

DILIP KULKARNI & ASSOCIATES - ARCHITECTS, INTERIOR, LANDSCAPE DESIGNER & SURVEYOR.

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NAME OF THE CLIENT: STATE BANK OF INDIA (SBILD- NERUL)

ADDRESS: SBILD at Vidhani Bldg. G+3 Floor , Nerul

NATURE OF WORK: - Electrical Work

The items given below are forming the part of the work to be carried out. The job includes for design, supply, storing, safety, security handling, erection, testing, and commissioning of the materials items, consumables required for completion.

MAT. - Stands for supply of equipment.

INS. - Stands for installation of the equipment is including, providing of erection accessories hardware, consumables, labor charges, testing, commissioning and handing over to client.

Providing means supply of materials, installation, testing and commissioning of the same.

Sr. No	Description	Total	Unit	Unit Rate in Rs		Total Amount In Rs
				Material	+Ins	
I	PANELS & D.B.S					
1	Providing Panel / Power distribution Boards suitable for 415V 50Hz 3ph 4 wire supply dust and vermin proof floor/ wall mounting cubicle pattern with removable gland plates, copper bus bar, mounting FRLSame, grouting made out of crca sheet, double door, duly powder coated painted as specified as follows. MCB with 'C' curve for lighting & power and 'D' curve for PC will be used.					
1.1	DG POWER DISTRIBUTION Panel					
	Incomer:					
	Incomer : 1 No., 630 Amps Four Pole, Microprocessor based Moulded Case Circuit Breaker of approved make with built in E/F, O/C, S/C releases .and as per the specifications given in Technical Specification. The Breaker shall be suitable for 415 Volts 50 Hz., AC supply. The breaker shall have breaking capacity of 36 KA for 1 Sec					
	Metering Section :-					
	1 No., Digital Combined Ammeter and Voltmeter all Three Phase Sensing CT Operated and of approved make.					
	Indication Section For Incoming Section :-					
	The following indicating lamps shall be provided for Incomer Section					
	3 Nos., Phase Indicating lamps, Led type of approved make .					
	2 Nos., One Red and One Green Led type lamps for indicating MCCB is in `ON' or `OFF' position.					
	1No. Of amber lamp for MCCB auto trip indicating					
	Current Transformers For Incoming Section :					

	3 Nos. of 630/5 Amps Cast Resin type Current Transformers, having 15 VA burden and Class-1 accuracy for metering purpose.				
	Busbar				
	630 Amps uniformly rated, continuous duty, 415 V AC, 3 Phase and 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 200 Amps.				
	Out goings :-				
	1 No., of 320 Amps., Four Pole, Microprocessor based Moulded Case Circuit Breaker with built in over-current, short circuit releases. The breaker shall be suitable for 415V, 50 cycles operation. Icu=Ics=Icw=36 kA=1sec.				
	1 No., of 260Amps., Four Pole, Microprocessor based Moulded Case Circuit Breaker with built in over-current, short circuit releases. The breaker shall be suitable for 415V, 50 cycles operation. Icu=Ics=Icw=36 kA=1sec.	1	Nos		
1.2	Main Panel-1				
	Incomer:				
	Incomer : 1 Nos. of 250 Amps, Four Pole, Electrically operated Molded Case Circuit Breaker with microprocessor based built in over-current, short circuit and earth fault releases. The MCCB shall be suitable for 415 Volts 50 Hz, AC supply and with 230 Volts AC Shunt Trip Coil . Prior to this MCCB 1 No 250 Amps 4 Pole ATS shall be provided as Main Incomer to the Main LT Panel . The MCCB Shall have Icu=Ics=I 35 kA for 1sec.				
	Metering Section :-				
	1 No., of Digital Multifunction meter type of Approved make.				
	Indication Section For Incoming Section :-				
	The following indicating lamps shall be provided for Incomer Section				
	3 Nos., Phase Indicating lamps, Led type of approved make .				
	2 Nos., One Red and One Green Led type lamps for indicating MCCB is in `ON' or `OFF' position.				
	1No. Of amber lamp for MCCB auto trip indicating				
	Current Transformers For Incoming Section :				
	4 Nos. of 250/5 Amps Cast Resin type Current Transformers, having 15 VA burden and Class-1 accuracy for metering purpose.				
	Busbar				

