

**A-862**

Total Pages : 3

Roll No. ....

**MSCBOT-606**

**M.Sc. BOTANY (MSCBOT)**

**(Biostatistics)**

4th Semester Examination, 2024 (June)

Time : 2:00 Hrs.

Max. Marks : 70

**Note :-** This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

**Section-A**

**Long Answer Type Questions**      2×19=38

**Note :-** Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. Define Biostatistics. Explain in detail about work procedure, merit and demerits of Mean.
2. What are the basic principles and types of experimental design ?
3. What is cluster analysis ? Describe its basic concept and algorithms.
4. Write an essay on Split Plot Design explaining its main features layout and uses.
5. Explain the types of graphical data presentation ?

### **Section–B**

#### **Short Answer Type Questions**      4×8=32

**Note** :- Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Write merits and demerits of standard deviation.
2. Differentiate between any *two* of the following:
  - (a) Primary and Secondary data
  - (b) Pictogram and histogram
  - (c) Correlation and regression

3. Calculate the sample median of the following data.

Number of students	Marks
12	15
6	20
8	23
17	18
4	27

4. Discuss the role of probability in inheritance.
5. A basket has 8 apple of weight 120 gm each, 6 apple weight 130 gm each, 5 apples of 150 gm each, 3 apples of 160 gm each and 2 apples of 175 gm each. What is the mean weight of an apple ?
6. Write a short note on Chi-Square Test and its uses.
7. Write short note on range and its utility.
8. Discuss in brief about Simple and Composite Hypothesis.

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