

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

College Profile

Name of the College: **GOVERNAMENT DEGREE COLLEGE, WARDHANNAPET**

Address: WARDHANNAPET, WARANGAL RURAL (Rented Building)

Contact Info: 9052412838

Campus Area: 10923 SQ.FT

Built-up Area: 9602.505 SQ.FT

Is the building has ventilators for natural air flow in all rooms: Yes/No: **yes**

The Student and faculty strength of the college:

Strength	Male	Female	Total
No of students	125	76	201
No of Teaching staff	03	06	09
No of Non-Teaching staff	-	02	02

Physical Structure

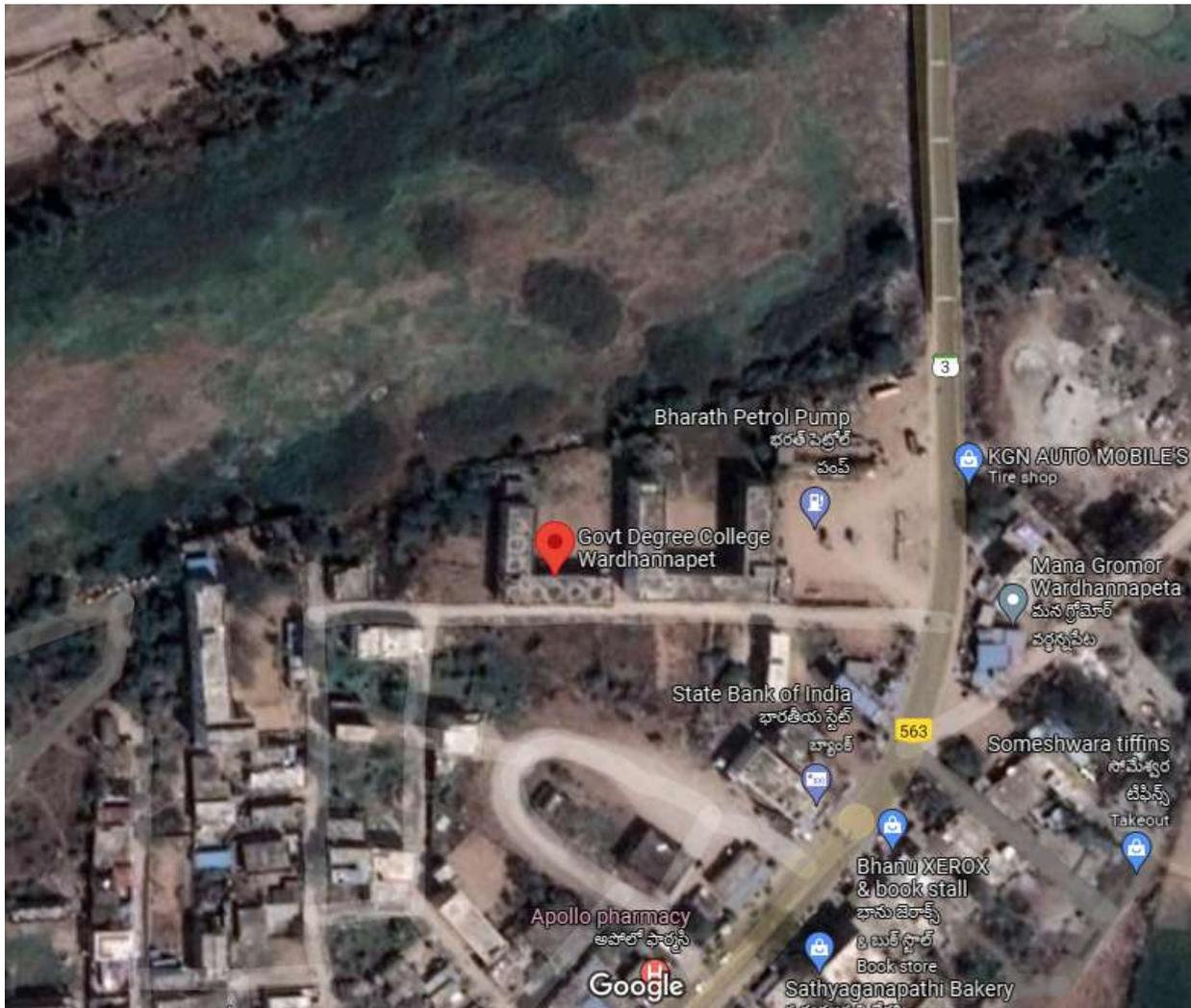
The available land of the college: 10923 SQ.FT

The built-up area of the college: 9602.505 SQ. FT

No. of Class Rooms	09
No. of Laboratories	05
No. of Conference halls	-

Library Halls	-
Auditorium	-
Canteen	-
Any other(please specify)(Toilets)	02

Objectives:	Proper utilization of natural resources. Using energy in reduction way. Proper utilization of water for drinking,cleaning and watering the plants. Conducting awareness programs about energy and water consumption.
Prepared by:	B.SWETHA
Approved by:	Dr.M.Samatha
Remarks:	
<b>FORMS AND SUPPORT MATERIAL</b>	
Questionnaire document ref. name/no.:	Questionnaire for Green Audit 01/GDC/WPT/2021
Checklist for Environmental Audit document ref. name/no.	Checklist for Green Audit 02/GDC/WPT/2021
Additional forms and support material:	Photographs and Reports



### **Background:**

The college has adopted the 'Green Campus' system for environmental conservation and sustainability. There are main three pillars i.e. zero environmental foot print, positive impact on occupant health and performance and 100% graduates demonstrating environmental literacy. The goal is to reduce CO2 emission, energy and water use, while creating atmosphere where students can learn and be healthy.

