

Reg. No. :	**************
Name :	

II Semester B.Sc. Degree (CBCSS - OBE - Reg./Sup./Imp.) Examination, April 2021 (2019 Admission Onwards) Core Course in Microbiology 2B02MCB: MICROBIAL DIVERSITY

Time: 3 Hours

Max. Marks: 40

Instruction:

Wherever needed answers must be supported by

structural illustrations and diagrams.

PART - A

Short answer type questions. Answer all questions. Each question carries 1 mark.

- 1. What is MTCC stands for ?
- 2. Who proposed the three kingdom system of classification? Which are they?
- 3. What is metagenomic analysis?
- 4. Give one example of dsDNA viruses.
- 5. What is cytopathic effect?
- 6. What is a Coliphage?

 $(6 \times 1 = 6)$

PART - B

Short essay type questions. Answer any six questions. Each question carries

- 7. What are ciliated protozoans? Give one example.
- 8. Sac fungi,
- 9. Phenetic classification.
- 10. Cladogram.

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- 11. What is 16s rRNA gene sequencing? Why is 16s rRNA used for bacterial identification?
- 12. Euglenoids.
- 13. Serotyping.

14. TMV.

 $(6 \times 2 = 12)$

PART - C

Essay type questions. Answer any four questions. Each question carries 3 marks

- 15. What does G C content mean? How it is measured?
- 16. Explain DNA hybridization. How does DNA hybridisation support evolution?
- 17. Difference between Zoospores and Aplanospores.
- 18. Describe the Baltimore classification of virus.
- 19. What are the classifications of algae?
- 20. Explain various morphological, biochemical and staining methods in bacterial classification. (4×3=12)

PART - D

Long essay type questions. Answer **any two** questions. **Each** question carries **5** marks.

- 21. Explain the structure, morphology and replication cycle of viruses.
- 22. Explain the general characteristics and classification of protozoa.
- 23. What are the different types of eubacteria? Discuss the characteristics of eubacteria.
- 24. Write in detail about the classification of bacteria adopted by Bergy. (2x5=10)