

2025

M.Sc. 3rd Semester Examination

HUMAN PHYSIOLOGY

Paper : PHY - 303

(Microbes - Human Interaction)

Full Marks : 25

Time : One Hour

*The figures in the margin indicate full marks.
Candidates are required to give their answers
in their own words as far as practicable.*

Group - A

Answer any *two* questions : $2 \times 2 = 4$

1. What is haptens? 2
2. What are mesophilic bacteria? 2
3. What are 'species' and 'type strain'? 1+1
4. What is meant by aerotolerant bacteria? 2

Group - B

Answer any *two* questions : $4 \times 2 = 8$

5. What are pilli? Why pilli are considered as virulence factors? 4
6. Differentiate between the cell walls of Gram-positive and Gram-negative bacteria. 4

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(2)

7. Describe the anaerobic culture media for cultivating obligate anaerobes. 4
8. Give a brief account of the pathogenesis of HIV. 4

Group - C

Answer any *one* question : 8×1=8

9. What are antibiotics? Mention the different mechanisms of action of the antibiotics to combat bacterial infections. What is "selective toxicity"? 2+4+2
10. What are capsules? Describe the features by which a capsule of bacteria takes part in pathogenesis? 2+6

Internal Assessment : 5 marks
