

ECAT (Pre-Eng) Mathematics Chapter 9 Permutation, Combination and Probability

Sr	Questions	Answers Choice
1	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	
2	Question Image	
3	Question Image	A. $P(A) + P(B)$ B. $P(A) - P(B)$ C. $P(A) \cdot P(B)$ D. $P(A) / P(B)$
4	Out of 40 consecutive natural numbers, two are chosen at random. Probability that the sum of the numbers is odd, is	A. $14 / 29$ B. $20 / 39$ C. $1 / 2$ D. n
5	A die is thrown, the probability that the dots on the top are prime numbers or odd numbers is	A. $1/2$ B. $2/3$ C. $1/3$ D. $2/5$
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	A key ring is an example of	A. Permutation B. Circular permutation C. Combination D. None
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	$9 \cdot 8 \cdot 7 \cdot 6 =$ _____	
10	Probability of an impossible event is	A. 0 B. -1 C. 1 D. ∞
11	$8 \cdot 7 \cdot 6 \cdot 5$ in factorial form is	
12	What is the probability of being born on Wednesday?	A. $1/7$ B. $1/2$ C. $1/3$ D. $1/8$
13	Question Image	A. 56 B. 7 C. 8 D. $8/7$
14	How many necklaces can be made from 6 beads of different colours?	A. 120 B. 60 C. 24 D. 15
15	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
16	Question Image	
17	Question Image	A. 1.5 B. 1.2 C. 8 D. None of these
18	Arithmetic mean between 14 and 18 is	A. 16 B. 17 C. 15

C. 12
D. 32

19 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

20 In how many ways can 5 persons be seated at a round table

- A. 5!
B. 4!
C. 3!
D. 120
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