

ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	The value of n , when ${}^n P_2 = 20$ is	A. 3 B. 4 C. 6 D. 5
2	$20 \cdot 19 \cdot 18 \cdot 17 = \underline{\hspace{2cm}}$	
3	$9 \cdot 8 \cdot 7 \cdot 6 = \underline{\hspace{2cm}}$	
4	There are 16 points 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
5	A box containing 10 mangoes out of which 4 are rotten. 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. $5/9$
6	An experiment yields 3 mutually exclusive and exhaustive events A, B, C, if $P(A) = 2$ and $P(B) = 3$, then $P(C) =$	A. $1/11$ B. $2/11$ C. $3/11$ D. $6/11$
7	In a country 55% of the male population has houses in cities while 30% have houses both in cities and in villages. Find the percentage of the population that has houses only in villages	A. 45 B. 30 C. 25 D. 50
8	The number of words that can be formed out of the letters of the word ASSASSINATION is	A. $1/7$
9	What is the probability of being born on Wednesday?	B. $1/2$ C. $1/3$ D. $1/8$
10	The probability that the sum of dots appearing in two successive throws of two dice, in every time 7 is	A. $1/5$ B. $1/36$ C. $1/7$ D. $1/63$
11	Number of permutations of n distinct objects taken $r (< n - 3)$ at a time which exclude 3 ($< n$) particular objects is	A. $3! P(n, r - 3)$ B. $P(n, 3) P(n, r - 3)$ C. $P(r, r) P(n, r - 3)$ D. $P(n - 3, r)$
12	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
13	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
14	There are 25 tickets bearing numbers from 1 to 25. One ticket is drawn at random. The probability that the number on it is a multiple of 5 or 6 is	A. $7/25$ B. $9/25$ C. $11/25$ D. None of these
15	A and B throw a dice. The probability that A's throw is not greater than B's is	A. $5/12$ B. $7/12$ C. $1/6$ D. $1/2$
16	A bag contains 3 white, 4 black and 2 red balls. If 2 balls are drawn at random, then the probability that both the balls are white is	A. $1/18$ B. $1/12$ C. $1/36$ D. None of these
17	How many terms of the A.P 3, 6, 9, 12, 15, must be taken to make the sum 108	A. 8 B. 6 C. 7 D. 8

18 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

19 If S is a sample space and event set $E = \emptyset$ then $P(E)$ is
A. >0
B. 1
C. <1
D. 0

20 Question Image
