

## BRAIN INTERNATIONAL SCHOOL

Chemistry Assignment

Class: X

April'21

### Chapter-1: Chemical Reactions and Equations

1. Why is hydrogen peroxide kept in coloured bottles?
2. Give one example of a combination reaction and one example of a decomposition reaction in which a catalyst is used.
3. Give an example of a double displacement reaction accompanied by the evolution of a gas.
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 colour of the solution?
6. Give two examples from everyday life situations where redox reactions are taking place.
7. Can we stir silver nitrate solution with a copper spoon? Why or why not?
8. Explain two ways by which food industries prevent rancidity.
9. Discuss the importance of decomposition reactions in metal industry.

#### 10. **MULTIPLE CHOICE QUESTIONS:**

- (i) What is the number of iron atoms and hydrogen atoms in the balanced equation for the reaction of steam on iron?
- (a) 3Fe and 8H      (b) 3Fe and 4H      (c) 3Fe and 6H      (iii) 3Fe and 10H
- (ii) On heating ferrous sulphate crystals, we obtain
- (a) A mixture of ferric oxide and sulphur dioxide.  
(b) A mixture of ferrous oxide and sulphur trioxide.  
(c) A mixture of ferric oxide, sulphur dioxide and sulphur trioxide.  
(d) A mixture of ferrous oxide, sulphur dioxide and sulphur trioxide.

#### 11. **ASSERTION-REASON QUESTIONS:**

Select the correct answer to these questions from the codes (i), (ii), (iii) and (iv) as given below

- (i) **Both A and R are true and R is correct explanation of the assertion.**
- (ii) **Both A and R are true but R is not the correct explanation of the assertion.**
- (iii) **A is true but R is false.**
- (iv) **A is false but R is true.**
- (a) Assertion: Iron articles get coated with reddish brown powder when left for sometime in the open.  
Reason: Iron is attacked by substances around it such as moisture, acids, etc.
- (b) Assertion: While silver chloride turns grey in sunlight.  
Reason: Copper reacts with zinc sulphate to form copper sulphate and zinc is deposited.

