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

Sr	Questions	Answers Choice
1	n different objects can be arranged taken all at a time in _____	A. (n + 1)! ways B. (n - 1)! ways C. n! ways D. n ways
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	Which one is not defined $\forall n \in Z+$	A. -n! B. n! C. (-n)! D. n!+0!=n!+1
4	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
5	nCn-r is equal to	A. n! B. n-1Cr C. nCr D. None of these
6	Question Image	
7	The sum of all positive integral multiple of 5 less than 100 is	A. 950 B. 760 C. 1230 D. 875
8	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
9	0! = _____	A. 0 B. 1 C. 2 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	The probability to get an odd number in a dice thrown once is	A. 1/2 B. 1/6 C. 1/3 D. 2
12	How many arrangements of the letters of the word MI SSI PPI, taken all together can be made?	
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. ⁶C₃x ⁴C₂ B. ⁴C₂x ⁴P₃ C. ⁴P₂x ⁶P₃ D. None of these
14	9. 8. 7. 6= _____	
15	n(n - 1) (n - 2) in factorial form is	
16	Question Image	A. 120 B. 5 C. 4 D. 6
17	In a class of 100 students, 60 drink tea, 50 drink coffee and 30 drink both. A student from his class is selected at takes at last one of 2 drinks is	A. 2 / 5 B. 3 / 5 C. 4 / 5

		D. None of these
18	The number of ways of arranging the letter AAAAA BBB CCC D EE F in a row when no two C's are together is	
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	Two coins are tossed twice each. The probability that the head appears on the first toss and the same forces appear in the two tosses is	A. 1/4 B. 1/2 C. 1/3 D. 1/7