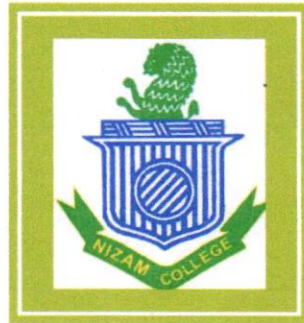


NIZAM COLLEGE (AUTONOMOUS)

HYDERABAD-500001

ENERGY MANAGEMENT AUDIT REPORT



**Prepared by
Energy Management Assessment Team
for the year
2022-23**



Certificate

HYM International Certifications Pvt. Ltd.

Certified that the Energy Management System of

NIZAM COLLEGE (AUTONOMOUS)

A CONSITUENT COLLEGE OF OSMANIA UNIVERSITY

Basheerbagh, Hyderabad - 500 001, Telangana State, India

has been assessed and found to be in accordance with the requirements of the Energy standards

ISO 50001 : 2018

for the following scope of certification

IMPLEMENTATION OF ENERGY SAVING PRACTICES

Further information about the scope of this certificate and applicability of ISO 50001 : 2018 requirements may be obtained by consulting the organization.

Issue Date : 10/06/2021

Renewal Date : 09/06/2024

1st Surveillance 09/06/2022



2nd Surveillance 09/06/2023



Authorised Signature

Certificate No : **En91864140117**

HYM International Certifications Pvt. Ltd

NOTE: This Certificate is Valid From 09/06/2022 to 09/06/2023

This is an accredited certificate authorized for issue by Accreditation Service for Certifying Bodies [Europe] Limited who have assessed M/s.HYM International Certifications Pvt. Ltd. against defined criteria and in cognisance of ISO 17021:2015 "Conformity Assessment - Requirements for bodies providing audit and Certification of management Systems".

www.hymcertifications.com on for checking the validation of the Certification

Regd. Office : Plot No. 265/C, Addagutta Society, Opp. JNTU, Kukatpally, Hyderabad - 500 072, Telangana State, India.
E-mail: siva@hymcertifications.com, Website: www.hymcertifications.com

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PRINCIPAL'S MESSAGE

Nizam College energy audit report presents the findings, recommendations, and potential energy-saving opportunities identified through a comprehensive assessment of the facilities and practices at Nizam College. The audit aimed to analyze energy usage patterns, identify areas of inefficiency, and propose actionable strategies to enhance energy conservation and reduce operational costs. The audit outlines the importance of energy conservation and the potential benefits for the college including cost savings, environmental sustainability, and regulatory compliance.

Analysis of energy consumption data for electricity, natural gas, water, and other relevant resources was done by examining utility bills and metering data, the audit determines baseline energy usage profiles and benchmarks performance against industry standards. The audit explores the feasibility of integrating renewable energy sources, such as solar photovoltaic (PV) systems, increasing solar panels, increasing green cover and using sensor-based technology would ensure a better environment. This energy audit report serves as a valuable roadmap for Nizam College to enhance operational efficiency, reduce energy costs, and demonstrate environmental leadership in today's competitive marketplace.

By implementing the recommended strategies and embracing a culture of sustainability, Nizam College can achieve its energy conservation goals while creating lasting value for stakeholders and the community and SAVE THE PLANET.



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ABOUT THE COLLEGE

Established in 1887 by the amalgamation of Hyderabad School and the Madarsa-i-Aliya, Nizam College is one of the oldest and most esteemed institutions of higher education in South India. It was affiliated to the University of Madras for 60 years after its inception, and was made a Constituent College of Osmania University on 19th February 1947.

Nizam College offers both undergraduate and postgraduate courses in the Faculties of Arts, Social Sciences, Commerce and Sciences in addition to professional courses such as MBA, MCA, M.Sc.(IS) and BCA. Several of our students are also pursuing doctoral and postdoctoral research. The college received the status of the College with Potential for Excellence both under the X Plan and the XI Plan period. The College is accredited by NAAC in March 2019 with 'B++' grade with a CGPA of 2.92.

The Placement Centre organizes on-campus recruitments involving industries and MNC's like Wipro, Infosys, Cognizant, Satyam, Nipuna, GE, etc. totaling to more than 25 to 50 reputed companies visit the college every year. Students come from a wide range of social status and different regions which creates a healthy atmosphere and an ambience of a global community with rich cultural exchange. Nizam College is foremost in the preference of students from various Asian and African countries. Foreign students constitute 25% of the total strength of the college.



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VISION AND MISSION

Vision

To continue as a centre of excellence in education and research, and consolidate our position as a reputed Institution of Higher Education.

