

GREEN AUDIT REPORT

2022-23

Submitted to
The Commissioner
Collegiate Education, T.S.
Nampally
Hyderabad.

Submitted By
Green Audit Committee
Government Degree College Patancheru, Dist. Sangareddy
Telangana State

**COMMISSIONERATE OF COLLEGIATE EDUCATION,
TELANGANA: HYDERABAD
PROFORMA FOR GREEN AUDIT**

College Profile

Name of the College: GOVERNMENT DEGREE COLLEGE

Address: PATANCHERU, SANGAREDDY DIST.

Contact Info: 9154806837

Campus Area: 25 Guntas

Built-up Area: 30157 Sft

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

The student and faculty strength of the college:

Strength	Male	Female	Total
No of students	619	653	1272
No of Teaching Staff	17	13	30
No of Non-Teaching staff	12	3	15

Physical Structure

The available land of the college: 25 Guntas.

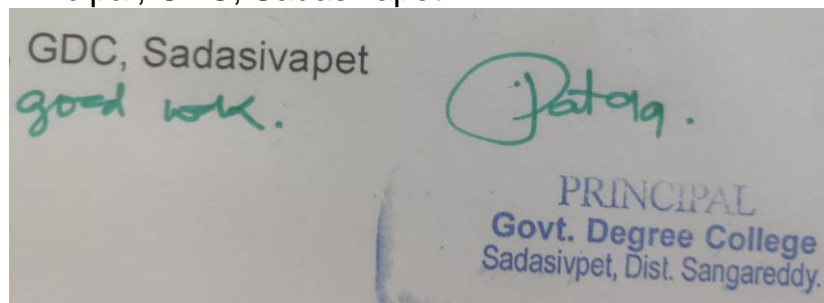
The built-up area of the college: 30157 Sq.Ft.

No. of Class Rooms	12
No. of Laboratories	07
No. of Conference halls	01
Library Halls	02
Auditorium	---
Canteen	---
Any other (please specify)	-----

Objectives : Clean and green campus with minimum energy consumption


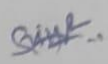

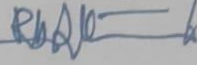

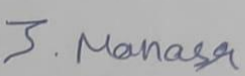
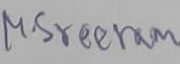
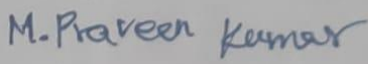
Prepared by: Green audit committee of the college

Approved by: Principal, GDC, Sadasivapet



FORMS AND SUPPORT MATERIAL

Questionnaire	Yes
Document ref. name/ no.:	
Checklist for Environmental Audit	Yes
Document ref. name/ no.:	
Additional forms and support material:	PHOTOGRAPHS

College Level Green Audit Committee	
Chairman	:Dr. V. Rajendra Prasad, Principal 
Convenor	:Dr. D. Srihari Reddy, Asst. Prof. of Botany 
Members	:Sri M. Venkateshwarulu, Lecturer in Chemistry  Sri R.H. Arthur, Asst. Prof. of Physics 
Student volunteers	: K. Maheshwari, BZC III  J. Manasa, BZCS II  M. Sriram, BZC III  M. Praveen Kumar MPC II 



 **GPS Map Camera**



Patancheruvu, Telangana, India

502319, 5-18/2, MG Rd, Ashok Nagar, Patancheru Industrial Area, Patancheruvu, Telangana 502319, India

Lat 17.531504°

Long 78.264592°

27/02/23 01:28 PM GMT +05:30

Green audit committee meeting

AUDITING FOR WATER MANAGEMENT

1. List out uses of water in your college. Water is used for following purposes:

Ans: i) Drinking water R.O. ii) Washrooms iii) Watering Plants iv) Laboratory

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

Ans: Bore well and rain water harvesting

3. How many wells are there in your college?

Ans: Bore well and rain water harvesting sump

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

Ans: 02 motors are used for pumping water from bore well and sump

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

Ans: 5HP and 2 HP

6. What is the depth of each well?

Ans: The total depth of the well is 200 feet

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

Ans: The present depth of water in each well is 180 feet

8. How does your college store water?

Ans: Water is stored in overhead tanks and sump

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

Ans: There is one overhead tank with total storage capacity of 5000 lit

10. Quantity of water pumped every day? (In liters)

Ans: water pumped every day is 1500 lit

11. If there is water wastage, specify why.

Ans: Waste water comes from RO plant

12. How can the wastage be prevented / stopped?

Ans: Waste water comes from RO plant is used for plants, and by regular monitoring of tap leakages

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

Ans: Entry of the water through bore well pipes

Exit of the water through drainage pipes.

