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

(8×4=32 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. λ₁₁ phage.
7. Ultrafiltration.
8. Poliovirus.

PART – B

(4×12=48 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)
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.