

FACULTY OF SCIENCE
B.Sc. (CBCS) III – Semester Examination, November / December 2017
Subject : BIO-TECHNOLOGY
Paper – III
Biochemistry and Biostatistics
Part – A ($5 \times 4 = 20$ Marks)
(Short Answer Type)

Time : 3 hours

Max. Marks : 80

Answer any Five of the following questions.

- 1 Enzyme Inhibition
- 2 Peptide Bond
- 3 Oxidative deamination
- 4 Beer Lambert's Law
- 5 Diagrammatic representation of data
- 6 Variance and standard deviation
- 7 Probability
- 8 Linear Regression Analysis

Part – B ($4 \times 15 = 60$ Marks)
(Essay Answer Type)

- Answer ALL questions from the following :**
- 9 a) Explain Michaelis-Menton equation in detail.
 b) Describe in detail the structure and functions of different polysaccharides.
 OR
 - 10 a) Write a note on Tricarboxylic Acid (TCA) cycle.
 b) Write the principle and applications of preparative and analytical centrifugation.
 OR
 - 11 a) Describe in detail the methods of sampling.
 b) Explain "MEDIAN" as a measure of central tendency, list out the merits and demerits and calculate median from the data given

x	16-20	21-25	26-30	31-35	36-40	41-45	46-50
f	4	7	9	4	3	3	2

- 12 a) Discuss in detail one-way ANOVA and their applications to biology.
 OR
 b) What is correlation coefficient. Calculate correlation coefficient between the given two variables, test the significance and interpret your results.

x	65	66	67	68	67	69	70	64	65	63
y	67	65	68	70	65	68	72	66	62	68