14. Where does waste water come from?

Ans: Rain water and wash rooms

15. Where does the waste water go?

Ans: Rain water to plantation and the waste water from washrooms goes to drainage

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

Ans: Rain water useful for Plants

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

Ans: Lab water enters in to drainage after neutralization treatment

18. Is there any treatment for the lab water?

Ans: Yes, Neutralization

19. Whether green chemistry methods are practiced in your labs?

Ans: Yes, we neutralize acids and bases before releasing in to the ground.

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

Ans: - Rain water used for gardening purpose

- By avoiding the overflow and leakage of tanks and water taps
- Closing taps properly after use
- Less amount of water is used for labs.

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

Ans: At present no water meter is allotted to college.

22. Bimonthly water charges paid to water connections if any

Ans: Nil

23. No. of water coolers. Amount of water used per day? (in liters)

Ans: Nil

24. No. of water taps. amount of water used per day?

Ans: There are 30 taps in the college, Total amount of water used per day is 800 lit.

25. No. of bath rooms in staff rooms, common, hostels. Amount of water used per day?

Ans: Nil

26. No. of toilet, urinals. Amount of water used per day?

Ans: No. of toilets are 16, Urinals 7 Amount of water used per day is 800 lit

27. No. of water taps in the canteen. Amount of water used per day?

Ans: Nil (NO Canteen in college)

28. Amount of water used per day for garden use.

Ans: Amount of water used per day for garden use is 300 lit

29. No. of water taps in laboratories. Amount of water used per day in each lab?

Ans: No. of water taps in laboratories is 10. Amount of water used per day in each lab is 20 lit.

30. Total use of water in each hostel?

Ans: Nil (No Hostel in 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.

S. No	Type of Usage	Amount of water
1	RO water filter	500 lit
2	Toilets, Urinals	800 lit
3	Laboratory	200 lit
4.	Gardening	300 lit
	Total	1800lit

32. Is there any water used for agricultural purposes?

Ans: No.

33. Does your college harvest rain water?

Ans: Yes.

34. If yes, how many rain water harvesting units are there? (Approx. amount)

Ans: One, 5000 liter

35. How many of the taps are leaky? Amount of water lost per day?

Ans: Nil

36. Are there signs reminding people to turn off the water? Yes / No

Ans: Yes

37. Is there any waterless toilets?

Ans: No

38. How many water fountains are there?

Ans: Nil

39. How many water fountains are leaky?

Ans: Nil

40. Is drip irrigation used to water plants outside? YES/NO

Ans: No

41. How often is the garden watered?

Ans: Daily in summer, weekly twice in other seasons

42. Quantity of water used to watering the ground?

Ans: Nil

43. Quantity of water used for bus cleaning? (Liters per day)

Ans: Nil (No BUS to College)

44. Amount of water for other uses? (Items not mentioned above)

Ans: Nil

45. Area of the college land without tree/building canopy.

Ans: 3 acres

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

Yes

47. Are there any water saving techniques followed in your college? What are they?

- ✓ Regular Checkup of Taps and pipes for leaks.
- ✓ Using Rain water harvested to water the garden plants

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

Ans: College could save more water by arranging drip irrigation

Rain water Harvesting sump



AUDITING FOR ENERGY MANAGEMENT

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

Ans: Electricity.

2. Electricity bill amount for the last year.

Ans: Rs. 1,08,794

3. Amount paid for LPG cylinders for last one year.

Ans: Nil

4. Weight of firewood used per month and amount of money spent? Also mention the amount spent for petrol/diesel/ others for generators?

Ans: Nil

5. Are there any energy saving methods employed in your college? If yes, please specify. If no, suggest some.

Ans: Replaced conventional bulbs and tubes with LED bulbs, tubes and energy efficient fans for saving the energy

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

Ans: Monthly electricity expenditure apprx.Rs 9066=00

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

Ans: Nil

8. Energy used by each bulb per month? (For example-60 watt bulb x 4hours x number of bulbs = KWh).

Ans: Nil

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

Ans: LED bulbs 155 & 6 hours/day and 25 days in a month

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

Ans: $9\text{watts} * 6\text{ hours} * 155\text{ bulbs} * 25\text{days} = 209\text{ kwh}$

