

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

Sr	Questions	Answers Choice
1	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
2	Question Image	A. 0 B. -1 C. 1 D. 2
3	If A and B are two disjoint events then	A. $P(A \cup B) = P(A) + P(B)$ B. $P(A \cup B) = P(A) - P(A \cap B)$ C. $P(A \cup B) = P(A) \text{ or } P(B)$ D. None
4	A sequence is a function whose domain is	A. N B. Subset of N C. R D. None of these
5	Three unbiased coins are tossed. Then the probabilities of getting two heads is	A. 3/8 B. 1/8 C. 1/4 D. None of these
6	How many arrangements of the letter of the word PAKPATTAN can be made	
7	Arithmetic mean between 14 and 18 is	A. 16 B. 17 C. 15 D. 32
8	Three integers are chosen at random from the first 20 integers. Then probability that their product is even, is	A. 2 / 19 B. 3 / 29 C. 17 / 19 D. 4 / 19
9	If n is a negative integer n! is	A. 1 B. 0 C. Unique D. Not defined
10	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
11	5 unbiased coins are tossed simultaneously. The probability of getting at least one head is	A. 1 / 32 B. 31 / 32 C. 1 / 16 D. None of these
12	The number of combinations of 10 different objects taken 8 objects at a time is	A. 90 B. 45 C. 55 D. 50
13	In how many ways can 5 persons be seated at a round table	A. 5! B. 4! C. 3! D. 120
14	Question Image	A. 0.9 B. 0.74 C. 0.2016 D. None of these
15	Number of permutations of n distinct objects taken r (< n - 3) at a time which exclude 3 (< n) particular objects is	A. $3! P(n, r - 3)$ B. $P(n, 3) P(n, r - 3)$ C. $P(r, r) P(n, r - 3)$ D. $P(n - 3, r)$
16	How many arrangements of the letters of the word MATHEMATICS can be made	

17	What is the probability of being born on Wednesday?	B. $\frac{1}{2}$ C. $\frac{1}{3}$ D. $\frac{1}{8}$
18	The probability that the sum of dots appearing in two successive thrown of two dice, in every time 7 is	A. $\frac{1}{5}$ B. $\frac{1}{36}$ C. $\frac{1}{7}$ D. $\frac{1}{63}$
19	9. 8. 7. 6= _____	
20	A combination lock on a suitcase has 3 wheels each labeled with nine digits from 1 to 9. If an opening combination is a particular sequence of three digits with no repeats, the probability of a person guessing the right combination is	A. $\frac{1}{500}$ B. $\frac{1}{504}$ C. $\frac{1}{252}$ D. $\frac{1}{250}$