

EE23010 NCERT Exemplar

Vishal A - EE22BTECH11057

Question 12.13.3.75

A bag contains 5 red and 3 blue balls. If 3 balls are drawn at random without replacement the probability that exactly two of the three balls were red, the first ball being red is

Solution:

See (??). In this question,

As the first ball drawn is red,

$$N = 7, R = 4, B = 3, G = 0, r = 1, b = 1, g = 0 \quad (1)$$

The desired probability is,

$$\Pr(1, 1, 0) = \frac{{}^4C_1 {}^3C_1}{{}^7C_2} \quad (2)$$

$$= \frac{4}{7} \quad (3)$$