

## ECAT Mathematics Chapter 2 Set, Functions and Groups

Sr	Questions	Answers Choice
1	If $D = \{a\}$ , the $P(D) =$	<p>A. <math>\{a\}</math>            B. <math>\{a\}</math>            C. <math>\{\emptyset, \{a\}\}</math>            D. <math>\{\emptyset, a\}</math></p>
2	$\{1, 2, 3, 4, \dots\}$ is set of _____	<p>A. Natural numbers            B. Whole numbers            C. Integers            D. Rational numbers</p>
3	Which conjunction is not true ?	
4	Question Image <input style="width: 150px; height: 20px;" type="text"/>	
5	Multiplicative inverse of "1" is	<p>A. 0            B. -1            C. 1            D. <math>\{0, 1\}</math></p>
6	The identity elements with respect to subtraction is	<p>A. 0            B. 1            C. -1            D. Does not exist</p>
7	Let A,B and C be any sets such that $A \cup B = A \cup C$ and $A \cap B = A \cap C$ then	<p>A. <math>A = B</math>            B. <math>B = C</math>            C. <math>A \neq C</math>            D. <math>A \neq B</math></p>
8	Question Image <input style="width: 150px; height: 20px;" type="text"/>	
9	The many subset can be formed from the set $\{a,b,c,d\}$	<p>A. 8            B. 4            C. 12            D. 16</p>
10	If $f: A \rightarrow B$ is an injective function and second elements of no two of its ordered pairs are equal, then f is called	<p>A. 1-1 and onto            B. Bijective            C. 1-1 and into            D. None of these</p>
11	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.	<p>A. 45            B. 30            C. 25            D. 50</p>
12	0 is a symbol of	<p>A. singleton set            B. Empty set            C. Equivalent set            D. Infinite set</p>
13	Question Image <input style="width: 150px; height: 20px;" type="text"/>	<p>A. 3            B. 1            C. 2</p>

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- 14 For any set B,  $B \cup B'$  is
- A. Is set B
  - B. Set B'
  - C. Universal set
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- 15 The complement of set A relative to universal set U is the set
- A.  $\{x / x \in A \wedge x \in U\}$
  - B.  $\{x / x \notin A \wedge x \in U\}$
  - C.  $\{x / x \in A \text{ and } x \notin U\}$
  - D. A-U
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- 16 The set of first elements of the ordered pairs in a relation is called its
- A. domain
  - B. range
  - C. relation
  - D. function
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- 17
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- 18 Which of the following is the subset of all sets
- A.  $\Phi$
  - B.  $\{1,2,3\}$
  - C.  $\{\Phi\}$
  - D.  $\{0\}$
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- 19
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- 20  $\{1, 2, 3\}$  is \_\_\_\_\_
- A. an infinite set
  - B. A finite set
  - C. A singleton set
  - D. Universal set
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