ECAT Mathematics Chapter 9 Permutation, Combination and Probability

Sr	Questions	Answers Choice
1	How many arrangements of the letters of the word MATHEMATICS can be made	
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	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
4	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. 410 D. 96
5	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
6	An integer is chosen at random from the number ranging from 1 to 50. the probability that the integer chosen is a multiple of 2 or 3 or 10 is	A. 3 / 10 B. 5 / 10 C. 7 / 10 D. 9 / 10
7	Question Image	A. n! B. 0! C. 1 D. None of these
8	Probability of an impossible event is	A. 0 B. -1 C. 1 D. ∞
9	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
10	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
11	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
12	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
13	Fifteen girls compete in a race. The first three places can be taken by them in	A. 3! ways B. 12! ways C. 15 x 14 x 13 ways D. 42 ways
14	A and B throw a dice. The probability that A's throw is not greater then B's is	A. 5 / 12 B. 7 / 12 C. 1 / 6 D. 1 / 2
15	The number of the diagonals of a 6 sided figure is	A. 15 B. 21 C. 9 D. 6
16	Question Image	
		A. N

17	A sequence is a function whose domain is	B. Subset of N C. R D. None of these
18	Two cards are drawn at random without replacement. the probability that the first is a king and second is not a king is	A. 48 / 663 B. 24 / 663 C. 12 / 663 D. None of these
19	n!/(n-1)!=	A. n B. n! C. (n-1)! D. 0!
20	The factorial of a positive integers is a (an)	A. Rational number B. Positive integer C. Real number D. None