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

Ans: Nil

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

Ans: Nil

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

Ans: 76 fans are installed in college & 6 hours and use 25 days in a month

14. Energy used by each fan per month? (kWh).

Ans: $60\text{ w} * 6\text{hours} * 25\text{days} * 76\text{fans} = 684\text{ kwh}$

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

Ans: Nil

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

Ans: Nil

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)

Ans: NIL

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

Ans: Nil

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

Ans: 98 computers & 2 hours/day and 25 days in a month

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

Ans: $98 \times 2 \times 25 \times 250 = 1225 \text{ kwh}$

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

Ans: 2 & 2 hours and 25 days in a month

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

Ans: 2 & 24 hours and 25 days in a month

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

Ans: $2 \times 24 \times 25 \times 150 = 180000 \text{ wh} = 180 \text{ kwh}$

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? Mentions use (Hours used/day for how many days in a month)

Ans:

$1 \times 2 \times 25 \text{ days} \times 650 = 32500 \text{ wh} = 32.5 \text{ kwh}$

2 hours/day and 25 days in a month

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

Ans: 3 inverters, 1 hour/day, 25 days

$3 \times 1 \times 25 \times 1000 = 75 \text{ kWh}$

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)

Ans: Electrical heater-1, Water bath-1, centrifuge-1. Total -3

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

Ans: 25 kWh, 10 kWh, 1 kWh

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)

Ans: Nil

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

Ans: nil

30. No of street lights in your college?

Ans: 02 lights only

31. Energy used by each street light per month? (kWh)

Ans: 02 bulbs*09watts*16 hours*25 days=7.2kwh

32. No of TV in your college and hostels?

Ans: 01

33. Energy used by each TV per month? (kWh)

Ans: 01*200 watts*25 days*1 hour=5kwh

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)

Ans: Nil

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.

Ans: Nil

36. Do you run "switch off" drills at college?

Ans: yes

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

Ans: 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?

Ans: No

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

Ans: Turn the lights and fans off in unoccupied students' rooms and shutdown the computers when not in use.

40. How many boards displayed for saving energy awareness?

Ans: 04 boards

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

Ans: Nil

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

Ans: To install solar based lights, fans, sensor based street lights totally in future

Calculation of energy for electrical appliances
Appliance Power used in (watt) Usage per day (hours) Number of appliances Average kWh per day
(Watt X hours X Number X 1000) Average kWh per month (Watt X hours X Number X 1000 x 30)
Incandescent bulb 60 watt CFL 18 W Microwave 1000W Stove 3000W Kettle 2500W



AUDITING FOR WASTE MANAGEMENT

What is the total strength of students, teachers and Non-teaching staff in your College?

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

Ans:

Strength	Male	Female	Total
No of students	619	653	1272
No of Teaching Staff	17	13	30
No of Non-Teaching staff	12	3	15

Which of the following are available in your College?

Ans: Give area occupied -25 kuntas, Garden area -500 sqyards and Garbage dump(number) -NO

Ans: Playground area 3 Acres , Laboratory -7, Kitchen - NO, Canteen -NO, Toilets(number) -16, Car/scooter shed area - NO

Ans: Number of class rooms -12, Office rooms 02 and others (specify) :

Library-1, TSKC-1, Seminar Hall-1

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.

Ans:

Municipal dump yard: NO

Garbage heap: NO Stagnant water: NO

Open drainage Industry – (Mention the type): NO

Bus / Railway station Market / shopping complex / public halls: NO

WASTE

Does your college generate any waste? If so, what are they? How much quantity?

Number or weight E-waste Hazardous waste (toxic)

Ans: Solid waste: 0.75Kg

Dry leaves : 0.25kg

Canteen waste :NO

Liquid waste :1 Liter Per

DayGlass :NO

Unused equipment : No Medical waste if any :NO

Napkins Others (Specify) :NO

Is there any waste treatment system in the college?

Ans: Yes, we have a compost unit in our college.

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

Ans: NO

1 What is the approximate quantity of waste generated per day? (in Kilograms) Office Laboratories Canteen/kitchen

Ans: NO

2 Why waste is a problem?

Ans: Waste causes pollution, promotes mosquitoes leading to health issues

3 Whether waste is polluting ground/surface water? How?

Ans: NO

4 Whether waste is polluting the air of the college? How?

Ans: NO

5 How is the waste generated in the college managed?

Ans: Methods 1. Composting(Yes) 2. Recycling 3. Reusing 4 Others (specify)
6 How many separate boxes do you think you would need to put into a classroom to start a waste segregation and recycling campaign?

