HOLIDAY HOMEWORK SCIENCE

SESSION 2023-24

(A.) Chemical reactions and equations:

1. Balance the following:

a) NaOH +
$$H_2SO_4$$
 \longrightarrow Na₂SO₄ + H_2O

b)
$$H_2S + SO_2 \longrightarrow S + H_2O$$

c) Fe +
$$H_2O \longrightarrow Fe_3O_4 + H_2$$

2. Consider the following reactions:

Which of these two reactions will take place and why?

- 3. Write characteristics of chemical reactions.
- 4. What is corrosion? How it can be prevented?
- 5. Oil and fat containing food items are flushed with nitrogen. Why?
- 6. Identify the substance oxidised, the substance reduced, oxidising agent and reducing agent in the following reactions:

a)
$$2PbO + C \longrightarrow 2Pb + CO_2$$

b) CuO +
$$H_2 \longrightarrow Cu + H_2O$$

7. Define and give examples of different types of chemical reactions.

Life Processes:

- 1. Name the product and by product of photosynthesis.
- 2. What are the raw materials of photosynthesis?
- 3. Name the products of photolysis of water.
- 4. Draw neat labelled diagram of the following:
 - i) Human digestive system
 - ii) Human heart
 - iii) Human kidney
 - iv) Human excretory system
 - v) Nephron

PROJECT WORK:

With the help of an activity explain mechanism of inspiration and expiration.

- (C) ART INTEGRATED PROJECT: STATE -TAMILNADU
- (D) MDP: i) Write in detail Agricultural tools used in Tamilnadu
 - ii) Organic Farming in Tamilnadu