


ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	The value of n , when ${}^nP_2 = 20$ is	A. 3 B. 4 C. 6 D. 5
2	$20 \cdot 19 \cdot 18 \cdot 17 = \underline{\hspace{2cm}}$	
3	$9 \cdot 8 \cdot 7 \cdot 6 = \underline{\hspace{2cm}}$	
4	There are 16 point in a plane, in which 6 are collinear. how many lines can be drawn by joining these points?	A. 10 B. 66 C. 71 D. 106
5	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. $5/9$
6	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. $6/11$
7	In a country 55% of the male population has houses in cities while 30% have houses both in cities and in villages find the percentage of the population that has houses only in villages	A. 45 B. 30 C. 25 D. 50
8	The number of words that can be formed out of the letters of the word ASSASSINATION is	
9	What is the probability of being born on Wednesday?	A. $1/7$ B. $1/2$ C. $1/3$ D. $1/8$
10	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. $1/63$
11	Number of permutations of n distinct objects taken $r (< n - 3)$ at a time which exclude 3($< n$) particular objects is	A. $3! P(n, r - 3)$ B. $P(n, 3) P(n, r - 3)$ C. $P(r, r) P(n, r - 3)$ D. $P(n - 3, r)$
12	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
13	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
14	There are 25 tickets bearing number from 1 to 25. One ticket is drawn at random. The probability that the number on it is a multiple of 5 or 6 is	A. $7/25$ B. $9/25$ C. $11/25$ D. None of these
15	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. $1/2$
16	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
17	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. 9

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| 18 | Three unbiased coins are tossed. Then the probabilities of getting two heads is | <p>A. $\frac{3}{8}$
B. $\frac{1}{8}$
C. $\frac{1}{4}$
D. None of these</p> |
| 19 | If S is a sample space and event set $E \neq \Phi$ then $P(E)$ is | <p>A. >0
B. 1
C. <1
D. 0</p> |
| 20 |  | <p>A. $\frac{1}{2}$
B. $\frac{1}{3}$
C. $\frac{1}{4}$
D. None of these</p> |