QB365

Important Questions - Probability

10th Standard CBSE

Maths Reg.No. : | | | | | | |

Time : 01:00:00 Hrs

Total Marks : 50

Section - A

1) Probability of getting 6 with single die is..... **1**

2) If the probability of winning a game is $\frac{5}{11}$, find the probability of losing the game. **1**

3) From the number 3, 5, 5, 7, 7, 7, 9, 9, 9, 9, one number is selected at random, what is the probability that the selected number is mean? **1**

4) A die is thrown once. What is the probability of getting a prime number. **1**

5) Complete the following statements: **1**

(iii) The probability of an event that is certain to happen is ----------. Such an event is called ----------.

6) Two coins are tossed simultaneously. Find the probability of getting exactly one head. **1**

7) A card is drawn at random form a well-shuffled pack of 52 playing cards. Find the probability of getting neither a red card nor a queen. **1**

8) From a pack of 52 playing cards, a card is drawn at random.Find the probability, that the drawn card is not a face card. **1**

9) One ticket is drawn at random from a bag containing tickets numbered 1 to 40.Find the probability that the selected ticket has a number which is a multiple of 5. **1**

10) If P(E)=0.15, then find P(not E). **1**

Section - B

11) Which of the following experiments have equally likely outcomes? Explain **2**

(i) A driver attempts to start a car. The car starts or does not start.

(ii) A player attempts to shoot a basketball. She/he shoots or misses the shot.

(iii) A trial is made to answer a true-false question. The answer is right or wrong.

(iv) A baby is born. It is a boy or a girl.

12) A box contains 5 red marbles, 8 white marbles and 4 green marbles. One marble is taken out of the box at random. What is the probability that the marble taken out will be (i) red? (ii) white? (iii) not green? **2**

13) A box contains 90 discs which are numbered from 1 to 90. If one disc is drawn at random from the box, find the probability that is bears (i) a two digit number (ii) a perfect square number (iii) a number divisible by 5 **2**

14) Find the probability of getting 53 Fridays in a leap year. **2**

15) Cards marked with numbers 3, 4, 5, ..., 50 are placed in a box and mixed thoroughly. One card is drawn at random from the box. Find the probability that number on the drawn card is **2**

(i) divisible by 7

(ii) a number which is a perfect square.

16) A bag contains 12 balls out of which x are white. **2**

(i) If one ball is drawn at random, what is the probability that it will be a white ball?

(ii) If 6 more white balls are put in the bag, the probability of drawing a white ball will be double than that in (i). Find x.

17) An unbiased die is thrown, what is the probability of getting a multiple of 3. **2**

18) A number is selected at random from first 70 natural numbers, find the probability that: **2**

(i)it is a multiple of 3 and 4

(ii)it is a number divisible by 2 and 3

(iii)it is a perfect square number

19) A die is thrown once.Find the probability of getting: **2**

(i)An number prime number

(ii)A multiple of 3.

20) A box contains 100 tokens on which 1 to 100 are marked.One token is drawn at random from the box.Find the probability that number on the token is: **2**

(a)A perfect

(b)An even number

Section - C

21) In a game, the entry fee is Rs. 5. The game consists of tossing a coin 3 times. If one or two heads show, Shweta gets her entry fee back. If she throws 3 heads, she receives double the entry fees. Otherwise she will lose. For tossing a coin three times, find the probability that she **5**

(i) loses the entry fee

(ii) gets double entry fee

(iii) just gets her entry fee

22) An urn consists of 100 identical tokens on which 1 to 100 are marked.One token is drawn.What is the probability that the number on token is: **5**

(i)Less than 33

(ii)AA multiple of 5

(iii)AN even number

(iv)A multiple of 2 and 3

(v)An odd number

(vi)A perfect square

23) A bag contains 15 balls of which x are blue and the remaining are red. If the number of red balls are increased by 5, the probability of drawing the red balls doubles. Find: **5**

(i) P(red ball)

(ii) P(blue ball)

(iii) P(blue ball it of 5 extra red balls are actually added)

24) Three digit number are made using the digits 4, 5, 9 (without repetition). If a number among them is selected at random, what is the probability that the number will : **5**

(i) be a multiple of 5 ?

(ii) be a multiple of 9 ?

(iii) will end with 9 ?

****