Mathematics ECAT Pre Engineering Chapter 2 Set, Functions and Groups Online Test

Sr	Questions	Answers Choice
1	The set of months in a year beginning with S.	A. {September, October, November} B. Singleton set C. Null set D. Empty set
2	Question Image	A. An empty set B. Universal set C. A singleton set D. None of these
3	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
4	A = B if	D. A is equivalent to B
5	Question Image	
6	Identity w.r.t intersection in a power set of any set is	A. $\varnothing$ B. Set itself C. Singleton set D. {0}
7	Decimal part of irrational number is	A. Terminating B. Repeating only C. Neither repeating nor terminating D. Repeating and terminating
8	Question Image	
9	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
10	{x : xε Z and x < 1} is	A. Singleton set B. A set with two points C. Empty set D. None of these
11	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
12	Group of none-singular matrices under multiplication is	A. None-Abelian group B. Semi group C. Abelian group D. None of these
13	Empty set is	A. Not subset of every set B. Finite set C. Infinite set D. Not the member of real numbers
14	If n(A) = n then n(P(A)) is	A. 2n B. n^2 C. n/2 D. 2^n
15	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
16	The set {1,-1, i, -i} form a group under	A. Addition B. Multiplication C. Subtraction D. None
17	The set of rational numbers is subset of	A. The set of natural numbers B. The set of real numbers C. The set of integers D. The set of whole numbers

		D. The set of whole numbers
18	Question Image	A. 1 B. 12 C. 5 D. 29
19	Question Image	A. Conclusion B. Implication C. Antecedent D. Hypothesis
20	The set R is _____ w.r.t subtraction	A. Not a group B. A group C. No conclusion drawn D. Non commutative group
21	If B-A≠φ , then n(B-A) is equal to	A. n(a)+n(c) B. n(c)-n(a) C. n(a)-n(c) D. None of these
22	The set of natural is a semi group w.r.t	A. Addition B. Division C. Subtraction D. None of these
23	Question Image	A. A onto B B. both a & c C. A into B D. none of these
24	If S = {3,6,9,12.......}, then	A. S = Four multiples of 3 B. S = Set of even numbers C. S = Set of prime numbers D. S = All multiples of 3
25	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
26	The statement that a group can have more than one identity elements is	A. True B. False C. Ambiguous D. Some times true
27	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
28	Question Image	D. None of these
29	The complement of set A relative to universal set U is the set	A. {x / x∈ A∧ x∈ U} B. {x / x∉ A∧ x ∈ U} C. {x / x∈ A and x ∉ U} D. A-U
30	Question Image	A. -x B. Infinite set C. {-4, 4} D. None of these
31	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
32	Question Image	
33	Question Image	
34	If A ⊆ B then A ∪ B is	A. A B. B C. A' D. A ∩B
35	The set X is	A. Proper Subset of X B. Not A subset of X C. Improper Subset of X D. None of these
36	Question Image	D. none of these
37	The set {-1,1} is closed under the binary operation of	A. Addition B. Multiplication C. Subtraction D. Division

D. Division

38	Question Image	A. a constant function B. linear function C. quadratic funtion D. none of these
39	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
40	The set of complex numbers forms a group under the binary operation of	A. Addition B. none of these C. Division D. Subtraction
41	Z is a	A. Infinite set B. Finite set C. Singleton set D. Set of all integers
42	Which of the following sets is finite	A. The set of natural numbers between 3 and 10 B. The set of rational numbers between 3 and 10 C. The set of real numbers between 0 and 1 D. The set of rational numbers between 0 and 1
43	Question Image	
44	Question Image	B. A C. A' D. U
45	Power set of X i.e P(X) _____ under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
46	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
47	The multiplicative inverse of -1 in the set {1-,1} is	A. 1 B. -1 C. ±1 D. 0 E. Does not exist
48	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
49	Power set of difference set N-W is	A. Empty set B. Infinite set C. Singleton set D. {0,∅}
50	Question Image	A. A B. A' C. U D. None of these
51	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
52	Question Image	
53	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'><m:r>∅</m:r></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@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"

