



Student Name					
Date	14/07/2020	Grade	X	Roll No.	
Subject	Science	Marks	50	Teacher's Sign	

**Periodic Assessment 1 : 2020**

**GENERAL INSTRUCTION:**

- The question paper contains 3 sections. Attempt all the section
- All questions are compulsory
- Section A contains one word answer question.
- Section B contains very short answer question.
- Section C contains short answer questions.

**SECTION A**

**A. Answer the following questions in one word: [5Marks]**

- 1 Name any one process which you would consider essential for maintaining life ?
- 2 Name the organisms that cannot prepare their own food.
- 3 The reaction  $H_2 + Cl_2 \rightarrow 2HCl$  represents:
  - a) Oxidation
  - b) Reduction
  - c) Decomposition
  - d) Combination
4. What is the rate of flow of electric charges called?
  - (a) Electric potential
  - (b) electric conductance
  - (c) Electric current
  - (d) none of these
- 5 Which of the following is the SI Unit of Electric Current?
  - (a) ohm
  - (b) ampere
  - (c) volt
  - (d) faraday

**SECTION B**

**B. Answer the following in short: [18 Marks]**

6. Where do plants get each of the raw materials required for photosynthesis ?
7. How are the lungs designed in human beings to maximize the area for exchange of gases?
8. Why is diffusion insufficient to meet the oxygen requirements of multicellular organisms like humans?
- 9 Define the unit of current.
- 10 What is meant by saying that the potential difference between two points is 1 V?
- 11 (a) Which among iron and mercury is a better conductor?  
(b) Which material is the best conductor?
12. Write 3 equations of decomposition action where energy is supplied in the form of heat  
Light and electricity.
- 13 What do you mean by a precipitation reaction? Explain by giving examples.
- 14 Identify the type of chemical reaction
  - (i)  $A \rightarrow B + C$
  - (ii)  $AD + CD \rightarrow AD + CB$

### SECTION C

#### **C. Answer the following questions in brief:**

**[27 Marks]**

- 15.** What are different ways in which glucose is oxidized to provide energy in various organisms?
- 16** How are the lungs designed in human beings to maximize the area of exchange of gases?
- 17** What are the components of the transport system in human beings? What are the functions of these components?
- 18** Draw a schematic diagram of a circuit consisting of a battery of three cells of 2 V each, a  $5\ \Omega$  resistor,  $8\ \Omega$  resistor, and a  $12\ \Omega$  resistor, and a plug key, all connected in series.
- 19** What is meant by electrical resistivity of a material? Derive its S.I. unit.
- 20.** State Ohm's law. Write the necessary conditions for its validity. How is this law verified experimentally? What will be the nature of graph between potential difference and current for a conductor?
- 21** What does one mean by exothermic and endothermic reactions? Give examples.
- 22** A solution of a substance 'X' is used for white washing
- i. Name the substance 'X' and write its formula.
  - ii. Write the reaction of the substance 'X' named in (i) above with water
- 23** Why decomposition reactions are called the opposite of combination reactions? Write equations for these reactions.
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