

SCEDULE OF QUANTITIES FOR ELECTRICAL, ALLIED AND AC WORKS AT IMA BRANCH DEHRADUN					
Sr.No.	Description	Units	Qty	Rate	Amount
1	Wiring for light point / fan point/exhaust fan/ / light socket switch with 3X1.5 sqmm copper conductor FRLS insulated 1100v grade multi strand wires (P+N+E) in cancelled / surface using 20/25/32 rigid MS conduit 16swg thick with all bend, tees, saddle mounting box, 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 FRLS insulated 1100V grade multistrand wire (P+N+E) identification ferrules at both end in MS conduit 16 swg thick 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 origional 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)				
i)	Light point controlled by one 6A modular one way switch.	Nos	20		
ii)	Secondary point	Nos	15		
iii)	One wall / exhaust fan controlled by one 6A modular switch, but switch at switch board level and 6A 5-pin socket has to provide near the wall fan at designated place for connections.	Nos	7		
iv)	One light plug point ontrolled by one 6A modular switch & 6A modular socket at switch board level .	Nos	6		
2	POWER POINTS				
	Do -as S.NO.1 but using 2X4 sqmm copper conductor FRLS wires for the first 16A,6ping modular socket controlled by 16A switch and second point looped with 2X2.5 sqmm copper conductor wires FRLS insulated 1100V grade.Earth wire shall be 2.5 sqmm copper conductor FRLS insulated wire.				

i	POWER POINT with 4 sqmm copper conductor wire	Nos	7		
ii	POWER POINT with looped with 2.5 sq.mm copper conductor wires	Nos	7		
3	AC POINT				
	Do as S.NO.1 but using 2X4 sqmm copper conductor FRLS /FR wires with 1X2.5sq.mm FRLS earth wire for AC point. The points shall start from DB & shall finish at point including the supply & installation of modular type 25Amps Socket with 25 Amp SPMCB (C Series) Metal Box .	Nos	3		
4	COMPUTER POINT				
i)	wiring with 3x2.5 sqmm PVC insulated ,1100V grade copper conductor FRLS wires in medium PVC conduit from UPS DB to computer points. Each point to have two set of 3 no 6A 5 pin modular type socket at below the top of table/counter and controlled by one 6A modular Switch and one 6A indicator at above the table top 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.(Counter)	Nos	6		
ii)	wiring with 3x2.5 sqmm PVC insulated ,1100V grade copper conductor FRLS wires in medium PVC conduit from UPS DB to computer points. Each point to have one set of 3 no 6A 5 pin modular type socket at below the top of table/counter and controlled by one 6A modular Switch and one 6A indicator at above the table top 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.	Nos	6		
iii)	Same as above but looped from first point & from first point to second point in a circuit including first point.	Nos	6		
5	Supplying , fixing , testing & commissioning of PVC insulated, 1100 volt grade Copper conductor armoured cables for sub mains inclusive of glad and end termination following size as				
ii	4C x10 sq. mm copper conductor cable (from panel To PDB)	RM	10		
iii	4C x6 sq. mm copper conductor cable from panel to LDB & UPS	RM	15		

vi	3 x6 sq . Mm PVC insulated copper conductor wires in PVC conduit (from UPS to UPSDB)	RM	25		
6	Removing & re-installation of electric panel in same premises inclusive of service , testing & commissioning	Nos	1		
7	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 & with built in loose wire box, and 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 :				
i	4-way TPN DB (PDB)				
	12 Nos. 10-25 Amp. SP MCBs as outgoing and 63Amp 4P MCB with as incomer.	Nos	1		
ii	10 way SPN DB (UPS Output DB & Light DB)				
	8 Nos. 10 Amp. SP MCBS as outgoing and 1x25 Amp DP 100mA 2pole RCBO as incomer.	Nos	1		
iii	6 way SPN DB (UPS Output DB)	Nos	1		
	4 Nos. 10 Amp. SP MCBS as outgoing and 25 Amp DP 100mA 2pole RCBO as incomer.				
8	Supplying, installing, testing & commission of 40Amps 4 P MCB double door 415 volts TPN MCB distribution .	Nos	1		
9	Supplying, installing, testing & commission of 15/16 A 6 ping modular socket controlled by 16A SPMCB .	Nos	1		
10	Supplying, installing, testing & commission of 125 Amps HRC Fuse type Switch unit	Nos	1		
11	Supplying, installing, testing & commission OF 10 Amp to 32 Amp SPMCB C Series	Nos	30		
12	Supplying, installing, testing & commission OF 40 Amp DP MCB C Series	Nos	4		
13	Supplying, installing, testing & commission OF 40 Amp FP MCB C Series	Nos	2		

