C 22097	(Pages : 2)	Name
		Reg. No.

# SECOND SEMESTER (CBCSS-UG) DEGREE EXAMINATION, APRIL 2022

# Microbiology

## MBG 2B 02-MICROBIAL PHYSIOLOGY AND TAXONOMY

(2021 Admissions)

Time: Two Hours

Maximum: 60 Marks

### **Section A**

Answer atleast **eight** questions. Each question carries 3 marks. All questions can be attended. Overall ceiling 24.

- 1. Siderophore.
- 2. Passive transport.
- 3. Osmophilic organisms.
- 4. Transport media.
- 5. Log phase.
- 6. Diauxic culture.
- 7. Lawn culture.
- 8. Synchronous culture.
- 9. Numerical taxonomy.
- 10. Cladistics.
- 11. Plaque.
- 12. Classical taxonomy.

 $(8 \times 3 = 24 \text{ marks})$ 

Turn over

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#### **Section B**

Answer atleast **five** questions. Each question carries 5 marks. All questions can be attended. Overall ceiling 25.

- 13. What are the major parameters and environmental factors affecting the microbial growth?
- 14. Explain the major methods used to isolate the pure cultures.
- 15. Discuss methods used for the cultivation of anaerobic bacteria.
- 16. Examine various methods used for the measurement of bacterial growth.
- 17. Outline the major reproduction modes of prokaryotic cell.
- 18. Illustrate the life cycle of a T4 bacteriophage.
- 19. Narrate various methods of the cultivation of viruses.

 $(5 \times 5 = 25 \text{ marks})$ 

### **Section C**

Answer any **one** question. The question carries 11 marks.

- 20. Elaborate various type of media used for the cultivation of bacteria with suitable examples.
- 21. What are the major criteria used for the classification of bacteria? Discuss with suitable examples.

 $(1 \times 11 = 11 \text{ marks})$