

Mathematics ECAT Pre Engineering Chapter 1 Number System Online Test

Sr	Questions	Answers Choice
1	$i^3 =$	A. -1 B. i C. -i D. 1
2	Gooch crucible is made of :	A. Brass. B. Porcelain. C. Bronze. D. Gold.
3	$\sqrt{25}$ is a number	A. Rational B. Irrational C. Natural D. Odd
4	$\frac{3}{4}$ is _____	A. An odd number B. An even number C. A natural number D. A rational number
5	In $(x + iy) \times$ is the known as	A. Imaginary part of complex number B. Real part of complex number C. Complex number D. None of above
6	$i^{101} =$	A. i B. $i^{>2}$ C. -i D. -1
7	$i^3 =$	A. -1 B. i C. -i D. 1
8	Question Image	
9	The set $\{1, 2, 3, 4, \dots\}$ is called	A. Set of Natural numbers B. Set of whole numbers C. Set of rational number D. Set of irrational numbers
10	A non-terminating non-recurring decimal represents an	A. Irrational no B. Both a & c C. Rational no D. None of these
11	O is _____	A. A positive integer B. A negative integer C. A natural number D. An integer
12	$(7, 9) + (3, -5) =$	A. (4, 4) B. (10, 4) C. (9, -5) D. (7, 3)
13	A non-terminating, non-recurring decimal represent	A. A natural number B. A rational number C. An irrational number D. A prime number
14	Every natural number is	A. A prime number B. An irrational number C. An integer D. An even number
15	Question Image	
16	Question Image	
17	$Q \cup Q' =$	A. Q B. Q' C. N D. P

18	2.333....is a	A. Irrational no B. Complex no C. Rational no D. None of these
19	Question Image	A. Reflexive property B. Symmetric property C. Transitive property D. Additive property
20	0.25 is _____	A. An irrational number B. A natural number C. A prime number D. A rational number
21	1.4142135... is _____	A. A natural number B. A rational number C. A prime number D. An irrational number
22	Question Image	A. Associative property of addition B. Commutative property of addition C. Distributive property D. Additive identity
23	If $4 > b$ or $a < b$ then $a = b$ is a	A. Additive property B. Transitive property C. Trichotomy property of inequality D. None of above
24	Question Image	A. are real no B. both are not real C. are imaginary no D. both are imaginary
25	What is the conjugate of $-7 - 2i$?	A. $-7 + 2i$ B. $7 + 2i$ C. $7 - 2i$ D. $\sqrt{53}$
26	The identity element with respect to subtraction is	A. 0 B. 1 C. -1 D. Does not exist
27	Question Image	A. Principle of equality of fractions B. Rule for product of fraction C. Rule for quotient of fraction D. Golden rule of fractions
28	$\forall x, y \in \mathbb{R}$ and $x < 0, y < 0$, which one is true	A. $xy < 0$ B. $xy = 0$ C. $xy > 0$ D. None of these
29	If $Z_1 = 1 + i, Z_2 = 2 + 3i$, then $ Z_2 - Z_1 = ?$	
30	if $Z_1 = 1 + i, Z_2 = 2 + 3i$, then $ Z_2 - Z_1 =$	A. $\sqrt{3} i$ B. $\sqrt{7}$ C. $-2 - i$ D. $\sqrt{5}$
31	Question Image	A. Commutative law of addition B. Associative law of addition C. Additive identity D. Additive inverse
32	$(a + bi) - (c + di) =$	A. $(a + b) = (c + d)$ B. $(a + c) + i(b + d)$ C. $(a - c) + (c - d)i$ D. $(a - c) + (b - d)i$
33	Question Image	A. (x, y) B. (kx, y) C. (x, ky) D. (kx, ky)
34	The multiplicative inverse of x^{-1} is	A. x B. $a - 2$ C. 0 D. 1
35	If $z = (x, y)$ then z has no multiplicative inverse when	A. $x \neq 0, y = 0$ B. $x = 0, y = 0$ C. $x = 0, y \neq 0$ D. None of these

