

ENERGY & SAFETY AUDIT REPORT

JUNE – 2021

Ladies Hostel

Dr. D.Y.Patil Medical College, Kolhapur.



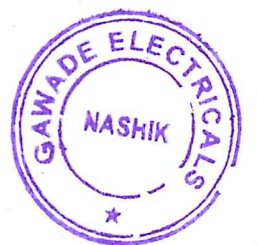
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Summery : Ladies Hostel.

Ladies Hostel			
1	"A" Building	9200 W	9.200 KW
2	"B" Building	5962 W	5.962 KW
3	"C" Building	11955 W	11.955 KW
	Total	30337 W	30.337 KW



Ladies Hostel Campus

Details of the energy meter are as mentioned below:

Type of Supply	LT- 11KV	Billing Unit	4019
Category	LT-X PUBLIC SERVICES 20-50KW	Meter Number	065-05840619
Sanctioned Load	30 KW	Connected Load	30 KW
Tariff	88 LT-VII B I	Meter Number	01531608178
Supply At	LT	Urban / Rural	Urban

Distribution Transformer Details:

Manufacturer: Not Known.(This is a Common distribution Transformer)

Rated KVA: 63 / or 100 / or 200 KVA.

SYSTEM DETAILS: Distribution Boxes are meant for control and protection of Distribution Transformers with relevant parameters as under:-

S.N.	Particulars	Details
1.	KVA rating	63 KVA/ 100 KVA /200 KVA
2.	Voltage	433 V, 3 Ph, (3x 250 V)
3.	Frequency	50 HZ
4.	Phases	3 phase, solidly grounded neutral
5.	Approximate full load current of transformer	84 A / 133 A / 270 A
6.	No. of Outgoing circuits	2 no.s 3 no.s

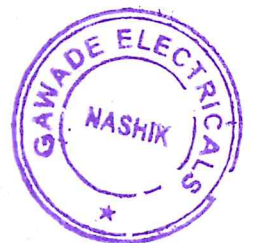


Bill Month	Consumption (Units)	Bill Amount
Jul 2021	598	11589.84
Jun 2021	891	16014.67
May 2021	1,734	24977.14
Apr 2021	3,899	58198.13
Mar 2021	5,384	80684.58
Feb 2021	4,100	61310.79
Jan 2021	3,466	51405.16
Dec 2020	3,425	50779.27
Nov 2020	618	7996.90
Oct 2020	955	13073.23
Sep 2020	1,022	14164.20
Aug 2020	1,311	18507.79
Unit cost	15.11/-	
Total	27403	408701
Average	2283	34508

DG Set Information

Manufacturer	Greaves Power
KVA	45
KW	36
Volts	415, 3 Phase, 50Hz
Amps	63 A
RPM	1500
Power Factor	0.8

Note: No fire extinguishers found nearby Generator. Two number of six kg capacity, ABC type fire extinguishers are necessary nearby DG Set, in case of emergency.



Office:

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Tube light	55(W)	3	165	
Ceiling Fan	80 (W)	1	80	
CPU +Display	175 W	1	175	
DVR	35 W	1	35	
Total			455 W	

Pump House:

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Tube light	20 (W)	3	60	
Motor-Pump set	2250 W	1	2250	
Total			2310 W	

Guard Room:

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Tube light	20(W)	1	20	
Ceiling Fan	80 (W)	1	80	
LED Bulb	10 W	1	10	
Finger Print Scanner	5 W	1	5	
Total			455 W	

"C" Wing

Ground Floor:

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Passage				
Tube light	20 W	2	40	
Study room				
Tube light	55 W	2	110	
Ceiling Fan	80 W	1	80	
Reception Room				
Tube light	55 W	2	110	
Ceiling Fan	80 W	1	80	
Water cooler	100 W	1	100	
Laundry				
Tube light	20 W	2	40	
Wall Fan	50 W	1	50	
Washing machine	750 W	1	750	



