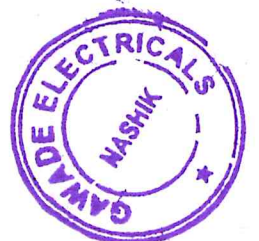


ENERGY & SAFETY AUDIT REPORT

JUNE – 2021

Boy's Hostel

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



INDEX

Sr No.	Name of the Topic	Page No.
1	Summery	3
1	Details of the energy meter	4
2	Distribution Transformer Details	4
3	DG Set Information	5
4	Office, Waiting Room, Study Room, Poarch	6
5	Laundry, "A" Building	7
6	"B" Building	8



Summery of Boys Hostel:

Boys Hostel			
1	"A" Building Consumption	2796 W	2.796 KW
2	"B" Building Consumption	9486 W	9.486 KW
	Total	16058	16.058 KW



Boys Hostel Campus

Details of the energy meter are as mentioned below:

Type of Supply	LT- 11KV	Billing Unit	4019
Category	073 ,LT VII(B) Public Service 0-20KW	Meter Number	05317146988
Sanctioned Load	13.7KW	Connected Load	13.7 KW
Tariff	88 LT-VII B I	Meter Number	05317146988
Supply At	LT	Urban / Rural	Urban

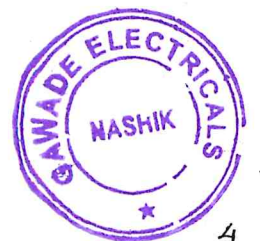
Distribution Transformer Details:

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
Sep 2021	729	5920.00
Aug 2021	738	4120.00
Jul 2021	768	4370.00
Jun 2021	776	6290.00
May 2021	832	11010.00
Apr 2021	1,986	28880.00
Mar 2021	1,545	10180.00
Total	7374	70770
Average	1053	10110
Unit cost	Rs.9.60	

DG Set Information

Manufacturer	Mahindra Powerol
KVA	20
KW	16
Volts	415, 3 Phase, 50Hz
Amps	27.8 A
RPM	1500
Power Factor	0.8

Note:

- i) 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.
- ii) Single wire earthing, earthing pits are not proper.
- iii) DG set is surrounded by grass and bushes, along with scrap material such as Shahabad tiles , scrap motor pump set etc
- iv) Found no mains connection for the maintenance person in case of emergency.



Office:

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Tube light	20(W)	1	20	
Ceiling Fan	80 (W)	1	80	
Display	45 W	1	45	
DVR	35 W	1	35	
Finger print scanner	5 W	1	5	
Total			185 W	

Waiting Room:

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Tube light	20(W)	2	40	
Ceiling Fan	80 (W)	1	80	
Wall fan	50 W	1	50	
Total			170 W	

Study Room:

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Tube light	20(W)	8	160	
Ceiling Fan	80 (W)	2	160	
Wall fan	50 W	5	125	
Total			445 W	

Poarch and Parking

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Tube light	20(W)	8	160	Poarch
LED Lamps	24 W	9	216	Parking
Total			376 W	



Laundry :

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Tube light	20(W)	1	20	
Ceiling Fan	80 (W)	1	80	
Electric iron	1000 W	1	1000	
Washing machine	750 W	1	750	
Dryer	750 W	1	750	
Total			2600 W	

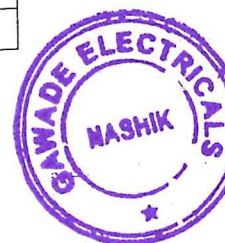
"A" building

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
First Floor				
Tube light	20 W	6	120	Passage
Tube light	6 W	6	36	Basin ,common toilet
Room Number	TL (20 W)	Fan (80 W)	TL (6 W)	
1,4,7,9	1	1	1	Attached bathroom(424 w)
2,3,5,6,8,10	1	1	-	(600 w)
Second Floor				
Tube light	20 W	5	100	Passage
Tube light	6 W	6	36	Basin ,common toilet
Room Number	TL (20 W)	Fan (80 W)	TL (6 W)	
12,14,17,19	1	1	1	Attached bathroom(424 w)
11,13,15,16,18,20	1	1	-	(600 w)
Third floor				
Tube light	20 W	2	40	Passage
Tube light	6 W	1	6	Passage
Bulb	40 W	1	40	Passage
Tube light	20 W	5	100	Room
Ceiling Fan	80 (W)	3	240	Room
Tube light	6 W	5	30	Room
Total			2796 W	



