**CBSE Class 11 Mathematics**

**Important Questions**

**Chapter 5**

**Complex Numbers and Quadratic Equations**

**1 Mark Questions**

1. Evaluate .
2. Solve the quadratic equation
3. If then find the least positive integral value of m.
4. Evaluate
5. Find the modulus of .
6. Express in the form of
7. Explain the fallacy in .
8. Find the conjugate of
9. Find the conjugate of
10. Let . Find .
11. Express in the form of .
12. Find the conjugate of .
13. Solve for x and y, .
14. Find the value of
15. Multiply by its conjugate.
16. Find the multiplicative inverse of .
17. Express in terms of .
18. Evaluate
19. If are three cube of unity, show that
20. Find that sum product of the complex number
21. Write the real and imaginary part
22. If two complex numbers are such that , is it necessary that
23. Find the conjugate and modulus of
24. Find the number of non zero integral solution of the equation . **[No value of x satisfies]**
25. If . Then show that

**CBSE Class 12 Mathematics**

**Important Questions**

**Chapter 5**

**Complex Numbers and Quadratic Equations**

**4 Marks Questions**

1. If . Prove that
2. Find real such that is purely real.
3. Find the modulus of .
4. If then show that .
5. If . Prove that .
6. If , where a, b, c are real prove that and .
7. If and . Find .
8. If . Prove that
9. If . Prove that
10. If then show that ().
11. Solve .
12. Find the modulus .
13. If . Prove that
14. Evaluate
15. Find that modulus and argument
16. For what real value of x and y are numbers equal and
17. If . Prove that
18. Convert in the polar form
19. Find the value of x and y if is the conjugate of.
20. If Prove that

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**Important Questions**

**Chapter 5**

**Complex Numbers and Quadratic Equations**

**6 Marks Questions**

1. If and . Show that
2. Convert into polar form .
3. Find two numbers such that their sum is 6 and the product is 14.
4. Convert into polar form .
5. If are different complex number with . Then find .