Probability
Workbook

1. There are two positive integers a and b. What is the probability that a + b is odd?
2. A number is selected at random from the number 1, 2, ...,50. What is the probability that the number is multiple of either 6 or 9?
3. If thrown 2 dices at a time, What is the Probability that
   - ➔ Both the dices shown same digit
   - ➔ Both the dices shown different digit
   - ➔ Sum of the digits is 8
   - ➔ Sum is more than 9
   - ➔ Sum is less than 7
   - ➔ Product of digits is perfect square
   - ➔ Product of digits is Odd Number
   - ➔ Product of digits is Even Number
4. A group of 4 students is to be chosen from 3 boys and 5 girls.Find the probability that the group contains exactly 3 girls.

   a.3/7 b.4/7 c.5/7 d.6/7
5. A card is drawn from a Pack of 52 cards . What is probability that
   - ➔ RED CARD
   - ➔ KING CARD
   - ➔ HONOUR CARD
   - ➔ DIGIT CARD
   - ➔ SPADE CARD
   - ➔ BLACK JACK
   - ➔ FACE CARD
   - ➔ EXCEPT heart Card
   - ➔ Either Heart or King
   - ➔ Either Black or Ace
6. A card is drawn from a Pack of 52 cards . What is probability that

- ➔ Both are Red cards
- ➔ Queen Cards
- ➔ Exactly 1 king
- ➔ Exactly 1 Heart
- ➔ EXCEPT Spade Cards
- ➔ Exactly 1 Honour CARD
- ➔ Exactly 1 Face CARD
- ➔ Exactly 1 Diamond CARD
- ➔ Either Black or Ace

7. If two cards were drawn from a Pack of 52 cards . What is probability that
    - ○
8. A bag contains 6 black and 8 white balls. One ball is drawn at random. What is the probability that the ball drawn is white?(
9. Four boys and three girls stand in queue for an interview. The probability that they stand in alternate positions is
10.
11. A box contains 5 green, 4 yellow and 3 white marbles. Three marbles are drawn at random. What is the probability that
    - ➔ All are different in colour?(41/44)
    - ➔ All are the same colour ?
    - ➔ Exactly 2 Green Marbles ?
    - ➔ Exactly 1 White Marble?
    - ➔ No Yellow Marble ?
    - ➔ Only Yellow Marbles ?
    - ➔ At least 1 Green Marble
    - ➔ At most 1 White Marble
12. In the class, there are 15 boys and 10 girls. Three students are selected at random. The probability that 1 girl and 2 boys are selected, is :

13. In a class, 30% of the students offered English, 20% offered Hindi and 10% offered both. If a student is selected at random, what is the probability that ha has offered English or Hindi?(2/5)
14. A man and his wife appear in an interview for two vacancies in the same post. The probability of husband's selection is (1 / 7) and the probability of wife's selection is (1 / 5). What is the probability that only one of them is selected?
15. The probability that A, B and C will live for more than 60 years is 1/2,⅓ and 1/4 respectively. What is the probability that at least 1 of them will be alive after 60 yrs of age?
16. A family has two children. What is the probability that both boys are boys given that one of the children is a boy?
17. Suppose that an Urn contains 8 red balls and 4 white balls. If We draw 2 balls without replacement. What is the probability that both balls are red?
18. Tickets numbered 1 to 20 are mixed up and then a ticket is drawn at random. What is the probability that the ticket drawn has a number which is a multiple of 3 or 5?
19. What is the probability that when a hand of 5 cards is drawn from a well shuffled deck of 52 cards,it contains all Queens
20. In a lottery, there are 10 prizes and 25 blanks. A lottery is drawn at random. What is the probability of getting a prize?
21. A bag contains 4 red and 3 black balls. A second bag contains 2 red and 4 black balls. One bag is selected at random. From the selected bag, one ball is drawn. Find the probability that the ball drawn is red?