

**GOVERNMENT DEGREE COLLEGE FOR WOMEN, HUSSAINIALAM,
HYDERABAD
TELANGANA STATE
Re-Accredited by NAAC with 'B' Grade**

**Green Audit Report
2022-2023**



**Submitted to
Commissionerate of Collegiate Education
Nampally Hyderabad**

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ACKNOWLEDGEMENT

The Green Audit team at college level is thankful to the Principal of the Govt. Degree College for Women Hussainialam, Hyderabad, who gave us the assignment to conduct a Green audit of the institution. We value the support we received throughout the process from all the faculties and students. We would especially want to thank Principal Dr. B.Sunitha Padmavathi for her warm encouragement and assistance during the entire process.

INTRODUCTION

Government Degree College for Women, Hussainialam, is a premier institution of Higher Education for women, affiliated to Osmania University. The College provides Higher Education to deserving candidates in a secular atmosphere and is committed to serve economically weak and needy students. The College is geographically close to Charminar in old city and is mostly inhabited by a particular minority community.

Sri Shamsheer Ali was the founder Principal of the College which was started in 1984 with a meager strength of 100 students and with limited infrastructure in temporary sheds. The College has made rapid progress and is presently catering to the educational needs of 2302 students. Initially the College started with B.A. and B.Com later many courses were added. Presently we are offering 20 UG courses and 01 PG course with dedicated staff who regularly conduct various activities to enhance the practical knowledge and skills of students.

The College received 2(f) & 12(B) in the year 2010 which makes the College eligible for UGC grants and it enabled to improve the infrastructure of the College. The College has well experienced Staff who play a major role in shaping the career of the students. The lecturers constantly strive for progression of students

The College has been maintaining the legacy of securing good results over the years. Each year, the College average is far ahead of the University average. Many students have brought laurels to the College by securing top ranks in the University.

VISION

The institute envisions the dream of nurturing young minds to tread the path of empowerment by making them educated holistically, socially aware and active, self-reliant, fearless in pursuit of truth and able to face the challenges in life.

MISSION

- To provide Higher Education to girl students in general and the weaker sections of minorities in particular.
- To develop a passion for knowledge and promote academic excellence in higher studies and research.
- To provide soft skills to the students and raise their level of employability.
- To provide right kind of ambience for the students to achieve their dreams and goals and make a difference to the society.
- To impart leadership qualities to the women students so that they become beacon lights to their peers and juniors.
- To inculcate moral, spiritual and social values in the students and make them responsible citizens of the nation.
- To encourage and empower women to compete in various cultural, sports competitions, self-defense programmes and develop their potential to the fullest.

COLLEGE PROFILE

Name of the College	Government Degree College for Women, Hussainialam, Hyderabad
Address	H. No. 20-3-1060, Khursheed Jah Devdi, Shah Gunj, Hussainialam, Hyderabad, Telangana 500002.
Contact Info	9154806681
Campus Area	4 Acres 9 Guntas
Built-up Area	27000 square feet

The building has ventilators for natural air flow in all rooms: Yes

The student and staff (teaching and non-teaching) strength in the college

Strength	Male	Female	Total
No. of Students	0	2302	2302
No. of Teaching Staff	05	31	36
No. of Non-Teaching staff	11	03	14

Physical Structure

The available land of the college: 4 acres and 9 Guntas.

The built-up area of the college: 27000 Sq.Ft .



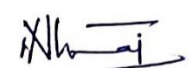





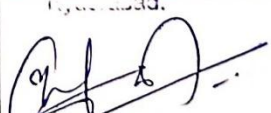
No. of Class Rooms	18
No. of Laboratories	10
No. of Conference halls	02
Library Halls	01
Auditorium	00
Canteen	01
Gymnasium	01
Any other (please specify)	Nil

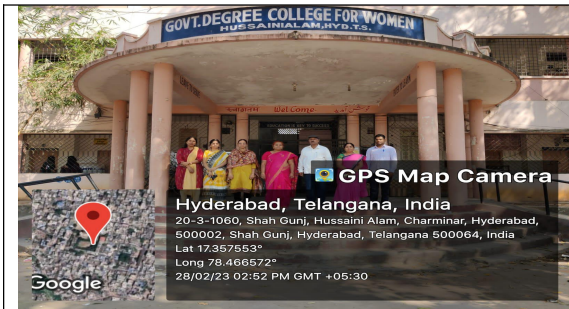
Internal Green Audit Team

Sl. No.	Name	Designation	Green Audit Committee
1	Dr. B. Sunitha Padmavathi	Principal, GDC W H Government Degree College For Women, Hussainialam	Chairperson
2	K. Sreedevi	IQAC Coordinator Government Degree College For Women, Hussainialam	Vice Chairperson
3	Dr. P. Latha	Lecturer in Botany Government Degree College For Women, Hussainialam	Coordinator
4	M. Pranitha	Asst. Prof. of Zoology Government Degree College For Women, Hussainialam	Member
5	S. Anitha	Assoc. Prof. of Zoology Government Degree College For Women, Hussainialam	Member
6	Dr.P.Venkata Ramana	Principal, GDC, Chanchalguda, Hyderabad	Special Invitee
7	B. Manga	Horticulture Officer, Urban Farming, Horticulture Department, Nampally, Hyderabad	Invitee
8	Dr.Pratibha Lakshmi	Assistant Professor –General Medicine, Osmania Medical College, Osmania General Hospital, Hyderabad	Invitee
9	Yousuf ur Rahman	Junior Assistant, Government Degree College For Women, Hussainialam	Member

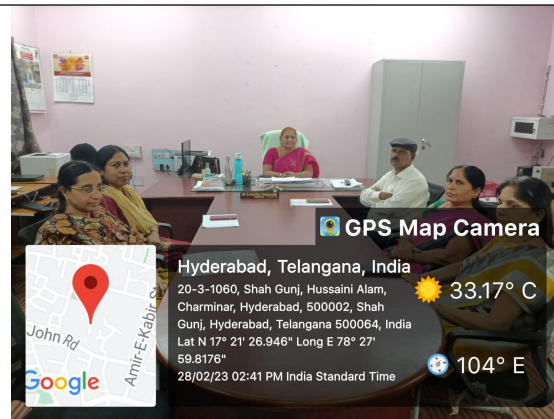
GOVERNMENT DEGREE COLLEGE FOR WOMEN, HUSSAINIALAM

Internal Green Audit Team

Sl. No.	Name	Designation	Green Audit Committee	Signature
1	Dr. B. Sunitha Padmavathi	Principal, GDC W H	Chairperson	
2	K. Sreedevi	IQAC Coordinator	Vice Chairperson	
3	Dr. P. Latha	Lecturer in Botany	Coordinator	
4	M. Pranitha	Asst. Prof. of Zoology	Member	
5	S. Anitha	Assoc. Prof. of Zoology	Member	
6	Dr.P.Venkata Ramana	Principal, GDC, Chanchalguda, Hyd	Special Invitee	 PRINCIPAL GOVT. DEGREE COLLEGE CHANCHALGUDA, HYD
7	B. Manga	Horticulture Officer, Urban Farming, Nampally, Hyd	Invitee	 Horticulture Officer GOVERNMENT GARDENS HYDERABAD. T.S.
8	Dr.Pratibha Lakshmi	Health Department	Invitee	 DR. PRATIBHA LAKSHMI Regn No. 59390 M.D.(Gen. Med) Assistant Professor - Gen. Medicine Osmania Medical College / Osmania General Hospital Hyderabad.
9	Yousuf ur Rahman	Junior Assistant	Member	



Dr.P.Venkata Ramana-Principal GDC Chanchalguda



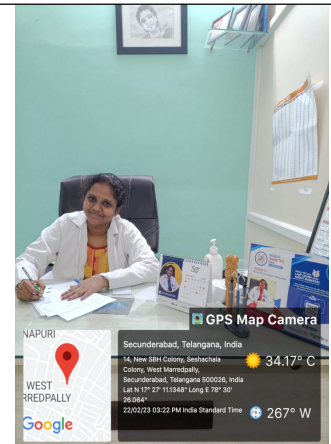
Green Audit Team



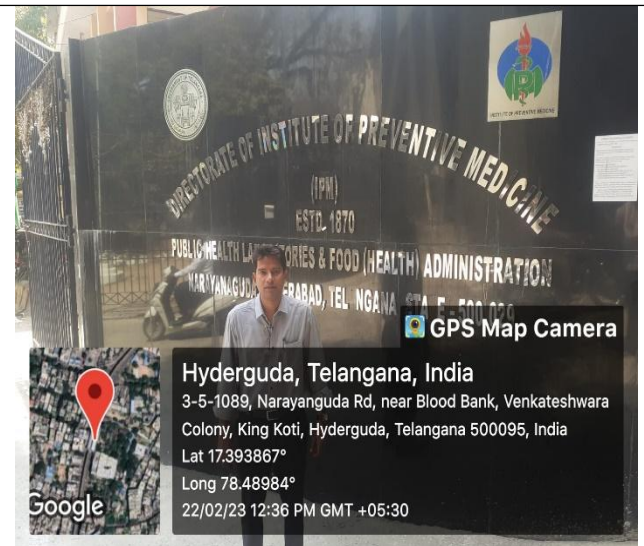
Dr.Pratibha Lakshimi-, Asst.Prof., General Medicine, Osmania General Hospital



Dr.Pratibha Lakshimi-, Asst.Prof., General Medicine, Osmania General Hospital



B.Manga- Horticulture Officer



Green Audit Committee (Students)

S.No	Roll No.	Name of the Student	Group	Year
1	1083-21-445-053	Maherunnisa	B.Sc. BZC	II
2	1083-21-445-011	Anees Fatima	B.Sc. BZC	II
3	1083-21-445-020	Daniya Maher	B.Sc. BZC	II
4	1083-21-445-094	Sana Fatima	B.Sc. BZC	II
5	1083-20-445-029	Khatija Begum	B.Sc. BZC	III
6	1083-20-445-056	Saleha Khatoon	B.Sc. BZC	III
7.	1083-20-457-023	Rafiya Begum	B.Sc. MZC	III
8	1083-20-457-043	Zehra Fatima	B.Sc. MZC	III
9.	1083-20-445-027	Sabeen Khan	B.Sc. BZC	III
10.	1083-20-457-030	Sara Fatima	B.Sc. MZC	III

GREEN AUDIT

The goal of the Green Audit is to improve the environmental state of affairs in and around educational institutions, businesses, and other organizations. To achieve the objective of become a better, more environmentally friendly institution, work is done on projects like waste management, energy conservation, and others.

GOALS OF GREEN AUDIT

Doing Green Audit has as its goal protecting the environment and reducing risks to human health.

- To ensure that laws and regulations are followed
- Securing the environment and reducing hazards to human health are the goals of doing a green audit.
- To prevent environmental disruptions that are more expensive to fix and more complex to deal.

- To make recommendations for the best practices to achieve sustainable development.

BENEFITS OF GREEN AUDIT

- Would be beneficial to develop a project to change the environment.
- Be aware of the ways of waste minimization and management which can reduce costs.
- Describes the current and impending effects on the environment.
- Assure adherence to the relevant laws.
- Provides organizations the tools they need to create greater environmental performance.
- It presents a positive image of an organization, which aids in improving connections with the group of interested parties.
- Increases awareness of environmental responsibilities and rules.

ENVIRONMENTAL POLICY OF THE COLLEGE

Government Degree College for Women, Hussainialam, Hyderabad has consistently espoused the need of upholding its own standards with regard to environmental and quality awareness. With a campus free of pollutants, it has undertaken a variety of steps to safeguard its own environment.

As an environmentally conscious institution, the college's staff and students take special care of the environment. Tree planting (Haritha Haaram) is done annually during the rainy season, and it is properly maintained. GDC (W) H Botany department is in charge of maintaining the environmental work that has been done on campus.

The GDC (W) H teaching and non-teaching staff is dedicated in carrying out its activities for sustainable development. We accomplish this by doing the following:

- i. To educate students and staff about how to appropriately use water.
- ii. To put the campus' "Rain Water Harvesting" to use.

- iii. To use ICT as much as possible while using paper as little as possible. It will contribute to the "Paperless Office" initiative.
- iv. To use campus solid waste as fertilizer by composting it with vermin.
- v. To lessen the campus noise pollution.
- vi. To preserve and care for the campus flora and fauna
- vii. To keep the campus green.

OBJECTIVES OF THE STUDY

The primary goal of conducting Green Audit is to support environmental management and conservation on college campuses. According to the relevant laws, rules, and standards, the audit's goal is to identify, quantify, explain, and prioritize the framework for environmental sustainability.

- By examining the pattern and extent of resource usage on campus, the Green Audit primary goals are to protect the environment and lessen the risks to human health.
- By preventing environmental disruptions that are more challenging to manage and expensive to repair. It would be possible to establish a baseline for evaluating future sustainability.
- To publish a report on the current state of environmental compliance.

METHODOLOGY

The technique for performing green audit involves a variety of instruments, including questionnaire preparation, a physical examination of the campus, observation and evaluation of the paperwork, key person interviews, data analysis, measurements, and suggestions. In order to summarize the current state of environment management on campus, the study includes the following topics:

1. Water management

- Raw Water
- Drinking Water
- Laboratory Waste Water

- Sewage Water
- Rain Storm Drain Water

2. Energy Conservation

- Petrol
- Diesel
- LPG
- Electricity
- Batteries

3. Waste management

- Green area management

FOCUS AREA OF STUDY

- Water management
- Air Pollution Management
- Noise Pollution Management
- Energy use & conservation
- Waste Management
- Green Belt area & Bio-diversity
- Environmental Initiative

IMPORTANT POINTS OBSERVED

1. The institution has created a green environmental policy and is working to promote sustainable growth on its campus.
2. The college has created a team of staff and students that works to preserve biodiversity on the campus and also takes part in campaigns to reduce pollution in society.
3. A plan to repair solar panels installed at the 4th floor of the college.
4. The college has conducted workshops and trainings for faculty and Students periodically on environmental awareness.
5. A vermicomposting facility has been set up at the college.

6. A program titled “Each One Plant One” was organized.

IMPORTANT RECOMMENDATIONS

1. As soon as feasible, the college would like to repair solar panels.
2. Additional energy and flow meters will be placed to track water and energy usage by building Committee.
3. Security will inspect PUC certificates for all vehicles accessing the site.
4. The college shall keep a record of all applicable legal environmental standards and follow them to the later.
5. Composting system should be used for biodegradable trash.
6. A method for managing e-waste must be implemented.

AUDITING FOR WATER MANAGEMENT

Water management involves organizing, creating, allocating, and making the best use of water resources while adhering to established water policies and laws. Management of water resources, management of flood protection, management of irrigation, and management of the water table are all included in this. It also covers management of water treatment for drinking water, industrial water, sewage, and wastewater.

1. List out uses of water in your college.

Water is used for the purpose of drinking, in laboratories, washrooms and for watering plants

2. What are the sources of water in your college?

Main source of water in our college is Bore well.

3. How many wells are there in your college?

There are no wells in the college.

4. No. of motors used for pumping water from each well?

One motor is used for pumping water from Bore well

5. What is the total horse power of each motor?

- 1Main submerged Bore well pump-3hpw

- Drinking water RO System is 1/2 HPW
- One motor pump is out of use

6. What is the depth of each well?

There are no wells in the college.

7. What is the present depth of water in each well?

There are no wells in our college

8. How does your college store water?

We store water in overhead water tanks



9. Quantity of water stored in your overhead water tank? (in litres)

4000 litres of water can be stored in four overhead water tanks

10. Quantity of water pumped every day?

2000 litres/ day.

11. If there is water wastage, specify why.

Minimum wastage of water is there if tank overflows and the waste water is used for watering plants.

12. How can the wastage be prevented / stopped?

Automatic Control System i.e. alarm bell should be installed to prevent overflowing of water tanks.

13. Locate the point of entry of water and point of exit of waste water in your College.

Bore well is the source of entry of water and sewerage pipelines are the

exit points for waste water. It is used for gardening also.

14. Where does waste water come from?

Waste water comes from washing equipment in laboratories, from RO Plant and from wash rooms.

