Probability Questions and Answers Pdf for Bank Exams

1. A basket contains 4 red, 5 blue and 3 green marbles. If 2 marbles are drawn at random from the basket, what is the probability that both are red?

a. 3/7

b.1/2

c. 1/11

d. 1/6

Ans: C

Total number of balls = (4 + 5 + 3) = 12.
Let E be the event of drawing 2 red balls.

Then, $n(E) = {}^4C_2 = \frac{4 \times 3}{2 \times 1} = 6.$

Also, $n(S) = {}^{12}C_2 = \frac{12 \times 11}{2 \times 1} = 66.$

$\therefore P(E) = \frac{n(E)}{n(S)} = \frac{6}{66} = \frac{1}{11}.$

2. In a single throw of a die, what is the probability of getting a number greater than 4?

a. 1/2

b. 1/3

c. 2/3

d. 1/4

Ans: B

When a die is thrown, we have $S = \{1, 2, 3, 4, 5, 6\}$.
Let E = event of getting a number greater than 4 = $\{5, 6\}$.

$\therefore \quad P(E) = \frac{n(E)}{n(S)} = \frac{2}{6} = \frac{1}{3}.$

3. In a simultaneous throw of two coins, the probability of getting at least one head is
   a. 1/2
   b. 1/3
   c. 2/3
   d. 3/4

   Ans: D

Here $S = \{HH, HT, TH, TT\}$.
Let E = event of getting at least one head = {HT, TH, HH}.

$$\therefore \quad P(E) = \frac{n(E)}{n(S)} = \frac{3}{4}.$$

4. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn bears a number which is a multiple of 3?

a. 3/10

b. 3/20

c. 2/5

d. 1/2

Ans: A

Here, $S = \{1, 2, 3, 4, \ldots\ldots, 19, 20\}$.
Let E = event of getting a multiple of 3 = {3, 6, 9, 12, 15, 18}.

$$\therefore \quad P(E) = \frac{n(E)}{n(S)} = \frac{6}{20} = \frac{3}{10}.$$

5. Two dice are tossed. The probability that the total score is a prime number is

a. 1/6

b. 1/2

c. 5/12

d. 7/9

Ans: C

Clearly, $n(S) = (6 \times 6) = 36$.

Let E be the event that the sum is a prime number. Then,

$n(E) = \{(1, 1), (1, 2), (1, 4), (1, 6), (2, 1), (2, 3), (2, 5), (3, 2), (3, 4), (4, 1), (4, 3), (5, 2), (5, 6), (6, 1), (6, 5)\}$

$\therefore \quad n(E) = 15.$

$$\therefore \quad P(E) = \frac{n(E)}{n(S)} = \frac{15}{36} = \frac{5}{12}.$$