PG/IS/MCB/106/24

M.Sc. 1st Semester Examination, 2024

MICROBIOLOGY

PAPER — MCB-106

Full Marks : 25

Time : 1 hour

Answer **all** questions

The figures in the right hand margin indicate marks

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

GROUP — A·

Answer any **two** questions : 2×2

1. What is coenzyme ? Give an example.

2. Why linear transformation of MM equation is necessary to calculate enzyme activity ?

3. Draw the titration curve of glycine.

4. Draw and lebel the structure of liposome.

GROUP – B

Answer any **two** questions : 4×2

5. State the effect of pH and temperature on the activity of enzyme.

6. Discuss the role of molecular chaperon and cheperonin.

7. Describe the factors that maintain membrane fluidity.

8. Describe the phosphotransferase system (PTS) of bacteria.

GROUP – C

Answer any **one** question : 8×1

(*Continued*)

9. Write the components of electron transport chain. How electrons are transported through electron transport chain ?   3 + 5

10. Compared alpha helix and beta sheet of proteins structure. Describe the structure of collagen. State the importance of Ramachandran plot.   3 + 3 + 2

[Internal Assessment — 5 Marks]

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