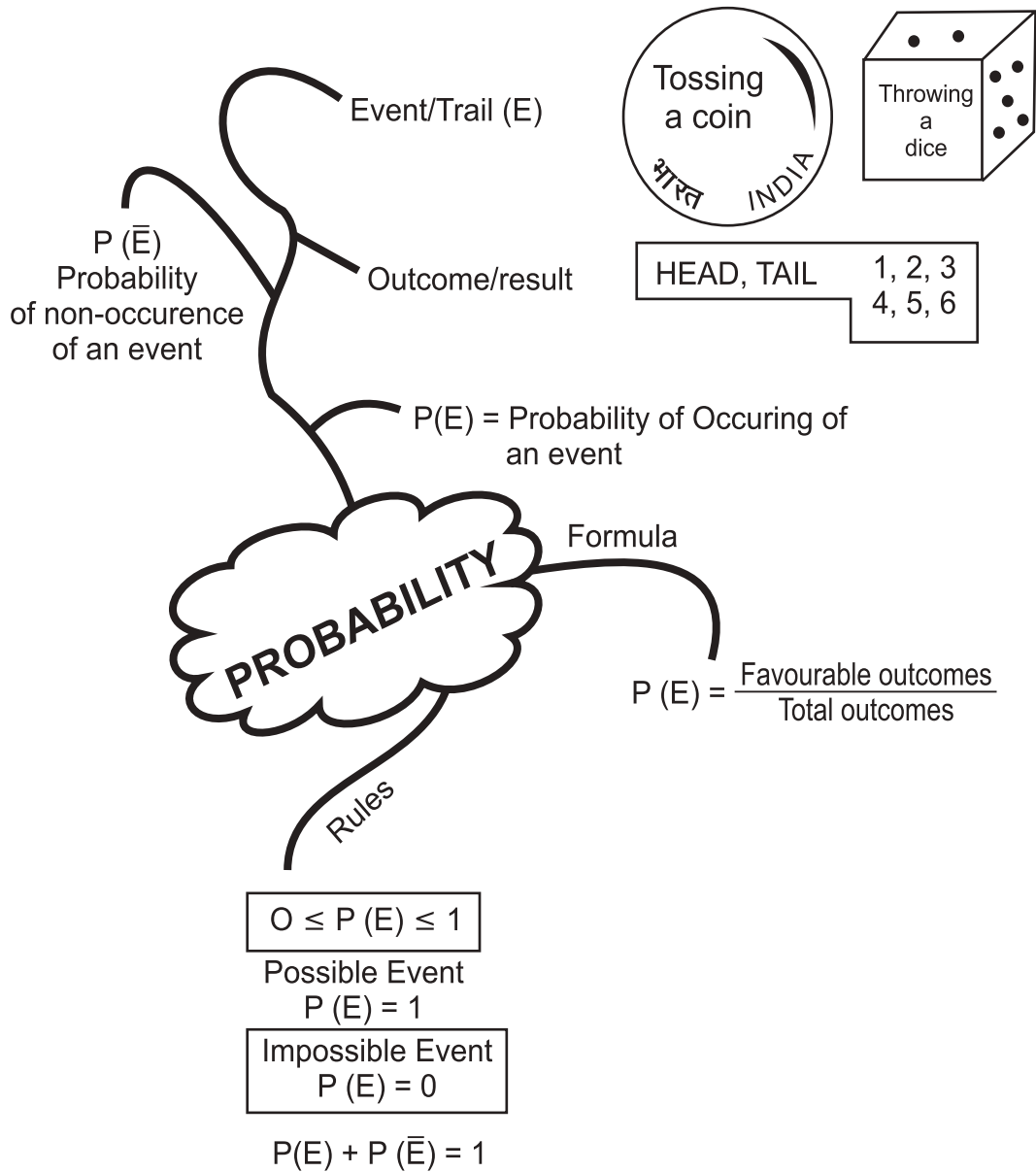


CHAPTER-15

PROBABILITY

MIND MAP



KEY – POINTS

Trials - Trial is an action which results in one or several outcomes.

Example :

- (i) Tossing a coin every time is a trial.
- (ii) Throwing a dice every time is a trial.

• Probability of an event E is given by

$$P(E) = \frac{\text{Number of favorable outcomes}}{\text{Total number of trials}}$$

The probability of an event always occur between 0 and 1.

$$0 \leq P(E) \leq 1$$

The probability of any sure event is 1.

$$P(a) = 1$$

The probability of an unsure event B is 0.

$$P(B) = 0$$

The sum of all the probabilities of all the trials of an event is 1.

$$P(E_1) + P(E_2) + P(E_3) + \dots = 1$$

The sum of probabilities of happening and non-happening of an event is 1.

$$P(E) + P(\bar{E}) = 1$$