

ECAT Mathematics MCQ's Test For Full Book

Sr	Questions	Answers Choice
1	Root of the equation $3^{x+1} + 3^{1-x} =$ is	A. 2 B. 1 C. 0 D. -1
2	A subset of set of complex number whose elements are of the form $(a,0)$ is called	A. Real number B. Complex number C. Rational number D. Irrational number
3	Question Image	A. 2 B. 5 C. 7 D. None of these
4	A conjunction is considered to be true only if both its components are	A. false B. equivalent C. equal D. true
5	The additive inverse of a matrix A is	D. None of these
6	Question Image	A. p and q B. p or q C. p implies q D. p is equivalent to q
7	Question Image	
8	Domain of $\operatorname{cosec} \theta$ is	
9	The sum of all odd numbers between 100 and 200 is	A. 6200 B. 7500 C. 6500 D. 3750
10	$\forall x, y \in \mathbb{R}$, either $x = y$ or $x > y$ or $x < y$ is	A. Transitive property B. Reflexive property C. Trichotomy property D. None of these
11	For non-trivial solution $ A $ is	A. non zero B. $A = 0$ C. $ A = 0$ D. $At = 0$
12	The angle of depression of the point at a distance 70 meters from the foot of the tower from the top of the tower is 45° . The height of the tower is	A. 37m B. 97m C. 101m D. 70m
13	Question Image	
14	$x = \underline{\hspace{2cm}}$ is in the solution of $2x + 3 \geq 0$	A. 1 B. -2 C. -3 D. -4
15	If $n \in \mathbb{N}$, then $n(n+3)$ is always	A. Multiple of 3 B. Multiple of 6 C. odd D. even
16	Which of the following is skew symmetric matrix	
17	A machine operates if all of its three components function. The probability that the first component fails during the year is 0.14, the second component fails is 0.10 and the third component fails is 0.05. the probability that the machine will fail during the year is	A. 0.2647 B. 0.2692 C. 0.3647 D. None of these
18	$2^{2x+2} \cdot 3^{x+1} + 32 = 0$ gives value of x	A. (3,4) B. (8,4) C. (2,3) D. (2,8)

D. (5,9)

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The y intercepts and the slpe of the line expressed by line expressed by $3x - 2y + 6 = 0$ is

- A. $\frac{3}{2}$, -3
- B. $-\frac{3}{3}$, $-\frac{3}{2}$
- C. -3, $-\frac{3}{2}$
- D. -3, -3

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Question Image

- A. Principle of equality of fractions
- B. Rule for product of fraction
- C. Rule for quotient of fraction
- D. Golden rule of fractions