

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, March 2021

Career Related First Degree Programme under CBCSS

Group 2 (a) Botany and Biotechnology

BB 1672 : ENVIRONMENTAL BIOTECHNOLOGY

(2015 – 2017 Admission)

Time : 3 Hours

Max. Marks : 80

PART – A

Answer **all** the questions in a word or **one** or **two** sentences. Each question carries **1** mark.

1. Name any one of the species used for vermicomposting.
2. Define Xenobiotics.
3. Identify the composition of biogas
4. Expand COD
5. What is Bioaccumulation?
6. What is Gasohol?
7. Which year is water Act is enacted in India?
8. Define biomass.

9. What is Aerobic composting?

10. Define smog.

(10 × 1 = 10 Marks)

PART – B

Answer **any eight** questions. Each question carries 2 marks. Answer not to exceed one paragraph.

11. What is biodiesel?

12. Give a note on open windrow composting.

13. Give note on bioplastic.

14. What is superbug?

15. What is biomineralisation?

16. Mention the importance of environmental biotechnology.

17. Give note on dark fermentation.

18. What is biosphere?

19. What do you mean by Total coliform count?

20. Explain direct biophotolysis.

21. Write a note on Jatropha.

22. Explain the ways by which the plant pigments release their energy.

(8 × 2 = 16 Marks)

PART – C

Answer **any six** questions. (Answer not to exceed 120 words) Each question carries **4** marks.

23. Explain the potential of Jojoba as an energy crop.
24. Differentiate between BOD and COD.
25. Explain the idea photosynthetic pigments as a means for future energy source.
26. Give an account on the methods for the detection of coliforms in water.
27. Enumerate different methods of land filling.
28. Explain the effects of organic matter contamination in a pond ecosystem.
29. How to use biomass as a source for energy production?
30. Write a note on environmental legislation in India.
31. Explain advantages and disadvantages while using bioplastics instead of plastics.

(6 × 4 = 24 Marks)

PART – D

Answer **any two** questions. (not more than three pages) Each question carries **15** marks.

32. Give a detailed note on solid waste treatment.
33. What is bioremediation? Give a detailed note on different approaches of bioremediation.
34. Explain steps and process of biogas production.
35. Explain the various methods in sewage water treatment

(2 × 15 = 30 Marks)