



‘সমানো মন্ত্র: সমিতি: সমানী’

UNIVERSITY OF NORTH BENGAL
B.Sc. Programme 5th Semester Examination, 2022

DSE1/2/3-P1-STATISTICS

APPLIED STATISTICS

Time Allotted: 2 Hours

Full Marks: 60

The figures in the margin indicate full marks.

1. Answer any **four** questions from the following: 3×4 = 12
 - (a) Why Latin square design is known as incomplete 3-way layout?
 - (b) What are the advantages and disadvantages of randomised block design?
 - (c) What are the methods of census taking?
 - (d) What do you mean by statistical quality control?
 - (e) Why do we need standardized death rate?
 - (f) What are different measures of population growth?

2. Answer any **four** questions from the following: 6×4 = 24
 - (a) Explain the terms tolerance limits and control limit.
 - (b) Write a short note on Yates algorithm.
 - (c) Write a short note on process control chart.
 - (d) Describe different functions available in a life table and the relations among them.
 - (e) Write the uses of life table.
 - (f) What are the advantages and disadvantages of Latin-square design?

3. Answer any **two** questions from the following: 12×2 = 24
 - (a) Describe the layout and analysis of a completely randomised design and discuss its merits and demerits.
 - (b) Describe the construction of control charts for mean and range from appropriate data when both standards are given and not given.
 - (c) What are the three basic principles of design of experiment? Explain them.
 - (d) Derive the logistic equation. Discuss the important properties of a logistic curve.

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