ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	What is the probability of being born on Wednesday?	A. 1/7 B. 1/2 C. 1/3 D. 1/8
2	Question Image	
3	20. 19. 18. 17= _____	
4	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
5	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
6	The value of n, when ${}^{n}P_{2}$= 20 is	A. 3 B. 4 C. 6 D. 5
7	A bag contains 7 whit, 5 black and 4 rd balls. If two balls are drawn at random from the bag, the probability that they are not of the same color is	A. 73 / 120 B. 83 / 120 C. 67 / 120 D. 43 / 120
8	If S is a sample space and event set E = S then P(E) is	A. >0 B. 1 C. <1 D. 0
9	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
10	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
11	Question Image	
12	Question Image	
13	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
14	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
15	An unbiased die is thrown. Then the probability of getting a prime is	A. 1/2 B. 2/3 C. 3/4 D. None of these
16	How many necklaces can be made from 6 beads of different colours?	A. 120 B. 60 C. 24 D. 15
17	Which one is not defined $\forall n \in Z+$	A. -n! B. n! C. (-n)! D. n!+0!=n!+1
		A. 15

18	How many 3 digit numbers can be formed by using each one of the digit 2, 3, 5, 7, 9 only once?	B. 24 C. 60 D. 120
19	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
20	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