

## ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	Question Image	A. 8 B. 1/56 C. 56 D. None of these
2	5 unbiased coins 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
3	Question Image	A. 120
4	How many necklaces can be made from 6 beads of different colours?	B. 60 C. 24 D. 15
5	The number of combinations of 10 different objects taken 8 objects at a time is	A. 90 B. 45 C. 55 D. 50
6	Six boys and 3 girls are to be seated at random, in a row, for a photograph. The probability that no two girls will sit together is	A. 1/12 B. 1/6 C. 5/12 D. 7/12
7	If $4 \cdot 6P_r = 6P_{r+1}$ , then r is equal to	A. 4 B. 3 C. 2 D. 1
8	Question Image	A. 6 B. 360 C. 120 D. 24
9	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
10	Question Image	A. 2450
11	The sum of all even numbers less than 100 is	B. 2352 C. 2272 D. 2468
12	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
13	How many committees of 5 numbers can be chosen from a group of 8 players person when each committee must include 2 particular persons	A. 8! B. 5!3! C. 5! D. 20
14	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
15	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
16	If for two events A and B , $P(A \cup B) = 1$ , then events A and B are	A. Certain events B. Mutually exclusive C. Complementary events D. Independent

17

Question Image

A. 1 / 2  
B. 1 / 3  
C. 1 / 4  
D. None of these

18

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

19

The number of permutation that can be formed from the letters of the word OBJECT is

A. 700  
B. 600  
C. 720  
D. 620

20

$(n + 2)(n + 1)n$  in factorial form is