**SYLHET CADET COLLEGE**
FORTNIGHTLY EXAMINATION - 2025 (T1F1)
CLASS: XI
SAQ and Creative Questions
Subject: STATISTICS

TIME – 40 Minutes FULL MARKS – 20

**Candidates are asked not to leave any mark or spot on the question paper.**

1. **Answer in brief.**

(a) Find the square of summation: 3, 7, 5, 9, 6 1

(b) If $\bar{X} = 25, CV = 50\%, \sigma^2 =?$ 1

(c) Arithmetic mean of a variable is 16 and variance is 9. What is the value of CV? 1

(d) Find the sum of squares of differences from 10: 6, 8, 10, 12, 14 1

(e) What is the variance of first 5 natural numbers? 1

(f) Does mean deviation depend on all values of a dataset? 1

(g) When is variance less than standard deviation? 1

(h) Write down the formula of Quartile Deviation. 1

(i) Is coefficient of variation a pure number? 1

(j) If $n = 10, \sum x_i = 120, \sum x_i^2 = 2000, CV =?$ 1

2. **Goals scored by two footballers in five consecutive seasons are given below:**

Footballer A: 10, 15, 12, 9, 20

Footballer B: 25, 5, 10, 15, 6

(a) What does dispersion measure? 1

(b) Is $\sum |x_i - \bar{x}|$ always greater than $\sum (x_i - \bar{x})$? Prove mathematically. 2

(c) Find Mean Deviation about mean and median of the footballer A. 3

(d) Which footballer should be hired a club? Determine with the help of a suitable relative measure of dispersion. 4

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