

SCEDULE OF QUANTITIES FOR ELECTRICAL AND ALLIED WORKS AT MEENA BAZAR BRANCH					
Sr.No.	Description of works	Units	Qty	Rate	Amount
1 i)	Wiring for light point / fan point/exhaust fan/ light modular socket switch with 3X1.5 sqmm copper conductor FR insulated 1100v grade multi strand wires (P+N+E) in cancelled / surface using 20/25/32 rigid PVC conduit with all bend, tees, saddle mounting box, 3 phase cover plate ceiling rose , etc. wherever required etc.& cromium plate brass screw/rawl plug etc.The circuit wiring start from DB to point control box /switch box using 3x2.5 sqmm copper conductor FR insulated 1100V grade multistrand wire (P+N+E) identification ferrules at both end in PVC conduit complete in all respect.The conduit must be fixed with MS saddle at every 80cm on surface and conduit to be laid in ceiling with proper clamps/wall floor filling the chese with cement mortar and finish the same in original form/wooden partion above falceiling chessess filled with cement mortar as required at site Each circuit shall have separate earth wire.All switch socket must be for modular type with M.S. Boxes and plate etc. as required Note:-.Each circuit shall have independent earth wire each point shall be earthed. Circuit wiring is to be includeed in point rate wiring. (PLEASE NOTE THAT Colour code - Red-Yellow-Blue wires for phases, Black wire for Neutral and Green wire for Earth must be used) Note:- i) one conneted switch wall Fan points to be connect with separate socket near wall fan. One connected switch with one light or 2-3 lights will be counted one point. Apporximately 15 LP Points for <u>hall only</u> may be connected for /looped with 2-3 light points Make:Finolex/polycab/Rellison- For all purpose & all concern sls.	Nos	90		
ii)	As above supply and fixing,light, & sw, point in system/UPS room/Printer room at suitable place as required by the branch,(04 point from UPS SPNDB /DPMCB for system /UPS room complete testing, commissioning in all respect with 1.5sqmm pvc 1100v grade copper insulated wire for phase, Neutral and earth (if required) in pvc conduit (cocealed on wall/floor and making the same). Item include modular switch socket, board,front plate etc. One sw should be near grill gate entrance.	Nos	1		
2	POWER POINTS				
	Do -as S.NO.1 but using 2X4 sqmm for phase & neutral and 2.5 sqmm wire for earth copper conductor FR wires insulated 1100V grade for the 16A,6ping modular socket controlled by 16A switch .Earth wire shall be 2.5 sqmm copper conductor FR insulated wire.				
i	power point with 4sqmm cu wire for phase and neutral and 2.5sqmm cuwire for earth in PVC conduit including all accessories boxes as required, Maximum Point on one circuit should not exeed Two. For water cooler, TV, Hotcase, music system, pantry, flood light, counter Back side wall & bm room	Nos	16		
ii	power point with 4sqmm cu wire for phase and neutral and 2.5sqmm cuwire for earth in PVC conduit including all accessories boxes as required Cash, Locker, record & stationary room to be connected through a lead or 3x1.5 sqmm pvc copper wire in a thick pvc pipe to out side with 15 amp socket (in side to be connected directly with proper connection)	Nos	4		
iii	power point for glow sigh board with 3x2.5 sqmm cu wire for phase, neutral and earth in PVC conduit including all accessories box as required, with 25Amp DPMCB with ms box and 16/10 switch & socket should be reating IP65 weather proof to be placed on outside wall of <u>Branch & ATM</u> etc complete in all respect.	Nos	2		
3	COMPUTER POINT				
i)	wiring with 3x2.5 sqmm PVC insulated, 1100V grade copper conductor FR wires in medium PVC conduit from UPS DB to computer points. Each point to have one set of four no 6A 5 pin modular type socket at below the top of table/counter and controlled by one 6A modular Swith and one 6A indicator at above the table top/side in wooden partion with all accessories. Inner / outer plates, metal box etc and to be fixed on wooden partion/ by grouting on wall etc as per site requirement. Two to three computer boards can be looped.(should be in colour silver alu/dark bronze/matt grey) Make: philips/L&T/Legrand(Mylicn)/LK	Nos	12		

ii)	wiring with FR 3x2.5 sqmm PVC insulated ,1100V grade copper conductor FR wires in medium PVC conduit from Light DB raw power to computer table. Each point to have one set of 2 no 6A 5 pin non modular type socket at below the top of table/counter and controlled by one 6A non modular Switch with one 6A indicator at above the table top/side in wooden partition with all accessories. Inner / outer plates, metal box etc and to be fixed on wooden partition/ by grouting on wall etc as per site requirement. Make: philips/L&T/Legrand/LK/Anchor.	Nos	12		
4	Supplying , fixing , testing & commissioning of PVC insulated, 1100 volt grade aluminium/copper conductor armoured cables for sub mains inclusive cable glad & end termination with following size as given below. Vendor to take cable measurment before starting the work.Make:Gloster/skyton/Polycab/Finolex/Relison.				
