

Code No. 3084

FACULTY OF SCIENCE

B.Sc. III-Semester (CBCS) Examination, November / December 2018

Subject : Bio-Technology

Paper – III : Biochemistry and Biostatistics (DSC)

Time : 3 Hours

Max. Marks: 80

PART – A (5 x 4 = 20 Marks)

(Short Answer Type)

Note : Answer any FIVE of the following questions.

- 1 What is complex lipid?
- 2 Write a note on the classification of carbohydrates.
- 3 Discuss oxidative deamination reactions of amino acids.
- 4 What is Beer-Lambert's law?
- 5 Write a note on methods of sampling.
- 6 Give an account on types of graphical representation of data.
- 7 What is binomial distribution?
- 8 What is the difference between null hypothesis and alternative hypothesis?

PART – B (4 x 15 = 60 Marks)

(Essay Answer Type)

Note: Answer ALL the questions.

- 9 (a) Write a note on :
(i) structure of proteins (ii) unsaturated fatty acids
OR
(b) What is Michaelis-Menten equation? Write a note on factors affecting enzyme activity.
- 10 (a) Describe the components of electron transport chain.
OR
(b) Give an account on :
(i) SDS-PAGE (ii) HPLC
- 11 (a) Describe the measures of central tendency adding a note on their advantages and disadvantages.
OR
(b) Discuss the measures of dispersion.
- 12 (a) Write a note on correlation and regression analysis and their applications.
OR
(b) Give a note on :
(i) analysis of variance
(ii) Chi-square test