

Class 10 Assignment

Class 10 Assignment 2 Chemical Equations & reactions

1. Which of the following is not a physical change?

- (a) Boiling of water to give water vapour
- (b) Melting of ice to give water
- (c) Dissolution of salt in water
- (d) Combustion of Liquefied Petroleum Gas (LPG)

2.. Three beakers labelled as A, B and C each containing 25 mL of water were taken. A small amount of NaOH, anhydrous and NaCl were added to the beakers A, B and C respectively. It was observed that there was an increase in the temperature of the solutions contained in beakers A and B, whereas in case of beaker C, the temperature of the solution falls. Which one of the following statement(s) is(are) correct?

- (i) In beakers A and B, exothermic process has occurred.
 - (ii) In beakers A and B, endothermic process has occurred.
 - (iii) In beaker C exothermic process has occurred.
 - (iv) In beaker C endothermic process has occurred.
- (a) (i) only
 - (b) (ii) only
 - (c) (i) and (iv)
 - (d) (ii) and (iii)

3. Which among the following statement(s) is(are) true? Exposure of silver chloride to sunlight for a long duration turns grey due to

- (i) the formation of silver by decomposition of silver chloride
 - (ii) sublimation of silver chloride
 - (iii) decomposition of chlorine gas from silver chloride
 - (iv) oxidation of silver chloride
- (a) (i) only
 - (b) (i) and (iii)
 - (c) (ii) and (iii)
 - (d) (iv) only

4. Barium chloride on reacting with ammonium sulphate forms barium sulphate and ammonium chloride. Which of the following correctly represents the type of the reaction involved?

- (i) Displacement reaction
 - (ii) Precipitation reaction
 - (iii) Combination reaction
 - (iv) Double displacement reaction
- (a) (i) only (b) (ii) only (c) (iv) only

5. Electrolysis of water is a decomposition reaction. The mole ratio of hydrogen and oxygen gases liberated during electrolysis of water is

- (a) 1:1 (b) 2:1
(c) 4:1 (d) 1:2

6. Which of the following gases can be used for storage of fresh sample of an oil for a long time?

- (a) Carbon dioxide or oxygen (b) Nitrogen or oxygen
(c) Carbon dioxide or helium (d) Helium or nitrogen

7. Which one of the following processes involve chemical reactions?

- (a) Storing of oxygen gas under pressure in a gas cylinder
(b) Liquefaction of air
(c) Keeping petrol in a china dish in the open
(d) Heating copper wire in presence of air at high temperature

8. 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 the chemical reaction?

9. Why do fire flies glow at night?

10. Grapes hanging on the plant do not ferment but after being plucked from the plant can be fermented. Under what conditions do these grapes ferment? Is it a chemical or a physical change?