

## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	The function sine and Cosine have the closed interval as their range	A. [1, 0] B. [-1, 1] C. [0, 1] D. [-1, 2]
2	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
3	$x = 0$ is in the solution of the inequality	A. $x > 0$ B. $3x + 4 < 0$ C. $x + 3 < 0$ D. $x - 2 < 0$
4	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. $2^{2^{n-1}}$ B. $1 - 2^{n-1}$ C. $n + 2^{n-1}$ D. $2^{n-1}$
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
6	The transport of a rectangular matrix is a	A. Square matrix B. Rectangular matrix C. Row matrix D. Column matrix
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 0 B. 1 C. -1 D. None
8	The polar form of complex number $x \neq 0$ is	A. $r \cos \theta + i \sin \theta$ B. $r \cos \theta + i \sin \theta$ C. $\cos \theta + i \sin \theta$ D. $i \cos \theta + i \sin \theta$
9	If ${}^4P_r = {}^6P_{r+1}$ , then r is equal to	A. 4 B. 3 C. 2 D. 1
10	Which symbolic notation represent unary operation ?	A. - B. $\vee$ C. $\wedge$ D. $\leftrightarrow$
11	The matrix A is Hermitian when $(A)' =$	A. A B. -A C. A D. A'
12	Period of $\sin 3x$ is _____	
13	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A B. A' C. U D. None of these
14	If $A \subseteq B$ , and B is a finite set, then	A. $n(A) < n(B)$ B. $n(B) < n(A)$ C. $n(A) \leq n(B)$ D. $n(A) \geq n(B)$
15	The sum of complex number (a,b) and (c,d) is	
16	In R the number of identity element w.r.t '+' is	A. One B. Two C. Three D. Four
17	A sequence is a functions whose domain is a subset of the set of	A. Natural numbers B. Real numbers C. Whole numbers D. Rational numbers
		A. $x \neq 0 \wedge y \neq 0$

- 18 For any real numbers  $x, y, xy=0 \Rightarrow$
- B.  $x = 0 \text{ \&nbsp; } \forall y = 0$   
C.  $x = 0$   
D.  $y = 0$
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- 19 Given  $X, Y$  are any two sets such that number of elements in set  $X = 28$ , number of elements in set  $Y = 28$ , and number of elements in set  $X \cup Y = 54$ , then number of elements in set  $X \cap Y =$
- A. 4  
B. 3  
C. 2  
D. 1
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- 20 An equation of the form  $ax + by = k$  is homogeneous linear equation when
- A.  $b = 0, a = 0$   
B.  $a = 0, b \neq 0$   
C.  $b = -0, a \neq 0$   
D.  $a \neq 0, b \neq 0, k = 0$