

FACULTY OF SCIENCE

B.Sc. II – Year Examination, March / April 2015

Subject : Bio-Technology (General)

Paper – II

Biological Chemistry and Microbiology

Time : 3 hours

Max. Marks : 100

Note : Answer all questions. All questions carry equal marks.

- 1 a) Describe the structure and biochemical importance of sucrose.
OR
b) Give details of classification and nomenclature of enzymes.
- 2 a) Describe the deamination, decarboxylation and transamination reactions of amino acids.
OR
b) Explain gluconeogenesis and its significance.
- 3 a) Describe the methods of isolation, identification and preservation of bacteria.
OR
b) Describe the structure and general characters of viruses.
- 4 a) Explain the principle, applications and types of chromatography.
OR
b) Discuss on dialysis and lyophilization.
- 5 Write short notes on any **Three** of the following :
 - a) Centrifugation
 - b) Chemical methods of sterilization
 - c) Albinism
 - d) Effect of pH on enzymatic reactions
 - e) Primary structure of proteins