36	$\forall a, b \in \mathbb{R}, ab = ba$ is a	A. Commutative law of multiplication B. Closure law of multiplication C. Associative law of multiplication D. Multiplicative identity
37	Name the property used in $1000 \times 1 = 1000$	A. additive inverse B. multiplicative inverse C. additive identity D. multiplicative identity
38	$(a + bi) - c(c + di) =$	A. $(a + b) = (c + d)$ B. $(a + c) + i(b + d)$ C. $(a - c) + (c - d)i$ D. $(a - c) + (b - d)i$
39	The multiplicative inverse of 0 is	A. 1 B. -1 C. 0 D. Does not exist
40	Question Image	A. N B. r C. 2r D. π
41	Question Image	A. A rational number B. A natural number C. An irrational number D. An integer
42	Question Image	
43	If in a set of real no a is additive identity then	A. $a + a = 2a$ B. $a + a = 1$ C. $a + a = 0$ D. None of these
44	Multiplicative inverse of 0 is	A. 0 B. 1 C. ± 1 D. Does not exist
45	If P is a whole number greater than 1, which has only P and 1 as factors. Then P is called	A. Whole number B. Prime number C. Even number D. Odd number
46	$i =$	A. $\sqrt{1}$ B. $\sqrt{2}$ C. $\sqrt{-2}$ D. $\sqrt{-1}$
47	Question Image	
48	The equation $ x + 4 = x$ has solution	A. $x = -2$ B. $x = 2$ C. $x = -4$ D. $x = 4$
49	The set of positive integers, 0 and negative integers is known as the set of	A. Natural numbers B. Rational numbers C. All integers D. Irrational numbers
50	Question Image	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
51	Question Image	A. real part of z B. imaginary part of z C. conjugate of z D. modulus of z
52	Question Image	
53	If $Z_1 = 1 + i$, $Z_2 = 2 + 3i$, then $ Z_1 - Z_2 = ?$	A. $\sqrt{5}$ B. $\sqrt{7}$ C. $-1 - 2i$ D. $\sqrt{3}$
54	Question Image	A. x C. y

55	The identity element with respect to subtraction is	<p>A. 0</p> <p>B. -1</p> <p>C. 0 and 1</p> <p>D. None of these</p>
56	The product of complex numbers (a,b) and (c,d) is	<p>A. (ac, bd)</p> <p>B. (ac-bd, ad+bc)</p> <p>C. (ab,cd)</p> <p>D. (ac+bd,ad-bc)</p>
57	$\forall a,b,c \in \mathbb{R}, a > b \wedge b > c \Rightarrow a > c$ is	<p>A. Trichotomy property</p> <p>B. Transitive property</p> <p>C. Symmetric property</p> <p>D. Additive property</p>
58	In $(x + iy)$ y is called as	<p>A. Imaginary part</p> <p>B. Complex number</p> <p>C. Real part</p> <p>D. None of above</p>
59	Every prime number is also	<p>A. Rational number</p> <p>B. Even number</p> <p>C. Irrational number</p> <p>D. Multiple of two numbers</p>
60	The additive inverse of 1 is	<p>A. 1</p> <p>B. -1</p> <p>C. 0</p> <p>D. Does not exist</p>
61	The symbol of irrational is	<p>A. W</p> <p>B. N</p> <p>C. Q</p> <p>D. \mathbb{Q}^c</p>
62	Question Image	<p>A. Commutative property of addition</p> <p>B. Closure property of addition</p> <p>C. Additive inverse</p> <p>D. Associative property w.r.t. to addition</p>
63	Question Image	
64	Question Image	
65	$a > b \Rightarrow a + c > b + c$ is known as	<p>A. Trichotomy property</p> <p>B. Additive property of inequality</p> <p>C. Transitive property</p> <p>D. Multiplicative property</p>
66	Question Image	
67	Associative law of multiplication	<p>A. $ab - ba$</p> <p>B. $a(bc) = (ab) c$</p> <p>C. $a(b + c) = ab + ac$</p> <p>D. $(a + b)c = ac + bc$</p>
68	Question Image	<p>A. 0</p> <p>B. 1</p> <p>C. -1</p> <p>D. 2</p>
69	Any recurring decimal represents a	<p>A. Irrational no</p> <p>B. Integer</p> <p>C. Rational no</p> <p>D. None of these</p>
70	Rational number is a number which can be written as a terminating decimal fraction or a	<p>A. Non-terminating decimal fraction</p> <p>B. Non-recurring</p> <p>C. Recurring decimal fraction</p> <p>D. a, b and c</p>
71	Question Image	
72	Question Image	
73	Name the property used in $4 \times (5 \times 8) = (4 \times 5) \times 8$	<p>A. Associative property of addition</p> <p>B. Associative property of multiplication</p> <p>C. Additive identity</p> <p>D. Multiplicative identity</p>
74	Question Image	<p>A. Rational</p> <p>B. Irrational</p> <p>C. Natural</p> <p>D. Odd</p>

