

ECAT Mathematics Online Test

Sr	Questions	Answers Choice
1	Z is a	A. Infinite set B. Finite set C. Singleton set D. Set of all integers
2	$\{0\}$ is a	A. Empty set B. Singleton set C. Zero set D. Null Set
3	Every set is an improper subset of	A. Empty set B. Equivalent set C. Itself D. Singleton set
4	Empty set is	A. Not subset of every set B. Finite set C. Infinite set D. Not the member of real numbers
5	if $A = \{x/x \in \mathbb{Q} \wedge 0 < x < 1\}$, the A is	A. Infinite set B. Finite set C. Set of rational numbers D. Set of real numbers
6	If there is one-one correspondence between A and B, then we write.	A. $A = B$ B. $A \subseteq B$ C. $A \supseteq B$ D. $A \sim B$
7	$P \notin A$ means	A. $\langle i \rangle P \langle /i \rangle$ is subset of A B. $\langle i \rangle P \langle /i \rangle$ is an element of A C. $\langle i \rangle P$ does not belongs to $A \langle /i \rangle$ D. A does not element of $\langle i \rangle P \langle /i \rangle$
8	The set of months in a year beginning with S.	A. {September, October, November} B. Singleton set C. Null set D. Empty set
9	$A = B$ 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
10	If $P = \{x/x = p/q \text{ where } p, q \in \mathbb{Z} \text{ and } q \neq 0\}$, then P is the set of	A. Irrational numbers B. Even numbers C. Rational numbers D. Whole numbers
11	If $S = \{3, 6, 9, 12, \dots\}$, then	A. S = Four multiples of 3 B. S = Set of even numbers C. S = Set of prime numbers D. S = All multiples of 3
12	Which of the following is the definition of singleton	A. The objects in a set B. A set having no element C. A set having no subset D. None of these
13	If $T = \{2, 4, 6, 8, 10, 12\}$, then	A. T = (First six natural numbers) B. T = (First six odd numbers) C. T = (First six real numbers) D. T = (First six even numbers)
14	Which of the following statement is true?	A. A set is a collection of non-empty object B. A set is a collection of only numbers C. a set is any collection of things D. a set is well-defined collection of objects

15	24 can be written as a product of	A. Odd factors B. Even factors C. Whole factors D. Prime factors
16	14 is not a	A. Prime number B. Whole number C. Even number D. Real number
17	Any whole number can be written as a product of factors which are	A. Odd numbers B. Prime number C. Rational number D. Even number
18	If P is a whole number greater than 1, which has only P and 1 are factors. Then P is called	A. Whole number B. Prime number C. Even number D. Odd number
19	The set of positive integers, 0 and negative integers is known as the set of	A. Natural numbers B. Rational numbers C. All integers D. Irrational numbers
20	$\sqrt{2} + \sqrt{3} + \sqrt{5} = (\sqrt{2} + \sqrt{3} + \sqrt{5})$: this property is called	A. associative property w.r.t addition B. commutative property C. Closure property w.r.t addition D. Additive identity
21	$3.5 + 5.4 = 5.4 + 3.5 = 8.9$ this property of addition is called	A. additive identity B. associative property C. commutative property D. closure property
22	$2/9, 5/7 \in \mathbb{R}, (2/9)(5/7) = 10/63 \in \mathbb{R}$ this property is called	A. Associative property B. Identity property C. Commutative property D. Closure property w.r.t multiplication
23	If $0 \in \mathbb{R}$, then the additive inverse of a is	A. $1/9$ B. $<\sup>1/-9</sup>$ C. a D. -a
24	The identity element with respect to subtraction is	A. 0 B. -1 C. 0 and 1 D. None of these
25	If a and b are real numbers then a+b is also real number this law is called	A. associative law of addition B. closure law of addition C. Distributive law of addition D. Commutative law of addition
26	The negative square root of 9 can be written as:	A. $-\sqrt{9}$ B. $\sqrt{9}$ C. $\sqrt{18}$ D. $-\sqrt{18}$
27	The $\sqrt{\quad}$ is used for the	A. Positive square root B. Negative square root C. +ve and -ve square root D. Whole number
28	$4/\sqrt{49}$ is a	A. Irrational Number B. Prime Number C. Rational number D. Whole number
29	The additive identity of real number is	A. 1 B. 2 C. $1/2$ D. 0
30	1 is not	A. Real number B. Natural number C. Prime Number D. Whole Number