#### **Solid Waste Management**

The college manages its waste with utmost responsibility and caution. The **Solid Waste** is generated in the college in the form of polythene bags, plastic bottles and waste paper. The **Solid Waste** management is on a very minor scale as all the plastic and paper waste is segregated at source in two separate bins installed in the college. Cleanliness campaign in association with GHMC is regularly organized to educate students on the segregation of waste materials. The dry leaves that are collected during the Fall season are composted in a demarcated corner of the campus to make manure that is used in the bio-diversity zone of our college. Vermicompost pit is maintained in the college to degrade the dry biomass into compost.

#### Title of the practice :Vermicomposting unit

Context: as a part of tradition of implementing best practices every year, in 2021-2022 we did renovation in vermicompost pit.

**Objectives** :The campus is very much potential in providing the biomass which seems to be a be a best raw material for the production of vermicompost.

**Implementation :** with the experience of organizing a workshop on organic farming a new practice was adopted in the form of vermicomposting. In this program 50 students were participarted, they maintained vermin compost unit .On a regular basis the student volunteers collect the suitable biomass and place it in the unit in a proper way. They are supposed to momitor moisture content as well as the presence of the earthworms.



### **Liquid Waste Management**

The Liquid Waste from the labs is sent out through the sewage system without any danger of hazardous effects on environment. The rain water from the terrace of the three blocks of our college is directed towards the ground through pipes where other trees and rain water harvesting pits are located. Proper sewage system is present in all the washrooms of the college. Care is taken to see that there is no water stagnation to discourage mosquito breeding.

#### **E-Waste Management**

**E-Waste** generated in the form of old monitors, CPUs, keyboards, mouse's and other discarded electronic devices are dealt with by a committee that works under the stipulated guidelines of e-waste disposal. This committee meets at regular intervals under the supervision of the Principal. The committee also keeps a record of the unused and discarded electrical appliances like ACs, ceiling fans, switch boards, bulb holders, etc.

#### AUDITING FOR WATER MANAGEMENT

- 1. List out uses of water in your college.
- Drinking, watering of plants, toilets, labs, construction of new blocks.
- 2. What are the sources of water in your college?
- Borewells-2, Municipal connection-1
- 3. How many wells are there in your college?

Nil

- 4. No. of motors used for pumping water from each well?
- 01 Water used in the college is from Borewell
- 5. What is the total horsepower of each motor?

# 1 HP

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?

• By means of overhead tanks.

7

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

• Sintex overhead tanks-6, each tank capacity-2000 litres

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

• 8000 litres

11. If there is water wastage, specify why.

## NIL

12. How can the wastage be prevented / stopped?

## NIL

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

## NIL

14. Where does wastewater come from?

#### NIL

15. Where does the wastewater go?

NIL

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

## NIL

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

• Water comes out from labs and goes to drainage. No

18. Is there any treatment for the lab water?

## No

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

Yes.Using Microwave synthesis of Organic compounds 8

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

• Use of press type taps, use of rainwater, prevention of leakage, regular monitoring.

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

• Borewell water is used for college purpose

22. Bimonthly water charges paid to water connections if any

• Rs 90000 per annum

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?

• 55 taps, 3000 litres / day

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

#### NIL

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

• 6+20, 2000 litres /day

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

• 1 tap, 300 litres / day

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

• 1000 litres

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

• 16 taps, 1000 litres / day

30. Total use of water in each hostel?

NIL 9

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

NIL

32. Is there any water used for agricultural purposes?

NIL

33. Does your college harvest rainwater?

Yes

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

• 01, 4000 litres

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

• No leakage of taps as there is regular plumbing services.

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

No

37. Are 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?

• Regularly (daily)

42. Quantity of water used to water the ground? 10

• 100 litres

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.

• 3 acres

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

NIL

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

NIL

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

- 1. Install a rain barrel for outdoor watering
- 2. Fix leaks
- 3. Plant a rain garden for catching storm water runoff from the roof

# AUDITING FOR WASTE MANAGEMENT

What is the total strength of students, teachers and Non-teaching staff in your College? 2237 (present second and final years' students along with staff) No. of Students; No. of Teachers; No. Non-teaching staff; Gents - Ladies Total Which of the following are available in your College? Garden area: 900sq yards Garbage dump:01 Playground area: approx. 1200 sq yards Laboratory: 11 Kitchen: 01 Canteen: 01 Toilets: 20 Car/scooter shed area: no Number of class rooms:20 Office rooms:02 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 17

Public convenience Sewer line :7

Stagnant water: 7

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? YES

Solid waste, Dry leaves, Canteen waste, Liquid waste, Glass, Unused equipment.

How much quantity? 60 KG

Number or weight E-waste Hazardous waste (toxic):

Is there any waste treatment system in the college? NO

Is there any treatment for toilet/urinal/sanitary napkin waste? NO

1 What is the approximate quantity of waste generated per day? (in Kilograms)

Office Laboratories Canteen/kitchen :20KG

2 Why waste is a problem?

Because we don't have any waste treatment methods.

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

No, because we carefully collect all the waste and dump in the garbage dump yard.

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

No, because we have lot of green cover.

5 How is the waste generated in the college managed?

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

By dumping in the garbage dump yard.

6 How many separate boxes do you think you would need to put into a classroom to start a waste segregation and recycling campaign? 2 18

What should be the use for each box? (Develop a Colour code with reasons) Red colour for non-degradable waste and green colour for bio-degradable waste.

7 Do you use recycled paper in College? No

8 Is there any waste wealth program practiced in the college? No

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? By conducting awareness programs.

Have you taken any initiatives? NO

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

Yes by reducing, recycling and reuse of waste produced in the college we can achieve reduction in garbage.