i	4x35 sq.mm PVC insulated aluminium conductor armoured cable (from Panel to Vertical DB/Fuse Grip as requird)	RM	25		
ii	4x25sq.mm PVC insulated aluminium conductor armoured cable (from PDB/UPS)	RM	60		
iii	4 x 16 sq . Mm insulated aluminium conductor armoured cable (from panel to ATM)	RM	25		
vi	3x6 sq .mm PVC insulated copper conductor armoured cable (from UPS to UPSDB, ATM UPS OUTPUT & LTPNDB to SPN & ATM)	RM	100		
v	End termination of cable of following size using dowells make copper cable lugs/ cable sockets of as required.				
a	4x 35 MM	Set	6		
b	4x 25 MM	Set	6		
c	4 x 16 MM	Set	6		
d	3 x 6 MM	Set	12		
e	4X50SQ MM	Set	0		
5	Supplying, installing, testing & commission of surface/recessed mountings,Double door 415 volts TPN MCB distribution board of steel steel, 1.6mm thick dust phosphatized and painted, inclusive of 100 amps, tinned copper busbars, earthbar, common neutral link, din bar for mounting of MCB's detachable gland / knock out plate & superior make terminal connectors for all incoming and outgoing circuits duly prewired with adequate size of PVC insulated copper wires between the bus bars and the MCB's as well as the incomer and upto the terminal connectors/ neutral link and ready for installation of following ways as required :.MAKE : MDS / GE /CG /Schneider /ABB/C&S/L&T. HPL .				
i	4-way vertical TPN DB (PDB)				
	100 Amp 3PMCCB (25 KA) AS incommer -1				
	Outgoing				
	20 /25 Amp SPMCB -09nos & 01nos - 25A TP MCB	Nos	1		
ii	4-way TPN DB (UPS /ATM-if required)				
	63/80 Amp 3P TP MCB -1				
	4 Nos. 63Amp SP as UPS outgoing,	Nos	1		
iii	4-way TPN DB (LDB)				
	12 Nos. 10-32 Amp. SP MCBs as outgoing and 63 Amp 3P TP MCB with as incomer.	Nos	1		
iv	2+8 way SPN DB (Light DB)				
	8 Nos. 10 Amp. SP MCBS as outgoing and 1x40 Amp DP 100mA 2pole RCBO/ELCB as incomer.	Nos	2		
v	2+8 way SPN DB (UPS Output DB BRANCH)				
	8 Nos. 6 Amp. SP MCBS as outgoing and 25Amp DP MCB as incomer.	Nos	2		
vi	4 way SPN DB (UPS Output & AC)				
vii	1 No. 20/25 Amp Two pole DPMCB with 6-10A 2Nos SPMCBs for UPS output near ATM UPS room.	Set	1		
viii	1 No. 20/25 Amp 2pole ELCB/RCCB 100 MA for ups output in ups room for system room & B'hall.	Set	3		

6	Wiring for two indication lamps from UPS output DP/DB critical circuits in 02 separate pvc conduit with lamp, holder in suitable box with connection /testing etc complete in all respect in UPS room.	set	1		
7	Supplying, installing, testing & commission of 15/16 A modular socket controlled by 16A SPMCB for UPS input Branch & ATM.	Nos	3		
8 i)	<p>Supply installation testing and and commissioning 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 9" above floor level including its grouting, fully compartmentalized/cubical type, bottom cable entry, front operated, dead back with following components each in separate compartment</p> <p>INCOMER - i) one 125A, 4 Pole MCCB 25KA & neutral with adjustable O/L fixed magnetic release. with 0-200 A ammeter with set of CTs and 0-500 V Voltmeter/or digital meter with selector switch and LED Indicating lamp for each phase - 01 SET Panel as above with:-</p> <p>Onload Changeover switch 125Amp. 4 pole --- 1Nos</p> <p>MCCB 63 Amp 4 pole 25KA -- 2Nos (ATM / LDB)</p> <p>MCCB 100 Amp 4 pole 25KA -- 3Nos (FOR 1PDB AND 1 for UPS, 1spare). 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. Cubical 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> <p>IMP: Pannel drg required to be approved from Electrical Engg. Factory test reports of insulation and resistance testing (meggering) and HV test should be sent with the panels. 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 40x5 to be used. DMC supports will be used for bus bars. 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. Before painting all requisite pretreatment like cleaning,degreasing, derusting, phosphadising 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 .MAKE : MDS / GE /CG /Schneider /ABB/C&S/L&T. For COS-socomec /HPL .</p>	Nos	1		
