

SCHEDULE OF POINT

Name of Work:- Electrification work for Academic Block

S.N	PARTICULARS (GROUND FLOOR)	Light point	Two Way Light Point	Light point							Ceiling/Wall/Ex. Fan Pt	Ceiling/Ex. Fan Pt		Call-Bell/Buzzer Point	5A Plug Point On Board	5A Plug Point Separate	15 A Plug Point	A. C Point	Tele Point	LAN Point	CCTV
				LED Tube 20 W	Wall Bracket Light 6 W	Batten holder	Mirror Light 10 W	Square Fitting. Light 15 W	LED 2x2 Ft. 36 W	Bulk Head 10 W		Fan Point 48"	Exhaust Fan 300 mm								
1	Department Sitting Area	28							28		14	14		2	18	9	6	0	20	2	
2	Library	13		4					9		6	6		2	10	2	4	1	1	2	
3	Tutorial Room	13		4					9		6	6		2	10	2	4	1	1	2	
4	Dean Cabin Waiting-1	5			1			4			1	1	1	1	2	1	1	1	1		
5	Dean Cabin Waiting-1	5			1			4			1	1	1	1	2	1	1	1	1		
6	Dean Cabin Waiting-3	5			1			4			1	1	1	1	2	1	1	1	1		
7	Dean Cabin Waiting-4	5			1			4			1	1	1	1	2	1	1	1	1		
8	Cabin Waiting-5	5			1			4			1	1	1	1	2	1	1	1	1		
9	Seminar hall	24		6					18		12	12					10	1	1	2	
10	Toilet-1	3		1		1	1				1		1								
11	Toilet-2	3		1		1	1				1		1								
12	Corridor	22							22		0										
13	Stair Case	2	2					2			0										
	TOTAL	133	2	16	5	2	2	22	86	0	45	43	2	5	11	48	18	29	8	28	8

S.N	PARTICULARS (FIRST FLOOR)	Light point	Two Way Light Point	Light point							Ceiling/Wall/Ex. Fan Pt	Ceiling/Wall/		Call-Bell/Buzzer Point	5A Plug Point On Board	5A Plug Point Separate	15 A Plug Point	A.C Point	Tele Point	LAN Point	CCTV
				LED Tube 20 W	Wall Bracket Light 6 W	Batten holder	Mirror Light 10 W	Square Fitting. Light 15 W	LED 2x2 Ft. 36 W	Bulk Head 10 W		Fan Point 48"	Exhaust Fan 300 mm								
1	Class Room-01	13		4					9		6	6			2	16	2	4		2	2
2	Class Room-02	13		4					9		6	6			2	16	2	4		2	2
3	Class Room-03	13		4					9		6	6			2	16	2	4		2	2
4	Class Room-04	13		4					9		6	6			2	16	2	4		2	2
5	Lab-01	13		4					9		6	6			2	16	10	4		2	2
6	Lab-02	13		4					9		6	6			2	16	10	4		2	2
7	Lab-03	13		4					9		6	6			2	16	10	4		2	2
8	Lab-04	13		4					9		6	6			2	16	10	4		2	2
9	Toilet Female	9				4	2	3			1		1		1						
10	Toilet Male	7				2	2	3			1		1		1						
11	Corridor	22							22		0										
12	Stair Case	2	2					2			0										
	TOTAL	144	2	32	0	6	4	8	94	0	50	48	2	0	18	128	48	32	0	16	16

