ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	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
2	Question Image	
3	Two sets A and B are said to be disjoint if	
4	If D = {a} , the P(D) =	A. {a} B. <!--[if gte msEquation 12]><m:oMathPara><m:oMath><m:r>∅</m:r> </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/msohtmlclip1/01/clip_image001.png" o:title="" chromakey="white"/> </v:shape><![endif]--><!--[if !vml]--><img width="9" height="19" src="file:///C:/Users/Softsol/AppData/Local/Temp/msohtmlclip1/01/clip_image002.png" v:shapes="_x0000_i1025" style="font-family: Calibri, sans-serif; font-size: 11pt;">∅<!--[endif]--><!--[endif]--><o:p></o:p> C. {∅,{a}} D. {∅,a}
5	The set (Z, +) forms a group	A. Forms a group w.r.t. addition B. Non commutative group w.r.t. multiplication C. Forms a group w.r.t multiplication D. Doesn't form a group
6	Let A,B, and C be any sets such that A∪B = A∪C and A∩B = A∩C then	A. A≠ C B. B = C C. A = B D. A≠ B
7	The set of complex numbers forms	A. Commutative group w.r.t addition B. Commutative group w.r.t multiplication C. Commutative group w.r.t division D. Non commutative group w.r.t addition
8	Question Image	
9	If A⊆ B, and B is a finite set, then	A. n (a) < n(B) B. n(B)<(A) C. n(A)≤ n (B) D. n(A)≥ n(B)
10	The set {1,-1, i, -i} form a group under	A. Addition B. Multiplication C. Subtraction D. None
11	The set of integer is	A. Finite group B. A group w.r.t addition C. A group w.r.t multiplication D. Not a group
12	In set builder notation the set {0, 1, 2, ..., 100} can be written as	
13	Question Image	A. A B. B C. A'B' D. B'A

14	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
15	Onto function is also called	A. Binjective function B. Injective function C. Surjechive function D. None of these
16	The set of integer is	A. Finite group B. A group w.r.t addition C. A group w.r.t multiplication D. Not a group
17	The multiplicative inverse of -1 in the set {1-, 1} is	A. 1 B. -1 C. 0 D. Does not exist
18	Z is a	A. Infinite set B. Finite set C. Singleton set D. Set of all integers
19	The logic in which every statement is regarded as true or false and no other possibility is called	A. Aristotelian login B. Inductive logic C. Non-Aristotelian logic D. None of these
20	Z is the set of integers (Z.*) is a group with a * b = a +b +1, a,b ∈ G.then inverse of a is	A. -a B. a +1 C. -1-a D. None of these