	250 Amps uniformly rated, continuous duty, 415 V AC, 3 Phase and 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 200 Amps.				
	Out goings :-				
	1 No., of 160 Amps., Four Pole, Thermo Magnetic based Moulded Case Circuit Breaker with built in over-current, short circuit releases. The breaker shall be suitable for 415V, 50 cycles operation. Icu=Ics=Icw=25 kA=1sec.				
	5No., of 100 Amps., Four Pole, Thermo Magnetic based Moulded Case Circuit Breaker with built in over-current, short circuit releases. The breaker shall be suitable for 415V, 50 cycles operation. Icu=Ics=Icw=25 kA=1sec.				
	1No., of 63 Amps., Four Pole, Thermo Magnetic based Moulded Case Circuit Breaker with built in over-current, short circuit releases. The breaker shall be suitable for 415V, 50 cycles operation. Icu=Ics=Icw=16 kA=1sec.	1	Nos		
1.3	APFC PANEL				
	60kVAR APFC PANEL :-				
	Incomer Section :-				
	1 No. of 160 Amps, 4 Pole Molded Case Circuit Breaker with microprocessor based built in over-current, short circuit and earth fault releases. The MCCB shall be suitable for 415 Volts 50 Hz, AC supply and with 230 Volts AC Shunt Trip Coil. Icu=Ics 25kA for 1sec showing all Electrical Parameters with necessary Hardware to be provided for Panel.				
	Metering Section :-				
	1 No. 12 Step 3 Phase Sensing CT Operated approved make APFC Relay.				
	1 No. CT Operated should have Ammeter, Voltmeter				
	Indication Section For Incoming Section :-				
	3 Nos., Phase Indicating lamps, LED type of approved make.				
	2 Nos., One Red and One Green LED type lamps for indicating MCCB is in 'ON' or 'OFF' position.				
	Current Transformers For Incoming Section :				
	3 Nos. of 160/5 Amps Cast Resin type Current Transformers, having 15 VA burden and Class-1 accuracy for metering purpose.				
	Bus bars :-				
	160 Amps uniformly rated, continuous duty, 415 V AC, 3 Phase and Neutral electrolytic grade 99.95% Purity Tinned Copper Bus-bars having SC withstand capacity of 50 kA for 1 sec, with colour coded heat shrink sleeves supported on SMC type grip supports. The Horizontal / Vertical sections of the busbars should all be uniformly rated for 250 Amps.				
	Out goings :-				
	1Set of 100 Amps TP MCCB with 4 Nos 100 Amps Semi Conductor Type 120 KA Din Type Fuses with Thyristors and 7% Detuned reactors alongwith and 1 Nos 25 KVAR Dry Type Capacitors of approved make .				

	3Set of 63 Amps TP MCCB with 2 Nos 63 Amps Semi Conductor Type 120 KA Din Type Fuses with Thyristors and 7% Detuned reactors alongwith and 2 Nos 10KVAR Dry Type Capacitors of approved make .				
	1 Set of 32 Amps TP MCCB with 1 Nos 32 Amps Semi Conductor Type 120 KA Din Type Fuses with Thyristors and 7% Detuned reactors alongwith and 1 Nos 05 KVAR Dry Type Capacitors of approved make .				
	2Set of 63 Amps TP MCCB with 2 Nos 63 Amps Semi Conductor Type 120 KA Din Type Fuses with Thyristors and 7% Detuned reactors are spare				
	7 - set of terminal blocks and control fuses and Connecting cables FRLSom Terminal Block to Capacitors using suitable electrolytic grade copper bus-bars/ XLPE insulated Copper Cables as required.				
	The above board shall be enclosed in design with powder coated paint all complete and as per final directions and final approval of the Consultant.	1	Nos		
1.4	Main Panel-2				
	Incomer:				
	Incomer : 1 Nos. of 320 Amps, Four Pole, Electrically operated Molded Case Circuit Breaker with microprocessor based built in over-current, short circuit and earth fault releases. The MCCB shall be suitable for 415 Volts 50 Hz, AC supply and with 230 Volts AC Shunt Trip Coil . Prior to this MCCB 1 No 250 Amps 4 Pole ATS shall be provided as Main Incomer to the Main LT Panel . The MCCB Shall have Icu=Ics=135 kA for 1sec.				
	Metering Section :-				
	1 No., of Digital Multifunction meter type of Approved make.				
	Indication Section For Incoming Section :-				
	The following indicating lamps shall be provided for Incomer Section				
	3 Nos., Phase Indicating lamps, Led type of approved make .				
	2 Nos., One Red and One Green Led type lamps for indicating MCCB is in `ON' or `OFF' position.				
	1 No. Of amber lamp for MCCB auto trip indicating				
	Current Transformers For Incoming Section :				
	4 Nos. of 320/5 Amps Cast Resin type Current Transformers, having 15 VA burden and Class-1 accuracy for metering purpose.				
	Busbar				