### **General Objectives:**

1. To map the Geographical Location of the college
2. To document the ambient environmental condition of weather, air and water of the college
3. To estimate the Energy requirements of the college

4. To follow the waste minimization and environmental pollution control plans.
5. To conduct emergency response plans and procedures.

### **Protocols used for Environmental Audit**

**Internal Audit Team Structure: (7+2=9):** It comprises Principal as Chairman, IQAC coordinator as Vice-Chairman, Principal of the neighboring college as special invitee, one coordinator from faculty of Botany/Zoology/ Environmental Science and three other members from any faculty interested in environment related activities. College can include two extra invitee members from Forest Department / Pollution control board / Health Department/ etc.

**Questionnaire :** this is used for acquiring basic information related to different categories to be covered in an institution.

**Check List:** This is used for providing a detailed listing of all issues to be covered in an institution.

**Photographs:** A picture speaks 1000 words. Use photographs to support findings and to highlight good practices with geo-tagging.

**Comprehensive Methods:** The detailed methodology is required for environmental audit and it must be conducted using comprehensive protocols and fixed procedures to ensure collection and documentation of the required data and verification of facts based on the information provided.

**Relevant Measures and Standards :** The standard measures could be adjusted to be relevant to the organization or activity being audited.

**Written Reports:** Reports should contain factual observations, reasoning and the documentation of the processes. The Clarity and accuracy should be maintained while presenting the findings with the support of valid and documented evidence.

**Evidence verification :** The concept of evidence and verification of environmental deficiencies is one of the key elements in an environmental audit. Initially the Internal audit team must verify all procedures, collected data and information through direct field inspection.

**Certification and Grading:** The External audit team will assess and evaluate the internal audit report and after thorough verification certificate along with grade will be issued.

<b>PROCEDURE</b>		
<b>Procedure</b>	<b>Description</b>	<b>Responsibility</b>
Annual plan	The environmental audit report is prepared by College Authorities each year and it ensures that the entire environmental management system is examined, must specify when the audit was carried out and those responsible for carrying it out.	Internal Environmental audit team/ coordinator
Preparation	The typical questionnaire and checklists are developed for the area to be audited before the actual individual audits are carried out. It is done using established procedures, objectives and action plans. They can be used to measure results in each area.  The staff and in charges of the area to be audited should be informed well in advance about when the audit would be done and what it covers.	Internal audit team
Internal Audit	Based on the questionnaire and checklists, the audit is carried out in the form of interviews / physical visit about - and observations of the actual state of affairs. The Team suggests further changes and correction as and when required.	Internal Audit team

Wrap-up meeting	<p>An audit report is prepared which is examined together with the in-charges responsible for the each area; minor areas are taken care of immediately, while a conclusion for the audit as a whole is written down.</p> <p>Correction reports are examined and corrective action is agreed upon. The internal audit team and the College Management / Principal sign the reports made. Then the reports must be submitted to the CC Office at Hyderabad.</p>	Internal audit team
Follow-up	<p>When deadlines for corrective action are reached, the Coordinator responsible for the area audited is contacted and the environmental manager checks the corrective action carried out. If corrective action is effective, the case is closed. If not, a new report is prepared.</p>	Coordinator
Reporting	<p>A comprehensive joint report is prepared on the basis of all the internal environmental audits of the college. This report forms the basis for certification and grading by the external audit team and it holds the authority to review the entire report.</p>	External Audit team/ Principal/ IQAC coordinator

## **AUDITING FOR WATER MANAGEMENT**

1. List out uses of water in your college.
  1. Drinking
  2. Cleaning
  3. Toilets

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

**ANS:** Ground water (Bore Water)

3. How many wells are there in your college?

**ANS:** 1 bore well.

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

**ANS:** One motor is being used bore well

5. What is the total horsepower of each motor?

**ANS:** 1HP

6. What is the depth of each well?

**ANS:** 100 feet

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

**ANS:** 35 feet approximately.

8. How does your college store water?

**ANS:** Water Drum

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

**ANS:** Nil

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

**ANS:** 2000 Liters

11. If there is water wastage, specify why.

**ANS:** Nil

12. How can the wastage be prevented / stopped?

**ANS:** Nil

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

**ANS:** Point of entry – Nil

Point of Exit – Nil

14. Where does wastewater come from?

**ANS:** NA

15. Where does the waste water go?

**ANS:** NA

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

**ANS:** NA.

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

**ANS:** NA

18. Is there any treatment for the lab water?

**ANS:** NA

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

**ANS:** NA

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

**ANS:**

a) We are Rain using Rain water.

b) Using water in proper way.

c) Conducting awareness programs to students and staff on water conservation in the college.

