



Date: 10/06/24
GRADE: X

MONTHLY TEST 1- 2024-25
SCIENCE (086)

Max marks: 20
Time: 50 minutes

General Instructions:

1. There are 9 questions in the question paper.
2. All questions are compulsory.
3. Draw diagrams, wherever necessary.

Qn. No		Marks allocated
SECTION A		
1	Name the substances whose build up in the muscles during vigorous physical exercise may cause cramps? (a) Ethanol + Carbon dioxide + Energy (b) Lactic acid + Energy (c) Carbon dioxide + Water + Energy (d) Pyruvate	1
2	When an object is kept within the focus of a concave mirror, an enlarged image is formed behind the mirror. This image is (a) real and inverted (b) virtual and inverted (c) real and erect (d) virtual and erect	1
3	Which of the following reactions is an example of a double displacement reaction? a) $\text{Zn} + \text{CuSO}_4 \longrightarrow \text{ZnSO}_4 + \text{Cu}$ b) $\text{Na}_2\text{SO}_4 + \text{BaCl}_2 \longrightarrow \text{BaSO}_4 + 2\text{NaCl}$ c) $2\text{AgCl} \longrightarrow 2\text{Ag} + \text{Cl}_2$ d) $\text{CaO} + \text{H}_2\text{O} \longrightarrow \text{Ca(OH)}_2$	1

4	<p>Which is the correct sequence of body parts in the human alimentary canal?</p> <p>(a) Mouth → stomach → small intestine → large intestine → oesophagus</p> <p>(b) Mouth → oesophagus → stomach → small intestine → large intestine</p> <p>(c) Mouth → stomach → oesophagus → small intestine → large intestine</p> <p>(d) Mouth → oesophagus → stomach → large intestine → small intestine</p>	1
SECTION B		
5	<p>A) Identify the substance that is oxidised and reduced in the following reaction.</p> $\text{CuO} + \text{H}_2 \text{ ----> } \text{Cu} + \text{H}_2\text{O}$ <p>B) Why chips manufacturers flush the bags of chips with nitrogen gas?</p>	1 + 1
SECTION C		
6	Find the size, nature, and position of the image formed when an object of size 1 cm is placed at a distance of 15 cm from a concave mirror of focal length 10 cm.	3
7	<p>Identify the type of reaction taking place in each case and write the balanced chemical equation.</p> <p>a) Zinc reacts with silver nitrate to produce zinc nitrate and silver.</p> <p>b) Potassium iodide reacts with lead nitrate to produce potassium nitrate and lead iodide.</p>	3
8	<p>1) Draw a ray diagram to show the image formation by a convex mirror when an object is placed between infinity and the pole P of the mirror.</p> <p>2) Name the type of mirror used (a) in search lights and (b) as a rear-view mirror in vehicles.</p>	3
SECTION D		
9	<p>a) State reasons for the following:</p> <p>(i) Herbivores need a longer small intestine while carnivores have shorter small intestine.</p> <p>(ii) The lungs are designed in human beings to maximise the area for exchange of gases.</p> <p>(b) The rate of breathing in aquatic organisms is much faster than that seen in terrestrial organisms.</p>	5
THE END		