75	$i =$	
76	Geometrically, the modulus of a complex number represents its distance from the	A. Point (1, 0) B. Point (0, 1) C. Point (1, 1) D. Point (0, 0)
77	Decimal part of irrational number is	A. Terminating B. Repeating only C. Neither repeating nor terminating D. Repeating and terminating
78	Question Image	A. $a = a$ B. $a < a$ C. $a > a$ D. $a \leq a$
79	$\forall z \in \mathbb{C}$, multiplicative is	A. (1,1) B. (1,0) C. (0,1) D. None of these
80	$(a-1)^{-1} =$	A. $a-1$ B. a C. $-a$ D. None of above
81	What is the conjugate of $-6 - i$	A. $-6 + i$ B. $6 + i$ C. $-6 - i$ D. $6 - i$
82	The set $\{1, -1\}$ is closed w.r.t.	A. Addition B. Multiplications C. Subtraction D. None of these
83	Question Image	A. real number B. complex number C. rational number D. irrational number
84	$i^2 =$	A. 1 B. 2 C. -1 D. 0
85	The symbol of irrational is	A. W B. N C. Q D. Q'
86	Question Image	A. A complex number B. A rational number C. A natural number D. An irrational number
87	Geometrically the modulus of a complex number represents its distance from the	A. Point (1,0) B. Point (0,1) C. Point (1,1) D. Point (0,0)
88	$\mathbb{Q} \cup \mathbb{Q} =$	A. \mathbb{N} B. \mathbb{R} C. \mathbb{W} D. \mathbb{Z}
89	$1/3$ is a decimal	A. Recurring B. Terminating C. Non-terminating D. None of the above
90	Question Image	A. $(a + b)c = ac + bc$ B. $a + b = b + a$ C. $(a + b) + c = a + (b + c)$ D. $a(b + c) = ab + ac$
91	6 is	A. A prime integer B. An irrational number C. A rational number D. An odd integer
92	Question Image	
93	If $A = \{x / x \in \mathbb{R} \wedge x^2 - 16 = 0\}$ then $A =$	A. $-x$ B. Infinite set C. Φ D. $\{4, -4\}$

		D. $\{-4, 4\}$
94	Question Image	D. None of these
95	$(\sqrt{3}+\sqrt{5})+\sqrt{7} = \sqrt{3} +(\sqrt{5} +\sqrt{7})$ property used in above is	A. Commutative property of addition B. Closure property of addition C. Additive inverse D. Associative property w.r.t to addition
96	Question Image	A. Associative law of multiplication B. Commutative law of addition C. Commutative law of multiplication D. Associative law of addition
97	Question Image	
98	$2/9, 5/7 \in \mathbb{R}, (2 \mid 9)(5 \mid 7) \Rightarrow 10/63 \in \mathbb{R}$ this property is called	A. Associative property B. Identity property C. Commutative property D. Closure property w.r.t multiplication
99	The set of natural no. is closed under	A. multiplication B. subtraction C. difference D. division
100	Question Image	A. 0 B. 1 C. -1 D. None of these
101	$1/3$ is _____	A. A prime number B. An integer C. A rational number D. An irrational number
102	Associative law of multiplication	A. $ab = ba$ B. $a(bc) = (ab) c$ C. $a(b+c) = ab + ac$ D. $(a + b)c = ac + bc$
103	In \mathbb{R} , the multiplicative identity is	A. 0 B. 1 C. -1 D. None
104	Question Image	
105	Question Image	A. Associative law of addition B. Commutative law of addition C. Additive identity D. Closure law of addition
106	The solution set of the equation $ 3x + 2 = 5$ is	
107	The additive inverse of 0 is	A. 1 B. -1 C. 0 D. Does not exist
108	In \mathbb{R} the right cancellation property w.r.t. addition is	
109	Question Image	A. 1 B. -1
110	If a set S contains n elements then $P(S)$ has number of elements	A. $2^{ⁿ}$ B. $2^{ⁿ²}$ C. $2.n$ D. $n^{²}$
111	A subset of set of complex number whose elements are of the form $(a, 0)$ is called	A. Real number B. Complex number C. Rational number D. Irrational number
112	There is no element common in	A. N and W B. E and W C. N and O D. Q and Q'
113	$\forall x, y \in \mathbb{R}$ and $x > 0, y > 0$, if $x > y$	D. None of these
114	Question Image	
115	Question Image	A. A rational number B. An irrational number C. An odd number D. A prime number

