

## Statistics - ICS Part 1 Statistics Chapter 6 Short Questions Preparation

Q1. What is meant by dependent event.

**Ans 1:** Two events A and B are said to be dependent if the occurrence of one even affects the occurrence of the other event.

Q2. What is classical Probability?

**Ans 1:** If there are n equally likely, mutually exclusive outcomes and m of which are favorable favourable to event A, then  $P(A) = \frac{\text{no of favourable outcomes}}{\text{no of possible outcomes}} = \frac{m}{n}$

Q3. What do you mean by not mutually exclusive events?

**Ans 1:** If two events can occur together then these events are said to be not mutually exclusive events.

Q4. Distinguish between permutation and combination.

**Ans 1:** A permutation is an ordered arrangement of objects, whereas a combination is an arrangement without regard to their order.

Q5. Define probability?

**Ans 1:** Probability is the measure of uncertainty.

Q6. State the properties of a random experiment.

**Ans 1:**

1. The experiment can be repeated any number of times.
2. A random trail consists of at least two possible outcomes.

Q7. Define mutually exclusive events.

**Ans 1:** Two events A and B are said to be mutually exclusive if they can not occur together i.e  $A \cap B = \emptyset$

Q8. What are exhaustive events?

**Ans 1:** If the union of some mutually exclusive events is equal to the sample space then these events are said to be exhaustive

events.

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Q9. Differentiate between independent and dependent events.

**Ans 1:** If the occurrence of event A affect the occurrence of event B the A and B are said to be depended are of the occurrence of event A does not effect the occurrence of event B them A and B are independent.

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Q10. What is meant by independent events.

**Ans 1:** Two events A and B are said to be independent if the occurrence of one does not affected the occurrence of the other.

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