



ASSIGNMENT NO. 2

SUBJECT: CHEMISTRY

CLASS-X

JULY'2026

Chapter-2: Acids, Bases and Salts

Answer the following questions:

1. Which of the following gives CO_2 on heating? (a) Slaked lime (b) Quick lime (c) Limestone (d) Soda ash (e) Limestone.
2. What colour does phenolphthalein show in a basic solution?
3. What is the colour of methyl orange in an acidic solution?
4. Which gas is generally liberated when an acid reacts with a metal? How will you test for the presence of this gas?
5. Why does sodium hydroxide react with zinc but not all metals?
6. Metal compound A reacts with dilute hydrochloric acid to produce effervescence. The gas evolved extinguishes a burning candle. If one compound formed is calcium chloride, write the balanced equation.
7. A compound X on electrolysis in an aqueous solution produces a strong base Y, along with two gases A and B. B is used in the manufacture of bleaching powder. Identify X, Y, A, and B.
8. Give the preparation, chemical name, formula, and uses of baking soda, washing soda, and bleaching powder.
9. Explain the importance of pH in everyday life with four examples.
10. Two statements are given-one labelled Assertion (A) and the other labelled Reason (R).

Select the correct answer to these questions from the codes (a), (b), (c) and (d) as given below

- (a) Both A and R are true and R is correct explanation of the assertion.
(b) Both A and R are true but R is not the correct explanation of the assertion.
(c) A is true but R is false.
(d) A is false but R is true.

- (i) **Assertion (A)** : On dilution of a strong acid or a weak acid, the number of H^+ ions per unit volume in the solution decreases.

Reason(R) : Dissociation of strong acid does not increase with dilution whereas that of weak acid increases with dilution.

- (ii) **Assertion (A)** : All salts form neutral solution with $\text{pH}=7$.

Reason(R) : Salts are formed by neutralisation of an acid with a base.

- (iii) **Assertion (A)** : The aqueous solutions of glucose and alcohol do not show acidic character.

Reason(R) : Aqueous solutions of glucose and alcohol do not give H^+ ions.

- (iv) **Assertion (A)** : During electrolysis of concentrated aqueous solution of sodium chloride, hydrogen is produced at anode and chlorine gas is produced at cathode.

Reason(R) : Ions get attracted to oppositely charged electrodes.