15. Where does the waste water go?

Waste water goes out through sewerage lines and water from RO plant is supplied to plants.

16. What are the uses of waste water in your college?

Waste water is used for gardening.

17. What happens to the water used in your labs? Whether it gets mixed with ground water?

It drains out through sewerage lines. It does not get mixed up in ground water.

18. Is there any treatment for the lab water?

No. Arrangement has to be done for it.

19. Whether Green Chemistry methods are practiced in your labs?

Yes; Laboratory hazardous chemicals are dumped into a separate pit covered with soil.

20. Write down four ways that could reduce the amount of water used in your college.

Usage of water is restricted only to required amount of water and wastage is prevented in the college. We are planning to use drip irrigation system which could reduce the amount of water used for watering plants. Leakage of water from all water pipes is regularly checked by the staff.

21. Record water use from the college water meter for six months.

There is no water connection hence no meter reading to record water usage.

22. Bimonthly water charges paid to water connections if any.
There is no water connection hence no water charges to be paid.
23. No. of water coolers. Amount of water used per day? (in liters)
There are 3 water coolers in the college.
24. No. of water taps. Amount of water used per day?
Labs- 10 ,Washrooms-23 Anteroom-01 Total taps=44
25. No. of bath rooms in staff rooms, common, hostels. Amount of water used per day?
There are 5 bathrooms in staffrooms and 18 washrooms in common and 4000 litres of water is used totally per day.
26. No. of toilet, urinals. Amount of water used per day?
There are no urinals.
27. No. of water taps in the canteen. Amount of water used per day?
There is no water tap in the canteen
28. Amount of water used per day for garden use?
60 to 70 liters of water is used for watering plants
29. No. of water taps in laboratories. Amount of water used per day in each lab?
There are 14 taps in laboratories and 10-20litres of water is used per day.
30. Total use of water in each hostel?
There is no hostel facility in our college.
31. At the end of the period, compile a table to show how many liters of water have been used in the college for each purpose.
Table in annexure
32. Is there any water used for agricultural purposes?
No
33. Does your college harvest rain water?
Yes

34. If yes, how many rain water harvesting units are there? (Approx. amount)
There are two rain water harvesting pits in the college.
35. How many of the taps are leaky? Amount of water lost per day?
Nil
36. Are there signs reminding people to turn off the water? Yes/No
Yes
37. Is there any waterless toilets?
No
38. How many water fountains are there?
There are no water fountains in the college.
39. How many water fountains are leaky?
There are no water fountains in the college
40. Is drip irrigation used to water plants outside?
No
41. How often is the garden watered?
Waste water is channeled for gardening
42. Quantity of water used to watering the ground?
20-25 litres.
43. Quantity of water used for bus cleaning? (Litres per day) N/A
44. Amount of water for other uses ?.
There is no other use of water.
45. Area of the college land without tree/building canopy?
Around 1.5Acres
46. Are there any water saving techniques followed in your college? What are they?
The bore well water is the main source of water in the college. It is used for drinking, cleaning lab equipment and for wash rooms. There are four overhead tanks of 1000 liters each which are used for saving water. RO

Plant is installed in the ground floor for drinking purpose. The waste water is channeled for watering plants. There are sign boards which instruct the students to use minimum water and turn off the taps after use. We plan to install drip irrigation system for watering plants and also install alarm control systems to prevent overflowing of water.

47. Is there any water management plan in the college?

There are sign boards which signal the users to use minimum water and turn off the taps after use.

48. Please share Some IDEA for how your college could save more water.

NSS Units I, II and III have organized 'Save Water' Awareness Program for students to make them conscious of using minimum water for their daily needs, preventing water wastage and spillage. We plan to organize the program every year to make the students understand that it is a precious natural resource and always endeavor to save water.

AUDITING FOR ENERGY MANAGEMENT

Energy management encompasses the distribution and storage of energy as well as the organization and administration of energy producing and consumption units. It has a close relationship with logistics, environmental management, production management, and other well-established operations. A definition of energy management that takes into consideration economic goals was published in the VDI-Guideline 4602: "Energy management is the proactive, structured, and systematic coordination of acquisition, conversion, distribution, and use of energy to meet requirements. "It is a systematic effort to use Engineering and Management methods to enhance energy efficiency for certain political, economic, and environmental goals.

1. List the ways that you use energy in your college. (Electricity, electric stove, kettle, microwave, LPG, firewood, Petrol, diesel and others).
 - a. Electricity
 - b. LPG
 - c. Microwave
 - d. Electric Stove
 - e. Diesel
 - f. Refrigerators
 - g. Incubators
 - h. Hot air Ovens
2. Electricity bill amount for the last year
Rs: 1.75, 985/- (One lakh Seventy-five thousand and nine hundred and eighty-five.

3 1-4-2021 to 31-3-22

SNo.	Bill Type	Bill Number	Bill Submitted Date	Taken Number	DUO Code	Head of Account	Purpose	Gross (in Rs.)	Discount (in Rs.)	New (in Rs.)	Net (in Rs.)	Chq/Debit	Voucher No.	Bill Status	
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of July 2021	21,091.00	0	0	21,091.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of July 2021	1,287.00	0	0	1,287.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of November 2021	11,767.00	0	0	11,767.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of December 2021	4,808.00	0	0	4,808.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of January 2022	25,925.00	0	0	25,925.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of February 2022	11,674.00	0	0	11,674.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of October 2021	16,960.00	0	0	16,960.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of August 2021	5,402.00	0	0	5,402.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of October 2021	18,881.00	0	0	18,881.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of August 2021	15,968.00	0	0	15,968.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of June 2021	1,881.00	0	0	1,881.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of April 2021	1,583.00	0	0	1,583.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of April 2021	11,979.00	0	0	11,979.00	0	1609	Voucher No. 1609	Bill Paid
	Contingent	20218+13	16-09-2021	220720379	256+10	00-07-130	Electricity bill month of April 2021	1,798.00	0	0	1,798.00	0	1609	Voucher No. 1609	Bill Paid

3. Amount paid for LPG cylinders for last one year
Rs. 2640 /- dated 25/08/2022

GAS CREDIT MEMO

VINEET ENTERPRISES
BHARAT GAS DISTRIBUTORS
20-3-601, Koushik Road, Hyderabad-500 002
Phone No. : 24577155, 24812358

No. **401** Date **25/08/22**

Consumer's Name **Hussaini Alam College**

Address **Hussaini Alam Govt. College**

Consumer No. _____ Tel. No. _____

DESCRIPTION	AMOUNT	Rs.	Paise
14-27 19.0 KG. GAS	192147	0	219
INSTALLATION CHARGES			18
ADMINISTRATION CHARGES			58
INSPECTION CHARGES			17
PASS BOOK			53
RUBBER TUBE (SURAKSHA)			
GAS LIGHTER			
STOVE			
CYLINDER TROLLEY			
TOTAL		2640	00

Signature of the Consumer _____ For **VINEET ENTERPRISES**

WORKING HOURS 9-00 A.M. TO 5-00 P.M. (SUNDAY HOLIDAY) Inclusive of GST

4. Weight of firewood used per month and amount of money spent? Also mention the amount spent for petrol/diesel/ others for generators?
No firewood is used in the college.
5. Are there any energy saving methods employed in your college? If yes, please specify. If no, suggest some.
No,

- Solar Lights to be installed in the Campus.
 - Energy Efficient fans & Refrigerators to be used in the college.
6. How much money does your college spend on Energy such as electricity, gas, firewood, etc. in a month?
Rs. 178625 (14885 per month)

45210F12U CASH/CREDIT MEMO

VINEET ENTERPRISES
BHARAT GAS DISTRIBUTORS
20-3-601, Kasaarhatta Road, Hyderabad-500 002.
Phone No. : 24577115, 24512288

No. **401** Date **25/08/22**

Consumer's Name **Hussaini Alam College**

Address **Hussaini Alam Govt. College**

Consumer No. _____ Tel. No. _____

DESCRIPTION	AMOUNT	
	Rs.	P.
14.27 19.0 KG. GAS	172197.0	219.52
INSTALLATION CHARGES		118.00
ADMINISTRATION CHARGES		85.00
INSPECTION CHARGES		172.00
PASS BOOK		52.00
RUBBER TUBE (SURAKSHA)		
GAS LIGHTER		
STOVE		
CYLINDER TROLLEY		
TOTAL	204400	

Signature of the Consumer _____ For VINEET ENTERPRISES

WORKING HOURS 9-00 A.M. TO 5-00 P.M. (SUNDAY HOLIDAY)
Inclusive of GST

3 1-4-2021 to 31-3-22

Sl. No.	Bill Type	Tax Number	Bill Sub-Head Date	Taxation Number	DDO Code	Head of Account	Purpose	Serial No.	Debit (Rs.)	Non Debit (Rs.)	Net (Rs.)	Change Detail	Year	Bill Status
Contngem			2021-01-01			2000-01-100	Electricity bill month		21,284.00	0	21,284.00		08/2021	Bill Paid
71 Bill			2021-01-01			2000-01-100	of Feb 2021						08/2021	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		1,207.00	0	1,207.00		09/2021	Bill Paid
81 Bill			2021-01-01			2000-01-100	of Feb 2021						09/2021	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		21,767.00	0	21,767.00		10/2021	Bill Paid
411 Bill			2021-01-01			2000-01-100	of December 2021						10/2021	Bill Paid
Contngem			2021-01-01			2000-01-100	ELECTRICITY BILL		4,000.00	0	4,000.00		11/2021	Bill Paid
411 Bill			2021-01-01			2000-01-100	MONTH OF						11/2021	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		25,821.00	0	25,821.00		12/2021	Bill Paid
411 Bill			2021-01-01			2000-01-100	November 2021						12/2021	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		16,874.00	0	16,874.00		01/2022	Bill Paid
411 Bill			2021-01-01			2000-01-100	of October 2021						01/2022	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		16,950.00	0	16,950.00		02/2022	Bill Paid
411 Bill			2021-01-01			2000-01-100	of August 2021						02/2022	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		5,400.00	0	5,400.00		03/2022	Bill Paid
411 Bill			2021-01-01			2000-01-100	of October 2021						03/2022	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		18,881.00	0	18,881.00		04/2022	Bill Paid
411 Bill			2021-01-01			2000-01-100	of August 2021						04/2022	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		15,968.00	0	15,968.00		05/2022	Bill Paid
411 Bill			2021-01-01			2000-01-100	of June 2021						05/2022	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		1,851.00	0	1,851.00		06/2022	Bill Paid
411 Bill			2021-01-01			2000-01-100	of June						06/2022	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		1,181.00	0	1,181.00		07/2022	Bill Paid
411 Bill			2021-01-01			2000-01-100	of April 2021						07/2022	Bill Paid
Contngem			2021-01-01			2000-01-100	Electricity bill month		11,511.00	0	11,511.00		08/2022	Bill Paid
411 Bill			2021-01-01			2000-01-100	of April 2021						08/2022	Bill Paid

7. How many CFL bulbs has your college installed? Mention use (Hours used/day for how many days in a month)
CFL Bulbs are used in the campus-63
8. Energy used by each bulb per month? (For example- 60 watt bulb x 4hours x number of bulbs = Kwh).
15120Kwh
9. How many LED bulbs are used in your college? Mention the use (Hours used/day for how many days in a month)
5 bulbs 7 hrs /day 22 days/month
10. Energy used by each bulb per month? (KWh).
163.8
11. How many incandescent (tungsten) bulbs have your college installed? Mentions use (Hours used/day for how many days in a month)
Yes we use in Physics lab--- Incandescent Bulbs are used in the College.
12. Energy used by each bulb per month? (kWh).
253,10 hrs/day,28 days/month
13. How many fans are installed in your college? Mention use (Hours used/day for how many days in a month)
Total Number of Fans = 176 (6 hours/Day, 25 Days)
14. Energy used by each fan per month? (kWh)
Energy Used by each Fan =4250.4 kWh (Approximate)
15. How many air conditioners are installed in your college? Mention use (Hours used/day, for how many days in a month)
4; Justification 3400 watts (4 hours/Day) 25 Days. It is used in summer

season only.

- 16 Energy used by each air conditioner per month? (kWh).
15600 kwh/month
- 17 How many electrical equipment including weighing balance are installed your college? Mention the use (Hours used/day for how many days in a month)
Included in Table-1
- 18 Energy used by each electrical equipment per month? (kWh).
23.42 kwh
- 19 How many computers are there in your college? Mention the use (Hours used/day for how many days in a month)
Total Computers =120 (6 hours/Day) for 25 Days
- 20 Energy used by each computer per month? (kWh).
Each Computer uses 20 kWh/month
- 21 How many photocopiers are installed by your college? Mention the use (Hours used/day for how many days in a month).
Total Photocopiers = 20(Printers) and 03 Reso machines (5 hours/Day) for 25 Days
- 22 How many cooling apparatus are in installed in your college? Mention the use (Hours used/day for how many days in a month)
Refrigerators--08 (6 hours/day) for 25 days
- 23 Energy used by each cooling apparatus per month? (kWh) Mention the use (Hours used/day for how many days in a month)
Energy by each cooling Apparatus = 38.7kWh
- 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 your college installed? Mention the use (Hours used/day for how many days in a month)
Energy used by each photocopier per month =. kWh
- 25 Energy used by each inverter per month? (kWh).
Energy used for 4 inverters=25kw
- 26 How many electrical equipment are used in different labs of your college? Mention the use (Hours used/day for how many days in a month)

S.No.	Name of the electrical equipment	Purpose	Quantity	Hours used Per month
1	Refrigerator	Storing chemicals	Chem lab -01 Micro-02 Genetics-01 Botany-01 NW Note*(Ladies Staff room-01 & Ante Room-01) Total in College-07	24hrs @per day 2520 hrs
2	LCD projector	Engages effective way of student learning process visually	06 (in labs) Note*Total 15	2 hrs @per day 420hrs
3	Hot air oven	Sterilize the equipment and other materials that are used in a laboratory.	03(Chemistry, Genetics, Microbiology)	2hrs @ per day
4	Centrifuge	Used to separate particles suspended in a liquid according to particle size and density, viscosity of the medium, and rotor speed.	07	1hr @ per day
5	Photovoltaic cell	Photovoltaics are best known as a method for generating electric power by using solar cells to convert energy from the sun into a flow of electrons by	01 (Physics Department)	nil

		the photovoltaic effect.		
6	Computers	To support teaching and learning. Allow students to complete course assignments or learn new programs.	55(labs) 120(Total college)	3hrs/per day in labs and 6hrs/day in office and departments
7	Laminar airflow	Laminar air flow is an enclosed bench designed to maintain a working area devoid of contaminants.	01 (Microbiology)	2hrs @ per week
8	Exhaust fans	To remove hazardous chemicals and biohazards in the labs building through exhaust fans	05(Chem Labs) Micro& Genetics labs-02 Note*Washrooms 12 19(Total)	
09	Air Conditioner	By keeping cool air circulated in accordance with space's needs, Improves productivity and computer system lifespan.	01(Physics lab) 02(CS Lab) 01(Principal Chamber) Note*04(Total in college)	Used only in hot summer days and used 3hrs/day
10	UPS	A UPS is typically used to protect hardware such as computers, data centers, telecommunication equipment or	03(Labs) Note*05(Total in college)	6hrs/day

		other electrical equipment where an unexpected power disruption could cause injuries, fatalities, serious business disruption or data loss.		
11	OHP	The OHP, like the slide projector, is used for showing prepared illustrations on a screen	05 (Chemistry, Genetics Microbiology)	03 hrs/week
12	Incubator	An Incubator is a device used to grow and maintain microbiological culture or cell culture	02 (Microbiology)	2hrs/day
13	Electronic balance	Instrument used in the accurate measurement of weight of materials	01(Botany) 01(Microbiology) 01(Genetics) 01(Chemistry)	1hr/week
14	PH meter	To measure the PH of the acids and base	03 (Chemistry, Genetics, Microbiology))	1hr/month
15	Colorimeter	To measure the optical density of the colored solutions	03(Chemistry) 10(Physics) 08(Microbiology)	2hr/mnth
16	Conductometer	To measure the conductivities of dilute acids and bases during neutralization	03(Chemistry)	2hrs/month
17	Single pan balance (infra digi)	To weight the sample which are used in	01 Chemistry) 2(Microbiology)	1hr/month

		preparation of solutions		
18	Melting point Apparatus	To measure the melting point of solid organic samples	02(Chemistry)	2hrs/month
19	Amplifiers	To modulate the sound equipment	04(Seminar halls and Principal room)	As when there is a program
20	Mikes	A transducer that converts sound into an electrical signal.	08(Seminar hall And Principal Room)	As and when required
21	Sound Boxes	To amplify the sound in seminar halls	05(Seminar Hall)	As when there is a program
22	Microwave Ovens	For heating	04(Chemistry, Microbiology, Genetics, Staff room)	As and when required
23	Autoclave	For sterilizing	05(Botany, Genetics, Microbiology)	As and when required
24	Sodium bulbs,Mercury Bulbs,Laser Diode Tubes	For experiments	09(Physics)	3hr/per when lab experiments are there.
25	Electric Stoves and Electric kettles	For experiments	10(Physics)	2hrs/day in 2 nd Semester only.

