ECAT Mathematics Chapter 9 Permutation, Combination and Probability

Sr	Questions	Answers Choice
1	The probability that the sum of dots appearing in two successive thrown of two dice, in every time 7 is	A. 1/5 B. 1/36 C. 1/7 D. 1/63
2	The domain of a finite sequence is a	A. Set of natural numbers B. R C. Subset of N D. Proper subset of N
3	How many arrangements of the letters of the word MATHEMATICS can be made	
4	Question Image	A. 120 B. 5 C. 4 D. 6
5	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
6	A bag contains 5 white, 7 red and 5 black balls. If four balls are drawn one by one with replacement, the probability that none is white is	A. (11/16)² B. (5/16)² C. (11/16)⁴ D. (5/16)⁴
7	0! = _____	A. 0 B. 1 C. 2 D. Not defined
8	The sum of all even numbers less than 100 is	A. 2450 B. 2352 C. 2272 D. 2468
9	A machine operates if all of its three components function. The probability that the first component fails during the year is 0.14, the second component fails is 0.10 and the third component fails is 0.05. the probability that the machine will fail during the year is	A. 0.2647 B. 0.2692 C. 0.3647 D. None of these
10	How many 6-Digit number can be formed without repairing any digit from the digits 0,1,2,3,4,5	A. 720 B. 600 C. 120 D. 6-5!
11	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
12	Question Image	
13	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
14	When a selection of object is made without paying regard to the order of selection, it is called	A. Sequence B. Series C. Combination D. Permutation
15	A bag contains 3 white, 4 black and 2 red balls. If 2 balls are drawn at random, then the probability that both the ball are white is	A. 1/18 B. 1/12 C. 1/36 D. None of these
16	Five engineering, four mathematics, two chemistry books are placed on a table at random.The probability that the books of each kind are all together is	
17	The sample space for tossing a coin twice is	A. {H, T} B. {HH, HT, TH, TT}

		C. {H, T , HH} D. {HH, HT, TT}
18	Form a group of 5 men and 3 women, a committee of 4 persons is to be selected randomly. The probability that there is a majority of men is	A. 1/4 B. 1/3 C. 1/2 D. 1/6
19	If n is a negative integer n! is	A. 1 B. 0 C. Unique D. Not defined
20	In a 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. 60