

## UNIVERSITY OF NORTH BENGAL

B.Sc. General Part-III Examination, 2021

## **STATISTICS**

# PAPER-VII (OLD SYLLABUS)

Full Marks: 65

#### **ASSIGNMENT**

The figures in the margin indicate full marks. All symbols are of usual significance.

# 1. Answer *all* questions:

 $1 \times 10 = 10$ 

- (a) What is design of experiment?
- (b) Why LSD is called incomplete 3 way layout?
- (c) What is statistical quality control?
- (d) What is producer's risk?
- (e) What is consumer's risk?
- (f) What are the advantages of LSD?
- (g) What is precision of an experiment?
- (h) What is process control?
- (i) What is product control?
- (i) What is tolerance limit?

### 2. Answer *all* questions:

 $6 \times 4 = 24$ 

- (a) Write a short note on rational subgroup.
- (b) What is Completely Randomized Design? Write down the advantages and disadvantages of the design.
- (c) Write a short note on Indian official statistics.
- (d) What is Single sampling and Double sampling inspection plan?

### 3. Answer *all* questions:

 $8 \times 2 = 16$ 

- (a) Write a short note on different components of time series.
- (b) Describe the construction of control charts for mean and fraction defective from appropriate data when standards are given and standards are not given.

#### 4. Answer *all* questions:

- (a) What do you mean by standardized death rate? Discuss the direct and indirect method of standardization.
- (b) Give the mathematical model assumed in L.S.D and explain the analysis of variance table used for analyzing the results of such an experimental design.

\_\_\_\_X\_\_\_

7587

2+6