

## ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	$0! = \underline{\hspace{2cm}}$	A. 0 B. 1 C. 2 D. Not defined
2	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
3	Question Image	
4	The domain of a finite sequence is a	A. Set of natural numbers B. R C. Subset of N D. Proper subset of N
5	How many necklaces can be made from 6 beads of different colours?	A. 120 B. 60 C. 24 D. 15
6	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
7	The value of n, when ${}^n P_2 = 20$ is	A. 3 B. 4 C. 6 D. 5
8	Question Image	A. n! B. 0! C. 1 D. None of these
9	The number of ways of arranging the letter AAAAA BBB CCC D EE F in a row when no two C's are together is	
10	Question Image	A. 1.5 B. 1.2 C. 8 D. None of these
11	In how many ways can 5 persons be seated at a round table	A. 5! B. 4! C. 3! D. 120
12	A card is drawn from a pack of cards numbered 2 to 53. the probability that the number on the card is prime number less than 20 is	A. 2 / 13 B. 4 / 13 C. 5 / 13 D. 8 / 13
13	Question Image	
14	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
15	Question Image	
16	What is the probability of being born on Wednesday?	A. 1/7 B. 1/2 C. 1/3 D. 1/8
17	Question Image	A. 36 B. 360 C. 24 D. 6

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18	A box containing 10 mangoes out of which 4 are rotter. 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
19	9. 8. 7. 6= _____	
20	In 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. 20

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