ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	Question Image	
2	Question Image	A. A finite set B. An infinite set C. An empty set D. None of these
3	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
4	Question Image	A. square root function B. identity function C. linear function D. quadratic function
5	If f:A→B is an injective function and second elements of no two of its ordered pairs are equal, then f is called	A. 1-1 and onto B. Bijective C. 1-1 and into D. None of these
6	The set {1,-1,i,-i}	A. Form a group w.r.t addition B. Form a group w.r.t multiplication C. Does not form a group w.r.t multiplication D. Not closed under multiplication
7	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.	A. 45 B. 30 C. 25 D. 50
8	Which of the following sets in infinite	A. The set of students of your class B. The set of all schools in Pakistan C. The set of natural numbers between 3 and 10 D. The set of rational numbers between 3 and 10
9	A conjunction of two statement p and q is true only if	A. p is true B. q is true C. Both p and q are true D. both p and q are false
10	If n(A) = n then n(P(A)) is	A. 2n B. n² C. n/2 D. 2ⁿ
11	The function f{(x, y) | y = ax^2+ bx + c} is	A. One-one function B. Constant function C. Onto function D. Quadratic function
12	If D = {a} , the P(D) =	A. {a} B. <p class="MsoNormal"><!--[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></p> C. {∅,{a}} D. {∅,a}
13	Under multiplication, solution set of is	A. Groupoid B. Abelian group C. Semi group D. All of these
14	The set {1, -1, 1, -1}, form a group under	A. Addition B. Multiplication C. Subtraction D. None
15	Question Image	A. A B. A' C. U D. None of these
16	If a 1-1 correspondence can be established b/w two sets A and B, then they are called	A. Equal sets B. Equivalent sets C. Over lapping sets D. None of these
17	Multiplicative inverse of "1" is	A. 0 B. -1 C. 1 D. {0, 1}
18	Multiplicative inverse of "1" is	A. +- 1 B. 0 C. 1 D. None of these
19	Which of the following has the same value as i113	A. i B. -1 C. -i D. 1
20	Group of none-singular matrices under multiplication is	A. None-Abelian group B. Semi group C. Abelian group D. None of these