	320Amps uniformly rated, continuous duty, 415 V AC, 3 Phase and 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 200 Amps.				
	Out goings :-				
	1 No., of 250 Amps., Four Pole, Thermo Magnetic based Moulded Case Circuit Breaker with built in over-current, short circuit releases. The breaker shall be suitable for 415V, 50 cycles operation. Icu=Ics=Icw=25 kA=1sec.				
	6No., of 100 Amps., Four Pole, Thermo Magnetic based Moulded Case Circuit Breaker with built in over-current, short circuit releases. The breaker shall be suitable for 415V, 50 cycles operation. Icu=Ics=Icw=25 kA=1sec.				
	1No., of 63 Amps., Four Pole, Thermo Magnetic based Moulded Case Circuit Breaker with built in over-current, short circuit releases. The breaker shall be suitable for 415V, 50 cycles operation. Icu=Ics=Icw=16 kA=1sec.	1	Nos		
1.5	APFC PANEL				
	100kVAR APFC PANEL :-				
	Incomer Section :-				
	1 No. of 250 Amps, 4 Pole Molded Case Circuit Breaker with microprocessor based built in over-current, short circuit and earth fault releases. The MCCB shall be suitable for 415 Volts 50 Hz, AC supply and with 230 Volts AC Shunt Trip Coil. Icu=Ics 25kA for 1sec showing all Electrical Parameters with necessary Hardware to be provided for Panel.				
	Metering Section :-				
	1 No. 12 Step 3 Phase Sensing CT Operated approved make APFC Relay.				
	1 No. CT Operated should have Ammeter, Voltmeter				
	Indication Section For Incoming Section :-				
	3 Nos., Phase Indicating lamps, LED type of approved make.				
	2 Nos., One Red and One Green LED type lamps for indicating MCCB is in `ON' or `OFF' position.				
	Current Transformers For Incoming Section :				
	3 Nos. of 250/5 Amps Cast Resin type Current Transformers, having 15 VA burden and Class-1 accuracy for metering purpose.				
	Bus bars :-				
	250 Amps uniformly rated, continuous duty, 415 V AC, 3 Phase and Neutral electrolytic grade 99.95% Purity Tinned Copper Bus-bars having SC withstand capacity of 50 kA for 1 sec, with colour coded heat shrink sleeves supported on SMC type grip supports. The Horizontal / Vertical sections of the busbars should all be uniformly rated for 250 Amps.				
	Out goings :-				

	3Set of 100 Amps TP MCCB with 4 Nos 100 Amps Semi Conductor Type 120 KA Din Type Fuses with Thyristors and 7% Detuned reactors alongwith and 3 Nos 25 KVAR Dry Type Capacitors of approved make .				
	2Set of 63 Amps TP MCCB with 2 Nos 63 Amps Semi Conductor Type 120 KA Din Type Fuses with Thyristors and 7% Detuned reactors alongwith and 2 Nos 10KVAR Dry Type Capacitors of approved make .				
	1 Set of 32 Amps TP MCCB with 1 Nos 32 Amps Semi Conductor Type 120 KA Din Type Fuses with Thyristors and 7% Detuned reactors alongwith and 1 Nos 05 KVAR Dry Type Capacitors of approved make .				
	2Set of 63 Amps TP MCCB with 2 Nos 63 Amps Semi Conductor Type 120 KA Din Type Fuses with Thyristors and 7% Detuned reactors are spare				
	8 - set of terminal blocks and control fuses and Connecting cables FRLSom Terminal Block to Capacitors using suitable electrolytic grade copper bus-bars/ XLPE insulated Copper Cables as required.				
	The above board shall be enclosed in design with powder coated paint all complete and as per final directions and final approval of the Consultant.	1	Nos		
1.6	UPS INPUT MCB				
	Providing and fixing on angle iron frame work 63 Amps Four Pole MCB of approved make. The rate shall also include supply and Installation of CRCA 14 SWG Fabricated Box to house the Four Pole MCB and painting of these Box and frames using two coats of anti rust red oxide primer and three coats of approved colour Powder Coated paint all complete as required and as per final direction & approval of Consultants.	1	Nos		
1.7	UPS INPUT MCB				
	Providing and fixing on angle iron frame work 40 Amps Four Pole MCB of approved make. The rate shall also include supply and Installation of CRCA 14 SWG Fabricated Box to house the Four Pole MCB and painting of these Box and frames using two coats of anti rust red oxide primer and three coats of approved colour Powder Coated paint all complete as required and as per final direction & approval of Consultants.	1	Nos		
1.8	VTPNDB - 12WAY (GR.1ST,2ND & 3RD FLOOR)	7	Nos.		
	Comprising of :				
	Incoming of 100 A TPN MCCB - 1 No.				
	Phase indicating lamps				
	Outgoing -				
	63 Amp, TPN MCB - 04Nos.				
	32 Amp, DP MCB - 10Nos.				
1.9	Lighting Distribution Board - 8 WAY (GROUND FLOOR)	1	Nos.		
	Comprising of :				
	Incoming of 40A TPN MCB - 1 No.				
	Phase indicating lamps				
	Outgoing -				
	32 Amp, DP 30 mA RCCB - 3 Nos.				

