ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	Number of combination of zero or more things out of n different things	A. nPn B. nPr C. nCr D. 2n
2	A card is drawn from a pack of cards numbered 1 to 52, the probability that the number on the card is a perfect square is	A. 1/13 B. 2/13 C. 7/52 D. None of these
3	For two events A and B if P(A) = P (A/B) = 1/4 and P(B/A) = 1/2, then	A. A is sub-event of B B. A and B are mutually exclusive C. A and B are independent and P(A/B) = 3/4 D. None of these
4	The probability to get an odd number in a dice thrown once is	A. 6 B. 1 C. 1/6 D. 1/2
5	If S is a sample space and event set E = S then P(E) is	A. >0 B. 1 C. <1 D. 0
6	0! = _____	A. 0 B. 1 C. 2 D. Not defined
7	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
8	An event having more than one sample point is called	A. Certain event B. Compound event C. Simple event D. None
9	The number of the diagonals of a 6 sided figure is	A. 15 B. 21 C. 9 D. 6
10	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
11	The number of permutations of n objects of which there are $n_1$like of one kind, $n_2$like of the second kind and $n_3$like objects of third kind are	
12	n!/(n-1)!=	A. n B. n! C. (n-1)! D. 0!
13	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
14	Two cards are drawn at random without replacement. the probability that the first is a king and second is not a king is	A. 48 / 663 B. 24 / 663 C. 12 / 663 D. None of these
15	Question Image	A. 1 / 2 B. 1 / 3 C. 1 / 4 D. None of these

16	How many different 5-digit even numbers are possible form digit 1,2,4,6,8	A. 4 : 4! B. 4! C. 5! D. 4!+4!
17	Arithmetic mean between 14 and 18 is	A. 16 B. 17 C. 15 D. 32
18	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
19	Three unbiased coins are tossed. Then the probabilities of getting two heads is	A. 3/8 B. 1/8 C. 1/4 D. None of these
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