"B" Building

Electrical Load	Wattage	Numbers	Total (Watts)	Remark
Poarch				
Tube light	20 W	5	100	
Water cooler	100 W	1	100	
TV Room				
Tube light	20 W	2	40	
Ceiling Fan	80 W	1	80	
Wall Fan	50 W	1	50	
TV	110 W	1	110	
Sports Room				
Tube light	20 W	2	40	
Wall Fan	50 W	3	150	
Canteen kitchen				
Tube light	20 W	4	80	
Wall Fan	50 W	2	100	
exhaust Fan	70 W	1	70	
Fridge	200 W	1	200	
Pulverizer	750 W	1	750	
Mixer	1300 W	1	1300	
Water heater	2000 W	1	2000	
Induction Heater	1200 W	1	1200	
Dining Room				
Tube light	20 W	6	120	
Ceiling Fan	80 W	1	80	
Wall Fan	50 W	3	150	
"B" building first floor passage				
Tube light	20 W	4	80	
Tube light	6 W	10	60	
First Floor Rooms: 8 Rooms(1 to 8)				
Tube light	20 W	8	160	
Ceiling Fan	80 W	8	640	
"B" building second floor passage				
Tube light	20 W	4	80	
Tube light	6 W	5	30	
second Floor Rooms: 8 Rooms(9 to 16)				
Tube light	20 W	8	160	
Ceiling Fan	80 W	8	640	
"B" building Third floor passage				
Tube light	20 W	4	80	
Tube light	6 W	5	30	

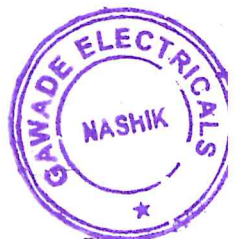


Third Floor Rooms: 8 Rooms(17 to 24)				
Tube light	20 W	8	160	
Ceiling Fan	80 W	8	640	
Fourth floor				
Tube light	6 W	1	6	
Total			9486 W	

Total load of Boys Hostel = 16058 W.

For Gawade Electricals

S. P. Gawade
Proprietor
(Sanjay P. Gawade)



Gawade Electricals

Sanjay P. Gawade

Certified Energy Auditor

(EA-4875) Mobile No. 9890837038

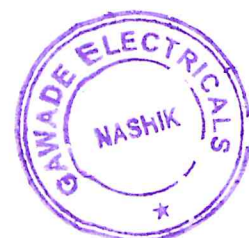
Date: 15 / 06 /2021

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

Branch Code and Name	D.Y. Patil Medical College Boys Hostel,
Address	B/E /7 Fernandis Plot, Sadar Bazar, Kolhapur
Sanctioned Load	13.7 KW
Connected Load	13.7 KW
Monthly amount of energy bill	Rs. 10110/- (Average Bill)
Total Tonnage of air conditioners in branch	-NA-
Area of the Branch	7000 Square feet (Approximately)

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	
4)	Whether water seepage is observed near any of the electrical panel, distribution boards, electrical equipments etc. ?	No	
5)	Whether Earthing pits are provided and connected o the equipment body of the connected equipment?	No	Earthing pits shall be provided.
6)	Whether earthing pits are properly	No	To improve the

Gawade Electricals: Shop No.203,Gangamai Industrial Estate, MIDC Satpur Nasik-422007



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Date: 15 / 06 /2021

	maintained ?		quality of earthing pour a bucketful water +10 kg salt regularly once in a month time in earth pit.
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	No UPS
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	
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	
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	Provision should be made
12)	Whether proper preventive maintenance	Yes	

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	after opening of panel 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 Hostel office / Security guard and other staff and they are displayed in Electric room / UPS room ?	Yes	Contract number list shall be displayed in hostel office 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	No	Old Benches, New

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	etc. accumulated at the premises have been cleared?		cupboards, Scrapped fans are dumped in parking area.
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?	NA	
v)	In the pantry / canteen LPG gas is used?	Yes	
19)	Server and UPS room.		
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?	NA	
21)	Fire protection and Fire Control Extinguishers and Fire Alarm System		
	Are fire extinguishers available in the following work area and clearly 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)	There are total Four numbers of extinguishers presently kept. One extinguisher on each floor shall be installed.
22)	DG Set / Generator		
	At least two 6 Kg ABC capacity fire extinguishers are placed near the DG set	NO	Two 6 Kg ABC capacity fire extinguishers shall be placed near the DG set.

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For Gawade Electricals

(Signature)
Proprietor
(Sanjay P. Gawade)

