#### Question 1

You have 2 sets of data as set 1:{10,20,30,40,50} and set 2:{100,200,300,400,500}. Which of the following statements are correct?

- 1. Standard Deviation of both sets are similar
- 2. Standard Deviation of both sets are different
- 3. Standard Deviations of both sets are similar but means are different
- 4. None of the above

#### Question 2

Which of the following statements are true?

- 1. Variance is Computationally easier and Standard Deviation is difficult to Compute relatively
- 2. Variance is Computationally difficult and Standard Deviation is easier to Compute relatively
- 3. None of the Above
- 4. Both 1 & 2 are true

#### **Question 3**

Which of the following statements are true?

- 1. Variance is easier to infer and Standard Deviation is difficult to infer relatively
- 2. Variance is difficult to infer and Standard Deviation is easier to infer relatively
- 3. None of the Above
- 4. Both 1 & 2 are true

#### **Question 4**

Which of the following are measures of Central Tendency?

- 1. Mean, Mode, Variance
- 2. Mean, Variance, Standard Deviation
- 3. Variance, Standard Deviation, Median
- 4. Median, Mode, Mean

#### **Question 5**

The measure of degree of asymmetry of a frequency distribution is

- Inter Quartile Range
- 2. Skewness
- 3. Kurtosis
- 4. Standard Deviation

## **Question 6**

Given the sample data

Observation No	Х	$X - \overline{X}$	$(X-\overline{X})^2$
1	XXXXX	-24.8667	XXXXX
2	XXXXX	-15.3667	XXXXX
3	XXXXX	-4.86667	XXXXX
4	XXXXX	4.733333	XXXXX
5	XXXXX	15.13333	XXXXX
6	XXXXX	???????	XXXXX
Σ	XXXXX	XXXXX	??????

Compute the values for  $X_6 - \bar{X}$  and  $\sum (X - \bar{X})^2$  ?

- 1.  $X_6 \bar{X} = 18.64221$  and  $\sum (X \bar{X})^2 = 254.71$ 2.  $X_6 \bar{X} = 22.85333$  and  $\sum (X \bar{X})^2 = 361.85$ 3.  $X_6 \bar{X} = 25.23333$  and  $\sum (X \bar{X})^2 = 1766.31$ 4.  $X_6 \bar{X} = 6.792421$  and  $\sum (X \bar{X})^2 = 110$

### **Question 7**

Which of these statements are correct?

- A: Quartiles can be derived from Percentile
- B: Decile can be derived from Percentile
- C: Standard Deviations can be derived from Quartiles
- D: Quartiles can be derived from Deciles
  - 1. Only A is true
  - 2. A and B is true
  - 3. B and C is true
  - 4. Only D is true

# **Question 8**

Basis the given sample dataset {22,34,63,45,85,47,38,53,39,28}, the mean value is 45.4. A researcher has found out that the 3<sup>rd</sup> and 5<sup>th</sup> Observation was wrongly recorded as 63 and 85, the actual value for which should be 35 and 36. What will be the percent change in the number of observations falling within the One Standard Deviation limit with the correction as compared to the previous case?

- 1. 20%
- 2. 30%
- 3. 50%
- 4. 70%

## **Answer Key**

- **1)** 2
- **2)** 1
- **3)** 2
- **4)** 4
- **5)** 2
- **6)** 3
- **7)** 2
- **8)** 3