

Roll No.

Total No. of Pages : 02

Total No. of Questions : 07

M.Sc. (Clinical Research) (Sem.-2)
BIOSTATISTICS IN CLINICAL RESEARCH

Subject Code : MSCR-213-18

M.Code : 75946

Date of Examination : 18-07-22

Time : 2 Hrs.

Max. Marks : 35

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of FIVE questions carrying ONE mark each.
2. SECTION-B contains THREE questions carrying FIVE marks each and students have to attempt any TWO 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. What is dependent variable?
 - c. Define the term probability.
 - d. What is null hypothesis?
 - e. Calculate the geometric mean of the following :
50, 72, 54, 82 and 93.

SECTION-B

2. Give an account of the procedure for testing of hypothesis.
3. Briefly explain the common statistical software used in research.
4. Find out the coefficient of correlation from the following data :

X :	65	66	67	67	68	69	71	73
Y :	67	68	64	68	72	70	69	70

SECTION-C

5. What do you mean sample size calculation? Discuss one method to calculate the sample size for observational studies. Write a note on Mann-Whitney U Test.
6. To carry out one factor analysis of variance of the given observations of three different groups of student performance in grades. Find out the mean difference between the groups and state the hypothesis, [**alpha level: 0.05 = F = 5.41**]

Group-A	Group-B	Group-C
3	3	4
4	4	2
5	3	4

7. What are the underlying assumptions of one way ANOVA? Explain under what circumstances ANOVA is the most preferred type of statistical data analysis.

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.