessed mounted Downlighter approx 18W with a nominal system lumen output of approx > 2000 lumens and a minimum system efficacy of >110lm/W. The luminaire should have a color temperature of 5700K~6500 and CRI 80. The luminaire shall meet IP20 rating with THD<10%. Driver Efficiency>85% . The luminaire housing should make of Die cast aluminium with PMMA diffuser. Fixture compliance with LG7 guidelines. Life Class of 50,000 hours and in compliance to IEC Safety Standards. The fixture should comply with the parameters as per IS10322. The luminaire manufacturer shall provide LM79 report from NABL accredited lab.	292.00	No		
b	SITC of Surface Mounted LED Downlight with cylindrical / circular construction made up of Extruded Aluminum Housing Luminaire with diffused light , luminous flux approx > 1000 Lm, Nominal Input Power approx 8/9W. The luminaire shall have a rated system lifetime of 50,000 burning hours. Luminous efficiency of 110 Lm/W. The luminaire shall meet IP20 rating with THD<10%.The luminaire should have a color temperature of 4000 - 6500K & Colour rendering index > 80. The luminaire manufacturer shall provide LM79 report from NABL accredited lab.	67.00	No		
c	SITC of Recessed mounted LED fitting suitable for 600 x 600 mm applications made of CRCA & Opal diffuser, fixture should have minimum net efficacy at System level (Not Chip Level) 110 lumens/watt, nominal system lumen of approx 3600lm, Life of fixture 50000 hrs, IP 20, CCT 4000 ~ 6500K, CRI 80, THD<10%, and suitable for 230V AC, 50Hz. supply, Internal Surge Protection 4KV. LED Chip SDCM should be <5.The fixture should comply with the parameters as per IS10322 and IEC60598, EMC / EMI compliance, and LED driver shall be Metallic housing & BIS registered & luminaire manufacture shall provide LM79report from NABL accredited lab.	242.00	No		
d	SITC of LED Recessed Downlighter with a nominal system lumen output of approx 1500 lumens and a minimum system efficacy of approx 110 lm/W. The luminaire shall have a rated system lifetime of 50,000 burning hours. The luminaire should have a color temperature of 4000 - 6500K and CRI 80. The luminaire shall meet IP20 rating with THD<10%. The luminaire housing should made of pressure die cast aluminium and the luminaire optics shall have a high efficiency diffuser with more than 85% transmittance. The total system power consumption 15W Max.The luminaire manufacturer shall provide LM79 report from NABL accredited lab.	149.00	No		

e	SITC of LED batten made of Aluminium extruded housing with nominal system lumen of 2000 and minimum system efficacy of 110lm/W. CRI80, CCT 4000/6500, Input voltage range 140-270V, THD<10%, Surge protection 3KV, system wattage shall be 18W max. The luminaire manufacturer shall provide LM79 report from NABL accredited lab	16.00	No		
f	SITC of LED flexi strip light of 5 mtrs. Length in 15 25 W with driver.	60.00	No		
g	SITC of LED adjustable spot light in false ceiling, round, recess mounting Warm White/ NW, 10-12 W downlighter complete with LED, driver etc.				
10	Security System:				
a	S.& I. of 4"x4" Red Danger Mark Stickers 230 Volt/ 440 Volt etc. to be fixed on all the D.B.'s S.& I. of	16.00	No		
11	Earthing System:				
a	..S & I of S.I.T.C. of Copper Plate (300 mm X 300 mm x 3.15 mm)Type Earth Pit as per I.S. 3043. Concrete Chamber with Mettalic cover, Funnel for adding water and Earth Strip Connector etc must be provided .	4.00	No		
b	Same as above but G. I. Pipe Type earthing and earth Pit as per I.S. 3043 and with above accessories (i.e Concrete chamber, Metal cover, watering funnel etc.) must be provided.	10.00	No		
c	S.I.T.C. of 2 runs of 25 mm. FRLS Copper wires in 40 mm PVC Conduit from Earthing Pits To Meter room Meter O/P. 160 Amp MCCB in Metal Box. Making Tight connections with Spring & Ring washers in both Earth Pits and Both ends of MCCB box in Meter Room.	0.00	Rmt		
d	SITC of 2x6 sqmm FRLS copper wire from copper plate to UPS output DB	180.00	Rmt		