Dryer	750 W	1	750	
Motor pump set	375 W	1	375	
Tube light	20 W	2	40	Out side
Staircase light				
Bulb	40 W	1	40	
First Floor (9 Rooms: 1 to 9)				
Tube light	20 W	1	20	Passage
Tube light	20 W	2	40	
Ceiling Fan	80 W	1	80	
			120 X9=1090 W	
LED Bulb	10 W	4	40	Bathroom
Geyser	2000 W	1	2000	
Second Floor (9 Rooms: 10 to 19)				
Tube light	20 W	1	20	Passage
Tube light	20 W	2	40	
Ceiling Fan	80 W	1	80	
			120 X9=1090 W	
LED Bulb	10 W	4	40	Bathroom
Geyser	2000 W	1	2000 W	
Third Floor(9 Rooms: 20 to 29)				
Tube light	20 W	1	20	Passage
Tube light	20 W	2	40	
Ceiling Fan	80 W	1	80	
			120 X9=1090 W	
LED Bulb	10 W	4	40	Bathroom
Geyser	2000 W	1	2000 W	
Total			11955 W	

"B" Wing

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Tube light	55 W	1	55	
Tube light	20 W	4	80	
TV set	80 W	1	80	
Set top Box	17 W	1	17	
Electric motor	375 W	2	750	
Parents room				
Tube light	55 W	2	110	
Ceiling Fan	80 W	2	160	



Store (next to Office)				
Tube light	55 W	1	55	
First Floor (5 Rooms)				
Tube light	55 W	1	55	Passage
Tube light	55 W	2	110	Room
Ceiling Fan	80 W	1	80	Room
LED Bulb	10 W	4	40	2bathroom
			190 x 5= 950	
Second Floor (9 Rooms)				
Tube light	55 W	1	55	Passage
Tube light	55 W	2	110	Room
Ceiling Fan	80 W	1	80	Room
LED Bulb	10 W	4	40	2bathroom
			190 x 9= 1710	
Third Floor(9 Rooms)				
Tube light	55 W	1	55	Passage
Tube light	55 W	2	110	Room
Ceiling Fan	80 W	1	80	Room
LED Bulb	10 W	4	40	2bathroom
			190 x 9= 1710	
Total			5962 W	

"A" Wing

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Ground Floor (7 Rooms: 1 to 7)				
Tube light	20 W	3	60	Passage
Tube light	20 W	2	40	Room
Ceiling Fan	80 W	1	80	Room
Zero W Bulb	15 W	1	15	Room
LED Bulb	10 W	4	40	2 Bathrooms
Geyser	2000 W	1	2000	
Total			3045 W	
First Floor (11 Rooms: 8 to 11)				
Tube light	20 W	1	20	Passage
Tube light	20 W	2	40	Room
Ceiling Fan	80 W	1	80	Room
Zero W Bulb	15 W	1	15	Room
LED Bulb	10 W	4	40	2 Bathrooms
Geyser	2000 W	1	2000	



Total			3545 W	
Second Floor (4 Rooms: 19 to 22)				
Tube light	20 W	3	60	Passage
Tube light	20 W	2	40	Room
Ceiling Fan	80 W	1	80	Room
Zero W Bulb	15 W	1	15	Room
LED Bulb	10 W	1	10	1 Bathrooms
Geysers	2000 W	1	2000	
Total			2610 W	

Total 9200W.

Total load on Ladies Hostel = 30337W.

For Gawade Electricals

Sanjay P. Gawade
Proprietor
(Sanjay P. Gawade)



Gawade Electricals

Sanjay P. Gawade

Certified Energy Auditor

(EA-4875) Mobile No. 9890837038

Date: 16 / 06 / 2021

Safety Audit of D. Y. Patil Medical College Ladies Hostel Building.

Branch Code and Name	D. Y. Patil Medical College Ladies Hostel
Address	875, E Ward, Raman Mala, Near Post office, Kolhapur
Sanctioned Load	30 KW
Connected Load	30 KW
Monthly amount of energy bill	Rs. 2283/-
Total Tonnage of air conditioners in branch	Not Applicable
Area of the Branch	8000 Square Feet (Approx.)

