

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Domain of $\cot x$ is _____	
2	The angle of depression of a point A on the ground from the top of the tower is 30° , then the angle of elevation of the top of the tower at the point A is	A. 60° B. 40° C. 41° D. 30°
3	The point _____ is in the solution of the inequality $2x - 3y > 5$	A. (1, -1) B. (2,2) C. (0,0) D. (3,0)
4	Roots of the equation $x^2 + 5x - 1 = 0$ are	A. Rational B. Irrational C. Complex D. None of these
5	Question Image	
6	Question Image	
7	Question Image	
8	Out of 10, 000 families with 4 children each, the number of families all of whose children are daughters is	A. 375 B. 500 C. 625 D. 150
9	I is not	A. Real number B. Natural number C. Prime Number D. Whole Number
10	A combination lock on a suitcase has 3 wheels each labeled with nine digits from 1 to 9. If an opening combination is a particular sequence of three digits with no repeats, the probability of a person guessing the right combination is	A. $1 / 500$ B. $1 / 504$ C. $1 / 252$ D. $1 / 250$
11	Question Image	
12	Question Image	
13	The proposition $S(n)$ for any $n \in \mathbb{N}$ is only true if $k \in \mathbb{N}$ and	A. $S(k+1)$ is true B. $S(1)$ is true and $S(k+1)$ is true whenever $S(k)$ is true C. $S(k+1)$ is true whenever $S(k)$ is true D. $S(k)$ is true
14	The coefficient of x^{10} in the expansion $(x^3 + 3/x^2)^{10}$ is	A. 1700 B. 17023 C. 17027 D. 17010
15	The proposition $S(n)$ is true $\forall n \in \mathbb{N}$, $S(k+1)$ true when _____ is true	A. $S(1)$ B. Both a & c C. $S(k)$ D. None
16	A and B throw a dice. The probability that A's throw is not greater than B's is	A. $5 / 12$ B. $7 / 12$ C. $1 / 6$ D. $1 / 2$
17	The complement of set A relative to universal set U is the set	A. $\{x / x \in A \wedge x \in U\}$ B. $\{x / x \notin A \wedge x \in U\}$ C. $\{x / x \in A \text{ and } x \notin U\}$ D. A-U
18	Domain of $\cos x$ is _____	
19	The corner point of the boundary lines, $x-2y$ $2x + y = 2$ is:	A. (2,6) B. (6,2)

19. The line $2x + y = 10$

- C. $(-2, 2)$
- D. $(2, -2)$

20. The distance between lines $3x + 4y = 9$ and $6x + 8y = 15$ is:

- A. $2/3$
- B. $3/10$
- C. 8
- D. $6/5$