	6 A SP MCB - 6 Nos. per phase Total-24 Nos.				
2	Power Distribution Board - 8 WAY (GROUND FLOOR)	1	Nos.		
	Comprising of :				
	Incoming of 40 A TPN MCB - 1 No.				
	Phase indicating lamps				
	Outgoing –				
	32 Amp, DP 30 mA RCCB – 3 Nos.				
	16A SP MCB - 8 Nos. per phase Total-24 Nos.				
2.1	UPS Distribution Board - 8 WAY (GROUND FLOOR)	1	Nos.		
	Comprising of :				
	Incoming of 63 A TPN MCB - 1 No.				
	Phase indicating lamps				
	Outgoing –				
	32 Amp, DP 30 mA RCCB – 3 Nos.				
	16A SP MCB - 8 Nos. per phase Total-24 Nos.				
2.0	8 WAY SPN UPSDB (FOR 1ST FLOOR)	1	Nos.		
	Comprising of :				
	Incoming of 32 A DP MCB - 1 No.				
	OUTGOING				
	16A SP MCB -8NOS				
2.2	4 WAY SPN DB (FOR HOSTEL ROOM,CLASS ROOM)	48	Nos.		
	Comprising of :				
	Incoming of 32 A DP MCB - 1 No.				
	OUTGOING				
	10A SP MCB (2Nos.)				
	20A SP MCB (2Nos.)				
2.3	40/63 A 4P MCB With MS Enclosure IP65	18	Nos.		
	SUB TOTAL OF PART I:				
II	CABLES				
2.1	Supply, Installation of 1100 V Grade XLPE insulated, FRLS , flat steel GI wires armoring, tough heat resisting outer sheets multicore Aluminum/copper Stranded conductor, Cable of following sizes to be laid in prepared trenches/ excavated trenches/ on wall / on trays complete with dressing saddling clamping etc. Including civil work and required accessories				
2.1.1	3.5 Core x 240sq.mm., XLPE Insulated Aluminium Conductor Armoured Cable	80	Mtrs.		
2.1.2	3.5 Core x 185sq.mm., XLPE Insulated Aluminium Conductor Armoured Cable	60	Mtrs.		
2.1.3	3.5 Core x 150 sq.mm., XLPE Insulated Aluminium Conductor Armoured Cable	90	Mtrs.		
2.1.4	3.5 Core x 95 sq.mm., XLPE Insulated Aluminium Conductor Armoured Cable	20	Mtrs.		
2.1.5	3.5 Core x 25 sq.mm., XLPE Insulated copper Conductor Armoured Cable	480	Mtrs.		

2.1.6	4 Core x 16 sq.mm., XLPE Insulated copper Conductor Armoured Cable	100	Mtrs.		
2.1.7	4 Core x 10 sq.mm., XLPE Insulated copper Conductor Armoured Cable	150	Mtrs.		
2.1.8	4 Core x 6 sq.mm., XLPE Insulated copper Conductor Armoured Cable	170	Mtrs.		
2.1.9	3 Core x 10 sq.mm., XLPE Insulated copper Conductor Armoured Cable	50	Mtrs.		
2.1.10	3 Core x 4 sq.mm., XLPE Insulated copper Conductor Armoured Cable	1300	Mtrs.		
2.2	Termination of cables with double compression Brass cable gland including gland earthing and with crimping type copper lugs suitable for copper conductor cable with consumable such as tape, hard ware.				
2.2.1	3.5 Core x 240sq.mm., XLPE Insulated Aluminium Conductor Armoured Cable	6	Nos.		
2.2.2	3.5 Core x 185sq.mm., XLPE Insulated Aluminium Conductor Armoured Cable	4	Nos.		
2.2.3	3.5 Core x 150 sq.mm., XLPE Insulated Aluminium Conductor Armoured Cable	8	Nos.		
2.2.4	3.5 Core x 95 sq.mm., XLPE Insulated Aluminium Conductor Armoured Cable	2	Nos.		
2.2.5	3.5 Core x 25 sq.mm., XLPE Insulated copper Conductor Armoured Cable	14	Nos.		
2.2.6	4 Core x 16 sq.mm., XLPE Insulated copper Conductor Armoured Cable	4	Nos.		
2.2.7	4 Core x 10 sq.mm., XLPE Insulated copper Conductor Armoured Cable	12	Nos.		
2.2.8	4 Core x 6 sq.mm., XLPE Insulated copper Conductor Armoured Cable	22	Nos.		
2.2.9	3 Core x 10 sq.mm., XLPE Insulated copper Conductor Armoured Cable	2	Nos.		
2.2.10	3 Core x 4 sq.mm., XLPE Insulated copper Conductor Armoured Cable	96	Nos.		
SUB TOTAL OF PART II:					
III	LIGHTING				

