Statistics - ICS Part 1 Statistics Chapter 8 Short Questions Preparation

Q1. How the distribution function is represented graphically in the discrete and continuous case.

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

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

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

Q3. Write down the propeties of a random experiment.

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

Ans 2: 2- Triials are independent

Q4. 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.

Q5. 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.

Q6. 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.

Q7. 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.

Q8. Give an example of random variable.

Ans 1: Rolling a die is a random experiment and its outcome, i.e. the occurrence of 1,2,3,4,5 or 6 is a random variable.

Q9. 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)

Q10. 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.