Mission

• To build across the college a culture of excellence in teaching and learning, attract both global and national students and mould them into responsible future citizens through various support activities.

Core Values

- Provide the students with a teaching learning experience that develops in them the capacities for creativity, critical judgment, effective communication, and in-depth knowledge
- Enhance interaction with industry/ business /academic in teaching programmes through guestlectures, seminars, adjunct faculty programs, and industrial/business/academic internships for students
- Ensure effective evaluation of teaching/ learning curricula, co-curricular opportunities of students and teachers
- Provide incentives to teachers/learners for research and consultancy
- To develop an environment-friendly campus.
- Create innovators, leaders and entrepreneurs
- Achieve excellence in application-oriented research in different areas so as to contribute to development of the region and the nation
- Promote co-curricular activities for over-all personality development of the students
- Develop responsible citizenship through awareness and acceptance of value-based education
- Provide efficient administration and responsive support for all activities of the college
- Provide remedial courses to preferentially admitted students and special attention to the Divyangjan students.
- Ensure Gender Equity
- Build alumni family, friends to create a network of allegiance and support for college



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OBJECTIVES OF ENERGY MANAGEMENT

- To achieve and maintain optimum energy procurement and utilization, throughout the organization
- To minimize energy costs/waste without affecting production & quality
- To minimize environmental effects.
- Raising awareness of the importance of energy conservation
- Generate energy at the lowest possible rate
- Select low-investment technology to meet present requirements and environment conditions



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CHECK LIST

The purpose of this checklist is to assist in systematically reviewing energy use in the college to identify focus areas that could benefit most from “energy efficiency” programmes. It provides a clear picture of which modifications and adjustments the college could make in order to achieve optimal and energy efficient operation.

- √ Energy Committee
- √ Energy Policy
- √ Energy objectives
- √ LED lights
- √ Solar panel details and capacity
- √ Total no. of power consumables
- √ Power consumed in watts
- √ Energy conservation methods
- √ Energy saving slogans



ORDERS

The following faculty are appointed as members for the Energy Audit Committee for the year 2022-23

S. No	Name	Designation	Signature
1	Prof. B. Bhima	Principal	
2	Dr. G. Upender Reddy	Vice - Principal	
3	Dr. M. Radhika	Academic Coordinator	
4	Dr. Kaleem Ahmed Jaleeli	Dept of Physics	
5	Dr. Shashidhar Bale	Dept of Physics	
6	Dr. B. Kavitha, Faculty	Dept of Physics	
7	Dr. B. Madhavi, Faculty	Dept of Business Management	
8	Dr. S. Renuka	Dept of Mathematics	
9	Dr. B. Manju	Dept of Environmental Science	
10	Ms. S. Geetha	Deputy Registrar	
11	Dr. B. Kumar	Librarian	



Energy Audit Committee

The following faculties are appointed as members for the Energy Audit Committee for the Academic year 2022-23

S. No	Name	Designation	Signature
1	Prof. B. Bhima	Chairman & Principal, Nizam College	
2	Dr. G. Upender Reddy	Vice - Principal	
3	Dr. M. Radhika	Academic Coordinator	
4	Dr. Kaleem Ahmed Jaleeli	Member, Dept. of Physics	
5	Dr. Shashidhar Bale	Member, Dept. of Physics	
6	Dr. B. Kavitha	Member, Dept. of Physics	
7	Dr. B. Madhavi	Dept of Business Management	
8	Dr. S. Renuka	Dept of Mathematics	
9	Dr. B. Manju	Dept of Environmental Science	
10	Ms. S. Geetha	Deputy Registrar	
11	Dr. B. Kumar	Librarian	



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INTRODUCTION

Energy management: The planning and operation of systems that produce, distribute, store, and consume energy. Human civilization relies on several sources of energy: the sun, plants, and animals in various forms, the splitting of atoms, gravity, the heat of the Earth, and rocks. These sources yield numerous forms of energy, including firewood (plants) and dung (animals) nuclear power (split atoms), tidal (gravity), coal (a rock), and many more.

Sources of energy can be **abiotic** (not derived from living things) or **biotic** (derived from living things). Energy can be **renewable** (you can use it over and over) or **non-renewable** (once you use it, usually by burning it, then it is gone and you have to find more).

Different forms of energy are harnessed, stored, converted, transmitted, and utilized inside machines or in networks across vast distances. The entire system of energy that we rely on has to be managed for it to work properly.

