

**Sylhet Cadet College**  
**Fortnightly Examination - 2022**  
**Class: XI**  
**Subject: Statistics First Paper**  
**Subject Code: 129**

**Time: 40 minutes**

**Full Marks: 20**

Answer all the questions. Figures in the right indicate full marks.

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1. If  $\sum_{i=1}^{10} x_i = 20$ , find,  $\sum_{i=1}^{10} (x_i - 4)$  [Hint: Expand the expression] 3
2. Prove the following statements:
  - (a)  $\sum_{i=1}^{10} cx_i = c \sum_{i=1}^{10} x_i$  3
  - (b)  $\sum_{i=1}^m (bx_i - c) = b \sum_{i=1}^m x_i - mc$  4
  - (c)  $\sum_{i=1}^{20} c = 20c$  2
3. Are the following variables discrete or continuous? 2  
Income, distance of stars in km, radius of screws, diameter of trees
4. Write the scale of measurement of the variables given below 3  
Gender, temperature, income group (Lower class, Low, Middle, High), marks in exam, number of daily accidents in Bangladesh, room no.
5. Explain the difference between discrete and continuous variables with examples 3