

ECAT Pre General Science Mathematics Online Test

Sr	Questions	Answers Choice
1	$A = B$ iff	A. All elements of A also the elements of B B. A and B should be singleton C. A and B have the same number of elements D. If both have the same element
2	Question Image	A. Zero matrix B. Diagonal matrix C. Column matrix D. Scalar matrix
3	Zero is	A. An irrational number B. A rational number C. A negative integer D. A positive number
4	x is a member of the set $[-1, 0, 3, 5]$ y is a member of the set $\{-2, 1, 2, 4\}$ which is possible?	A. $x - y = -6$ B. $x - y \leq -6$ C. $x - y \geq -6$ D. None
5	Question Image	
6	20. 19. 18. 17= _____	
7	If $x^2 - 7x + a$ has remainder 1 when divided by $x + 1$, then $a =$ _____	A. -7 B. 7 C. 0 D. None of these
8	Name the property used in $4.1 + (-4.1) = 0$	A. Additive inverse B. Multiplication inverse C. Additive identity D. Multiplication identity
9	The distance of the point (a, b) from x-axis is	A. a B. b C. a + b
10	The term involving x^4 in the expansion $(3-2x)$ is	A. $217x^{>4}$ B. $15120x^{>4}$ C. $313x^{>4}$ D. $-25x^{>4}$
11	$A = [3]$ is a/an	A. Square matrix B. Scalar matrix C. Diagonal matrix D. Identity matrix
12	Let A be a square matrix. Then, $\frac{1}{2} (A-A')$ is	A. Skew-symmetric B. Symmetric C. Null D. None of the above
13	The mid point of the line segment joining the points (4,0) and (0,4) is	A. (4,4) B. (2,2) C. (-4,-4) D. (-2,-2)
14	Question Image	
15	The number of divisors of 1029, 1547 and 122 are in	A. A.P. B. G.P. C. H.P. D. None of these
16	$7^{2n} + 3^{n-1} \cdot 2^{3n-3}$ is divisible by	A. 24 B. 25 C. 9 D. 13
17	$\sqrt{2} + \sqrt{3} + \sqrt{5} = (\sqrt{2} + \sqrt{3} + \sqrt{5})$: this property is called	A. associative property w.r.t addition B. commutative property C. Closure property w.r.t addition

C. Closure property with addition
D. Additive identity

18 Question Image

19 Question Image

A. Hermitian matrix
B. Skew-hermitian matrix
C. Symmetric matrix
D. Identity matrix

20 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