

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, April 2023
Career Related First Degree Programme under CBCSS

Botany and Biotechnology

Vocational Course

BB 1672 : ENVIRONMENTAL BIOTECHNOLOGY

(2019 Admission Onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A

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

1. Comment on *Azolla*.
2. Identify the contributions of Anand Mohan Chakrabarty.
3. Write the composition of biogas.
4. Comment on The Environment (Protection) Act, 1986
5. What is bioaugmentation?
6. What is Fecal Coliform?
7. Which microorganisms are in biomining?
8. Name the organism used in vermicomposting.

9. What is Total coliform count?
10. List the uses of *Bacillus thuringiensis*

(10 × 1 = 10 Marks)

SECTION – B

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

11. Identify the importance of *Rhizobium*.
12. What are methanogens?
13. Give a note on *Jatropha*.
14. What are Indicator organisms?
15. What is biodiesel?
16. What is vermicomposting?
17. What is air pollution? Add a note on air pollutants.
18. Explain MPN.
19. Give note on lagooning.
20. What is meant by energy crops?
21. Comment on mycorrhizae.
22. Define bioleaching.

(8 × 2 = 16 Marks)

SECTION – C

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

23. Explain the biological control of pests in agriculture.
24. Discuss the types and uses of biofertilizers.
25. What are bioplastics? Give note on its advantages and applications.
26. Differentiate between BOD and COD.
27. Give note on microbial hydrogen production.
28. Elaborate the idea of using photosynthetic pigments for the generation of future energy.
29. Explain the process of production of biogas.
30. Discuss the methods and application of vegetable oil as engine fuels.
31. "Biomass is the source for future energy". Justify the comment.

(6 × 4 = 24 Marks)

SECTION – D

Answer any **two** questions. Each question carries **15** marks. (Answer not to exceed 3 pages)

32. What is meant by pollution? Briefly discuss various types and sources of pollution.
33. Explain different methods of sewage treatment.
34. Explain different environmental laws in India.
35. Discuss various types of solid wastes and add an account on methods of solid waste management.

(2 × 15 = 30 Marks)