

ECAT (Pre-Eng) Mathematics Chapter 9 Permutation, Combination and Probability

Sr	Questions	Answers Choice
1	A card is drawn from a pack of cards numbered 2 to 53. the probability that the number on the card is prime number less than 20 is	A. 2 / 13 B. 4 / 13 C. 5 / 13 D. 8 / 13
2	Probability of an impossible event is	A. 0 B. -1 C. 1 D. ∞
3	Three numbers are chosen random without replacement from {1, 2, 3, ..., 10}. the probability that minimum of the chosen numbering is 3 or their maximum is 7	A. 7 / 40 B. 5 / 40 C. 11 / 40 D. None of these
4	The factorial of a positive integers is a (an)	A. Rational number B. Positive integer C. Real number D. None
5	Question Image <input type="text"/>	A. 56 B. 7 C. 8 D. 8/7
6	A bag contains 3 white, 4 black and 2 red balls. If 2 balls are drawn at random, then the probability that both the ball are white is	A. 1/18 B. 1/12 C. 1/36 D. None of these
7	If A is an event then which of the following is true	A. $P(A) < 0$ B. $0 \geq P(A) \leq 1$ C. $P(A) > 0$ D. None
8	The domain of an infinite sequence is a	A. Set of natural numbers B. R C. Subset of N D. None of the above
9	An unbiased die is thrown. Then the probability of getting a prime is	A. 1/2 B. 2/3 C. 3/4 D. None of these
10	How many arrangements of the letters of the word MATHEMATICS can be made	
11	A dice is rolled. The probability that the dots on the top are greater than 4 is	A. 1/6 B. 1/3 C. 1/2 D. 1
12	A box containing 10 mangoes out of which 4 are rotter. Two mangoes are taken together from the box. If one of them is found to be good, the probability that the other is also good is	A. 1 / 3 B. 8 / 15 C. 5 / 13 D. 5 / 9
13	A card is drawn from a pack of cards numbered 1 to 52, the probability that the number on the card is a perfect square is	A. 1/13 B. 2/13 C. 7/52 D. None of these
14	The sample space for tossing a coin once is	A. {T, T} B. {H, H} C. {H, T} D. None of these
15	The probability that the sum of dots appearing in two successive thrown of two dice, in every time 7 is	A. 1/5 B. 1/36 C. 1/7 D. 1/63
16	Question Image <input type="text"/>	A. 36 B. 360 C. 24

17	$n(n - 1) (n - 2) \dots (n - r + 1) = \underline{\hspace{2cm}}$	
18	If two balls are drawn from a bag containing 3 white, 4 black and 5 red balls. Then the probability that the drawn balls are of different colours is	A. $1 / 66$ B. $3 / 66$ C. $19 / 66$ D. $47 / 66$
19	The sum of all positive integral multiple of 5 less than 100 is	A. 950 B. 760 C. 1230 D. 875
20	There are n seats round a table numbered 1, 2, 3 n. The number of ways in which m person can take seats is	A. ${}^n P_m$ B. ${}^n C_m \times (m - 1)!$ C. ${}^{n-1} P_m$ D. None of these