

Reg. No. :

Name :

Sixth Semester B.Sc. Degree Examination, March 2020

Career Related First Degree Programme under CBCSS

Group 2(a) Botany and Biotechnology

BB 1672 : ENVIRONMENTAL BIOTECHNOLOGY

(2015 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. What is meant by garbage?
2. Give the Binomial of the organism used in vermicomposting.
3. Which year 'Water act' came into force?
4. What is BOD?
5. What is meant by 'coliforms'?
6. What is Mycorrhiza?
7. What are chemoautotrophs?
8. Name any two examples for methanogenic bacteria.

9. What is meant by '3R's'?
10. Name an organism used for bioleaching.

(10 × 1 = 10 Marks)

SECTION – B

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

11. How COD is measured?
12. What are the constituents of hydrosphere?
13. Briefly mention the steps in biogas production.
14. Define Phytoremediation.
15. What is meant by lagooning?
16. What is biodiesel?
17. What are the major sources of air pollution?
18. Biopesticides.
19. Write a short note on soil pollutants.
20. What are the effects of Industrial waste in ecosystem?
21. Define bioaugmentation.
22. Role of microbes in effluent treatment systems.

(8 × 2 = 16 Marks)

SECTION – C

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

23. Write a short account on the scope of biotechnology in environment protection.
24. Describe the methods to assess quality of drinking water.
25. Write about the role of bacteria in biogas production.
26. Give a short account on Bioplastics.
27. Describe how microbes can be used in degrading xenobiotics.
28. Briefly discuss Environmental protection act.
29. Discuss how the household wastes can be managed for better environment and energy production.
30. Give a short account on biofuel crops.
31. Discuss about the Preventive measures for air pollution.

(6 × 4 = 24 Marks)

SECTION – D

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

32. Write a detailed account on solid waste management strategies.
33. What are non conventional energy sources? Describe how biomass can be utilized for the production of energy?
34. Write an essay on the causes of water pollution? What are strategies to prevent it?
35. What is Bioleaching? Describe the various bioleaching methods.

(2 × 15 = 30 Marks)