27. Energy used by each equipment per month? (kWh)

Energy used by each equipment per month = 322.5 kWh Approx

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)

No heaters are used in the Canteen

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

Nil

30. No. of street lights in your college?
No of street lights = 03
31. Energy used by each street light per month? (kWh)
Energy used by each street light = 57.6kWh
32. No. of TV in your college and hostels?
ManaTV-01,CCTV-01(Principal chamber).
33. Energy used by each TV per month? (kWh)
1.2kWh
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)
Two Motors with total $3^{1/2}$ horsepower are working .
35. Are any alternative energy sources/nonconventional energy sources employed / installed in your college? (Photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.) Specify.
Solar street Light = NIL
36. Do you run “switch off” drills at college?
Yes
37. Are your computers and other equipment put on power-saving mode?
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?
Yes (2 to 4 hours)
39. What are the Energy Conservation methods adapted by your college?
- Switch off the light and fans, when they are not in use
 - Five star rating refrigerators are used in the labs
 - All the electrical equipment’s are unplugged when they are not in use.
 - Limited usage of Computers and Printers
40. How many boards displayed for saving Energy awareness?

2 boards

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

Nil

42. Write a note on the methods/practices/adaptations by which you can reduce the energy use in your college campus in future.

- Investment in solar lights for outdoor lighting can generate long term benefits
- Switch to CFLs and LEDs.
- Walk, bike, carpool, or use public transportation as often as possible rather than driving, Recycle and encourage others to recycle in office.
- Use double-sided printing
- Keep your electronics on a low brightness setting to save energy
- Unplug overhead projectors, computers, and smart boards when not in use.
- Traditional electrical appliances must be replaced with power efficient ones to reduce power consumption and waste.
- Use of dimming lights in hallways can lead to reduction in consumption of energy
- Conduct electricity conservation sessions for staff and students
- Hold power conservation and awareness events from time to time to keep the campus community engaged.
- More energy efficient fans should be replaced

AUDITING FOR WASTE MANAGEMENT

Waste management, often known as trash disposal, refers to the procedures and actions necessary to control waste from its creation to its ultimate disposal. It involves monitoring and regulating the waste management process, regulations, technology, and economic mechanisms associated to trash, this also encompasses the collection, transportation, treatment, and disposal of waste.

Each sort of waste has a unique way of being managed and disposed off, whether it be solid, liquid, or gaseous. Waste management deals with all kinds of trash, including radioactive, organic, biomedical, household, municipal, industrial, and biological wastes. Waste can occasionally endanger human health. Health problems are related to waste management at every stage. Waste management seeks to lessen the hazardous consequences that such garbage has on the environment and people's health. Municipal solid waste, which is produced by commercial, industrial, and residential activity, is a significant component of waste management.

1. What is the total strength of students, teachers and non-teaching staff in your college?

Strength	Male	Female	Total
No of students	0	2302	2302
No of Teaching Staff	05	31	36
No of Non-Teaching staff	11	02	13
Total	16	2335	2351

* Which of the following are available in your College? Give area occupied, Garden area ,Garbage dump (number) ,Playground area Laboratory, Kitchen, Canteen ,Toilets (number) ,Car/scooter shed area

The available land of the college: 4 Acres and 9 Guntas.

The built-up area of the college: 27000 Sq.Ft.

No. of Class Rooms	18
No. of Laboratories	10
No. of Conference halls	02
Library Halls	01
Auditorium	00
Canteen	01

Principal room	01
Staff rooms	03
TSKC room	01
Office room	01
Exam branch	01
Physical Education room	01
Culture room	01
Dr.B.R.Ambedkar University room	01

2. Which of the following are found near your college?

Mark the level of disturbance it creates for the college in a scale of 1 to 9.
Municipal dump yard ,Garbage heap ,Public convenience Sewer line ,Stagnant water ,Open drainage Industry – (Mention the type) ,Bus / Railway station Market / shopping complex / public halls.

Our college premises are away from all of the above. It is located in an isolated area free from all pollutants.

WASTE

3. Does your college generate any waste? If so, what are they?

Types of waste	Particulars
Plastic waste	Pen, Refill, Plastic water bottles and other plastic containers, wrappers etc
Solid wastes	Damaged furniture, paper waste, paper plates, food wastes
Chemical wastes	Laboratory waste
Waste water	Washing, urinals, bathrooms
Glass waste	Broken glass wares from the labs
Sanitary Napkin	Incinerator
E-Waste	Computers, electrical and electronic parts

4. How much quantity?

> 10kg

5. Number or weight E-waste Hazardous waste (toxic)

Solid waste, Dry leaves, Canteen waste, Liquid waste, Glass, Unused equipment, Medical waste if any Napkins Others (Specify)

E-Waste Management

E-Waste	Source-Computers, electrical and electronic parts	Disposal-As per the instruction from Commissioner of Collegiate Education, Telangana to dispose E waste.
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1. Computers and their parts, telephones, printers and other electronic devices become Obsolete or do not function properly after some years are considered to be e- waste.
2. Proper collection and disposal of e-waste is very important as they are mostly made of hazardous metals like lead, cadmium etc. All the E-Waste like key boards, mother boards, printers etc generated in the college
3. The institute follows the directions of Commissioner of Collegiate Education Telangana to dispose E waste.
4. The printer cartridges are refilled outside the college. Around 50e waste

Solid wastes	Source-Damaged furniture, paper waste, paper plates, food wastes	Disposal-Kitchen wastes and garden wastes commonly are recycled to form nutrient rich quality organic manure for agricultural purpose. Food wastage used for cattle. GHMC
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Dry leaves:

Dry leaves are collected and Compost is prepared



Canteen waste

Hazardous waste -100gm/day Canteen waste ❖ Biodegradable college canteen - 20kg/day
Liquid waste

Waste water	Source-Washing, Cleaning urinals,	Disposal-Soak pits
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	bathrooms	
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Glass

Glass waste	Source-Broken glass wares from the labs	Disposal-Direct selling, municipal waste collection centers.
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- Unused equipment
Not Available
- Medical waste if any
Nil

Napkins Others (Specify)

Sanitary Napkin	Disposal-Napkin Incinerators
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6. Is there any waste treatment system in the college?

Yes

7. Is there any treatment for toilet/urinal/sanitary napkin waste?

Yes

8. What is the approximate quantity of waste generated per day?

(In Kilograms) Office, Laboratories, Canteen/kitchen

23kgs

9. Why waste is a problem?

Pollution of soil: Waste can leak hazardous chemicals into the soil and from there into our food.

Air pollution: The burning of waste at landfills releases toxic substances into the air, including extremely poisoning dioxin

10. Whether waste is polluting ground/surface water? How?

No

11. Whether waste is polluting the air of the college? How?

No

12. How is the waste generated in the college managed? Methods

Methods 1 Composting 2 Recycling 3 Reusing 4 Others

(specify)

a. Composting b. Recycling c. Reusing d. Others (specify)

The college campus is environmental friendly and filled with greenery. The quantity of waste in the form of solid, liquid and waste is only meagre. The 3Rs “reduce, reuse and recycle’ hierarchy helps to eliminate waste and protects environment. To fulfil 3R’s the college takes special measures for the management of the waste.

Solid Waste Management

The solid waste is generated in the form of either used papers or other stationery items. Some initiatives are taken to minimize the use of plastic and other solid waste in the college. Solid waste is segregated as biodegradable and non- degradable and handed over to Hyderabad Municipality as part of Swach Bharath initiative as well as clean and green programme. Dustbins are provided in the college for dry waste.

The compost technique is adopted for the disposal of solid waste from the college and the leftover food from the canteen. For this purpose, solid waste is collected and dumped into the pit especially dug for decomposition of waste and after few months the decomposed matter is used as manure for the plants in the college campus.

Many awareness programmes are conducted in the college to avoid usage of plastic. Special care is taken to utilize naturally available leaves and flowers available in the campus to prepare bouquets to offer to guests to felicitate them on special occasions. Bags are also prepared by the students out of waste which is considered as the best .The College is striving to be plastic free zone.

Liquid Waste

A huge quantity of liquid waste is generated in the college daily. The liquid waste consists of mainly effluent waste generated from wash rooms and waste water from the R.O. Plant. The institute has dug up sinking pits for the drained water to increase the ground water level.

E – Waste management

E waste refers to the discarded computers, electronic equipment, projectors etc. The Commissioner ate of Collegiate Education has issued certain guidelines which all the Government Degree colleges adhere for the management of E waste. For this purpose, a district level committee shall be formed in each District under the chairmanship of the District ID College Principal comprising lecturers as members.

The college follows a standard operational procedure (SOP) and guidelines prescribed by the Higher Authorities in the Management of Waste

13. How many separate boxes do you think you would need to put into a classroom to start a waste segregation and recycling campaign?

Two

14. What should be the use for each box? (Develop a Colour code with reasons)

Blue and Green boxes for wet and dry waste dumping

15. Do you use recycled paper in College?

Yes

16. Is there any waste wealth program practiced in the college? Is there any waste wealth program practiced in the college?

Yes

Approx. Bio degradable Non-Bio degradable Hazardous Others < 1 kg. 2 - 10 kg. > 10 kg.

Approx. Bio degradable Non-Bio degradable Hazardous Others < 1 kg. 2 - 10 kg. > 10 kg.

Approx. Bio degradable Non-Bio degradable Hazardous Others < 1 kg. 2 - 10 kg. > 10 kg.

17. How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.

- The **composting** and other reuse of biodegradable waste—such as food and garden waste— is also a form of recycling.
- Materials for recycling are either delivered to a household recycling center or picked up from curbside bins, then sorted, cleaned, and reprocessed into new materials for manufacturing new products.
- Reduce the Size of Landfill
- Saves Energy.
- Stimulate the Use of Greener Technologies.

18. Can you achieve zero garbage in your college? (Reduce, Recycle, Reuse, Refuse) If yes, how?

- Compost all food waste
- Repair and repurpose appliances, furniture and electronics before replacing them
- Buy electronics refurbished

WASTE MANAGEMENT: PLASTIC FREE CAMPUS AWARENESS PROGRAMME

SOLID WASTE



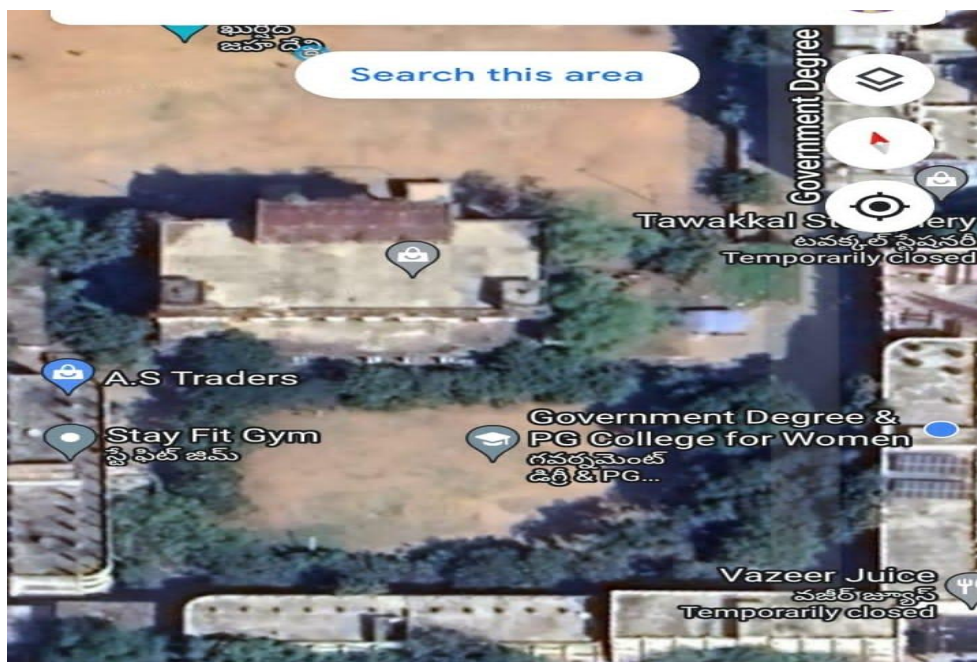
LIQUID WASTE-TO PLANTS



AUDITING FOR GREEN CAMPUS MANAGEMENT

1. Is there a garden in your college? Area?

The Government Degree College for Women, Hussaini alam, is co-sited with Government Junior College, Government High School and Primary School in the same 4 Acres and 9 Gunta area. The layouts of these building are located in 4 sides of the rectangular area. And the



playground is located in the center of these institutions. The Plants and Vegetation in these institutions are grown surrounding the playground. The area of the vegetation is nearly 0.25 Acres land.

2. Do students spend time in the garden?

Yes, ornamental, vegetable and medicinal, fruit and plants grown in the gardens are used as living illustrations during Lectures and practical classes with students.

3. List the plants in the garden, with approx. number of each species.

S. No.	Scientific Name	Common Name	Family	No. of Saplings
1	<i>Kalanchoe pinnata</i> (Lam.) Pers	cathedral bells	Crassulaceae	1
2	<i>Coleus amboinicus</i> Lour.	vaamu	Lamiaceae (Labiatae)	2
3	<i>Portulaca grandiflora</i>	Moss Rose	Portulacaceae	3
4	<i>Dracaena trifasciata</i>	Snake plant	Asparagaceae	4
5	<i>Aloe barbadensis miller</i>	Kalabanda	Asparagacea (Liliaceae)	2
6	<i>Syngonium podophyllum</i>	arrowhead plant	Asparagacea (Liliaceae)	2
7	<i>Epipremnum aureum</i>	Money Plant	Araceae	6
8	<i>Nerium oleander L.</i>	Nerium	Apocynaceae	5
9	<i>Fragesiiaitida</i>	Bamboo Tree	Bambusoideace	1
10	<i>Pongamia pinnata</i>	Ganuga	Fabaceae	27
11	<i>Mangifera Indica</i>	Mango Tree	Anacardiaceae	1
12	<i>Ficus carica</i>	Anjeer	Moraceae	1
13	<i>Bouganviella glabra</i>	Paper Flower	Nictaginaceae	7
14	<i>Caltropis gigantea</i>	Milk Weed	Asclepiadaceae	2
15	<i>Syzygium cumini</i>	Black Plam	Myrtaceae	2
16	<i>Melia azadirachta</i>	Neem Tree	Meliaceae	1
17	<i>Tecoma stans</i>	Yellow Bells	Bignoniaceae	2
18	<i>Carica papaya</i>	papaw	Caricaceae	3
19	<i>Tamarindus indica</i>	Tamarind	fabaceae	1

4. Suggest plants for your campus. (Trees, Vegetables, Herbs, etc.)

S.No.	Botanical Name	Trees/Vegetables/ Herbs	Family
1	<i>Rauwolfia serpentina</i>	Herb	Apocyanaceae
2	<i>Withania somnifera</i>	Herb	Solanaceae
3	<i>Centella asiatica</i>	Herb	Apiaceae
4	<i>Asclepia curassavica</i>	Herb	Asclepidiacea
5	<i>Dichrostachys cinerea</i>	Tree	Mimosoideae
6	<i>Terminalia chebula</i>	Tree	Combretaceae

7	<i>Givotia moluccana</i>	Tree	Euphorbiaceae
8	<i>Anacardium occidentale</i>	Tree	Anacardiaceae
9	<i>Annona muricata</i>	Tree	Anacardiaceae
10	<i>Annona cherimola</i>	Tree	Annonaceae
11	<i>Artabotrys hexapetala</i>	Climber	Annonaceae
12	<i>Aloe vera</i>	Herb	Asphodelaceae
13	<i>Vinka rosea</i>	Herb	Apocynaceae
14	<i>Zingiber officinalis</i>	Herb	Zingiberaceae
15	<i>Curcuma aromatica</i>	Herb	Zingiberaeae

5. List the species planted by the students, with numbers.

2022-2023

S.No.	Scientific Name	Common Name	Family	No.of Saplings
1	<i>Kalanchoe pinnata</i> (Lam.) Pers	cathedral bells	Crassulaceae	1
2	<i>Coleus amboinicus</i> Lour.	Vaamu	Lamiaceae (Labiatae)	2
3	<i>Portulaca grandiflora</i>	Moss Rose	Portulacaceae	3
4	<i>Dracaena trifasciata</i>	Snake plant	Asparagaceae	4
5	<i>Aloe barbadensis miller</i>	Kalabanda	Asparagacea (Liliaceae)	2
6	<i>Syngonium podophyllum</i>	arrowhead plant	Asparagacea (Liliaceae)	2
7	<i>Epipremnum aureum</i>	Money Plant	Araceae	6
8	<i>Nerium oleander</i> L.	Nerium	Apocynaceae	5

Kalanchoe pinnata(Lam.) Pers
Scientific name:***Kalanchoe pinnata***(Lam.) Pers
Family Crassulaceae
Common Name: cathedral bells,air plant,life plant,miracle leaf
Coleus amboinicusLour.

