

CLASS: X - CHEMISTRY

Q1. The electronic configuration of three elements X, Y and Z are X – 2, 8; Y – 2, 8, 6; and Z – 2, 8, 1. Which of the following is correct?

- a) X is a metal
- b) Y is a metal
- c) Z is a non metal
- d) Y is a non-metal and Z is metal

Q2. Which of the following metals are obtained by electrolysis of their chlorides in molten state ?

- a) Na
- b) Fe
- c) Ca
- d) Cu

Q3. Reaction between the element X and Y results in the compound Z. Whereas X loses electron & Y gains the same. Which of the following properties is not shown by Z ?

- a) Has high melting point.
- b) Has low melting point.
- c) Conducts electricity in molten state.
- d) Occurs in solid.

Q4. Which one of the following properties is not generally exhibited by ionic compounds ?

- a) Solubility in water
- b) Electrical conductivity in solid state
- c) High melting and boiling point
- d) Electrical conductivity in molten state

Q5. Generally metals react with acid to give salt and hydrogen gas. Which of the following acid does not give hydrogen gas on reacting with metal (except Mn and Mg) ?

- a) H₂SO₄
- b) HCl
- c) HNO₃
- d) All of these

Q6. You are provided with three metals : Sodium, Magnesium and Copper. Using only water as the reactant how will you identify them ?

Q7. An element reacts with oxygen to form an oxide which dissolves in dilute hydrochloric acid. The oxide formed also turn a solution of red litmus blue. Is the element a metal or non-metal ? Explain with the help of a suitable example.

Q8. An element 'A' catches fire in water and burn with golden yellow flame in air. It reacts with another element 'B', present in group 17 to give a product 'C'. An aqueous solution of product 'C' on electrolysis gives a compound 'D' and liberates hydrogen. Identify A, B, C and D.

Q9. How will you demonstrate that the ionic compound do not conduct electricity in solid state and can do so in solution.

Q10. A) Distinguish between 'roasting' and 'calcination'. Which of the two is used for sulphide ores and why ?