116	$(7, 9) + (3, -5) =$	A. (4, 4) B. (10, 4) C. (9, -5) D. (7, 3)
117	What is the conjugate of $-6 - i$?	A. $-6 + i$ B. $6 + i$ C. $-6 - i$ D. $6 - i$
118	Question Image	A. Principle of equality of fractions B. Rule for product of fraction C. Rule for quotient of fraction
119	Question Image	
120	The $\sqrt{\quad}$ is used for the	A. Positive square root B. Negative square root C. +ve and -ve square root D. Whole number
121	The multiplicative inverse of $\frac{2}{3}$ is	A. $\frac{3}{2}$ B. $-\frac{2}{3}$ C. $-\frac{3}{2}$ D. 1
122	$i^9 =$	A. $i^{>2}</sup>$ B. -1 C. 1
123	In polar form of complex number $r =$	D. i
124	Question Image	A. Reflexive property B. Symmetric property C. Transitive property D. Additive property
125	$(a^{-1})^{-1} =$	A. $a^{>-1}</sup>$ B. a C. -a D. None of above
126	Question Image	
127	In R the number of identity elements w.r.t. '!' is	A. One B. Two C. Three D. Four
128	24 can be written as a product of	A. Odd factors B. Even factors C. Whole factors D. Prime factors
129	Name the property used in $a(b-c) = ab - ac$	A. commutative property of multiplication B. distributive property of multiplication C. associative property of multiplication D. multiplicative inverse
130	Question Image	A. Additive property of inequality B. Commutative property C. Additive inverse D. Additive identity
131	Question Image	
132	What is the conjugate of $-7 - 2i$?	A. $-7 + 2i$ B. $7 + 2i$ C. $7 - 2i$ D. None of these
133	Question Image	
134	The conjugate of $\sqrt{5} i$ is	A. $\sqrt{5}$ B. $-\sqrt{5} i$ C. i D. $5i$
135	Question Image	
136	If a is any real number and $a + a$ is called	A. symmetric property B. Trichotomy Properties

136	If a is any real number and $a = -a$ is called	C. Transitive Property D. Reflexive Properties
137	The value of x , and y , when $(x + iy)^2 = 5 + 4i$	A. $X = 2, y = 1$ B. $X = -2, y = 1$ C. $X = 2, y = -1$ D. $X = 2, y = 2$
138	π is the ration of	A. Area of a circle to its diameter B. Area of a circle to its radius C. Circumference of a circle to its diameter D. Circumference of circle to its radius
139	Question Image	
140	$\sqrt{11}$ is	A. an irrational number B. Rational number C. odd number D. Negative number
141	If $z_1 = 2 + 6i$ and $z_2 = 3 + 7i$, then which expression defines the product of z_1 and z_2 ?	A. $36 + (-32)i$ B. $-36 + 32i$ C. $6 + (-11)i$ D. $0, +(-12)i$
142	The sum of complex number (a,b) and (c,d) is	
143	For any real numbers $x,y, xy=0 \Rightarrow$	A. $x \neq 0 \wedge y \neq 0$ B. $x = 0 \wedge y = 0$ C. $x = 0$ D. $y = 0$
144	The real number system contains.	A. Positive Numbers B. Negative numbers C. Zero D. (option a, b and c)
145	Question Image	
146	Question Image	
147	Which element is the additive inverse of (a, b) in Complex numbers?	A. $(a, 0)$ B. $(0, b)$ C. (a, b) D. $(-a, -b)$
148	Question Image	A. $-3 - 2i$ B. $3 + 2i$ C. $1 + 2i$ D. $1 - 2i$
149	The multiplicative inverse of 4 is	A. -4 B. $-1/4$ C. $1/4$ D. 1
150	Question Image	A. Associative property of addition B. Associative property of multiplication C. Commutative property of addition D. Commutative property of multiplication
151	In set builder notation the set $\{0, 1, 2, \dots, 100\}$ can be written as	A. $\{x / x \in \mathbb{B} \wedge x \leq 100\}$ B. $\{x / x \in \mathbb{W} \wedge x \leq 101\}$ C. $\{x / x \in \mathbb{Z} \wedge x \leq 101\}$ D. The set of first 100 whole numbers
152	If in a set of real no a is multiplicative identity then	A. $a \cdot a = a^{>2}$ B. $a \cdot a = 1$ C. $a \cdot a = 0$ D. None of these
153	14 is not a	A. Prime number B. Whole number C. Even number D. Real number
154	Every whole number is	A. A real number B. An irrational number C. A prime number D. A negative integer
155		A. $(a, 0)$ B. $(0, b)$

