

Science

Practice Sample Paper – 5

(Session 2026–27)

(Class 7)

Time: 3 Hours

Maximum Marks: 80

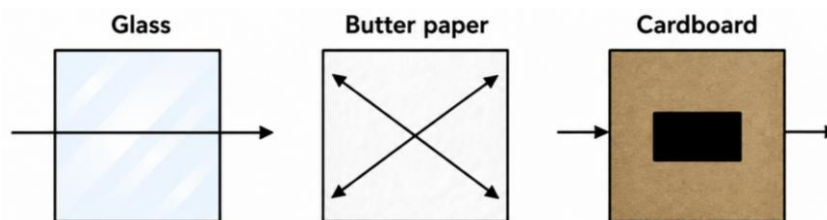
General Instructions

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. Question 6 is image-based.)

1. Which of the following is a source of light? [1]
(a) Moon (b) Mirror
(c) Sun (d) Book
2. A shadow is formed when light is [1]
(a) reflected by a mirror (b) blocked by an opaque object
(c) absorbed by air (d) produced by a screen
3. Which material allows only some light to pass through it? [1]
(a) Transparent glass (b) Translucent butter paper
(c) Opaque cardboard (d) Wooden block
4. Which change involves formation of a new substance? [1]
(a) Cutting cloth (b) Melting wax
(c) Curdling of milk (d) Inflating a balloon
5. Which of the following is a poor conductor of heat? [1]
(a) Copper (b) Aluminium
(c) Wood (d) Iron
6. Which material is translucent? [1]



- (a) Glass
- (b) Butter paper
- (c) Cardboard
- (d) None

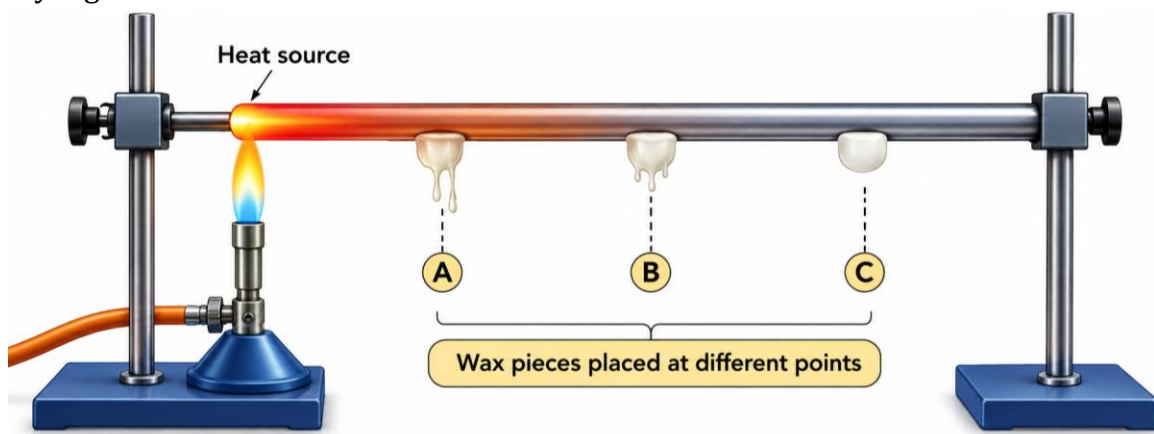
7. Which of these is a common property of metals? [1]
(a) They are generally lustrous (b) They are always soft
(c) They never conduct electricity (d) They are always gases
8. Which substance can be used to neutralise excess acidity in the stomach? [1]
(a) A suitable antacid (b) Vinegar
(c) Lemon juice (d) Salt water
9. Which change is caused by the action of oxygen and moisture on iron? [1]
(a) Melting (b) Rusting
(c) Freezing (d) Evaporation
10. Which of the following is an important nutrient during adolescence for healthy growth? [1]
(a) Proteins (b) Only sugar
(c) Only salt (d) Only water

SECTION B – SHORT ANSWER QUESTIONS

(Questions 11 to 14 carry 3 marks each. Question 12 is image-based.)

