

Science

Practice Sample Paper – 3

(Session 2026–27)

(Class 8)(Curiosity Chapter 1 – 6)

Time: 2 Hours 30 Minutes

Maximum Marks: 60

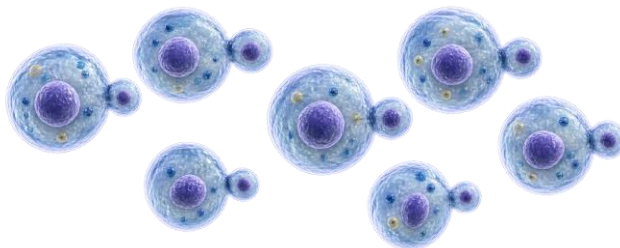
GENERAL INSTRUCTIONS

1. The paper contains 15 questions divided into Sections A to E.
2. All questions are compulsory. Internal choices are given in selected questions.
3. Section A: 12 MCQs $\times$ 1 mark = 12 marks.
4. Section B: 4 Very Short Answer questions $\times$ 2 marks = 8 marks.
5. Section C: 3 Short Answer questions $\times$ 3 marks = 9 marks.
6. Section D: 3 questions $\times$ 5 marks = 15 marks.
7. Section E: 4 case/source-based questions $\times$ 4 marks = 16 marks.
8. Five questions use diagrams/images. Observe them carefully.

SECTION A

Multiple Choice Questions ($12 \times 1 = 12$)

1. (i) Observe the microscopic image. Which process is most clearly represented by the small outgrowths on the cells? [1]



- (A) Budding
(C) Germination

- (B) Photosynthesis
(D) Filtration

- (ii) Which step should follow a scientific prediction if we want to test whether it is reliable? [1]

- (A) Ignore evidence
(C) Change the question immediately

- (B) Design an investigation
(D) Memorise the prediction

- (iii) Which organism can multiply only inside a living host cell? [1]

- (A) Virus
(C) Mushroom

- (B) Yeast
(D) Alga

- (iv) Which nutrient is mainly required for growth and repair of body tissues? [1]

- (A) Proteins
(C) Roughage

- (B) Water only
(D) Minerals only

- (v) A compass placed near a current-carrying wire shows deflection because electric current produces: [1]

- (A) light only
(C) pressure

- (B) a magnetic effect
(D) friction

- (vi) A fuse wire is designed to melt when: [1]

- (A) current becomes dangerously high
(C) a magnet is removed

- (B) current becomes zero
(D) air pressure falls

- (vii)** Which force pulls a falling fruit towards Earth? [1]
 (A) Magnetic (B) Gravitational
 (C) Muscular (D) Electrostatic
- (viii)** When two equal forces act on an object in opposite directions, the forces are: [1]
 (A) unbalanced (B) balanced
 (C) magnetic (D) frictionless
- (ix)** School bags with broad shoulder straps are more comfortable because the broad straps: [1]
 (A) increase pressure (B) decrease area
 (C) reduce pressure by increasing area (D) increase weight
- (x)** Warm air generally rises because it becomes: [1]
 (A) denser than surrounding air (B) less dense than surrounding air
 (C) solid (D) motionless
- (xi)** Which instrument is used to measure atmospheric pressure? [1]
 (A) Barometer (B) Ammeter
 (C) Spring balance (D) Microscope
- (xii)** Assertion (A): Regular physical activity supports good health. [1]
 Reason (R): Physical activity can improve fitness and proper functioning of body systems.
 (A) Both A and R are true and R explains A.
 (B) Both are true but R does not explain A.
 (C) A true, R false. (D) A false, R true.

SECTION B

Very Short Answer Questions ($4 \times 2 = 8$)

2. Attempt either (A) or (B): [2]
 (A) Why should observations be recorded carefully during an investigation? Give two reasons.
OR
 (B) State any two differences between bacteria and viruses.
3. Why are adequate sleep and regular physical activity considered important for maintaining health? Give one reason for each. [2]
4. Study the diagram of a wooden block attached to a spring balance. [2]
 (a) What quantity related to force can the spring balance measure?
 (b) Name the contact force that resists the block's motion along the surface.



5. A drawing pin has a broad head but a pointed tip. Explain the purpose of both features using the idea of pressure. [2]

SECTION C

Short Answer Questions ($3 \times 3 = 9$)

6. Attempt either (A) or (B):

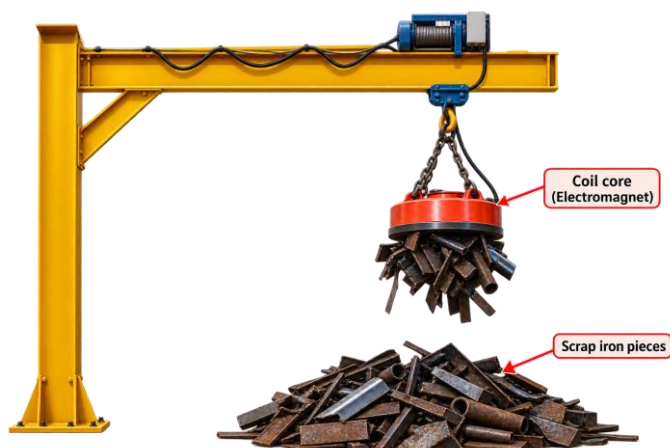
[3]

(A) Explain how curd is formed from milk with the help of microorganisms.

