

Chapter 15

ASSIGNMENT

OBJECTIVE - 15.1

1. 3 Coins are tossed simultaneously. The probability of getting at least 2 heads is
(A) $\frac{3}{10}$ (B) $\frac{3}{4}$ (C) $\frac{3}{8}$ (D) $\frac{1}{2}$
2. Two cards are drawn successively with replacement from a pack of 52 cards. The probability of drawing two aces is
(A) $\frac{1}{169}$ (B) $\frac{1}{221}$ (C) $\frac{1}{265}$ (D) $\frac{4}{663}$
3. In a single throw of two dice, the probability of getting more than 7 is
(A) $\frac{7}{36}$ (B) $\frac{7}{12}$ (C) $\frac{5}{12}$ (D) $\frac{5}{36}$
4. Two cards are drawn at random from a pack of 52 cards. The probability that both are the cards of space is
(A) $\frac{1}{26}$ (B) $\frac{1}{4}$ (C) $\frac{1}{17}$ (D) None of these
5. Two dice are thrown together. The probability that sum of the two numbers will be a multiple of 4 is
(A) $\frac{1}{9}$ (B) $\frac{1}{3}$ (C) $\frac{1}{4}$ (D) $\frac{5}{9}$
6. If the odds in favour of an event be 3 : 5 then the probability of non-happening of the event is
(A) $\frac{3}{5}$ (B) $\frac{5}{3}$ (C) $\frac{3}{8}$ (D) $\frac{5}{8}$
7. In a cricket match, a batswoman hits a boundary 6 times out of 30 balls she plays. Find the probability that she did not hit a boundary.
(A) 0.8 (B) 0.6 (C) 0.5 (D) 0.2
8. If the three coins are simultaneously tossed again compute the probability of 2 heads coming up.
(A) $\frac{3}{8}$ (B) $\frac{1}{4}$ (C) $\frac{5}{8}$ (D) $\frac{3}{4}$
9. A coin is tossed successively three times. The probability of getting one head or two heads is :
(A) $\frac{2}{3}$ (B) $\frac{3}{4}$ (C) $\frac{4}{9}$ (D) $\frac{1}{9}$
10. One card is drawn from a pack of 52 cards. What is the probability that the drawn card is either red or king:
(A) $\frac{15}{26}$ (B) $\frac{1}{2}$ (C) $\frac{7}{13}$ (D) $\frac{17}{32}$

SUBJECTIVE - 15.2

1. Two dice are thrown together. Find the probability of getting a total of 9.
2. A coin and a dice are tossed simultaneously find the sample space.
3. A dice is thrown repeatedly until a six comes up. What is the sample space for this experiment.
4. On a simultaneous toss of three coins, find the probability of getting
 - (i) at least 2 heads
 - (ii) at most 2 heads
 - (iii) exactly 2 heads

5. Two dice are thrown simultaneously. Find the probability of getting
 - (i) an even number s the sum
 - (ii) the sum as a prime number
 - (iii) a doubled of even number
6. Three dice are thrown together. Find the probability of getting a total of a least 6.
7. Find the probability that a leap year selected at random will contain 53 Tuesday.
8. A coin is tossed 80 times with the following outcomes :
 - (i) head : 35
 - (ii) tail : 45
 Find the probability of each event.
9. Two coins are tossed simultaneously 150 times and we get the following outcomes.
 - (a) No tail = 45
 - (b) One tail = 55
 - (c) Two tails = 50
 Find the probability of each event.
10. In a cricket match a batsman hits a boundary 10 times out of 36 balls be play. Find the probability that he did not hit the boundary.
11. In a cricket match a batsman hits a boundary 3 times in 3 over he play. Find the probability that the did not hit the boundary.
12. A bag which contains 7 blue marbles, 4 black marbles and 9 white marbles. A marbles drawn at random from the bag then what is the probability that the drawn marble is
 - (i) blue
 - (ii) white or black
13. The odds in favour of an event are 3 : 5 find the probability of occurrence of this event.
14. Cards marked with the numbers 2 to 101 are placed in a box and mixed thoroughly. One card is drawn from this box, find the probability that the number on card is
 - (i) An even number
 - (ii) A number less than 14
 - (iii) A number which is a prefect square.
 - (iv) A prime number less than 20
15. An urn contains 6 oranges, 7 apples & 11 mango. A fruit is drawn at random, what is the probability of drawing.
 - (i) An orange
 - (ii) Not apple
 - (iii) An apple or a mango
16. A card is drawn at random from a well shuffled desk of playing cards. Find the probability that the card drawn is
 - (i) A card of spade or an ace
 - (ii) A red king
 - (iii) Neither a king nor a queen
 - (iv) Either a king or a queen
17. A box contains 19 balls bearing numbers 1,2,3..... 19. A ball is drawn at random from the box. Find the probability that the number on the balls is
 - (i) A prime number
 - (ii) Divisible by 3 or 5
 - (iii) Neither divisible by 5 nor by 10
 - (iv) An even number
18. There are 30 cards of same size in a bag containing numbers 1 to 30. One card is taken out from the bag at random. Find the probability that the number on the selected card is not divisible by 3.