155	Which element is the additive inverse of (a,b) in Complex numbers	<p> <input type="radio"/> A. (a,b) <input checked="" type="radio"/> B. (-a,-b) <input type="radio"/> C. (a,-b) <input type="radio"/> D. (-a,b) </p>
156	The property used in $-3 < -2 \Rightarrow 0 < 1$	<p> <input type="radio"/> A. Commutative property <input checked="" type="radio"/> B. Additive property of inequality <input type="radio"/> C. Additive inverse <input type="radio"/> D. Additive identity </p>
157	If $z_1 = 1 + 2i$, $z_2 = 3 + 4i$ then	<p> <input type="radio"/> A. $z_1 > z_2$ <input type="radio"/> B. $z_1 \neq z_2$ <input type="radio"/> C. $z_1 < z_2$ <input checked="" type="radio"/> D. None of these </p>
158	Question Image	<p> <input checked="" type="radio"/> A. Additive property in R <input type="radio"/> B. Multiplication property in R <input type="radio"/> C. Cancellation property in R <input type="radio"/> D. Distribution property in R </p>
159	Question Image	<p> <input type="radio"/> A. Trichotomy property <input checked="" type="radio"/> B. Additive property of inequality <input type="radio"/> C. Transitive property <input type="radio"/> D. Multiplicative property </p>
160	Question Image	<p> <input type="radio"/> A. z is purely imaginary <input type="radio"/> B. a is any complex number <input checked="" type="radio"/> C. z is real <input type="radio"/> D. None of these </p>
161	$(a,0) \times (c, 0) =$	<p> <input type="radio"/> A. (0,ac) <input checked="" type="radio"/> B. (ac, 0) <input type="radio"/> C. (0,0) <input type="radio"/> D. (a, c) </p>
162	Question Image	
163	If a and b are real numbers then $a+b$ is also real number this law is called	<p> <input type="radio"/> A. associative law of addition <input checked="" type="radio"/> B. closure law of addition <input type="radio"/> C. Distributive law of addition <input type="radio"/> D. Commutative law of addition </p>
164	Zero is	<p> <input type="radio"/> A. An irrational number <input checked="" type="radio"/> B. A rational number <input type="radio"/> C. A negative integer <input type="radio"/> D. A positive number </p>
165	Every irrational number is	<p> <input checked="" type="radio"/> A. A real number <input type="radio"/> B. A prime number <input type="radio"/> C. A natural number <input type="radio"/> D. An integer </p>
166	Question Image	
167	Question Image	<p> <input type="radio"/> A. Principle of equality of fractions <input type="radio"/> B. Rule for product of fractions <input type="radio"/> C. Golden rule for fractions <input checked="" type="radio"/> D. Rule for quotient of fractions </p>
168	Question Image	
169	Every prime number is also	<p> <input checked="" type="radio"/> A. Rational number <input type="radio"/> B. Even number <input type="radio"/> C. Irrational number <input type="radio"/> D. Multiple of two numbers </p>
170	Question Image	<p> <input type="radio"/> A. Principle of equality of Fractions <input type="radio"/> B. Rule for product of fraction <input checked="" type="radio"/> C. Golden rule of fraction <input type="radio"/> D. Rule of quotient of Fraction </p>
171	Question Image	<p> <input type="radio"/> A. A rational number <input checked="" type="radio"/> B. A irrational number <input type="radio"/> C. An even integer <input type="radio"/> D. A factor of 36 </p>
172	$i^{101} =$	<p> <input checked="" type="radio"/> A. i <input type="radio"/> B. i^2 <input type="radio"/> C. -i <input type="radio"/> D. -1 </p>
173	Question Image	
174	The square root of $2i - 20i$ is	<p> <input type="radio"/> A. $\pm(5 - 2i)$ <input type="radio"/> B. $\pm(5 + 2i)$ <input type="radio"/> C. $(5 - 2i)$ </p>