3.1	SITC Light Fitting with Driver, LED light source specified below and as approved by Architect/Consultant having cat No.-				
3.2	2'x2' LED luminaire housing made of CRCA white matte powder coated, high efficiency opal diffuser at the FRLSont with transmittivity of more than 85% and system o/p of 2900lumen for 38w unit. Useful life of the system is 40000burning hr. for 70% lumen maintence.	62	Nos.		
3.3	15w downlighter, light o/p of 900lumen, constant current integrated driver, optics made of high quality diffuser, die-cast heat sink for long service free life of 30000 burning hr, cut-out dia 135mm and depth of 85mm.	450	Nos.		
3.4	Supply , Installation, Testing and Commissioning of approved make Recessed type Linear LED 36W Light Fitting and having - Length 1180 mm xHeight 50 X Width 65 mm LED fitting, system lumen output >= 3100 lumens, light color 4500K, recessed type, inbuilt-constant current driver having p.f.>0.95, THD<10%, Aluminium extruded housing housing along with antiglaer diffuser, MCPCB LED type & high efficiency PMMA Lumio diffuser, ,3 years warrenty and 50000 burning hrs., all complete as required as per final directions of consultant.	55	Nos.		
3.5	Supply & Installation of 1 X 20W T5 Tubelight of APPROVED make as per final approval & direction of architect & consultant.	43	Nos.		
3.6	Supply & Installation of 1 X 12W LED Mirror light of APPROVED make as per final approval & direction of architect & consultant.	7	Nos.		
3.7	Supplying & Installation for Wall Mounting 12/9 Watt LED Type light Fixture	40	Nos.		
3.8	Approved make 20 Watts Cicular Surface Mounted Hanging Ligts for Café Area all complete with accessories, as required & as per directions & approval of consultant.	23	Nos.		
3.9	Supply, Receiving, Storing at site, fixing 48 Inches Three Blades fan with step electronic regulator ceiling fan of approved Make, colour as per architect	42	Nos.		
4.0	Supply, Receiving, Storing at site, fixing 16 inches wall fan Three Blades wall fan with speed control by pull chord mechanism of approved Make, colour as per architect	4	Nos.		
4.1	Supply, Receiving, Storing at site, fixing in position, testing and commissioning at site, 6 inch diameter single phase heavy duty exhaust fans with louvered shutters, including supply of the FRLSame to fix the exhaust fan by using minimum 25 x 3 mm. MS angle and 25 x 3 mm MS flat, and grouting the FRLSame using fasteners all complete as required and as per final directions and approval of the Architect/Consultant.	40	Nos.		

	SUB TOTAL OF PART III:				
IV	POINT WIRING & CONDUITING WORK				
Notes:	These notes shall apply to all the relevant wiring items described in the schedule of items given below :-				
a	All points wiring, circuit wiring, sub mains wiring shall be done using rigid FRLS PVC CONDUITS as required , conduits of minimum 2 mm thickness and shall comply with IS 2509 of 1973 or amendments there of and FIA approval.				
b	All switch boards under the point wiring shall be the standard boxes available and the same shall be suitable for concealed work. The boxes should be of Electro Zinc Plated as per the Manufactures standard practice and should be				
c	The entire wiring shall have continuous 2.5 sq.mm. approved make FRLSLS Copper conductor earth wire for earth continuity having Green colour in 660/1100 volts grade.				
d	The point wiring shall comply to IS 732.				
e	The entire work has to be carried out under the direct supervision of PMC/Consultant.				
f	All materials under this schedule shall deemed to be included by the Contractor in his scope.				
g	The entire work to be carried out as per the specifications laid down in the tenders, approved drawings, and as per final directions of PMC/Consultant/Architects.				
h	The point wiring shall include wiring of light/fan outlet of any length FRLS distribution board via switch or to the point and including providing circuit wiring, in minimum 25 mm dia PVC Conduit of 2 mm and using minimum 2.5 sq.mm FRLS Copper Conductor wires having Uniley bunching Class 5 Construction and having 99.99% Purity Copper and of approved make for Circuit and Point wiring and of 1100 Volts Grade and 2.5 sq.mm Yellow/Green Colour Copper wire for Earthing in 1100 Volts grade. All the FRLS wires should be of approved make.				
i	The entire work of the point wiring may be split into two parts				