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

**ANS:** Not Available

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:** Nil

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

**ANS:** 1900 Liters

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

**ANS:** 1900 Liters

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

**ANS:** Nil

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

**ANS:** 20 Liters used for garden.

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

**ANS:** Nil

30. Total use of water in each hostel?

**ANS:** NA

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.

**ANS:**

S. No.	Item	Quantity of water used per day in liters
1	Toilets	1900

2	Drinking	80
3	Plants	20
	<b>Total</b>	<b>2000</b>

32. Is there any water used for agricultural purposes?

**ANS:** NA.

33. Does your college harvest rain water?

**ANS:** No.

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

**ANS:** NA.

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:** NA

37. Is there any waterless toilets?

**ANS:** Nil.

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

42. Quantity of water used to watering the ground?

**ANS:** 20 Liters.

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

**ANS:** Nil. (There is no college bus)

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

**ANS:** Nil

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

**ANS:** 1321 Sq.ft

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

**ANS:** No.

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

**ANS:** NA

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

**ANS:** NA

### **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:24000/-

3. Amount paid for LPG cylinders for last one year. Ans: NA

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: Lights and Fans will be switched off when there is nobody in the room
6. How much money does your college spend on energy such as electricity, gas, firewood, etc. in a month? Ans: ₹2000 /-
7. How many CFL bulbs has your college installed? Mention use (Hours used/day for how many days in a month)  
Ans: NA
8. Energy used by each bulb per month? (For example- 60 watt bulb x 4hours x number of bulbs = Kwh).  
Ans: NA
9. How many LED bulbs are used in your college? Mention the use (Hours used/day for how many days in a month)  
Ans: 02, 04hr/day, 24days/month
10. Energy used by each bulb per month? (kWh). Ans:1.728 Kwh
11. How many incandescent (tungsten) bulbs have your college installed? Mentions use (Hours used/day for how many days in a month)  
Ans: NA
12. Energy used by each bulb per month? (kWh). Ans: NA
13. How many fans are installed in your college? Mention use (Hours used/day for how many days in a month)  
Ans: 10, 04hr/day, 24 days/month
  1. Energy used by each fan per month? (kWh). Ans:57.6 kWh/month
15. How many air conditioners are installed in your college? Mention use (Hours used/day, for how many days in a month)  
Ans: NA
16. Energy used by each air conditioner per month? (kWh). Ans: NA
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: 02 Computers.
18. Energy used by each electrical equipment per month? (kWh).  
Ans: NA
19. How many computers are there in your college? Mention the use (Hours used/day for how many days in a month) Ans: 02 24/days 06/day
20. Energy used by each computer per month? (kWh). Ans: 864 kWh/month

21. How many photocopiers are installed by your college? Mention use (Hours used/day for how many days in a month).  
Ans: NA
22. How many cooling apparatus are in installed in your college? Mention use (Hours used/day for how many days in a month) Ans: NA
23. Energy used by each cooling apparatus per month? (kWh) Mention use (Hours used/day for how many days in a month)  
Ans: NA
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: One inverter, 30 days, 600 Kwh
25. Energy used by each inverter per month? (kWh). Ans: 1608 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: 01, 120 Hrs per month, 24 days
27. Energy used by each equipment per month? 288 (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: Nil
31. Energy used by each street light per month? (kWh) Ans: NA
32. No of TV in your college and hostels? Ans: Nil
33. Energy used by each TV per month? (kWh)  
Ans: Nil
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: NA
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: No
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: Yes 01 Computer 2hrs

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

Ans: Turning off unnecessary lights

Unplugging unused electronics

40. How many boards are displayed for saving energy awareness? Ans: 01

41. How much ash is collected after burning firewood 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: Use energy efficient appliances

Use smart power strips

Turn off unnecessary lights

Unplug unused electronics

## **AUDITING FOR WASTE MANAGEMENT**

What is the total strength of students, teachers and Non-teaching staff in your College? 201

No. of Students;201 No. of Teachers;09 No. Non-teaching staff;02 Gents – 03Ladies=06 Total: 221

Which of the following are available in your College?

Give area occupied, Garden area and Garbage dump (number) NA

Playground area, Laboratory, Kitchen, Canteen, Toilets (number)

Car/scooter shed area

Number of class rooms, Office rooms and others (specify)

Class Rooms-09, Laboratory-05, Office Rooms-01, Staff Room-01

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 **No**

Garbage heap **No**

Public convenience Sewer line **No**

Stagnant water **No**

Open drainage Industry – (Mention the type) **No**

Bus / Railway station Market / shopping complex / public halls **Bus**

### **WASTE**

Does your college generate any waste? If so, what are they? No

How much quantity? **NA**

Number or weight E-waste Hazardous waste (toxic) **No**

Solid waste **No**

Dry leaves **No**

Canteen waste **No**

Liquid waste **No**

Glass **No**

Unused equipment **No**

Medical waste if any No

Napkins Others (Specify) No

Is there any waste treatment system in the college? No

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

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

2 Why waste is a problem? Recycling problem

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

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

5 How is the waste generated in the college managed?

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

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

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

7 Do you use recycled paper in College? No

8 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.

