

K23U 2372

Reg. No. :

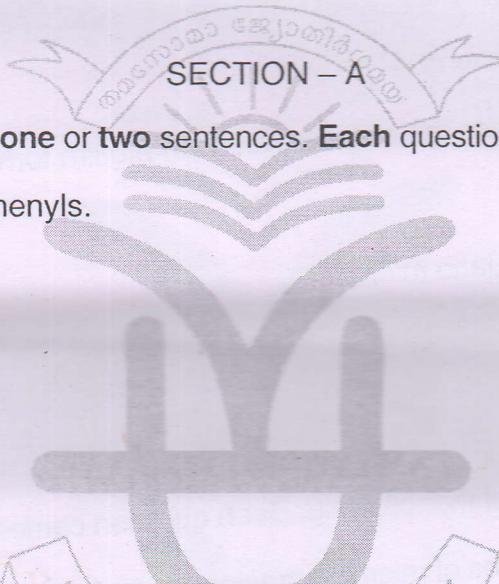
Name :

V Semester B.Sc. Degree (CBCSS – O.B.E.-Regular/Supplementary/
Improvement) Examination, November 2023
(2019 – 2021 Admissions)

CORE COURSE IN MICROBIOLOGY
5B09 MCB : Environmental Microbiology

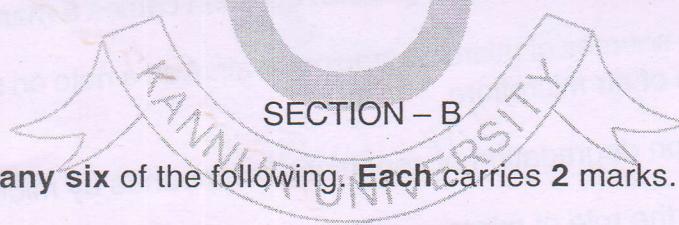
Time : 3 Hours

Max. Marks : 40



Answer all questions in one or two sentences. Each question carries 1 mark. $(6 \times 1 = 6)$

1. Polychlorinated biphenyls.
2. Droplet nuclei.
3. Azotobacter.
4. Ammensalism.
5. Benthic zone.
6. Predation.



Write briefly on any six of the following. Each carries 2 marks.

$(6 \times 2 = 12)$

7. Define symbiotic nitrogen fixation.
8. Antibiosis.
9. Define algal bloom.
10. Define ammonification. Give examples for ammonifying bacteria.
11. Nitrogenase enzyme.

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12. BOD.
13. Limnology.
14. What is meant by recalcitrance ?

SECTION - C

Write short essay on **any four** of the following. **Each** question carries 3 marks. $(4 \times 3 = 12)$

15. Write an essay on various types of interactions between micro-organisms.
16. Recalcitrant halocarbons.
17. What is biofilm ? Write the steps involved in biofilm formation.
18. Phosphorus cycle.
19. Factors affecting aquatic microflora.
20. Estuarine microflora.

SECTION - D

Write essays on **any two** of the following. **Each** question carries 5 marks. $(2 \times 5 = 10)$

21. Discuss various sources of micro-organisms in air. Add a note on methods used for enumeration of air microflora.
22. Write an essay on degradation of xenobiotic compounds by micro-organisms.
23. Explain in detail the role of micro-organisms in nitrogen cycle.
24. What is meant by bioleaching ? Discuss the role of micro-organisms.