

## ECAT Mathematics Chapter 1 Number System Online Test

Sr	Questions	Answers Choice
1	What is the conjugate of $-6 - i$ ?	A. $-6 + i$ B. $6 + i$ C. $-6 - i$ D. $6 - i$
2	Question Image	A. 1 B. 3 C. $2 - i$ D. $-1$
3	Question Image	
4	The set $\{1, -1\}$ is closed w.r.t.	A. Addition B. Multiplications C. Subtraction D. None of these
5	If $A = \{x / x \in \mathbb{R} \wedge x^2 - 16 = 0\}$ then $A =$	A. $-x$ B. Infinite set C. $\Phi$ D. $\{-4, 4\}$
6	$i^9 =$	A. $i^{<sup>2</sup>}$ B. $-1$ C. 1 D. $i$
7	The set of rational numbers between 0 and 1 is	A. Finite B. Null set C. Infinite D. None of these
8	$(a, b) + (-a, -b) =$	A. $(0, 0)$ B. $(a, b)$ C. $(-a, -b)$ D. $(1, 1)$
9	$\forall a, b, c \in \mathbb{R}, a > b \wedge b > c \Rightarrow a > c$ is	A. Trichotomy property B. Transitive property C. Symmetric property D. Additive property
10	For each real number, there is a number which is its	A. Negative B. Possitive C. Opposite D. Similar
11	$\sqrt{x} =$ _____ if $x$ is a prime number	A. Rational no B. Natural no C. Irrational no D. Complex no
12	$\sqrt{11}$ is	A. an irrational number B. Rational number C. odd number D. Negative number
13	In $\mathbb{R}$ the left cancellation property w.r.t addition is	
14	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
15	Question Image	A. 15 B. $15i$ C. $-15i$ D. $-15$
16	Question Image	A. 0 B. 1 C. $-1$ D. 2

17	The additive inverse of $\frac{2}{3}$ is	A. $\frac{3}{2}$ B. $-\frac{2}{3}$ C. $-\frac{3}{2}$ D. 0
18	The square roots of negative numbers is called	A. Real no B. Complex no C. Positive no D. Negative no
19	$(\sqrt{3}+\sqrt{5})+\sqrt{7} = \sqrt{3} +(\sqrt{5} +\sqrt{7})$ 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
20	Question Image	A. A complex number B. A rational number C. A natural number D. An irrational number
21	Question Image	A. Reflexive property B. Symmetric property C. Transitive property D. Additive property
22	Question Image	A. $-3 -2i$ B. $3 +2i$ C. $1 + 2i$ D. $1 - 2i$
23	$\forall x,y \in \mathbb{R}$ and $x > 0, y > 0$ , if $x > y$	D. None of these
24	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
25	Question Image	A. z is purely imaginary B. a is any complex number C. z is real D. None of these
26	Multiplicative inverse of "1" is	A. 0 B. $\pm 1$ C. 1 D. $\{0, 1\}$
27	$a > b, b > c \Rightarrow a > c$ is a	A. Multiplicative property B. Additive property C. Trichotomy property D. Transitive property of inequality
28	Every recurring decimal represents	A. A natural number B. A rational number C. An irrational number D. A whole number
29	$i^{101} =$	A. i B. $i^{\sup{2}}$ C. -i D. -1
30	$i^3 =$	A. -1 B. i C. -i D. 1
31	If $\forall a, b \in \mathbb{R}$ , then $a + b \in \mathbb{R}$ is a property	A. Closure law of addition B. Associative law of addition C. Additive inverse D. Additive identity
32	Question Image	A. Closure law of addition B. Associative law of addition C. Additive inverse D. Additive identity
33	$a \cdot a^{-1} = a^{-1} \cdot a = 1$ is a	A. Commutative law of multiplication B. Multiplication identity C. Associative law of multiplication D. Multiplication inverse
34	The negative square root of 9 can be written as:	A. $-\sqrt{9}$ B. $\sqrt{9}$ C. $\sqrt{18}$ D. $-\sqrt{18}$
35	Question Image	

