



‘समानो मन्त्रः समितिः समानी’

UNIVERSITY OF NORTH BENGAL
B.Sc. Honours 6th Semester Examination, 2022

CC13-MICROBIOLOGY

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) What is agglutination?
 - (b) What is mycoses?
 - (c) Name two antiviral agents.
 - (d) Name causative agent responsible for Kala-azar.
 - (e) What is MDR?
 - (f) Define toxigenicity.
 - (g) Name two normal microflora of skin.
 - (h) What are efflux pump?

2. Answer any **three** of the following: 5×3 = 15
 - (a) Elucidate the various mechanisms of overcoming antibiotic resistance. 5
 - (b) Describe the symptoms and mode of transmission of the disease caused by bacteria that affects the respiratory system in human. 2+3
 - (c) Explain the principle and process of ELISA. 5
 - (d) Differentiate between acute and chronic carriers with suitable example. 5
 - (e) Write short notes on the following: 2½ × 2 = 5
 - (i) Sources of nosocomial infections
 - (ii) Anthropogenic activities behind the development of antibiotic resistance.

3. Answer any **two** of the following: 10×2 = 20
 - (a) What is malaria? How it is transmitted? What are the common symptoms of malaria? Add a note on its treatment and prevention. 1+3+3+3
 - (b) Describe various agglutination based tests for diagnosis of diseases. Name one antimicrobial agent that inhibits cell membrane function. Add note on MDR. 5+1+4
 - (c) Name one antibacterial agent that affect the cell membrane of bacteria. Describe its structure and mode of action. Write a note on Griseofulvin. 1+2+5+2
 - (d) Describe the structure and mode of action of any one antibacterial agent that targets the cell wall of bacteria. What are antimetabolites? 3+5+2

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