

## ECAT Mathematics Chapter 9 Permutation, Combination and Probability

Qr.	Questions	Answers Choice
Sr	Questions	
1	If 4 $^{6}P_{r}$ = $^{6}P_{r+1}$ , then r is equal to	A. 4 B. 3 C. 2 D. 1
2	Question Image	A. 6 B. 360 C. 120 D. 24
3	If A is an event then which of the following is true	A. P(A)<0 B. 0≥P(A)≤1 C. P(A)>0 D. None
4	A bag contains 3 white, 4 black and 2 red balls. If 2 balls are drawn at random, then the probability that both the ball are white is	A. 1/18 B. 1/12 C. 1/36 D. None of these
5	How many arrangements of the letters of the word MI SSI PPI, taken all together can be made?	
6	Question Image	
7	The domain of a finite sequence is a	A. Set of natural numbers B. R C. Subset of N D. Proper subset of N
8	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
9	Question Image	
10	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
11	Number of combination of zero or more things out of n different things	A. nPn B. nPr C. nCr D. 2n
12	The domain of an infinite sequence is a	A. Set of natural numbers B. R C. Subset of N D. None of the above
13	Which one is not defined ∀n∈Z+	An! B. n! C. (-n)! D. n!+0!=n!+1
14	Cycle tyres are supplied in lots of 10 and there is a chance if 1 in 500 tyres to be defective. Using Poisson distribution, the approximate number of lots containing no defective tyre in a consignment of 10, 0000 lots is	A. 9028 B. 9208 C. 9802 D. 9820
15	The probability that the sum of dots appearing in two successive thrown of two dice, in every time 7 is	A. 1/5 B. 1/36 C. 1/7 D. 1/63
16	Question Image	
17	An event having more than one sample point is called	A. Certain event B. Compound event C. Simple event D. None

18	Arithmetic mean between 14 and 18 is	A. 16 B. 17
		C. 15 D. 32
		D. 32
19	Two unbiased dice are thrown. The probability that the total score is > 5 is	A. 1 / 18
		B. 7 / 18
		C. 13 / 18
		D. 11 / 18
20	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