36	Name the property used in $4 + 9 = 9 + 4$	A. Associative property of addition <b>B. Commutative property of addition</b> C. Distributive property D. Additive identity
37	Question Image	
38	Question Image	A. Closure law of addition B. Associative law of addition <b>C. Commutative law of multiplication</b> D. Associative law of multiplication
39	Which element is the additive inverse of $(a,b)$ in Complex numbers	A. $(a,0)$ B. $(0,b)$ C. $(a,b)$ <b>D. <math>(-a,-b)</math></b>
40	$(a-1)^{-1} =$	A. $a^{-1}$ <b>B. <math>a</math></b> C. $-a$ D. None of above
41	Question Image	<b>A. <math>(a + b)c = ac + bc</math></b> B. $a + b = b + a$ C. $(a + b) + c = a + (b + c)$ D. $a(b + c) = ab + ac$
42	$1/3$ is a decimal	<b>A. Recurring</b> B. Terminating C. Non-terminating D. None of the above
43	The equation $ x + 4  = x$ has solution	<b>A. <math>x = -2</math></b> B. $x = 2$ C. $x = -4$ D. $x = 4$
44	Question Image	A. Commutative law of addition B. Associative law of addition <b>C. Additive identity</b> D. Additive inverse
45	Every real number is	A. a positive integer B. a rational number C. a negative integer <b>D. a complex number</b>
46	The set $\{1, 2, 3, 4, \dots\}$ is called	<b>A. Set of Natural numbers</b> B. Set of whole numbers C. Set of rational number D. Set of irrational numbers
47	Question Image	<b>A. Associative property of addition</b> B. Commutative property of addition C. Distributive property D. Additive identity
48	The symbol of irrational is	A. W B. N C. Q <b>D. <math>Q'</math></b>
49	Question Image	A. $\langle br \rangle$
50	If $z = (x,y)$ , then $\bar{z} =$	A. $(-x,y)$ <b>B. <math>(x,-y)</math></b> C. $(-x, -y)$ D. None of these
51	$i^{(4n+2)} =$ -----	A. 1 B. $i$ <b>C. <math>-1</math></b> D. $-i$
52	Question Image	<b>A. Additive property in R</b> B. Multiplication property in R C. Cancellation property in R D. Distribution property in R
53	The multiplicative inverse of 1 is	<b>A. 1</b> B. $-1$ C. 0 D. Does not exist
54	Question Image	
55	Question Image	A. $(1, 0)$ <b>B. <math>(0, 1)</math></b>

55	$i$ is equal	C. $(1, 1)$ D. $(0, 0)$
56	0 is _____	A. A positive integer B. A negative integer C. A natural number D. An integer
57	Total number of subsets that can be formed out of the set $\{a,b,c\}$ is	A. 1 B. 4 C. 8 D. 12
58	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 $(0, 0)$
59	Question Image	
60	Question Image	A. 15 B. $15i$ C. $-15i$ D. -15
61	The product of complex numbers $(a,b)$ and $(c,d)$ is	A. $(ac, bd)$ B. $(ac-bd, ad+bc)$ C. $(ab, cd)$ D. $(ac+bd, ad-bc)$
62	Question Image	
63	Question Image	
64	Multiplicative inverse of 0 is	A. 0 B. 1 C. $\pm 1$ D. Does not exist
65	Question Image	A. additive property B. multiplicative property C. additive inverse D. additive identity
66	What is the conjugate of $-6 - i$	A. $-6 + i$ B. $6 + i$ C. $-6 - i$ D. $6 - i$
67	The additive inverse of 1 is	A. 1 B. -1 C. 0 D. Does not exist
68	Question Image	
69	$\sqrt{2}$ is a number	A. Rational B. Irrational C. Even D. Odd
70	If $Z_1 = 1 + i$ , $Z_2 = 2 + 3i$ , then $ Z_2 - Z_1  = ?$	
71	In $\mathbb{R}$ , the additive identity is	A. 0 B. 1 C. -1 D. None
72	The symbol of irrational is	A. W B. N C. Q D. $\mathbb{Q}^c$
73	Question Image	
74	$a \cdot a^{-1} = a^{-1} \cdot a = 1$ is a	A. Commutative law of multiplication B. Multiplicative identity C. Associative law of multiplication D. Multiplicative inverse
75	Every prime number is also	A. Rational number B. Even number C. Irrational number D. Multiple of two numbers
76	The multiplicative inverse of $1 - 2i$ is	A. Rational number

