

## ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	For two events A and B if $P(A) = P(A/B) = 1/4$ and $P(B/A) = 1/2$ , then	A. A is sub-event of B B. A and B are mutually exclusive C. A and B are independent and $P(A/B) = 3/4$ D. None of these
2	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
3	A key ring is an example of	A. Permutation B. Circular permutation C. Combination D. None
4	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
5	Arithmetic mean between 14 and 18 is	A. 16 B. 17 C. 15 D. 32
6	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
7	Question Image	A. 56 B. 7 C. 8 D. $8/7$
8	Question Image	A. $1/2$ B. $1/3$ C. $1/4$ D. None of these
9	How many committees of 5 numbers can be chosen from a group of 8 players person when each committee must include 2 particular persons	A. 8! B. $5!3!$ C. 5! D. 20
10	Question Image	
11	$8 \cdot 7 \cdot 6 \cdot 5$ in factorial form is	
12	Out of 10, 000 families with 4 children each, the number of families all of whose children are daughters is	A. 375 B. 500 C. 625 D. 150
13	The sum of all positive integral multiple of 5 less than 100 is	A. 950 B. 760 C. 1230 D. 875
14	$0! =$ _____	A. 0 B. 1 C. 2 D. Not defined
15	Question Image	A. 1.5 B. 1.2 C. 8 D. None of these
16	The number of words that can be formed out of the letters of the word ASSASSINATION is	
17	A combination lock on a suitcase has 3 wheels each labeled with nine digits from 1 to 9. If an opening combination is a particular sequence of three digits with no repeats, the probability	A. $1/500$ B. $1/504$ C. $1/505$ D. $1/506$

17	A 3-digit opening combination is a particular sequence of three digits with no repeats, and the probability of a person guessing the right combination is	C. $\frac{1}{252}$ D. $\frac{1}{250}$
18	A bag contains 5 white, 7 red and 5 black balls. If four balls are drawn one by one with replacement, the probability that none is white is	A. $(\frac{11}{16})^2$ B. $(\frac{5}{16})^2$ C. $(\frac{11}{16})^4$ D. $(\frac{5}{16})^4$
19	All letters of the word "AGAIN" are permuted in all possible ways and the words so formed (with or without meaning) are written as in dictionary, then the 50th word is	A. NAAGI B. NAAIG C. IAANG D. INAGA
20	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750