

2022

MICROBIOLOGY

[Generic]

(B.Sc. Second Semester End Examination-2022)

PAPER-GE2T

Full Marks: 40

Time: 02 Hrs

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

Illustrate the answers wherever necessary

Group-A

Answer any five questions from the following: 5x2= 10

1. What is selective medium? Give example.
2. What are Viroids?
3. What are porins?
4. Mention the difference between bacteria and archaea.
5. What is endospore? Name one endospore forming bacteria?
6. Name one enveloped and one nonenveloped virus.
7. What are methanogens? Give example.
8. State the mode of transmission of Hepatitis B virus.

Contd.../2

(2)

Group-B

Answer any four questions from the following: 4x5 = 20

1. Describe the different phases of bacterial growth curve.
2. a) Write down the composition of bacterial cell wall.
b) Write down the difference between Gram+ve and Gram-ve bacterial cell wall. 3+2
3. a) Write down the general characteristics of spirochetes and Rhizobium.
b) Name one cell wall less bacterium. 2+2+1
4. Briefly explain the salient features and economic importance of Archaeobacteria.
5. Describe the lytic cycle pathway of bacteriophage T₄.
6. What is pure culture? Write a brief note on cultivation of anaerobic bacteria. 2+3

Group -C

Answer any one question of the following: 1x10 = 10

1. Describe different growth kinetics of typical bacteria. What is generation time? 8+2
2. a) Describe the fluid mosaic model of bacterial plasma membrane.
b) Write the genome organization and mode of transmission of HIV.
c) Write the difference between lytic and lysogenic cycle. 4+(2+2)+2