

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image	
2	The matrix A is Hermitian when $(A)' =$	A. A B. -A C. A D. A'
3	$\tan(\cot^{-1}x)$ is equal to	A. $\cot(\tan^{-1}x)$ B. $\tan x$ C. $\sec x$ D. None of these
4	Which is not a half plane	A. $ax + by < c$ B. $ax + by > c$ C. Both A and B D. None
5	If $x^2 + px + 1$ is a factor of $ax^3 + bx + c$, then	A. $a^2 + c^2 = -ab$ B. $a^2 - c^2 = -ab$ C. $a^2 - c^2 = ab$ D. None of these
6	$(a + bi) - c + di =$	A. $(a + b) + (c + d)$ B. $(a + c) + i(b + d)$ C. $(a - c) + (c - d)i$ D. $(a - c) + (b - d)i$
7	(1, 1) is the in the solution of the inequality	A. $3x + 4y > 3$ B. $2x + 3y < 2$ C. $4x = 3y > 5$ D. $2c - 3y > 2$
8	The derivative of \sqrt{x} at $x = a$ is:	A. $1/2a$ B. $2 / \sqrt{a}$ C. $2\sqrt{x}$ D. $1 / 2\sqrt{x}$
9	The multiplicative inverse of 4 is	A. -4 B. -1/4 C. 1/4 D. 1
10	Question Image	
11	$w^{-1} =$ _____	A. 0 B. 1 C. w D. w^2
12	For any set B, $B \cup B'$ is	A. Is set B B. Set B' C. Universal set D. None of these
13	$d/dx (\cos x^2) =$	A. $-2x \cos x$ B. $-2x \sin x^2$ C. $-2x \tan x$ D. $-2x \sec^2 x$
14	Question Image	
15	Question Image	A. $2x - 3x + c$ B. $x^2 - 3x + c$
16	If both p and q are false, then the disjunction of p and q is	A. false B. true C. equal D. equivalent
17	Question Image	D. none of these

- 18 The domain of an infinite sequence is a
- A. Set of natural numbers
 - B. \mathbb{R}
 - C. Subset of \mathbb{N}
 - D. None of the above
-
- 19 202.04 is an example of
- A. Recurring decimals
 - B. Non-recurring decimals
 - C. Terminating decimals
 - D. None of the above
-
- 20 If $x^3 + 4x^3 - 2x + 5$ is divided by $x - 1$, then the remainder is
- A. 8
 - B. 6
 - C. 4
 - D. None of these
-