e	Supply and burying of safe Earthing Electrode T-19 (hot dip Galvanised), Length 3000 mm, outer pipe 50 mm, inner pipe 25, Terminal Dia 12 mm, outer GI pipe of 16 SWG and inner GI pipe of 12 SWG with Hot dip Galvanization up to 100 micron filled with crystalline conductive mixture (CCM) having Anti-corrosive & conductive property with 50 Kgs activated soil (BFC) capable of reducing the soil resistivity with good mixture of retaining capacity along with CI Box with hinged cover and masonry housing (from electrode terminal to SW board, cost of GI strip will be extra). GI strip directly to be connected from GI pipe with double nut bolt and spring washer. Make: As approved in UPPWD & CPRI certified. (one for 2 + 8 way TPN DB in system room, one for panel safety and 02 for UPS body/ isolation transformer, one earthing to be used for genset neutral).	6.00	No		
f	SITC of 25 X 3 mm GI Strip concealed on wall/ floor up to 1 st per meter point complete in all respect.	30.00	mtr		
g	Providing & installation of 1 X 10 sq.mm. PVC insulated copper wire in 20 mm PVC pipe from earth station to UPS room complete in all respect including fixing with nut and bolts (concealed on wall/ floor).	130.00	mtr		
h	S & I of floor - raceways consisting of 2 Nos of 80 mm x 40 mm x2mm thick rectangular aluminium anodized pipes including chasing and refilling as per the route shown in the drawing and as approved by consultant at site including claming at every open pipe ends by suitable plastic end - covers against entry of dust or any other foreign material.	200.00	mtr		
i	S & I of galvanised floor junction boxes for above mentioned raceways , of size 200mm x 200mm x2.0 mm thick , fabricated out of 2.0 mm thick G.I. sheet with proper cutouts on the sides for pipe entry & screwed top cover with rubber gasket and suitable knockouts for flexible conduit outlets as per the drawing enclosed. All the junction boxes to be 'properly Earth - bonded with the raceways pipe using 12 SWG Copper bare wire as directed at site.	40.00	No		
12	LAN & Telephone Accessories:-				
a	25 mm. PVC conduit pipe for laying Telephone Line from Tel.Tag block to each work station.	525.00	Mtr		

b	Supply and installation of 32 mm. PVC medium duty conduit pipes with accessories like Bends, T's , couplers etc. To be concealed in wall/floor with cutting, laying and repairing with plaster. From Server room to all work-Stations, training Room, discussion room, Branch head room etc. for laying of LAN cable by other vendor. (In consultation with Branch Head.) All bends, T's etc should be of Inspection type.	850.00	Mtr		
13	S.& I. of Metallic Boxes with Steel Surface Plates fixed with Steel screws				
a	a. 8" X 8"	40.00	No		
14	Ceiling / Exhaust Fan:				
a	Supply of Heavy duty industrial type 300 mm exhaust fan 1400 RPM (for UPS room/toilet/kitchen etc.)	31.00	No		
b	S.I.T.C. of High Breeze metal body, metal blades, 1200mm ceiling fan (UPS Room) with 100 watt Electronic regulator.	12.00	No		
c	Supply of 450 mm sweep, oscillating type, wall mounting multi speed Metal Body Metal Blades Three pin wall fan with motor, wire guard, control, complete in all respects.	194.00	No		
15	MISCELLENOUS ITEMS				
a	S.I.T.C. Of Bell with Bell Point for RM/ AGM/SR. Officer Area Mgr.	20.00	No		
b	S.I.T.C. of Timer with M.C.B.'s control for Sign Board of Branch.	1.00	No		
c	Providing and fixing Copper bus bar 200 A with 4 copper strip of 50x6 mm size with MS enclosure (duly painted) for distribution of Power supply to First floor and second floor.	0.00	No		
	IMPORTANT Note : Successful/L1 contractor has to strictly use only Approved Make Of materials. Final As Built CAD Drawings (3 sets) with Measurement Sheets (D.B. To Each Switch-Board+ D.B. To Each A.C. + D.B. to Each UPS & Raw P.P. Points etc and clearly showing Conduit routes for Lighting, UPS & Raw + LAN cabling and indicating the points looped on one ckt.+ Marking of UPS and RAW Pts on each Work-Station and Pasting of Chart in each D.B. indicating the Ckt. have to be enclosed with Final Bill. All above requirements are MANDATORY without which FINAL Bill will not be processed. PAYMENT Will be made as per Actual Measurements for which MEASUREMENT SHEET IS ESSENTIAL. No EXTRA ITEMS To be Executed Without Prior INTIMATION/APPROVAL.				
	Total				
Rate are considered inclusive of all except GST. GST shall be admissible at prevalent rates/ rules.					