

## ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	The square matrix A is skew Hermitian when $(A)^t =$	A. A B. $A'$ C. $-A$ D. A
2	Question Image	A. K/6 B. 2K C. 3K D. 6K
3	Question Image	
4	Question Image	A. A B. $A'$ C. U D. None of these
5	The sum of even coefficient in the binomial expansion is	A. $2^{\sup>n+1</sup>}$ B. $2^{\sup>n</sup>}$ C. $2^{\sup>n-1</sup>}$ D. 2n
6	Question Image	A. 100 B. 99 C. 0 D. none of these
7	Question Image	A. A rational number B. An irrational number C. An odd number D. A prime number
8	The directrix of $y^2 = -4ax$ is	A. $y = -a$ B. $y = a$ C. $x = a$ D. $x = -a$
9	If $ax + bx + c = 0$ is satisfied by every value of x, then	A. $b = 0, c = 0$ B. $c = 0$ C. $b = 0$ D. $a = b = c = 0$
10	The common ration of a geometric sequence cannot be	A. 0 B. 1 C. 2 D. 3
11	Question Image	
12	$1^0 =$ _____	
13	Question Image	A. 0 B. 1 C. 2 D. 3
14	Question Image	
15	If $ax^2 + bx + x = 0$ is satisfied by every value of x, then	A. $b = 0, c = 0$ B. $c = 0$ C. $b = 0$ D. $a = b = c = 0$
16	The set of the first elements of the ordered pairs forming a relation is called its	A. Function on B B. Range C. Domain D. A into B
17	$\sin^2 \alpha \cos^2 \alpha =$	A. -1 B. 0 C. 1 D. None of these

18  $s > t$  then

- A.  $(s - t)^2 > (t - s)^2$
- B.  $(s - t)^2 < (t - s)^2$
- C.  $(s - t)^2 = (t - s)^2$
- D. None

19 The solution set of the equation  $1 + \cos x = 0$  is \_\_\_\_\_

D. none of these

20  $\cos 315^\circ =$  \_\_\_\_\_