

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 matches 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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