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

### **Providing awareness to the students.**

10 Can you achieve zero garbage in your college? (Reduce, Recycle, Reuse, Refuse) If yes, how? **No**

## **AUDITING FOR GREEN CAMPUS MANAGEMENT**

1. Is there a garden in your college? Area? No

2. Do students spend time in the garden? No

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

Plant Species recorded in the college campus-92

Sl. No	Botanical Name	vernacular / common name	Family	No.of Species	Herb/ Shrub /Trees
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1	Azhadirachtaindica	Vepa	Meliaceae	02	Tree
2	Psidiumguajava	Jama	Myrtaceae	01	Tree
3	NeeriumOdorum	Ganneru	Apocyanaceae	01	Herb
4	Canna Lily	Lily	Cannaceae	06	Herb

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

**Herbs**

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

Sl no	Name of Plant	Habit	Family	Number of plants
1	NeeriumOdorum	Herb	Apocyanaceae	01
2	Canna Lily	Herb	Cannaceae	06

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



వర్ధన్వేటి: డిగ్రీ కళాశాల ఆవరణలో మొక్క నాటుతూ..

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

Some plants planted in college area

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

No

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

No

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

No

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

No

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

No

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?

NA

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

NA

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

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

NA

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

### Plant Species recorded in the college campus-92

19. Give the number and names of the medicinal plants in your college campus. NO

20. Any threatened plant species planted/conserved?  
No

21. Is there a nature club in your college? If yes what are their activities?  
No

22. Is there any arboretum in your college? If yes details of the trees planted.  
No

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

<b>No.of Fruit Yielding plants in the college campus</b>				
<b>Sl.No.</b>	<b>Botanical Name</b>	<b>vernacular / common name</b>	<b>Family</b>	<b>No.of Fruit yielding plants</b>
1	Psidiumguajava	Jama	Myrtaceae	01

24. Is there any groves in your college? If yes details of the trees planted.  
No

25. Is there any irrigation system in your college? NA

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

27. What are the nature awareness programmes conducted in the campus?  
1) We conducted a Seminar on Nature Protection.  
2) A Project work on Nature by Students.

28. What is the involvement of students in the green cover maintenance?  
Watering the Plants
29. What is the total area of the campus under tree cover? Or under tree canopy? NA
30. Share your IDEAS for further improvement of green cover.  
Major plantation program in the campus.

### **AUDITING FOR CARBON FOOTPRINT**

1. What is the total strength of students and teachers in your College?  
No. of Students-201 No. of Teachers-09 No. of Non-teaching-02 staff Gents-03 Ladies-06 Total: 221
2. Total Number of vehicles used by the stakeholders of the college. (per day) -04
3. No. of cycles used -NA
4. No. of two wheelers used (average distance travelled and quantity of fuel and amount used per day) -03,306Km,27L,RS.3024/-
5. No. of cars used (average distance travelled and quantity of fuel and amount used per day)01,68Km,6L,RS.624/-
6. No. persons using common (public) transportation (average distance travelled and quantity of fuel and amount used per day) : 102, 1020 KM, 85 L, Rs.8500
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..) 02
9. Number of visitors with vehicles per day?NA
10. Number of generators used per day (hours). Give the amount of fuel used per day. NA
11. Number of LPG cylinders used in the canteen (Give the amount of fuel used per day and amount spent). NA

12. Quantity of kerosene used in the canteen/labs (Give the amount of fuel used per day and amount spent). NA
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. NA
14. Amount of taxi/auto charges paid per month for the transportation of office goods to the college. NA
15. Average amount of taxi/auto charges paid per month by the stakeholders of the college. NA
16. Use of any other fossil fuels in the college (Give the amount of fuel used per day and amount spent). NA
17. Suggest the methods to reduce the quantity of use of fuel used by the stakeholders/students/teachers/non-teaching staff of the college:

We suggested the students and staff

Drive only when needed.

Avoid idling

Minimize air conditioning.

Maintain proper tire inflation.

Reduce weight in the vehicle

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 – Sample Report**

- Petrol used by two wheelers/day–229 L
- (Per person to and fro 40 Kms=1L) Fuel used by four wheelers (52 Persons) – 104 L

· (Per person to and fro 40 Kms=2L) Fuel for persons (total 2314 persons) travelling by common

· Transportation =184 L (4L x 50 persons)

Total fossil fuel use is 517 L / day

Total fuel cost per day for transportation =Rs. 36190/- (517 L x Rs70 )

Cost of stakeholder transportation per month (Rs.36190x22 days)-  
Rs.796180

## 2. Water management

SL NO	PARAMETERS	Response	Remarks
1	Source of water	Bore well	
2	No. of Wells	01	
3	No. of motors used	01	
4	Horse power - Motor	1hp	
5	Depth of well -Total	100Feets	
6	Water level	35 Feets	
7	Number of water tanks	Nil	
8	Capacity of tank	Nil	
9	Quantity of water pumped every day	2000L	
10	Any water wastage/why?	NA	
11	Water usage for gardening	20L	
12	Waste water sources	NA	
13	Use of waste water	NA	
14	Faith of waste water from labs	NA	
15	Whether waste water from labs mixed with ground water	NA	

