

SAIRAM ENGINEERING COLLEGE

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ELECTRICAL ENERGY AUDIT

Block :E
Floor No :G

Sl. No	EQUIPMENT	LOCATION	ELECTRICAL MACHINES	CORRIDOR	SURVEY LABORATORY	CLASS ROOM	CLASS ROOM	CLASS ROOM	GENTS TOILET	QUANTITY	POWER CONSUMPTION PER QTY (W)	TOTAL POWER CONSUMPTION (W)
1	Light	Incandescent Lamp								0	60	
		Fluorescent Light	23	8	6	6	6	6	2	57	40	2280
		CFL								0	20	
		LED								0	10	
2	Fan	Ceiling Fan	27		7	7	7	7		55	60	3300
		Pedestal Fan								0	60	
		Wall mounted Fan								0	60	
		Exhaust Fan								0	60	
3	Socket	5A	8		2	2	2	2		16	1000	16000
		15A	26			2	2	2		32	3000	96000
4	AC (Number and Capacity)	Split AC								0	1200	
		Window AC								0	1200	
5	UPS(kVA)	5kVA								0	900	
		0.5kVA								0	900	

Sl. No	EQUIPMENT	LOCATION	ELECTRICAL MACHINES	CORRIDOR SURVEY	LABORATORY	CLASS ROOM	CLASS ROOM	CLASS ROOM	GENTS TOILET	QUANTITY	POWER CONSUMPTION PER QTY (W)	TOTAL POWER CONSUMPTION (W)
6	Computer									0	250	
7	Printer									0	100	
8	Speaker		4			1	1	1		7	200	1400
9	Water Cooler									0	200	
10	3 Phase Load (HP)									0	745	
11	1 Phase Load (HP)									0	745	
12	Trip circuit		7			1	1	1		10	360	3600
13	Xerox Machine									0	700	
14	Television									0	200	
15	Lift			1						1	8000	8000
16	Other Equipments									0		
17	Show Light									0	15	
18	Amplifier									0	200	
19	ID Card Printer									0	150	
20	Heater									0	2000	
21	Focus Light(150W)									0	150	
22	LED Light (75W)									0	75	
23	Fingering Machine									0	50	
Total load (kW)												

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130.58

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Block :E

Floor No :1

Sl. No	EQUIPMENT	LOCATION	CLASS ROOM	CLASS ROOM	CLASS ROOM	CLASS ROOM	STAFF ROOM	CLASS ROOM	CLASS ROOM	CLASS ROOM	CLASS ROOM	CORRIDOR	GENTS TOILET	QUANTITY	POWER CONSUMPTION PER QUANTITY (W)	TOTAL POWER CONSUMPTION (W)	
		Incandecent Lamp												0	60		
1	Light	Fluorocent Light	6	6	6	6	5	6	6	6	5	7	2	61	40	2440	
		CFL													0	20	
		LED													0	10	
2	Fan	Ceiling Fan	7	7	7	7	7	7	7	7	7			63	60	3780	
		Pedestal Fan													0	60	
		Wall mounted Fan					1								0	60	
		Exhaust Fan													0	60	
3	Scket	5A	2	2	2	2	2	2	2	2	2			18	1000	18000	
		15A	2	2	2	2	2	2	2	2	2			18	3000	54000	
4	AC (Number and Capacity)	Split AC												0	1200		
		Window AC												0	1200		
		0.5kVA												0	900		

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DEPARTMENT

EL

Block :E

Floor No :2 _____

Sl. No	Equipment	Location	CLASS ROOM	CLASS ROOM
1	Light	Incandescent lamp		
		Fluorescent Light	8	8
		CFL		
		LED		
2	Fan	Ceiling Fan	6	6
		Pedestal Fan		
		Wall mounted Fan		
		Exhaust Fan		
3	Scoke	5A	2	2
		15A	2	2
4	AC (Number and Capacity)	Split AC		
		Window AC		

