ECAT Mathematics Chapter 9 Permutation, Combination and Probability

Sr	Questions	Answers Choice
1	Three dice are thrown together. The probability of getting a total of at least 6 is	A. 103 / 108 B. 10 / 216 C. 93 / 108 D. None of these
2	A dice is rolled. The probability that the dots on the top are greater than 4 is	A. 1/6 B. 1/3 C. 1/2 D. 1
3	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
4	Question Image	
5	If A is an event then which of the following is true	A. $P(A) < 0$ B. $0 \geq P(A) \leq 1$ C. $P(A) > 0$ D. None
6	The key for opening a door is in a bunch of 10 keys. A man attempts to open the door by trying the keys at random discarding the wrong key. The probability that the door is opened in the 5th trial is	A. 1 / 10 B. 2 / 10 C. 3 / 10 D. 4 / 10
7	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
8	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
9	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)
10	Question Image	
11	All letters of the word "AGAIN" are permuted in all possible ways and the words so formed (with or without meaning) are written as in dictionary, then the 50th word is	A. NAAGI B. NAAIG C. IAANG D. INAGA
12	Question Image	A. 5 B. 20 C. 9 D. 4
13	Eight chairs are numbered 1 to 8. Two women and three men wish to occupy one chair each. First, the women choose the chairs from amongst the chairs marked 1 to 4 and then the men select the chairs from amongst the remaining. The number of possible arrangement is	A. $^6C_3 \times {}^4C_2$ B. $^4C_2 \times {}^4P_3$ C. $^4P_2 \times {}^6P_3$ D. None of these
14	Probability of an impossible event is	A. 0 B. -1 C. 1 D. ∞
15	A class contains nine boys and three girls, in how many ways can the teacher choose a committee of four?	A. 60 B. 460 C. 495 D. 272
16	There are n seats round a table numbered 1, 2, 3 .... n. The number of ways in which m	A. ^nP_m B. $^nC_m \times (m - 1)!$

	person can take seats is	C. $^{n-1}P_m$ D. None of these
17	probability of a certain event is	A. 0 B. -1 C. 1 D. ∞
18	Four cards are drawn at random from a pack of 52 playing cards. The probability of getting all the four cars of the same suit is	A. 44/4165 B. 22/4165 C. 11/4165 D. None of these
19	How many terms of the A.P 3,6,9,12,15...........must be taken to make the sum 108	A. 8 B. 6 C. 7 D. 36
20	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