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

College Profile

Name of the College: GDC Serilingampally

Address: Premises of Govt. Junior College, BHEL

Contact Info: 7075168286

Campus Area: BHEL

Built-up Area:

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

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

Strength	Male	Female	Total
No. of Students	192	111	303
No. of Teaching Staff	5	7	12
No. of Non-Teaching staff	6	5	11

Physical Structure

The available land of the college: Running in Junior college Building acres and Guntas.
The built-up area of the college: Sq.Ft.

No. of Class Rooms	09
No. of Laboratories	NIL
No. of Conference halls	NIL
Library Halls	NIL
Auditorium	NIL
Canteen	NIL
Any other (please specify)	

PROCEEDINGS OF THE PRINCIPAL

GOVERNMENT OF DEGREE COLLEGE: SERILINGAMPALLY
RR DISTRICT
Present: Dr. Nikhat Anjum, Msc, Mphil, PhD.

Rc. No. 612/Estt/GDC//SRPL/2023, Dated. 02/03/2023.

Sub: GDC Serilingampally – Quality Initiatives of GDCs – Green Audit for all GDCs Constitution of College Level Committee – Reg.

Ref: CCETS Pro. File. No. CCE-AC/QLTY/NAAC/1/2021 – ACADEMIC CELL, Date: 23/04/2021.

In compliance with the CCETS Proceedings under reference cited, the undersigned is pleased to constitute College Level Committee for Green Audit under Quality Initiatives of GDC with the following members for the academic year 2022-2023.

SL NO	Designation	Name of the Member	Signature
1	Chairman	Dr. Nikhat Anjum Principal, GDC Serilingampally	
2	External Member	Dr. V. Rajendra Prasad Principal Government Degree College, Patancheru	
3	Convenor	Dr. K. Kalpana, Guest Lecturer in Botany	
4	Members	1. Dr. CH. Varalakshmi, Asst. Prof. of Physics 2. Dr. RVGK. Mohan, Associate Prof. of Chemistry 3. M. Sony Priyanka, Guest Lecturer in Zoology	
5	Student Volunteers	P.Srivardhan, III MPC E/M	
		S.Manideep, III MPC E/M	
		V.Tarun , III BZC E/M	

The Audit Committee is informed to complete the Green Audit for academic year 2022-2023 and submit the report to this office.

PRINCIPAL
Principal
Government Degree Colleg
Serilingampally, R. R. Dist

Copy to

1. Office
2. Members

Objectives :	Minimize the energy utilization, water waste proper and optimum use of natural resource awareness on environment protection to students
Prepared by:	Green Audit Committee GDC, Serilingampallly
Approved by:	Principal, GDC, Patancheru PRINCIPAL Govt. Degree College Patancheru.
Remarks :	-

FORMS AND SUPPORT MATERIAL	
Questionnaire Document reference name/No.:	Yes
Checklist for Environmental Audit Document reference name/No.:	Yes
Additional forms and support material:	Photographs

Background: The history of an Institution / Organization, including information on the setting and construction plan, environmental practices, known environmental issues from the site and neighbours, previous environmental damage/spill at the site and monitoring records. Any changes made or occurred up to the time of the last audit and future plans for the development. The Natural Resources used as input, processing of materials and all finished products (energy, water, raw material use) and wastes including hazardous and toxic wastes.

General Objectives (can be slightly modified according to need of an Institution)

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General Objectives (can be slightly modified according to need of an Institution)

- Environmental risk assessment including compliance to regulations, soil, Water, solid and E-wastes, emissions, hazardous products & noise pollution.

- Waste minimization and Environmental Pollution control plans.
- The optimal utilization of energy, water and other Natural Resources.
- Recycling programs and product life cycle considerations.
- Emergency response plans and procedures.

Protocols used for Environmental Audit

Internal Audit Team Structure: (7+2=9): It comprises of

- The Principal as Chairman,
- The IQAC coordinator as Vice-Chairman,
- The Principal of the neighboring college as special invitee,
- One Coordinator from faculty of Botany/Zoology/ Environmental Science and
- Three 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.