The fundamental goal of energy management is to produce goods and provide services with the least cost and least environmental effect. The term energy management means many things to many people. One definition of energy management is: "The judicious and effective use of energy to maximize profits (minimize costs) and enhance competitive positions" (Cape Hart, Turner, and Kennedy, Guide to Energy Management Fairmont Press Inc. 1997).

Another comprehensive definition is "The strategy of adjusting and optimizing energy, using systems and procedures to reduce energy requirements per unit of output while holding constant or reducing total costs of producing the output from these systems"

Energy audits will help to understand the ways energy and fuel are used in any industry and help in identifying the areas where waste can occur and where scope for improvement exists. It would give a positive orientation to energy cost reduction, preventive maintenance, and quality control programs which are vital for production and utility activities.

AUDITING FOR ENERGY MANAGEMENT

1. List ways that you use energy in your college. (Electricity, electric stove, kettle, microwave, LPG, firewood, Petrol, diesel, and others).

A. Electricity, printers, water heater, electric stove, incubator, refrigerator etc.

2. Electricity bill amount for the last year

A. ₹19,09,847

3. Amount paid for LPG cylinders for last year

A. ₹112434

4. Weight of fire wood used per month and amount of money spent? Also, mention the t spent on petrol/diesel/others for generators.

A. We use diesel to run generators which monthly cost around ₹28000.

5. Are there any energy-saving methods employed in your college? If yes, please specify. If not, suggest some.

A. Yes, we follow energy-saving methods such as:

- Adjusting day-to-day behaviors
- Using energy efficient appliances
- Using solar energy to reduce expenses
- Using updated ventilation and air conditioning systems

6. How much money does your college spend on energy such as electricity, gas, firewood, etc. in a month?

A. ₹22400

7. How many CFL bulbs has your college installed? Mention use (Hours used/day for how many days in a month)?

A. We installed 1260 CFL bulbs, they are used 150 hours per month

8. What Energy is used by each bulb per month? (for example- 60watt bulb x 4hours x number of bulbs=kwh).

A. 2457000Kwh

9. How many LED bulbs are used in your college? Mention the use (Hours used/day for how many days in a month)

A. 300 LED bulbs are used for 200 hours in a month

10. What Energy used by each bulb per month?(Kwh).

A. 2250Kwh

11. How many incandescent (tungsten) bulbs have your college installed? Mentions use (Hours used /day for how many days in a month)

A. Replaced incandescent bulbs with LEDs

12. Energy used by each bulb per month?(Kwh).

A. 2250Kwh

13. How many fans are installed in your college? Mention use (Hours used/day for how many days in a month)

A. 850 fans are installed in our college which runs for a duration of 150 hours in a month.

14. What Energy is used by each fan per month?(kwh)

A. 9360Kwh

15. How many air conditioners are installed in your college? Mention use (Hours used/day, for how many days in a month)

A. 66 Air Conditioners are used in our college and they are used for 104 hours in a month

16. Energy used by each air conditioner per month?(Kwh).

A. 1456Kwh energy is used per month

17. How many electrical equipment including weighing balance are installed in your college? Mention the use (Hours used/day for how many days in a month)

A. There are 60 Electrical equipments in our college which are used for 100 hours per month

18. Energy used by each electrical equipment per month?(kwh).

A. 28.66Kw/hr

19. How many computers are there in your college? Mention the use (Hours used/day for how many days in a month)

A. There are around 300 computers in our college, which are used for 208 hours in a month

20. Energy used by each computer per month? (kwh)

A. 7000Kwh energy is used by each computer in a month.

21. How many photo copiers are installed by your college? Mention use (Hours used / day for how many days in a month).

A. There are around 5 photocopier machines in our college which are used for 13 hours a month

22. How many cooling apparatuses are installed in your college? Mention the use (Hours used/day for how many days in a month)

A. There are 10 cooling apparatuses in our college which are used for 30 days in a month

23. Energy used by each cooling apparatus per month? (kwh) Mention use (Hours used/day for how many days in a month).

A. 180000Kwh energy is used per month

24. Energy used by each photocopier per month? (kwh) Mention the use (Hours used /day for how many days in a month) how many inverters has your college installed? Mentions use (Hours used/day for how many days in a month)

A. 3950Kwh energy is used by each photocopier in a month

25. Energy used by each inverter per month?(kwh)

A. 2625Kwh energy is used by each inverter per month

26. How much electrical equipment is used in different labs of your college? Mention the use(Hours used/day for how many days in a month)

A. 160 pieces of equipment are used in different labs of our college which are used for 125 hours in a month

27. Energy used by each piece of equipment per month?(kwh)

A. 28.66Kwh energy is used by each piece of equipment in a month

28. How many heaters are used in the canteen of your college? Mention the use(Hours used/ day for how many days in a month)