		D. None of these
175	$(a, b) + (-a, -b) =$	A. (0,0) B. (a, b) C. (-a, -b) D. (1, 1)
176	I is not	A. Real number B. Natural number C. Prime Number D. Whole Number
177	Question Image	A. 1 B. 3 C. 2-i D. -1
178	Question Image	A. 15 B. 15 i C. -15 i D. -15
179	Question Image	A. -8 B. 8 C. 8i D. 32
180	Any whole number can be written as a product of factors which are	A. Odd numbers B. Prime number C. Rational number D. Even number
181	Question Image	
182	$\frac{3}{2}$ is	A. An irrational number B. Whole number C. A positive integer D. A rational number
183	If $z_1 = \sqrt{-36}$, $z_2 = \sqrt{-25}$, $z_3 = \sqrt{-16}$ then	A. 15 B. 15i C. -15i D. -15
184	Some of two real numbers is also a real number , this property is called:	A. Commutative property w.r.t addition B. Closure property w.r.t. addition C. Associative property w.r.t. addition D. Distributive property w.r.t addition
185	The set of rationals numbers between 0 and 1 is	A. Finite B. Null set C. Infinite D. None of these
186	Question Image	A. Associative law of addition B. Commutative law of addition C. Additive identity D. Closure law of addition
187	Question Image	A. 1 B. -i C. i D. 0
188	If $\forall a, b \in R$, then $a + b \in R$ is a property	A. Closure law of addition B. Associative law of addition C. Additive inverse D. Additive identity
189	Question Image	
190	Question Image	
191	Question Image	
192	Question Image	A. Associate law of addition B. Commutative law of addition C. Additive identity D. Closure law of addition
193	A prime number can be a factor of a square only if it occurs in the square at least	A. Once B. Thirce C. Twice D. None of these
		A. 1 B. 4

194	The multiplicative inverse of 1 is	B. -1 C. 0 D. Does not exist
195	Question Image	
196	Question Image	A. 15 B. 15 i C. -15 i D. -15
197	$\sqrt{-1} b =$	A. b B. 2 C. 2b D. None of these
198	In $(x + iy)$, y is called as	A. Imaginary part B. Complex number C. Real part D. None of above
199	6 is	A. A prime integer B. An irrational number C. A rational number D. An odd integer
200	In R the left cancellation property w.r.t addition is	
201	The polar form of complex number $x \neq 0$ is	A. $r \cos \theta + r \sin \theta$ B. $r \cos \theta + i r \sin \theta$ C. $\cos \theta + r \sin \theta$ D. $i \cos \theta + i \sin \theta$
202	$\forall a, b, c \in \mathbb{R}$ and $c > 0$, then	A. $a > b \Rightarrow ac < bc$ B. $a > b \Rightarrow ac > bc$ C. $a < b \Rightarrow ac > bc$ D. None of these
203	Question Image	
204	$\sqrt{-1} b = ?$	A. b i B. -i b C. b2 D. i/b
205	If $Z = (1, 2)$, then $Z^{-1} = ?$	A. (0.2, 0.4) B. (-0.2, 0.4) C. (0.2, -0.4) D. (-0.2, -0.4)
206	Question Image	A. A positive integer B. A negative integer C. A natural number D. An irrational number
207	Every real number is	A. A complex number B. A rational number C. A natural number D. A prime number
208	Question Image	A. $(a + b)c = a \cdot c + bc$ B. $a + b = b + a$ C. $(a + b) + c = a + (b + c)$ D. $a(b + c) = ab + ac$
209	The multiplicative inverse of $-3i$ is	A. 3i B. $-3i$ C. $-1/3i$ D. $1/3 i$
210	Question Image	A. Rule of quotient of fraction B. Golden rule of fraction C. Rule for product of fraction D. Principle for equality of fraction
211	$\forall a, b, c \in \mathbb{R} \quad ac = bc \Rightarrow a = b, c \neq 0$ is a	A. Symmetric property B. Cancellation property w.r.t multiplication C. Reflexive property D. Transitive property
212	Question Image	A. Closure law of addition B. Associative law of addition C. Commutative law of multiplication D. Associative law of multiplication
213	Union of the sets of rational and irrational numbers is called 6th set of	A. Natural numbers B. Real numbers

