**PROBABILITY**

1. 2 dice are thrown at a time. What is the probability that the sum of the numbers on the dice is 6 or 9?

a) ½ b) ¼ c) 1/8 d) 1/6

2. A natural number is chosen at random from q to 100. The probability of getting a prime number is –

a) ½ b) ¼ c) 1/8 d) 1/6

3. If 2 cards are drawn a random from a pack of cards, find the probability of getting at least one club?

a) 11/34 b) 15/34 c) 19/34 d) 23/34

4. The probability that a leap year has 53 Mondays is –

a) 2/13 b) 3/7 c) 2/7 d) 1/8

5. Find the probability that a non leap year contains 52 Sundays?

a) 3/7 b) 2/7 c) 5/7 d) 1/7

6. If 2 cards are drawn at a random from a pack of cards, the probability that both are queens is

a) 3/221 b) 1/221 c) 1/17 d) 4/17

7. If a dice is rolled 2 times, what is the probability of the product of the numbers obtained, being 12?

a) 1/9 b) 8/9 c) 5/36 d) 1/6

8. If a card is picked at random from a pack of cards, what is the probability that it is neither a King nor a Spade?

a) 4/13 b) 11/13 c) 2/13 d) 9/13

9. In rolling an unbiased die the probability of getting an even number or a number less than 4 is –

a) 2/3 b) 2/5 c) 2/3 d) 5/6

10. If 2 dice are thrown at a time, what is the probability that the first die shown up 6 and the second die does not up 6?

a) 3/36 b) 5/36 c) 1/36 d) 1/18

11. If 2 cards are drawn at a time from a pack of cards, what is the probability that both are Kings or both are Spades?

a) 14/221 b) 2/221 c) 55/221 d) 16/221

12. A bag contains 2 green, e blue and 6 black balls. If a ball is drawn at random, what is the probability that is a black?

a) 5/11 b) 7/11 c) 6/11 d) 3/11

13. A bag contains 6 green, 2 white and 7 black balls. If w balls are drawn at time, what is the probability that both are of same colour?

a) 27/105 b) 37/105 c) 47/105 d) 17/105

14. Bag X andY contains 3 white & 2 Red and 2 White & 4 black balls respectively. If one bag is selected at random and ball is selected from it, find the probability that is white?

a) 2/15 b) 4/15 c) 7/15 d) 11/15

15. When w balls are drawn in succession with replacement from a box consisting of 6 white and 8 black ball, find the probability that the first ball is white and second is a black?

a) 3/49 b) 6/49 c) 9/49 d) 12/49

16. The probability of A and B to pass an exam are 2/10 and 3/10 respectively. Find the probability that only one of them to pass the exam?

a) 9/30 b) 11/30 c) 17/30 d) 19/30

17. The probability of 3 students to solve a problem is ½, 1/3 and ¼ respectively. Find the probability that the problem is solved?

a) ¼ b) ¾ c) 5/9 d) 8/9

18. If a square is selected at random from a 8x8 chess board, what is the probability that it is a 3x3 square?

a) 1/17 b) 2/17 c) 3/17 d) 4/17

19. A dice is biased such that 6 turns up twice as often as 3 and thrice as often as any other face. What is the probability of obtaining y in a single throw?

a) 3/17 b) 5/17 c) 6/17 d) 8/17

20. Two numbers m and n are selected at random from the set {1,3,5,4,6,8}. What is the probability that 7m + 7 n is divisible by 2?

a) 1/9 b) 1/36 c) 1 d) 0

21. Two numbers are selected at random from first 30 natural numbers. What is the probability that sum of the two numbers is even?

a) 14/29 b) 15/29 c) 16/29 d) 19/19

22. What is the probability that a rectangle selected at random from a 8x8 chess board is a square?

a) 1 b) 9/54 c) 7/108 d) 64/1296

23. 4 digit numbers are formed using the digits 0 to 4 without repetition. The probability that, a umber so formed is divisible by 2 is –

a) 1/8 b) 3/8 c) 5/8 d) 7/8

24. The odds against an event are 3 to 4 and the odds in favour of another independent event are 2 to 5. The probability that –

(i) Exactly one of them occurs is –

a) 23/49 b) 26/49 c) 6/49 d) 9/49

(ii) At least one of the occurs is –

a) 34/49 b) 15/49 c) 23/49 d) 26/49

25. If A and B are 2 possible events of an experiment such that P(AuB) = 0.7; P(A) = 0.4 then find P(B) given that –

(i) A and B are mutually exclusive events –

a) 0.6 b) 0.5 c) 0.3 d) 0.2

(ii) A and B are independent events?

a) 0.6 b) 0.5 c) 0.3 d) 0.2

26. Ram picked a letter from the set of English alphabet and found it to be a vowel. What is the probability that it is E?

a) 25/26 b) 1/26 c) 5/26 d) 1/5

27. An unbiased coin is tossed 6 times. Find the probability of getting exactly 4 heads –

a) 3/64 b) 5/64 c) 15/64 d) 21/64

28. If 10 students are to be seated in a row, the probability that w particular students never sit together is –

a) 2/5 b) 4/5 c) 1/5 c) 3/5

29. If 2 balls are drawn at random from a bag containing 4 green and 3 red balls, the odds against the two balls being green is –

a) 3:5 b) 2:5 c) 5:2 d) 5:3

30. The probability of getting a least e heads when 5 coins are tossed is –

A0 ½ b) ¼ c) ¾ d) 5/9

31. If 6 people sit around a round table, the probability that 2 specified persons always sit side by side is –

a) 14/15 b) 11/15 c) 2/5 d) 4/15

32. What is the probability that a 3 digit number selected at random is a multiple of 25?

a) 37/1000 b) 39/1000 c) 1/25 d) 7/25

33. Two lamps are fitted in a room. 2 bulbs are chosen at random from 10 bulbs of which 4 are defective. The chance of the room being lighted is –

a) 5/16 b) 14/15 c) 13/15 d) 3/8

34. A speaks truth in 70% of cases while B speaks truth in 65% of cases. The probability that they will contradict each other on starting the same fact is –

a) 44/100 b) 72/100 c) 47/100 d) 86/100

35. When 3 dice are rolled together what is the probability that exactly w dice show prime numbers?

a) 1/8 b) 3/8 c) 5/8 d) 7/8

36. A group of 8 boys and 2 girls sit in a row at random. What is the probability that w girls are separated by exactly 3 boys?

a) 2/15 b) 4/15 c) 6/15 d) 8/15