

Science

Practice Sample Paper – 1

(Session 2026–27)

(Class 7)

Time: 3 Hours

Maximum Marks: 80

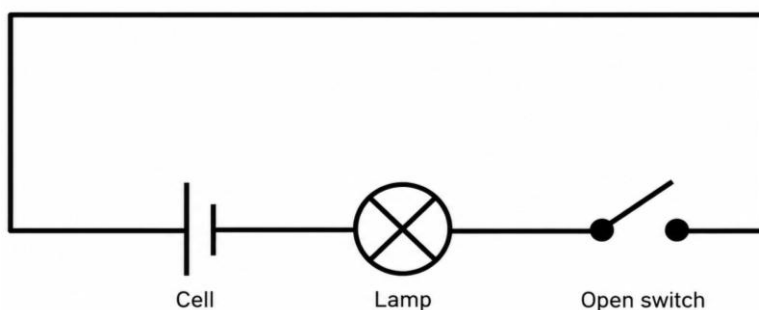
General Instructions

1. All questions are compulsory.
2. The question paper is divided into Sections A, B, C and D.
3. Draw neat and labelled diagrams wherever required.
4. Answer all questions in clear and concise language.

SECTION A – OBJECTIVE TYPE QUESTIONS

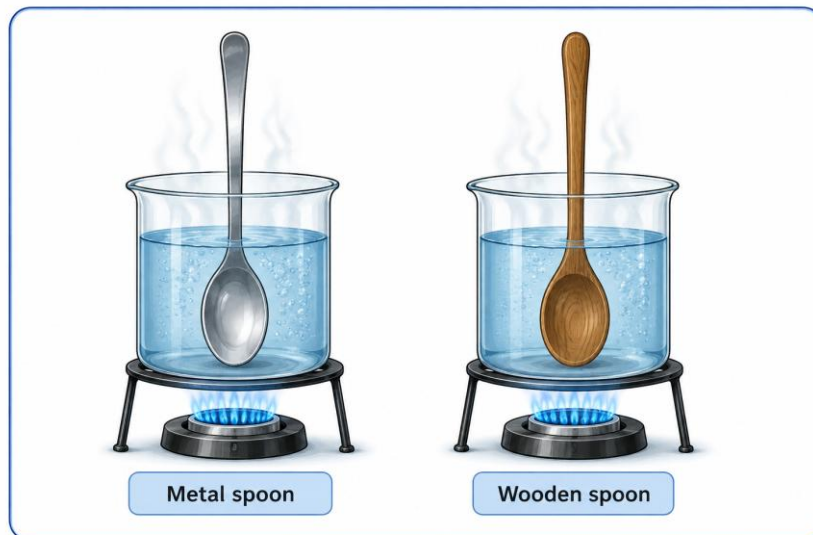
(Questions 1 to 10 carry 1 mark each. Questions 3 and 7 are image-based.)

1. Which of the following best describes science? [1]
(a) A collection of fixed facts
(b) A process of questioning, exploring and experimenting
(c) Only laboratory work
(d) Only the study of living things
2. A substance that turns blue litmus paper red is generally [1]
(a) basic
(b) neutral
(c) acidic
(d) metallic
3. Observe figure and answer: What should be done to the switch so that the lamp can glow? [1]



- (a) Keep the switch open
(b) Close the switch
(c) Remove the cell
(d) Disconnect the lamp
4. The property by which a metal can be drawn into wires is called [1]
(a) malleability
(b) ductility
(c) brittleness
(d) sonority

5. Which is a chemical change? [1]
(a) Melting ice (b) Cutting paper
(c) Rusting of iron (d) Folding paper
6. The lowest temperature at which a substance can catch fire is its [1]
(a) melting point (b) boiling point
(c) ignition temperature (d) freezing point
7. Observe figure and answer: Which spoon will become hotter sooner? Give the reason. [1]



- (a) The metal spoon, because metal is a good conductor of heat.
(b) The wooden spoon, because wood is a good conductor of heat.
(c) Both spoons will become hot at the same time.
(d) Neither spoon will become hot.
8. The longer line in the symbol of an electric cell represents the [1]
(a) negative terminal (b) positive terminal
(c) switch (d) wire
9. Adolescence is the period of change from [1]
(a) childhood to adulthood (b) adulthood to old age
(c) infancy to childhood (d) old age to childhood
10. The chemicals produced in the body that control many changes during adolescence are called [1]
(a) enzymes
(b) hormones
(c) indicators
(d) vitamins

SECTION B – SHORT ANSWER QUESTIONS

(Questions 11 to 14 carry 3 marks each.)

11. Explain what an acid-base indicator is. Name any two indicators and state what they help us identify. [3]
12. Why does an electric lamp glow only when the circuit is complete? Explain the role of the switch. [3]
13. State any three properties of metals and give one everyday use related to any one of them. [3]
14. Differentiate between a physical change and a chemical change with suitable examples. [3]

SECTION C – DESCRIPTIVE QUESTIONS

(Questions 15 to 18 carry 5 marks each.)

15. Explain the important parts of a simple electric circuit. Also explain what happens when the switch is in the ON and OFF positions. Draw a simple circuit diagram using symbols. [5]
16. Observe Figure and answer the following: [5]



- (a) Which change shown in the figure is physical? [2]
- (b) Which change is chemical? Give one reason. [2]
- (c) What role does heat play in combustion? [1]
17. Describe rusting of iron. State the conditions necessary for rusting and explain any two methods of preventing it. [5]
18. Explain the physical, emotional and behavioural changes that may occur during adolescence. Mention suitable habits that help adolescents remain healthy. [5]

SECTION D – CASE-BASED / COMPETENCY-BASED QUESTIONS

(Questions 19 and 20 carry 19 marks each. Answer all parts.)

19. A group of students collected lemon juice, soap solution, salt solution and tamarind water. They tested the samples using red and blue litmus paper. In another activity, they made a simple circuit using a cell, lamp, switch and connecting wires. They observed that the lamp glowed only when the path was complete.

- (a) Which of the given samples are likely to be acidic? Give a reason. [4]
- (b) Which sample is likely to be basic? How would litmus help identify it? [4]
- (c) What does it mean if a solution does not change either red or blue litmus paper? [3]
- (d) Why must the connecting path be conducting for the lamp to glow? [4]
- (e) In the symbol of an electric cell, which line represents the positive terminal? Show through diagram. [4]

20. Refer to Figure and the situation described: a candle is burning and an iron nail is kept in contact with air and water. Answer the following.



- (a) Which changes in the candle are physical changes? [4]
- (b) Which change in a burning candle is chemical? Give a reason. [4]
- (c) What is ignition temperature? Why is it important for combustion? [3]
- (d) State two conditions required for rusting and mention one method of preventing it. [4]
- (e) What is adolescence? Mention two important changes that may occur during this period. [4]