		C. Whole numbers D. Prime numbers
214	Question Image	
215	Every real number is	A. a positive integer B. a rational number C. a negative integer D. a complex number
216	In \mathbb{R} , the additive inverse of a is	A. 0 B. 1 C. $-a$ D. $1/a$
217	The set $\{1,2,3,4,\dots\}$ is called	A. Set of natural numbers B. Set of whole numbers C. Set of rational number D. Set of irrational numbers
218	$(a,0) \times (c,0) =$	A. $(0,ac)$ B. $(ac,0)$ C. $(0,0)$ D. (a,c)
219	$\sqrt{x} = \text{_____}$ if x is a prime number	A. Rational no B. Natural no C. Irrational no D. Complex no
220	If $0 \in \mathbb{R}$, then the additive inverse of a is	A. $1/9$ B. $1/9$ C. a D. $-a$
221	$\sqrt{23}$ is	A. A rational number B. A irrational number C. An even integer D. A factor of 36
222	$4/\sqrt{49}$ is a	A. Irrational Number B. Prime Number C. Rational number D. Whole number
223	The set of rational number is represented by	A. \mathbb{W} B. \mathbb{R} C. \mathbb{Q} D. \mathbb{Q}
224	$\sqrt{2} + \sqrt{3} + \sqrt{5} = (\sqrt{2} + \sqrt{3} + \sqrt{5})$: this property is called	A. associative property w.r.t addition B. commutative property C. Closure property w.r.t addition D. Additive identity
225	The multiplicative inverse of $1 - 2i$ is	
226	If $Z_1 = 1 + i$, $Z_2 = 2 + 3i$, then $ Z_1 - Z_2 = ?$	
227	$a \cdot a^{-1} = a^{-1} \cdot a = 1$ is a	A. Commutative law of multiplication B. Multiplication identity C. Associative law of multiplication D. Multiplication inverse
228	The decimal fraction in which we have finite number of digits in its decimal part is called.	A. recurring decimal fraction B. Non terminating fraction C. Non recurring fraction D. terminating decimal fraction
229	The value of x and y when $(x + iy)^2 = 5 - 4i$	A. $x = 2, y = -1$ B. $x = -2, y = 1$ C. $x = 2, y = -i$ D. $x = 2, y = 2$
230	The value of i^{4n+1}	A. 1 B. -1 C. i D. i^2
231	Question Image	A. Symmetric property B. Cancellation property w.r.t. multiplication C. Reflexive property D. Transitive property
232	Question Image	A. Closure law of addition B. Associative law of addition C. Additive inverse

		D. Additive identity
233	Question Image	A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule of fractions D. Rule for quotient of fractions
234	$\forall a \in \mathbb{R} \exists 0 \in \mathbb{R}$ such that $a + 0 = a$ is property of	A. Commutative law of addition B. Associative law of addition C. Additive identity D. Additive inverse
235	$3.5 + 5.4 = 5.4 + 3.5 = 8.9$ this property of addition is called	A. additive identity B. associative property C. commutative property D. closure property
236	Question Image	A. A natural number B. A rational number C. An irrational number D. A whole number
237	Question Image	A. A prime number B. An integer C. A whole number D. An irrational number
238	$i^{(4n+2)} = \dots$	A. 1 B. i C. -1 D. -i
239	$\forall a, b, c \in \mathbb{R}, a + c = b + c \Rightarrow a = b$	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
240	$\sqrt{2}$ is a number	A. Rational B. Irrational C. Even D. Odd
241	Question Image	A. Principle of equality of fractions B. Rule for product of fractions C. Golden rule for fractions D. Rule for quotient of fractions
242	The equation $ x + 4 = x$ has solution	A. $x = -2$ B. $x = 2$ C. $x = -4$ D. $x = 4$
243	Question Image	A. Rational B. Irrational C. Even D. Odd
244	$a \cdot a^{-1} = a^{-1} \cdot a = 1$ is a	A. Commutative law of multiplication B. Multiplicative identity C. Associative law of multiplication D. Multiplicative inverse
245	Question Image	A.
246	The set $\{0, -1\}$ hold closure property under	A. Addition B. Both a & c C. Multiplication D. None of these
247	Question Image	
248	Question Image	A. Multiplication property B. Additive property C. Trichotomy property D. Transitive property of inequality
249	202.04 is an example of	A. Recurring decimals B. Non-recurring decimals C. Terminating decimals D. None of above
250	Which of the following has the same value as i^{113} ?	A. i B. -1 C. -i D. 1
		A. Rational numbers

251	The square root of every incomplete square is an	B. Even numbers C. odd numbers D. Irrational numbers
252	The order axioms are satisfied by set of	A. C B. C and R C. R D. None of these
253	Name the property used in $4 + 9 = 9 + 4$	A. Associative property of addition B. Commutative property of addition C. Distributive property D. Additive identity
254	Question Image	B. 1 C. -1
255	Question Image	A. Set of whole number B. Rational Numbers C. Complex numbers D. Whole numbers
256	Question Image	
257	Question Image	
258	QUQ'	
259	Question Image	
260	Question Image	
261	For each real number, there is a number which is its	A. Negative B. Positive C. Opposite D. Similar
262	In R the number of identity element w.r.t '+' is	A. One B. Two C. Three D. Four
263	$a > b, b > c \Rightarrow a > c$ is a	A. Multiplicative property B. Additive property C. Trichotomy property D. Transitive property of inequality
264	Additive inverse of $-a - b$ is	A. a B. $-a + b$ C. $a - b$ D. $a + b$
265	Such fraction which can not be written in the form of $\frac{p}{q}$ where p,q and $q \neq 0$, such fractions are called.	A. Fractional numbers B. Rational Numbers C. Even Numbers D. Whole Numbers
266	Question Image	A. additive property B. multiplicative property C. additive identity D. multiplicative identity
267	Name the property used in $4.1 + (-4.1) = 0$	A. Additive inverse B. Multiplication inverse C. Additive identity D. Multiplication identity
268	If $z_1 = (a,b)$, $z_2 = (c,d)$, then $z_1 z_2 =$ -----	A. (ac,bd) B. (ac+bd, ad-bc) C. (ac-bd, ad+bc) D. (ac-bd, ad-bc)
269	0 (zero) is	A. An irrational number B. A rational number C. A negative integer D. A positive number
270	i is equal	A. (1, 0) B. (0, 1) C. (1, 1) D. (0, 0)
271	Name the property used in $100 + 0 = 100$	A. Additive inverse B. Multiplicative inverse C. Additive identity D. Multiplicative identity