14	Supplying, installing, testing & commission OF 63 Amp FP MCB C Series	Nos	2		
15	Earthing				
i	Supply,installation,comossioning and testing of Teksai 343 Cu Or Equivalent (Pipe-in-Pipe Technology) EC Grade Copper Spec: 3 mtr Long/40 mm dia/2 mm wall thickness /Terminal-32 x 6 mm EC Grade K Type Electrolytic Copper Earthing 92-97% Purity with CI Chamber Cover. (For UPS) (T-39)	Nos	2		
ii	Supply,installation,comossioning and testing of Teksai 350 GI , Or Equivalent (Pipe-in-Pipe Technology) Spec: 3 mtr Long/50 mm dia/2.89mm wall thickness /Terminal-32 x 10 mm Inner Pipe / Outer pipe 250-100 micron galvanized. With CI Chamber Cover.(Panel BOdy) (T-19)	Nos	1		
iii	10 Sq.mm PVC insulated copper conductor wires in PVC conduit from earth pit to UPS Output DB & near Reck .	RM	75		
16	DATA & VOICE CABLING				
(i)	Supplying & laying wiring with CAT 6 E in PVC conduit inclusive of supplying ,fixing , testing & commissioing of IOs with double Face Plate MS box with double IO of CAT-6 all accessories asrequired . (only case counters & BM'cabin)	Nos	5		
(ii)	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).	Nos	10		
17	Supplying & fixing of 24 ports Jack Panel fully loaded with CAT-6 RJ- 45 sockets for terminating cables at RACK including managing cable .	Nos	1		
18	Supplying & laying wiring with CAT 5 E in PVC conduit supplying , fixing,testing and commissioning of Os with Single Face Plate, MS Box with one IO of CAT-5 all accessories asrequired complete as required.	Nos	4		
19	Supplying & installation of 9 u rack complete including testing & commissioning complete as required.	Nos	1		
20	Providing & fixing of CAT -6 , Patch Cordof following length				
	1 Meter	Nos	15		
	3 Meter	Nos	10		

21	P/F Exhaust Fan 12" (Make :-Usha / Crompton/ orient / Havells/Bajaj / metal Body .	Nos	3		
22	Supply of light fixtures suitable for LED lamps with all components and accessories including				
i	RESSES DOWN LED LIGHT FIXTURE. 15Watt Make:-Make:- Phipps / Havells	Nos	15		
ii	600x600 LED 36 W panel Make : Philips /Havells	Nos	20		
iii	Surface LED Light 20 Watt Make : Philips /Havells	Nos	2		
iv	Surface LED Light 18 Watt (1x1) : Make : Philips /Havells	Nos	5		
23	Receiving , storing , installation ,interconnection & commissioning of light fixtures suitable for LED lamps with all components and accessories including				
i	RESSES DOWN LED LIGHT FIXTURE. 15Watt metal body Make:- Philips / Havells	Nos	28		
ii	600x600 LED 36 W panel	Nos	14		
iii	Surface LED Light 20 Watt	Nos	2		
iv	Surface LED Light 18 Watt (1x1)	Nos	7		
24	Supplying, installation, testing and commissioning of Timer between Two Ac Make :-L&T , E.E & Reputed firm	Nos	1		
25	Removing light fixture 2x2 / down /wall fans with electric connection & re-installation with connection inclusive testing & commission .				
i	2x2 recess light fixture	Nos	17		
ii	down recess light fixture	Nos	20		
iii	Wall fans	Nos	13		
26	Removing of existing cable 25 sqmm to 50 sq.mm	RM	150		
27	Receiving , fixing , testing & commissioning of PVC insulated, 1100 volt grade Copper / aluminium conductor armoured cables 25 sqmm to 50 sq.mm for sub mains inclusive of glad and end termination following size as	RM	120		