Ans: 2 boxes for each class

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

Ans: Green colour box for biodegradable(Wet) and Blue colour box for nonbiodegradable(dry).

7 Do you use recycled paper in College?

Ans: NO

8 Is there any waste wealth program practiced in the college?

Ans: NO

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

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

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

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

Ans: We spread the message of recycling to others in the community by organizing awareness programmes by NSS and ECO-CLUB

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

Ans: Reducing the plastic usage by banning plastic bags, recycling biodegradable waste by compost unit and reusing the plastic bottles/cans for growing ornamental plants.

Compost unit



AUDITING FOR GREEN CAMPUS MANAGEMENT

1. Is there a garden in your college? Area? Yes, approx. 600 sq yards
2. Do students spend time in the garden? Yes
3. List the plants in the garden, with approx. numbers of each species.

S.NO	NAME OF THE PLANT	NO.OF PLANTS
1	Asoka	28
2	Neem	2
3	Mango	1
4	Guava	2
5	Lemon	2
6	Radamanoham	1
7	Sapota	1
8	Cashew	1
9	Drum stick tree	1

4. Suggest plants for your campus. (Trees, vegetables, herbs, etc.)

- Mango
- Rosewood
- Guava
- Teak
- Curryleaf
- Drumstick
- Pomogranate
- Ladys finger
- Brinjal
- Ridge guard
- Tomato
- Tippateega

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

S.NO	NAME OF THE PLANT	NO.OF PLANTS
1	Asoka	28
2	Neem	2
3	Mango	1
4	Guava	2
5	Lemon	2

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

Ans: Yes, displayed with QR codes

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

Ans: Yes, some plantation has done during harithaharam programme

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

Ans: No

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

Ans: Yes, 100sqy

We are growing medicinal plants on the terrace.

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

Ans: Nil

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

NA

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

Ans: Dr.D.Srihari Reddy, NSS Programme officer

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

Ans: Yes. Wastewater released from RO plant is used for watering plants

14. List the name and quantity of pesticides and fertilizers used in your gardens?

Ans: No, we are not using chemicals in garden

15. Whether you are doing organic farming in your college? How?

Ans: Using the compost from compost unit for terrace garden.

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

Ans: Yes, We have a compost unit in the garden. We fill the compost unit with organic waste like fallen plant parts and dung. That waste is decomposed to form compost fertilizer.

The compost generated in the college is being used as manure for plants in the garden

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

Ans: No

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

Ans: Yes. Our college has small botanical garden on the terrace.

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

Neem-1,
Tulasi-5
Aloe-2
Amla-2
Saraswathi-2

Bryophyllum-10

Coleus-2

Ashwagandha-1

Nela usiri

20. Any threatened plant species planted/conserved?

Ans: No

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

Ans: No

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

Ans: No

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

- Guava
- Mango
- Lemon
- Sapota

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

Ans: No

25. Is there any irrigation system in your college?

Ans: No

26. What is the arboretum in the surrounding area of the college?

Ans: Drydeciduous plants

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

- Plantation programme
- Clean and green programmes
- Swatch bharath programme
- Haritha haram program
- Ozone day awareness programme

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

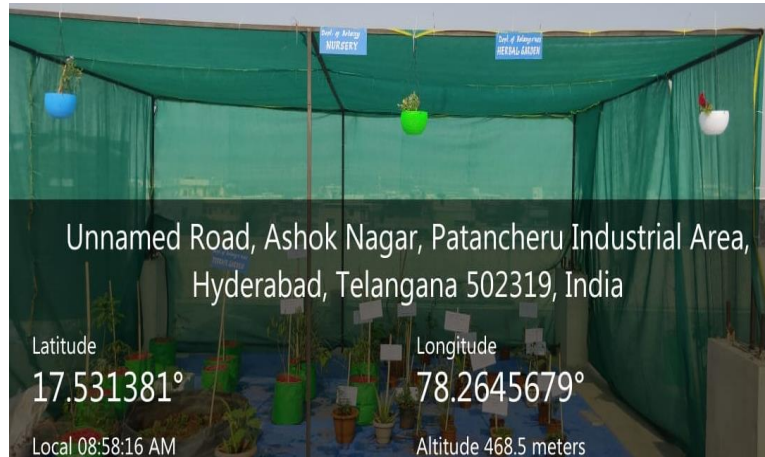
Ans: NSS volunteers participate in various plantation activities. They clean the campus and remove plastic bottles, plastic covers from the campus.

