

Statistics - ICS Part 1 Statistics Chapter 4 Short Questions Preparation

Q1. If $Var(X) = 16$ than find variance of 3 x and 3x -	10
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Ans 1: Var(3) = 9 Var(X) = 9(6) = 144

Ans 2: Var(3x-10) = 9 Var(X) = 144

Q2. Define mean deviation.

Ans 1: It is defined as the mean of the absolute deviation of observation from mean.

Q3. Write ant two advantage of range.

Ans 1: 1. It is easy to calculate.2. It is a useful measure in small samples.

Q4. What is symmetry and skewness?

Ans 1: It the values equidistant from the mean have equal frequencies, that the distribution is called the symmetrical distribution. Lack of symmetry is called skewness.

Q5. Define dispersion, mean deviation and standard deviation.

Ans 1: By dispersion, we mena the extent to which the values are spread out from the average.

Ans 2: The mean deviation is defined as the average of absolute deviations of the valeus from an average mean or median.

Ans 3: The standared deviation as the positive square root of the mean of the squared deviations of the values from their mean.

Q6. Define moments.

Ans 1: Moments are the arithmetic mean of the power to which the deviation. are raised.

Q7. What do you mean by a symmetrical distribution?

Ans 1: The distribution is called symmetric if the frequency curve is such that the left of curve to its mean is the mirror image of the curve to the right of mean.

- Q8. Define Harmonic mean.
 - **Ans 1:** Harmonic mean of n value is defined as a reciprocal of the arithmetic mean of the values.
- Q9. Discuss demerits of A.M.
 - Ans 1: It is greatly affected by extreme values. It can not be calculated for open end classes without assuming open ends.
- Q10. Explain moment about mean.
 - Ans 1: The moments about the mean are the mean of deviation from the mean after raising them to integer powers.