

ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	Three unbiased coins are tossed. Then the probabilities of getting two heads is	A. 3/8 B. 1/8 C. 1/4 D. None of these
2	n different objects can be arranged taken all at a time in _____	A. $(n + 1)!$ ways B. $(n - 1)!$ ways C. $n!$ ways D. n ways
3	In a class of 100 students, 60 drink tea, 50 drink coffee and 30 drink both. A student from his class is selected at takes at last one of 2 drinks is	A. 2 / 5 B. 3 / 5 C. 4 / 5 D. None of these
4	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^{m-1} B. $n^{m-1} \times (m-1)!$ C. $n-1$ D. None of these
5	The probability to get an odd number in a dice thrown once is	A. 1/2 B. 1/6 C. 1/3 D. 2
6	The number of combinations of 10 different objects taken 8 objects at a time is	A. 90 B. 45 C. 55 D. 50
7	There are 16 point in a plane, in which 6 are collinear. how many lines can be drawn by joining these points?	A. 10 B. 66 C. 71 D. 106
8	The probability that a person A will be alive 15 years hence is $5/7$ and the probability that another person B will be alive 15 years hence is $7/9$. Find the probability that both will be alive 15 years hence	A. 4/63 B. 5/9 C. 45/49 D. None of these
9	How many arrangements of the letters of the word PAKISTAN cab be made	
10	If for two events A and B , $P(A \cup B) = 1$, then events A and B are	A. Certain events B. Mutually exclusive C. Complementary events D. Independent
11	Question Image	A. 5 B. 10 C. 20 D. 30
12	Question Image	
13	How many arrangements of the letters of the word MATHEMATICS can be made	
14	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
15	How many arrangements of the letter of the word PAKPATTAN can be made	
16	A and B throw a dice. The probability that A's throw is not greater then B's is	A. 5 / 12 B. 7 / 12 C. 1 / 6 D. 1 / 2
17	Out of 40 consecutive natural numbers, two are chosen at random. Probability that the sum of the numbers is odd, is	A. 14 / 29 B. 20 / 39 C. 1 / 2 D. n

18 Product of any n consecutive positive integers is divisible by
A. n
B. \sqrt{n}
C. $n!$
D. None

19 The probability to get an odd number in a dice thrown once is
A. 6
B. 1
C. $1/6$
D. $1/2$

20 The value of n , when ${}^n P_2 = 20$ is
A. 3
B. 4
C. 6
D. 5