C. {∅,{a}}
D. {∅,a}

54	The multiplicative inverse of x such that x = 0 is	A. -x B. Does not exist C. 1/x D. ±1
55	Question Image	A. 1/x B. -x C. 2x D. 0.5 x
56	The set {x|x∈N∧x-4=0} in tabular form is	A. {-4} B. {0} C. {} D. None of these
57	The function f{(x, y) | y = ax^2+ bx + c} is	A. One-one function B. Constant function C. Onto function D. Quadratic function
58	To each element of a group there corresponds _____ inverse element	A. Two B. One C. No D. Three
59	If p and q are two statements then their conjunction is denoted by	
60	The set {-1,1} is	A. Group under the multiplication B. Group under addition C. Does not form a group D. Contains no identity element
61	A∪(A∪B)= --------------------	A. B B. A C. A∪B D. None of these
62	The negation of given number is a	A. Binary operation B. Unary operation C. Relation D. None of these
63	The number of different ways of describing a set is	A. One B. Two C. Three D. Four
64	Question Image	A. A = B B. B = C C. A = C D. None of these
65	If there is one-one correspondence between A and B, then we write.	A. A = B B. A⊆ B C. A⊇ B D. A ~ B
66	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
67	The number of subsets of a set having three elements is	A. 4 B. 6 C. 8 D. none of these
68	The set of complex numbers forms a group under the binary operation of	A. Addition B. Multiplication C. Division D. Subtraction
69	Question Image	A. square root function B. identity function C. linear function D. quadratic function
70	The number of proper subset of A ={a,b,c,d} is	A. 3 B. 6

	The number of proper subset of A = {a,b,c,d} is	C. 8 D. 15
71	The set {{a,b}} is	A. Infinite set B. Singleton set C. Two points set D. None
72	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
73	The set of whole numbers is subset of	A. The set on integers B. The set of natural numbers C. {1, 3, 5, 7, ...} D. The set of prime numbers
74	Question Image	A. A B. A' C. U D. A A'
75	The set of the first elements of the orders pairs forming a relations is called its	A. Relation in B B. Range C. Domain D. Relation in A
76	If n(X) = 18, n(X∩Y) = 7, n(X∪ Y) = 40 then n(Y) =	A. 1 B. 12 C. 5 D. 29
77	A conditional "if p then q" is denoted by	
78	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
79	Question Image	
80	Question Image	A. A B. B C. A'B' D. B'A
81	Question Image	
82	The set {1, -1, 1, -1}, form a group under	A. Addition B. Multiplication C. Subtraction D. None
83	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
84	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
85	A set having only one element is called	A. An empty set B. Universal set C. A singleton set D. A power set
86	The negation of a number	A. a relation B. a function C. unary operation D. binary operation
87	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
88	Question Image	D. none of these
89	If A∩B=B, then n(A∩B) is equal to	A. n(a) B. n(a)+n(c) C. n(c) D. None of these
90	Question Image	

91	The many subset can be formed from the set {a,b,c,d}	A. 8 B. 4 C. 12 D. 16
92	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
93	Which of the following is the definition of singleton	A. The objects in a set B. A set having no element C. A set having no subset D. None of these
94	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
95	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
96	Question Image	A. A B. B C. U D. None of these
97	Write down the power set of {9, 11}	
98	If p and q are two statements then their biconditional 'p if q' is denoted by	
99	A conditional is regarded as false only when the antecedent is true and consequent is	A. True B. False C. Known D. Unknown
100	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
101	If a = {2m/2m < 9 ,m€ p} , the (n A) =	A. {2,3,4,5,6,7,8} B. {2,4,6,8............16} C. { 4, 6} D. {2,3,5,7}
102	Φ set is the _____ of all sets	A. Subset B. Union C. Universal D. Intersection
103	Multiplicative inverse of "1" is	A. 0 B. -1 C. 1 D. {0, 1}
104	Question Image	A. 4 B. 3 C. 2 D. 1
105	Multiplicative inverse of "1" is	A. +- 1 B. 0 C. 1 D. None of these
106	Question Image	A. A B. B C. U D. None of these
107	Question Image	A. a-b=ab B. ab=a C. a+b=ab
108	The set {Z\{0}} is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
109	The complement of set A relative to universal set U is the set	
110	Question Image	