A. A single heater used in the canteen of our college which runs approximately for 270 hours in a month

29. Energy used by each heater per month?(kwh)

A. 5400Kwh energy is used by the heater

30. No. of street lights in your college

A. There are around 24 street lights in our college

31. What Energy is used by each street light per month? (kwh)

A. 24998Kwh energy is used by them in a month

32. No. of TV in your college and hostels?

A. There is a TV in the hostel.

33. What Energy is used by each TV per month?(kwh)

A. 6200Kwh energy is used by TV in a month

34. Any other item that uses energy (Please write the energy used per month) Mention the use (Hours used /day for how many days in a month)

A. NO

35. Are any alternative energy sources/nonconventional energy sources employed / installed in your college? (Photo voltaic cells for solar energy, wind mill, energy-efficient stoves, etc.,) Specify.

A. YES

36. Do you run “switch off” drills at college?

A. Yes, we conduct switch-off drills at college on 14th December every year.

37. Are your computers and other equipment put in power-saving mode?

A. YES

38. Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby mode most of the time? If yes, how many hours?

A. YES 720Hrs

39. What are the energy conservation methods adopted by your college?

1. We adjust our day-to-day behaviors
2. We use energy-efficient appliances
3. We use solar water heaters to reduce heating expenses
4. We use updated ventilation and air conditioning systems
5. Energy conservation awareness programs are conducted

40. How many boards are displayed for saving energy awareness?

A. 30 boards are displayed in various departments of our college to bring awareness on the conservation of energy

41. How much ash is collected afterburning fire wood per day in the canteen?

A. Firewood is not used in our canteen.

ENERGY SAVING PRACTICES

1. Unplug electronics when not in use
2. Switch to LED and CFL bulbs to save energy
3. Hang clothes to dry instead of using dryers
4. Use solar Inverters rather than normal ones
5. More sensor-based lights to be used



ENERGY SAVING SLOGANS

- 🌞 Save Energy today for a brighter tomorrow
- 🌞 Save Energy and Save the Nation
- 🌞 Energy Saved is energy generated

Energy Management

S.No		Tubes/ bulbs	AC;s	LCD projectors	LED bulbs	printers	Computers	Solar Power	Energy management
1	Arabic	√	√	√	√	√	√	X	√
2	Biotechnology	√	√	√	√	√	√	X	√
3	Botany	√	√	√	√	√	√	X	√
4	Chemistry	√	√	√	√	√	√	X	√
5	Commerce	√	√	√	√	√	√	X	√
6	Computer Science	√	√	√	√	√	√	X	√
7	Economics	√	√	√	X	√	√	X	√
8	English	√	√	√	√	√	√	X	√
9	French	√	√	√	X	√	√	X	√
10	Genetics	√	√	√	√	√	√	X	√
11	Geography	√	√	√	√	√	√	X	√
12	Hindi	√	√	√	√	√	√	X	√
13	History	√	√	√	√	√	√	X	√
14	Marketing	√	√	√	X	√	√	X	√
15	Mathematics	√	√	√	√	√	√	X	√
16	MBA	√	√	√	X	√	√	X	√
17	MCA	√	√	√	√	√	√	X	√
18	Microbiology	√	√	√	√	√	√	X	√
19	Persian	√	√	√	X	√	√	X	√
20	Philosophy	√	√	√	√	√	√	X	√
21	Physical education	√	√	√	√	√	√	X	√
22	Physics	√	√	√	√	√	√	X	√
23	Political science	√	√	√	√	√	√	X	√
24	Psychology	√	√	√	√	√	√	X	√
25	Public administration	√	√	√	√	√	√	X	√
26	Sanskrit	√	√	√	√	√	√	X	√
27	Sociology	√	√	√	√	√	√	X	√
28	Statistics	√	√	√	√	√	√	X	√
29	Telugu	√	√	√	√	√	√	X	√
30	Urdu	√	√	√	√	√	√	X	√
31	Zoology	√	√	√	√	√	√	X	√
32	Hostels	√	X	√	√	√	√	proposed	√

