ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	The number of 5-digit number that can be formed from the digits 1,2,4,6,8, when 2 and 8 are never together is	A. 72 B. 48 C. 144 D. 20
2	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
3	A box containing 10 mangoes out of which 4 are rotter. Two mangoes are taken together from the box. If one of them is found to be good, the probability that the other is also good is	A. 1 / 3 B. 8 / 15 C. 5 / 13 D. 5 / 9
4	The number of words that can be formed out of the letters of the word ASSASSINATION is	
5	Question Image	
6	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
7	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
8	Out of 10, 000 families with 4 children each, the number of families all of whose children are daughters is	A. 375 B. 500 C. 625 D. 150
9	Cycle tyres are supplied in lots of 10 and there is a chance if 1 in 500 tyres to be defective. Using Poisson distribution, the approximate number of lots containing no defective tyre in a consignment of 10, 0000 lots is	A. 9028 B. 9208 C. 9802 D. 9820
10	probability of a certain event is	A. 0 B. -1 C. 1 D. ∞
11	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
12	Arithmetic mean between 14 and 18 is	A. 16 B. 17 C. 15 D. 32
13	n!/(n-1)!=	A. n B. n! C. (n-1)! D. 0!
14	In school there are 150 students Out of these 80 students enrolled for mathematics class 50 enrolled for English class and 60 enrolled for Physics class The student enrolled for English cannot attend any other class but the students of mathematics and Physics can take two courses at a time Find the number of students who have taken both physics and mathematics.	A. 40 B. 30 C. 50 D. 20
15	How many comittees 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
16	The number of permutation that can be formed from the letters of the word OBJECT is	A. 700 B. 600 C. 720 D. 620

17	6! = _____	A. 360 B. 720 C. 6.5.4 D. None of these
18	n(n - 1) (n - 2) .... (n - r + 1) = _____	
19	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
20	The probability to get an odd number in a dice thrown once is	A. 6 B. 1 C. 1/6 D. 1/2