Scientific name:***Coleus amboinicus***Lour.
Family :Lamiaceae (Labiatae)



Portulaca grandiflora
Scientific name:***Portulaca grandiflora***
Family :Portulacaceae
Common Name :Moss Rose



Common Name :Snake plant
Dracaena trifasciata
Scientific name:***Dracaena trifasciata***
Family :Asparagaceae



Common Name-***Aloe barbadensis miller***
Scientific name: ***Aloe barbadensis miller***.
Family :Asparagacea(Liliaceae)
Common Name :Kalabanda



Syngonium podophyllum
Scientific name: *Syngonium podophyllum*
Family :Asparagacea(Liliaceae)
Common Name :arrowhead plant,
arrowhead vine, arrowhead
philodendron, goosefoot, African
evergreen, and American evergreen.



Epipremnum aureum
Scientific name: *Epipremnum aureum*
Family : Araceae
Common Name :Golden Pothos, Money
Plant, Devil's Ivy



Nerium oleander L.
Scientific name:*Nerium oleander L.*
Family : Apocynaceae
Common Name :nerium



Bryophyllum pinnata(Lam.)
**Scientific
name:***Bryophyllum pinnata(Lam.)*
Family : Crassulaceae
Common Name :Ranapaala





6. Whether you have displayed scientific names of the trees in the campus?

Yes, the department of Botany displayed the QR Codes for plants for identifying the scientific name and common name.



Dracaena trifasciata



Aloe barbadensis miller



Syngonium podophyllum



Epipremnum aureum



Nerium oleander L.



Kalanchoe pinnata(Lam.) Pers



Coleusamboinicus Lour.



Portulaca grandiflora





Bryophyllum pinnata(Lam.)



7. Is there any plantation in your campus? If yes specify area and type of plantation.

Yes, some plants have been planted in front of the college entrance on the ground. In addition, Plants have also been planted in pots organized by the department of Botany.

8. Is there any vegetable garden in your college? If yes how much area?

Yes, some area in the backside of the college is used to grow bottle guard, snake guard and tomatoes.

9. Is there any medicinal garden in your college? If yes how much area?

No, however, few medicinal plants have been planted in pots.

1. *Aloe barbadensis miller*

2. *Ocimum sanctum*

3. *Bryophyllum pinnata*

10. **What are the vegetables cultivated in your vegetable garden?
(Mention the quantity of harvest in each season)**

Yes, bottle guard, snake guard tomatoes are cultivated at the backside of the college. Around 5kg vegetables are harvest in rainy season.

11. **How much water is used in the vegetable garden and other gardens?
(Mention the source and quantity of water used).**

60-70 litre of water are used for garden. There is a bore well in the college and this bore well water and water stored is used for watering the plants twice a week with hose pipes.

12. **Who is in charge of gardens in your college?**

Department of Botany and Eco Club is the incharge for maintaining the garden.

13. **Are you using any type of recycled water in your garden?**

No

14. **List the name and quantity of Pesticides and Fertilizers used in your gardens?**

Yes, these are the following Bio-fertilizers that are being used.

- a. Dry leaves Compost- 2 Kg
- b. Vermicompost- 5 Kg
- c. Rhizobium
- d. Azospirillum



15. Whether you are doing Organic Farming in your college? How?

Yes , Small quantity with using bio fertilizers.

16. Do you have any composting pit in your college? If yes, what are you doing with the compost generated?



Yes, used for Gardening

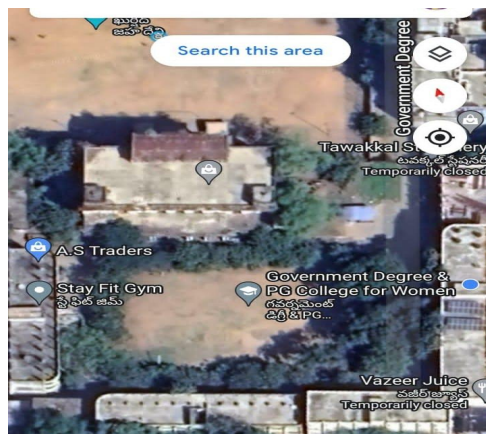
17. What do you do with the vegetables harvested? Do you have any student market?

Some vegetables are grown in the campus in rainy season. No student market

18. Is there any botanical garden in your campus? If yes give the details of campus flora.

No, there is no specific area for botanical garden. However, vegetation in the college exists and some of the names of the plants are given below.

Campus flora-[View](#)

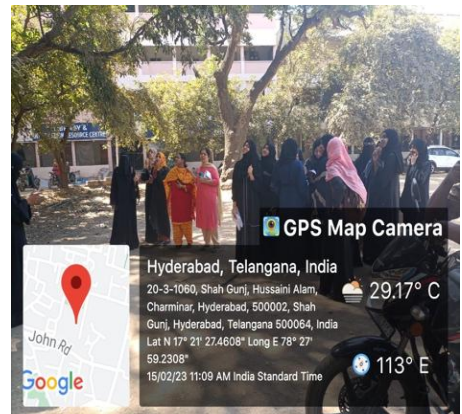


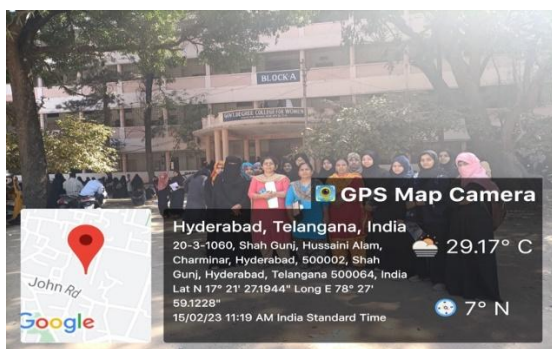
[images](#)

Plant species recorded in the College campus -73

S.No.	Scientific Name	Common Name	Family	No.of Saplings
1	<i>Kalanchoe pinnata</i> (Lam.) Pers	cathedral bells	Crassulaceae	1
2	<i>Coleus amboinicus</i> Lour.	vaamu	Lamiaceae (Labiatae)	2
3	<i>Portulaca grandiflora</i>	Moss Rose	Portulacaceae	3
4	<i>Dracaena trifasciata</i>	Snake plant	Asparagaceae	4
5	<i>Aloe barbadensis miller</i>	Kalabanda	Asparagacea (Liliaceae)	2
6	<i>Syngonium podophyllum</i>	arrowhead plant	Asparagacea (Liliaceae)	2
7	<i>Epipremnum aureum</i>	Money Plant	Araceae	6
8	<i>Nerium oleander L.</i>	Nerium	Apocynaceae	5
9	<i>Fragesiatiitida</i>	Bamboo Tree	Bambusoideace	1
10	<i>Pongamia pinnata</i>	Ganuga	Fabaceae	27
11	<i>Mangifera Indica</i>	Mango Tree	Anacardiaceae	1
12	<i>Ficus carica</i>	Anjeer	Moraceae	1
13	<i>Bouganviella glabra</i>	Paper Flower	Nictaginaceae	7
14	<i>Caltropis gigantea</i>	Milk Weed	Asclepiadaceae	2
15	<i>Syzygium cumini</i>	Black Plam	Myrtaceae	2
16	<i>Melia azadirachta</i>	Neem Tree	Meliaceae	1
17	<i>Tecoma stans</i>	Yellow Bells	Bignoniaceae	2
18	<i>Carica papaya</i>	papaw	Caricaceae	3
19	<i>Tamarindus indica</i>	Tamarind	fabaceae	1







19. Give the number and names of the medicinal plants in your college campus.

The below table includes the medicinal plants grown in the college.

S.No.	Scientific Name	Common Name	Family	No.of Saplings
1	<i>Kalanchoe pinnata</i> (Lam.) Pers	cathedral bells	Crassulaceae	1
2	<i>Coleus amboinicus</i> Lour.	vaamu	Lamiaceae (Labiatae)	2
3	<i>Aloe barbadensis miller</i>	Kalabanda	Asparagacea (Liliaceae)	2
4	<i>Syngonium podophyllum</i>	arrowhead plant	Asparagacea (Liliaceae)	2
5	<i>Epipremnum aureum</i>	Money Plant	Araceae	6
6	<i>Nerium oleander L.</i>	Nerium	Apocynaceae	5
7	<i>Fragesiaitida</i>	Bamboo Tree	Bambusoideace	1
8	<i>Pongamia pinnata</i>	Ganuga	Fabaceae	27
9	<i>Mangifera Indica</i>	Mango Tree	Anacardiaceae	1
10	<i>Ficus carica</i>	Anjeer	Moraceae	1
11	<i>Bouganviella glabra</i>	Paper Flower	Nictaginaceae	7
12	<i>Calotropis gigantea</i>	Milk Weed	Asclepiadaceae	2
13	<i>Syzygium cumini</i>	Black Plam	Myrtaceae	2
14	<i>Melia azadirachta</i>	Neem Tree	Meliaceae	1
15	<i>Carica papaya</i>	papaw	Caricaceae	3
16	<i>Tamarindus indica</i>	Tamarind	fabaceae	1

20. Any threatened plant species planted/conserved?

No

21. Is there a nature club in your college? If yes what are their activities?

We have **Eco Club** and **Zoo-Fauna Club**

ECO CLUB

- Eco Clubs are crucial in raising the next generation's understanding of the environment.
- An Eco-Club is operating in the college to guarantee a clean environment within the establishment.







Objectives of the Club





- ◇ To raise awareness of ecological degradation and the necessity of protecting eco systems.
- ◇ To raise public knowledge of environmental issues and to emphasise the importance of fundamental health and hygiene practices
- ◇ To ensure the area is a plastic-free zone and to plant and maintain saplings near to the campus.
- ◇ To raise awareness and teach about grave environmental problems.
- ◇ To persuade pupils to utilize environmentally friendly items on a regular basis.

Activities of ECO Club

- Eco club organizes, rallies and marches human chains at public places with a vision to spread environmental awareness.
- Eco club will take up activities like tree plantation, Cleanliness drives both within and outside of the college campus.
- Eco club will also promote Eco-Friendly practices like organic farming ,non-chemical pest management

S.No.	Name of the Programme	Date	Organised by	Remarks
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1	Awareness & Quiz on Water on the occasion of World Water day	22-03-2022	Botany & Eco club	
2	Awareness on World Earth Day	22-04-2022	Botany & Eco club	
3	Save Soil Movement Awareness programme - Save Soil Movement- Save Soil is a global movement launched by Sadhguru, conducted in coordination with ISHA Foundation Hyderabad	24-05-2022	Eco Club, all Life science Departments NSS unit I&II, in Collaboration with ISHA foundation	
4	Save Earth on the occasion of International Earth Day	24-05-2022	Eco club & Botany	
5	Various competitions on the occasion of world Environment Day 5th June	05-06-2022	Environment Protection Training Research (EPTRI). & Eco Club	
6	Visit Trip & Workshop on Terrace Gardening at Horticulture Training Centre , Horticulture Department , Nampally, Hyderabad	11-06-2022	Botany	

7	Tree plantationn (Harithahaaram)	10-08-2022 & 24-08-2022	Harithahaaram , committee Dept.of Botany & NSS and Eco Club	 View images
8	Awareness & Quiz on Biodiversity & Conservation	27-10-2022	Botany & Eco club	
9	Awareness & Quiz on Soil on the occasion of World soil day	05-12-2022	Eco club & Botany	
10	Awareness on Eco friendly Holi by using Natural Colors ,organized by Department of Botany & Eco club, Hussainialam, Hyderabad	17-03-2022	Eco club & Botany	

ZOOLOGY CLUB-ZOO FAUNA

THE ZOOLOGY “ZOO-FAUNA” CLUB IS INAUGURATED ON 28-11-2022

Students club -**WHAT WE LEARN WITH PLEASURE, WE NEVER FORGET-**
quote by Swami Vivekanda is the Motto of the Club.

INTRODUCTION

- ☉ The Department of Zoology & Microbiology initiated the Zoo micro club with the name ZOO-FAUNA, The movement of aspiration from the academic year 2022.
- ☉ The club will develop a BLOG With the required elements.
- ☉ The club is a community for students with a keen interest in animals and their conservation.

- ◎ The Club is geared towards their professional development, Planning & promoting Science events.

PHILOSOPHY AND VALUES

- ◎ The Departmental Club believes that Students and Faculty have a shared responsibility to obtain knowledge.
- ◎ Faculty should maintain their expertise by ongoing investigation, presentation & pursuit of scholarly activities.
- ◎ In addition Students should develop skills in Communication, analysis and critical thinking relevant to Zoology & other disciplines.

AIMS & OBJECTIVES

- ◎ The purpose of the club is to advocate for animals in a changing world.
- ◎ To nurture and develop innovative culture through skill based workshops, Inspirational Seminars, Competitions etc
- ◎ The club also includes Guest lectures, Field trips to wild reserves, celebrating important occasions, News about latest research findings & more.
- ◎ To provide information about the possible applications of Degree course.
- ◎ Club inculcates and improves scientific temper, scientific thinking, new ideas and enhance scientific awareness amongst students.

**DEPARTMENT OF ZOOLOGY
INAUGURATED "ZOO-FAUNA CLUB " ON
28-11-2022**



**DEPARTMENT OF ZOOLOGY ZOO-
FAUNA CLUB ORGANISED FEST
"EXPLORIKA" PORTRAYED NATURE**



22. Is there any arboretum in your college? If yes details of the trees planted

We have small arboretum.

23. Are there any fruit yielding plants in your college? If yes details of the trees planted.

Yes ,

- a. Mangifera indica
- b. Syzygium cumini,
- c. Tamarindus indica,
- d. Carica papaya

24. Are there any groves in your college? If yes, details of the trees planted.

No

25. Is there any irrigation system in your college?


No




26. What is the type of vegetation in the surrounding area of the college?


Shrubs and herbs and some Trees






27. What is the nature awareness programmes conducted in the campus?

Yes, we conduct Nature awareness programmes, participate in related events and try to fulfill our responsibility towards environmental protection.

