ECAT Mathematics Chapter 2 Set Function and Groups

Sr	Questions	Answers Choice
1	If A and B are two sets then any subset R of A x B is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
2	For any set B, BUB' is	A. Is set B B. Set B' C. Universal set D. None of these
3	If A and B are two sets then any subset R of B x A is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
4	Question Image	A. Evert element of A is in B B. Every element of B is in A C. Every element of A is in B' D. Every element of A is in A
5	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
6	Question Image	A. square root function B. identity function C. linear function D. quadratic function
7	Let A and B be two sets. If every element of A is also an element of B then	
8	Question Image	A. A is proper subset of B B. A is an improper subset of B C. A is equivalent to B D. B is subset of A
9	The set {x +iy / x, y ∈ Q} forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Both addition and multiplication
10	The set {1, -1, 1, -1}, form a group under	A. Addition B. Multiplication C. Subtraction D. None
11	The set {{a,b}} is	A. Infinite set B. Singleton set C. Two points set D. None
12	For any two sets A and, A ⊆ B if	A. x ∈ A ⇒ x ∈ B B. x ∉ A ⇒ x ∉ B C. x ∈ A ⇒ x ∉ B D. None of these
13	G = {e, a, b, c} is an Abelian group with e as identity element The order of the other elements are	A. 2,2,2 B. 3,3,3 C. 2,2,4 D. 2,3,4
14	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
15	The contra positive of p → q is	A. q → p B. ~q→~q C. ~p→~q D. None of these
16	Question Image	

17	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}
18	The multiplicative inverse of -1 in the set {1-,1} is	A. 1 B. -1 C. ±1 D. 0 E. Does not exist
19	For any set X, X∪X is	A. X B. X' C. Φ D. Universal Set
20	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