S.N	PARTICULARS (SECOND FLOOR)	Light point	Two Way Light Point	Light point							Ceiling/Wall/Ex. Fan Pt	Ceiling/Ex.		Call-Bell/Buzzer Point	5A Plug Point On Board	5A Plug Point Separate	15 A Plug Point	A.C Point	Tele Point	LAN Point	CCTV
				LED Tube 20 W	Wall Bracket Light 6 W	Batten holder	Mirror Light 10 W	Square Fitting. Light 15 W	LED 2x2 Ft. 36 W	Bulk Head 10 W		Fan Point 48"	Exhaust Fan 300 mm								
1	Class Room-01	13		4					9		6	6			2	16	2	4		2	2
2	Class Room-02	13		4					9		6	6			2	16	2	4		2	2
3	Class Room-03	13		4					9		6	6			2	16	2	4		2	2
4	Class Room-04	13		4					9		6	6			2	16	2	4		2	2
5	Lab-01	13		4					9		6	6			2	16	10	4		2	2
6	Lab-02	13		4					9		6	6			2	16	10	4		2	2
7	Lab-03	13		4					9		6	6			2	16	10	4		2	2
8	Lab-04	13		4					9		6	6			2	16	10	4		2	2
9	Toilet Female	9				4	2	3			1		1		1						
10	Toilet Male	7				2	2	3			1		1		1						
11	Corridor	22							22		0										
12	Stair Case	2	2					2			0										
	TOTAL	144	2	32	0	6	4	8	94	0	50	48	2	0	18	128	48	32	0	16	16

S.N	PARTICULARS (THIRD FLOOR)	Light point	Two Way Light Point	Light point							Ceiling/Wall/Ex. Fan Pt	Ceiling/Ex.		Call-Bell/Buzzer Point	5A Plug Point On Board	5A Plug Point Separate	15 A Plug Point	A.C Point	Tele Point	LAN Point	CCTV
				LED Tube 20 W	Wall Bracket Light 6 W	Batten holder	Mirror Light 10 W	Square Fitting. Light 15 W	LED 2x2 Ft. 36 W	Bulk Head 10 W		Fan Point 48"	Exhaust Fan 300 mm								
5	Lab-01	13		4					9		6	6			2	16	10	4		2	2
5	Lab-02	13		4					9		6	6			2	16	10	4		2	2
	Lab-03	13		4					9		6	6			2	16	10	4		2	2
	Lab-04	13		4					9		6	6			2	16	10	4		2	2
	Lab-05	13		4					9		6	6			2	16	10	4		2	2
	Lab-06	13		4					9		6	6			2	16	10	4		2	2
	Common Area	13		4					9		6	6			2	10	2	4		2	2
2	Library	13		4					9		6	6			2	10	2	4	1	1	2
9	Toilet Female	9				4	2	3			1		1		1						
10	Toilet Male	7				2	2	3			1		1		1						
11	Corridor	22							22		0										
12	Stair Case	2	2					2			0										
	TOTAL	144	2	32	0	6	4	8	94	0	50	48	2	0	18	116	64	32	1	15	16
S.N	PARTICULARS	Light point	Two Way Light Point	Light point							Ceiling/Wall/Ex. Fan Pt	Ceiling/Wall/		Call-Bell/Buzzer Point	5A Plug Point On Board	5A Plug Point Separate	15 A Plug Point	A.C Point	Tele Point	LAN Point	CCTV
				LED Tube 20 W	Wall Bracket Light 6 W	Batten holder	Mirror Light 10 W	Square Fitting. Light 15 W	LED 2x2 Ft. 36 W	Bulk Head 10 W		Fan Point 48"	Exhaust Fan 300 mm								
1	Ground Floor	133	2	16	5	2	2	22	86	0	45	43	2	5	11	48	18	29	8	28	8
2	First Floor	144	2	32	0	6	4	8	94	0	50	48	2	0	18	128	48	32	0	16	16
3	Second Floor	144	2	32	0	6	4	8	94	0	50	48	2	0	18	128	48	32	0	16	16
4	Third Floor	144	2	32	0	6	4	8	94	0	50	48	2	0	18	116	64	32	1	15	16
5	Lift	12	2							12	2		2				12				2
	GRAND TOTAL	577	10	112	5	20	14	46	368	12	197	187	10	5	65	420	190	125	9	75	58

