

## ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Question Image	
2	If both p and q are false, then the disjunction of p and q is	A. false B. true C. equal D. equivalent
3	The roots of the equation will be irrational if $b^2 - 4ac$ is	A. Positive and perfect square B. Positive but not a perfect square C. Negative D. Zero
4	$(a^{-1})^{-1} =$	A. $a^{-1}$ B. a C. -a D. None of above
5	Question Image	A. real part of z B. imaginary part of z C. conjugate of z D. modulus of z
6	The length of perpendicular from (-2,3) to the line $y=2x-3$ is:	A. $5\sqrt{2}$ B. 6 C. $2\sqrt{5}$ D. 7.5
7	Question Image	
8	If $uv = \text{Proj}_v u$ then	A. u and v are parallel B. v is a unit vector C. u is a unit vector D. Both b and c
9	Question Image	A. Linear equation B. Quadratic equation C. Cubic equation D. None of these
10	Question Image	
11	Question Image	A. $\sec 5x + c$ B. $-\sec 5x + c$
12	If $c = 2i + j + k$ and $d = -1 + 4j + 2k$ , then $[c \cdot d] =$	A. $\sqrt{7}$ B. $\sqrt{41}$ C. $\sqrt{19}$ D. $\sqrt{(2 \cdot 7)}$
13	The point _____ is in the solution of the inequality $2x - 3y < 4$	A. (0, -2) B. (1, -3) C. (2, 2) D. (3, 0)
14	$Z$ is the set of integers ( $Z^*$ ) is a group with $a * b = a + b + 1$ , $a, b \in G$ . then inverse of a is	A. -a B. a + 1 C. -1-a D. None of these
15	Range of $\text{cosec}^{-1} x$ is	A. $W - \{y \mid -1 \leq y \leq 1\}$ B. $R - \{y \mid -1 \leq y \leq 1\}$ C. $O - \{y \mid -1 \leq y \leq 1\}$ D. R
16	The period of $\sin^2 \theta$ is	A. $2\pi$ B. $\pi$ C. $\pi/2$ D. $\pi/4$
17	Cofactor of an element $a_{ij}$ is defined by	A. $(-1)^{i+j}  A $ B. $(-1)^{i+j} M_{ij}$ C. $(-1)^{i+j} M_{sup-1}$ D. ...

D. None of these

18 The 7th term of the A.P 7,11,15,is

- A. 24
- B. 31
- C. 26
- D. 23

19 Which of the following diagrams represent into function?

20  Question Image