111	The sets {1, 2, 4} and {4, 6, 8, 10} are	A. Equal sets B. Equivalent sets C. Disjoint sets D. Over lapping sets
112	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
113	(A∪B)∪C= -------------------------	A. A∩B(B∪C) B. A∪(B∪C) C. A∪(B∩C) D. None of these
114	The statement that a group can have more than one identity elements is	A. True B. False C. Fallacious D. Some times true
115	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
116	The set of all positive even integers is	A. Not a group B. A group w.r.t subtraction C. A group w.r.t division D. A group w.r.t multiplication
117	The set of integers is a subset of	A. The set of natural numbers B. The set of whole numbers C. The set of prime numbers D. The set of rational numbers
118	The set of the first elements of the orders pairs forming a relation is called its	A. Relation in B B. Range C. Domain D. Relation In A
119	{0} is a	A. Empty set B. Singleton set C. Zero set D. Null Set
120	Question Image	D. None of these
121	If we have a statement "if p then q" then q is called	A. Conclusion B. Implication C. Unknown D. Hypothesis
122	(A ∩ B)c =	A. A∩ B B. (A ∪ B)c C. Ac∪Bc D. Φ
123	Question Image	
124	The set {Z\ {0} } is group w.r.t	A. Addition B. Multiplication C. Division D. Subtraction
125	Question Image	
126	Question Image	
127	The number of subsets of B = {1,2,3,4,5}	A. 10 B. 32 C. 16 D. 5
128	Given X,Y are any two sets such that number of elements in set X = 28, number of elements in set Y = 28, and number of elements in set X∪Y = 54, then number of elements in set X∩Y =	A. 4 B. 3 C. 2 D. 1
129	If B⊆ A, then complement of B in A is = ----------------------	A. A-B B. A∩B C. B-A D. A∪B
130	In set builder notation the set {0, 1, 2, ..., 100} can be written as	
		A. A set is a collection of non-empty object

131	Which of the following statement is true?	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
132	If 0 = {1,3,5.......}, then n (0) =	A. Infinite B. Even numbers C. odd integers D. 99
133	*P∉ A means*	A. <i>P</i>is subset of A B. <i>P</i>is an element of A C. <i>P does not belongs to A</i> D. A does not element of <i>P</i>
134	A function in which the second elements of the order pairs are distinct is called	A. Onto function B. One-one function C. Identity function D. Inverse function
135	The set { {a,b} } is	A. Infinite set B. Singleton set C. Two points set D. Empty set
136	Question Image	A. n(A) B. n(B) C. 0 D. 1
137	The set of natural numbers is a subset of	A. {1, 2, 3, ... 100} B. The set of whole numbers C. {2, 4, 6, 8, ...} D. None of these
138	The multiplicative inverse of -1 in the set {1-, 1} is	A. 1 B. -1 C. 0 D. Does not exist
139	Which conjunction is not true ?	
140	(A∩Bc)c= ------------------------	A. Ac∪Bc B. Ac∪B C. Ac∩B D. None of these
141	Question Image	
142	Question Image	A. Singleton set B. A set with two points C. Empty set D. None of these
143	Question Image	A. A B. A' C. U D. None of these
144	Onto function is also called	A. Binjective function B. Injective function C. Surjechive function D. None of these
145	*Φ*set is the _____ of all sets?	A. Subset B. Union C. Universal D. Intersection
146	The set { {a, b} } is	A. Infinite set B. Singleton set C. Two points set D. Empty set
147	Question Image	A. Addition B. Multiplication C. Division D. Both addition and multiplication
148	The graph of a quadratic function is	A. Circle B. Straight line C. Parabola D. Triangle
149	{x|x∈ R∧x≠x} is a	A. Infinite set B. Null set C. Finite set D. None of these

150	{1, 2, 3} is _____	A. an infinite set B. A finite set C. A singleton set D. Universal set
151	Question Image	
152	The total number of subsets that can be formed out of the set {a, b, c} is	A. 1 B. 4 C. 8 D. 12
153	Question Image	A. Biconditional B. Implication C. Antecedent D. Hypothesis
154	0 is a symbol of	A. singleton set B. Empty set C. Equivalent set D. Infinite set
155	The set of first elements of the ordered pairs in a relation is called its	A. domain B. range C. relation D. function
156	Question Image	
157	Question Image	
158	For any set X, X∪X is	A. X B. X' C. Φ D. Universal Set
159	If B ={x/x€ Z ^ - 3 < x < 6}, then n (B) =	A. 5 B. {-3,-2,-1,0,1,2,3,4,5,6} C. 8 D. 9
160	The set of the first elements of the ordered pairs forming a relation is called its	A. Function on B B. Range C. Domain D. A into B
161	If the intersection of two sets is non-empty, but either is a subset of other are called	A. Disjoint sets B. Over lapping C. Equal sets D. None of these
162	The extraction of cube root of a given number is a	A. Unary Operation B. Binary Operation C. Relation D. None of these
163	The set which has no proper subset is	A. {0} B. {} C. {∅} D. None of these
164	Question Image	
165	Let A,B and C be any sets such that A∪B = A∪C and A∩ B = A∩ C then	A. A = B B. B = C C. A≠ C D. A ≠ B
166	The graph of a linear function is	A. a circle B. triangle C. a straight line D. none of these
167	Two sets A and B are said to be disjoint if	
168	To each element of a group there corresponds .... inverse element	A. Two B. One C. No D. Three
169	The identity element of a set X with respect to intersection in P(x) is	A. X B. Does not exist C. ∅ D. None of these
170	The set {-1, 1} is	A. Group under the multiplication B. Group under addition C. Does not form a group

