

Statistics - ICom Part 1 Statistics Chapter 8 Short Questions Preparation

Q1. Define probability distribution for a discrete random variable.

Ans 1: Probability distribution of a discrete random variable is a table consisting of all possible values with their respective probabilities.

Q2. What are random numebrs.

Ans 1: Random numebr are tehnumbers obtained by some random process . The numbers 00,01,02..... 09,10,11..... 99 are two - digit random numbers.

Q3. How would represent the continuous probabiliyt distribution.

Ans 1: The probability distribution of a vontinuous random variable cannot be represented in tabular form. It can be represented by means of a mathematical formula and by a graph displayed as a continuous curve.

Q4. What is meant by probability distribution?

Ans 1: An arrangement of all possible values of a continuous random variable x is specified by a curve such that the total area under the cause is 1.0.

Q5. Define continuous random variable.

Ans 1: A random variable whihc takes on an infinite number of values on a continuous scale in a given interval is called a continuous random variable for example, the distance travelled by a car between two locations is a continuous random variable. it may assume any of the values int he interval (a,b)

Q6. How the distribution function is represented graphically in the discrete and continuous case.

Ans 1: Teh distribution function of a discrete random variable is represnated by a step function, While for the continuous random variable. It is represented by a courve. In both cases, It increase from 0 to 1

Q7. What does P.d.f stands for.

Ans 1: P.d.f stands for probability density function of a continuous random variable.

Q8. How would you represent the discrete probabiliyt distribution.

Ans 1: A discrete probability distribution may be represented in tabular and graphical forms and as a mathematical equation. In graphical form, it is displayed as a bar diagram and as a histogram.

Q9. Write down the properties of a random experiment.

Ans 1: 1- Experiments in which outcomes vary from trial to trial

Ans 2: 2- Trials are independent

Q10. What do you know mean by expected value.

Ans 1: Let x be a random number variable with probability function, The mathematical expectation of the discrete random variable x denoted by $E(x)$ is defined by
 $E(x) = \sum x \cdot p(x)$
