

CHAPTER 15

Probability

Knowledge about Coin:

A coin has two sides, head and tail. If an experiment consists of more than one coin, then coins are considered as distinct.

(i) Sample space of one coin = $\{H, T\} \Rightarrow n(S) = 2 = 2^1$

(ii) Sample space of two coins = $\{(H,T), (T,H), (H,H), (T,T)\} \Rightarrow n(S) = 4 = 2^2$

(iii) Sample space of three coins = $\{(H, H, H), (H, H, T), (H, T, H), (T, H, H), (H, T, T), (T, H, T), (T, T, H), (T, T, T)\} \Rightarrow n(S) = 8 = 2^3$

Note: If the number of coins tossed 'n', then the number of total outcomes = 2^n .

