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

Total No. of Questions : 09

B.Sc - Honours (Microbiology) (Sem.–3)

BIOSTATISTICS

Subject Code : BSMB308-19

M.Code : 90374

Date of Examination : 21-12-22

Time : 3 Hrs. **Max. Marks : 60**

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR 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) What do you mean by parametric test?

b) Define biostatistics.

c) What do you mean by standard deviation?

d) Define skewness and kurtosis.

e) Define t-test

f) Calculate mean, median and mode for 30, 16, 20, 16, 18, 14, 24, 18

g) Define variables.

h) Define Shannon-weaver index.

i) How do you calculate range?

j) What do you mean by statistical power?

SECTION-B

2. Explain chi-square test- goodness of fit.

3. Define paired sample t-test. Write its significance in research.

4. Define errors. Give its importance in research.

5. Find out the coefficient of correlation from the following data:

   X: 65, 66, 65, 67, 68, 69, 71, 73

   Y: 67, 68, 68, 68, 72, 70, 69, 70

6. Define simple linear regression. Add a note on spearman's correlation.

SECTION-C

7. Define hypothesis. Write a detailed note on hypothesis testing.

8. Define Mann-Whitney U Test. Write its significance in research. Explain with example.

9. To carry out one factor analysis of variance of the given observations of three different methods of teaching. Find out the mean difference between the groups and state the hypothesis, **[alpha level: 0.05, F= 5.41]**

Online Teaching	Teaching through Multimedia device	Traditional Method
5	5	6
3	4	4
4	6	4

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.