77	Every prime number is also	A. Rational number B. Even number C. Irrational number D. Multiple of two numbers
78	The sum of complex number (a,b) and (c,d) is	
79	Question Image	
80	In R, the additive inverse of a is	A. 0 B. 1 C. -a D. 1/a
81	The additive identity of real number is	A. 1 B. 2 C. 1/2 D. $<b>0</b>$
82	Gooch crucible is made of :	A. Brass. B. Porcelain. C. Bronze. D. Gold.
83	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
84	Question Image	A. A prime number B. An integer C. A whole number D. An irrational number
85	Question Image	A. Principle of equality of Fractions B. Rule for product of fraction C. Golden rule of fraction D. Rule of quotient of Fraction
86	Question Image	A. Multiplication property B. Additive property C. Trichotomy property D. Transitive property of inequality
87	Question Image	A. x C. y
88	If $Z_1 = 1 + i$ , $Z_2 = 2 + 3i$ , then $ Z_1 - Z_2  = ?$	
89	$\sqrt{-1b} = ?$	A. b i B. -i b C. b <sup>2</sup> D. i/b
90	$i^{101} =$	A. i B. $i^{<sup>2</sup>}$ C. -i D. -1
91	What is the conjugate of $-7 - 2i$ ?	A. $-7 + 2i$ B. $7 + 2i$ C. $7 - 2i$ D. $\sqrt{53}$
92	$\forall a, b, c \in R, a + c = b + c \Rightarrow a = b$	A. Reflexive property B. Symmetric property C. Cancellations property w.r.t. addition D. Transitive property
93	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
94	The multiplicative inverse of 0 is	A. 1 B. -1 C. 0 D. Does not exist
95	If $z_1 = 1 + 2i$ , $z_2 = 3 + 4i$ then	A. $z_{<sub>1</sub>} > z_{<sub>2</sub>}$ B. $z_{<sub>1</sub>} \neq z_{<sub>2</sub>}$ C. $z_{<sub>1</sub>} \leq z_{<sub>2</sub>}$ D. None of these

A. Commutative property

96	The property used in $-3 < -2 \Rightarrow 0 < 1$	B. Additive property of inequality C. Additive inverse D. Additive identity
97	Question Image	D. None of these
98	$a > b \Rightarrow a + c > b + c$ is known as	A. Trichotomy property B. Additive property of inequality C. Transitive property D. Multiplicative property
99	Question Image	A. real part of z B. imaginary part of z C. conjugate of z D. modulus of z
100	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
101	Question Image	A. A rational number B. A irrational number C. An even integer D. A factor of 36
102	$i^2 =$	A. 1 B. 2 C. -1 D. 0
103	The square root of every incomplete square is an	A. Rational numbers B. Even numbers C. odd numbers D. Irrational numbers
104	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. Fractal numbers B. Rational Numbers C. Even Numbers D. Whole Numbers
105	If a and b are real numbers then $a+b$ is also real number this law is called	A. associative law of addition B. closure law of addition C. Distributive law of addition D. Commutative law of addition
106	Question Image	
107	Question Image	
108	Question Image	A. Additive property of inequality B. Commutative property C. Additive inverse D. Additive identity
109	In R the number of identity element w.r.t '+' is	A. One B. Two C. Three D. Four
110	$3.5+5.4=5.4+3.5=8.9$ this property of addition is called	A. additive identity B. associative property C. commulative property D. closure property
111	If $0 \in \mathbb{R}$ , then the additive inverse of a is	A. $\frac{1}{9}$ B. $\frac{1}{-9}$ C. a D. -a
112	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
113	$\frac{1}{3}$ is _____	A. A prime number B. An integer C. A rational number D. An irrational number
114	Question Image	
115	Question Image	
116	$i^2 =$	A. 1 B. 2 C. -1 D. 0

