FACULTY OF SCIENCE

M.Sc. III – Semester (CBCS / Non-CBCS) Examination, December 2014

Subject: Biochemistry
Paper - III: Virology, Nutrition and Clinical Biochemistry

Time: 3 Hours
Max. Marks: 80

Note: Answer all questions from Part - A and Part - B.
Each question carries 4 marks in Part - A and 12 marks in Part - B.

PART – A (8 x 4 = 32 Marks)
(Short Answer Type)

1. Define bacteriophages? Write in detail about the composition and structure of bacteriophages.
2. Describe the plaque assay for the determination of phage titre.
3. Write the structure and morphological characters of adenovirus.
4. What are viroids? Give examples.
5. Mention the factors that influence calorie requirement of men and women.
6. Explain briefly the following:
   (i) Essential fatty acids
   (ii) Pellagra
7. Explain the diagnostic significance of transaminases.
8. Write a note on biochemical abnormalities.

PART – B (4 x 12 = 48 Marks)
(Essay Answer Type)

9. (a) Discuss the Baltimore classification system.
   OR
   (b) Describe the clinical applications of Bacteriophage.

10. (a) Write an essay on isolation, purification and cultivation of animal virus.
    OR
    (b) Write the symptom, mode of transmission, control measure and structure of TMV.

11. (a) Describe the causes, diagnosis and treatment of type II diabetes mellitus.
     OR
     (b) What is BMR? How is it calculated? Explain the factors that affect BMR.

12. (a) List out the different renal function tests and explain briefly their significance.
     OR
     (b) Discuss in detail the automation in clinical laboratory.

*****