

## ECAT (Pre-Eng) Mathematics Chapter 9 Permutation, Combination and Probability

Sr	Questions	Answers Choice
1	If $n$ is a negative integer $n!$ is	A. 1 B. 0 C. Unique D. Not defined
2	A die is rolled. What is the probability that the dots on the top are greater than 4?	A. $1/4$ B. $1/2$ C. $1/3$ D. $1/33$
3	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. $1/63$
4	Number of selections of $n$ different things out of $n$	A. 1 B. $nPr$ C. $n!$ D. $nPr$
5	Three numbers are chosen random without replacement from $\{1, 2, 3, \dots, 10\}$ . the probability that minimum of the chosen numbering is 3 or their maximum is 7	A. $7/40$ B. $5/40$ C. $11/40$ D. None of these
6	A die is thrown, the probability that the dots on the top are prime numbers or odd numbers is	A. $1/2$ B. $2/3$ C. $1/3$ D. $2/5$
7	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. $1/2$
8	A die is thrown 100 times. If getting an odd number is considered a success, the variance of the number of successes is	A. 50 B. 25 C. 10 D. 100
9	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	
10	If $n$ is a positive integer then $n!$ is	A. $(n-1)(n-2) \dots 3, 2, 1$ B. $n(n-1)(n-2) \dots 3, 2, 1$ C. $n(n-1)(n-2) \dots 3$ D. None of these
11	Question Image	
12	Question Image	A. 110 B. 220 C. 1320 D. None of these
13	Question Image	A. 120 B. 5 C. 4 D. 6
14	Question Image	A. 36 B. 360 C. 24 D. 6
15	9. 8. 7. 6= _____	
16	An experiment yields 3 mutually exclusive and exhaustive events A, B, C, if $P(A) = 2$ and $P(B) = 3$ . then $P(C) =$	A. $1/11$ B. $2/11$ C. $3/11$ D. $6/11$
17	The number of significant numbers which can be formed by using any number of the digits 0, 1, 2, 3, 4 but using each not more than once in each number is	A. 260 B. 356 C. 440

1, 2, 3, 4 but using each not more than once in each number is

C. 410  
D. 96

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There are 25 tickets bearing number from 1 to 25. One ticket is drawn at random. The probability that the number on it is a multiple of 5 or 6 is

A.  $7/25$   
B.  $9/25$   
C.  $11/25$   
D. None of these

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Product of any  $n$  consecutive positive integers is divisible by

A.  $n$   
B.  $\sqrt{n}$   
C.  $n!$   
D. None

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An event having more than one sample point is called

A. Certain event  
B. Compound event  
C. Simple event  
D. None