PROCEDURE		
Procedure	**Description**	**Responsibility**
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 check- lists 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 tobe 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	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. 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 CCETS,Hyderabad.	Internal audit team
Follow-up	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.	Coordinator
Reporting	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.	External Audit team/ Principal/ IQAC coordinator

AUDITING FOR WATER MANAGEMENT

1. List out uses of water in your college. Drinking water, Toilet Cleaning, watering plants

2. What are the sources of water in your college? Borewell pipeline supply from Junior College.

3. How many wells are there in your college? NIL
4. No. of motors used for pumping water from each well? NIL
5. What is the total horse power of each motor? NIL

6. What is the depth of each well? NIL

7. What is the present depth of water in each well? NIL
8. How does your college store water? P O T S c a n s a n d b u c k e t s

9. Quantity of water stored in your overhead water tank? (in liters) 1000 liters

10. Quantity of water pumped every day? (in liters) 500 liters

11. If there is water wastage, specify why. NO

12. How can the wastage be prevented / stopped? Waste water is redirected to plants

13. Locate the point of entry of water and point of exit of waste water in your College. No water wastage

14. Where does waste water come from? washing

15. Where does the waste water go? To plants

16. What are the uses of waste water in your college? Used for plant growth

17. What happens to the water used in your labs? Whether it gets mixed withground water? No Labs yet

18. Is there any treatment for the lab water? No Lab

19. Whether Green Chemistry methods are practiced in your labs? No Lab

20. Write down four ways that could reduce the amount of water used in your college. Water usage is minimum as we get water from Junior College

21. Record water use from the college water meter for six months.
No separate water connection

22. Bimonthly water charges paid to water connections if any - No water connection

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

24. No. of water taps. Amount of water used per day? 2

25. No. of bath rooms in staff rooms, common, hostels. Amount of water used perday? 01,100 liters of water

26. No. of toilet, urinals. Amount of water used per day? 300 liters

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

28. Amount of water used per day for garden use? All wildly grown plants, There is no special watering source

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

30. Total use of water in each hostel? No Hostel

31. At the end of the period, compile a table to show how many liters of water havebeen used in the college for each purpose Toilets – 400 lts washing hand – 50lts

32. Is there any water used for agricultural purposes? NO

33. Does your college harvest rain water? NO

34. If yes, how many rain water harvesting units are there? (Approx. amount) NO

35. How many of the taps are leaky? Amount of water lost per day? NO Leakage

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? NIL

39. How many water fountains are leaky? NIL

40. Is drip irrigation used to water plants outside? Yes/No - NO

41. How often is the garden watered? 2 days is week

42. Quantity of water used to watering the ground? NIL

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

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

45. Area of the college land without tree/building canopy. College campus is with full of Trees, Shrubs and herbs

46. Is there any water management plan in the college? No

47. Are there any water saving techniques followed in your college? What are they?Using water carefully without wastage is followed by everybody

48. Please share Some IDEA for how your college could save more water.- Water pil harvesting water coming out of washing through different activities is directed for plant growth

AUDITING FOR ENERGY MANAGEMENT

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

2. Electricity bill amount for the last year / - Using Electricity from Junior College through sub meter, Recent bill 21,600/-

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

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

5. Are there any energy saving methods employed in your college? If yes, pleasespecify. If no, suggest some. - Off the appliances when not in use Nil

6. How much money does your college spend on Energy such as electricity, gas,firewood, etc. in a month? Rs.1800/-

7. How many CFL bulbs has your college installed? Mention use (Hours used/day for how many days in a month) – No CFL bulbes

8. Energy used by each bulb per month? (For example- 60 watt bulb x 4hoursx number of bulbs = Kwh).- 10 x 60 W x 6 x25 =9KWH

9. How many LED bulbs are used in your college? Mention the use (Hours used/day for how many days in a month) 7

10. Energy used by each bulb per month? (KWh). 7 x 20 x 6 x 25 = 21KWH

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

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

13. How many fans are installed in your college? Mention use (Hours used/day for howmany days in a month) – 8 x 5 x 25 = 75KWH

