

## ECAT Mathematics Chapter 9 Permutation, Combination and Probability Online Test

Sr	Questions	Answers Choice
1	Question Image	A. 110 B. 220 C. 1320 D. None of these
2	Question Image	
3	The number of the diagonals of a 6 sided figure is	A. 15 B. 21 C. 9 D. 6
4	Question Image	
5	The number of permutations of n objects of which there are $n_1$ like of one kind, $n_2$ like of the second kind and $n_3$ like objects of third kind are	
6	When a selection of object is made without paying regard to the order of selection, it is called	A. Sequence B. Series C. Combination D. Permutation
7	How many necklaces can be made from 6 beads of different colours?	A. 120 B. 60 C. 24 D. 15
8	How many 3 digit numbers can be formed by using each one of the digit 2, 3, 5, 7, 9 only once?	A. 15 B. 24 C. 60 D. 120
9	How many signals can be given by 5 flags of different colours, using 3 flags at a time	A. 120 B. 60 C. 24 D. 15
10	In how many ways can 5 persons be seated at a round table	A. 5! B. 4! C. 3! D. 120
11	How many arrangements of the letters of the word MI SSI PPI, taken all together can be made?	
12	Number of ways of writing the letters of WORD taken all at a time is	A. 24 B. 4 C. 12 D. 6
13	Question Image	A. 120 B. 5 C. 4 D. 6
14	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
15	Question Image	A. 6 B. 360 C. 120 D. 24
16	Question Image	A. 0 B. 20 C. 90 D. 80
17	Question Image	A. n! B. 0! C. 1 D. None of these

18	Question Image	
19	Question Image	A. 3 B. 6 C. 0 D. None of these
20	(n + 2) (n + 1)n in factorial form is	
21	n(n - 1) (n - 2) in factorial form is	
22	Question Image	A. 56 B. 7 C. 8 D. 8/7
23	6! =	A. 360 B. 720 C. 6.5.4 D. None of these
24	8 . 7 . 6. 5 in factorial form is	
25	Question Image	A. 8 B. 1/56 C. 56 D. None of these
26	0! =	A. 0 B. 1 C. 2 D. Not defined
27	For a positive integer n	A. n! = n(n + 1) B. n! = n(n+1)! C. n! = n(n - 1) D. n! = n(n - 1)!
28	If n is a positive integer then n! is	A. (n - 1) (n - 2)3,2.1 B. n(n - 1) (n - 2)3.2.1 C. n(n - 1) (n - 2) 3 D. None of these
29	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
30	In a school there are 150 students Out of these 80 students enrolled for mathematics class.50 enrolled for English class and 60 enrolled for Physics class The student enrolled for English cannot attend any other class but the students of mathematics and Physics can take two courses at a time find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 60