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

Ans: We have no ground area for growing trees, maintaining terrace garden.

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

- Activities such as Plantation programs and protecting plants should be done regularly.



Terrace Garden and Herbal Garden(Shade net)



Plantation and Save soil awareness program



Nursery(above) Sapplings production for terrace garden(below)



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

Ans:

Strength	Male	Female	Total
No of students	619	653	1272
No of Teaching Staff	17	13	30
No of Non-Teaching staff	12	3	15

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

Ans:6

3.No. of cycles used Ans:15

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

Ans: No. of two wheelers used 5, 100 kilometer, 5 litre,550 rupees per day

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

Ans: 03, 500km, 25 litre, 2500 rupees per day.

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

Ans: 650 students come by bus to college from nearby villages with bus pass

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)- NA

8. Number of parent-teacher meetings in a year? Parents turned up (approx.)

Ans:1

9. Number of visitors with vehicles per day? Ans: 8

10. Number of generators used per day (hours). Give the amount of fuel used per day.
Ans: Nil

11. Number of LPG cylinders used in the canteen (Give the amount of fuel used per day and amount spent). Ans: 2, 122 gm, Rs. 3000

12. Quantity of kerosene used in the canteen/labs (Give the amount of fuel used per day and amount spent). Ans: No

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. Ans: No

14. Amount of taxi/auto charges paid per month for the transportation of office goods to the college. Ans: No

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

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

Ans: Nil

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

Ans:

-Using of fuel only when it is urgently needed

-paper less work(digitalization), recycling the paper from library and waste paper.

18. Are the Rooms in Campus are Well Ventilated? Ans: Yes

19. Window Floor ratio of the Rooms. Ans: Good

Water management

SL NO	PARAMETERS	Response	Remarks
1	Source of water	Bore	
2	No. of Wells	01	
3	No. of motors used	02	
4	Horse power – Motor	5 HP	
5	Depth of well –Total	200 feet	
6	Water level	180 feet	
7	Number of water tanks	02	
8	Capacity of tank	@ 5000 lit	
9	Quantity of water pumped every day	1000 lit	
10	Any water wastage/why?	NO	
11	Water usage for gardening	Weekly twice	
12	Waste water sources	Rain water	
13	Use of waste water	To plants	
14	Fate of waste water from labs	Drainage	
15	Whether waste water from labs mixed with ground water	NO	
16	Any treatment for lab water	Yes	
17	Whether any green chemistry method practiced in labs	Neutralisation	
18	No. of water coolers	Nil	
19	Rain water harvest available?	Yes	
20	No. of units and amount of water harvested	1, 5000 ltr	
21	Any leaky taps	Nil	
22	Amount of water lost per day	Nil	
23	Any water management plan used?	Yes	
24	Any water saving techniques followed?	Yes	
25	Are there any signs reminding peoples to turn off the water?	Yes	

Results of water quality

Parameters	Bore Well water	Municipal Tap water	Standard value (BIS)
Dissolved Oxygen (mg/l)	7.2		6-8
Acidity (mg/l)	147		200
Alkalinity (mg/l)	90		200
Chloride (mg/l)	90		250
Hardness (Total)	215		200
Conductivity (μ s)	635		
Ph.	6.84		6.5-8.5
Total Dissolved Solids (ppm)	754		500
Salinity (ppt)	--		
Total coliform	--		0
Fecal coliform	--		0

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

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

**Water Quality analysis (Biological) report of college – II (with
Photographic evidence):**

S.No	Phytoplanktons	Scientific Name and number per L	Methodology
1	Diatoms (Bacillariophyceae)	Nil	Microscopic observation
2	Dino flagellates (Dinophyceae)	Nil	Microscopic observation
3	Coccolithophores (Prymnesiophyceae)	Nil	Microscopic observation
4	Green algae (Chlorophyceae)	Nil	Microscopic observation
5	Cyanobacteria (earlier Blue-green algae)	Nil	Microscopic observation
6	Others (specify)	-----	

1. ENERGY AUDIT

S.No	Electrical device/ items	Number	Power (W)/Unit	usage time (hr/day)
1	CFL	0	0	0
2	TUBE	0	0	0
3	LED BULB	155	9	6
4	PROJECTOR	2	280	1
5	FAN	76	60	6
6	COMPUTER	98	250	2
7	PRINTERS	3	60	1
8	PHOTOSTAT MACHINE	1	650	1
9	SCANNER	1	50	0.5
10	REFRIGERATOR	2	150	24
11	TABLE FAN	0	55	
12	CCTV DVR	1	10	24

