CLASS X PROBABILITY

(ONE MARK QUESTIONS) -   2021-2022

1. From a well shuffled pack of cards, a card is drawn at random. Find the probability of getting a black queen
   a) $\frac{1}{13}$ b) $\frac{1}{52}$ c) $\frac{1}{26}$ d) $\frac{3}{26}$

2. 15 cards, numbered 1, 2, 3, ...,… 15 are put in a box and mixed thoroughly. A card is drawn at random from the box. Find the probability that the card drawn bears a number divisible by 2 or 3.
   a) $\frac{2}{3}$ b) $\frac{3}{15}$ c) $\frac{1}{15}$ d) $\frac{2}{15}$

3. The king, queen and jack of diamonds are removed from a pack of 52 cards and then the pack is well shuffled. A card is drawn from the remaining cards. Find the probability of getting a card of
   (*i*) diamonds,
   a) $\frac{10}{52}$ b) $\frac{10}{48}$ c) $\frac{10}{49}$ d) *none of these*

4. The probability of getting a bad egg in a lot of 800 eggs is 0.125. Find the number of bad eggs in the lot.
   a)   100   b)   200   c)   125   d) *none of these*

5. Cards marked with numbers 3, 4, 5, ..., 50 are placed in a box and mixed. One card is drawn at random from the box. Find the probability that number on the drawn card is divisible by 7.
   a) $\frac{10}{48}$ b) $\frac{7}{48}$ c) $\frac{7}{52}$ d) *none of these*

6. A bag contains 4 red and 6 black balls. A ball is taken out of the bag at random. Find the probability of getting a black ball.
   a) $\frac{3}{5}$ b) $\frac{1}{10}$ c) $\frac{1}{5}$ d) $\frac{3}{10}$

7. Cards bearing numbers 1, 3, 5, ..., 35 are kept in a bag. A card is drawn at random from the bag. Find the probability of getting a card bearing. a number divisible by 3 and 5.
   a) $\frac{1}{13}$ b) $\frac{1}{18}$ c) $\frac{1}{26}$ d) $\frac{3}{26}$

8. A die is thrown once. Find the probability of getting a number less than 3.
   a) $\frac{1}{6}$ b) $\frac{1}{5}$ c) $\frac{1}{3}$ d) $\frac{1}{2}$

9. Cards bearing numbers 3 to 20 are placed in a bag and mixed thoroughly. A card is taken out from the bag at random. What is the probability that the number on the card taken out is an even number?
   a) $\frac{1}{4}$ b) $\frac{1}{5}$ c) $\frac{1}{3}$ d) $\frac{1}{2}$

10. Two coins are tossed simultaneously. Find the probability of getting exactly one head.
    a) $\frac{1}{2}$ b) $\frac{1}{5}$ c) $\frac{1}{3}$ d) *none of these*

11. The probability of getting a bad pen in a lot of 400 pens is 0.25. Find the number of good pen in the lot.
    a)   300   b)   200   c)   250   d) *none of these*

12. An unbiased die is thrown, what is the probability of getting an even number
    a) $\frac{1}{2}$ b) $\frac{1}{5}$ c) $\frac{1}{3}$ d) *none of these*

13. The probability that it will rain tomorrow is 0.85. What is the probability that it will not rain tomorrow?
    a)   0.15   b)   0. 25   c)   0.85   d) *none of these*

14. If two different dice are rolled together, the probability of getting an even number on both dice, is:

    a) $\frac{1}{36}$ b) $\frac{1}{2}$ c) $\frac{1}{6}$ (D) $\frac{1}{4}$

15. Archana calculates that probability of her winning the first prize in a lottery is 0.04. If 12000 tickets are sold, how many tickets has she bought?
    ANS: 480.

16. A card is drawn at random from a well shuffled pack of 52 playing cards. Find the probability of getting a red face card.   ANS: $\frac{3}{26}$

17. A bag contains 3 red balls, 5 black balls and 4 white balls. A ball is drawn at random from the bag. What is the probability that the ball is white? ANS: $\frac{1}{3}$

18. A letter is chosen at random from the letters of the word 'ASSASSINATION' Find the probability that the letter chosen is a vowel?

           ANS : $\frac{6}{13}$

19. Two players, Sangeeta and Reshma, play a tennis match. It is known that the probability of winning the match by Sangeeta is 0.62. What is the probability of winning the match by Reshma?
           ANS: 0.38

20. A game of chance consists of spinning an arrow which comes to rest pointing at one of the numbers 1, 2, 3, 4, 5, 6, 7, 8 and these are equally likely outcomes. Find the probability that the arrow will point at any factor of 8.   ANS : $\frac{1}{2}$

21. A ticket is drawn at random from a bag containing tickets numbered from 1 to 40. Find the probability that the selected ticket has a number which is a multiple of 5.   ANS ; $\frac{1}{5}$

22. Cards, marked with numbers 5 to 50, are placed in a box and mixed thoroughly. A card is drawn from the box at random. Find the probability that the number on the taken card is (*i*) a prime number less than 10.   ANS: $\frac{1}{13}$

23. A pair of dice is thrown once. Find the probability of getting the same number on each dice
           ANS: $\frac{1}{6}$

24. A bag contains 5 red, 4 blue and 3 green balls. A ball is taken out of the bag at random. Find the probability that the selected ball is not of green colour.   ANS: $\frac{3}{4}$

25. A card is drawn at random from a well-shuffled deck of playing cards. Find the probability of drawing a card which is neither a king nor a red card.   ANS : $\frac{6}{13}$

26. Find the probability of getting 53 Fridays in a leap year.   ANS: $\frac{2}{7}$

27. Two dice are rolled once. Find the probability of getting such numbers on the two dice, whose product is 12.   ANS: $\frac{1}{9}$

28. A bag contains 5 white balls, 7 red balls, 4 black balls and 2 blue balls. One ball is drawn at random from the bag. What is the probability that the ball drawn is neither white nor black?
    ANS : $\frac{1}{2}$

29. A bag contains 5 red balls and some blue balls. If the probability of drawing a blue ball from the bag is thrice that of a red ball, find the number of blue balls in the bag.   ANS: 15

30. Two different dice are tossed together. Find the probability that the product of the two numbers on the top of the dice is 6.   ANS: $\frac{4}{36}$

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