Annexure

 12/13
 12/13
 12/13
 12/13
 12/13
 12/13

NO:02000311
 C:101229649
 NAME:THE PRINCIPAL
 ADDR:NIZAM COLLEGE
 TEN MAIDAN

17 A PH:3 LT
 CONTRACTED LOAD:10.00KW
 MNo:3619560
 NF: 1.000

READING	MONTH	STS
60658	08/11/23	01
H 86762		01
60217	11/10/23	01
H 86183		01

TS: 659 AUG: 0
 RMD: 0.84 KVA PF:0.67
 KWH:441

ENERGYCHARGES: 5469.70
 ED CHARGES: 115.00
 CUST CHARGES: 100.00
 ED : 39.34
 ED INT : 0.00
 ADDL CHARGES : 0.00
 Surchree : 0.00
 STRENT : 0.00
 AMOUNT : 5794.00
 /GAIN : 0.12
 AMOUNT : 5795.00
 ARRS
 31/03/23: 0.00
 01/04/23: 0.00
 AMOUNT : 5795.00
 DUE : 0.00
L DUE : 5795.00
 RATE : 22/11/2023
 DATE : 06/12/2023
 PAID : 21/10/2023
 ELL No.:
 ELL No.: 23431296

For AAO/ERO 5

TSSPDCL

DT:08/11/2023 TIME 12:07
 SNo:3607E/No:5 GRP:IN
 RAO :MINT COMPOUND
 SEC :SUNFOUNDRY
 AREA CODE: 27-650

S NO:02000312
 USC:101232426
 NAME:PRINCIPAL
 ADDR:NIZAM COLLEGE
 SUNFOUNDRY
 HYDERABAD

CAT:2 B PH:3 LT
 CONTRACTED LOAD:120.00KW
 MNo:648762
 NF: 1.000

IR READING	MONTH	STS
Pa 783874	08/11/23	01
KVAH 909281		01
Pv 776244	11/10/23	01
KVAH 901160		01

UNITS: 8336 DAYS: 20
 RMD: 75.98 KVA PF:0.94
 KVAH:8093 KWH:7630
 Minimum Units: 2400
 U1:234U U2:234U U3:233U
 I1: 40A I2: 45A I3: 31A
 MD DT: 09/10/23 TI:11:00

ENERGYCHARGES: 77524.00
 Rs. 8.00 for 4160
 Rs. 9.00 for 4160
 FIXED CHARGES: 45600.00
 Rs.475.00 for 96.00
 CUST CHARGES : 2000.00
 ED : 500.16
 ED INT : 0.00
 ADDL CHARGES : 177.57
 ADD Surchree : 0.00
 ADJUSTMENT : 0.00
 BILL AMOUNT : 125802.52
 LOSS/GAIN : 0.48
 NET AMOUNT : 125803.00
 ARRS

Bef 31/03/23: 0.00
 After 01/04/23: 2541.00
 TOTAL AMOUNT : 128344.00
 ACD DUE : 0.00
TOTAL DUE : 128344.00
 MATS AMOUNT:1093537.00
 DUE DATE : 22/11/2023
 DISC DATE : 08/11/2023
 LAST PAID : 21/10/2023
 AAO CELL No.:
 AOE CELL No.: 23431296

For AAO/ERO 5

TSSPDCL

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 SNo:3607E/No:5 GRP:IN
 RAO :MINT COMPOUND
 SEC :SUNFOUNDRY
 AREA CODE: 27-650

S NO:02000318
 USC:101229649
 NAME:THE PRINCIPAL
 ADDR:NIZAM COLLEGE

PHSHEER BAGH,
 CAT:17 A PH:3
 CONTRACTED LOAD:10.00KW
 MNo:3619560
 NF: 1.000

IR READING	MONTH	STS
Pa 16342	08/11/23	09
KVAH 18283		01
Pv 16342	11/10/23	09
KVAH 18283		09

UNITS: 0 AUG: 0
 RMD: 0.00 KVA PF:0.00
 KVAH:0 KWH:0

ENERGYCHARGES: 150.00
 FIXED CHARGES: 210.00
 CUST CHARGES : 100.00
 ED : 0.00
 ED INT : 0.00
 ADDL CHARGES : 0.00
 ADD Surchree : 0.00
 ADJUSTMENT : 0.00
 BILL AMOUNT : 460.00
 LOSS/GAIN : 0.00
 NET AMOUNT : 460.00
 ARRS
 Bef 31/03/23: 0.00
 After 01/04/23: 0.00
 TOTAL AMOUNT : 460.00
 ACD DUE : 0.00

TOTAL DUE : 460.00
 DUE DATE : 22/11/2023
 DISC DATE : 06/12/2023
 LAST PAID : 21/10/2023
 AAO CELL No.:
 AOE CELL No.: 23431296

For AAO/ERO 5

TSSPDCL
 DT: 08-11-2023 TIME: 12:25
 BILL NO: 00000000000000000000
 ERG: 101229757
 ERO: MINT COMPOUND
 EEO: SUN FOUNDRY
 AREA CODE: 050914 GRP: 11