11. What is heat? Differentiate between heat and temperature in one or two points. [3]

12. Study Figure. [3]



- (a) What does the movement of heat through the rod show?
(b) Which wax piece is expected to melt first?
(c) Name the mode of heat transfer involved in the rod.
13. Why are cooking utensils generally made of metals while their handles are often made of insulating materials? Give three reasons. [3]
14. What is a neutral solution? Name one neutral substance used in everyday life and state how an indicator can help identify it. [3]

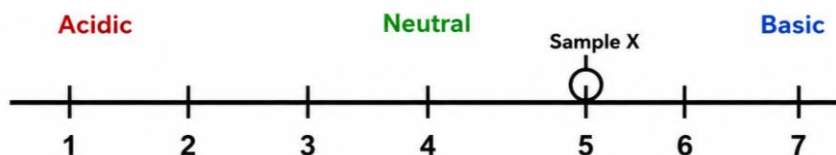
SECTION C – DESCRIPTIVE QUESTIONS

(Questions 15 to 18 carry 5 marks each. Question 17 is image-based.)

15. Explain how a simple electric circuit works. Name four main components and describe what happens when the circuit is open and when it is closed. [5]

16. Explain the difference between combustible and non-combustible substances. Give two examples of each and state why ignition temperature is important for burning. [5]

17. Study Figure. [5]



- (a) What does the scale represent?
- (b) On which side would an acidic solution lie?
- (c) On which side would a basic solution lie?
- (d) Where would a neutral solution be placed?
- (e) Give one example of an acidic and one example of a basic substance.

18. Describe how personal hygiene, nutritious food, physical activity and adequate sleep help an adolescent remain healthy. [5]

SECTION D – CASE-BASED / COMPETENCY-BASED QUESTIONS

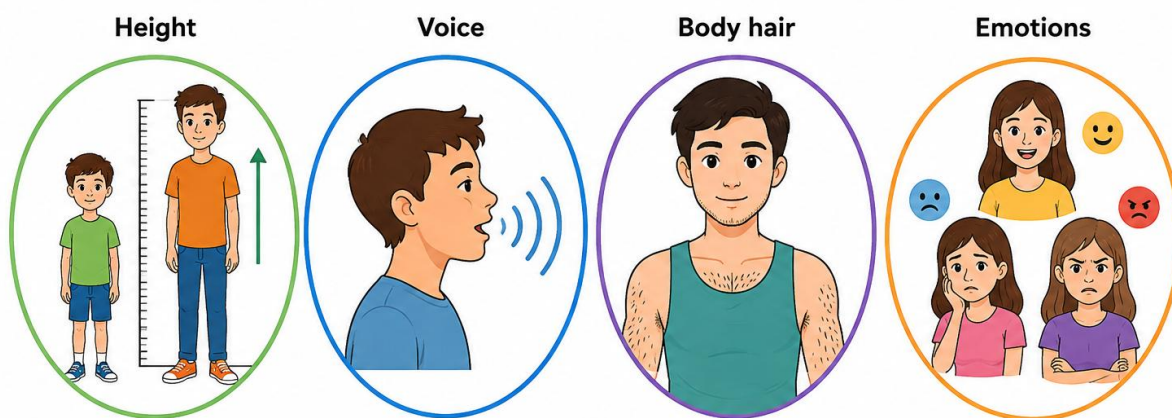
(Questions 19 and 20 carry 19 marks each. Read each case carefully and answer all parts.)

19. A science club collected four iron objects from around the school campus. One object was painted, another was coated with oil, a third had been galvanised, while the fourth was left exposed. After several weeks, the students compared the objects and noticed that the exposed iron showed the most visible rust. Their teacher explained that rusting requires suitable conditions and that protective coatings can reduce contact between iron and the surroundings. Study Figure and answer the following.



- (a) What is rusting? [3]
- (b) State the two main conditions necessary for rusting of iron. [3]
- (c) Explain how paint and oil coatings help prevent rusting. [3]
- (d) What is galvanisation? Why is it useful for protecting iron objects? [4]
- (e) Why would an iron object kept in completely dry air rust much less than one exposed to moist air? [3]
- (f) Mention three everyday objects where preventing rust is important and give one reason for each. [3]

20. A group of students in Grade 7 discussed the changes they had noticed as they grew from childhood towards the teenage years. Some had grown taller quickly, some noticed changes in their voice or body shape, and others talked about changes in feelings and behaviour. The teacher explained that adolescence is a period of rapid growth and development and that these changes are controlled by hormones. The class also discussed why balanced nutrition, personal hygiene, exercise, adequate sleep and responsible choices are important during this stage. Study Figure and answer the following.



- (a) What is adolescence? State its approximate age range. [3]
- (b) Why do physical changes not necessarily occur at exactly the same age in all adolescents? [3]
- (c) What are hormones? Name two hormones related to the changes discussed in the chapter. [4]
- (d) Mention four physical changes that may occur during adolescence. [4]
- (e) Why is a balanced diet important during this stage? [2]
- (f) State three healthy and responsible practices that should be followed during adolescence. [3]