



CBSE NCERT Based Chapter wise Questions (2025-2026)

Class-X

Subject: MATHEMATICS

Chapter Name : Probability (Chap : 14)

Total : 5 Marks (expected) [MCQ(2)-1 Mark, SA-II(1)-3 Marks]

Level - 2 (Higher Order)

MCQ Type :

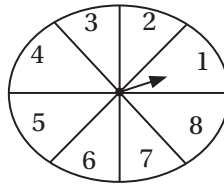
1. A letter is chosen from the letters in the word 'ENTERTAINMENT'. The probability of choosing a consonant is
(A) $\frac{5}{8}$ (B) $\frac{8}{13}$ (C) $\frac{13}{8}$ (D) $\frac{2}{13}$
2. A two-digit number is formed with the digits 3, 5 and 7 (repetitions of digits is not allowed). The probability that the number so formed is greater than 57 is
(A) $\frac{1}{5}$ (B) $\frac{1}{2}$ (C) $\frac{2}{6}$ (D) $\frac{2}{4}$
3. The probability of choosing a vowel from the set of English alphabets is
(A) $\frac{3}{26}$ (B) $\frac{5}{26}$ (C) $\frac{2}{26}$ (D) $\frac{2}{13}$
4. There are 20 boys and 15 girls in a class of 35 student. A student is chosen at random. The probability of choosing a boy is
(A) $\frac{4}{7}$ (B) $\frac{7}{4}$ (C) $\frac{5}{4}$ (D) $\frac{4}{5}$
5. The probability of getting a black king from a pack of 52 cards is
(A) $\frac{4}{13}$ (B) $\frac{13}{52}$ (C) $\frac{2}{52}$ (D) $\frac{1}{5}$
6. An integer is chosen from the first twenty natural numbers. The probability of getting a prime number is
(A) $\frac{8}{20}$ (B) $\frac{9}{20}$ (C) $\frac{15}{20}$ (D) $\frac{10}{20}$
7. There are 40 cards in a bag. Each bears a number from 1 to 40. One card is drawn at random. What is the probability that the card bears a number which is a multiple of 5 ?
(A) $\frac{1}{5}$ (B) $\frac{3}{5}$ (C) $\frac{4}{5}$ (D) $\frac{1}{3}$
8. What is the probability of the event that a number chosen from 1 to 100 is a prime number?
(A) $\frac{1}{5}$ (B) $\frac{6}{25}$ (C) $\frac{1}{4}$ (D) $\frac{13}{50}$
9. Two dice are rolled simultaneously. A is an event that product of numbers on the uppermost face is 12, then $P(A) = ?$
(A) $\frac{1}{9}$ (B) $\frac{1}{3}$ (C) $\frac{2}{9}$ (D) $\frac{2}{3}$
10. A box contains 20 cards, numbered from 1 to 20. One card is drawn at random. B is the event that the card drawn bears a number which is a perfect square, then $n(B)$ is
(A) 3 (B) 4 (C) 5 (D) 6

SA-II Type :

11. From a pack of 52 playing cards, jacks, queens, kings and aces of red colour are removed. From the remaining a card is drawn at random. Find the probability that the card drawn is (i) a black queen (ii) a red card (iii) a face card.
12. A box contains cards bearing numbers from 6 to 70. If one card is drawn at random from the box, find the probability that it bears (i) a number divisible by 5. (ii) an odd number less than 30. (iii) a composite number

between 50 and 70.

13. In a single throw of a pair of different dice, what is the probability of getting
- (i) a prime number on each dice ?
 - (ii) a total of 9 or 11 ?
14. A box consists of 100 shirts of which 88 are good, 8 have minor defects and 4 have major defects. Ramesh, a shopkeeper will buy only those shirts which are good but 'Kewal' another shopkeeper will not buy shirts with major defects. A shirt is taken out of the box at random. What is the probability that
- (i) Ramesh will buy the selected shirt?
 - (ii) 'Kewal' will buy the selected shirt?
15. A game of chance consists of spinning an arrow on a circular board, divided into 8 equal parts, which comes to rest pointing at one of the numbers 1, 2, 3,, 8 which are equally likely outcomes. What is the probability that the arrow will point at
- 1. an odd number
 - 2. a number greater than 3
 - 3. a number less than 9.



ANSWER

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|-------------------------|----------------------|
| 1. (B) | 6. (A) |
| 2. (C) | 7. (A) |
| 3. (B) | 8. (C) |
| 4. (A) | 9. (A) |
| 5. (C) | 10. (B) |
| 11. (i) $\frac{1}{22}$ | (ii) $\frac{9}{22}$ |
| 12. (i) $\frac{1}{5}$ | (ii) $\frac{12}{65}$ |
| 13. (i) $\frac{1}{4}$ | (ii) $\frac{1}{6}$ |
| 14. (i) $\frac{22}{25}$ | (ii) $\frac{24}{25}$ |
| 15. (i) $\frac{1}{2}$ | (ii) $\frac{5}{8}$ |
- (ii) 1