

ECAT Mathematics Chapter 23

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. $\langle p \text{ class="MsoNormal"><!--[if gte msEquation 12]><m:oMathPara><m:oMath><i style='mso-bidi-font-style:normal'><m:r></m:r></i></m:oMath></m:oMathPara><![endif]><!--[if !msEquation]><!--[if gte vml 1]><v:shapetype id="_x0000_t75" coordsize="21600,21600" o:spt="75" o:preferrelative="t" path="m@4@5l@4@11@9@11@9@5xe" filled="f" stroked="f"><v:stroke joinstyle="miter"><v:formulas><v:f eqn="if lineDrawn pixelLineWidth 0"/><v:f eqn="sum @0 1 0"/><v:f eqn="sum 0 0 @1"/><v:f eqn="prod @2 1 2"/><v:f eqn="prod @3 21600 pixelWidth"/><v:f eqn="prod @3 21600 pixelHeight"/><v:f eqn="sum @0 0 1"/><v:f eqn="prod @6 1 2"/><v:f eqn="prod @7 21600 pixelWidth"/><v:f eqn="sum @8 21600 0"/><v:f eqn="prod @7 21600 pixelHeight"/><v:f eqn="sum @10 21600 0"/></v:formulas><v:path o:extrusionok="f" gradientshapeok="t" o:connecttype="rect"/><o:lock v:ext="edit" aspectratio="t"/></v:shapetype><v:shape id="_x0000_i1025" type="#_x0000_t75" style="width:6.75pt; height:14.25pt"><v:imagedata src="file:///C:/Users/Softsol/AppData/Local/Temp/msohtmlclip/1/01/clip_image001.png" o:title="" chromakey="white"/></v:shape><![endif]><!--[if !vml]><!--[endif]><!--[endif]><o:p></o:p></p>$ 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 $B = \{x/x \in \mathbb{Z} \wedge -3 < x < 6\}$, then $n(B) =$	A. 5 B. $\{-3, -2, -1, 0, 1, 2, 3, 4, 5, 6\}$ C. 8 D. 9
14	If $a = \{2m/2m < 9, m \in \mathbb{P}\}$, then $n(A) =$	A. $\{2, 3, 4, 5, 6, 7, 8\}$ B. $\{2, 4, 6, 8, \dots, 16\}$ C. $\{4, 6\}$ D. $\{2, 3, 5, 7\}$
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. $\{3, 6, 9, 12, 15\}$
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. $\{4, 5, 6, \dots, 22\}$ 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