16	Any treatment for lab water	NA	
17	Whether any green chemistry method practiced in labs	NA	
18	No. of water coolers	NA	
19	Rain water harvest available?	NA	
20	No. of units and amount of water harvested	NA	
21	Any leaky taps	NA	
22	Amount of water lost per day	NA	
23	Any water management plan used?	NA	
24	Any water saving techniques followed?	NA	
25	Are there any signs reminding peoples to turn off the water?	NA	

### Results of water quality

Parameters	Bore Well water	Drinking water	Standard value (BIS)
Dissolved Oxygen (mg/l)	7.5	7.0	6-8
Acidity (mg/l)	6.9	6.5	200
Alkalinity (mg/l)	55.60	8.35	200
Chloride (mg/l)	35.20	20.6	250
Hardness (Total)	170	125	200
Conductivity ( $\mu$ s)	110	0.25	
Ph.	6.45	7.05	6.5-8.5
Total Dissolved Solids (ppm)	555	60	500

Salinity (ppt)	9.0	7.50	
Total coliform	40	26	0
Fecal coliform	25	16	0

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

S.No	Parameter/ WHO permissible level	Zooplankton (No of Samples/Sites)	Methodology
1	Protozoan (Ciliates)	30	Sedgwick Rafter Cell Method
2	Rotifers	763	
3	Ostracods	448	
4	Insect Larvae	52	
5	Water Fleas	33	
6	Bivalves	20	
7	Snails	12	
8	Mussels	13	
9	Any Other (Specify)	Cladocera-252	

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

S.No	Phytoplanktons	Scientific Name and number	Methodology
1	Diatoms (Bacillariophyceae)	Cymbella Fragilaria	Microscopic
2	Dinoflagellates (Dinophyceae)		

3	Coccolithophores (Prymnesiophyceae )		
4	Green algae (Chlorophyceae)	Oedogonium Pediastrum Scenedesmus Spirogyra Chlamydomonas	
5	Cyanobacteria(earlier Blue-green algae)	Oscillatoria	
6	Others (specify)		



**2. Waste management : NOT APPLICABLE**

**Approximate quantity of waste generated per day (in kg)**

<b>Office</b>				
Approx.	Biodegradable	Non - Biodegradable	Hazardous	Others
<1Kg				
2-10Kg				
>10Kg				
<b>Laboratories</b>				
Approx.	Biodegradable	Non - Biodegradable	Hazardous	Others
<1Kg				
2-10Kg				
>10Kg				
<b>Canteen/kitchen</b>				
Approx.	Biodegradable	Non - biodegradable	Hazardous	Others
<1Kg				
2-10Kg				
>10Kg				

**How the waste generated in the college is managed?**

A)Composting/ Vermicomposting	Yes/ No	Remark
B)Recycling	NO	
C)Reusing	NO	
D)Other ways	NO	

### Waste generated in the college?

E-waste		NA
Hazardous waste		NA
Solid waste		NA
Dry leaves		NA
Canteen waste		NA
Liquid waste		NA
Glass		
Unused Equipment		NA
Napkins		
Others (specify)		NA
<b>Do you use recycled paper in college?</b>		NA
<b>Any waste management methods used?</b>		NA

### Energy Audit Sample Report

Sl. No	Electrical appliances/instruments	Number	Power (W)/unit	Total power(W)	kW	Operation /day	kW/h r.	No. of days in month	Total consumption per month
1	LED Bulb	02	9	18	0.018	4	0.072	24	1.728

5	LED TUBE	05	20	100	0.1	4	0.4	24	9.6
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					84				
6	PROJECTOR	01	280	280	0.28	1	0.28	24	6.72
7	SPEAKERS	01	10	10	0.01	1	0.01	24	0.24
8	FAN	10	60	600	0.6	4	2.4	24	57.6
9	COMPUTER	02	250	500	0.5	4	2.0	24	48
11	PRINTERS	1	60	60	0.06	1	0.06	24	1.44
14	UPS	1	1000	1000	1	12	12	24	288
33	CCTV DVR	04	10	40	0.04	24	0.96	30	28.8
	<b>Total</b> Consumption per month						18.182 kW/hr		

#### Faunal diversity in college campus (with Photographic evidence)

Faunal group	Scientific name	Number (If enumeration is done)	Seasonality
Spiders	Telamonia dimidiata, Lycosapictula, Hersilliasavignyi,	26	Monsoon
Moths & butterflies	CastaliusRosimon (Common Pierrot), ChiladesLajus (Lime Blue), DiscolampaEthion (Banded Blue Pierrot),TalicadaNyseus	14	<b>Monsoon</b>
Other (Dragon Flies, Bees,	Apisflorea, Coccinellaseptempunctata, Leptinotarsadecemlineata, Musca domestica, Danausplexippus, Lepismasaccharina(Silverfish),Nezarav	35	<b>Monsoon</b>

