Sylhet Cadet College

First Term-End Examination - 2023

Class: XI

Subject: Statistics First Paper (MCQ) **Set: A**

Time: 20 minutes **Subject Code: 129** **Full Marks: 20**

Answer all the questions. Each question is worth one (1) mark.

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1. **If** $x_1 = 2, x_2 = 3, x_3 = 5, x_4 = 7$ **and** $y_1 = 3, y_2 = 4, y_3 = 5, y_4 = 8; \sum_{i=2}^{4} x_i y_i =$?

   (a) 14 (b) 201 (c) 93 (d) 109

2. **If** $\sum_{i=1}^{20} x_i^2 = 20$ **and** $\sum_{i=1}^{20} x_i = 30$**, what is the value of** $\sum_{i=1}^{20} x_i^2 + \sum_{i=1}^{20} x_i + 100$**?**

   (a) 130 (b) 200 (c) 250 (d) 2130

3. **A subset of a population is called–**

   (a) Constant (b) Variable (c) Sample (d) Scale

   Answer the next 2 question based on the following information.

   A farmer collects growth (in cm) of 10 plants in a month and finds that $\sum x_i = 7$ **and** $\sum x_i^2 = 15$

4. **What is the value of** $\sum(x_i + 4)$**?**

   (a) 23 (b) 47 (c) 22 (d) 11

5. **What is the value of** $\sum(x_i - 4)^2$**?**

   (a) 23 (b) 135 (c) 484 (d) 119

6. **Which of the following is a continuous variable?**

   (a) Number of goals (b) Natural number

   (c) Summation of Fibonacci series (d) Success rate

7. **How many sources of data are there?**

   (a) 5 (b) 4 (c) 3 (d) 2

8. **What is the raw material of research?**

   (a) Data (b) Theory (c) Graph (d) Mean

9. **Data obtained through direct observation is called–**

   (a) Primary data (b) Secondary data (c) Original Data (d) Informal data

10. **Who invented Stem and Leaf plot?**

    (a) Karl Pearson (b) R.A. Fisher (c) David Cox (d) John Tukey

11. **How many measure of central tendency are there?**

    (a) 2 (b) 3 (c) 4 (d) 5

12. **Which measure of central tendencyis suitable for qualitative variable?**

    (a) Arithmetic Mean (b) Harmonic Mean (c) Quadratic Mean (d) Mode

13. **In presence of negative values, which measure is not usable?**

    (a) Arithmetic Mean (b) Geometric Mean (c) Quadratic Mean (d) Harmonic Mean

14. **For grouped data, which formula is correct for Arithmetic Mean?**

    (a) $\bar{x} = \frac{\sum f_i x_i}{\sum f_i}$ (b) $\bar{x} = \frac{\sum x_i}{N}$ (c) $\bar{x} = \frac{\sum f_i x_i}{n}$ (d) $\bar{x} = \frac{\sum f_i}{N}$

Answer Key

1. (c) 93
2. (c) 250
3. (c) Sample
4. (b) 47
5. (d) 119
6. (d) Success rate
7. (d) 2
8. (a) Data
9. (a) Primary data
10. (d) John Tukey
11. (d) 5
12. (d) Mode
13. (b) Geometric Mean
14. (a) $\bar{x} = \dfrac{\sum f_i x_i}{\sum f_i}$