

Mathematics ECAT Pre Engineering Chapter 1 Number System Online Test

Sr	Questions	Answers Choice
1	Gooch crucible is made of :	A. Brass. B. Porcelain. C. Bronze. D. Gold.
2	Question Image	
3	Which of the following has the same value as i ¹¹³ ?	A. i B1 Ci D. 1
4	What is the conjugate of -6 -i?	A6 +i B. 6+i C6 -i D. 6 -i
5	Which element is the additive inverse of (a, b) in Complex numbers?	A. (a, 0) B. (0, b) C. (a, b) D. (-a, -b)
6	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 B36 + 32i C. 6 + (-11)1 D. 0, +(-12)i
7	Question Image	A. 15 B. 15 i C15 i D15
8	Question Image	 A. z is purely imaginary B. a is any complex number C. z is real D. None of these
9	Question Image	A. 0 B. 1 C1 D. None of these
10	If Z ₁ = 1 + i, Z ₂ = 2+3i, then Z ₁ - Z ₂ = ?	
11	i ¹⁰¹ =	A. i B. i ² Ci D1
12	The multiplicative inverse of -3i is	A. 3i B3i C1/3i D. 1/3 i
13	Question Image	
14	In polar form of complex number r =	
15	Question Image	
16	Question Image	
17	(7, 9) + (3, -5) =	A. (4, 4) B. (10, 4) C. (9, -5) D. (7, 3)
18	Question Image	A.
19	j ² =	A. 1 B. 2 C1 D. 0

20	(a,0) x (c, 0) =	A. (0,ac) B. (ac, 0) C. (0,0) D. (a, c)
21	(a, b) + (-a, -b) =	A. (0,0) B. (a, b) C. (-a, -b) D. (1, 1)
22	Question Image]
23	(a+bi) - (c+di)=	A. $(a+b) = (c+d)$ B. $(a+c) + i(b+d)$ C. $(a - c) + (c - d)i$ D. $(a - c) + (b - d)i$
24	i ³ =	A1 B. i Ci D. 1
25	In (x + iy), y is called as	A. Imaginary part B. Complex number C. Real part D. None of above
26	i =	
27	Question Image	A. Additive property of inequalityB. Commutative propertyC. Additive inverseD. Additive identity
28	Question Image	 A. Commutative property of addition B. Closure property of addition C. Additive inverse D. Associative property w.r.t. to addition
29	Question Image	A. Rule of quotient of fractionB. Golden rule of fractionC. Rule for product of fractionD. Principle for equality of fraction
30	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