Practice Test
Chapter: 3rd
Metals and Non- Metals

Q1: Which of the following methods is suitable for preventing an iron frying pan from rusting?

(a) Applying grease
(b) Applying paint
(c) Applying a coating of zinc
(d) All of the above.

Q2: Which of the following pairs will give displacement reactions?

(a) NaCl solution and copper metal
(b) $MgCl_2$ solution and aluminium metal
(c) $FeSO_4$ solution and silver metal
(d) $AgNO_3$ solution and copper metal.

Q3: What happens when calcium is treated with water?

(i) It does not react with water.
(ii) It reacts violently with water.
(iii) It reacts less violently with water.
(iv) Bubbles of hydrogen gas formed stick to the surface of calcium.

(a) (i) and (iv)
(b) (ii) and (iii)
(c) (i) and (ii)
(d) (iii) and (iv)

Q4: The electronic configurations of three elements X, Y and Z are X –2, 8; Y –2, 8, 7 and Z –2, 8, 2. 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 a metal

Q5: **Assertion (A):** A list of common metals arranged in order of their decreasing reactivity is known as an activity series.

Reason (R): Metals above hydrogen in the Activity series can displace hydrogen from dilute acids. A more reactive metal displaces a less reactive metal from its salt solution.

Q6: **Assertion (A):** Ionic compounds have low melting and boiling points.

Reason (R): A considerable amount of energy is required to break the strong inter-ionic attraction.

Q7: Name two metals which are found in nature in the free state.

Q8: Why do ionic compounds have high melting points?

Q9: What would you observe when zinc is added to a solution of iron(II) sulphate? Write the chemical reaction that takes place.

Q10: Name the non-metal which is good conductor of electricity.

Q11: Give reasons why copper is used to make hot water tanks and not steel (an alloy of iron).

Q12: Differentiate between metal and non-metal on the basis of their chemical properties.

Q13: What are amphoteric oxides? Give two examples of amphoteric oxides.

Q14: What is the difference between Calcination and Roasting process?

Q15: What is the difference between (i) Mineral (ii) Ore (iii) Gangue?

Q16: Write down the general properties for ionic compounds.