



*SETH HIRACHAND MUTHA COLLEGE OF
ARTS, COMMERCE & SCIENCE*

ENERGY AUDIT REPORT

Audited by:

Mangalmurti Electrical Services

Govt. License No.: M.C. 24940

Residential, Commercial & Industrial HT.LT. electrical Works

Energy management Report

Energy management is the means to control and reduce an organization's energy consumption. And controlling and reducing organization's energy consumption is important because it enables to: reduce costs – this is becoming increasingly important as energy costs rise.

The audit team assessed the number of electrical appliances and their respective uses in terms of consumption of energy.

Based on the assessment suggestions and recommendations were made.

Sr. No.	Name of the instruments	Number of the instruments	Power Use/Appliance
1	Magnetic Stirrer	01	01 Watt/hour
2	Electric Bell	03	02 Watt/Day
3	Fridge	01	100-250 watt/hour
4	Exhaust Fan	05	30-40 watts/hour
5	Centrifuge	02	180 Watt/hour
6	Mixer Grinder	01	750 Watts /hour
7	Weighing Balance	01	10 Watt/day
8	Incubator	01	150 Watt/hour
9	Photoelectric Colorimeter	03	230 V, 50 Hz. AC/hour
10	Wi-Fi Modem	03	2 to 20 Watt/Day
11	Computer	41	60-250 Watt/Day
12	Microwave	01	800 Watt/hour
13	Water Bath	01	1000 Watt/hour
14	Fan	170	75 Watt/hour
15	LED Bulb	03	7-10 Watt/hour
16	LED Tube	49	20 Watt /hour
17	CFL	02	15 Watt/hour
18	Speaker	03	100 Watt/hour
19	Projector	04	150 Watt/ hour
20	ACs	06	1,000 watts per one

			ton/hour
21	Bulb	08	40 Watt/hour
22	Printer	06	10-50 watt/Day
23	LPG Per Month	01	-
24	Wi-Fi Modem	03	2 to 20 Watt/Day
25	Photocopier	01	115 Watt/hour
26	Scanner	02	10 - 50 Watt/Day
27	Barcode Reader	NA	NA
28	PH Meter	02	
29	Digital Potentiometer	03	
30	Spectrophotometer	01	
29	Sodium Lamp	01	3.57 Watt/hour
30	Mercury Lamp	01	1.82 Watt/hour
31	Galvanometer	01	10 Watt/hour
32	Televisions	01	50 Watt/Day
33	CCTV Cameras	44	02 Watt to 15 watt./Day
34	Induction plate	01	1900 Watt/hour
35	LED Flood Light	40	100 Watt/hour
36	LED Street Light	25	25 Watt/hour
37	Inverter	03	35 Watt/Day
38	Generator	01	2500 Watt/Day

Energy Usage of Ceiling LED Used In different sections of College

Sr. No.	Room	Ceiling LED	Average uses per day	Average uses per month
1	1	4	8 Hour	208 Hour
2	2	4	8 Hour	208 Hour
3	3	4	8 Hour	208 Hour
4	4	4	8 Hour	208 Hour
5	5	4	8 Hour	208 Hour
6	6	4	8 Hour	208 Hour
7	7	4	8 Hour	208 Hour
8	9	4	8 Hour	208 Hour
9	10	4	8 Hour	208 Hour
10	15	4	8 Hour	208 Hour
11	17	4	8 Hour	208 Hour

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12	101	-	8 Hour	208 Hour
13	102	-	8 Hour	208 Hour
14	103	-	8 Hour	208 Hour
15	104	-	8 Hour	208 Hour
16	105	-	8 Hour	208 Hour
17	106	-	8 Hour	208 Hour
18	107	-	8 Hour	208 Hour
19	108	-	8 Hour	208 Hour
20	112	-	8 Hour	208 Hour
21	113	-	8 Hour	208 Hour
22	115	-	8 Hour	208 Hour
23	IT Lab	-	8 Hour	208 Hour
24	NSS	-	8 Hour	208 Hour
25	STAFF ROOM	-	8 Hour	208 Hour
26	IQAC	-	8 Hour	208 Hour
27	AUDITORIUM	30	8 Hour	208 Hour
28	GYMNASIUM	-	8 Hour	208 Hour
29	Library	16	8 Hour	208 Hour
30	Common Room	-	8 Hour	208 Hour
31	Reception Room	2	8 Hour	208 Hour
32	Principal Cabin	4	8 Hour	208 Hour
33	Chairman Cabin	2	8 Hour	208 Hour
34	Bio lab	-	8 Hour	208 Hour
35	Chemistry Lab	-	8 Hour	208 Hour
36	Kitchen	-	8 Hour	208 Hour
37	Physics Lab	-	8 Hour	208 Hour

