

**M.Sc. I Semester Degree Examination, April/May - 2024****MICROBIOLOGY****Virology and Bacteriology****(NEP)**

Time : 3 Hours

Maximum Marks : 70

Note : Answer **any five** of the following questions. with Question No. **1(Q1) compulsory**. Each question carries equal marks.

1. With a neat labelled diagram explain the organelles of prokaryotes and eukaryotes. **14**
2. Discuss in detail the general characteristics of Cyanobacteria and Archaeobacteria. **14**
3. Write a note on types of microbial culture media with suitable examples. **14**
4. Explain in detail on nomenclature and classification of viruses. **14**
5. Discuss the epidemiology, ethology, pathogenesis, Mutations, and treatment of Covid-19 virus. **14**
6. (a) Endospores and exospores. **7**
(b) General characteristics and classification of actinomycetes. **7**
7. Describe the process of isolation and purification of viruses. **14**
8. (a) G + C ratio **5**
(b) Numerical taxonomy **5**
(c) What are continuous and synchronous cultures ? **4**

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