

CBSE Class 10 – Science

Practice Question Paper – Set 2

Time: 3 Hours

Maximum Marks: 80

GENERAL INSTRUCTIONS

1. All questions are compulsory.
2. The question paper consists of **Sections A, B, C, D and E**.
3. Use of calculators is not permitted.
4. Draw neat and labelled diagrams wherever required.
5. Write answers clearly and concisely.

SECTION A – MCQs

(1 × 20 = 20 Marks)

1. Which of the following is not a physical change?
 - (a) Melting of ice
 - (b) Rusting of iron
 - (c) Boiling of water
 - (d) Dissolving sugar in water
2. The chemical formula of bleaching powder is:
 - (a) CaOCl_2
 - (b) CaCl_2
 - (c) $\text{Ca}(\text{OH})_2$
 - (d) NaOCl
3. The image formed by a concave mirror when the object is at the centre of curvature is:
 - (a) virtual and erect
 - (b) real, inverted and same size
 - (c) real, inverted and diminished
 - (d) virtual and diminished
4. Which part of the brain controls balance and posture?
 - (a) Cerebrum
 - (b) Medulla
 - (c) Cerebellum
 - (d) Spinal cord
5. The SI unit of electric charge is:
 - (a) Ampere
 - (b) Coulomb

- (c) Volt
- (d) Ohm

6. Which hormone prepares the body for emergency situations?
 - (a) Insulin
 - (b) Thyroxine
 - (c) Adrenaline
 - (d) Growth hormone
7. Which gas is essential for combustion?
 - (a) Nitrogen
 - (b) Carbon dioxide
 - (c) Oxygen
 - (d) Hydrogen
8. The focal length of a plane mirror is:
 - (a) zero
 - (b) infinity
 - (c) positive
 - (d) negative
9. Which structure in plants helps in gaseous exchange?
 - (a) Xylem
 - (b) Phloem
 - (c) Stomata
 - (d) Roots
10. Which of the following is a biodegradable substance?
 - (a) Plastic
 - (b) Glass
 - (c) Paper
 - (d) Polythene

11–20. MCQs from **Chemical Reactions, Metals & Non-metals, Life Processes, Light, Electricity, Environment, Resources.**

SECTION B – Very Short Answer

(2 × 5 = 10 Marks)

21. Define corrosion.
22. Write the chemical formula of slaked lime.
23. Name the pigment involved in photosynthesis.
24. State the SI unit of electric current.
25. What is meant by biodegradation?

SECTION C – Short Answer

(3 × 6 = 18 Marks)

26. Explain aerobic and anaerobic respiration with one example each.
27. What is reactivity series? State its importance.
28. State the laws of reflection of light.
29. What are acquired traits? Give one example.
30. Explain the role of decomposers in the environment.
31. Differentiate between renewable and non-renewable resources (any three points).

SECTION D – Long Answer

(5 × 5 = 25 Marks)

32. Explain the process of digestion in humans with the help of a labelled diagram.
33. Derive the formula for equivalent resistance when two resistors are connected in series.
34. Describe an activity to show that metals are good conductors of electricity.
35. Explain Mendel's dihybrid cross with the help of a Punnett square.
36. What is ecosystem? Explain its components and importance.

SECTION E – Case Study Based Question

(5 Marks)

37. Case Study: Environment

A village adopts rainwater harvesting and solar energy systems to meet its daily needs.

Answer the following:

- a) Name the type of resource represented by solar energy.
- b) State two advantages of using solar energy.
- c) How does rainwater harvesting help in conserving water?

□ ANSWER KEY / MARKING POINTS (Set 2)

Section A (Key answers)

1. (b)
2. (a)
3. (b)
4. (c)

5. (b)
6. (c)
7. (c)
8. (b)
9. (c)
10. (c)

Section B

21. Slow destruction of metals due to chemical reaction with environment.
22. $\text{Ca}(\text{OH})_2$
23. Chlorophyll
24. Ampere
25. Breakdown of substances by microorganisms

Section C & D

- Correct definitions
- Proper explanations with diagrams where required
- Use of scientific terminology
- Step-wise answers as per CBSE marking scheme

Section E

- Renewable resource
- Any two: eco-friendly, reduces electricity bills, non-polluting
- Recharges groundwater, prevents water scarcity