Section - A

1. (c) Used in white washing walls.
2. (d) Exothermic.
3. (d) Glucose.
4. (c) Green.

Section - B

5. Water contains hydrogen and oxygen in the ratio of 2: 1, that is why volume of H_2 is double than that of oxygen.

6. Black coloured coating is formed. It is a due to formation of copper oxide.

7.

$$CuO + 2HCl \rightarrow CuCl_2 + 2H_2O$$

Copper chloride solution imparts blue green color to the solution.

8. Iron being more reactive displaces copper from copper sulfate (Blue) solution to form iron (II) sulfate (Pale green) solution and reddish brown copper metal gets deposited

$$Fe(s) + CuSO_4 \rightarrow FeSO_4(aq) + Cu(s)$$

9. White precipitate of $BaSO_4$ is formed.

$$BaCl_2(aq) + Na_2SO_4(aq) \rightarrow BaSO_4(s) + 2NaCl(aq)$$

It is a double displacement reaction. If reactants are taken in solid state, products will not be formed.

Section - C

10.

a. Chemical equation must be balanced so as to follow the law of conservation of mass.

(i) $CH_4(g) + 2O_2(g) \rightarrow CO_2(g) + 2H_2O(l)$

(ii) $C_6H_{12}O_6(s) + 6O_2(g) \rightarrow 6CO_2(g) + 6H_2O(l) + Heat$

11. a. Yes, combination reaction can be called a oxidation reaction.

b. Bring a burning splinter near the gas, if it burns with pop sound, it is hydrogen gas.

c. It is because copper is less reactive than hydrogen

Section - D

12.

a. Double displacement reaction,
b. Oxidation,
c. Decomposition reaction,
d. Displacement reaction,
e. Combination reaction.