Roll No. | | | | | | | | | | | | | **Total No. of Pages : 02**

Total No. of Questions : 11

M.Sc. (Biotechnology) (2018 Batch) (Sem.-3)

BIOSTATISTICS

Subject Code : MBT-302

M.Code : 76729

Date of Examination : 14-12-22

Time : 3 Hrs. **Max. Marks : 70**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains SEVEN questions carrying SIX marks each and students have to attempt any FIVE questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Write briefly :

a) Define biostatistics.

b) Define mode with example.

c) What do you mean by degrees of freedom?

d) Define precision

e) A book contains 100 pages. If you open book randomly, what is the probability that you will get page number 90?

f) Define distribution

g) Give example for non-parametric tests

h) Define rank correlation

i) Define variance

j) Write the formulae for Karl Pearson coefficient of correlation.

SECTION-B

2. Write a note on Correlation.

3. What do you mean by Normal distribution?

4. The number of defects per unit in sample of 330 units of manufactured product was found as follows :

No of Defects	0	1	2	3	4
No of Units	214	92	20	3	1

Fit a poision distribution to the data (Given $e^{-0.439} = 0.6447$)

5. Calculate Mean, Median and Mode by taking your own data.

6. Explain t-Test importance in biostatistics. Write the various formulae for standard deviation used in t-Test.

7. In an anti malarial campaign particular city, quinine was given to some people. Discuss the usefulness of quinine checking malaria by using chi square test

Observed:	20	220	792	2216
Expected:	60	180	752	2256

(Table value is 3.84)

8. Write a note on graphical presentation.

SECTION-C

9. Discuss in detail Chi square test and randomised block design

10. Perform one way Analysis of variance for the given following data $F_{0.05}(2, 6)$ is 5.14.

A	B	C
5	4	3
6	5	7
7	3	5

11. Write a note on any two : a) Design of experiments b) Probability c) Regression.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.