S.No.	Name of the Programme	Date	Organised by	Remarks
1	Awareness on Environment Conservation on the occasion of National Science day - Quiz, Essay & Poster Presentation Competition	26-02-2022, 28-02-2022	Botany	 <p>Quiz Competition-Dept. of Botany, GDC(W), Hussainialam ,Hyderabad</p> <p>Quiz Competition for All Life Science on the occasion of National Science Day 28 February 2022 organized by Department of Botany, Govt. Degree College, WU, Hussainialam, Hyderabad.</p> <p>In 1986, the National Council for Science and Technology Communication (NCSTC) asked the Government of India to designate 28 February as National Science Day which the Govt. of India accepted and declared the day as National Science Day in 1986.</p> <p>The theme of National Science Day 2022 Integrated Approach in Science and Technology for a Sustainable Future.</p> <p>lathapeka@gmail.com Switch accounts</p> <p>*Required</p> <p>Enroll *</p>

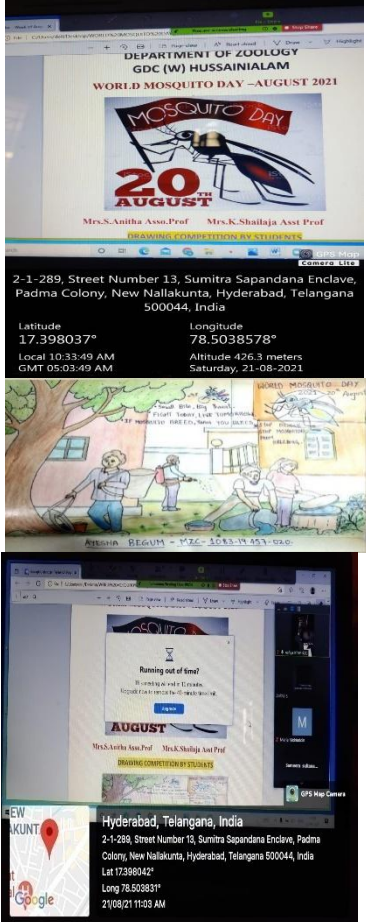

2	Awareness & Competitions : Quiz , Debate and Poster presentation on the occasion of International Forests Day	21-03-2022	Botany	
3	Awareness & Quiz on Water on the occasion of World Water day	22-03-2022	Botany	
4	Quiz & Awareness on World Health Day April 4th ,2022,	04-04-2022	Botany	
5	Awareness on World Earth Day Save Earth on the occasion of World Earth Day	22-04-2022	Eco club and Dept. of Botany	
6	Quiz & Awareness on the occasion of International biodiversity Day 22 May 2022	22-05-2022	Botany	
7	Save Soil Movement- Awareness programme - Save Soil Movement- Save Soil is a global movement launched by Sadhguru, conducted in	24-05-2022	Eco Club, NSS unit I&II and all Life science Departments in Collaboration with ISHA foundation	




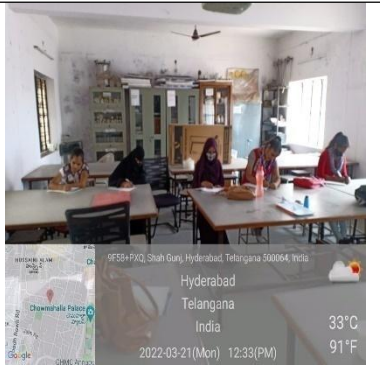

	coordination with ISHA Foundation Hyderabad			
				View images
8	Various competitions on the occasion of world Environment Day 5th June	05-06-2022	Environment Protection Training Research (EPTRI).	
9	Extension Lecture on 4th June,2022 & Awareness & Quiz Competition on the occasion of World Environment Day June 5th 2022	04-06-2022& 05-06-2022	Botany	
10	Visit Trip & Workshop on Terrace Gardening at Horticulture Training Centre , Horticulture Department , Nampally, Hyderabad	11-06-2022	Botany	
				View images
11	Tree plantation	10-08-2022 & 24-08-2022	Harithahaaram committee , Dept.of Botany & NSS	
				View images
12	poster presentation on the occasion of Ozone day	16-09-2022	Botany	


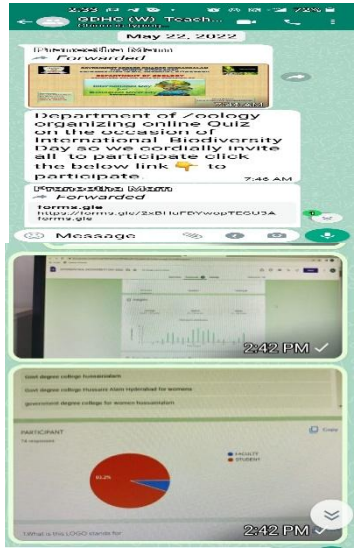
				
13	Awareness & Quiz on Biodiversity & Conservation	27-10-2022	Botany	
14	Certificate course Organic Compost preparation methods	31-10-2022	Botany	
16	Awareness & Quiz on Soil on the occasion of World soil day	05-12-2022	Eco club & Botany	
17	Awareness on Eco friendly Holi by using Natural Colors , organized by Department of Botany & Eco club , Hussainialam, Hyderabad	17-03-2022	Dept. of Botany & Eco club	



S.NO	NAME OF THE ACTIVITY	DATE	CONDUCTED BY	REMARKS
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1	<p>Birds Around Me</p> <p>Activity-Mini Project of poster presentation</p>	27-07-2021	Zoology	
2	<p>International Tiger Day</p> <p>Theme-'Tigers and Their Habitat',</p> <p>Activity-Awareness lecture online on Tigers conservation</p>	29-07-2021	Zoology	
3	<p>International Elephant Day</p> <p>Theme-'Tigers and Their Habitat',</p> <p>Activity-Conducted online quiz in Google form</p>	12-08-2021	Zoology	

<p>4</p>	<p>World Mosquito Day</p> <p>Theme-“Reaching the zero-malaria target”.</p> <p>Activity-Conducted Drawing Competition</p>	<p>21-08-2021</p>	<p>Zoology</p>	
<p>5</p>	<p>World Ozone Day</p> <p>Theme- Montreal Protocol — Keeping us, our food, and vaccines cool</p> <p>1.Awareness Video on Ozone Depletion & protection was shown online</p> <p>2.Shared link to fill carbon footprints</p> <p>3.Students displayed posters and videos</p>	<p>16-09-2021</p>	<p>Zoology</p>	

6	Activity- National Science Day Theme-Poster presentation on Role of Science in Environment Protection	28-02-22	Zoology	 <p>Hyderabad, Telangana, India 20-3-1060/a/b, Shah Guri, Hyderabad, Telangana 500064, India Lat: 17.357446° Long: 78.46661° 23/02/22 12:40 PM</p>
7	Activity-World Wild Life Day .Models prepared by students	03-03-2022	Zoology	
8	Activity- The theme for this year is "Monitor the Sparrows & other common birds" Talk by students	20-03-2022	Zoology	 <p>Hyderabad, Telangana, India 20-3-1060/a/b, Shah Guri, Hyderabad, Telangana 500064, India 2022-03-21 (Mon) 12:37 (PM) 33°C 91°F</p>
9	The theme for 2022 is Forests and Sustainable Production and Consumption . Conducted Essay writing competition	21-03-2022	Zoology	 <p>Hyderabad, Telangana, India 9F5B-FKQ, Shah Guri, Hyderabad, Telangana 500064, India 2022-03-21 (Mon) 12:33 (PM) 33°C 91°F</p>
10	Activity- The theme of World Water Day this year is "Groundwater, making the invisible visible" . Students Took	22-03-2022	Zoology	 <p>Hyderabad, Telangana, India 20-3-1107, Shah Guri, Hyderabad, Telangana 500002, India Lat: 17.357659° Long: 78.465977° 22/03/22 03:52 PM</p>





	pledge			
11	<p>Global health awareness day</p> <p>Theme-‘Our Planet Our Health’</p> <p>Held Online Elocution</p> <p>Took Health Pledge</p>	07-04-2022	Zoology	
12	<p>Activity- National quiz on Biodiversity on occasion of International Biodiversity Day</p>		Zoology	



13	Activity-Painting Competitions on “One Earth” on occasion of World Environment Day by MGNCR India	28-05-2022	Zoology	
14	International Environment Day	05-06-2022	Zoology	
15	To create awareness among the students about the importance of saving water for our future generations.	22-03-2022	Chemistry	

16	<p>On the occasion of world ozone day 16 - 09 – 2022, the following competitions to create awareness among the students about the necessity of protecting Ozone layer.</p> <ol style="list-style-type: none"> 1. Elocution competition on the topic “Causes and effects of Ozone layer depletion.” 2. Preparation of charts related to Ozone layer. <p>Quiz on the topic “Pollution”.</p>	16 - 09 – 2022	Chemistry	

17	World Environmental day	ONLY ONE EARTH	2-12-2022 Microbiology	 <p>World Environment Day Only One Earth 2022</p> <p>Dept of Microbiology</p> <p>Gdcw hussainialam</p>
18	World water Day	Online Debate on importance of water in daily life	22-3-2022 Microbiology	 <p>Carra Fatima (HCC)</p> <p>Muzhin Rajji</p> <p>Zabooli than</p> <p>Sahiba fatima (mcc2 year)</p>
19	Our Medicine Comes From Earth.	Conducting debates for 1 st , 2 nd and Final yr of Microbiology students.	5-4-2022 Microbiology	 <p>GDCW HUSSAINIALAM, Hyd</p> <p>Our medicine comes from the Earth</p> <p>Dept of Microbiology organizing awareness programme to save soil save antibiotic producing organisms</p>
20	Save Soil Event	Isha Foundation Save Soil Awareness program	24-5-2022 Microbiology	 <p>CERTIFICATE FROM SAVE SOIL</p> <p>STUDENTS FOR SOIL VOLUNTEER CERTIFICATE</p> <p>STUDENTS FOR SOIL VOLUNTEER CERTIFICATE</p>

21	Best Out of waste	Best out of waste Biodiversity	4-06-2022 Microbiology	
22	Swatch Bharat	Cleaning your surroundings	4-06-2022 Microbiology	
23	Making of Paper Bags	Final yr Microbiology students made paper bags..	5-06-2022 Microbiology	
24	Food and Water Feeders for Birds	Food and water feeders by Microbiology Department	18-06-2022 Microbiology	

25	Stop Plastic Program	Awareness program on Stop usage of plastics.	25-06-2022 Microbiology	
26	Vrikshabhandan	Tie a "Rakhi" To save plants	22-08-2022 Microbiology	
27	Field work	Sanitation near local vendors in and around college premises.	11-10-2022 Microbiology	<p>Sanitizing the local vendors and around college premises.</p> 
28	National Mushroom Day	Making of model by microbiology students.	15-10-2022 Microbiology	

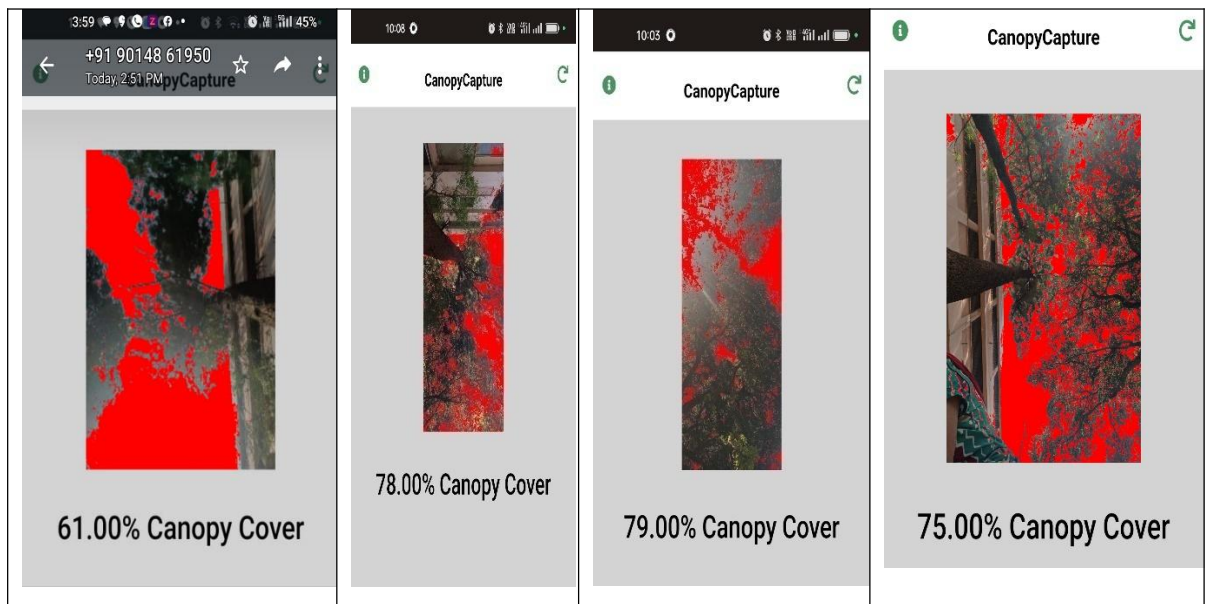
29	Green calendar	Sustainable September Challenge by department of Microbiology	18-10-2022 Microbiology	
30	Best out of waste	Competition between 1 st , 2 nd and final yr students making of dress by using old	21-11-2022 Microbiology	

28. What is the involvement of students in the green cover maintenance?

Yes, they involve in various awareness programmes, participate in the events and show their responsibility towards environmental protection

29. What is the total area of the campus under tree cover? Or under tree canopy?

Average Canopy Percentage is 73.5% -Pictures taken by Canopy Capture App



30. Share your ideas for further improvement of green cover.

To create a green campus, we need to run projects on:

- Organic food
- Renewable energy
- Gardening, landscape and biodiversity
- Low-carbon transport
- Clean water
- Energy supply. .
- Using electronics instead of paper.
- Special campaigns for students.
- Good old recycling. ...

Creating eco-friendly rules in a campus

AUDITING FOR CARBON FOOTPRINT

1. What is the total strength of students and teachers in your College?

No. of Students, No. of Teachers, No. of Non-teaching staff, Gents - Ladies, Total

Strength	Male/ Gents	Female /Ladies	Total
No of students	00	2302	2302
No of Teaching Staff	05	31	36
No of Non-Teaching staff	11	03	14

2. Total Number of vehicles used by the stakeholders of the college?
(Perday)

Strength	Male	Female	Total	Mode of transportati on	Cars	Two wheelers / Autos	Cycles/ City bus
No of students	-	2302	2302	Car, Autos and Two wheelers	28	50+150	2cycle/ 589 bus
No of Teaching Staff	05	31	36	Car,Autos and Two wheelers	05	20	11(bus)
No of Non-Teaching staff	11	02	13	Car,Autos and Two wheelers	01	12	01 (Cycle)

3. No. of cycles used?

03

4. No. of two wheelers used? (average distance travelled and quantity of fuel and amount used per day)

Approximately 30 km/day

5. No. of cars used?(average distance travelled and quantity of fuel and amount used per day)

03

6. No. persons using common (public) transportation (average distance travelled and quantity of fuel and amount used per day)

600

7. No. of persons using college conveyance by the students, non-teaching staff and teachers (average distance travelled and quantity of fuel and amount used per day)

NIL

8. Number of Parent-Teacher meetings in a year?

Parents turned up (approx.)

Parent-teacher meetings in a year-2

9. Number of visitors with vehicles per day?

05 -8 visitors daily. 25-40 per day but varies during examinations

10. Number of generators used per day (hours)? Give the amount of fuel used per day.

Nil

11. Number of LPG cylinders used in the canteen? (Give the amount of fuel used per day and amount spent).

Nil

12. Quantity of kerosene used in the canteen/labs? (Give the amount of fuel used per day and amount spent).

Nil

13. Amount of taxi/auto charges paid and the amount of fuel used per month for the transportation of vegetables and other materials to canteen.

