Statistics - ICS Part 1 Statistics Chapter 8 Short Questions Preparation

Q1. 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 donated by E(x) is defined by
E(x)=x.p(x)

Q2. What does P.d.f stands for.

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

Q3. 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)

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. Differentiate betwen discrete and continuous random variable

Ans 1: Discrete Random Variable.: A random variable which takes on only a finite numebr of valeus or a sequence of whole numbers is called a discrete random variable.

Ans 2: Continuous Random Variable: A random variable which takes on an infinite number of values on a continuous scale in a given interval is called a continuous random variable.

Q6. 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.

Q7. Define probability density function.

Ans 1: The probability density function of a continuous random variable x is specified by a curve such that the total area under the cause is 1.0.

Q8. How can random numbers be generated.

Ans 1: Random numbers can be generated manually as well as mechanically Random numbers can be generated manually by drawing cards from numbered cards or by spinning numbered wheels. These numbers can be genereated mechanically by use of programmable calculators or digital computers.

Q9. 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.

Q10. 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.