2. Waste management

Approximate quantity of waste generated per day (in kg)

Office				
Approx.	Biodegradable	Non -Biodegradable	Hazardous	Others
<1Kg	0.75kg	0.25kg	nil	
2-10Kg	-----	-----	-----	
>10Kg	-----	-----	-----	

Laboratories :				
Approx.	Biodegradable	Non - Biodegradable	Hazardous	Others
<1Kg	0.25 kg	0 kg	-----	
2-10Kg	-----	-----	-----	
>10Kg	-----	-----	-----	

Canteen/kitchen :NO				
Approx.	Biodegradable	Non - biodegradable	Hazardous	Others
<1Kg				
2-10Kg				
>10Kg				

How the waste generated in the college is managed?

A)Composting/ Vermicomposting	Yes	Organic waste
B)Recycling	-----	
C)Reusing	-----	
D)Other ways	-----	

Waste generated in the college?

E-waste		10kgs Per annum
Hazardous waste		-----
Solid waste		0.25kg
Dry leaves		0.75kg
Canteen waste		-----
Liquid waste		1 liter per day
Glass		-----
Unused Equipment		2
Napkins		-----
Others (specify)		-----

Do you use recycled paper in college?	Yes
Any waste management methods used?	Composting

Faunal diversity in college campus (with Photographic evidence)

Faunal group	Scientific name	Number (If enumeration is done)	Seasonality
Spiders	Aranea	15	All seasons
Moths & butterflies 1. Lemon butterfly 2. Comma butterfly	Papilio demoleus Polygonia calbum	10 5	Rainy season
Other insects: (Dragon Flies, Honey bee Wasps,	Anax Apis mellifera Vespa	150 200 10	Rainy season
Annelids 1. Earth worm	Pheritima	50	Rainy season
Other Arthropods 1. Locust 2. House fly	Schistocerca Musca domestica	70 300	Rainy season
Amphibians 1. Frog	Rana tigrina	4	Rainy season
Reptiles Garden lizard	Calotis versicolor	2	All seasons
Birds 1. Crow 2. House sparrow	Carvus Passer	10 30	All seasons
Mammals 1. Squirrel	Funambulus	2	All seasons



Spider



Butterfly

**Air quality Determination:
Air Quality Index (parameters studied/recorded/ Seasonal):**

NO ₂	12.9ppb
NO	--
O ₃	6.3 ppb
PM2.5	4.2 ug/m3
PM10	12.3 ug/m3
CO	200 ppb
Humidity	89%
Barometric Pressure	950 hpa
Wind Speed	21 km/h
Wind Direction	West to east

Measurements of Noise level in and around the college

S.No	place (S)	Measurements (Duration in seconds)	Minimum (dBA)	Maximum (dBA)	Average (dBA)
1	Library	60	40.2	70.1	56.9
2	Canteen	-	-	-	-
3	Play ground	60	41.6	88.6	66.6
4	Auditorium	-	-	-	-
5	Science Block	60	39.6	62.8	51.2
6	Any Other (Specify)	-	-	-	

Eco-Club activities

Terrace garden was developed to counter the ground space problem. Several grafted varieties viz. Sapota, guava, Lemon, drumsticks etc. are grown on terrace. Plantation of saplings on the occasion of Haritha haram programme performed in the college. Rallies are organized around the Patancheru to provide awareness among the people to 'plant trees and save trees'. Instructed the students to use bikes only if necessary. Emission of carbon monoxide from the vehicles cause lot of pollution. National Forest Day is celebrated on March 21 to spread awareness among the students about the importance of all types of forests and trees for the benefit of current and future generations. Water day is organized on March 22nd by taking action to tackle water crisis.



Plantation of sapplings in the campus



Terrace gardening programme



Patancheruvu, Telangana, India

502319, 5-18/2, MG Rd, Ashok Nagar, Patancheru Industrial Area,
Patancheruvu, Telangana 502319, India

Lat N 17° 31' 53.346"

Long E 78° 15' 52.4016"

01/06/22 01:59 PM

Seed bank maintenance

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	A : 81-90
4	Landscape or Environment audit	15	B+ : 71-80
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 : 61-70
7	Student clubs (Environmental club/Green club/Nature club/Biodiversity club/ ECO Club/Friends and Fauna Club/Science club etc.) activity annual report	10	C : 51 - 60
	Total	100	