

BOQ for "Electrical Installation work at various labs/class room/office rooms (M-130,M-154B,M-160,M-206,M-240,M-256,M-263) in IACS"

SI No.	Description of item	Qty	Unit	Rate	Amount
A	Electrical Work				
1	Wiring for light point / fan point / exhaust fan point / call bell point with 1.5sq.mm FRLS PVC insulated copper conductor single core cable in surface / recessed medium class PVC conduit, with modular switch, modular plate , suitable GI box and earthing the point with 1.5 sq.mm. FRLS PVC insulated copper conductor single core cable etc. as required.				
	Group C (as per CPWD Categorisation)	40	Point		
	Make: wire: Finolex, polycab, MESCAB, KEI, Havells,Gloster Conduit : Plaza/ presto/AKG/ precession				
2	Wiring for circuit/ submain wiring along with earth wire with the following sizes of FRLS/HFFR PVC insulated copper conductor, single core cable in surface/ recessed medium class PVC conduit as required.				
(a)	2 x10 sq.mm + 1 x 6 sq.mm	15	Mtr		
(b)	4 x 6 sq.mm + 2 x 6 sq.mm	15	Mtr		
(c)	2 x 6 sq.mm + 1 x 6 sq.mm	30	Mtr		
(d)	2 x 4 sq.mm + 1 x 4 sq.mm	425	Mtr		
(e)	2 x1.5 sq.mm + 1 x 1.5 sq.mm	300	Mtr		
	Make: wire: Finolex, polycab, MESCAB, KEI, Havells Conduit : Plaza/ presto/AKG/ precession				

3	supplying and drawing following pair 0.5 mm dia FRLS/HFFR PVC insulated annealed copper conductor,unarmoured telephone cable in the existing surface/recess steel/ PVC conduit as required.				
(a)	2 pair	180	Mtr		
	Make: Finolex/Netco/Havells				
4	Supply and fixing following rating and capacity and pole MCCB with thermomagnetic release and terminal spreaders in existing cubicle panel board including drilling holes in cubicle panel,making connctitions,Ics=100% Icu and Operational Voltage 690V etc as required.				
	125 A,36 kA,FPMCCB	1	No		
	Make: Legrand/L&T/ABB/C&S/Havells/Hagar				
5	Supply and fixing folowing way,single pole and neutral,sheet steel,MCB distribution board,240 V,on surface/recess,complete with tinned copper bus bar,neutral bus bar, earth bar,din bar,interconnections,powder painted including earthing etc as required(But without MCB/RCCB/Isolator)				
(a)	6 Way ,Double door	4	Nos.		
(b)	8 Way ,Double door	4	Nos.		
	Make: Legrand/L&T/ABB/C&S/Havells/Hagar				
6	Supply and fixing folowing way,surface/recess mounting, vertical type,415 V,TPN MCB distribution board of sheet steel,dust protected,duly powder painted,inclusive of 200 A tinned copper busbar,common neutral link, earth bar, din bar for mounting MCBs (But without MCBs and incomer)as required				
(a)	8Way(4+24),Double door	1	No		
(b)	12 Way(4+36) Double door (For MCCB incomer)	1	No		
	Make: Legrand/L&T/ABB/C&S/Havells/Hagar				

7	Supplying and fixing following way, horizontal type three pole and neutral, sheety steel, MCB distribution board, 415 V, on surface/recess, complete with tinned copper busbar, earthing bar, din bar interconnections, powder painted including earthing etc as required (But without MCB/RCCB/Isolator)				
(a)	6 Way(4+18), Double door	1	No		
	Make: Legrand/L&T/ABB/C&S/Havells/Hagar				
8	Supplying and fixing 5 A to 32 A rating, 240/415 V, 10 kA, "C" curve, miniature circuit breaker suitable for inductive load of following poles in the existing MCB DB complete with connections, testing and commissioning etc. as required.				
(a)	32 A SP MCB	1	Nos.		
(b)	20 A SP MCB	15	Nos.		
(c)	16 A SP MCB	50	Nos.		
(d)	6A SP MCB	40	Nos.		
(e)	32 A DP MCB	2	Nos.		
(f)	32 A TP MCB	1	No		
(g)	32 A 4 Pole MCB	3	Nos.		
	Make: Legrand/L&T/ABB/C&S/Havells/Hagar				
9	Supply and fixing following rating, double pole, 240V, MCB in the existing MCB DB complete with connections, testing and commissioning etc. as required				
(a)	63 A SP MCB	1	No		
(b)	63 A DP MCB	1	Nos.		
(c)	63 A 4 TP MCB	2	Nos.		
(d)	63 A 4 Pole MCB	3	No.		
	Make: Legrand/L&T/ABB/C&S/Havells/Hagar				