14. Energy used by each fan per month? (kWh).- 0.375 KWH

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

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

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

19. How many computers are there in your college? Mention the use (Hours used/day for how many days in a month) 03PC x 70 w x 4 hours 25 days, 21 KWH

20. Energy used by each computer per month? (kWh). – 7 KWH

21. How many photocopiers are installed by your college? Mention the use (Hours used/day for how many days in a month). 3 [3 x 250 W x 1hr x 25 = 18.75 KWH]

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

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

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) – 1 x 250 W x 1hr x25 = 6.25 KWH

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

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) - No Labs

27. Energy used by each equipment per month? (kWh) – see old copy and insert table

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 canteen

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

30. No. of street lights in your college? -NIL

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

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

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

36. Do you run "switch off" drills at college?- No but instruct all to switch off the devices when not in use

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, when not working 2 hrs. per day

39. What are the Energy Conservation methods adapted by your college?- asking to switch off the devices after usage

40. How many boards displayed for saving Energy awareness?- 01

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.- Display of Green Board creating awareness on conservation of energy and how to reduce the energy usage

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

1. What is the total strength of students, teachers and non-teaching staff inyour college?
No. of Students: 303

No. of Teachers: 12

No. Non-teaching staff: 11

Gents 11 – Ladies: 12

Total: 23

Which of the following are available in your College?Give

area occupied

Garden area - NIL

Garbage dump (number)-NIL

Playground area Laboratory -NIL

Kitchen -

NIL

Canteen-

NIL

Toilets (number) -04

Car/scooter shed area –

Nil

Number of class – 09

running in junior college

Rooms

Office rooms and others (specify)- 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- NIL

Public convenience Sewer line- NIL
-Stagnant water- NIL

Open drainage Industry – (Mention the type)- NIL

Bus / Railway station Market / shopping complex / public halls-NIL

WASTE

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

4. How much quantity? 01 kg

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

Solid waste 01 kg

Dry leaves –

2 Kg

Canteen waste–

NiI

Liquid waste –

NIL

Glass-nil

Unused equipment –NIL

Medical waste if any – NIL

Napkins Others (Specify)

No

6. Is there any waste treatment system in the college? - NIL

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

8. What is the approximate quantity of waste generated per day?(in Kilograms) Office Laboratories Canteen/kitchen – 0.25 kg
9. Why waste is a problem?- Harmful to Health and destroys environment
10. Whether waste is polluting ground/surface water? How? - NIL
11. Whether waste is polluting the air of the college? How? - NIL
12. How is the waste generated in the college managed? Methods- Dried Leaves branches and paper waste are heaped to a corner and left for degradation

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

13. How many separate boxes do you think you would need to put into a classroom to start a waste segregation and recycling campaign?-3 boxes 1 for wet waste; Dry waste and plastic waste

14. What should be the use for each box? (Develop a Colour code with reasons) – wet waste blue colour as wet nature indicate water dry waste dry water Green colour indicating, paper waste, dust etc. plastics waste Red colour indicating plastic is dangerous to use

15. Do you use recycled paper in College? - NO

16. Is there any waste wealth program practiced in the college? : 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.- Hazardous NIL

17. How would you spread the message of recycling to others in thecommunity? Have you taken any initiatives? If yes, please specify.- Awarness on energy saving

18. 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 (page 11 It is Nil

2. Do students spend time in the garden? – No Garden

3. List the plants in the garden, with approx. number of each species.- No specific garden area. But college campus is surrounded with ** Many trees like neem 10 Delonix regia 05 Albezzia 10 oputi06 pongamia04 & polyethia 12

4. Suggest plants for your campus. (Trees, Vegetables, Herbs, etc.)- How evering plants, Medical plants

5. List the species planted by the students, with numbers. – Ocimum 3, vinca 2, Arta botrys 2, Nemala Nara 01,Astoria 01, Dekinix 01

