

Statistics - ICom Part 1 Statistics Chapter 6 Short Questions Preparation

Q1. Define set and a subset.

Ans 1: Set is a well-defined list or collection of objects. The objects in a set, called the elements or members of the set, may be numbers, people, letters, books, etc. If every element of a set A is also an element of set B, then A is a subset of B.

Q2. What is Venn diagram.

Ans 1: A Venn diagram represents the relationship between the sets. In such a diagram, the universal set is represented by a rectangle and subsets are represented by circles inside the rectangle.

Q3. Write down the different set operations.

Ans 1: Four set operations are

Ans 2: 1- Union of sets

Ans 3: 2- Intersection of set

Ans 4: 3- Difference of sets

Ans 5: 4- Complement of a set

Q4. Define Random Experiment.

Ans 1: An experiment which produced different outcomes even it is repeated a large number of times under similar conditions.

Q5. 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.

Q6. State the properties of a random experiment.

Ans 1:

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

Q7. Define Permutation.

Ans 1: An arrangement of finite number of objects in a definite order is called Permutation of these objects.

Q8. 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.

Q9. 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
 $P(A) = \frac{\text{no of favourable outcomes}}{\text{no of possible outcomes}} = \frac{m}{n}$

Q10. What are combinations?

Ans 1: When a selections of object is made without paying regard to the order of selection it is called combination,