Nil

14. Amount of taxi/auto charges paid per month for the transportation of office goods to the college.

Nil

15. Average amount of taxi/auto charges paid per month by the stakeholders of the college.

Nil

16. Use of any other fossil fuels in the college (Give the amount of fuel used per day and amount spent).

No

17. Suggest the methods to reduce the quantity of use of fuel used by the stakeholders/students/teachers/non-teaching staff of the college.

1. Drive only when needed.
2. Make sure the gas cap is on tight.
3. Avoid long idling.
4. Accelerate and break steadily.
5. Drive the speed limit.
6. Walk, bike, carpool, or use public transportation as often as possible rather than driving
7. Using of electric vehicles

18. Are the Rooms in Campus are Well Ventilated? Yes/No

Yes

19. Window Floor ratio of the Rooms Good/Not Enough?

Good

Carbon Footprint - Report

- Petrol used by two wheelers/day-50L
- (Per person to and fro 30 Kms=1L) Fuel used by four wheelers (3 Persons) – 5L
- (Per person to and fro 30 Kms=1.5L) Fuel for persons (total 600 persons) travelling by common

•Transportation =Each bus consumes 6 Ltr/day 12 buses travel daily so total =72Lts/days

Auto transport consumes 4 Ltr/ auto so 150 autos consume 600 Ltr

Total fossil fuel used =50+5+600+72=727Ltrs/day

Total fuel cost per day for transportation for Diesel vehicle=58,200/-

(600L x Rs 97) For 22 days it costs Rs.12, 80, 400

Total fuel cost per day for transportation for Petrolvehicle=25,288/day

(232L x Rs 109) For 22 days it costs,

Total amount of fuel consumption for 22 days is

Rs.12,80,400+Rs.5,56,336=Rs.18,36,736/-

Cost of stakeholder transportation per month is Rs.18,36,736/-

Green Audit Carbon Footprint-Student Survey Sheet-

https://docs.google.com/spreadsheets/d/1_OVnozBAOHY-qhTYI1av-N6xSG6n8esVMXuBmoC6Kbl/edit?usp=sharing

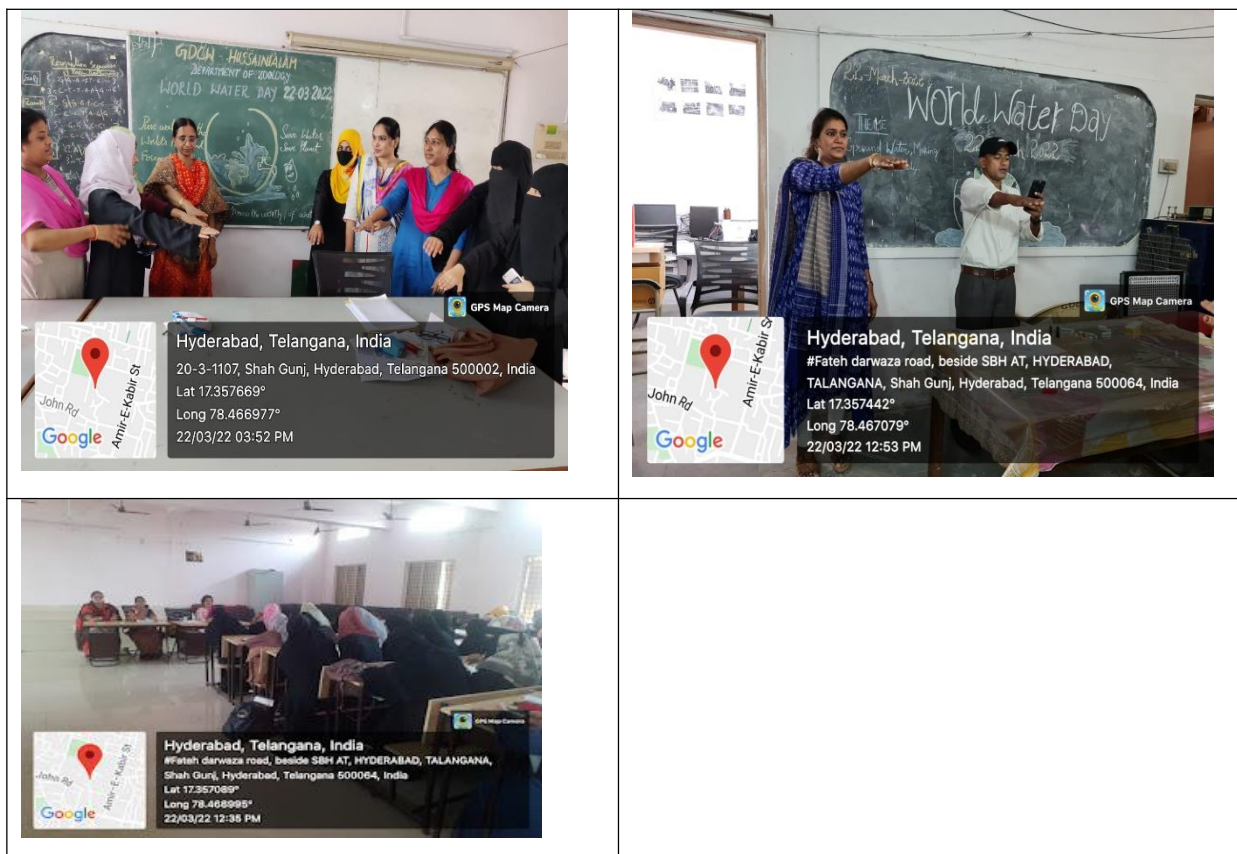
Online and Offline Carbon Footprint Survey is conducted

Water Management

S. No.	Parameters	Response	Remarks
1	Source of water	Bore water only	No municipal water connection
2	No. of Wells	01	
3	No. of motors used	2	
4	Horse power – Motor	1.Main submerged Borewell pump 2.Drinking water RO System is	3hpw ½ hpw
5	Depth of well –Total	No wells	Nil
6	Water level	No	Nil
7	Number of water tanks	04	Used for Drinking, Laboratories, Washrooms&

			gardening
8	Capacity of tank	4000 litres	---
9	Quantity of water pumped every day	1000 litres	---
10	Any water wastage/why?	No	
11	Water usage for gardening	Waste water from	50-70 Litres of water
		RO Plant, labs is used for gardening	used
12	Waste water sources	Laboratories, RO plant & washrooms	Used for gardening
13	Use of waste water	Nil	
14	Fate of waste water from labs	No wastage	Used for plants
15	Whether waste water from labs mixed with ground water	Little amount of water is percolating into ground.	
16	Any treatment for lab water	No	To plan for alternatives
17	Whether any green chemistry method practiced in labs	Yes	Will try to initiate effectively
18	No. of water coolers	02	Nil
19	Rain water harvest available?	Yes	Two harvesting pit
20	No. of units and amount of water harvested	Nil	Not measured
21	Any leaky taps	no	-----
22	Amount of water lost per day	1 to 2 liters	To be fixed
23	Any water management plan used?	To treat waste water from labs	To be initiated
24	Any water saving techniques followed?	Used for plants in premises	Used for gardening

25	Are there any signs reminding peoples to turn off the water?	Yes	To impart more awareness programmes for Faculty and students. To celebrate water day.
----	--	-----	---



Results of water quality-I

Parameters	Bore water	Well	Municipal Tap water No Municipal water connection	Standard value (BIS)
Dissolved Oxygen (mg/l)	6.3 Mg/l	NA		6-8
Acidity (mg/l)	19.9	NA		200
Alkalinity (mg/l)	180.1	NA		200

Chloride (mg/l)	50.1	NA	250
Hardness (Total)	170.3	NA	200
Conductivity (µs)	Nil	NA	
Ph.	7.9	NA	6.5-8.5
Total Dissolved Solids (ppm)	300	NA	500
Salinity (ppt)	Nil	NA	
Total coliform	0	NA	0
Fecal coliform	0	NA	0

GOVERNMENT OF TELANGANA
DEPARTMENT OF WATER AND WASTE WATER EXAMINATION
Directorate of P.M.P.H.Labs, Food (H) Administration, Narayanguda, Hyderabad - 29.
REPORT OF PHYSICO-CHEMICAL ANALYSIS OF WATER

Source: Niloufer Hospital
Collected by: Dr. Mani RMO & Mohd Naser, H1
Collected on: 16/2/2023
Received on: 16/2/2023
State: Telangana
Sample volume: 2 lt.
Source profile: Metro Water
Sample ID: 5576

S.No	Parameter	Source / Sample ID	Drinking Water - Specification As per IS 10500:2012	
			Requirement (Acceptable)	Permissible limit in the absence of alternative source
Physical parameters				
1	colour(Hazen),max		<5	15
2	Turbidity (NTU),max		4.3	3
3	Colour		Un-Objectionable	Un-Objectionable
4	Taste		Acceptable	Agreeable
5	pH		7.3	6.5 - 8.5
6	Electrical Conductivity at 25°C (Micro Mhos/cm)		586	No relaxation
7	TDS(mg/L),max		386	2000
Chemical parameters (mg/L)				
1	Alkalinity(as CaCO3)		Nil	
2	phenolphthalein ,max			
3	Total alkalinity (as CaCO3),max		176	600
4	Total hardness ,max (as CaCO3)		200	600
5	Calcium hardness (as CaCO3),max		96	600
6	Magnesium hardness (as CaCO3),max		116	
7	Calcium (as Ca),max		38.4	75
8	Magnesium (as Mg),max		24.96	30
9	Ammonical Nitrogen,max		Nil	100
10	Nitrite(as N),max		Nil	
11	Nitrate(as N),max		0.6	45
12	Sulphate (as SO4),max		4	200
13	Chloride(as Cl),max		64	400
14	Fluoride(as F),max		0.34	250
15	Iron (as Fe),max		Nil	1.5
16			0.3	No relaxation

Remarks: The given sample is physico chemically satisfactory for drinking purpose.

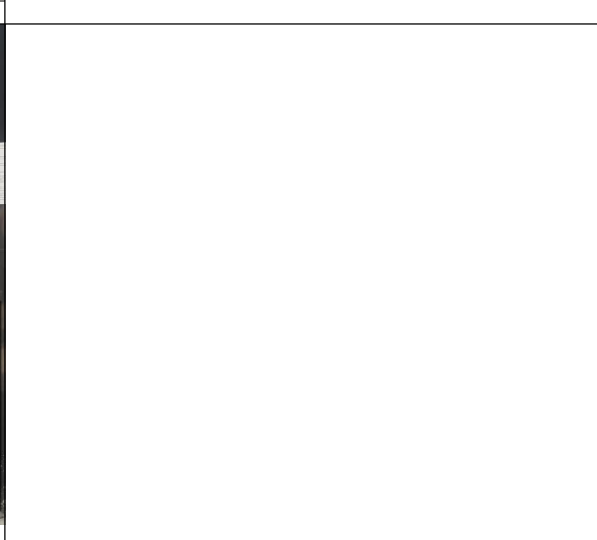
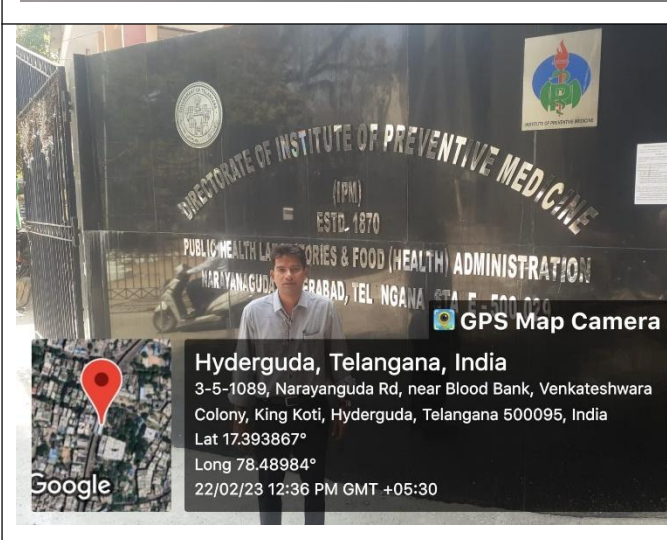
Mani 21/2/23
Dy. Chief Water Analyst

GOVERNMENT OF TELANGANA
DIRECTORATE OF INSTITUTE OF PREVENTIVE MEDICINE PUBLIC HEALTH
LABORATORIES & FOOD (HEALTH) ADMINISTRATION
Narayanguda, Hyderabad-500 029
CENTRAL RECEPTION SECTION
MASTER SLIP

Sp.No: 5803-B
5804-C

Service: Water Analysis
Master No: 3248 Receipt No: 2502210119 Date: 22/2/2023
Name: S. SUDRANTH Age: Sex: Counter: 1
Referred by: Telom No: Mode Of Payment: Paid

S.No	Name of the Test	Amount (Rs)
1	Chemical Analysis (Domestic)	1*300
2	Bacteriological Analysis	1*150
	Total	380
	Bank	



Water Quality Analysis (Biological) Report of the college - II (with Photographic evidence)

S.No	Parameter/ WHO permissible level	Zooplankton (No of Samples/Sites)	Methodology
1	Protozoan (Ciliates)	NIL	Indirect Immuno fluorescent assay
2	Rotifers	NIL	Microscopic method
3	Ostracods	NIL	Sampling method
4	Insect Larvae	NIL	Microscopic method
5	Water Fleas	NIL	Microscopic method
6	Bivalves	NIL	Sampling method
7	Snails	NIL	Sampling method
8	Mussels	NIL	Sampling method
9	Any Other (Specify)	NIL	Nil

Water Quality analysis (Biological) report of college - II (with Photographic evidence)

S.No	Phytoplanktons	Scientific Name and number	Methodology
1	Diatoms (Bacillariophyceae)	NIL	Microscopic method
2	Dinoflagellates (Dinophyceae)	NIL	Microscopic method
3	Coccolithophores (Prymnesiophyceae)	NIL	Microscopic method
4	Green algae (Chlorophyceae)	NIL	Jar test

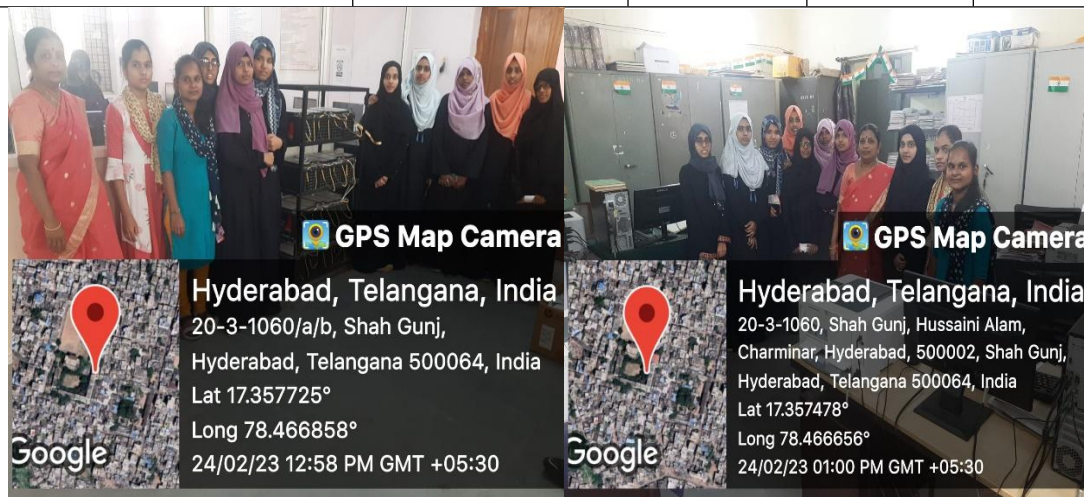
5	Cyanobacteria (earlier Blue green algae)	NIL	Jar test
6	Others (specify)	NIL	Slide method

Note* No water Bodies are present in our college campus so no evidence produced Fresh drinking water is devoid of biological agents mentioned above

