પુ•ના International School

Shree Swaminarayan Gurukul, Zundal

Periodic Assessment - I :2021-22					
Student Name					
Date		Grade	X	Roll No.	
Subject	Science	Marks	50	Teacher's Sign	

GENERAL INSTRUCTION:

- **The question paper contains 3 sections. Attempt all the section**
- **All questions are compulsory**
- **Section A contains one word / MCQ 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: **[5-Marks]**

1) Which of the following are energy foods?
(a) Carbohydrates and fats
(b) Proteins and mineral salts
(c) Vitamins and minerals
(d) Water and roughag

2) In which mode of nutrition an organism de-rives its food from the body of another living organism without killing it?
(a) Saprotrophic nutrition
(b) Parasitic nutrition
(c) Holozoic nutrition
(d) Autotrophic nutrition

3) A substance which oxidizes itself and reduces other is known as
a) Oxidising agent
b) reducing agent
c) Both (a and (b)
d) None of these

4) The rate of flow of an electric charge is known as?
(a) Electric potential
(b) electric conductance
(c) electric current
(d) none of these

5) The relation between potential difference (V) and current (I) was discovered by ?
(a) Newton
(b) Ampere
(c) ohm
(d) Volta

SECTION - B

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

6) What is the role of the acids in our stomach?
7) How are the lungs designed in human beings to maximize the area for exchange of gases
8) Where do plant get each of the raw materials required for photosynthesis
9) Name a device that helps to maintain a potential difference across a conductor.
10) What is Resistivity (P)?
11) Calculate the number of electrons constituting one coulomb of charge.?
12) A student took 2-3 g of a substance X in a glass beaker & pour dewater over it slowly. He observed bubbles along with hissing noise.The beaker becomes quite hot. Identify X. What type of reaction is it?
13) What do you mean by a precipitation reaction? Explain by giving examples.
14) Balance the following chemical equations:

i. $NaOH + H_2SO_4 \rightarrow Na_2SO_4 + H_2O$

ii. $NaCl + AgNO_3 \rightarrow AgCl + NaNO_3$

SECTION - C

Answer the following questions in brief: **[27 Marks]**

15) What are the components of transport system in highly organized plants?
16) What are different ways in which glucose is oxidized to provide energy in various organisms
17) How is small intestine designed to absorb digested material?
18) Why are coils of electric toasters and electric irons are made of an-alloy rather than a pure metal ?
19) Draw a schematic diagram of a circuit consisting of a battery of three cells of 2 V each, a 5Ω resistor, an 8 Ω resistor, and a 12 Ω resistor, and a plug key, all connected in series.
20) What are the advantages of connecting electrical devices in parallel with the battery instead of connecting them in series?
21) What does one mean by exothermic and endothermic reactions ?Give examples.
22) Identify the substances that are oxidized and the substances that are reduced in the following reactions

i) $4Na(s) + O2(g) \rightarrow 2Na2O(s)$

ii) $CuO(s) + H2 \rightarrow Cu(s) + H2O(l)$

23) Why decomposition reactions are called the opposite of combination reactions? Write equations for these reactions.

**********Best of Luck**********