117	Question Image	<p>A. Closure law of addition</p> <p><b>B. Closure law of multiplication</b></p> <p>C. Commutative law of addition</p> <p>D. Commutative law of multiplication</p>
118	$(a + b) - c - (c + d) =$	<p><b>A. <math>(a + b) = (c + d)</math></b></p> <p>B. <math>(a + c) + i(b + d)</math></p> <p>C. <math>(a - c) + (c - d)</math></p> <p>D. <math>(a - c) + (b - d)</math></p>
119	6 is	<p>A. A prime integer</p> <p>B. An irrational number</p> <p><b>C. A rational number</b></p> <p>D. An odd integer</p>
120	$\sqrt{23}$ is	<p>A. A rational number</p> <p><b>B. A irrational number</b></p> <p>C. An even integer</p> <p>D. A factor of 36</p>
121	$\pi$ is _____	<p>A. A complex number</p> <p>B. A rational number</p> <p>C. A natural number</p> <p><b>D. An irrational number</b></p>
122	Question Image	
123	Question Image	
124	$\forall x, y, z \in \mathbb{R}$ and $z \neq 0$ , then	<p>A. <math>x \geq y \Rightarrow xz \geq yz</math></p> <p>B. <math>x &lt; y \Rightarrow xz &lt; yz</math></p> <p><b>C. <math>x \leq y \Rightarrow xz \geq yz</math></b></p> <p>D. None of these</p>
125	$\sqrt{25}$ is a number	<p><b>A. Rational</b></p> <p>B. Irrational</p> <p>C. Natural</p> <p>D. Odd</p>
126	0.25 is _____	<p>A. An irrational number</p> <p>B. A natural number</p> <p>C. A prime number</p> <p><b>D. A rational number</b></p>
127	Question Image	<p><b>A. <math>a = a</math></b></p> <p>B. <math>a \neq a</math></p> <p>C. <math>a \geq a</math></p> <p>D. <math>a \leq a</math></p>
128	The multiplicative inverse of $x^{-1}$ is	<p><b>A. x</b></p> <p>B. <math>a^{-2}</math></p> <p>C. 0</p> <p>D. 1</p>
129	If P is a whole number greater than 1, which has only P and 1 as factors. Then P is called	<p>A. Whole number</p> <p><b>B. Prime number</b></p> <p>C. Even number</p> <p>D. Odd number</p>
130	$(7, 9) + (3, -5) =$	<p>A. (4, 4)</p> <p><b>B. (10, 4)</b></p> <p>C. (9, -5)</p> <p>D. (7, 3)</p>
131	Question Image	
132	What is the conjugate of $-7 - 2i$ ?	<p><b>A. <math>-7 + 2i</math></b></p> <p>B. <math>7 + 2i</math></p> <p>C. <math>7 - 2i</math></p> <p>D. None of these</p>
133	The identity element with respect to subtraction is	<p><b>A. 0</b></p> <p>B. -1</p> <p>C. 0 and 1</p> <p>D. None of these</p>
134	Question Image	<p><b>A. Associative law of multiplication</b></p> <p>B. Commutative law of addition</p> <p>C. Commutative law of multiplication</p> <p>D. Associative law of addition</p>
135	$\forall a \in \mathbb{R} \exists 0 \in \mathbb{R}$ such that $a + 0 = 0 + a = a$ is property of	<p>A. Commutative law of addition</p> <p>B. Associative law of addition</p> <p><b>C. Additive identity</b></p> <p>D. Additive inverse</p>