1	Providing point wiring for following light point using 2 x 2.5 sq.mm. and circuit wiring using 2.5 sq.mm FRLS copper conductor wires in rigid HMS PVC conduits as required, of approved make only, minimum 25 mm dia and 2.0 mm thickness heavy duty with necessary junction boxes/pull boxes complete with flush mounted shock proof accessories manufactures standard electro plated boxes with earthing screw and continuous earthing up to fixtures and MCB DB using 1 No. 2.5 sq.mm. FRLS green colour copper earth wire of approved make all complete and as per final approval of Consultant.				
1.1	1 point controlled by 1 No. 6 Amps. Single Pole Modular type switch of approved make.	310	Nos.		
1.2	2 points controlled by 1 No. 6 Amps., Single Pole Modular type switch of approved make.	55	Nos.		
1.3	3 Points controlled by 1 No., 6 Amps., Single Pole Modular type switch of approved make.	17	Nos.		
1.3	4 Points controlled by 1 No., 6 Amps., Single Pole Modular type switch of approved make.	23	Nos.		
1.4	5 Points controlled by 1 No., 6 Amps., Single Pole Modular type switch of approved make.	5	Nos.		
1.4	6 Points controlled by 1 No., 6 Amps., Single Pole Modular type switch of approved make.	3	Nos.		
2	Providing point wiring for following light points using 2 x 2.5 sq.mm. FRLS copper conductor wires of approved make in 25 mm dia PVC conduits as required, of approved make with necessary junction boxes/pull boxes complete with all accessories and continuous earthing up to fixtures and MCB DB using 1 No. 2.5 sq.mm. FRLS green colour copper earth wire of approved make as required and as per final direction and approval of the Consultant.				
2.1	4 Points controlled by 1 No. 6 Amps., Single Pole MCB.	8	Nos.		
2.2	ceiling fan point controlled by 1 No. 6 Amps., Single Pole Modular type switch and the Electronic Regulator of approved make .	42	Nos.		
2.3	Exhaust fan point controlled by 1 No. 6 Amps., Single Pole Modular type switch and 1 No 6 Amps Socket near the Exhust Fan of approved make .	40	Nos.		

2.4	Providing wiring for 20 Amps Geyser Power Socket outlet independently mounted using 3 Core x 4.0 Sq.mm FRLS Copper Conductor flexible wires of approved make for the first point in 25 mm dia 1.8 mm wall thickness PVC conduits of approved make with suitable sized manufactures standard electro plated boxes near the point. The rate shall also include supply and installation of 20 AMps Sockets with interconnections all complete as required and as per final approval of the Consultant.(One Sockets shall be connected on one circuit)	36	Nos.		
2.5	Providing wiring for Bell Point installed on Main Entrance 2 x 1.5 sq.mm. FRLS copper conductor wires of approved and minimum 2.5 sq.mm. copper conductor FRLS green colour earth wire of approved make for continuous earthing to Bell complete with 6 Amps., modular type Bell Push of approved make flush mounted all complete as required and as per final approval of the Consultant.	36	Nos.		
3	Providing wiring for Raw power 6/16 Amps. approved make switched socket outlet independently mounted using 3 Core x 2.5 Sq.mm FRLS Copper Conductor flexible wires for the first point and 3 Core x 2.5 sq. mm Copper conductor FRLS wires to 5 Pin Socket outlet in under floor race ways or extending the point using 25 mm dia 2 mm wall thickness PVC conduits of approved make with suitable sized manufactures standard electro plated boxes near the point. The rate shall also include supply and installation of 1 Nos, 6/16 Amps., 5 Pin Multistandard type Socket outlet, 1 Nos, 16 Amps., single pole modular type switch and necessary face plate and GI back box with interconnections all complete as required and as per final approval of the Consultant/Bank. (1 such points shall be looped together and called as a Set)	45	Set		
4	Providing wiring for Raw power 6/16 Amps. approved make switched socket outlet independently mounted using 3 Core x 2.5 Sq.mm FRLS Copper Conductor flexible wires for the first point and 3 Core x 2.5 sq. mm Copper conductor FRLS wires to 5 Pin Socket outlet in under floor race ways or extending the point using 25 mm dia 2 mm wall thickness PVC conduits of approved make with suitable sized manufactures standard electro plated boxes near the point. The rate shall also include supply and installation of 1 Nos, 6/16 Amps., 5 Pin Multistandard type Socket outlet, 1 Nos, 16 Amps., single pole modular type switch and necessary face plate and GI back box with interconnections all complete as required and as per final approval of the Consultant/Bank. (2 such points shall be looped together and called as a Set)	28	Set		

