

ECAT Mathematics Chapter 23

Sr	Questions	Answers Choice
1	In a country, 55% of the male population has houses in cities while 30% have houses both in cities and in village. Find the percentage of the population that has house only in villages.	A. 45 B. 30 C. 25 D. 50
2	Decimal part of irrational number is	A. Terminating B. Repeating only C. Neither repeating nor terminating D. Repeating and terminating
3	Multiplicative inverse of 0 is	A. 0 B. 1 C. + -1 D. Does not exist
4	The identity elements with respect to subtraction is	A. 0 B. 1 C. -1 D. Does not exist
5	Question Image	A. -x B. Infinite set C. {-4, 4} D. None of these
6	Question Image	A. $1/x$ B. -x C. 2x D. $0.5x$
7	Additive inverse of -a -b is	A. a B. -a + b C. a - b D. a + b
8	If a set S contains "n" elements then P (S) has number of elements	A. 2^{n+1} B. 2^{n-1} C. $2 \cdot n$ D. n^{2+1}
9	Multiplicative inverse of "1" is	A. + - 1 B. 0 C. 1 D. None of these
10	The set {-1, 1} is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division
11	Question Image	
12	The total number of subsets that can be formed out of the set {a, b, c} is	A. 1 B. 4 C. 8 D. 12
13	Question Image	A. A = B B. B = C C. A = C D. None of these
14	Question Image	A. 1 B. 12 C. 5 D. 29
15	Question Image	A. 3 B. 1 C. 2 D. 4
16	In set builder notation the set {0, 1, 2,, 100} can be written as	A. A

17	Question Image	<p>B. B</p> <p>C. A'</p> <p>D. None of these</p>
18	For any set B, $B \cup B'$ is	<p>A. Is set B</p> <p>B. Set B'</p> <p>C. Universal set</p> <p>D. None of these</p>
19	The set $(\mathbb{Z}, +)$ forms a group	<p>A. Forms a group w.r.t. addition</p> <p>B. Non commutative group w.r.t. multiplication</p> <p>C. Forms a group w.r.t multiplication</p> <p>D. Doesn't form a group</p>
20	The set (\mathbb{Q}, \cdot)	<p>A. Forms a group</p> <p>B. Does not form a group</p> <p>C. Contains no additive identity</p> <p>D. Contains no additive inverse</p>