5	UPS(kVA)		
6	Computer		
7	Printer		
8	Speaker	1	1
9	Trip	2	2
Total (KW)=			

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CLASS ROOM	CLASS ROOM	STAFF ROOM	CLASS ROOM	CLASS ROOM	CLASS ROOM	CLASS ROOM	GENTS TOILET	CORRIDOR	QUANTITY	POWER CONSUMPTION PER QTY (W)	TOTAL POWER CONSUMPTION (W)
									0	60	0
8	8	8	8	8	8	8	2	7	81	40	3240
									0	20	0
									0	10	0
6	6	6	6	6	6	6	0	0	54	60	3240
								0	0		0
		1						0	1	60	60
									0		0
2	2	14	2	2	2	2	0	0	30	1000	30000
2	2	1	2	2	2	2	0	1	18	1200	21600
									0	1200	0
									0	3500	0

		3							3	1000	3000
		3							3	250	750
									0	100	0
1	1	1	1	1	1	1	0	0	9	200	1800
2	2	2	2	2	2	2	0	0	18	360	6480
70.17											

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Block :E
Floor No :3

Sl. No	Equipment	Location	Location							QUANTITY	POWER CONSUMPTION PER QTY (W)	TOTAL POWER CONSUMPTION (W)
			SMART CLASS 1	SMART CLASS 2	ENGLISH COMMUNICATION LAB	KNOWLEDGE LAB SEC-1	INNOVATION AND ENTREPRENEURSHIP LAB SEC-2	GENTS TOILET	CORRIDOR			
1	Light	Incandescent Lamp								0	60	0
		Fluorescent Light	25	25	8	8	10	4	9	89	40	3560
		CFL								0	20	0
		LED								0	10	0
2	Fan	Ceiling Fan	0	0	0	0	6	9	5	20	60	1200
		Pedestal Fan				3				3	75	225
		Wall mounted Fan								0	60	0
		Exhaust Fan								0		0
3	Socket	5A	7	7	0	2	5	1	9	31	1000	31000
		15A	2	2	4	2	5	1	1	17	1200	20400
4	AC (Number and Capacity)	Split AC	5	5	2	3	3			18	1200	21600
		Window AC								0	3500	0

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Block :E

Floor No :4

Sl. No	Equipment		Location									GENTS TOILET	SOLAR POWER CONTROL ROOM	CORRIDOR	QUANTITY	POWER CONSUMPTION PER QTY (W)	TOTAL POWER CONSUMPTION (W)
			CLASSROOM - 1	CLASSROOM - 2	CLASSROOM - 3	CLASSROOM - 4	CLASSROOM - 5	CLASSROOM - 6	CLASSROOM - 7	CLASSROOM - 8	CLASSROOM - 9						
1	LIGHT	Fluoresent Light	4	4	4	4	4	4	4	4	4	2	2	7	47	40	1880
2	FAN	Ceiling Fan	6	6	6	6	6	6	6	6	6	0	2	0	56	60	3360
3	SOCKET	5A	2	2	2	2	2	2	2	2	2	1	0	0	19	1000	19000
		15A	2	2	2	2	2	2	2	2	2	1	4	0	23	3000	69000
4	TRIP CIRCUIT (240 V)		2	2	2	2	2	2	2	2	2	0	0	0	18	360	6480
Total load (kW)																99.72	

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ELECTRICAL ENERGY AUDIT

Block :E
Floor No :5

Sl. No	Equipment	Location	GENTS TOITEL	CORRIDOR	DRAWING HALL	QUANTITY	POWER CONSUMPTION PER QTY (W)	TOTAL POWER CONSUMPTION (W)
1	Light	Incandescent Lamp				0	60	0
		Fluorescent Light	2	4	36	2	40	80
		CFL				0	20	0
		LED		0	0	0	10	0
2	Fan	Ceiling Fan		0	48	48	60	2880
		Pedestal Fan				0		0
		Wall mounted Fan				0	60	0
		Exhaust Fan				0		0
3	Socket	5A		1	18	19	1000	19000
		15A		1	17	18	3000	54000
4	AC (Number and Capacity)	Split AC				0	1200	0
		Window AC				0	1200	0
5	UPS(3kVA)					0		0