A. A positive integer

136	Question Image	<p>A. A positive integer  B. A negative integer  C. A natural number  D. An irrational number</p>
137	Question Image	
138	Question Image	<p>A. Commutative law of multiplication  B. Closure law of multiplication  C. Associative law of multiplication  D. Multiplication identity</p>
139	The polar form of complex number $x \neq 0$ is	<p>A. <math>r \cos \theta + r \sin \theta</math>  B. <math>r \cos \theta + i r \sin \theta</math>  C. <math>\cos \theta + r \sin \theta</math>  D. <math>i \cos \theta + i \sin \theta</math></p>
140	$(a+bi) - (c+di) =$	<p>A. <math>(a+b) = (c+d)</math>  B. <math>(a+c) + i(b+d)</math>  C. <math>(a - c) + (c - d)i</math>  D. <math>(a - c) + (b - d)i</math></p>
141	$(7, 9) + (3, -5) =$	<p>A. (4, 4)  B. (10, 4)  C. (9, -5)  D. (7, 3)</p>
142	If $z_1 = \sqrt{-36}$ , $z_2 = \sqrt{-25}$ , $z_3 = \sqrt{-16}$ then	<p>A. 15  B. <math>15i</math>  C. <math>-15i</math>  D. -15</p>
143	$(a,0) \times (c,0) =$	<p>A. (0,ac)  B. (ac,0)  C. (0,0)  D. (a,c)</p>
144	Question Image	<p>A. Principle of equality of fractions  B. Rule for product of fraction  C. Rule for quotient of fraction</p>
145	Question Image	
146	Question Image	<p>A. Reflexive property  B. Symmetric property  C. Transitive property  D. Additive property</p>
147	Question Image	<p>B. 1  D. -1</p>
148	Question Image	
149	202.04 is an example of	<p>A. Recurring decimals  B. Non-recurring decimals  C. Terminating decimals  D. None of above</p>
150	In $(x + iy)$ , $y$ is called as	<p>A. Imaginary part  B. Complex number  C. Real part  D. None of above</p>
151	6 is	<p>A. A prime integer  B. An irrational number  C. A rational number  D. An odd integer</p>
152	Question Image	
153	If $z_1 = (a,b)$ , $z_2 = (c,d)$ , then $z_1 z_2 =$ -----	<p>A. (ac,bd)  B. (ac+bd, ad-bc)  C. (ac-bd, ad+bc)  D. (ac-bd, ad-bc)</p>
154	Rational number is a number which can be written as a terminating decimal fraction or a	<p>A. Non-terminating decimal fraction  B. Non-recurring  C. Recurring decimal fraction  D. a, b and c</p>
155	Question Image	<p>A. 1  B. -1</p>
156	$\forall a, b, c \in \mathbb{R} \quad ac = bc \Rightarrow a = b, c \neq 0$ is a	<p>A. Symmetric property  B. Cancellation property w.r.t multiplication  C. Reflexive property  D. Transitive property</p>



157	$\forall a, b \in \mathbb{R}, ab = ba$ is a	A. Commutative law of multiplication B. Closure law of multiplication C. Associative law of multiplication D. Multiplicative identity
158	The multiplicative inverse of $-3i$ is	A. $3i$ B. $-3i$ C. $-1/3i$ D. $1/3 i$
159	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
160	Question Image	A. A rational number B. A natural number C. An irrational number D. An integer
161	Question Image	A. Trichotomy property B. Additive property of inequality C. Transitive property D. Multiplicative property
162	$i =$	
163	$3/4$ is _____	A. An odd number B. An even number C. A natural number D. A rational number
164	$3/2$ is	A. An irrational number B. Whole number C. A positive integer D. A rational number
165	Question Image	
166	Additive inverse of $-a - b$ is	A. $a$ B. $-a + b$ C. $a - b$ D. $a + b$
167	Question Image	
168	Question Image	A. Associative property of addition B. Associative property of multiplication C. Commutative property of addition D. Commutative property of multiplication
169	Question Image	A. Associative law of addition B. Commutative law of addition C. Additive identity D. Closure law of addition
170	$\sqrt{2} + \sqrt{3} + \sqrt{5} = (\sqrt{2} + \sqrt{3} + \sqrt{5})$ : this property is called	A. associative property w.r.t addition B. commutative property C. Closure property w.r.t addition D. Additive identity
171	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. $y = 0$
172	Question Image	
173	Question Image	A. $(x, y)$ B. $(kx, y)$ C. $(x, ky)$ D. $(kx, ky)$
174	Any recurring decimal represents a	A. Irrational no B. Integer C. Rational no D. None of these
175	Zero is	A. An irrational number B. A rational number C. A negative integer D. A positive number
		A. $36 + (-32)i$ B. $32 + 36i$