4

10-02000834
 :101229757
 E: NIZAM COLLEGE
 R: SUN FOUNDRY
 ER: ERO

7 A PH: 1
 CONTRACTED LOAD: 1.00KW
 MNO: 17977730 MF: 1.000

READING	MONTH	STS
801	08/11/23	01
800	11/10/23	01

TS: 21 AUG: 0
 : 0.58

CHARGES	AMOUNT
REG CHARGES	174.30
ED CHARGES	21.00
T CHARGES	100.00
INT	1.26
ADJ CHARGES	0.00
Surcharge	0.00
ADJUSTMENT	0.00
AMOUNT	296.56
LOSS/GAIN	0.44
AMOUNT	297.00

31/03/23: 0.00
 01/04/23: 0.00
 L AMOUNT: 297.00
 DUE: 0.00

AL DUE: 297.00

DATE: 22/11/2023
 DATE: 06/12/2023
 PAID: 21/10/2023

CELL No.:
 CELL No.: 23431296

For ARO/ERO 5

TSSPDCL
 DT: 08-11-2023 TIME: 12:25
 BILL NO: 00000000000000000000
 ERG: 101229757
 ERO: MINT COMPOUND
 EEO: SUN FOUNDRY
 AREA CODE: 050914 GRP: 11

5

S: 101229757
 NAME: PRINCIPAL
 ADDR: NIZAM COLLEGE
 SUN FOUNDRY
 HYDERABAD
 CAT: 7 A PH: 1
 CONTRACTED LOAD: 1.00KW
 MNO: 17977730 MF: 1.000

IR READING	MONTH	STS
Ps 247724	08/11/23	01
KVAH 325191		01
Fv 245917	11/10/23	01
KVAH 322804		01

UNITS: 2387 AUG: 0
 RMD: 13.79 KVA FF: 0.76
 KVAH: 2387 KWH: 1897

CHARGES	AMOUNT
ENERGY CHARGES	19812.18
FIXED CHARGES	336.00
CUST CHARGES	100.00
ED	143.22
ED INT	0.00
ADJL CHARGES	0.00
ADJL Surcharge	0.00
ADJUSTMENT	0.00
BILL AMOUNT	20391.32
LOSS/GAIN	-0.32
NET AMOUNT	20391.00

31/03/23: 0.00
 01/04/23: 0.00
 TOTAL AMOUNT: 20391.00
 ACD DUE: 0.00
TOTAL DUE: 20391.00

DUE DATE: 22/11/2023
 DISC DATE: 06/12/2023
 LAST PAID: 21/10/2023

ARO CELL No.:
 ADE CELL No.: 23431296

ESOE For ARO/ERO 5

TSSPDCL
 DT: 08-11-2023 TIME: 12:54
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 EEO: SUN FOUNDRY
 AREA CODE: 050914 GRP: 11

6

CC NO: 02904918
 UCL: 101230110
 NAME: PRINCIPAL
 ADDR: NIZAM COLLEGE
 SUN FOUNDRY
 HYDERABAD
 CAT: 7A GENERAL PURPOSE
 IR MODE: -IR
 CONTRACTED LOAD: 19.00
 CONNECTED LOAD: 17.84
 MTRNO: 9177630 MF: 1.00 PH: 3

PREVIOUS	PRESENT
KVAH: 19479	214
KVAH: 1779	2580
EXPORT: 25667	852
KVAH: 0	0

DATE: 06/Oct/23 08/Nov/23
 STATUS: 01 01
 IMPD: 3236 EXPD: 116
 OF Uts: 0
 UNITS: 3128 DAYS: 33
 RMD: 17.84 KVA FF: 0.83
 BILLED DEMAND: 19.00
 KVAH: 3236 KWH: 2695

VCL R: 235.46 CUR 8:156.3
 VCL V: 235.83 CUR 8:50.2
 VCL S: 235.73 CUR 8:113.4

CHARGES	AMOUNT
ENERGY CHARGES	25996.88
FIXED CHARGES	100.00
CUST CHARGES	100.00
ELECTRICITY DUTV	184.16
ED INT	0.00
ADJL CHARGES	150.00
ADJL SURCHARGES	0.00
Int on SD	0.00
BILL AMOUNT	26739.25
LOSS/GAIN	-0.25
NET AMOUNT	26739.00

31/03/23: 0.00
 01/04/23: 0.00
TOTAL AMOUNT: 26739.00

DUE DATE: 22/11/2023
 DISC DATE: 06/12/2023
 LAST PAID: 21/10/2023

ARO CELL No.:
 ADE CELL No.: 23431296

ESOE For ARO/ERO 5

TSSPDCL
 DT: 08-11-2023 TIME: 12:54
 BILL NO: 00000000000000000000
 ERG: 101230110
 ERO: MINT COMPOUND
 EEO: SUN FOUNDRY
 AREA CODE: 050914 GRP: 11

