K19U 0272

II Semester B.Sc. Degree (CBCSS-Reg./Supple./Improv.) Examination, April 2019
(2014 Admission Onwards)
CORE COURSE IN MICROBIOLOGY
2B02 MCB : Microbial Taxonomy

Time : 3 Hours

Max. Marks : 40

SECTION – A

(Answer **all** questions. **Each** question carries **1** mark.)

1. Five kingdom classification was proposed by _____

2. The organism growing optimally at high salt concentration is called _____

3. The grouping of organisms based on similarity of their phenotype is called _____

4. The genome of nanoavirus infecting plants is _____   (4×1=4)

SECTION – B

(Answer **any seven** of the following. **Each** question carries **2** marks.)

5. Define serotyping.

6. Differentiate between simple matching coefficient and Jaccard coefficient.

7. What are temperate phages ?

8. Differentiate eukaryotic and prokaryotic cells.

9. Define dimorphism in fungi.

P.T.O.

10. What are slime molds ?

11. What are the major characteristics used in viral classification ?

12. What are molecular chronometers ?

13. What is the practical significance of taxonomy ?

14. Define bacterial species. (7×2=14)

SECTION – C

(Answer **any four** of the following. **Each** question carries **3** marks.)

Write short notes on :

15. IMViC reactions.

16. Bergey's manual of systematic bacteriology.

17. Molecular characteristics used in microbial classification.

18. Proteobacteria.

19. Classification of plant viruses.

20. Dinoflagellates. (4×3=12)

SECTION – D

(Answer **any two** of the following. **Each** question carries **5** marks.)

21. Discuss the steps involved in numerical taxonomy of micro-organisms.

22. Write a note on classification of protozoa.

23. Distinguish between Eubacteria and Archaeobacteria. Describe the characteristics of major groups of Archaeobacteria.

24. Discuss the classification of animal viruses. (2×5=10)

_____