



'সমানো মন্ত্র: সমিতি: সমানী'

**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 1st Semester Examination, 2023

**CC1-MICROBIOLOGY**

**INTRODUCTION TO MICROBIOLOGY AND MICROBIAL DIVERSITY**

Time Allotted: 2 Hours

Full Marks: 40

*The figures in the margin indicate full marks.*

1. Answer any **five** of the following: 1×5 = 5
  - (a) Who is called the discoverer of microbial world?
  - (b) Who discovered the concept of chemolithotrophy in bacteria?
  - (c) Name the Kingdom's in Whittaker's classification.
  - (d) What are virions?
  - (e) Name one N<sub>2</sub>-Fixing blue green algae.
  - (f) What is meant by haplobiontic lifecycle of algae?
  - (g) What are trophozoites?
  - (h) Name one important component of fungal cell wall.
  
2. Answer any **three** of the following: 5×3 = 15
  - (a) Briefly describe the Carl Woese's system of classification. 5
  - (b) State the characteristics features of prions. Name one disease caused by prions. 4+1
  - (c) State the characteristic features of fungi. 5
  - (d) Write a short note on algal pigments. 5
  - (e) Write down the general characteristics of plasmodium. 5
  
3. Answer any **two** of the following: 10×2 = 20
  - (a) Write down the characteristics features of viruses and viroids. Name two diseases caused by viroids. 4+4+2
  - (b) Briefly describe the ultrastructure of fungal cell. Write down the economic importance of algae. 6+4
  - (c) What is parasexual cycle and who discovered it? Describe in detail the mechanism of parasexual cycle. (2+1)+7
  - (d) What are different modes of reproductions in algae? Describe in detail the different modes of sexual reproduction in algae. 2+8

—x—