29	Supplying , installation , testing & commissioning of 1.5 TR split AC air - conditioner Three star rating inclusive of MS stand & refrigerent copper pipe complete in all respect . Make : Hitachi/ carrier-midea / Dakin/ Blue-star /Voltas	Nos.	1		
30	Supplying , installation , testing & commissioning of 2.0 TR split AC air - conditioner three star rating inclusive of MS stand & refrigerent copper pipe complete in all respect . Make : Hitachi/ carrier/ Dakin/ Blue-star /Voltas	Nos.	5		
31	Supply,installation,testing and commissioning of Interconnecting refrigerant pipe work with (19mm/13 mm thick) closed cell elastomeric nitrile rubber tubular insulation between each set of indoor & outdoor units as per specifications, all piping inside the room shall be properly supported with MS hanger & clamps and also inclusive of pvc insulated cooper wires from indoor to outdoor unit .				
	Refrigerant copper piping for split AC/1.5/2.0 TR	RM	125		
32	Drain Piping				
	Supply,installation,testing and commissioning of rigid PVC piping complete with fittings, supports as per specifications and duly insulated with 6 mm thick closed cell nitrile rubber insulation.				
	25mm Dia PVC drain pipe for split AC	RM	150		
33	Supplying, installation, testing and commissioning of voltage stabilizers (copper winding)(Bluebird/Logic State/In-line only & reputed firm)				
	4 KVA	Nos	6		
34	Supplying, installation, testing and commissioning of Timer between Two Ac Make ; -L&T , E.E & Reputed firm	Nos	1		
35	Removing 1.0TR /1.5 TR/2.0TR split airconditioner with stablizer & electric connection	Nos	9		
36	Removing 1.5 TR window airconditioner with stablizer & electric connection	Nos	1		
37	Receiving ,installatin , gascharging ,testing & commissioning of 1.5TR Split airconditioning	Nos	6		
	TOTAL				

S.NO	SCHEDULE OF QUANTITY	UNIT	QTY
1	Supplying , installation , testing & commissioning of 1.5 TR split AC air -conditioner Three star rating inclusive of MS stand & refrigerant copper pipe complete in all respect . Make : Hitachi/ carrier/ Dakin/ Blue-star /Voltas	Nos.	1
2	Supplying , installation , testing & commissioning of 2.0 TR split AC air -conditioner five star rating inclusive of MS stand & refrigerant copper pipe complete in all respect . Make : Hitachi/ carrier/ Dakin/ Blue-star /Voltas	Nos.	5
3	Supply,installation,testing and commissioning of Interconnecting refrigerant pipe work with (19mm/13 mm thick) closed cell elastomeric nitrile rubber tubular insulation between each set of indoor & outdoor units as per specifications, all piping inside the room shall be properly supported with MS hanger & clamps and also inclusive of pvc insulated copper wires from indoor to outdoor unit .		
4	Refrigerant copper piping for split AC/1.5/2.0 TR	RM	125
5	Drain Piping		
	Supply,installation,testing and commissioning of rigid PVC piping complete with fittings, supports as per specifications and duly insulated with 6 mm thick closed cell nitrile rubber insulation.		
	25mm Dia PVC drain pipe for split AC	RM	150
6	Supplying, installation, testing and commissioning of voltage stabilizers (copper winding)(Bluebird/Logic State/In-line only & reputed firm)		
	4 KVA	Nos	6
7	Supplying, installation, testing and commissioning of Timer between Two Ac Make ; -L&T , E.E & Reputed firm	Nos	1
8	Removing 1.0TR /1.5 TR/2.0TR split air conditioner with stabilizer & electric connection	Nos	9
10	Removing 1.5 TR window air conditioner with stabilizer & electric connection	Nos	1
11	Receiving , installation , gas charging , testing & commissioning of 1.5TR Split air conditioning	Nos	6

RATE	AMOUNT
32000	32000
38000	190000
	0
600	75000
	0
	0
150	22500
	0
3200	19200
3000	3000
1000	9000
500	500
4000	24000
	375200