

| Reg. | No. : | *************************************** | •• |
|------|-------|---|----|
| Name | | | |

Il Semester B.Sc. Degree (CBCSS – Supplementary/Improvement) Examination, April 2020 CORE COURSE IN MICROBIOLOGY 2B02 MCB: Microbial Taxonomy (2014-2018 Admissions)

Time: 3 Hours Max. Marks: 40

Instruction: Draw diagrams wherever necessary.

SECTION - A

Answer all questions. Each question carries 1 mark.

- 1. In microbiology the _____ is a collection of strains that share many stable properties and differ significantly from other groups of strains.
- 2. The Three kingdom classification was proposed by _____
- 3. The fungi that exist in yeast and mold forms are called _____
- 4. The red algae are classified under _____ division of algae. (4×1=4)

SECTION - B

Answer any seven questions. Each question carries 2 marks.

Comment on the following:

- 5. Polyphasic taxonomy.
- 6. Serotypes.
- 7. Aplanospores.
- 8. Cryptomonads.
- 9. Zygospores.



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- 11. Retroviridae.
- 12. Temperate phages.
- 13. Jaccard coefficient.
- 14. Diatoms.

 $(6 \times 2 = 12)$

PART - C

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

- 15. Briefly describe various ways of protozoan reproduction.
- 16. Explain molecular methods in microbial taxonomy.
- 17. Explain the importance of Bergey's Manual in bacterial taxonomy.
- 18. What is a bacteriophage made of? Explain phage typing.
- 19. What is 5 Kingdom of classification? Explain the characteristics of each kingdom.
- 20. Write on outline classification of algae by Fritsch.

 $(4 \times 3 = 12)$

PART - D

Long Essay type questions. Answer any two questions. Each question carries 5 marks :

- 21. Explain various criteria used in bacterial classification.
- 22. Classify fungi, with a note on economic importance of fungi.
- 23. What are various ways of virus classification? Briefly explain the classification of virus on the basis of nucleic acid.
- 24. Differentiate between eubacteria and archaebacteria. Add a note on important groups of archaebacteria. (2×5=10)