

## ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	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. $\frac{n!}{m!}$ B. $\frac{n!}{(n-m)!} \times (m-1)!$ C. $\frac{n!}{(n-m)!}$ D. None of these
2	In how many ways can 5 persons be seated at a round table	A. 5! B. 4! C. 3! D. 120
3	The number of permutation that can be formed from the letters of the word OBJECT is	A. 700 B. 600 C. 720 D. 620
4	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
5	If $S$ is a sample space and event set $E = S$ then $P(E)$ is	A. $> 0$ B. 1 C. $< 1$ D. 0
6	$0! = \underline{\hspace{2cm}}$	A. 0 B. 1 C. 2 D. Not defined
7	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
8	Question Image	
9	The probability to get an odd number in a dice thrown once is	A. 1/2 B. 1/6 C. 1/3 D. 2
10	If $n$ is a negative integer $n!$ is	A. 1 B. 0 C. Unique D. Not defined
11	The probability that a slip of number divisible by 4 is picked from the slips bearing numbers 1, 2, 3, ... 10 is	A. 1/5 B. 1/4 C. 1/3 D. 1/2
12	$(n + 2)(n + 1)n = \underline{\hspace{2cm}}$	A. 36 B. 360 C. 24 D. 6
13	Question Image	
14	Question Image	
15	Two cards are drawn at random without replacement. the probability that the first is a king and second is not a king is	A. 48 / 663 B. 24 / 663 C. 12 / 663 D. None of these
16	$8 \cdot 7 \cdot 6 \cdot 5$ in factorial form is	
17	Question Image	
18	How many signals can be given by 5 flags of different colours, using 3 flags at a time	A. 120 B. 60 C. 24

19 Question Image

20 A key ring is an example of

- A. Permutation
- B. Circular permutation**
- C. Combination
- D. None