ENERGY AUDIT

Room No. / name	Electrical device/ items	Number	Power	Usage time (hr/day)
Chemistry lab & Anteroom	Refrigerators	07	150(W)	24hrs/day
Phy,Zool,ChemBot,Library, Exambranch, Microbiology,Commerce	LCD	07	280(w)	6hrs/day
Microbiology Lab	Hot air oven	01	1500(W)	1hr/day
Genetics Lab	Centrifuge	05	850(W)	0-1hr/day
Physics lab	Photovoltaic cell	01	3000(W)	Not used till date
Computers lab,Commerce Lab,TSKC,Library ,Depts ,Exam Branch & Office	Computers	122	250(W)	6 hrs /day
Total College	Printers	14	60(W)	0-2hrs/day
Genetics Lab	Laminar airflow	01	600(W)	0-1hrs/day
Chemistry Lab & Washrooms	Exhaust fans	12	32(W)	2-6hrs/day
Physics Lab ,CS lab,Principals room	Air Conditioner	04	7000(W)	0-1hrs/day

Physics ,Microbiology labs,Library & Exam branch	UPS	05	1000(W)	6hrs/day
Total College	Fans	176	60(W)	4-6hrs/day
Total College	Tube lights	224	38(W)	6hrs/day
Total College	OHP	05	280(W)	0-6hrs/day



2. Waste Management

Approximate quantity of waste generated per day (in kg)

Office				
Approx.	Biodegradable	Non -Biodegradable	Hazardous	Others
<1Kg	Biodegradable – 1 kg/day (office);	Non-biodegradable – ½ kg/day (office)		
2-10Kg	---	---	--	---
>10Kg	---	---	---	--
Laboratories				
Approx.	Biodegradable	Non -Biodegradable	Hazardous	Others
<1Kg	Biodegradable – ½ kg/day (labs	Non-biodegradable – ¼ kg/day (including glass bottles		
2-10Kg	--	---	--	---
>10Kg	---	---	---	---

Canteen/kitchen				
Approx.	Biodegradable	Non - biodegradable	Hazardous	Others
<1Kg		Non-biodegradable - ½ kg/day	Hazardous waste - 100gm/day Canteen waste	
2-10Kg	---	---	--	--
>10Kg	Biodegradable college canteen - 20kg/day	--	--	--

3. How the waste generated in the college is managed?

A)Composting/ Vermicomposting	Yes/ No	Remark
B)Recycling		College waste is given to Municipal corporation (GHMC)
C)Reusing	Yes	Reuse of one side printed paper for internal communication and academic evaluation works
D)Other ways	Yes	Two types of waste bins are provided at campus for biodegradable and no biodegradable waste

4. Waste generated in the college?

E-waste	Yes	The institute follows the procedure as directed by the Commissioner of Collegiate Education Telangana for the disposal of E waste
Hazardous waste		Sent to GHMC, Hyderabad
Solid waste		Sent to GHMC, Hyderabad
Dry leaves		Used in composting
Canteen waste		To reduce waste like plastic and paper, only

		steel utensils were used
Liquid waste		Disposal-Soak pits
Glass		Disposal-Direct selling to municipal waste collection centers
Unused Equipment	NA	NA
Napkins	Yes	Natural burner-Incinerator is used for managing sanitary waste
Others (specify)	Nil	Nil
Do you use recycled paper in college?		Yes
Any waste management methods used?		1.college is putting efforts to minimize plastic usage 2.Steel cups and plates are used instead of paper 3. Biodegradable and nontoxic washing liquids are used in the college and all the toilet cleaners are ecofriendly.

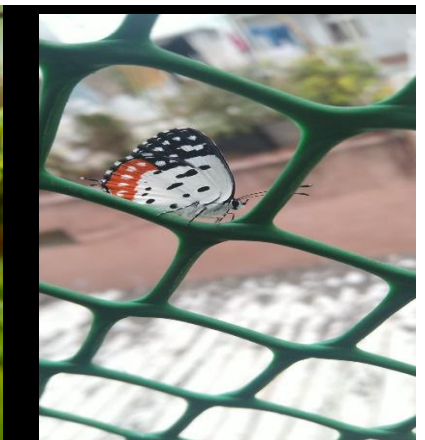
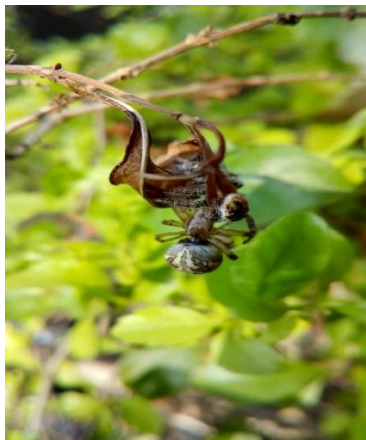
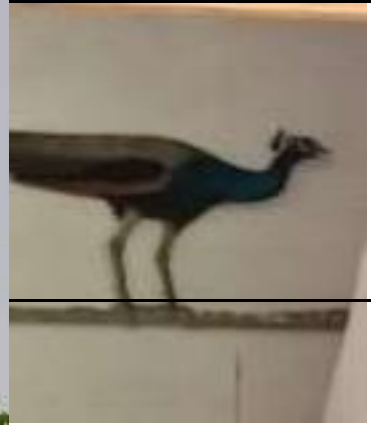
Energy Audit Report

Sl. No	Electrical appliances instruments	Number	Power (W)/ unit	Total power(W)	kW	Operation/day	kW/hr	No.of days in month	Total consumption per month
1	Tube lights	224	38	8512	8.512	06	51.072	25	1276.8
2	Projector	07	280	1960	1.96	06	0.01176	25	0.294
3	Speakers	03	10	30	6	0-01	0.03	25	0.15

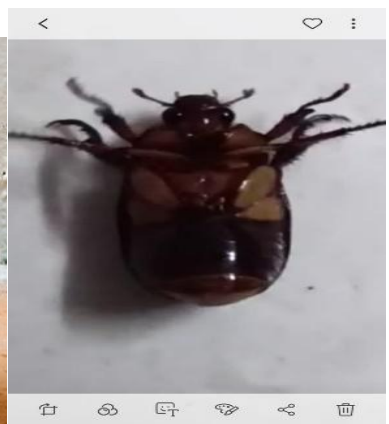
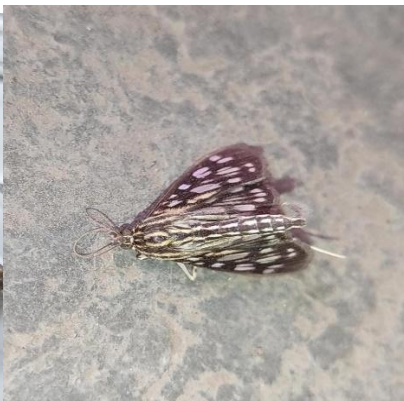
4	Fan	176	60	10560	10.56	6	63.36	25	1584
5	Computer	120	250	30000	30.0	6	1803.00	20	36060
6	Printers	14	60	840	0.84	2	1.68	20	33.6
7	UPS	5	100 0	500 0	3	12	36	20	720
8	Photostat Machine	1	65 0	650	0.65	02	1.3	25	32.5
9	A/C	2	7000	14000	14	1	14	15	210
10	Refrigerator	2	150	003	1.05	24	25.2	30	756
11	Oven	1	1500	1500	1.5	0.25	0.375	10	3.75
12	Centrifuge	05	850	4250	4.25	0.25	0.425	8	3.4
13	Autoclave	1	1700	1700	1.7	1	1.7	4	6.8

14	Laminar air flow	1	600	600	0.6	1	0.6	15	9
15	Exhaust fans	12	32	384	0.384	4	0.128	25	3.2
16	Incubator	2	40	80	0.08	6	0.32	6	6
17	Sanitary napkin incinerator	Natural Incinerator is present wherein napkins are burnt without using electricity							
18	CCTV DV R	1	10	240	.24	24	5.76	30	720
	Total	Consumption per month is 2004.961KW/hr							

Faunal Diversity in College Campus (With Photographic Evidence)









Air quality Determination

Air Quality Index (parameters studied/recorded/ Seasonal):

Average Measurements

Parameters	Autumn	Spring
NO ₂	40	44
NO	55	52
O ₃	16	14
PM2.5	76.56µg/m ³	80.6µg/m ³
PM10	197µg/m ³	173µg/m ³
CO	45	700ppb
SO ₂	1.8ppb	1ppb
Temperature	36°C	28°C
Humidity	11%	14%
Barometric Pressure	1010hpa	1015hpa
Wind Speed	10km/h	11.1km/h
Wind Direction	South East	South East
Sun Rise	North-East	North-East
Sun Set	North-West	North-West

Measurements of Noise level in and around the college

NOISE POLLUTION MANAGEMENT

A) THE COLLEGE HAS SILENCE ZONES

For awareness of the need to maintain silence at the college, various display boards have been put up in the library and other locations.

A) COLLEGE QUIETNESS CONTROL

The college has enacted a no honking policy that forbids the use of any noise on campus, including honking.

On college campuses, noise pollution is maintained to a minimum and designated quiet zones are established in places like the library and classrooms.

RECOMMENDATIONS

The administration of the college may prioritise this.

1. The Noise Pollution (Regulation and Control) Regulations 2000's guidelines for noise level monitoring must be followed.
2. In accordance with the 1988 Central Motor Vehicle Act, vehicle exhausts must be frequently inspected in the college.
3. The use of bicycles will be encouraged for all students and employees beyond the boundary limit that has been set to restrict vehicular traffic.

S.No	Place (S)	Measurements (Duration in seconds)	Minimum (dBA)	Maximum (dBA)	Average (dBA)
1	Library Reading Room	42	60	77	67
2	Digital Library	44	60	81	64
3	Principal chamber	41	49	80	62
4	Canteen	45	56	93	68
5	Play ground	44	56	96	70
6	Auditorium (new)	38	59	92	66
7	Seminar hall(old)	44	60	84	65
8	Ground floor	41	56	83	64
5	First floor	41	56	83	64
9	Second floor	43	59	82	65
10	Third floor	43	59	90	66
11	Office	38	54	90	70
12	Examination Branch	43	61	92	71
13	College entrance	43	59	90	70

The World Health Organization (WHO) defines noise above 65 decibels (dB) as noise pollution. To be precise, noise becomes harmful when it exceeds 75 decibels (dB) and is painful above 120 dB.Noise level of 80 decibels or more for more than 8 hours a day increases tension and changes in breathing patterns. As our noise pollution levels are very low we define our college

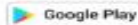
premises as a noise free zone. We have used sound Meter and Noise detector app which is downloaded from Google play store for Noise detection

Ist floor GDC W H

Min	Avg	Max
57	63	80

Time 2023-02-10 12-11-30
Duration 00:43
Levels of Noise Conversation

SoundMeter,Good helper for noise measurement
[Download for free now](#)



Scan QR code and download it from Google play

Second floor GDC W H

Min	Avg	Max
59	65	82

Time 2023-02-10 12-16-31
Duration 00:43
Levels of Noise Conversation

SoundMeter,Good helper for noise measurement
[Download for free now](#)



Scan QR code and download it from Google play

College entrance

Min	Avg	Max
59	70	90

Time 2023-02-10 11-50-13
Duration 00:43
Levels of Noise Busy Traffic

SoundMeter,Good helper for noise measurement
[Download for free now](#)



Scan QR code and download it from Google play

Principal Chamber GDC W H

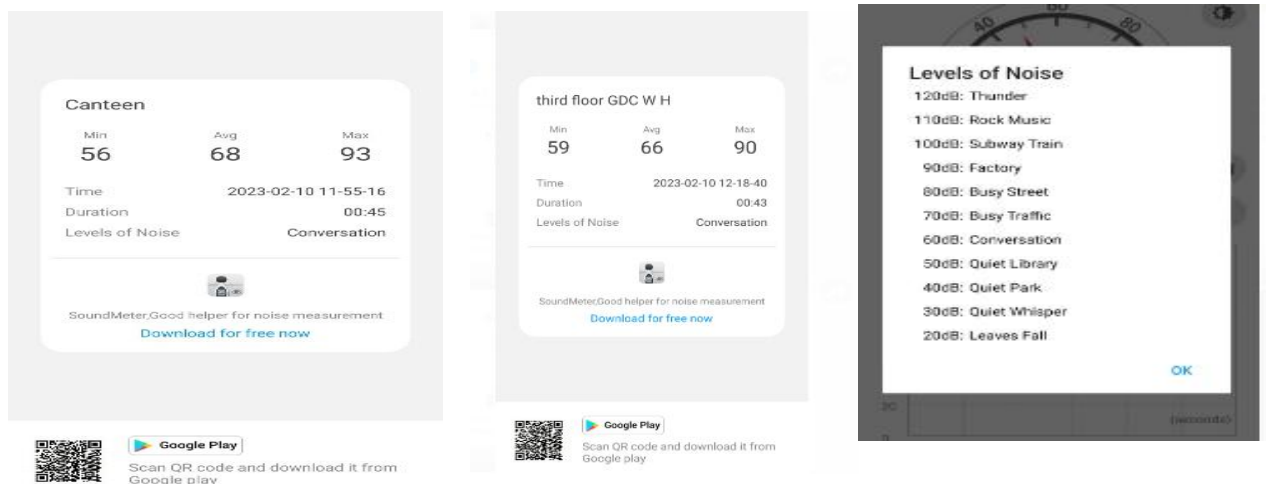
Min	Avg	Max
49	62	80

Time 2023-02-10 10-55-11
Duration 00:41
Levels of Noise Conversation


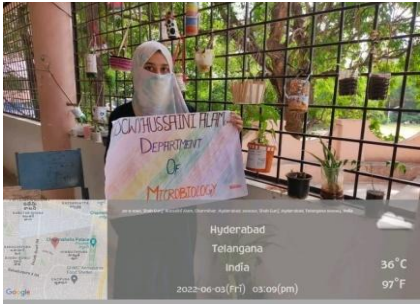

SoundMeter,Good helper for noise measurement
[Download for free now](#)



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If any eco-friendly or restoration activities conducted, please specify

ACTIVITY	Date	Organised by	Remarks
Eco friendly Models out of waste products were prepared	04-06-2022	Microbiology	
Food and water feeders for Birds	03-06-2022	Microbiology	
Awareness on Eco friendly Holi by using Natural Colors	17-03-2022	Eco club & Botany	



TELANGANA STATE POLLUTION CONTROL BOARD
CENTRAL LABORATORY
Paryavarana Bhavan, I.E. A – 3, Sanathnagar,
Hyderabad – 500 018

SAAQM (24 hours) Daily Parameterwise data for the month of February - 2023

S. NO	Sampling Location	01.02.2023				
		PM ₁₀ in µg/m ³	SO ₂ in µg/m ³	NO _x in µg/m ³	NH ₃ in µg/m ³	AQI
1	MGBS, Bus stand	85	4.1	28.1	21	85
2	Rajendranagar, NG Ranga Agricultural University	72	3.7	24.6	18	72
24 hrs Standards		100	80	80	400	-

Note: " - " Monitoring was not carried out

SAAQM (24 hours) Daily Parameterwise data for the month of
February - 2023

S.NO	Sampling Location	04.02.2023				
		PM ₁₀ in µg/m ³	SO ₂ in µg/m ³	NO _x in µg/m ³	NH ₃ in µg/m ³	AQI
1	MGBS, Bus stand	114	3.1	28.0	27	110
2	Rajendranagar, NG Ranga Agricultural University	110	2.6	27.2	20	107
24 hrs Standards		100	80	80	400	-

Note: " - " Monitoring was not carried out

SAAQM (24 hours) Daily Parameterwise data for the month of
February - 2023

S. NO	Sampling Location	08.02.2023				
		PM ₁₀ in µg/m ³	SO ₂ in µg/m ³	NO _x in µg/m ³	NH ₃ in µg/m ³	AQI
1	MGBS, Bus stand	107	4.9	24.5	12	104
2	Rajendranagar, NG Ranga Agricultural University	120	4.7	28.3	40	113
24 hrs Standards		100	80	80	400	-

Note: " - " Monitoring was not carried out
 SAAQM (24 hours) Daily Parameterwise data for the month of
 February - 2023

