

## ECAT Mathematics Chapter 23

Sr	Questions	Answers Choice
1	Every subset of a finite set is	A. Disjoint B. Null <b>C. Finite</b> D. Infinite
2	0 is a symbol of	A. singleton set <b>B. Empty set</b> C. Equivalent set D. Infinite set
3	The number of subsets of B = {1,2,3,4,5}	A. 10 <b>B. 32</b> C. 16 D. 5
4	The number of proper subset of A = {a,b,c,d} is	A. 3 B. 6 C. 8 <b>D. 15</b>
5	The many subset can be formed from the set {a,b,c,d}	A. 8 B. 4 C. 12 <b>D. 16</b>
6	The number of subset of {0} is	A. 1 <b>B. 2</b> C. 3 D. None
7	If E = { }, then P(E)	A. $\emptyset$ B. { } C. {(2),(4),(6),...} <b>D. (<math>\emptyset</math>)</b>
8	If D = {a} , the P(D) =	A. {a} B. <p class="MsoNormal"><!--[if gte msEquation 12]><m:oMathPara><m:oMath><i style="mso-bidi-font-style: normal"><span style='font-family: "Cambria Math", serif; mso-bidi-font-family: Calibri; mso-bidi-theme-font: minor-latin'><m:r> $\emptyset$ </m:r></span></i></m:oMath></m:oMathPara><![endif]--><!--[if !msEquation]--><span style="line-height: 107%;"><!--[if gte vml 1]><v:shapetype id="_x0000_t75" coordsize="21600,21600" o:spt="75" o:preferrelative="t" path="m@4@5@4@11@9@11@9@5xe" filled="f" stroked="f"> <v:stroke joinstyle="miter"/> <v:formulas> <v:f 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:image data-bbox="111 111 923 798" src="file:///C:/Users/Softsol/AppData/Local/Temp/msoshmlclip1/01/clip_image001.png" o:title="" chromakey="white"/> </v:shape><!--[endif]--><!--[if !vml]--><!--[endif]--></span><!--[endif]--><o:p></o:p></p>
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} <b>D. {2}</b>
10	If $A \subseteq B$ , and B is a finite set, then	A. $n(A) < n(B)$ B. $n(B) < n(A)$ <b>C. <math>n(A) \leq n(B)</math></b> D. $n(A) \geq n(B)$
11	If $A = \{2m/m^3 = 8, m \in \mathbb{Z}\}$ then $A = \boxed{\quad}$	A. {1,8,27} <b>B. {4}</b> C. {2,4,6} D. {2,16,54}

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- 12 If  $O = \{1, 3, 5, \dots\}$ , then  $n(O) =$
- A. Infinite  
B. Even numbers  
C. odd integers  
D. 99
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- 13 If  $B = \{x/x \in \mathbb{Z} \wedge -3 < x < 6\}$ , then  $n(B) =$
- A. 5  
B.  $\{-3, -2, -1, 0, 1, 2, 3, 4, 5, 6\}$   
C. 8  
D. 9
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- 14 If  $a = \{2m/2m < 9, m \in p\}$ , then  $(n A) =$
- A.  $\{2, 3, 4, 5, 6, 7, 8\}$   
B.  $\{2, 4, 6, 8, \dots, 16\}$   
C. {4, 6}  
D. {2, 3, 5, 7}
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- 15 If  $C = \{p/p < 18, p \text{ is a prime number}\}$ , 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}
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- 16 If  $A = \{x/x \text{ is a positive integer and } 4 \leq x < 23\}$ , then  $A =$
- A. {1, 2, 3, 4, 5, 6, 7}  
B. {4, 5, 6, ..., 22}  
C. {1, 2, 3, ..., 23}  
D. {1, 2, 3, 4, 5}
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- 17  $Z$  is a
- A. Infinite set  
B. Finite set  
C. Singleton set  
D. Set of all integers
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- 18  $\{0\}$  is a
- A. Empty set  
B. Singleton set  
C. Zero set  
D. Null Set
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- 19 Every set is an improper subset of
- A. Empty set  
B. Equivalent set  
C. Itself  
D. Singleton set
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- 20 Empty set is
- A. Not subset of every set  
B. Finite set  
C. Infinite set  
D. Not the member of real numbers
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