Wasps, Bugs, and Beetles etc..)	iridula		
Annelids	Hirudinaria granulosa, Peritemaposthuma, Lumbricusterrestris, Palolaviridis	52	<b>Monsoon</b>
Other Arthropods	Culex pipiens, Aedes vexans, Anopheles stephensi, Musca domestica,	60	<b>Monsoon</b>
Amphibians	Rana temporaria, Rana tigrina, Lithobates pipiens, Bufo bufo	22	<b>Monsoon</b>
Reptiles	Lacerta agilis, Gekko gecko, Iguana iguana, Sphenodon punctatus, Natrix natrix	11	<b>Monsoon</b>
Birds	Passer domesticus, Poecileatricapillus,	51	<b>Monsoon</b>
Mammals	Ovisaries, Bos taurus, Mus musculus	36	<b>Monsoon</b>







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

NO <sub>2</sub>	20.1 µg/m <sup>3</sup> , AQI 25 Good
NO	10.2 µg/m <sup>3</sup> , AQI 12 Good
O <sub>3</sub>	31.9 µg/m <sup>3</sup> , AQI 31 Good
PM2.5	53.0 µg/m <sup>3</sup> , AQI 50 good
PM10	51.0 µg/m <sup>3</sup> , AQI 45 good
CO	70.0 µg/m <sup>3</sup> , AQI 2 good
Humidity	64.0 %

Barometric Pressure	1013.0 hPa
Wind Speed	8.03 m/s
Wind Direction	27.0 degrees
Sun Rise	6.10 AM
Sun Set	5.40 PM

**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	NA	NA	NA	NA
2	Canteen	NA	NA	NA	NA
3	Play ground	NA	NA	NA	NA
4	Auditorium	NA	NA	NA	NA
5	Science Block	NA	NA	NA	NA
6	Any Other (Specify)	NA	NA	NA	NA

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

**ప్రత్యేక సలహాలు**

- చవుడు భూములకు స్వేదన నీటిని పెట్టి దమ్ముచేసి పేరుకున్న నీటిలో ఊట కాల్షియం ద్వారా బయటకు పంపవలెను.
- అప్పు/ క్షారము నేలలు..... కేజీలు/ టన్నులు /సున్నపు/ జిప్సము ఎకరాకు పొడిచేసి పొలములో వేసి భాగా దుక్కి చేయవలెను. ఊట కాల్షియం ద్వారా నీటిలో పొలము నుండి బయటకు పంపవలెను.
- భూమి మధ్య మరియు అధిక క్షారము కల్గియున్నప్పుడు పెసర, పిల్లి, పెసర, జనుము, అలసంద మరియు జీలుగ పంటలు వేసి పూతరకలో కలిర్లు దున్నాలి మరియు పెంట పోయవలయును.
- భూమి, నీరు పంటల సాగుకు సంబంధించిన మంచి యాజమాన్య పద్ధతులకు ఆచరించాలి.
- చరిపంటలకు జింకు సల్ఫేటు ఎకరాకు 20 కిలోలు దుక్కిలో వేయాలి.
- జింకు దాకు లోపమున్న నేలలో అవరాసన్ని బట్టి జింకుసల్ఫేటు ప్రతి పైరుకు వేయాలి.
- జింకు సల్ఫేటును భాస్వరపు ఎరువులతో కలిపి వేయరాదు.
- గమనిక :- 1. భాస్వరం, ( డి. ఏ.పి. ) / యస్. యస్. పి. ఎరువును ఆఖరు దమ్ములో వేయవలయును.
  - పొటాష్ ( ఎమ్. ఓ. పి ) ఎరువును సగం ఆఖరు దమ్ములో వేయాలి. మిగతా సగం 45/60 రోజులలో స్వల్ప/ దీర్ఘకాలిక రకములలో వేయవలెను.
  - సత్తజని ఎరువును ( యూరియా ) 1/3 వ వంతును ఆఖరు దమ్ములో వేయవలయును. మిగతా దానిలో స్వల్పకాలిక రకములకు నాడిన తర్వాత 15-30 మరియు 45 రోజున సమయంలో వేయాలి. దీర్ఘకాలిక రకములకు నాడిన తర్వాత 20-40 మరియు 60 రోజులలో వేయాలి.

సహాయ వ్యవసాయ సంఘాలకు  
భూసార పరీక్ష కేంద్రము

రైతు శిక్షణా కేంద్రం క్యాంపస్ ప్రైవేట్ బిల్డింగ్, చరంగల్ - 506007.  
ఫోన్ నెం. : 7288894785

**వ్యవసాయ శాఖ - చరంగల్ జిల్లా**  
**సాయిల్ హెల్త్ కార్డు**  
(భూసార సమాచార పట్టిక)

ల్యాబ్ నెం... 369. తేది Oct/2021

- రైతు పేరు: Govt. Degree College
- గ్రామము: Wananganpet
- మండలము: Wanangal Dist.
- సర్వే నెంబర్: -
- షేకు/ పేతు/ ఇతరులు: -