S. NO	Sampling Location	11.02.2023				
		PM ₁₀ in µg/m ³	SO ₂ in µg/m ³	NO _x in µg/m ³	NH ₃ in µg/m ³	AQI
1	MGBS, Bus stand	134	4.8	31.3	22	123
2	Rajendranagar, NG Ranga Agricultural University	94	3.9	28.8	23	94
24 hrs Standards		100	80	80	400	-

Note: " - " Monitoring was not carried out
 SAAQM (24 hours) Daily Parameterwise data for the month of
 February - 2023

S. NO	Sampling Location	13.02.2023				
		PM ₁₀ in µg/m ³	SO ₂ in µg/m ³	NO _x in µg/m ³	NH ₃ in µg/m ³	AQI
1	MGBS, Bus stand	90	3.1	28.3	24	90
2	Rajendranagar, NG Ranga Agricultural University	121	3.8	21.5	24	114
24 hrs Standards		100	80	80	400	-

Note: " - " Monitoring was not carried out
 SAAQM (24 hours) Daily Parameterwise data for the month of
 February - 2023

S. NO	Sampling Location	15.02.2023				
		PM ₁₀ in µg/m ³	SO ₂ in µg/m ³	NO _x in µg/m ³	NH ₃ in µg/m ³	AQI
2	MGBS, Bus stand	86	3.5	28.3	22	86
8	Rajendranagar, NG Ranga Agricultural University	91	3.6	24.2	25	91
24 hrs Standards		100	80	80	400	-

Note: " - " Monitoring was not carried out
 SAAQM (24 hours) Daily Parameterwise data for the month of
 February - 2023

S. NO	Sampling Location	20.02.2023				
		PM ₁₀ in µg/m ³	SO ₂ in µg/m ³	NO _x in µg/m ³	NH ₃ in µg/m ³	AQI
2	MGBS, Bus stand	96	5.8	28.5	29	96
8	Rajendranagar, NG Ranga Agricultural University	97	5.8	44.6	25	97
24 hrs Standards		100	80	80	400	-

Note: " - " Monitoring was not carried out

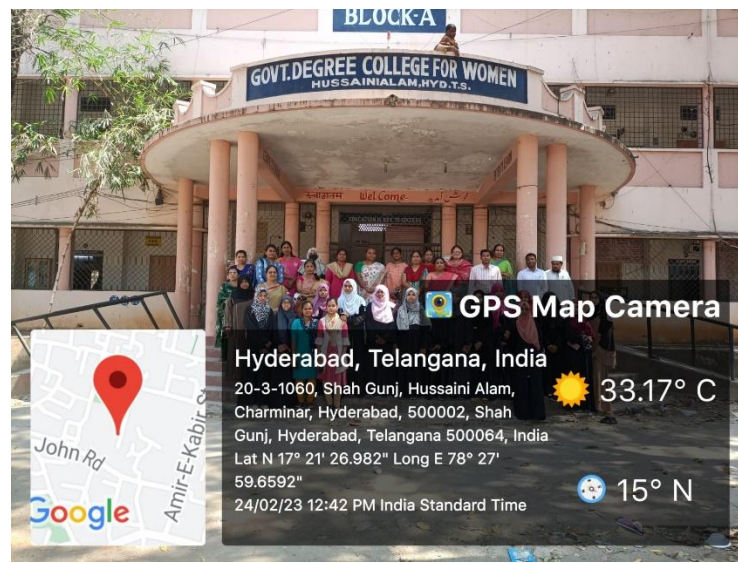
**SAAQM (24 hours) Daily Parameterwise data for the month of
February - 2023**

S. NO	Sampling Location	23.02.2023				
		PM ₁₀ in µg/m ³	SO ₂ in µg/m ³	NO _x in µg/m ³	NH ₃ in µg/m ³	AQI
1	MGBS, Bus stand	87	3.7	26.6	19	87
2	Rajendranagar, NG Ranga Agricultural University	71	3.4	29.5	27	71
24 hrs Standards		100	80	80	400	-

Note: " - " Monitoring was not carried out

**AQI Colour Index &
Health Effects:**

GOOD (0-50)	Minimal impact
SATISFACTORY(51-100)	Minor breathing discomfort to sensitive people
MODERATE (101-200)	Breathing discomfort to the people with lungs, asthma and heart disease
POOR (201-300)	Breathing discomfort to most people on prolonged exposure
VERY POOR (301-400)	Respiratory illness to people on prolonged exposure
SEVERE (>400)	Affects healthy people and seriously impacts those with existing diseases



Dr.Pratibha Lakshimi-, Asst.Prof., Osmania General Hospital



Smt. B.Manga - Horticulture officer, Urban Farming



Dr.Pratibha Lakshimi-, Asst.Prof., General Medicine, Osmania General Hospital.



Dr.Pratibha Lakshimi-, Asst.Prof., Osmania General Hospital



B.Manga,Horticulture Officer

GOVERNMENT DEGREE COLLEGE FOR WOMEN, HUSSAINIALAM, HYD.

GRADING FOR ENVIRONMENTAL AUDIT REPORT

S.NO	COMPONENTS FOR ASSESSMENT	MARKS	GRADES
1	Energy audit	20	A+ : 91-100
2	Waste audit	15	
3	Water audit	15	
4	Landscape or Environment audit	15	A : 81-90
5	Carbon footprint & Oxygen emission audit	15	
6	Green activities (conduction of seminars/conferences/workshops/student competitions/awareness programmes/observation of environmental related days etc.	10	B+ : 71-80
7	Student clubs (Environmental club/Green club/Nature club/Biodiversity club/ ECO Club/Friends and Fauna Club/Science club etc.) activity annual report	10	B : 61-70
			C : 51 - 60
	Total	100	

GDC(W) Hussainialam ,Hyderabad
Attested Scanned Copies of Green Audit 2022-2023

ENERGY AUDIT REPORT

Sl. No	Electrical appliances instruments	Number	Power (W)/ unit	Total power(W)	kW	Operation/day	kW/hr	No.of days in month	Total consumption per month
1	Tube lights	224	38	8512	8.512	06	51.072	25	12768
2	Projector	07	280	1960	1.96	06	0.01176	25	0.294
3	Speakers	03	10	30	6	0-01	0.03	25	0.15
4	Fan	176	60	10560	10.56	6	63.36	25	1584
5	Computer	120	250	30000	30.0	6	1803.00	20	36060
6	Printers	14	60	840	0.84	2	1.68	20	33.6
7	UPS	5	1000	5000	3	12	36	20	720
8	Photostat Machine	1	650	650	0.65	02	1.3	25	32.5
9	A/C	2	7000	14000	14	1	14	15	210

WASTE

1. Does your college generate any waste? If so, what are they?

Types of waste	Particulars
Plastic waste	Pen, Refill, Plastic water bottles and other plastic containers, wrappers etc
Solid wastes	Damaged furniture, paper waste, paper plates, food wastes
Chemical wastes	Laboratory waste
Waste water	Washing, urinals, bathrooms
Glass waste	Broken glass wares from the labs
Sanitary Napkin	Incinerator
E-Waste	Computers, electrical and electronic parts

2. How much quantity?

> 10kg

5. Number or weight E-waste Hazardous waste (toxic)

Solid waste, Dry leaves, Canteen waste, Liquid waste, Glass, Unused equipment, Medical waste if any Napkins Others (Specify)

E-Waste Management

E-Waste	Source-Computers, electrical and electronic parts	Disposal-As per the instruction from Commissioner of Collegiate Education, Telangana to dispose E waste.
---------	---	--

1. Computers and their parts, telephones, printers and other electronic devices become Obsolete or do not function properly after some years are considered to be e- waste.
2. Proper collection and disposal of e-waste is very important as they are mostly made of hazardous metals like lead, cadmium etc. All the E-Waste like key boards, mother boards, printers etc generated in the college
3. The institute follows the directions of Commissioner of Collegiate Education Telangana to dispose E waste.
4. The printer cartridges are refilled outside the college. Around 50e waste

10	Refrigerator	2	150	003	1.05	24	25.2	30	756
11	Oven	1	1500	1500	1.5	0.25	0.375	10	3.75
12	Centrifuge	05	850	4250	4.25	0.25	0.425	8	3.4
13	Autoclave	1	1700	1700	1.7	1	1.7	4	6.8
14	Laminar air flow	1	600	600	0.6	1	0.6	15	9
15	Exhaust fans	12	32	384	0.384	4	0.128	25	3.2
16	Incubator	2	40	80	0.08	6	0.32	6	6
17	Sanitary napkin incinerator	Natural Incinerator is present wherein napkins are burnt without using electricity							
18	CCTV DV R	1	10	240	.24	24	5.76	30	720
	Total	Consumption per month is 2004.961KW/hr							

PRG
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B. Sundar Prasad
Principal

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Hussainialam, Hyd.

Solid wastes	Source-Damaged furniture, paper waste, paper plates, food wastes	Disposal-Kitchen wastes and garden wastes commonly are recycled to form nutrient rich quality organic manure for agricultural purpose. Food wastage used for cattle. GHMC
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Dry leaves:

Dry leaves are collected and Compost is prepared



Canteen waste

Hazardous waste -100gm/day Canteen waste ❖ Biodegradable college canteen - 20kg/day

Liquid waste

Methods 1 Composting 2 Recycling 3 Reusing 4 Others
(specify)

a. Composting b. Recycling c. Reusing d. Others (specify)

The college campus is environmental friendly and filled with greenery. The quantity of waste in the form of solid, liquid and waste is only meagre. The 3Rs “reduce, reuse and recycle’ hierarchy helps to eliminate waste and protects environment. To fulfil 3R’s the college takes special measures for the management of the waste.

Solid Waste Management

The solid waste is generated in the form of either used papers or other stationery items. Some initiatives are taken to minimize the use of plastic and other solid waste in the college. Solid waste is segregated as biodegradable and non- degradable and handed over to Hyderabad Municipality as part of Swach Bharath initiative as well as clean and green programme. Dustbins are provided in the college for dry waste.

The compost technique is adopted for the disposal of solid waste from the college and the leftover food from the canteen. For this purpose, solid waste is collected and dumped into the pit especially dug for decomposition of waste and after few months the decomposed matter is used as manure for the plants in the college campus.

Many awareness programmes are conducted in the college to avoid usage of plastic. Special care is taken to utilize naturally available leaves and flowers available in the campus to prepare bouquets to offer to guests to felicitate them on special occasions. Bags are also prepared by the students out of waste which is considered as the best .The College is striving to be plastic free zone.

Liquid Waste

A huge quantity of liquid waste is generated in the college daily. The liquid waste consists of mainly effluent waste generated from wash rooms and waste water from the R.O. Plant. The institute has dug up sinking pits for the drained water to increase the ground water level.

E - Waste management

E waste refers to the discarded computers, electronic equipment, projectors etc. The Commissioner ate of Collegiate Education has issued certain guidelines which all the Government Degree colleges adhere for the management of E waste. For this purpose, a district level committee shall be formed in each District under the chairmanship of the District ID College Principal comprising lecturers as members.

The college follows a standard operational procedure (SOP) and guidelines prescribed by the Higher Authorities in the Management of Waste


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Principal

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Results of water quality-I

Parameters	Bore water	Well	Municipal Tap water No Municipal water connection	Standard value (BIS)
Dissolved Oxygen (mg/l)	6.3 Mg/l		NA	6-8
Acidity (mg/l)	19.9		NA	200
Alkalinity (mg/l)	180.1		NA	200
Chloride (mg/l)	50.1		NA	250
Hardness (Total)	170.3		NA	200
Conductivity (µs)	Nil		NA	
Ph.	7.9		NA	6.5-8.5
Total Dissolved Solids (ppm)	300		NA	500
Salinity (ppt)	Nil		NA	
Total coliform	0		NA	0
Fecal coliform	0		NA	0

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NOISE POLLUTION MANAGEMENT

S.No	Place (S)	Measurements (Duration in seconds)	Minimum (dBA)	Maximum (dBA)	Average (dBA)
1	Library Reading Room	42	60	77	67
2	Digital Library	44	60	81	64
3	Principal chamber	41	49	80	62
4	Canteen	45	56	93	68
5	Play ground	44	56	96	70
6	Auditorium (new)	38	59	92	66
7	Seminar hall(old)	44	60	84	65
8	Ground floor	41	56	83	64
5	First floor	41	56	83	64
9	Second floor	43	59	82	65
10	Third floor	43	59	90	66
11	Office	38	54	90	70
12	Examination Branch	43	61	92	71
13	College entrance	43	59	90	70

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Carbon Footprint - Report

- Petrol used by two wheelers/day-50L
- (Per person to and fro 30 Kms=1L) Fuel used by four wheelers (3 Persons) -5L
- (Per person to and fro 30 Kms=1.5L) Fuel for persons (total 600 persons) travelling by common
- Transportation =Each bus consumes 6 Ltr/day 12 buses travel daily so total =72Lts/days

Auto transport consumes 4 Ltr/ auto so 150 autos consume 600 Ltr

Total fossil fuel used =50+5+600+72=727Ltrs/day

Total fuel cost per day for transportation for Diesel vehicle=58,200/-

(600L x Rs 97) For 22 days it costs Rs.12, 80, 400

Total fuel cost per day for transportation for Petrolvehicle=25,288/day

(232L x Rs 109) For 22 days it costs,

Total amount of fuel consumption for 22 days is

Rs.12,80,400+Rs.5,56,336=Rs.18,36,736/-

Cost of stakeholder transportation per month is Rs.18,36,736/-

Green Audit Carbon Footprint-Student Survey Sheet-

https://docs.google.com/spreadsheets/d/1_OVnozBAOHY-qhTYI1av-N6xSG6n8esVMXuBmoC6Kbl/edit?usp=sharing

Online and Offline Carbon Footprint Survey is conducted


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Plant species recorded in the College campus -73

S.No.	Scientific Name	Common Name	Family	No.of Saplings
1	<i>Kalanchoe pinnata</i> (Lam.) Pers	cathedral bells	Crassulaceae	1
2	<i>Coleus amboinicus</i> Lour.	vaamu	Lamiaceae (Labiatae)	2
3	<i>Portulaca grandiflora</i>	Moss Rose	Portulacaceae	3
4	<i>Dracaena trifasciata</i>	Snake plant	Asparagaceae	4
5	<i>Aloe barbadensis miller</i>	Kalabanda	Asparagaceae (Liliaceae)	2
6	<i>Syngonium podophyllum</i>	arrowhead plant	Asparagaceae (Liliaceae)	2
7	<i>Epipremnum aureum</i>	Money Plant	Araceae	6
8	<i>Nerium oleander L.</i>	Nerium	Apocynaceae	5
9	<i>Fragaria indica</i>	Bamboo Tree	Bambusoideace	1
10	<i>Pongamia pinnata</i>	Ganuga	Fabaceae	27
11	<i>Mangifera Indica</i>	Mango Tree	Anacardiaceae	1
12	<i>Ficus carica</i>	Anjeer	Moraceae	1
13	<i>Bougainvillea glabra</i>	Paper Flower	Nictaginaceae	7
14	<i>Crotalaria gigantea</i>	Milk Weed	Asclepiadaceae	2
15	<i>Syzygium cumini</i>	Black Plum	Myrtaceae	2
16	<i>Melia azadirachta</i>	Neem Tree	Meliaceae	1
17	<i>Tecoma stans</i>	Yellow Bells	Bignoniaceae	2
18	<i>Carica papaya</i>	papaw	Caricaceae	3
19	<i>Tamarindus indica</i>	Tamarind	fabaceae	1


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GRADING FOR ENVIRONMENTAL AUDIT REPORT

S.NO	COMPONENTS FOR ASSESSMENT	MARKS	GRADES
1	Energy audit	20	A+ : 91-100
2	Waste audit	15	
3	Water audit	15	
4	Landscape or Environment audit	15	
5	Carbon footprint & Oxygen emission audit	15	A : 81-90
6	Green activities (conduction of seminars/conferences/workshops/student competitions/awareness programmes/observation of environmental related days etc.	10	B+ : 71-80
7	Student clubs (Environmental club/Green club/Nature club/Biodiversity club/ ECO Club/Friends and Fauna Club/Science club etc.) activity annual report	10	B : 61-70 C : 51 - 60
	Total	100	


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