



'समानो मन्त्रः समितिः समानी'

**UNIVERSITY OF NORTH BENGAL**  
B.Sc. Honours 1st Semester Examination, 2022

**CC1-MICROBIOLOGY**

**INTRODUCTION TO MICROBIOLOGY AND MICROBIAL DIVERSITY**

Time Allotted: 2 Hours

Full Marks: 40

1. Answer any **five** questions from the following: 1×5 = 5
- (a) Name any two commercially important algae. 1
  - (b) Name the causative agents of giardiasis. What is its source? 1
  - (c) Write down any two algal pigment. 1
  - (d) What do you understand by aseptate hyphae? 1
  - (e) Name a disease associated with prion. 1
  - (f) What are merozoites? 1
  - (g) State the contribution of Elie Metchnikoff in the field of immunology. 1
  - (h) Name two pathogenic fungi that cause disease in human being. 1
2. Answer any **three** questions from the following: 5×3 = 15
- (a) State some major characteristics that differ bacteria, fungi from each other. 5
  - (b) Write an account of work of Robert Koch on Germ Theory of disease. 5
  - (c) Diagrammatically represent the life cycle of *Plasmodium* sp. Name the species of *Plasmodium* that causes disease in human being. 4+1
  - (d) List some of the applied fields of microbiology and make general statement of importance. 5
  - (e) What is Binomial Nomenclature? Mention its characteristics with example. 1+4
3. Answer any **two** questions from the following: 10×2 = 20
- (a) Write down the morphological characteristics and mode of reproduction in Bacteria. 5+5
  - (b) Describe in detail about the asexual mode of reproduction in fungi. Write down the economic importance of fungi. 6+4
  - (c) Give a concise account on occurrence and thallus organisation of algae. Differentiate between algae and fungi based on mode of nutrition and reproduction. (2+3)+5
  - (d) Mention the significance of Swan neck flask that Louis Pasteur had designed to disprove abiogenesis. State the contribution of Selman A. Waksman and Paul Ehrlich in the field of microbiology. 5+(3+2)

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