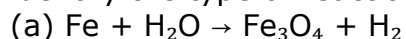


Q1. Balance the following equations and identify the type of reaction.



Q2. Explain what happens when an acid reacts with:

(i) A metal

(ii) A metal carbonate

(iii) A base

Or

Write the chemical formula and one use each of baking soda, washing soda and bleaching powder

Q3 . Why do ionic compounds have high melting points and conduct electricity in molten state?

Q4. What is corrosion? Give two methods to prevent it.

Or

Differentiate between combination and decomposition reactions with one example each.

Or

Explain thermal, electrolytic and photochemical decomposition with examples.

Q5. Why does dry HCl gas not change the colour of dry blue litmus paper? What happens when HCl dissolves in water?

Or

Why should acid always be added to water and not water to acid?

Or

A solution has pH 3 and another has pH 6. Which is more acidic and why?

Q6. How is baking soda useful in making cakes and bread? Write the reaction involved

Or

What happens when baking soda reacts with an acid? Give an equation and one observation

Q7. Why do metals generally form cations while non-metals form anions?

Or

Why does copper not liberate hydrogen from dilute HCl?

Q8. Explain why ionic compounds:

(a) have high melting points

(b) are generally soluble in water

(c) conduct electricity in molten state

Q9. Explain why metals are extracted from their ores by different methods depending on their reactivity.

Or

Give an example of a metal which

(i) is a liquid at room temperature.

(ii) can be easily cut with a knife.

(iii) is the best conductor of heat. (iv) is a poor conductor of heat

Q10. What is aqua regia? State its composition and the ratio in which its components are mixed.

Or

Give three important characteristics of aqua regia.

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

Q12. (i) Write the electron-dot structures for sodium, oxygen and magnesium.

(ii) Show the formation of Na_2O and MgO by the transfer of electrons.

(iii) What are the ions present in these compounds?

Q13. Define the following terms. (i) Mineral (ii) Ore (iii) Gangue

Q14. (i) Which metals do not corrode easily? (ii) What are alloys?

Q15. Differentiate between metal and non-metal on the basis of their chemical properties.

Q16. What are amphoteric oxides? Give two examples of amphoteric oxides.

Q17. Name two metals which will displace hydrogen from dilute acids, and two metals which will not.