

Answer key

Chapter 1. Biodiversity and Classification

- (i) b (ii) d (iii) d
- (i) Peptidoglycin (ii) Monera (iii) R.N. Whitaker

Chapter 2. Matter : Nature and Behaviour

- (i) b (ii) b (iii) a (iv) b
(v) b (vi) d
- (i) Same type (ii) Tyndall effect (iii) Solute (iv) Suspension
(v) Solution

Chapter 3. Atomic Structure

- (i) c (ii) b (iii) c
- (i) Same (ii) Electron (iii) Isobars

Chapter 4. Motion

- (i) b (ii) a (iii) b (iv) d
- (i) Zero (ii) displacement (iii) 20 m/s (iv) Zero

Chapter 5. Force and Laws of Motion

- (i) c (ii) c (iii) d (iv) c
- (i) External force (ii) Zero (iii) Inertia (iv) Double
(v) Vector

Chapter 6. Fundamental Unit of Life : Cell

- (i) a (ii) a (iii) d (iv) a
(v) b

Chapter 7. Multicellular Structure : Tissue

1. (i) b (ii) c (iii) d
2. (i) Transport/xylem (ii) Epithelial (iii) Muscular and connective

Chapter 8. Chemical Bonding

1. (i) b (ii) b (iii) c (iv) c
(v) b
2. (i) Loses, neon (ii) Three (iii) 8, 2 (iv) Covalent, electrovalent
(v) Soluble, insoluble

Chapter 9. Chemical Formula and Mole Concept

1. (i) a (ii) a (iii) c (iv) a
(v) b
2. (i) Ionic (ii) 342 (iii) 2 (iv) 6.022×10^{23}
(v) 18
3. (i) 6.022×10^{23} (ii) SO_4^{2-} (iii) Mg^{2+} (iv) 14 g
(v) 2 moles

Chapter 10. Chemical Reactions and Equations

1. (i) c (ii) c (iii) b (iv) d
2. (i) Reactants, products (ii) Decomposition (iii) Direction (iv) Endothermic

Chapter 11. Gravitation

1. (i) c (ii) c (iii) a (iv) a
(v) a
2. (i) 98 N (ii) $v^2 = 2gh$ (iii) $6.67 \times 10^{-11} \text{Nm}^2/\text{kg}^2$ (iv) m/s^2
(v) Same (if friction due to air is negligible)

Chapter 12. Work and Energy

1. (i) b (ii) a (iii) d (iv) b
2. (i) Joules (ii) $36 \times 10^5 \text{ J}$ (iii) Constant (iv) Negative
(v) $\frac{1}{2} mgh$

Chapter 13. Our Health

1. (i) d (ii) a (iii) d

Chapter 14. Sound

1. (i) b (ii) b (iii) d (iv) b
(v) d (vi) b
2. (i) 20Hz to 20 kHz (ii) Metre (iii) Wave length (iv) Medium

Chapter 15. Hydrocarbons

1. (i) Alkane (ii) Catenation (iii) Isomers (iv) Chain isomers
(v) Position isomerism (vi) Homologous series
2. (i) Position (ii) More (iii) Three (iv) Eight
(v) Alkane

Chapter 16. Coal, Petroleum and Petrochemicals

1. (i) c (ii) d (iii) d (iv) 3
2. (i) Fossil (ii) Peat, Anthracite (iii) Peat (iv) Boiling
(v) Petra, oleum

Chapter 17. Habitat

1. (i) b (ii) c (iii) a

Chapter 18. Waste and its Management

1. (i) a (ii) b (iii) a