

E 6489



Reg. No	•
Name	

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MAY 2024

Fourth Semester

Core Course XI—AQUATIC MICROBIOLOGY

 $(For\ B.Sc.\ Microbiology)$

[2013 to 2016 Admissions]

Time: Three Hours Maximum Marks: 80

Part A

Answer all questions. Each question carries 1 mark.

Write about:

- 1. Eutrophication.
- 3. Cynabacteria.
- 5. Impact of oil pollution in ocean.
- 7. Algal blooms.
- 9. Archae bacteria.

- 2. Disease caused by Salmonella typhi.
- 4. Upwelling in the sea.
- 6. Microbiome.
- 8. Membrane filtration.
- 10. Fouling.

 $(10 \times 1 = 10)$

Part B

Answer any **eight** of the following. Each question carries 2 marks.

Write note on:

- 11. Decomposers in ecosystem.
- 13. Heterotrophic bacteria.
- 15. Pour plate method.
- 17. Potability of water.
- 19. Indicator organisms.
- 21. Biofilm formation.

- 12. E-coli contamination in water.
- 14. Deep water zones.
- 16. Inorganic pollution in water bodies.
- 18. ATP test.
- 20. Metal pollution.
- 22. Ecosystem in a stream.

 $(8 \times 2 = 16)$

Turn over





Part C

Answer any six of the following. Each question carries 4 marks.

- 23. Write about estuaries.
- 24. Give an account on changes in aquatic ecosystem due to organic pollutants.
- 25. Write an account on bioactive compounds produced from aquatic microbes.
- 26. Explain how water can be purified and disinfected for drinking purposes.
- 27. Write a note on importance of microbes in marine ecosystem.
- 28. Point out the importance of microbial consortia in a water body.
- 29. Explain how drinking water can be examined for microbial contamination.
- 30. Write about benthic micro-organisms.
- 31. Explain the types and control of algal blooms.

 $(6 \times 4 = 24)$

Part D

Answer any **two** of the following. Each question carries 15 marks.

- 32. Explain techniques to study aquatic micro-organisms.
- 33. Give an account on aquatic ecosystems.
- 34. 'Water borne diseases can be deadly.' Explain with examples. Point out measures to control them.
- 35. Explain water pollution and its impact on aquatic ecosystem.

 $(2 \times 15 = 30)$