5	<p>Providing wiring for Raw power 6/16 Amps. approved make switched socket outlet independently mounted using 3 Core x 2.5 Sq.mm FRLS Copper Conductor flexible wires for the first point and 3 Core x 2.5 sq. mm Copper conductor FRLS wires to 5 Pin Socket outlet in under floor race ways or extending the point using 25 mm dia 2 mm wall thickness PVC conduits of approved make with suitable sized manufactures standard electro plated boxes near the point. The rate shall also include supply and installation of 1 Nos, 6/16 Amps., 5 Pin Multistandard type Socket outlet, 1 Nos, 16 Amps., single pole modular type switch and necessary face plate and GI back box with interconnections all complete as required and as per final approval of the Consultant/Bank. (3 such points shall be looped together and called as a Set)</p>	13	Set		
6	<p>Providing wiring for Raw power 6/16 Amps. approved make switched socket outlet independently mounted using 3 Core x 2.5 Sq.mm FRLS Copper Conductor flexible wires for the first point and 3 Core x 2.5 sq. mm Copper conductor FRLS wires to 5 Pin Socket outlet in under floor race ways or extending the point using 25 mm dia 2 mm wall thickness PVC conduits of approved make with suitable sized manufactures standard electro plated boxes near the point. The rate shall also include supply and installation of 1 Nos, 6/16 Amps., 5 Pin Multistandard type Socket outlet, 1 Nos, 16 Amps., single pole modular type switch and necessary face plate and GI back box with interconnections all complete as required and as per final approval of the Consultant/Bank. (4 such points shall be looped together and called as a Set)</p>	40	Set		
7	<p>Providing wiring for UPS Power 6/16 Amps. switched socket outlet independently mounted using 3 Core x 4 Sq.mm FRLS Copper Conductor flexible wires for the first point and 3 Core x 2.5 sq. mm Copper conductor FRLS wires to 5 Pin Socket outlet in under floor race ways or extending the point using 25 mm dia 2 mm wall thickness PVC conduits of approved make with suitable sized manufactures standard electro plated boxes near the point. The rate shall also include supply and installation of 2 Nos, 6/16 Amps., 5 Pin Multistandard type Socket outlet, 1 Nos, 16 Amps., single pole modular type switch and necessary face plate and GI back box with interconnections all complete as required and as per final approval of the Consultant/Bank.(1 such points shall be looped together and called as a Set)</p>	5	Set		

8	Providing wiring for UPS Power 6/16 Amps. switched socket outlet independently mounted using 3 Core x 4 Sq.mm FRLS Copper Conductor flexible wires for the first point and 3 Core x 2.5 sq. mm Copper conductor FRLS wires to 5 Pin Socket outlet in under floor race ways or extending the point using 25 mm dia 2 mm wall thickness PVC conduits of approved make with suitable sized manufactures standard electro plated boxes near the point. The rate shall also include supply and installation of 2 Nos, 6/16 Amps., 5 Pin Multistandard type Socket outlet, 1 Nos, 16 Amps., single pole modular type switch and necessary face plate and GI back box with interconnections all complete as required and as per final approval of the Consultant/Bank.(2 such points shall be looped together and called as a Set)	3	Set		
9	Providing wiring for UPS Power 6/16 Amps. switched socket outlet independently mounted using 3 Core x 4 Sq.mm FRLS Copper Conductor flexible wires for the first point and 3 Core x 2.5 sq. mm Copper conductor FRLS wires to 5 Pin Socket outlet in under floor race ways or extending the point using 25 mm dia 2 mm wall thickness PVC conduits of approved make with suitable sized manufactures standard electro plated boxes near the point. The rate shall also include supply and installation of 2 Nos, 6/16 Amps., 5 Pin Multistandard type Socket outlet, 1 Nos, 16 Amps., single pole modular type switch and necessary face plate and GI back box with interconnections all complete as required and as per final approval of the Consultant/Bank.(3 such points shall be looped together and called as a Set)	2	Set		
10	Providing wiring for UPS Power 6/16 Amps. switched socket outlet independently mounted using 3 Core x 4 Sq.mm FRLS Copper Conductor flexible wires for the first point and 3 Core x 2.5 sq. mm Copper conductor FRLS wires to 5 Pin Socket outlet in under floor race ways or extending the point using 25 mm dia 2 mm wall thickness PVC conduits of approved make with suitable sized manufactures standard electro plated boxes near the point. The rate shall also include supply and installation of 2 Nos, 6/16 Amps., 5 Pin Multistandard type Socket outlet, 1 Nos, 16 Amps., single pole modular type switch and necessary face plate and GI back box with interconnections all complete as required and as per final approval of the Consultant/Bank.(4 such points shall be looped together and called as a Set)	1	Set		
SUB TOTAL OF PART IV:					
V RACEWAYS					