Sl. No	Equipment	Location	GENTS TOITEL	CORRIDOR	DRAWING HALL	QUANTITY	POWER CONSUMPTION PER QTY (W)	TOTAL POWER CONSUMPTION (W)
6	Computer					0		0
7	Printer					0		0
8	Scanner					0		0
9	Water Cooler					0		0
10	3 Phase Load (HP)					0		0
11	1 Phase Load (HP)					0		0
12	Fax					0		0
13	Xerox Machine					0		0
14	Trip circuit				18	18	360	6480
15	Lift					0		0
16	Other Equipments					0		0
17	Projector					0	410	0
18	Switch Rack(Router)					0	200	0
19	Speaker					0	300	0
Total load (kW)								82.44

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ELECTRICAL ENERGY AUDIT

E BLOCK-CONSOLIDATED REPORT

Sl. No	Equipment	Location	Ground Floor	I Floor	II Floor	III Floor	IV floor	V Floor	Total watts
1	Light	Incandescent Lamp	0	0	0	0	0	0	0
		Fluoresent Light	2280	2440	3240	3560	1880	80	13480
		CFL	0	0	0	0	0	0	0
		LED	0	0	0	0	0	0	0
2	Fan	Ceiling Fan	3300	3780	3240	1200	3360	2880	17760
		Pedestal Fan	0	0	0	225	0	0	225
		Wall mounted Fan	0	0	60	0	0	0	60
		Exhaust Fan	0	0	0	0	0	0	0
3	Scket	5A	16000	18000	30000	31000	19000	19000	133000
		15A	96000	54000	21600	20400	69000	54000	315000
4	AC (Number and Capacity)	Split AC	0	0	0	21600	0	0	21600
		Window AC	0	0	0	0	0	0	0
5	UPS(kVA)		0	0	3000	11000	0	0	14000
6	Computer		0	250	750	28750	0	0	29750
7	Printer		0	100	0	200	0	0	300
8	Scanner		0	0	0	0	0	0	0
9	Water Cooler (500W)		0	0	0	0	0	0	0
10	3 Phase Load (HP)		0	0	0	0	0	0	0

Sl. No	Equipment	Location	Ground Floor	I Floor	II Floor	III Floor	IV floor	V Floor	Total watts
11	1 Phase Load (HP)		0	0	0	0	0	0	0
12	Fax		0	0	0	0	0	0	0
13	Xerox Machine		0	0	0	0	0	0	0
14	Television		0	0	0	0	0	0	0
15	Lift		8000	0	0	0	0	0	8000
16	Other Equipments		0						0
17	Show Light		0						0
18	Amplifier		0						0
19	ID Card Printer		0						0
20	Heater		0						0
21	Focus Light(150W)		0						0
22	LED Light (75W)		0						0
23	Fingering Machine		0						0
24	Switch Rack(router)			0			0		0
25	Roneo Machine			0					0
26	DOT MATRIX Printer			0					0
27	Water Cooler			0		0			0
28	Fridge				0				0
29	Stabilizer				0				0
30	Projector					820	0		820
31	Water Cooler								0
32	Trip circuit		3600	3600	6480	1800	6480	6480	
33	Speaker		1400	2000	1800	5200	0		10400
Total load in W			130.58	84.17	70.17	125.76	99.72	82.44	592.84

SAIRAM ENGINEERING

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ELECTRICAL ENERGY

E BLOCK-CONSOLIDATED RI

S.No	Floor
1	Ground floor
2	I-floor
3	II-floor
4	III-floor
5	IV-floor
6	V-floor
Total load in W	

E-BLOCK TOTAL ENERGY USED PER DAY

GROUND FLOOR UNIT/day = 389.36units

FIRST FLOOR UNIT/day = 298.56units

SECOND FLOOR UNIT/day = 160.32units

➤ **All the above calculations are approximate value.**

3 COLLEGE

TRONICS ENGINEERING

AUDIT

REPORT

Total loads in W
130.58
84.17
70.17
125.76
99.72
82.44
592.84