

D 103776

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Name.....

Reg. No.....

**SECOND SEMESTER (CBCSS—UG) DEGREE EXAMINATION
APRIL 2024**

Microbiology

MBG 2B 02—MICROBIAL PHYSIOLOGY AND TAXONOMY

(2019—2023 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A (Short Answer Type Questions)*Answer all questions.**Each question carries 2 marks.**(Ceiling : 20 marks)*

Write briefly on :

1. Micronutrients
2. Stenothermal and eurythermal bacteria.
3. Barophiles.
4. Stab culture method.
5. Anaerobic media.
6. Fastidious micro-organisms.
7. Siderophores.
8. Binary fission.
9. Symport and antiport.
10. Passive diffusion and facilitated diffusion.
11. Numerical taxonomy.
12. Taxonomic hierarchy.

Turn over

Section B (Paragraph Type Questions)

Answer all questions.

Each question carries 5 marks.

(Ceiling : 30 marks)

Write notes on :—

13. Bacterial growth curve.
14. Molecular characteristics and techniques used in bacterial taxonomy.
15. Different types of culture media used for culturing bacteria.
16. Classification of microorganisms based on their temperature preferences for growth.
17. Indirect methods for the quantification of microbial growth by plate count.
18. The process of lyophilisation.
19. Lysogenic cycle of bacteriophage reproduction.

Section C (Essay Type Questions)

Answer any one question.

Question carries 10 marks.

Write essay on :

20. Explain the different methods for the cultivation of viruses.
21. Discuss the nutritional requirement of bacteria and give an account on the nutritional types of bacteria.

(1 × 10 = 10 marks)