Code No.: 9268

FACULTY OF SCIENCE M.Sc. II Semester Examination, May/June 2012 BIOCHEMISTRY

Paper – III: Microbiology

Time: 3 Hours]

[Max. Marks: 80

Note: Answer **all** questions in Part – **A** and **B**. In Part – **A** each question carries **4** marks and in Part – **B** each question carries **12** marks.

PART – A

 $(8\times4=32 \text{ Marks})$

Answer all questions:

- 1. Prions and uses.
- 2. Selective media and uses.
- 3. Growth curve of bacterium.
- 4. Effect of pH on growth of bacterium.
- 5. Lysogeny.
- 6. λ_{11} phage.
- 7. Ultrafiltration.
- 8. Poliovirus.

PART-B

 $(4\times12=48 \text{ Marks})$

Answer all questions:

9. a) Write on general characteristics of protozoa.

OR

b) Discuss on the discovery and characteristics of TMV.

(This paper contains 2 pages)

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10. a) How conjugation in bacteria discovered? Comment on application in genome mapping.

OR

- b) Write an essay on preparation of various culture media and add a note on Trp-cell culture growth.
- 11. a) Discuss on the isolation of virus particles using ultracentrifugation.

OR

- b) Write on life cycle of T₄ phages.
- 12. a) Explain the methods of culturing of viruses in eukaryotes.

OR

b) Write an essay on isolation and characterization of viruses from eukaryotes.