176	If $z_1 = 2 + 6i$ and $z_2 = 3 + 7i$ , then which expression defines the product of $z_1$ and $z_2$ ?	<p>B. <math>-30 + 22i</math></p> <p>C. <math>6 + (-11)i</math></p> <p>D. <math>0 + (-12)i</math></p>
177	The set $\{1, 2, 3, 4, \dots\}$ is called	<p>A. Set of natural numbers</p> <p>B. Set of whole numbers</p> <p>C. Set of rational number</p> <p>D. Set of irrational numbers</p>
178	1.4142135... is _____	<p>A. A natural number</p> <p>B. A rational number</p> <p>C. A prime number</p> <p>D. An irrational number</p>
179	A non-terminating, non-recurring decimal represent	<p>A. A natural number</p> <p>B. A rational number</p> <p>C. An irrational number</p> <p>D. A prime number</p>
180	If $a$ is any real number and $a = a$ is called	<p>A. symmetric property</p> <p>B. Trichotomy Properties</p> <p>C. Transitive Property</p> <p>D. Reflexive Properties</p>
181	$(a, 0) \times (c, 0) =$	<p>A. <math>(0, ac)</math></p> <p>B. <math>(ac, 0)</math></p> <p>C. <math>(0, 0)</math></p> <p>D. <math>(a, c)</math></p>
182	Question Image	
183	Question Image	
184	Question Image	<p>A. Rational</p> <p>B. Irrational</p> <p>C. Natural</p> <p>D. Odd</p>
185	The real number system contains.	<p>A. Positive Numbers</p> <p>B. Negative numbers</p> <p>C. Zero</p> <p>D. (option a, b and c)</p>
186	The value of $x$ and $y$ when $(x + iy)^2 = 5 - 4i$	<p>A. <math>x = 2, y = -1</math></p> <p>B. <math>x = -2, y = 1</math></p> <p>C. <math>x = 2, y = -i</math></p> <p>D. <math>x = 2, y = 2</math></p>
187	Union of the sets of rational and irrational numbers is called 6th set of	<p>A. Natural numbers</p> <p>B. Real numbers</p> <p>C. Whole numbers</p> <p>D. Prime numbers</p>
188	Question Image	<p>A. Associative law of addition</p> <p>B. Commutative law of addition</p> <p>C. Additive identity</p> <p>D. Closure law of addition</p>
189	$i^3 =$	<p>A. -1</p> <p>B. i</p> <p>C. -i</p> <p>D. 1</p>
190	Question Image	<p>A. Reflexive property</p> <p>B. Symmetric property</p> <p>C. Cancellations property w.r.t. addition</p> <p>D. Transitive property</p>
191	The set of positive integers, 0 and negative integers is known as the set of	<p>A. Natural numbers</p> <p>B. Rational numbers</p> <p>C. All integers</p> <p>D. Irrational numbers</p>
192	Geometrically the modulus of a complex number represents its distance from the	<p>A. Point <math>(1, 0)</math></p> <p>B. Point <math>(0, 1)</math></p> <p>C. Point <math>(1, 1)</math></p> <p>D. Point <math>(0, 0)</math></p>
193	Associative law of multiplication	<p>A. <math>ab - ba</math></p> <p>B. <math>a(bc) = (ab)c</math></p> <p>C. <math>a(b + c) = ab + ac</math></p> <p>D. <math>(a + b)c = ac + bc</math></p>
194	Question Image	<p>A. <math>X = 2, y = 1</math></p> <p>B. <math>X = -2, y = 1</math></p>

195	The value of x, and y, when $(x + iy)^2 = 5 + 4i$	C. $X = 2, y = -1$ D. $X = 2, y = 2$
196	Which of the following has the same value as $i^{113}$ ?	A. $i$ B. $-1$ C. $-i$ D. $1$
197	$\forall z \in \mathbb{C}$ , multiplicative is	A. $(1,1)$ B. $(1,0)$ C. $(0,1)$ D. None of these
198	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. $\sqrt{5}$
199	$QUQ, =$	A. N B. R C. W D. Z
200	If in a set of real no a is multiplicative identity then	A. $a, a = a^{>2}$ B. $a, a = 1$ C. $a, a = 0$ D. None of these
201	Question Image	A. A rational number B. An irrational number C. An odd number D. A prime number
202	The value of $i^{4n+1}$	A. 1 B. -1 C. $i$ D. $i^{>2}$
203	In $(x + iy)$ y is called as	A. Imaginary part B. Complex number C. Real part D. None of above
204	Associative law of multiplication	A. $ab = ba$ B. $a(bc) = (ab) c$ C. $a(b+c) = ab + ac$ D. $(a + b)c = ac + bc$
205	It is not possible to find the exact value of	A. $\pi$ B. $\sqrt{9}$ C. $\sqrt[3]{27}$ D. $\sqrt{1}$
206	$\pi$ 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
207	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
208	The multiplicative inverse of $(a,b)$ is	
209	2.333.... is a	A. Irrational no B. Complex no C. Rational no D. None of these
210	If $a > b$ or $a < b$ then $a = b$ is a	A. Additive property B. Transitive property C. Trichotomy property of inequality
211	$4/\sqrt{49}$ is a	A. Irrational Number B. Prime Number C. Rational number D. Whole number
212	Question Image	A. real number B. complex number C. rational number D. irrational number
		A. Principle of equality of fractions B. Rule for product of fractions

