

Statistics - ICS Part 1 Statistics Chapter 7 Short Questions Preparation

Q1. Define exhaustive or completely exhaustive or collectively exhaustive outcomes.

Ans 1: When a list of outcomes that can result from an experiment includes every possible outcome, the list is said to be completely or collectively exhaustive, in the experiment of tossing a coin, the list head and tail is completely exhaustive.

Q2. State the difference between simple and compound events.

Ans 1: When an event consists of only one sample point or outcome, it is called a simple or elementary event.

Q3. Define mutually exclusive events.

Ans 1: Two events A and B are said to be mutually exclusive if the event A occurs, B cannot occur or vice versa. That is, they cannot both occur at the same time.

Q4. Can a random variable assume negative values?

Ans 1: Yes a random variable can assume negative values.

Q5. What is a random variable?

Ans 1: A variable whose value is determined by the outcomes of a random experiment is called a random variable.

Q6. State the properties of a random experiment.

Ans 1: A random experiment has two properties in common. Firstly, each experiment has several possible outcomes which can be described in advance. For example, in tossing a coin, the possible outcomes are head and tail.

Q7. What is a dependent event?

Ans 1: If the events A and B are not independent, they are said to be dependent.

Q8. Define a continuous random variable.

Ans 1: A random variable is called continuous if the set of values it takes is an entire interval on the number line.

Q9. What do you mean by Equally Likely events.

Ans 1: When each outcome of a sample space is as likely to occur as any other, the outcomes are said to be equally likely, e.g. if we toss a fair coin, the head is as likely to occur as the tail

Q10. Find the minimum and maximum sum of dots when a pair of dice is rolled.

Ans 1: 2 is minimum sum on two dice

Ans 2: 12 is maximum sum on two dice