		D. Contains no identity element
171	Every subset of a finite set is	A. Disjoint B. Null C. Finite D. Infinite
172	Multiplicative inverse of 0 is	A. 0 B. 1 C. +-1 D. Does not exist
173	Question Image	
174	Which of the following has the same value as i113	A. i B. -1 C. -i D. 1
175	The set of real numbers is a subset of	A. The set of natural numbers B. The set of rational numbers C. The set of integers D. The set of complex numbers
176	{1, 2, 3, 4,.....} is set of _____	A. Natural numbers B. Whole numbers C. Integers D. Rational numbers
177	Question Image	
178	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
179	What is the number of elements of the power set of {0, 1}	A. 1 B. 2 C. 3 D. 4
180	The function {f(x,y)|y = ax2 +bx +c} is	A. One-one function B. Constant function C. Onto function D. Quadratic function
181	if A = (x/x€ Q∧ 0 < x < 1}, the A is	A. Infinite set B. Finite set C. Set of rational numbers D. Set of real numbers
182	Question Image	
183	Let A and B be two sets. If every element of A is also an element of B then	
184	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
185	The set (Q, .)	A. Forms a group B. Does not form a group C. Contains no additive identity D. Contains no additive inverse
186	If A is a subset of B and B contains at least one element which is not an element of A, then A is said to be	A. Improper subset of B B. Super set of B C. Proper subset of B D. None of these
187	Which of the following is the subset of all sets?	
188	For any set B,B∪B' is	A. Is set B B. Set B' C. Universal set
189	Question Image	A. An empty set B. Universal set C. A singleton set D. None of these
190	Question Image	A. A B. B C. A' D. None of these
191	Question Image	

192	Which of the following is the subset of all sets	A. Φ B. {1,2,3} C. {Φ} D. {0}
193	The number of subset of {0} is	A. 1 B. 2 C. 3 D. None
194	If A and B are two sets then intersection of A and B is denoted by	
195	Question Image	A. Addition B. Subtraction C. Multiplication D. None of these
196	The identity elements with respect to subtraction is	A. 0 B. 1 C. -1 D. Does not exist
197	Question Image	A. A = C B. A = B C. B = C D. None of these
198	The set of the first elements of the ordered pairs forming a relation is called its	A. Function on B B. Range C. Domain D. A into B
199	For a set A, A∪Ac= ---------------------	A. A B. ∅ C. Ac D. U
200	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}
201	If a set S contains "n" elements then P (S) has ...... number of elements	A. 2^n B. 2^{2n} C. 2 . n D. n^2
202	If T = {2,4,6,8,10,12}, then	A. T = (First six natural numbers) B. T = (First six odd numbers) C. T = (First six real numbers) D. T = (First six even numbers)
203	Question Image	
204	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. -2 -a D. None of these
205	Question Image	A. 3 B. 1 C. 2 D. 4
206	If E = { } , then P(E)	A. ∅ B. { } C. {(2),(4),(6)....} D. (∅)
207	A - B = _____	
208	The geometrical representation of a linear function is	A. Circle B. Parabola C. Straight lie D. None of these
209	The multiplicative inverse of -1 in the set {1-, 1} is	A. 1 B. -1 C. +-1 D. 0
210	Additive inverse of -a -b is	A. a B. -a + b C. a - b D. a + b

