

## ECAT Mathematics Chapter 23

Sr	Questions	Answers Choice
1	Question Image	<p>A. A is proper subset of B</p> <p>B. A is an improper subset of B</p> <p>C. A is equivalent to B</p> <p>D. B is subset of A</p>
2	Question Image	<p>A. An empty set</p> <p>B. Universal set</p> <p>C. A singleton set</p> <p>D. None of these</p>
3	$A = B$ if	D. A is equivalent to B
4	$\{1, 2, 3\}$ is _____	<p>A. an infinite set</p> <p>B. A finite set</p> <p>C. A singleton set</p> <p>D. Universal set</p>
5	The set of rational numbers is subset of	<p>A. The set of natural numbers</p> <p>B. The set of real numbers</p> <p>C. The set of integers</p> <p>D. The set of whole numbers</p>
6	The set of real numbers is a subset of	<p>A. The set of natural numbers</p> <p>B. The set of rational numbers</p> <p>C. The set of integers</p> <p>D. The set of complex numbers</p>
7	The set of integers is a subset of	<p>A. The set of natural numbers</p> <p>B. The set of whole numbers</p> <p>C. The set of prime numbers</p> <p>D. The set of rational numbers</p>
8	The set of whole numbers is subset of	<p>A. The set on integers</p> <p>B. The set of natural numbers</p> <p>C. <math>\{1, 3, 5, 7, \dots\}</math></p> <p>D. The set of prime numbers</p>
9	The set of natural numbers is a subset of	<p>A. <math>\{1, 2, 3, \dots, 100\}</math></p> <p>B. The set of whole numbers</p> <p>C. <math>\{2, 4, 6, 8, \dots\}</math></p> <p>D. None of these</p>
10	Let A and B be two sets. If every element of A is also an element of B then	
11	Question Image	<p>A. Every element of A is in B</p> <p>B. Every element of B is in A</p> <p>C. Every element of A is in B'</p> <p>D. Every element of A is in A</p>
12	Question Image	<p>A. Natural numbers</p> <p>B. Whole numbers</p> <p>C. Integers</p> <p>D. Rational numbers</p>
13	$\{1, 2, 3, 4, \dots\}$ is set of _____	<p>A. Natural numbers</p> <p>B. Whole numbers</p> <p>C. Integers</p> <p>D. Rational numbers</p>
14	The number of different ways of describing a set is	<p>A. One</p> <p>B. Two</p> <p>C. Three</p> <p>D. Four</p>
15	The set $(\mathbb{Z}, +)$ forms a group	<p>A. Forms a group w.r.t addition</p> <p>B. Forms a group w.r.t multiplication</p> <p>C. Non commutative group w.r.t multiplication</p> <p>D. Doesn't form a group</p>
16	Power set of X i.e $P(X)$ .....under the binary operation of union $\cup$	<p>A. Forms a group</p> <p>B. Does not form a group</p> <p>C. Has no identity element</p> <p>D. Infinite set although X is infinite</p>

17	The set $\{\mathbb{Z} \setminus \{0\}\}$ is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
18	The set $\mathbb{R}$ is .....w.r.t subtraction	A. Not a group B. A group C. No conclusion drawn D. Non commutative group
19	The set $\{1, -1, i, -i\}$	A. Form a group w.r.t addition B. Form a group w.r.t multiplication C. Does not form a group w.r.t multiplication D. Not closed under multiplication
20	The set of complex numbers forms	A. Commutative group w.r.t addition B. Commutative group w.r.t multiplication C. Commutative group w.r.t division D. Non commutative group w.r.t addition