


ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	How many signals can be given by 5 flags of different colours, using 3 flags at a time	A. 120 B. 60 C. 24 D. 15
2	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
3	Four cards are drawn at random from a pack of 52 playing cards. The probability of getting all the four cars of the same suit is	A. 44/4165 B. 22/4165 C. 11/4165 D. None of these
4	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
5	$(n + 2) (n + 1) n =$ _____	
6	For a positive integer n	A. $n! = n(n + 1)$ B. $n! = n(n+1)!$ C. $n! = n(n - 1)$ D. $n! = n(n - 1)!$
7	If S is a sample space and event set $E \neq \Phi$ then $P(E)$ is	A. > 0 B. 1 C. < 1 D. 0
8	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
9	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
10	If n is a negative integer $n!$ is	A. 1 B. 0 C. Unique D. Not defined
11	$n!/(n-1)!$	A. n B. $n!$ C. $(n-1)!$ D. $0!$
12	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
13	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
14	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 6 B. 360 C. 120 D. 24
15	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
16	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 56 B. 7 C. 8 D. 8/7
17	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

18 There are n seats round a table numbered 1, 2, 3 n . The number of ways in which m person can take seats is

- A. ${}^n P_m$
- B. ${}^n C_m \times (m - 1)!$
- C. ${}^{n-1} P_m$
- D. None of these

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20 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