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

7. Is there any plantations in your campus? If yes specify area and type of plantation.- No specific plantation. But college is with various trees all around

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?- NIL

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

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

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

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

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

15. Whether you are doing Organic Farming in your college? How?-NO

16. Do you have any composting pit in your college? If yes, what are youdoing with the compost generated?-NO

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

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

19. Give the number and names of the medicinal plants in your collegecampus.- Ocinum vinca, Neem, Albizzia, cassia

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.- No

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?- No

26. What is the type of vegetation in the surrounding area of the college?-Scrub Jungle like with Throny Trees

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

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

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

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

AUDITING FOR CARBON FOOTPRINT

1. What is the total strength of students and teachers in your College?No. of Students-

303

No. of Teachers- 12

No. of Non-teaching staff:-

11

Gents -11 Ladies-12

Total- 23

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

3. No. of cycles used?- 0

4. No. of two wheelers used? (average distance travelled and quantity of fuel and amount used per day) – 06, 10km/lit

5. No. of cars used? (average distance travelled and quantity of fuel and amount used per day) – 04, 20km, 2lit

6. No. persons using common (public) transportation (average distance travelled and quantity of fuel and amount used per day) 05, 10km, 1 lit

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

8. Number of Parent-Teacher meetings in a year? Parents turned up (approx.) - 04

9. Number of visitors with vehicles per day?
   NIL

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

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

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

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

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

15. Average amount of taxi/auto charges paid per month by the stake holders of thecollege. nil

16. Use of any other fossil fuels in the college (Give the amount of fuel used perday 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.- NIL

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

91. Window Floor ratio of the Rooms Good/Not Enough ?- Not enough

Carbon Footprint - Sample Report

- Petrol used by two wheelers/day– 100 L (50 persons, 50 x2= 100)
- Fuel used by four wheelers (52 Persons)

- 20 liters per day

- Fuel for persons (total 2314 persons)travelling by common
- Transportation =185 L (4L x 50 persons)

Total fossil fuel use is 362 L / day

Total fuel cost per day for transportation =Rs. 36190/- (517 L x Rs 70)

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

Water management

SL NO	PARAMETERS	Response	Remarks
1	Source of water	From junior college Bore well and overhead tank	
2	No. of Wells	NA	
3	No. of motors used	NA	
4	Horse power – Motor	NA	
5	Depth of well –Total	NA	
6	Water level	NA	
7	Number of water tanks	NA	
8	Capacity of tank	50 lit	
9	Quantity of water pumped every day	NA	
10	Any water wastage/why?	NA	
11	Water usage for gardening	NA	
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 offthe water?	YES	

Results of water quality-I

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 (µs)	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 the college – II(with Photographic evidence) NA

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

9	Any Other (Specify)	-	-

Water Quality Analysis (Biological) Report of the college – III(with Photographic evidence): NA

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

ENERGY AUDIT

Room No. / name	Electrical Device/Items	Number	Power	usage time (hour/day)
Office	LED lamps	7	20 W	6
Office	Fans	8	75 W	5
Office	Tube light	4	40 W	5
Office	Computers	3	70 W	4
Office	Printers	3	250 W	1

2. Waste management

Approximate quantity of waste generated per day (in kg)

Office				
Approx.	Biodegradable	Non -Biodegradable	Hazardous	Others
<1Kg	-	-	-	-
2-10Kg	✓	-	-	-
>10Kg	-	-	-	-

Laboratories	-	-	-

Approx.	Biodegradable	Non - Biodegradable	Hazardous	Others

<1Kg	-	-	-	-
2-10Kg	-	-	-	-
>10Kg	-	-	-	-

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

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

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

4. Waste generated in the college? NIL

E-waste		
Hazardous waste		-
Solid waste		-
Dry leaves		✓
Canteen waste		-
Liquid waste		-
Glass		-
Unused Equipment		-
Napkins		-
Others (specify)		-