Sr. No	Description	Details	Remark
1)	Whether MCCBs/MCBs/ELCBs are provided With proper ratings to cover the load ?	Yes	
2)	Whether light and emergency light are provided in electrical rooms, operating areas for easy operation and maintenance work ?	Yes	Except DG Room
3)	Whether Pump room, DG set room, UPS room, electrical room etc. are maintained dry and in good Condition and obsolete / Hazardous / old items are not dumped there ?	Yes	Good and Dry Condition
4)	Whether water seepage is observed near any of the electrical panel, distribution boards, electrical Equipments etc. ?	Yes	Electrical switch board in store room is on the leaky wall.
5)	Whether Earthing pits are provided and connected to the equipment body of the connected equipment?	Yes	

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6)	Whether earthing pits are properly maintained ?	Yes	
7)	Whether proper exhaust fans for proper ventilation of panel room /electrical room/UPS room is provided and paper, old material /any other scrap kept near DB/Panels/UPS Batteries etc are not kept there.	Yes	Not Applicable
8)	Whether penalty is being imposed in electricity bills on account of higher load / poor power factor etc. (check electricity bills of April, May, June, July month) Additional electrical load required if any from power distribution company)	No	No penalty
9)	Whether the load is distributed in all three phases equally ? to avoid unbalancing of phases and no loose connections / Hazardous wirings observed in the branch/ office premises	Yes/No	
10)	Whether isolating switches are provided for switching off then on essential loads premises during night and main switch to switch off the power supply to the branch in case of emergency?	Yes	
11)	Whether electrical equipments of pantry etc. are properly connected to Iron Socket box with MCBs. MCBs or latest type of switches are provided to switch on / off the ACs and protect them from overload.	No	Such provision shall be made.
12)	Whether proper preventive maintenance after opening of panel	Yes	

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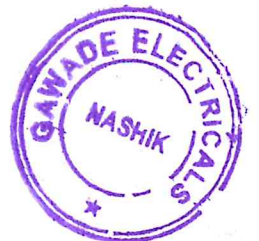
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	boards and the distribution boards are carried out by license holder electrician or skilled technicians of equipment manufacturers / service providers ?		
13)	Whether appropriate timers used in the change-over of air conditioners for server room A/Cs and for signage boards to make auto on /off. The thermostat of A/C at server room should be set to say 30 ⁰ C, so they are not run only when temperature is too high (To minimize the chances of fire due to idle running of the ACs during night)	NA	Not Applicable.
14)	Whether preventive maintenance of electric installation and equipment is carried out by skilled licensed holder electricians / skilled technicians.	Yes	
15)	General conditions of electrical panels, main switch, electric motor board and change over switch, A/Cs, water cooler, water filter, wiring cables etc. is good and all DBs, panels, switch boards are properly covered	Yes	
16)	Whether the contact numbers of persons, electricians, power distribution company, Generator service provider, vendor, UPS Vendor, A/C service provider are available with Accountant / Security guard and other staff and they are displayed in Electric room / UPS room ?	No.	Contact numbers of Maintenance persons, electricians, power distribution company, Generator service provider, vendor, UPS Vendor, A/C service provider shall be made available with main office and Security guard



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			and they are displayed in Electric room / UPS room
17)	Whether the power factor correcting panel of appropriate rating is installed? (APFC Panel)	No	
18)	Fire Prevention Measures.		
i)	All old disposable records, broken furniture etc. accumulated at the premises have been cleared?	Yes	
ii)	Combustible leaf, litter / waste papers etc. in and around the branch is covered / cleaned periodically	Yes	
iii)	No stationary / Records / old obsolete items are stored / kept in the system / UPS room.	No	
iv)	Storage racks in stationary / record room kept at a safe distance of at least 3 ft. from electrical points / switch / junction box?	Yes	
v)	In the pantry / canteen LPG gas is used?	Yes	
19)	Server and UPS room.		
i)	Server room have dual AC Units having timer circuit device with independent circuit	NA	
ii)	Whether exhaust fan installed in UPS room?	NA	
20)	Electrical safety		
i)	Power supply to record / stationary room is made through Plug and Socket arrangement?	Yes	
21)	Fire protection and Fire Control Extinguishers and Fire Alarm System		
	Are fire extinguishers available in the following work area and clearly		Only four Numbers of fire extinguishers found on

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	marked and accessible? A) System and UPS room (CO2-3/4 Kg x 2No) B) Banking Hall: Water CO2 type C) Stationary Room: Water CO2 type	A) B) C)	ground floor of the buildings. Each floor shall have at least one fire extinguisher
22)	DG Set / Generator		
	At least two 6 Kg ABC capacity fire extinguishers are placed near the DG set	No	This provision shall be made.

For Gawade Electricals


Proprietor
(Sanjay P. Gawade)