5	Providing raceways in the floor comprising rectangular aluminum extruded tubes with cover plate including with cover plate chasing of floor and tiles, cleaning wherever necessary, fixing the raceways, minor civil work with providing sealing at joints at junction boxes and proper alignment, vacuum cleaning and connection of following sizes. Job includes Chiseling of pcc if required for laying of data/voice/power conduit & throwing the debris outside the builder premises.				
5.1.1	100 x 40mm x2mm thick Al Raceway	80	Mtrs		
5.1.2	40 x 40mm x2mm thick Al Raceway	70	Mtrs		
5.1.4	Providing 25 mm PVC ISI marked Rigid conduit for Data/Voice/AV with accessories.	1200	Mtr.		
5.1.5	Providing 25 mm PVC ISI marked Flexible conduit for Data/Voice/AV with accessories.	200	Mtr.		
5.2	Providing junction boxes for aforesaid raceways fabricated out of ms sheet steel, powder coated, having following sizes made out of 2 mm thick crca sheet, 50 mm deep, with cut outs for raceways and anodized SS cover duly champhered. Cover plate of the junction box will be flush with top of cement screed floor				
5.2.1	Junction Box of size 250 mm x 250mm.x 50mm	8	Nos.		
5.2.2	Junction Box of size 150 mm x 150 mm.x 50mm	16	Nos.		
SUB TOTAL OF PART V:					
VI	EARTHING				
6.1	Providing and laying of advance maintenance free earthing consisting of 14.35 mm dia and 3 meter length copper bonded earth rod in 150 mm dia. in an augured hole in ground, surrounded by ground enhancement material as per specification. Inspection chamber shall be of 450 x 450 mm with concrete base CI manhole cover with FRL same painted with bitumastic paint. 2 Nos. of 50 x 6 mm cross section & 300 mm long copper strip to be clamped with copper clad rod electrode have sufficient nos (But not less than 4 Nos.) of 10 mm dia. GI nuts & bolts for connection to the equipment / interconnection to the other pits to form equi-potential bonding .The pH value of ground enhance material shall be 6.9 to 7.2 of 1000gm / lit @ 20 deg.c.The minimum 30 Kg of ground	4	set		
6.3	Providing 25 mm x 6 mm GI earthing flat	400	Mtrs		
6.4	Providing 1CX6 Sq.mm copper earthing wire	500	Mtrs		
6.5	Providing 25 mm x 3 mm CU. earthing flat	100	Mtrs		
SUB TOTAL OF PART VI:					
VII	MISCELLANEOUS ITEMS				

CABLE SUPPORTS					
7.1	Providing Structural fabrication for Cable Tray supports made out of 40 x 40 x 3mm angle, plate, Anchor fasteners etc in wall/ceiling including supply of steel, cutting, welding, drilling, erecting at site including consumables like welding rods, gas drill bits etc. Job also includes for minor civil work, duly Painted with two coats of Red oxide and two coats of Synthetic enamel paint of grade 631.	200	Kg.		
7.2	Providing 300mm x 50mm x 2mm Hot Dip Galvanized Perforated Cable <u>with removable cover</u> of 1.6 mm. Job includes providing cable Raceway and it's supports / hangers installation. Fully threaded GI bolts will be installed on two numbers of 10mm (3/8") x 75mm Anchor Fasteners. MS angle of 25mm x 25mm x 6mm will be mounted to these hangers by check nuts and spring washers, on which cable trays will be provided. Hangers will be installed as per site condition but not over than 1 Mtr.	350	Mtrs.		
7.3	Providing 150mm x 50mm x 2mm Hot Dip Galvanized Perforated Cable <u>with removable cover</u> of 1.6 mm. Job includes providing cable Raceway and it's supports / hangers installation. Fully threaded GI bolts will be installed on two numbers of 10mm (3/8") x 75mm Anchor Fasteners. MS angle of 25mm x 25mm x 6mm will be mounted to these hangers by check nuts and spring washers, on which cable trays will be provided. Hangers will be installed as per site condition but not over than 1 Mtr.	150	Mtrs.		
SUB TOTAL OF Part VII					

Summary

I	PANELS & D.B.S				
II	CABLES				
III	LIGHTING				
IV	POWER WIRING & CONDUTING WORK				
V	RACEWAYS				
VI	EARTHING				
VII	MISCELLENEOUS ITEMS				
	Grand Total				