Do you use recycled paper in college?	NO
Any waste management methods used?	NO

Energy Audit Sample 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	CFL	63	14	882	0.882	4	3.528	25	88.2
2	TUBE	272	38	10336	10.336	4	41.344	25	1033.6
4	LED BULB	97	9	873	0.873	4	3.492	25	87.3
5	LED TUBE	42	20	840	0.84	4	3.36	15	50.4
6	PROJECTOR	10	280	2800	2.8	1	2.8	25	70
7	SPEAKERS	36	10	360	0.36	1	0.36	25	9
8	FAN	233	60	13980	13.98	4	55.92	20	1118.4
9	COMPUTER	140	250	35000	35	4	140	20	2800
10	LAPTOPS	10	50	500	0.5	4	2	20	40
11	PRINTERS	2	60	120	0.12	1	0.12	20	2.4
12	PHOTOSTAT MACHINE	6	650	3900	3.9	2	7.8	15	117
13	SCANNER	1	50	50	0.05	0.5	0.025	15	0.375
14	UPS	3	1000	3000	3	12	36	20	720
15	INDUCTION	1	2000	2000	2	0.25	0.5	15	7.5
16	A/C	2	7000	14000	14	1	14	15	210
17	REFRIGERATOR	7	150	1050	1.05	24	25.2	30	756
18	TABLE FAN	2	55	110	0.11	2	0.22	25	5.5
19	MIXER GRINDE	2	750	1500	1.5	2	3	15	45

	R								
20	OVEN	3	1500	4500	4.5	2	9	10	90
22	CENTRIFUGE	2	850	1700	1.7	0.25	0.425	8	3.4
23	AUTOCLAVE	1	1700	1700	1.7	1	1.7	4	6.8

24	ULTRASOU ND	1	700	700	0.7	0.25	0.175	5	0.875
25	LAMINAR FLOW	1	600	600	0.6	1	0.6	15	9
26	EXHAUST FAN	1	32	32	0.032	4	0.128	25	3.2
27	IRON BOX	2	2000	4000	4	0.25	1	15	15
28	SEWING MACHINE	6	100	600	0.6	4	2.4	25	60
29	COLOUR BULB	13	60	780	0.78	1	0.78	5	3.9
30	INCUBATOR	2	40	80	0.08	4	0.32	25	8
31	DISTILLATION UNIT	1	1000	1000	1	1	1	12	12
32	SANITARY NAPKIN INCINERATOR	6	1200	7200	7.2	1	7.2	25	180
33	CCTV DVR	24	10	240	.24	24	5.76	30	720
	Total Consumption per month						9515.15 kW/hr		

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

Faunal group	**Scientific name**	**Number (If enumeration is done)**	**Seasonality**
Spiders	*Araneae*	✓	
Moths & butterflies	*Rhopalocera*	✓	
Other insects:(Dragon Flies, Bees, Wasps, Bugs, and Beetles etc..)	Dragon Files-*Anisoptera*	✓	
Annelids	-	-	
Other Arthropods	*Rhopalocera*		

Amphibians	-	-	
Reptiles	*Calote*s sps.	✓	
Birds	1. *Pavo cris*tatus (Peacock) 2. *Merops orientalis* (Asian green bee eater)	✓	

Mammals	1. Dogs(*Camislupus familiaris*) 2. Sqyirrel(*Sciurus limmaens)*	✓	
Any other (specify)	Reptiles Snake- *Naja naja*	✓	

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

NO_2	12 ppb
NO	-
O_3	6 ppb
PM2.5	4.2 mg/m3
PM10	12.3 mg/m3
CO	200 ppb
Humidity	89%
Barometric Pressure	950 khpa
Wind Speed	21 km/h
Wind Direction	West to east
Sun Rise	East
Sun Set	West

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	Library			
2	Canteen	No canteen			
3	Play ground	Yes			
4	Auditorium	No Auditorium			
5	Science Block	No			
6	Any Other (Specify)	--			

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

GRADING FOR ENVIRONMENTAL AUDIT REPORT

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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	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
	Total	100	C : 51 - 60

Principal
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Government Degree College
Serilingampally, R. R. Dist.