10	Supplying and fixing of following size/ modules, GI/PVC box along with modular base & cover plate for modular switches in surface/ recess etc. as required.				
(a)	2 Module	30	Nos.		
(b)	3 Module	40	Nos.		
(c)	6 Module	40	Nos.		
(d)	8 Module	20	Nos.		
	Make: Crabtree/MK/L&T/Hagar/Legrand				
11	Supplying and fixing of following modular switch/socket on the existing modular plate & switch box including connections but excluding plate etc. as required				
(a)	6 A Switch	80	Nos.		
(b)	6 A Socket	90	Nos.		
(c)	16 A Switch	80	Nos.		
(d)	16 A Socket	90	Nos.		
(e)	Telephone socket outlet	6	Nos.		
	Make: Crabtree/MK/L&T/Hagar/Legrand				
12	Supply and fixing 2 x 18 W double tube light set with LED light(Equivalent to Philips Cat no TMC-502 with 2 x T-LED 22 W ,with 1200 mm length ,2100 Lumen) complete with all accessories with 1.5 sq.mm FRLS/HFFR ,PVC insulated copper conductor single core cable and earthing etc, as required.				
	Make: Crompton/Phillips/bajaj/Havells/wipro	22	Nos.		

13	Supplying and fixing (with chain & fastnut arrangement) of indoor type 36 W, 2 feet X 2 feet recess mounted LED down light with die cast aluminium housing, heat sink, anti glare polycarbonate/acrylic diffuser and integrated energy efficient electronic driver. With colour temperature 5700K (cool day light).	20	Nos.		
	Make: Crompton/Phillips/bajaj/Havells/wipro				
14	Brush Less Direct Current(BLDC)Fan without remote : SITC of ceiling fan with BLDC motor ,class of insulation: B,3 nos metal(Al.alloy) baldes,30 cm long down rod,power factor not less than 0.9, 350 RPM(tolerance as per IS 374-2019),THD less than 10% suitable for 230V,50Hz ,single phase AC supply including external connections with 1.5 sq.mm FRLS/HFFR ,PVC insulated copper conductor single core cable and earthing etc, as required.				
	1200 mm,Air delivery 210 CM/Min(Minimum)	6	Nos.		
	Supply of XLPE Armoured Aluminium cable)				
15	Supplying of XLPE insulated and PVC sheathed heavy duty following size of XLPE Armoured Aluminium cable 1.1 KV grade conforming the IS code(IS:7098)				
	Make: Polycab/Gloster/KEI/Havells				
(a)	3.5 C x 50 sq.mm	25	Mtr		
(b)	4 C x 16 sq.mm	30	Mtr		
(c)	4 C x 10 sq..mm	15	Mtr		
	Cable Laying				
16	Laying of one number PVC insulated and XLPE power cable of 1.1 KV grade of following size on the wall surface as required (clamped with suitable size of saddle)				

(a)	3.5 C x 50 sq.mm(clamped with 25 x3 mm MS flat Saddle)	25	Mtr		
(b)	4 C x 16 sq.mm(clamped with 1 mm thick saddle)	30	Mtr		
(c)	4 C x10 sq.mm(clamped with 1 mm thick saddle)	15	Mtr		
	Cable end termination				
17	Supplying and making end termination with brass compression gland and alluminium lugs for follwing size of PVC insulated XLPE armoured aluminium conductor cable of 1.1KV as required				
(a)	3.5 core 50 sq.mm	2	Nos.		
(b)	4 core 16 sq.mm	4	Nos.		
(c)	4 core 10 sq.mm	2	Nos.		
18	Providing and fixing of 4 mm dia copper wire on surface or in recess for loop earthing as required	150	Mtr		
19	Supply,installation,testing & commissioning of Microprocessor based sequential AC timer , capable to switch between two nos. of 1.5 TR/2 TR AC sequentially,with auto/manual/bypass mode as per requirment.				
	Make: Saitronics Systems/ Carrier /Custom make	2	Nos.		
20	Supplying and fixing of modular type 25A AC starter switch along with GI box to be recessed/surface in wall including connections but excluding providing modular plate etc. as required.	12	Nos.		
	Make: Crabtree/MK/L&T/Hagar/Legrand/North West				

21	Supply and fixing two module stepped type electronic fan regulator on the existing modular plate switch box including connections but excluding modular plate as required.	2	Nos.		
	Make: Anchor/Roma/Havells/LeGrand				
22	Supply and fixing 12 inch dia metal body exhaust fan	1	No		
	Make: CG/Havells/Bajaj				
23	supply and fixing 400 mm dia Copper wound steel/aluminium body wall fan	5	Nos.		
	Make: CG/Havells/Bajaj				
				Total	
	CGST@ 9% considered in the above BOQ				
	SGST@ 9% considered in the above BOQ				

In Words:..... only