

Statistics - ICS Part 1 Statistics Chapter 3 Short Questions Preparation

Q1. What is the relative position of the mean, median and mode in the symmetrical and moderately skewed distributions.

Ans 1: In symmetrical distributions, the mean, median and mode all coincide IN moderately skewed distribution the median line between the mean and the mode and it is twice as far away from the mode as from the mean.

Q2. Give important advantages and disadvantages of the mean.

Ans 1: It is the most commonly used average. It is unique because every distribution has one and only one mean.

Ans 2: Its main disadvantage is that it is affected by extreme values that are not representative of the rest of the data.

Q3. Compute the median for the data -2,5,0,-1,4,2

Ans 1: Arranging the data.

Ans 2: -2,-1,0,2,4,5

Ans 3: Median = $\frac{0+2}{2} = 1$

Q4. Find mode and median of letter."STATISTICS"

Ans 1: Mode =S and T For median arrange the letters.A,C,I,I,S,S,S,T,T, T Median=Mid value=S

Q5. State some disadvantage of geometric mean.

Ans 1: Disadvantages of Geometric mean.

Ans 2: 1- It is neither easy to calculate nor simple to understand.

Ans 3: 2- It vanishes if any item in the data is zero.

Ans 4: 3- It cannot be computed if any value is negative it may locate the value at a point at which few or none of the actual values lie.

Q6. If Mean =20 and Median=18.6 find mode using the formula connecting them.

Ans 1: Mode =3 median =2 Mean=3(18.6)-2(20)Mode =15.8

Q7. What is meant by Percentile?

Ans 1: The values which divide an array data into one hundred equal parts are called percentiles.

Q8. Define quartiles.

Ans 1: The values which divide an array data into four equal parts are called quartiles.

Q9. Find the mode of 3,3,7,8,10,11,10,12.

Ans 1: Mode is the most repeated value. So mode =3 and 10

Q10. Describe the empirical relation between the mean, median and mode.

Ans 1: For unimodal frequency curves which are moderately skewed, we have the Mean- Mode = 3 (Mean - Median)