OR

(B) Explain three ways in which a balanced lifestyle can help maintain physical and mental well-being.

7. Observe the scrapyards crane shown below. Explain how an electromagnet helps the crane lift and release iron objects. Mention the role of switching current ON and OFF. [3]



8. Distinguish among muscular force, gravitational force and magnetic force. Give one suitable example of each. [3]

SECTION D

Skill-Based / Long Answer Questions ($3 \times 5 = 15$)

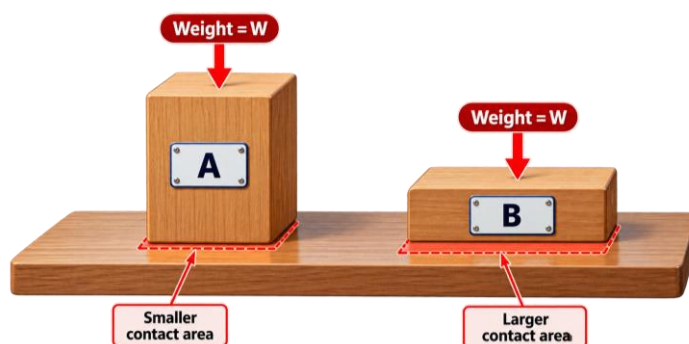
9. Fill in the blanks using the words in the box:

[5]

[hypothesis, fermentation, friction, barometer, resistance]

- (a) A testable possible explanation is called a _____.
- (b) Conversion of sugar by microorganisms to useful products is called _____.
- (c) The force that opposes relative motion between surfaces is _____.
- (d) Atmospheric pressure is measured using a _____.
- (e) The opposition offered by a conductor to electric current is called _____.

10. Observe blocks A and B below. Both have the same weight but rest on different contact areas. [5]



- (a) Which block exerts greater pressure on the surface? (1)
- (b) Give the reason. (1)
- (c) Write the relation between pressure, force and area. (1)
- (d) What happens to pressure if contact area is doubled while force remains the same? (1)
- (e) Give one everyday application of this principle. (1)

11. Explain the heating effect of electric current. Describe how it depends on the resistance of a conductor and state three useful applications of this effect. **[5]**

OR

Explain how air-pressure differences produce winds. Include the role of heating, rising air and movement of cooler air in your answer.

SECTION E

Case / Source-Based Questions ($4 \times 4 = 16$)

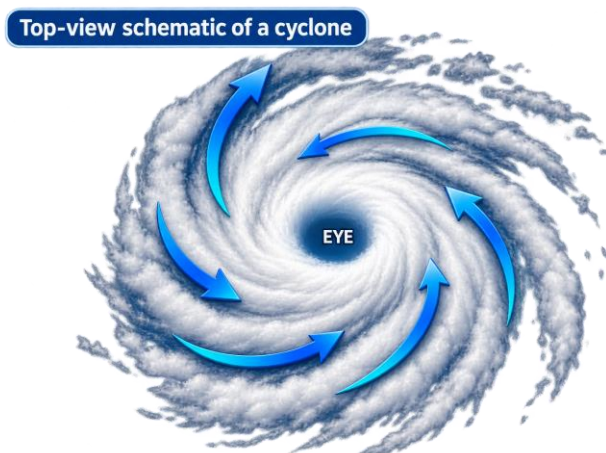
12. A student observes a drop of pond water under a microscope and notices several tiny moving forms that cannot be seen clearly with the naked eye. **[4]**

- (a) Why is a microscope needed here? (1)
- (b) What broad term can be used for such extremely small living organisms? (1)
- (c) State two precautions for obtaining a useful microscopic observation. (2)

OR

(d) Explain two ways microscopic observations have expanded our understanding of the living world. (2)

13. Observe the top-view schematic of a cyclone. **[4]**



- (a) Name the calm central part marked in the diagram. (1)
- (b) Is atmospheric pressure at the cyclone's centre generally high or low? (1)
- (c) Explain why strong winds occur around the centre. (2)

OR

(d) State two safety measures people in cyclone-prone coastal areas should follow after an official warning. (2)

14. During a school sports day, a student feels tired after running continuously. The teacher advises water, rest and a nutritious meal rather than skipping food. **[4]**

- (a) Name one reason the body needs water during physical activity. (1)
- (b) Why is rest important after strenuous activity? (1)
- (c) Explain two ways a balanced diet supports health. (2)

OR

(d) State two habits, other than diet, that contribute to long-term well-being. (2)

15. A bicycle rider stops pedalling on a level road. The bicycle continues to move for some distance and gradually slows down. **[4]**

- (a) Name one force that opposes the bicycle's motion. (1)
- (b) Is this force a contact or non-contact force? (1)
- (c) Explain two factors that can affect this opposing force between surfaces. (2)

OR

- (d) Give two situations in which this force is useful in daily life. (2)