

NCERT Assignment 2

EE22BTECH11052 - SUJAL GUPTA

A coin is tossed two times. Find the probability of getting at most one head.

Solution: Let the event of getting a head on one coin toss be A. Then

$$\Pr(A) = \frac{1}{2} \quad (1)$$

The possible outcomes if a coin is tossed two times is

$$S = \{(HH), (HT), (TH), (TT)\} \quad (2)$$

Let E be the event of getting atmost one head.

$$E = \{(HT), (TH), (TT)\} \quad (3)$$

$$n(E) = 3 \quad (4)$$

Hence, the required probability is

$$\Pr(E) = \frac{n(E)}{n(S)} \quad (5)$$

$$= \frac{3}{4} \quad (6)$$