211	A statement which is either true or false is called	A. Induction B. Deduction C. Propositicon D. Logic
212	Every set is an improper subset of	A. Empty set B. Equivalent set C. Itself D. Singleton set
213	In a school, there are 150 students. Out of these 80 students enrolled for mathematics class, 50 enrolled for English class, and 60 enrolled for Physics class. The students enrolled for English cannot any other class, but the students of mathematics and Physics can take two courses at a time. Find the number of students who have taken both physics and mathematics	A. 40 B. 30 C. 50 D. 20
214	If A = {x/x is a positive integer and 4≤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}
215	A function whose range is just one element is called	A. One-one function B. Constant function C. Onto function D. Identity function
216	For any set B, BUB' is	A. Is set B B. Set B' C. Universal set D. None of these
217	Z is a group under	A. Subtraction B. Multiplication C. Addition D. None of these
218	If A = {2m/m³= 8 , m€ Z} then A = ☐	A. {1,8,27} B. {4} C. (2,4,6) D. {2,16,54}
219	If A=B, then	A. A⊂B and B⊂A B. A⊆B and B⊈A C. A⊆B and B⊆A D. None of these
220	Given X,Y are any two sets such that number of elements in X = 18, number of elements in set Y = 24,and number of elements in set X∪ Y =40,then number of elements in set x∩ Y =	A. 3 B. 1 C. 2 D. 4
221	The contra positive of p → q is	A. q → p B. ~q→~q C. ~p→~q D. None of these
222	If A is a set then any subset R of A x A is called	A. relation on A B. relation on B C. relation from A to B D. relation from B to A
223	Which symbolic notation represent unary operation ?	A. - B. ∨ C. ∧ D. ⇔
224	Question Image	
225	Question Image	A. A finite set B. An infinite set C. An empty set D. None of these
226	A monoid (G, *) is said to be group if	A. have identity element B. is commutative C. have inverse of each element D. None of these
227	A disjunction of two statement p and q is true	A. p is false B. q is false C. Both p and q are false D. One of p and q is true
	The set {-1, 1} is closed under the binary	A. Addition B. Multiplication

228	operation of	C. Subtraction D. Division
229	The set (Z, +) forms a group	A. Forms a group w.r.t addition B. Forms a group w.r.t multiplication C. Non commutative group w.r.t multiplication D. Doesn't form a group
230	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
231	The function whose range consists of just one element is called	A. One-One Function B. Identity Function C. Onto Function D. Constant Function
232	If x = 1/x for x ∈ R then the value of x is	A. ±1 B. 0 C. 2 D. 4
233	The multiplicative inverse of x such that x = 0 is	A. -x B. does not exist C. 1/x D. 0
234	If P = {x/x = p/q where p,q ∈ Z and q≠ 0}, then P is the set of	A. Irrational numbers B. Even numbers C. Rational numbers D. Whole numbers
235	The set Q	A. Forms a group under addition B. Does not form a group C. Contains no additive indentity D. Contains no additive inverse
236	Question Image	A. A B. A' C. U D. U'
237	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)
238	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
239	A function whose range is just one elements is called	A. One-one function B. Constant function C. Onto function D. Identity function
240	What is the number of elements of the power set of { }	A. 0 B. 1 C. 2 D. 3
241	If #n = (n-5)^2+ 5, then find #3 x #4.	A. 54 B. 12 C. 4 D. 9
242	The set R is ....w.r.t subtraction	A. Not a group B. A group C. No conclusion drawn D. Non commutative group
243	If z1 = 2 + 6i and z2 = 3 + 7i then which expression defines the product of z1 and z2	A. 36 +(-32)i B. -36+32i C. 6+(-11)i D. 0, +(-12)i
244	The set {{a,b}} is	A. Infinite set B. Singleton set C. Two points set D. None
245	Question Image	A. Natural numbers B. Whole numbers C. Integers D. Rational numbers

246	If C={p/p < 18, p is a prime number}, then C =	A. {2,3,4,.........17} B. {2,4,6,8.................16} C. {1,3,5,7,9,11,13,15,17} D. {3,6,9,12,15}
247	If P is a proposition then its negative is denoted by	
248	Power set of X i.e P(X).........under the binary operation of union U	A. Forms a group B. Does not form a group C. Has no identity element D. Infinite set although X is infinite
249	The set of all positive even integers is	A. Not a group B. A group w.r.t. subtraction C. A group w.r.t. division D. A group w.r.t. multiplication
250	Under multiplication, solution set of is	A. Groupoid B. Abelian group C. Semi group D. All of these