SCHEDULE OF ELECTRIC LOAD

Name of Work:- Electrification work for Academic Block

SL. N.	Discription	Qty	Watt	Total Watts
1	LED Tube 20 W	112	20	2240
2	Wall Bracket Light 6 W	5	6	30
3	Batton Holder/LED Bulb 7W	20	7	140
4	Mirror Light 10 W	14	10	140
5	Square Fitting. Light 15 W	46	15	690
6	LED 2x2 Ft. 36 W	368	36	13248
7	Bulk Head 10 W	12	10	120
8	Fan Point	187	60	11220
9	Exhaust Point	10	100	1000
10	Plug on Board	65	200	13000
11	Sep. Plug	420	200	84000
	Light load		Total (In W)	125828
			Say (In KW)	125.828
1	Power Point	190	1000	190000
2	AC Point	125	2000	250000
	Power load		Total (In W)	440000
			Say (In KW)	440
			G.Total	565828
			Diversity factor @ 60% (W)	339496.80
			Load (Amp)	590.40

CIRCUIT AND SUBMAIN

Name of Work:- Electrification work for Academic Block

Light CKT

Light point	577 Nos
Fan/ Exhaust Fan point	197 Nos
Plug on Board/2	32.5 Nos

Total----- 806.5 Nos

Each circuit have 6 point	134.42
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Total----- 134 Ckt

Plug point	478 Nos
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Each circuit have 4 point	120.00
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Grand Total 254 Ckt

Power CKT/AC

190 Nos

95 Ckt

125 Ckt

220 Ckt

474 Ckt

Power point

Each circuit have 2 point

AC Point (Each circuit have 1 point)

Total-----

Total circuit Light+ Power

Hence required of TPND on light CKT

8 way

12 NO. LDB

Hence required of TPND on Power CKT

8 way

11 NO. PDB

Isolator 4 pole 40 AMP

12 No.

Isolator 4 pole 63 AMP

11 No.

MCB 6 to 32 AMP

474 No.

Details of Ckt/Submains

2 X 1.5 sq. mm + 1 X 1.5 sq. mm earth wire

358 No. Separate Plug for Looping average required 10 mts	358x10	3580.00 mts
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Sub-Total 3580.00 mts

Wastage 5%		179.00 mts
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Total 3759.00 mts

Say 3759.00 mts

2 X 2.5 sq. mm + 1 X 2.5 sq. mm earth wire

For 254 circuit of Light average per circuit required 25 mts	254x25	6350.00 mts
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Add 95 No. Power Ckt for looping average required 10 mts	95X10	950.00 mts
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Sub-Total 7300.00 mts

Wastage 5%		365.00 mts
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Total 7665.00 mts

Say 7665.00 mts

2 X 4 sq. mm + 1 X 4 sq. mm earth wire

For 220 circuit of power/ac average per circuit required 25 mts

Wastage 5%	220x25	5500.00 mts
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Total 5775.00 mts

Say 5775.00 mts

4 X 6 sq. mm + 2 X 6 sq. mm earth wire

For 8 No. of Light DB average per DB required 45 mts

Wastage 5%	8x45	540.00 mts 27.00 mts
	Total	567.00 mts
	Say	567.00 mts
4 X 10 sq. mm + 2 X 6 sq. mm earth wire		
For 8 No. of Power DB average per DB required 45 mts		
Wastage 5%	8x45	495.00 mts 24.75 mts
	Total	519.75 mts
	Say	520.00 mts
Telephone Cable		
For 9 No. of Telephone Point average per point required 40 mts		
Wastage 5%	9x40	360.00 mts 18.00 mts
	Total Say	378.00 mts
		378.00 mts
CAT -6 Cable		
For 133 No. of CAT-6 Point average per point required 40 mts		
	133x40	5320.00 mts
For uplinks ie connecting 4 switches Wastage 5%		
	4X55	220.00 mts
	Total	5540.00 mts
	Total Say	277.00 mts
		5817.00 mts
		5817.00 mts
PVC conduit for LAN/Telephone/TV		
60% of telephone and LAN cable		
	(378+5817)*60%	3717.00 mts
Wastage 5%		185.85 mts
	Total	3902.85 mts
	Say	3903.00 mts