

ECAT Pre General Science Mathematics Chapter 2 Set, Functions and Groups Online Test

Sr	Questions	Answers Choice
1	Every subset of a finite set is	A. Disjoint B. Null C. Finite D. Infinite
2	0 is a symbol of	A. singleton set B. Empty set C. Equivalent set D. Infinite set
3	The number of subsets of $B = \{1,2,3,4,5\}$	A. 10 B. 32 C. 16 D. 5
4	The number of proper subset of $A = \{a,b,c,d\}$ is	A. 3 B. 6 C. 8 D. 15
5	The many subset can be formed from the set $\{a,b,c,d\}$	A. 8 B. 4 C. 12 D. 16
6	The number of subset of $\{0\}$ is	A. 1 B. 2 C. 3 D. None
7	If $E = \{ \}$, then $P(E)$	A. \emptyset B. $\{ \}$ C. $\{(2),(4),(6),\dots\}$ D. $\{\emptyset\}$
8	If $D = \{a\}$, the $P(D) =$	A. $\{a\}$ B. $\langle p \text{ class="MsoNormal"><!--[if gte msEquation 12]><m:oMathPara><m:oMath><i style='mso-bidi-font-style:normal'><m:r><</m:r></i></m:oMath></m:oMathPara><![endif--><!--[!msEquation]--><!--[if gte vml 1]><v:shapetype id=" _x0000_t75" coordsize="21600,21600" o:spt="75" o:preferrelative="t" path="m@4@5l@4@11@9@11@9@5xe" filled="" stroked=""> <v:stroke jointstyle="miter"/> <v:formulas> <v: eqn="if lineDrawn pixelLineWidth 0"/> <v: f eqn="sum @0 1 0"/> <v: f eqn="sum 0 0 @1"/> <v: f eqn="prod @2 1 2"/> <v: f eqn="prod @3 21600 pixelWidth"/> <v: f eqn="prod @3 21600 pixelHeight"/> <v: f eqn="sum @0 0 1"/> <v: f eqn="prod @6 1 2"/> <v: f eqn="prod @7 21600 pixelWidth"/> <v: f eqn="sum @8 21600 0"/> <v: f eqn="prod @7 21600 pixelHeight"/> <v: f eqn="sum @10 21600 0"/> </v:formulas> <v:path o:extrusionok="f" gradientshapeok="t" o:connecttype="rect"/> <o:lock v:ext="edit" aspectratio="t"/> </v:shapetype><v:shape id=" _x0000_i1025" type="# _x0000_t75" style="width:6.75pt; height:14.25pt"> <v:imagedata src="file:///C:/Users/Softsol/AppData/Local/Temp/msohtmlclip/1/01/clip_image001.png" o:title="" chromakey="white"/> </v:shape><![endif--><!--[if !vml]--><!--[endif]--><!--[endif]--><o:p></o:p></p></div></td><td style="vertical-align: top;">C. \{\emptyset, \{a\}\}D. \{\emptyset, a\}$
9	The set of even prime numbers is	A. $\{2,4,6,8,10\}$ B. $\{2,4,6,8,10,12\}$ C. $\{1,3,5,7,9\}$ D. $\{2\}$
10	If $A \subseteq B$, and B is a finite set, then	A. $n(A) \leq n(B)$ B. $n(B) \leq n(A)$ C. $n(A) \leq n(B)$ D. $n(A) \geq n(B)$
11	If $A = \{2m/m^3 = 8, m \in \mathbb{Z}\}$ then $A =$	A. $\{1,8,27\}$ B. $\{4\}$ C. $\{2,4,6\}$ D. $\{2,16,54\}$

12	If $O = \{1,3,5,\dots\}$, then $n(O) =$	A. Infinite B. Even numbers C. odd integers D. 99
13	If $B = \{x \in \mathbb{Z} \mid -3 < x < 6\}$, then $n(B) =$	A. 5 B. $\{-3,-2,-1,0,1,2,3,4,5,6\}$ C. 8 D. 9
14	If $a = \{2m/2m < 9, m \in \mathbb{P}\}$, the $(nA) =$	A. $\{2,3,4,5,6,7,8\}$ B. $\{2,4,6,8,\dots,16\}$ C. $\{4, 6\}$ D. $\{2,3,5,7\}$
15	If $C = \{p \mid p < 18, p \text{ is a prime number}\}$, then $C =$	A. $\{2,3,4,\dots,17\}$ B. $\{2,4,6,8,\dots,16\}$ C. $\{1,3,5,7,9,11,13,15,17\}$ D. $\{3,6,9,12,15\}$
16	If $A = \{x \mid x \text{ is a positive integer and } 4 \leq x < 23\}$, then $A =$	A. $\{1,2,3,4,5,6,7\}$ B. $\{4,5,6,\dots,22\}$ C. $\{1,2,3,\dots,23\}$ D. $\{1,2,3,4,5\}$
17	\mathbb{Z} is a	A. Infinite set B. Finite set C. Singleton set D. Set of all integers
18	$\{0\}$ is a	A. Empty set B. Singleton set C. Zero set D. Null Set
19	Every set is an improper subset of	A. Empty set B. Equivalent set C. Itself D. Singleton set
20	Empty set is	A. Not subset of every set B. Finite set C. Infinite set D. Not the member of real numbers
21	if $A = \{x \in \mathbb{Q} \mid 0 < x < 1\}$, the A is	A. Infinite set B. Finite set C. Set of rational numbers D. Set of real numbers
22	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. $A \sim B$
23	$P \notin A$ means	A. P is subset of A B. P is an element of A C. P does not belongs to A D. A does not element of P
24	The set of months in a year beginning with S.	A. $\{\text{September, October, November}\}$ B. Singleton set C. Null set D. Empty set
25	$A = B$ 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
26	If $P = \{x \mid x = p/q \text{ where } p, q \in \mathbb{Z} \text{ and } q \neq 0\}$, then P is the set of	A. Irrational numbers B. Even numbers C. Rational numbers D. Whole numbers
27	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
28	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
29	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)

C. $T =$ (First six real numbers)
D. $T =$ (First six even numbers)

30 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
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