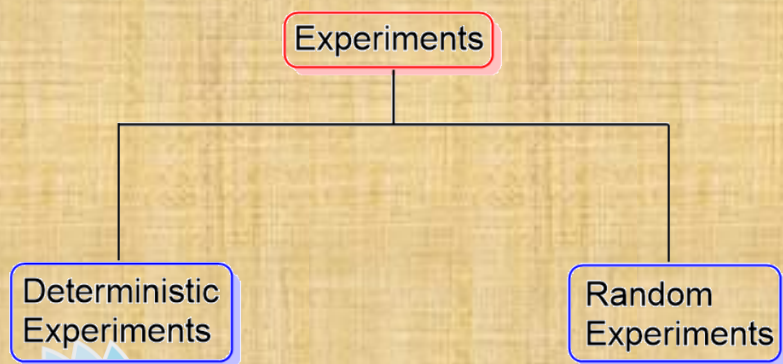


CHAPTER 15

Probability

Types of Experiments:

Experiments can be divided into two types,



(1) Deterministic experiments

(2) Random experiments

Deterministic Experiments:

An experiment, which gives the same result every time, when it is repeated under identical conditions, is called “Deterministic Experiments”.

Example:

Tossing an unfair coin having either tail or head on both sides 20 times, we get the same result. It has more than one possible outcomes. It has not possible to predict the outcomes in advance.

Random Experiments:

An experiment, which gives the result, may not be same, when they are repeated under identical conditions. (i.e. The results produced is one out of the several possible results) is known as a “Random or Probabilistic experiments”.

Example:

Tossing a fair coin is a random experiment, because if we toss a coin, then either a head or tail will come up but if we toss a coin again and again then the result each time will not be same but it will surely be either head or tail.

Note: An experiment is called random experiment, if it satisfies the following two conditions.

- (i) It has more than one possible outcomes.
- (ii) It is not possible to predict the outcomes in advance.

Some more examples:

- (i) Rolling an unbiased die.
- (ii) Drawing a card from a well-shuffled pack of Cards.