

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

Sr	Questions	Answers Choice
1	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
2	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. $6 / 11$
3	Question Image	A. $1 / 2$ B. $1 / 3$ C. $1 / 4$ D. None of these
4	Question Image	A. 0 B. 20 C. 90 D. 80
5	Question Image	
6	Which one is not defined $\forall n \in \mathbb{Z}^+$	A. $-n!$ B. $n!$ C. $(-n)!$ D. $n! + 0! = n! + 1$
7	A coin is tossed. If head comes up, a die is thrown but if tail comes up, the coin is tossed again. The probability of obtaining a head and an even number is	A. $1/8$ B. $2/8$ C. $3/8$ D. None of these
8	Question Image	
9	Two cards are drawn at random from a well shuffled pack of cards. The probability that at least one of them is a face card is	A. $3 / 17$ B. $5 / 17$ C. $7 / 17$ D. $9 / 17$
10	probability of a certain event is	A. 0 B. -1 C. 1 D. ∞
11	$n(n - 1)(n - 2)$ in factorial form is	
12	$(n + 2)(n + 1)n =$ _____	
13	If A is an event then which of the following is true	A. $P(A) < 0$ B. $0 \geq P(A) \leq 1$ C. $P(A) \geq 0$ D. None
14	An event having more than one sample point is called	A. Certain event B. Compound event C. Simple event D. None
15	Five engineering, four mathematics, two chemistry books are placed on a table at random. The probability that the books of each kind are all together is	
16	A card is drawn from a pack of cards numbered 1 to 52, the probability that the number on the card is a perfect square is	A. $1/13$ B. $2/13$ C. $7/52$ D. None of these
17	A box contains 10 red 30 white and 20 black marbles When a marble is drawn at random the probability that it is either red or white is	A. $1/6$ B. $1/3$ C. $1/2$ D. $2/3$
18	Two coins are tossed twice each. The probability that the head appears on the first toss and the same faces appear in the two tosses is	A. $1/4$ B. $1/2$ C. $1/3$ D. $1/7$

19 An unbiased die is thrown. Then the probability of getting a prime is

- A. $\frac{1}{2}$
B. $\frac{2}{3}$
C. $\frac{3}{4}$
D. None of these

20 Question Image