

M.Sc. Biochemistry
Semester-II Examination, August 2022
Paper Title: Biostatistics
Paper Code: MBC-208

Time: 1.5 Hours

Max Marks: 37

Attempt all questions. Use only A4 sheets. All parts of a question must be attempted in continuation. Start answer of a fresh question on a new page. Cite examples and draw labelled diagrams wherever necessary.

Note: Attempt all the questions. Question No.1 Is compulsory. Attempt any THREE questions from the rest of the portion. The use of a calculator for mathematical calculations is allowed.

Q.1 (a) Write TRUE or FALSE against the following statements.

(1X7=7)

- (i) When the upper limit of one class is included in that class itself. The method is known as exclusive method.
- (ii) The curve obtained by plotting frequencies is called an Ogive.
- (iii) An average is referred as a Measure of Central Tendency.
- (iv) Correlation Coefficient is a measure of degree of co variability between two variables.
- (v) The series for which Coefficient of Variation is less is said to be more variable.
- (vi) Chi Square is the measure of variability between the Observed and Expected Frequencies.
- (vii) Student's - t - Test is known as Test of Significance between various means.

Q.2 Find Arithmetic Mean, and Mode for the following data

(10)

Classes	:	0-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40
Freq.	:	5	7	12	15	20	10	8	4

Q.3 Calculate Standard Deviation and Variance of the Following Data

(10)

X	:	0-10	10-20	20-30	30-40	40-50	50-60	60-70	70-80
F	:	3	8	10	13	9	6	5	2

Q.4 A departmental store gives in-service training to its salesmen, which is followed by a test. It is

(10)

Considering, whether it should terminate the service of any salesman who does not do well in the test. The following data gives the test scores and sales made by nine salesmen during a certain period.

Test Scores	:	14	19	24	21	26	22	15	20	19
Sales(000Rs.):		31	36	48	37	50	45	33	41	39

Calculate the Correlation Coefficient between the Test Scores and Sales. Does it indicates the Termination of services of low-test scores is justified?

PTO

Q.5 Write Short Notes on any of the following

- a) Measures of Variation
- b) Tests of Significance
- c) Soft wares used in plotting and representation of statistical data.
- d) Mean, Mode and median
- e) Correlation and Regression