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Energy Usage Of LED Tube Used In different sections of College

Sr. No.	Room	LED Tube	Average uses per day	Average uses per month
1	1	-	-	-
2	2	-	-	-
3	3	-	-	-
4	4	-	-	-
5	5	-	-	-
6	6	-	-	-
7	7	-	-	-
8	9	-	-	-
9	10	-	-	-
10	15	1	8 Hour	208 Hour
11	17	-	-	-
12	101	2	8 Hour	208 Hour
13	102	-	-	-
14	103	1	8 Hour	208 Hour
15	104	1	8 Hour	208 Hour
16	105	3	8 Hour	208 Hour
17	106	2	8 Hour	208 Hour
18	107	1	8 Hour	208 Hour
19	108	0	8 Hour	208 Hour
20	112	2	8 Hour	208 Hour
21	Corridor	1	8 Hour	208 Hour
22	Ground Floor	6	8 Hour	208 Hour
23	IT Lab	5	8 Hour	208 Hour
24	NSS	1	8 Hour	208 Hour
25	STAFF ROOM	4	8 Hour	208 Hour
26	IQAC	-	-	-
27	AUDITORIUM	-	-	-
28	GYMNASIUM	-	-	-
29	Washroom (2 nd Floor)	1	8 Hour	208 Hour
30	Common Room	2	8 Hour	208 Hour

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31	Terrace	1	8 Hour	208 Hour
32	Watchman	1	8 Hour	208 Hour
33	Washroom(Outside)	1	8 Hour	208 Hour
34	Bio lab	6	8 Hour	208 Hour
35	Chemistry Lab	5	8 Hour	208 Hour
36	Kitchen	1	8 Hour	208 Hour
37	Physics Lab	1	8 Hour	208 Hour

Energy Usage of LED Bulbs Used In different sections of College

Sr. No.	Room	LED Tube	Average uses per day	Average uses per month
1	Corridor	2	8 Hour	208 Hour
2	Washroom	1	8 Hour	208 Hour

Energy Usage of Used In Fans different sections of College

Sr. No.	Room	Fans	Average uses per day	Average uses per month
1	1	4	8 Hour	208 Hour
2	2	4	8 Hour	208 Hour
3	3	4	8 Hour	208 Hour
4	4	4	8 Hour	208 Hour
5	5	4	8 Hour	208 Hour
6	6	4	8 Hour	208 Hour
7	7	4	8 Hour	208 Hour
8	9	4	8 Hour	208 Hour
9	10	4	8 Hour	208 Hour
10	15	3	8 Hour	208 Hour
11	17	3	8 Hour	208 Hour
12	101	4	8 Hour	208 Hour
13	102	4	8 Hour	208 Hour
14	103	4	8 Hour	208 Hour
15	104	4	8 Hour	208 Hour

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16	105	8	8 Hour	208 Hour
17	106	8	8 Hour	208 Hour
18	107	4	8 Hour	208 Hour
19	108	4	8 Hour	208 Hour
20	112	8	8 Hour	208 Hour
21	113	7	8 Hour	208 Hour
22	115	4	8 Hour	208 Hour
23	IT Lab	3	8 Hour	208 Hour
24	NSS	1	8 Hour	208 Hour
25	STAFF ROOM	7	8 Hour	208 Hour
26	IQAC	2	8 Hour	208 Hour
27	AUDITORIUM	8	8 Hour	208 Hour
28	GYMNASIUM	2	8 Hour	208 Hour
29	Library	16	8 Hour	208 Hour
30	Common Room	1	8 Hour	208 Hour
31	Reception Room	1	8 Hour	208 Hour
32	Principal Cabin	2	8 Hour	208 Hour
33	Chairman Cabin	2	8 Hour	208 Hour
34	Bio lab	8	8 Hour	208 Hour
35	Chemistry Lab	8	8 Hour	208 Hour
36	Kitchen	1	8 Hour	208 Hour
37	Physics Lab	7	8 Hour	208 Hour

Energy Usage Of ACs Used In different sections of College

Sr. No.	Room	ACs	Average uses per day	Average uses per month
1	10	01	8 Hour	208 Hour
2	Principal Cabin	01	8 Hour	208 Hour
3	Chairman Cabin	01	8 Hour	208 Hour

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4	Conference Room	01	8 Hour	208 Hour
5	IT Lab	02	8 Hour	208 Hour

Findings

- Number of gas cylinders used – 01/ month.
- Cost of Gas cylinders used – Rs. 26160/- year (Rs. 2180 /cylinder).
- Average monthly amount paid for electricity during the last three years – Rs. 33,000/-
- Monthly amount paid for electricity and gas – Rs. 35,180 Rs. /-
- Cost of generator fuel – Rs 1,26,277/-month.

For Mangal Murti Electrical Services



Proprietor