A. $-\sqrt{9}$

272	The negative square root of 9 can be written as:	B. $\sqrt{9}$ C. $\sqrt{18}$ D. $-\sqrt{18}$
273	In \mathbb{R} , the additive identity is	A. 0 B. 1 C. -1 D. None
274	The square roots of negative numbers is called	A. Real no B. Complex no C. Positive no D. Negative no
275	The square root of $2i - 20i$ is	A. $+(5 - 2i)$ B. $+(5 + 2i)$ C. $(5 - 2i)$ D. None of these
276	In \mathbb{R} , the multiplicative inverse of a is	A. 0 B. 1 C. $-a$ D. $1/a$
277	The multiplicative inverse of (a,b) is	
278	Every recurring decimal represents	A. A natural number B. A rational number C. An irrational number D. A whole number
279	Question Image	A. additive property B. multiplicative property C. additive inverse D. additive identity
280	Question Image	B. 1 D. -1
281	Question Image	A. Closure law of addition B. Closure law of multiplication C. Commutative law of addition D. Commutative law of multiplication
282	The value of x , and y , when $(x + iy)^2 = 5 + 4i$	A. $X = 2, y = -1$ B. $X = -2, y = 1$ C. $X = 2, y = -1$ D. $X = 2, y = 2$
283	Which of the following sets has closure property w.r.t. addition	A. $\{0\}$ B. $\{1\}$ C. $\{0, -1\}$ D. $\{1, -1\}$
284	If $z = (x,y)$, then $\bar{z} =$	A. $(-x,y)$ B. $(x,-y)$ C. $(-x, -y)$ D. None of these
285	Total number of subsets that can be formed out of the set $\{a,b,c\}$ is	A. 1 B. 4 C. 8 D. 12
286	The additive identity of real number is	A. 1 B. 2 C. $1/2$ D. 0
287	The additive inverse of $2/3$ is	A. $3/2$ B. $-2/3$ C. $-3/2$ D. 0
288	Question Image	A. Commutative law of multiplication B. Closure law of multiplication C. Associative law of multiplication D. Multiplication identity
289	π is _____	A. A complex number B. A rational number C. A natural number D. An irrational number
290	Question Image	
291	$(a,b) + (c,b) =$	A. $(0,0)$ B. (a,b)

291	$(a,b) \cap (-a,-b) =$	C. $(-a,-b)$ D. $(1,1)$
292	$i^2 =$	A. 1 B. 2 C. -1 D. 0
293	Multiplicative inverse of "1" is	A. 0 B. ± 1 C. 1 D. $\{0,1\}$
294	It is not possible to find the exact value of	A. π B. $\sqrt{9}$ C. $\sqrt[3]{27}$ D. $\sqrt{1}$
295	$\forall x,y,z \in \mathbb{R}$ and $z \neq 0$, then	A. $x > y \Rightarrow xz > yz$ B. $x < y \Rightarrow xz < yz$ C. $x < y \Rightarrow xz > yz$ D. None of these
296	$\forall x, y \in \mathbb{R}$, either $x = y$ or $x > y$ or $x < y$ is	A. Transitive property B. Reflexive property C. Trichotomy property D. None of these
297	If $a > b$ or $a < b$ then $a \neq b$ is a	A. Additive property B. Transitive property C. Trichotomy property of inequality
298	If $Z = (1,2)$, then $Z^{-1} = ?$	A. $(0.2, 0.4)$ B. $(-0.2, 0.4)$ C. $(0.2, -0.4)$ D. $(-0.2, -0.4)$
299	202.04 is an example of	A. Recurring decimals B. Non-recurring decimals C. Terminating decimals D. None of these