1. నేల స్వభావము ( CL ) (Texture)	తేలిక నేలలు	మధ్యరకపు నేలలు	బరువు నేలలు
2. ఆమ్లతార లక్షణములు (PH)	8.1		
	1. అష్టగుణము	6.5 వరకు	
	2. తీక్ష్ణగుణము	6.6-7.3 వరకు	
	3. అల్పక్షారగుణము	7.4-7.8 వరకు	
	4. మధ్యక్షారగుణము	7.9- 8.4 వరకు	
	5. అధికక్షారగుణము	8.4 కన్న ఎక్కువ	
		తేలిక మధ్యరకపు బరువు నేలలు నేలలు నేలలు	
3. లవణ సూచిక ( 0, 22 ) మి.మో/ పె.మి. (EC)	1. సామాన్యము 1.0 వరకు	1.5 వరకు	2.0 వరకు
	2. మొలకెత్తట కష్టము 1.0 -3.0	1.6-4.5	2.1-6.0"
	3. పెరుగుదలకు కష్టము 3.0 ఎక్కువ	4.5 కన్న ఎక్కువ	6.0 కన్న ఎక్కువ

4. సెండ్రెయం కచ్చునము ( L )	తక్కువ	మధ్యస్థము	ఎక్కువ
5. లభ్య భాస్వరము ( 00 )	0-05 వరకు	0.5-0.7 వరకు	0.75- కన్నా ఎక్కువ
6. లభ్య పొటాష్ ( 125 )	0-10 వరకు	10-24 వరకు	24- కన్నా ఎక్కువ
	58- వరకు	58-136 వరకు	136-కన్నా ఎక్కువ

**సిఫారసు చేయబడిన పోషక పదార్థముల ( ఎరువులు ) మోతాదు ( కిలోలు/ ఎకరాకు )**

వంటలు	సజ్జ	ఫాస్ఫరము	I		II		జింకు	బోర్	మిక్చర్		
			యూరియా	4:2:2	యూ.పి	యూ.పి					
1. మం / అరిస్	L-58	26	21	91	57	35	113	163	35	..	4
	M-40	20	16	70	43	27	87	125	27	..	4
	H-28	14	11	50	30	18	61	88	18	..	4
మం / రబీ	L-62	31	21	109	67	35	135	194	35	20	4
	M-48	24	16	85	52	27	104	150	27	20	4
	H-34	17	11	59	27	18	74	106	18	20	4
2. మొక్కజొన్న/ అరిస్	L-94	31	26	178	67	43	204	194	43	20	4
	M-72	24	20	137	52	33	157	150	33	20	4
	H-50	17	14	94	37	23	109	106	23	20	4
మొక్కజొన్న/ రబీ	L-104	31	26	200	67	43	226	194	43	..	4
	M-80	24	20	154	52	33	174	150	33	..	4
	H-56	17	14	107	37	23	122	106	23	..	4
3. జొన్నలు	L-31	21	16	50	46	27	67	131	27	20	4
	M-24	16	12	39	35	20	52	100	20	20	4
వర్షాధారము	H-34	14	8	28	24	13	37	69	13	20	4
4. ప్రత్తి	L-62	31	30	109	67	50	135	194	50	..	4
	M-48	24	24	85	52	40	104	150	40	..	4
	H-32	17	18	59	37	30	74	106	30	..	4
5. విరవి/ప.చా	L-31	21	28	50	46	43	67	131	43	..	10
	M-24	16	20	39	35	33	52	100	33	..	10
	H-17	11	14	28	24	23	37	69	23	..	10
విరవి/పి.వే	L-158	31	32	319	64	103	339	194	103	..	10
	M-120	24	48	241	52	80	261	150	80	..	10
	H-84	17	34	167	32	57	183	106	57	..	10
6. మమపు	L-94	39	62	172	85	103	204	244	103	..	10
	M-72	30	48	146	65	80	157	188	80	..	10
	H-50	21	34	100	46	57	109	131	57	..	10

**సిఫారసు చేయబడిన పోషక పదార్థముల ( ఎరువులు ) మోతాదు ( కిలోలు/ ఎకరాకు )**

వర్షాధారము / గిడి సేద్యము

వంటలు	సజ్జ	ఫాస్ఫరము	కృత్రిమ పోషక	యూరియా	4:2:2	యూ.పి	యూ.పి	జింకు	బోర్	మిక్చర్	
7. మధ్యలు	L-11	30	20	..	65	33	24	188	33	..	2
	M-16	24	16	15	52	27	35	150	27	..	2
	H-21	18	12	30	39	20	46	113	20	..	2
8. వేరుశనగ	L-10	21	26	..	..	..	23	130	43	..	4
	M-8	16	20	..	..	..	17	100	33	..	4
	H-6	11	10	..	..	..	12	70	21	..	4
9. చిన్న దివరలు	L-10	26	10	..	57	17	23	163	17	..	2
	M-8	20	8	..	44	13	17	125	13	..	2
	H-6	14	6	..	30	9	12	88	9	..	2
	L-10	26	8(S)	..	57	8(S)	23	163	8(S)	..	2
	M-8	20	8(S)	..	44	8(S)	17	125	8(S)	..	2
	H-6	14	8(S)	..	30	8(S)	12	88	8(S)	..	2

