<u>Class - X,Science,. Ch – 1, Chemical Reactions and Equations.</u>

Answer the following questions.

- 1. What is meant by a chemical reaction?
- 2. State one difference between a physical change and a chemical change?
- 3. A magnesium ribbon should be cleaned before burning it in air. Why?
- 4. What do you mean by balanced chemical reaction?
- 5. Which one is a chemical change-rusting of iron or melting of iron?
- 6. What does symbol (aq) represent in a chemical equation?
- 7. Complete and balance the following equations :

(a) NaOH+...... \rightarrow Na2SO4+H2O

(b) Ca(OH)2+..... \rightarrow CaCO3+H2O

8. Write the essential condition for following reaction to take place.

 $2AgCI \rightarrow 2Ag+CI2$ and write one use of this reaction.

9. List any four observations that help us to determine whether a chemical reaction has taken place ?

- 10. On what basis is a chemical equation balanced?
- 11. (a) What is a chemical equation ? Explain with the help of an example ?

(b) Giving examples, state the difference between balanced and unbalanced chemical equations.

(c) Balance the following chemical equation : -

(i) NH3 \rightarrow N2+H2

(ii) C+CO2 \rightarrow CO

12.(a) What do you understand by exothermic and endothermic reactions.

(b) Give one example of an exothermic reaction and endothermic reaction.

(c) Find out endothermic & exothermic reactions from the following?

(i) Respiration

(ii) Photosynthesis

(iii) Burning of natural gas

(iv) Digestion of food

13. (a) What happens when an aqueous solution of sodium sulphate reacts with an aqueous solution of barium chloride ?

(b) Write the balanced chemical equation for the reaction which takes place.

(c) State the physical conditions of reactants in which the reaction will not take place.

(d) Name the type of chemical reaction which occurs ?