213	Question Image	B. Rule for product of fractions C. Golden rule for fractions D. Rule for quotient of fractions
214	$(a, b) + (-a, -b) =$	A. $(0, 0)$ B. $(a, b)$ C. $(-a, -b)$ D. $(1, 1)$
215	Question Image	A. Associate law of addition B. Commutative law of addition C. Additive identity D. Closure law of addition
216	Question Image	
217	In $\mathbb{R}$ the right cancellation property w.r.t. addition is	
218	$i =$	A. $\sqrt{1}$ B. $\sqrt{2}$ C. $\sqrt{-2}$ D. $\sqrt{-1}$
219	$\forall a, b, c \in \mathbb{R}$ 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
220	Question Image	A. -8 B. 8 C. $8i$ D. 32
221	Question Image	
222	202.04 is an example of	A. Recurring decimals B. Non-recurring decimals C. Terminating decimals D. None of these
223	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
224	$\forall x, y \in \mathbb{R}$ , either $x = y$ or $x > y$ or $x < y$ is	A. Transitive property B. Reflexive property C. Trichotomy property D. None of these
225	Question Image	A. Symmetric property B. Cancellation property w.r.t. multiplication C. Reflexive property D. Transitive property
226	Name the property used in $100 + 0 = 100$	A. Additive inverse B. Multiplicative inverse C. Additive identity D. Multiplicative identity
227	$\mathbb{I}$ is not	A. Real number B. Natural number C. Prime Number D. Whole Number
228	In $\mathbb{R}$ , the multiplicative identity is	A. 0 B. 1 C. -1 D. None
229	Decimal part of irrational number is	A. Terminating B. Repeating only C. Neither repeating nor terminating D. Repeating and terminating
230	$(a^{-1})^{-1} =$	A. $a^{-1}$ B. $a$ C. $-a$ D. None of above
231	Question Image	
232	Question Image	A. Set of whole number B. Rational Numbers

232		C. Complex numbers D. Whole numbers
233		B. 1 C. -1
234	0 (zero) is	A. An irrational number B. A rational number C. A negative integer D. A positive number
235	The $\sqrt{\quad}$ is used for the	A. Positive square root B. Negative square root C. +ve and -ve square root D. Whole number
236	The set of rational number is represented by	A. W B. R C. Q' D. $\mathbb{Q}$
237		
238	The equation $ x + 4  = x$ has solution	A. $x = -2$ B. $x = 2$ C. $x = -4$ D. $x = 4$
239	Name the property used in $1000 \times 1 = 1000$	A. additive inverse B. multiplicative inverse C. additive identity D. multiplicative identity
240		A. 1 B. -i C. i D. 0
241	If a set S contains n elements then P (S) has ..... number of elements	A. $2^n$ B. $2^{n^2}$ C. 2.n D. $n^2$
242		
243		A. Commutative property of addition B. Closure property of addition C. Additive inverse D. Associative property w.r.t. to addition
244	In polar form of complex number $r =$	
245		A. additive property B. multiplicative property C. additive identity D. multiplicative identity
246	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. $X = 2, y = 2$
247	The set $\{0, -1\}$ hold closure property under	A. Addition B. Both a & c C. Multiplication D. None of these
248	24 can be written as a product of	A. Odd factors B. Even factors C. Whole factors D. Prime factors
249	$Q \cup Q' =$	A. Q B. Q' C. N D. R
250	If $Z_1 = 1 + i, Z_2 = 2 + 3i$ , then $ Z_1 - Z_2  = ?$	A. $\sqrt{5}$ B. $\sqrt{7}$ C. $-1 - 2i$ D. $\sqrt{3}$
251		
252	In R the number of identity elements w.r.t. ' ' is	A. One B. Two C. Three

