

## ECAT Mathematics Chapter 9 Permutation, Combination & Probability

Sr	Questions	Answers Choice
1	The domain of a finite sequence is a	A. Set of natural numbers B. R C. Subset of N D. Proper subset of N
2	<div style="border: 1px solid #ccc; padding: 2px; display: inline-block;">Question Image</div>	A. 0 B. -1 C. 1 D. 2
3	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	
4	Two balanced dice are tossed once, the sample space when the integers on the faces of two dice are the same is	A. $\{(1, 1), (2, 2), (3, 3)\}$ B. $\{(4, 4), (5, 5), (6, 6)\}$ C. $\{(1, 1), (2, 2), (3, 3), (4, 4), (5, 5), (6, 6)\}$ D. None of these
5	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
6	The probability that a slip of numbers divisible by 4 is picked from the slips of number 1,2,3,4,.....10 is	A. $1/5$ B. $2/5$ C. $1/10$ D. $3/10$
7	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
8	probability of a certain event is	A. 0 B. -1 C. 1 D. $\infty$
9	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
10	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. $1/2$
11	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. $8/13$
12	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
13	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
14	Three integers are chosen at random from the first 20 integers. Then probability that their product is even, is	A. $2/19$ B. $3/29$ C. $17/19$ D. $4/19$
15	Two unbiased dice are thrown. The probability that the total score is $> 5$ is	A. $1/18$ B. $7/18$ C. $13/18$ D. $11/18$

16	A coin is tossed. If head comes up, a die is thrown but if tail comes up, the coin is tossed again. The probability of obtaining a head and an even number is	A. $\frac{1}{8}$ B. $\frac{2}{8}$ C. $\frac{3}{8}$ D. None of these
17	Four cards are drawn at random from a pack of 52 playing cards. The probability of getting all the four cards of the same suit is	A. $\frac{44}{4165}$ B. $\frac{22}{4165}$ C. $\frac{11}{4165}$ D. None of these
18	Question Image <input type="text"/>	A. 5 B. 10 C. 20 D. 30
19	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. $(\frac{11}{16})^2$ B. $(\frac{5}{16})^2$ C. $(\frac{11}{16})^4$ D. $(\frac{5}{16})^4$
20	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