



## St. JOHN'S RESIDENTIAL PUBLIC SCHOOL

Sona Gopalpur, Sampatchak, Patna – Gaya Highway, Patna – 7

**Pre – Mid Term Exam - I (2023 – 24)**

[SECTION – C: *PHYSICS*]

**Grade: X** **Date : / 05/ 23**  
**Subject: SCIENCE** **Max Marks: 25** **Duration: 1 hr.**  
**Name: \_\_\_\_\_** **Roll: \_\_\_\_\_**

1. What is first law of reflection? [2]
2. What is difference between Real and Virtual image? [2]
3. What is Lateral Inversion? [2]
4. A ray of light is incident on a plane mirror making an angle of  $90^\circ$  with the mirror. Find the angle of reflection? [1]
5. What is Quantum theory of light? [1]

### [SECTION – A: *CHEMISTRY*]

1. Define combination reaction. [1]
2. On what basis is a chemical reaction balanced? [1]
3. Correct and balance the chemical equation [1]  
$$\text{Ca} + \text{H}_2\text{O} \longrightarrow \text{CaOH} + \text{H}$$
4. Why should magnesium ribbon is cleaned before burning in air? [2]
5. What is redox reaction? Identify the following reaction: [3]
  - i) the substance oxidised, and
  - ii) the substance reduced
$$\text{ZnO} + \text{C} \longrightarrow \text{Zn} + \text{CO}$$

### [SECTION – B: *BIOLOGY*]

1. Write the final sample product of the following:- **3x1=3**
  - a) Carbohydrate
  - b) Protein
  - c) Fat
2. Define digestion. [2]
3. Write the name of the enzyme present in the saliva. [1]
4. The process of engulfing the food in Amoeba with help of Pseudopodia is called \_\_\_\_\_ [1]
5. Which chemical substance is use for starch or glucose test in the laboratory? [1]
6. What is systolic pressure? [1]