



ASSIGNMENT NO. 1

SUBJECT: CHEMISTRY

CLASS-X

APRIL/MAY'2026

Chapter-1: Chemical Reactions and Equations

Answer the following questions :

1. A student wants to study a decomposition reaction by taking ferrous sulphate crystals. Write two precautions he must observe while performing the experiment.
2. Give one example of a combination reaction and one example of a decomposition reaction .
3. Give an example of a double displacement reaction accompanied by the evolution of gases.
4. Why is respiration considered an exothermic process?
5. When iron rod is kept dipped in copper sulphate solution for some time, a brown coating is formed on the iron rod. Explain why. What change will you observe in the color of the solution?
6. A shining metal M on burning gives a dazzling white flame and changes to a white powder N.
 - (a) Identify M and N.
 - (b) Represent the above reaction in the form of a balanced chemical equation .
7.
 - (a) Define a double displacement reaction .
 - (c) Write the chemical equation of a double displacement reaction which is also a
 - (i) neutralization reaction and (ii) precipitation reaction . Give justification for your answer.
8. Mention with reason the colour changes observed when :
 - (i) silver chloride is exposed to sunlight .
 - (ii) copper powder is strongly heated in the presence of oxygen .
 - (iii) a piece of zinc is dropped in copper sulphate solution
9. In the electrolysis of water :
 - (i) Name the gas liberated at anode and cathode .
 - (ii) Why is it that the volume of gas collected on one electrode is two times that on the other electrode ?
 - (iii) What would happen if dil.H₂SO₄ is not added to water ?
10. Can a displacement reaction be a redox reaction ? Explain with the help of an example.