7

S: 101230110
 NAME: PRINCIPAL
 ADDR: NIZAM COLLEGE
 SUN FOUNDRY
 HYDERABAD
 CAT: 7 A PH: 3
 CONTRACTED LOAD: 11.00KW
 MNO: 17977730 MF: 1.000

IR READING	MONTH	STS
Ps 42780	08/11/23	01
KVAH 51203		01
Fv 42271	11/10/23	01
KVAH 50667		01

UNITS: 568 AUG: 0
 RMD: 32.28 KVA FF: 0.86
 KVAH: 568 KWH: 489

CHARGES	AMOUNT
ENERGY CHARGES	4697.88
FIXED CHARGES	635.88
CUST CHARGES	100.00
ED	33.96
ED INT	0.00
ADJL CHARGES	0.00
ADJL Surcharge	0.00
ADJUSTMENT	0.00
BILL AMOUNT	5467.64
LOSS/GAIN	0.36
NET AMOUNT	5468.00

31/03/23: 0.00
 01/04/23: 0.00
TOTAL AMOUNT: 5468.00

DUE DATE: 22/11/2023
 DISC DATE: 06/12/2023
 LAST PAID: 21/10/2023

ARO CELL No.:
 ADE CELL No.: 23431296

ESOE For ARO/ERO 5

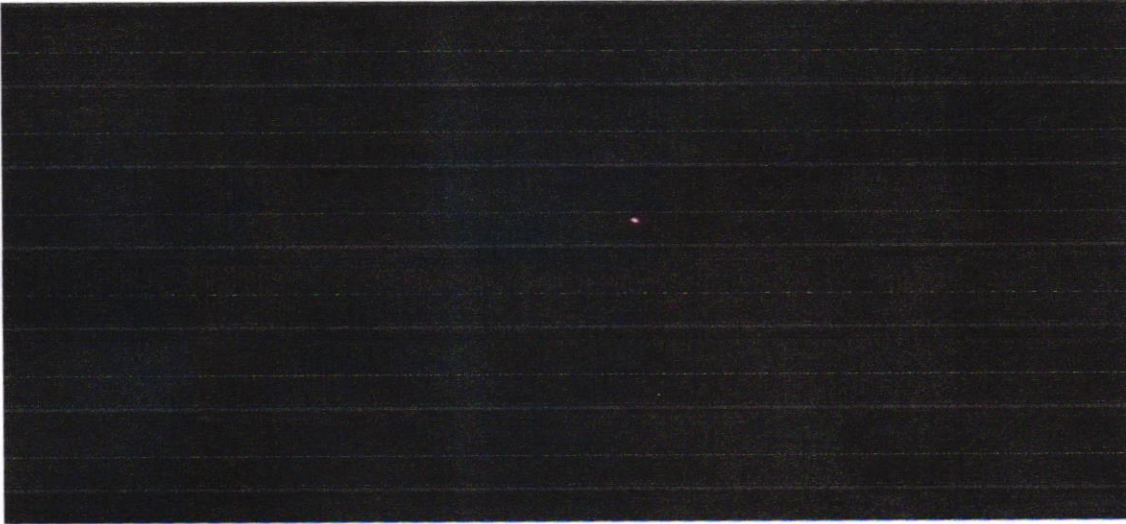
Registered by the State of Karnataka
 Last PAID DT: 21/10/2023
 ARO CELL No.:
 ADE CELL No.: 23431296
 ERO: FOR ARO/ERO 5

Register to pay via QR Code
 Amazon Pay

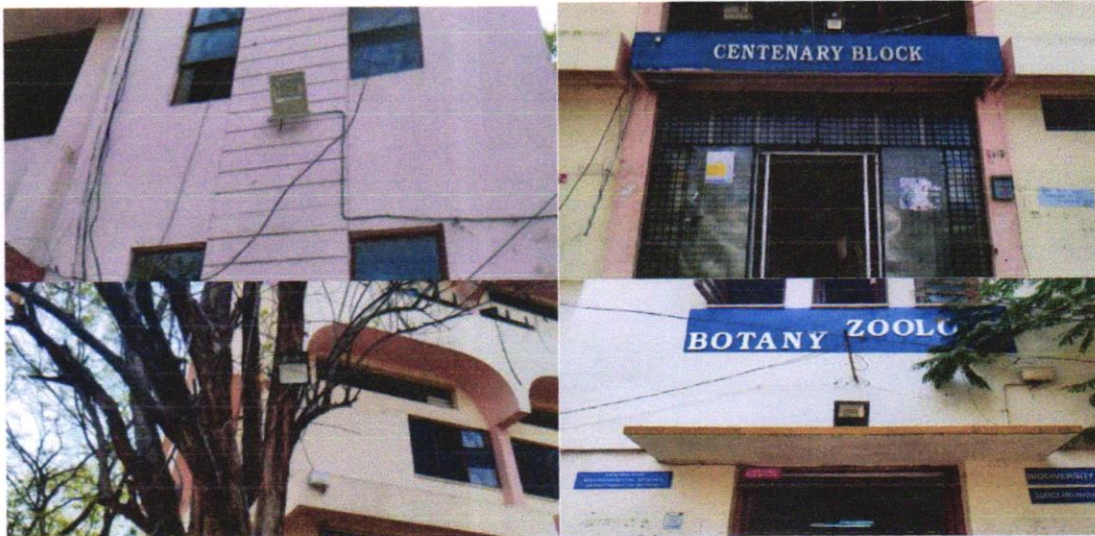
GET FLAT 25% CASHBACK

RELATED PICTURES

SENSOR BASED LIGHTS



LED LIGHTS



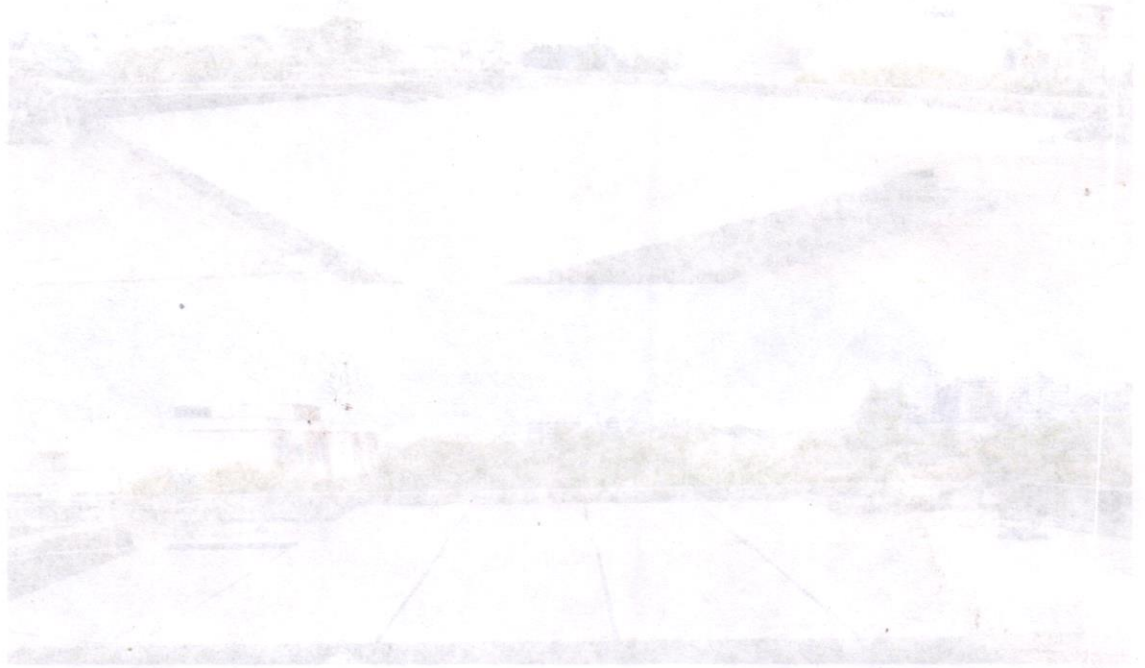
SOLAR PANELS



SUGGESTIONS

- Install more LED and sensor-based devices
- Install smart controls with sensors and automation
- Heat and cool campus buildings properly
- Conserve water on campus
- Conducting workshops on energy management
- Invited lectures from resource persons on energy management
- Awareness programs by the NSS unit of the college
- Help your buildings run smarter together





SUGGESTIONS

- The school should have a dedicated area for sports and recreation.
- The school should have a dedicated area for students to study and work.
- The school should have a dedicated area for students to play and exercise.
- The school should have a dedicated area for students to rest and relax.
- The school should have a dedicated area for students to eat and drink.
- The school should have a dedicated area for students to sleep and rest.
- The school should have a dedicated area for students to take a shower and wash.
- The school should have a dedicated area for students to take a break and recharge.

