

CHEMICAL REACTIONS AND EQUATIONS

QUESTION BANK

Q1. Write the chemical equation of the reaction in which the following changes have taken place with an example of each:

- i. Change in colour
- ii. Change in temperature
- iii. Evolution of gas
- iv. Formation of precipitate

Q2. Write the chemical reactions taking place when:

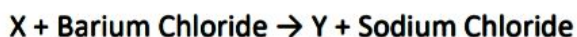
- i. Iron reacts with steam
- ii. Magnesium reacts with dil. Hydrochloric acid
- iii. Copper is heated in air
- iv. Dil. Hydrochloric acid is added to copper oxide.
- v. Electric current is passed through water

Q3. What is redox reaction? When a magnesium ribbon burns in air with a dazzling flame and forms a white ash, is magnesium oxidized or reduced? Why?

Q4. Why do we store silver chloride in dark-coloured bottles?

Q5. A solution of potassium chloride when mixed with silver nitrate solution, an insoluble white substance is formed. Write the chemical reaction involved and also mention the type of chemical reaction.

Q6. Consider the following chemical reaction:



- i) Identify X and Y.
- ii) Name the type of reaction.

Q7. A solution of substance X is used for white washing. What is the substance X? State the chemical reaction of X with water.

Q8. When you have mixed the solutions of lead(II) nitrate and potassium iodide.

- a) What was the colour of the precipitate formed and can you name the precipitate?
- b) Write the balanced chemical reaction for this reaction.
- c) Is this also a double displacement reaction?

Q9. A zinc plate was put into a solution of copper sulphate kept in a glass container. It was found that blue colour of the solution gets fader and fader with the passage of time. After few days when zinc plate was taken out of the solution, a number of holes were observed on it.

(i) State the reason for changes observed on the zinc plate.

(ii) Write the chemical equation for the reaction involved.

Q10. a) What happens when limestone is heated strongly? Write the chemical equation involved.

b) Name the type of reaction.

Q11. a) Write one equation each for decomposition reactions where energy is supplied in the form of heat, light or electricity.

b) Which of the following statements is correct and why?

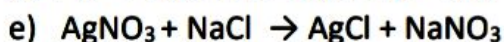
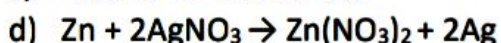
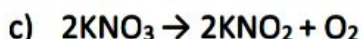
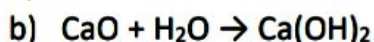
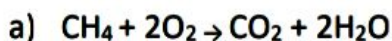
Copper can displace silver from the solution of silver nitrate or silver can displace copper from solution of copper sulphate.

Q12. Why does the colour of copper sulphate change when an iron nail is dipped in it?

Q13. a) What is the colour of ferrous sulphate crystals? How does this colour change after heating?

b) Name the product formed on strongly heating ferrous sulphate crystals. What type of chemical reaction occurs in this change?

Q14. Identify the type of reaction:



Q15. A) Identify the oxidizing and reducing agents in the given reactions:

