



B.K. BIRLA CENTRE FOR EDUCATION

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



MID-APRIL TEST 2026-27 SCIENCE MARKING SCHEME

Class: X

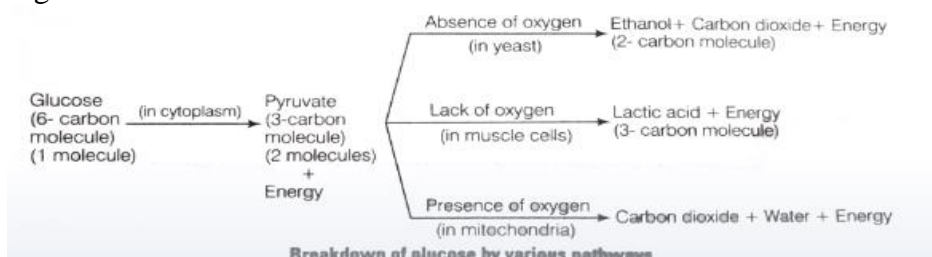
Time: 1hour

Date: 18.04.26

Max Marks: 25

Section A (Biology)

- (b) Hydrochloric acid 1
- (a) Autotrophic vs Heterotrophic nutrition 2
Autotrophic: Organisms make their own food using sunlight (e.g., plants).
Heterotrophic: Organisms depend on other organisms for food (e.g., animals).
(b) Role of bile juice: Emulsifies fats and makes the medium alkaline for digestion.
- (a) Cartilage rings keep the trachea open and prevent it from collapsing. 3
(b) Herbivores eat cellulose-rich plants which take longer to digest, so they have a longer intestine.
(c) Diffusion is slow and cannot supply oxygen to all cells in large multicellular organisms.

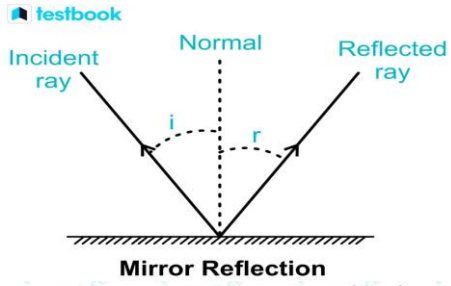


Section B (Chemistry)

- (b) (2:1) 1
- $Pb(CH_3COO)_2 + 2HCl \rightarrow PbCl_2 + 2CH_3COOH$ 2
 $H_2S + O_2 \rightarrow H_2O + S$
- Green colour disappear and red brown formed along with some suffocating gas evolved 2
 $2FeSO_4 \rightarrow Fe_2O_3 + SO_2 + SO_3$
- $BaCl_2 + Na_2SO_4 \rightarrow BaSO_4$ (White ppt) + $2NaCl$ 3
Double displacement reaction

Section C (Physics)

- B. Convex mirror 1
- (i) Principal Focus is a point on the principal axis where all the incident rays parallel to principal axis meet after reflection. 2
(ii) Radius of curvature is the distance between centre of curvature and pole of a mirror
 $f = R/2$ or $R = 2f$
- Angle of incidence = Angle of reflection. 2
Incident ray, reflected ray, and the normal lie in the same plane.



12.

Concave Mirror -

Object beyond Center of Curvature

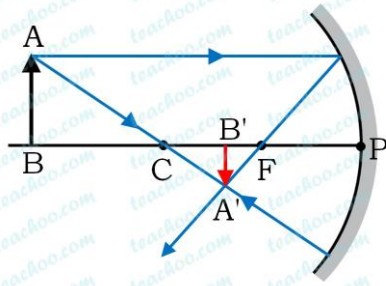


Image characteristics:

Image forms at C

Image is real

Image is inverted

Image is same size as the object

3