ii	One set of kitkat fuse unit(03) and 01 No 200 Amp copper Neutral link near main Energy meter & near Generator set on suitable wooden board (porcelain kit-kat fuse unit) with connection etc. MAKE: Anchor or equ.	Set	2		

iii	Wiring from Energy meter to kitkat fuse neutral link and or Item No.1 TPN switch fuse unit ie if provided with 100V grade PVC insulated 4 Nos. 16 MM copper wire in PVC conduit/ flexible pipe. Complete testing / commissioning etc. Wire to be used :- For all purpose/all sls -KEI/plaza /finolex/polycab/seiko/Vmarc. Conduit:- PVC - 1.8MM to 2mm Thick- medium ISI mark AKG/BEC/Bajaj/seiko/cap,ISI mark. other: ABB/SCHNEIDER/MDS/HPL/C&S/L&T/GE.	Mtr	3		
iv	Supply and fixing MS denger notice board.	Nos	2		
9	Earthing				
i	Supply and burring of safe Earthing Electrode T-19(hot dip Galvanised), Length 2000mm, outer pipe 80mm, inner pipe 40, Terminal Dia 12mm, outer GI pipe of 16SWG And inner GI pipe of 12swg 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 30cm sq CI frame with hinged cover and masonry housing (from electrode terminal to sw board, cost of GI strip will be extra). Make: As approved in UPPWD & CPRI certified 2 for UPS (1 for router) +1 genset neutral / safety earthing to used. (Make:as per CPWD)	Nos	5		
ii	10 Sq.mm PVC insulated copper conductor wires in PVC conduit from earth pit to UPS Output DB & near Reck .	RM	100		
iii	As per SI No.15 with 25X3MM GI STRIP concealed on wall/floor up to Ist point complete in all respect.	Mtr	30		
10	Supply , fixing ,testing & commissioning of light fixtures suitable for LED lamps with all components and accessories including but not restricted to reflectors, housings, lamp holders and including cost of ballasts and cost of lamps complete as required and as below.				
i	S&F DOWN LED LIGHT FIXTURE. 15Watt Make:- CG / Bajaj / HPL/Philips/GE.	Nos	10		
ii	600x600 LED 36 W panel full light Make : CG / Bajaj / HPL/Philips/GE.	Nos	20		
iii	Surface LED Light 18 Watt (1x1 feet) Make: CG / Bajaj / HPL/Philips/GE.	Nos	10		
iv	Surface LED Light 18/20 Watt (2 feet) Make: CG / Bajaj / HPL/Philips/GE.	Nos	10		
v	P/F Exhaust Fan 12" (Usha / Crompton /ORIENT/Bajaj).	Nos	4		
vi	P/F wall fans (Usha / Crompton/ orient / BAJAJ/ Make).	Nos	10		
11 i	Supplying & laying wiring with CAT 6 E in PVC conduit inclusive of supplying ,fixing , testing & commissioing of IOs with singal face Plate , MS box with single IO of CAT-6 all accessories asrequired . (Data). (Counters required to be provided with 02 single points)D-link/Awaya	Nos	16		
ii	Supplying & fixing of 24 ports Jack Panel fully loaded with CAT-6 RJ- 45 sockets for terminating cables at RACK including managing cable . One for ist floor	Nos	1		
iii	Supplying & laying wiring with CAT 5 E in PVC conduit supplying , fixing,testing and commissioning of IOs with Single Face Plate, MS Box with one IO of CAT-5 all accessories asrequired complete as required.D-link/Awaya	Nos	10		
iv	Supplying & installation of 9 Unit rack with cable manager complete including testing & commissioning complete as required. D-link/Awaya	Nos	1		
v	Providing & fixing of CAT -6 , Patch Cord of following length. D-link/Awaya				
vi	1 Meter	Nos	16		
vii	2 Meter	Nos	16		
	TOTAL AMOUNT (EXCLUDING GST)				