

ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	The symbol of irrational is	A. W B. N C. Q D. $\mathbb{Q}$
2	Question Image	A. 0 B. 1 C. -1 D. None
3	Question Image	A. Rational B. Irrational C. Even D. Odd
4	Question Image	
5	Range of $\cot \theta$ is	A. $(-\infty, \infty)$ B. $(-1, 1)$ C. $(-5, 5)$ D. Set of even numbers only
6	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
7	If $x + y + 1 = 0$ touches the parabola $y^2 = 4x$, then λ is equal to	A. 2 B. 4 C. 6 D. 8
8	If a set S contains "n" elements then P (S) has number of elements	A. 2^n B. 2^{n+1} C. $2 \cdot n$ D. n^2
9	If a, b, c, d, e, f are in A.P., then e-c is equal to	A. $2(c - a)$ B. $2(f - d)$ C. $2(d - c)$ D. $d - c$
10	Question Image	A. 1.5 B. 1.2 C. 8 D. None of these
11	5 unbiased coins are tossed simultaneously. The probability of getting at least one head is	A. $1/32$ B. $31/32$ C. $1/16$ D. None of these
12	If n is positive integers, then $2^n > 2n + 1$, only when	A. $n \leq 3$ B. $n \geq 3$ C. $n \leq 2$ D. $n \leq 1$
13	The towers each 120 meters high are 800 meters apart. The measure of the angle of elevation from the base of one tower to the top of the other is	A. 12° B. 9° C. 7° D. 120°
14	The mid point of the line segment joining the points (4,0) and (0,4) is	A. (4,4) B. (2,2) C. (-4,-4)

D. (-2,-2)

15

Question Image

16

The principal value of $\sin^{-1}(-1/2)$

- A. $\pi/3$
- B. $\pi/4$
- C. $\pi/6$
- D. $-\pi/6$

17

Question Image

18

The number of permutation that can be formed from the letters of the word OBJECT is

- A. 700
- B. 600
- C. 720
- D. 620

19

Question Image

20

Question Image