**L - Low తక్కువ, M - Medium మధ్యస్థం, H - High ఎక్కువ, S - Sulphur సల్ఫర్**

10. మామిడి	వయస్సు	నత్రజని	ఫాస్ఫరం	పొటాష్	జింక్
1 వయస్సు	1	100 గ్రా.	100 గ్రా.	100 గ్రా.	100 గ్రా.
	2	200 గ్రా.	200 గ్రా.	200 గ్రా.	200 గ్రా.
	3	..	..	..	..
	4	..	..	..	..
	5	..	..	..	..
	6	..	..	..	..
	7	..	..	..	..
	8	..	..	..	..
	9	..	..	..	..
	10	1000 గ్రా.	1000 గ్రా.	1000 గ్రా.	1000 గ్రా.
2 వయస్సు	1	217 గ్రా.	825 గ్రా.	187 గ్రా.	280 గ్రా.
	2	434 గ్రా.	1250 గ్రా.	334 గ్రా.	476 గ్రా.
	3	..	..	..	..
	4	..	..	..	..
	5	..	..	..	..
	6	..	..	..	..
	7	..	..	..	..
	8	..	..	..	..
	9	..	..	..	..
	10	2170 గ్రా.	6250 గ్రా.	1670 గ్రా.	2380 గ్రా.
3 వయస్సు	1	183 గ్రా.	217 గ్రా.	187 గ్రా.	280 గ్రా.
	2	366 గ్రా.	434 గ్రా.	334 గ్రా.	476 గ్రా.
	3	..	..	..	..
	4	..	..	..	..
	5	..	..	..	..
	6	..	..	..	..
	7	..	..	..	..
	8	..	..	..	..
	9	..	..	..	..
	10	1830 గ్రా.	2170 గ్రా.	1670 గ్రా.	2380 గ్రా.

### **GRADING FOR ENVIRONMENTAL AUDIT REPORT**

<b>S.N O</b>	<b>COMPONENTS FOR ASSESSMENT</b>	<b>MARK S</b>	<b>GRADE S</b>	<b>Marks Secure d</b>	<b>Grad e</b>
1	Energy audit	<b>20</b>	<b>A+ : 91-100</b>  <b>A : 81-90</b>	20	A+
2	Waste audit	<b>15</b>		-	-
3	Water audit	<b>15</b>		15	A+
4	Landscape or Environment audit	<b>15</b>		15	A+
5	Carbon footprint & Oxygen emission audit	<b>15</b>		12	A
6	Green activities (conduction of seminars/conferences/workshops/student competitions/awareness programmes/observation of environmental related days etc.	<b>10</b>	<b>B+ : 71-80</b>  <b>B : 61-70</b>  <b>C : 51 - 60</b>	6	B
7	Student clubs (Environmental club/Green club/Nature club/Biodiversity club/ ECO Club/Friends and Fauna Club/Science club etc.) activity annual report	<b>10</b>		5	C
	<b>Total</b>	<b>100</b>			

2/9/2021.

## Minutes of Meeting

The staff Council meeting of UDC, Wardhanapet has conducted today under the chairmanship of Dr. M. Samatha Principal, UDC, Wardhanapet and resolved the following item unanimously:

1. It is resolved and formed a Green Audit Committee to complete Green Audit Report of 2021.

Chairman - Principal - Dr. M. Samatha

Vice chairman - IQAC Coordinator - Dr. P. Malathi Lakshmi

Special Invitee - Principal, I. A. College - Dr. B. Chandramani

Coordinator - Lecturer in Botany - B. Suresha

Members - 1. Asst. Prof. of Commerce - B. Srinivas

2. Asst. Prof. of History - D. Sridhar Reddy

3. Lecturer in Commerce - Dr. N. Greenvel

4. Lecturer in Chemistry - P. Vitha .

Staff

*Malathi Lakshmi*  
2/9/2021  
Principal.

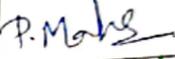
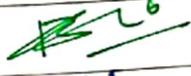
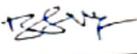
Principal

Govt. Degree College  
Wardhanapet, Dist. Warangal, T.S.

- 1) B. Suresha
- 2) B. Srinivas
- 3) D. Sridhar Reddy
- 4) P. Vitha
- 5) P. Vitha
- 6) P. Vitha
- 7) P. Vitha

GOVERNMENT DEGREE COLLEGE, WARDHANNAPET, WARANGAL

GREEN AUDIT COMMITTEE-2021

S.No.	Committee	Designation	Name	Signature
1	Chairman	Principal	Dr.M.Samatha	
2	Vice Chairman	IQAC Coordinator	Dr.P.Malathilatha	
3	Special Invitee	Principal, ID College	Dr.B.Chandramouli	
4	Coordinator	Lecturer in Botany	B.Swetha	
5	Members	Asst.Professor of Commerce	B.Srinivas	
		Asst.Professor of History	D.Sridhar Reddy	
		Lecturer in Commerce	Dr.N.Sreenivas	
		Lecturer in Chemistry	P.Vijitha	