## **PROBABILITY**

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## CONCEPT

I. A card is drawn from a well-shuffled pack of cards. What is the probability of getting a spade?

2. A card is drawn from a well-shuffled pack of cards. What is the probability of getting a spade or a diamond?

3. Two cards are drawn from a well-shuffled pack of cards. What is the probability that the first is a spade and the second is a diamond?

4. Two cards are drawn from a well-shuffled pack of cards. What is the probability of getting a spade and a diamond?

Ans:

5. Two bottles are randomly selected from a stack of 10 bottles in which 5 are blue, 3 are green, and 2 are yellow. What is the probability that the  $1^{st}$  bottle selected is blue and the  $2^{nd}$  is green?

Ans:	

6. Three bottles are randomly selected from a stack of 12 bottles in which 3 are black, 4 are white, and 5 are red. What is the probability that all 3 bottles selected are of different colour?

7. Two dice are rolled. What is the probability that the sum of the results is 5?

8. Two dice are rolled. What is the probability that the sum of the results is less than or equal to 5?

9. A fair coin is tossed 6 times. What is the probability that heads turns up exactly 2 times?

10. A bag contains three	e differently colou	red bottles, which	ch include 3	black, 4
white, and 5 red. If 3 be	ottles are picked	randomly from t	the bag, wha	t is the
probability that:			_	
: All the three are bleeld	A 10.00			

i. All the three are black? Ans: \_\_\_\_\_

ii. None of them are white? Ans: \_\_\_\_\_

iii. All of them are not white? Ans:

II. A committee of 10 people needs to be seated on 10 chairs in a straight line
What is the probability that 3 particular people always sit together?
Ans:

12. The probability of getting heads in both trials when a balanced coin is tossed twice will be?

A. I/4 B. I/2 C. I

D. 3/4

I3. A card is drawn from a well-shuffled pack of cards. The probability of getting a queen of club or king of the heart is?
 A. 1/52
 B. 1/26
 C. 1/13
 D. None of these

14. If the probability that A will live 15 years is 7/8 and that B will live 15 years is 9/10, then what is the probability that both will live 15 years?

A. I/20

B. 63/80

C. 1/5

D. None of these

15. The probability of drawing a red card from a deck of playing cards is

A. 2/18

B. I/13

C. I/4

D. 1/2

16. Two dice are rolled. What is the probability that the sum of the numbers appeared on them is 8 or 11?

A. I/6

B. I/18

C. 1/9

D. 7/36

17. A bag contains 8 red and 5 white balls. 2 balls are drawn at random. What is the probability that both are white?

A. 5/16 B. 2/13 C. 3/26 D. 5/39

18. Three unbiased coins are tossed. What is the probability of getting at most 2 heads?

A. I/4 B. 3/8 C. 7/8 D. I/2

19. A brother and sister appear for an interview against two vacant posts in an office. The probability of the brother's selection is 1/5th and that of the sister's selections is 1/3rd. What is the probability that only one of them is selected?

A. 1/5

B. 2/5

C. 1/3

D. 2/3

20. The probability that a card drawn from a pack of 52 cards will be a diamond or a king is?

A. I/13 B. 4/13 C. I/52 D. 2/13

## ANSWER KEY – PROBABILITY

QUESTION	ANSWER	QUESTION	ANSWER
I	1/4	Π	1/15
2	1/2	12	Α
3	13/204	13	В
4	13/102	14	В
5	1/6	15	D
6	3/11	16	D
7	1/9	17	D
8	5/18	18	С
9	15/64	19	В
10	1/220, 14/55, 54/55	20	В