Question Paper

MANIPAL ACADEMY OF HIGHER EDUCATION

FOURTH SEMESTER B.Sc. (PSYCHOLOGY) / B.Sc. CND / B.Sc. HIM / B.Sc. MLT / B.Sc. NMT / B.Sc. PFT / B.Sc. RT / B.Sc. OPTOM. / B.Sc. EMT DEGREE EXAMINATION - SEPTEMBER 2022
SUBJECT: BST 3201 - BIOSTATISTICS AND RESEARCH METHODOLOGY
(2020 SCHEME)

Marks: 50   **Duration: 120 mins.**

Answer all the questions.

1)   Compute the mean, median and standard deviation for the following data.   (10)

Diastolic Blood Pressure
76
64
62
81
70
72
81
63
67
77

(2+3+5 = 10 marks)

2)   (a) State any five properties of an ideal measure of central tendency. (b) Define coefficient of   (10)
variation. (c) Define the three components of descriptive epidemiology.
(5+2+3 = 10 marks)

3A)   List the points of similarity and difference between Pearson's and Spearman's Correlation   (5)
coefficient.

3B)   Define the four scales of measurement with an example.   (5)

3C)   Explain the following: cross-sectional study and an ecological study.   (5)

3D)   Write a short note on stratified sampling and quota sampling.   (5)

4A)   Give two examples of a discrete variable.   (2)

4B)   Comment on the skewness and kurtosis of Normal Distribution. List the parameters of Normal   (2)
distribution.

4C)   List any two methods to visualize: i) Categorical variable ii) Continuous variable   (2)

4D)   Define the following terms: population and sample.   (2)

4E)   Define ratio and proportion.   (2)

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