		D. Four
253	In $\mathbb{R}$ , the multiplicative inverse of $a$ is	A. 0 B. 1 C. $-a$ D. $1/a$
254	Name the property used in $4 \times (5 \times 8) = (4 \times 5) \times 8$	A. Associative property of addition B. Associative property of multiplication C. Additive identity D. Multiplicative identity
255	Question Image	A. Rational B. Irrational C. Even D. Odd
256	The set of natural no. is closed under	A. multiplication B. subtraction C. difference D. division
257	A non-terminating non-recurring decimal represents an	A. Irrational no B. Both a & c C. Rational no D. None of these
258	Question Image	A. A natural number B. A rational number C. An irrational number D. A whole number
259	$2/9, 5/7 \in \mathbb{R}, (2 \mid 9)(5 \mid 7) = 10/63 \in \mathbb{R}$ this property is called	A. Associative property B. Identity property C. Commutative property D. Closure property w.r.t multiplication
260	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
261	If $Z = (1, 2)$ , then $Z^{-1} = ?$	A. $(0.2, 0.4)$ B. $(-0.2, 0.4)$ C. $(0.2, -0.4)$ D. $(-0.2, -0.4)$
262	$\forall x, y \in \mathbb{R}$ and $x < 0, y < 0$ , which one is true	A. $xy < 0$ B. $xy = 0$ C. $xy > 0$ D. None of these
263	Question Image	
264	Every whole number is	A. A real number B. An irrational number C. A prime number D. A negative integer
265	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
266	If $Z = (1, 2)$ , then $Z^{-1} = ?$	A. $(0.2, 0.4)$ B. $(-0.2, 0.4)$ C. $(0.2, -0.4)$ D. $(-0.2, -0.4)$
267	Every natural number is	A. A prime number B. An irrational number C. An integer D. An even number
268	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
269	Question Image	
270	Which element is the additive inverse of $(a, b)$ in Complex numbers?	A. $(a, 0)$ B. $(0, b)$ C. $(a, b)$ D. $(-a, -b)$

271	Question Image	A. 0 B. 1 C. -1 D. None of these
272	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
273	The square root of $2i - 20i$ is	A. $\pm(5 - 2i)$ B. $\pm(5 + 2i)$ C. $(5 - 2i)$ D. None of these
274	The multiplicative inverse of $\frac{2}{3}$ is	A. $\frac{3}{2}$ B. $-\frac{2}{3}$ C. $-\frac{3}{2}$ D. 1
275	Name the property used in $4.1 + (-4.1) = 0$	A. Additive inverse B. Multiplication inverse C. Additive identity D. Multiplication identity
276	Question Image	
277	The solution set of the equation $ 3x + 2  = 5$ is	
278	$\sqrt{-1} b =$	A. b B. 2 C. $2b$ D. None of these
279	The multiplicative inverse of 4 is	A. -4 B. $-\frac{1}{4}$ C. $\frac{1}{4}$ D. 1
280	Every real number is	A. A complex number B. A rational number C. A natural number D. A prime number
281	Question Image	
282	The identity element with respect to subtraction is	A. 0 B. 1 C. -1 D. Does not exist
283	QUQ'	
284	Every irrational number is	A. A real number B. A prime number C. A natural number D. An integer
285	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
286	14 is not a	A. Prime number B. Whole number C. Even number D. Real number
287	The additive inverse of 0 is	A. 1 B. -1 C. 0 D. Does not exist
288	The conjugate of $\sqrt{5} i$ is	A. $\sqrt{5}$ B. $-\sqrt{5} i$ C. i D. $5i$
289	The order axioms are satisfied by set of	A. C B. C and R C. R D. None of these
290	Question Image	A. N B. r C. $2r$ D.

Roman&quot;; font-size: 24px; text-align: center; background-color: rgb(255, 255, 248);"><i>π</i></span>

291	Question Image	A. are real no B. both are not real C. are imaginary no D. both are imaginary
292	Question Image	
293	Question Image	
294	Which of the following sets has closure property w.r.t. addition	A. { 0 } B. { 1 } C. { 0, -1} D. { 1, -1}
295	There is no element common in	A. N and W B. E and W C. N and O D. Q and Q'
296	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
297	The square root of $2i - 20i$ is	A. $-(5 - 2i)$ B. $-(5 + 2i)$ C. $(5 - 2i)$ D. None of these
298	Question Image	
299	Question Image	A. $(a + b)c = a \cdot c + bc$ B. $a + b = b + a$ C. $(a + b) + c = a + (b + c)$ D. $a(b + c) = ab + ac$