B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL

MID-APRIL TEST 2025-26
SCIENCE

Class: X **Time: 1hour**
Date: 15.04.25 **Max Marks: 25**
Admission no: **Roll no:**

General Instructions:

i. This question paper consists of 12 questions in 3 sections.
ii. Section A consists of 3 objective type questions carrying 1 mark each.
iii. Section B consists of 5 Very Short questions carrying 02 marks each.
iv. Section C consists of 4 Short Answer type questions carrying 03 marks each.

Section A

1. Magnesium ribbon is rubbed before burning because it has a coating of 1
   (a) magnesium carbonate
   (b) magnesium oxide
   (c) magnesium sulphide
   (d) magnesium chloride
2. The image formed by a concave mirror is observed to be virtual, erect and larger than the object. Where should be the position of the object? 1
   (a) Between the principal focus and the center of curvature
   (b) At the centre of curvature
   (c) Beyond the centre of curvature
   (d) Between the pole of the mirror and its principal focus.
3. The enzyme Pepsin is inactive in the stomach without the presence of 1
   (a) Nitric Acid
   (b) Hydrochloric acid
   (c) Acetic acid
   (d) Citric acid

Section B

4. Explain the combination reaction with an example. 2
5. What happens when Lead Nitrate is heated? Give reaction. 2
6. State and explain laws of reflection. 2
7. Draw the ray diagram of image formation by a concave mirror, when an object is beyond centre of curvature (C). 2
8. (a) Differentiate between autotrophic and heterotrophic nutrition. 2
   (b) What is the role of bile juice in digestion?

Section C

9. 2 g of ferrous sulphate crystals are heated in a dry boiling tube. 3
   (a) List any two observations.
   (b) Name the type of chemical reaction taking place.
   (c) Write balanced chemical equation for the reaction and name the products formed.
10. Name the type of mirror used in the following situations. 3

(a) Headlights of a car.
(b) Side/rear-view mirror of a vehicle.
(c) Solar furnace.
Support your answer with reason.

11. What are the different ways in which glucose is oxidised to provide energy in various organisms? 3

12. Give reason: 3
(a)The walls of trachea is supported by cartilage rings.
(b) Herbivores need a longer small intestine whereas carnivores like tigers have a shorter small intestine.
(c) Diffusion is insufficient to meet the oxygen requirements of multicellular organisms like humans.

**********ALL THE BEST**********