

Science

Practice Sample Paper – 4

(Session 2026–27)

(Class 8)(Curiosity Chapter 1 – 6)

Time: 2 Hours 30 Minutes

Maximum Marks: 60

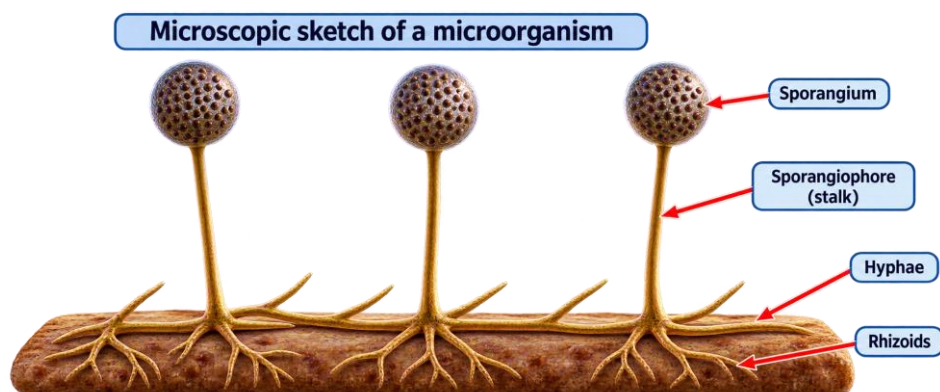
GENERAL INSTRUCTIONS

1. The question paper contains 15 questions divided into five sections - A to E.
2. All questions are compulsory. Internal choices are provided in selected questions.
3. Section A contains 12 MCQs of 1 mark each.
4. Section B contains 4 Very Short Answer questions of 2 marks each.
5. Section C contains 3 Short Answer questions of 3 marks each.
6. Section D contains 3 questions of 5 marks each.
7. Section E contains 4 case/source-based questions of 4 marks each.
8. Five questions are image/diagram based. Observe each figure carefully.

SECTION A

Multiple Choice Questions (12 x 1 = 12)

1. (i) Observe the microscopic sketch below. Which group of microorganisms does it most closely represent? [1]



- (A) Fungi
(B) Viruses
(C) Protozoa
(D) Algae
- (ii) In a fair scientific test, why is only one variable usually changed at a time? [1]
(A) To make observations impossible
(B) To identify the effect of that variable
(C) To avoid recording data
(D) To guarantee the expected result
- (iii) Which gas forms a high proportion of biogas produced by certain microorganisms in oxygen-free conditions? [1]
(A) Oxygen
(B) Methane
(C) Nitrogen
(D) Hydrogen
- (iv) Which of the following is a non-communicable disease? [1]
(A) Dengue
(B) Flu
(C) Diabetes
(D) Chickenpox

(v) In a dry cell, the zinc container acts as the: [1]
(A) positive terminal (B) negative terminal
(C) electrolyte (D) switch

(vi) Rechargeable batteries are preferred for many applications because they: [1]
(A) can be recharged and reused several times
(B) contain no chemicals
(C) never wear out
(D) produce no electric current

(vii) The upward force exerted by a liquid on an immersed object is called: [1]
(A) friction (B) upthrust
(C) muscular force (D) electrostatic force

(viii) Which statement about mass and weight is correct? [1]
(A) Both always change from place to place
(B) Mass remains unchanged, but weight may vary
(C) Weight is measured in kilograms only
(D) Mass is a force

(ix) Pressure is defined as: [1]
(A) force x area
(B) force per unit area
(C) area per unit force
(D) mass per unit volume

(x) Holes are made in large banners mainly to: [1]
(A) increase wind pressure
(B) allow air to pass through and reduce force on the banner
(C) increase the mass of the banner
(D) stop all air movement

(xi) A thunderstorm commonly involves: [1]
(A) only gentle wind
(B) lightning, thunder, strong winds and often rain
(C) no movement of air
(D) only high pressure at the ground

(xii) Assertion (A): Used batteries should not be thrown casually into ordinary garbage. [1]
Reason (R): Some batteries contain materials that can harm the environment and may be recovered through e-waste recycling.
(A) Both A and R are true, and R correctly explains A.
(B) Both A and R are true, but R does not explain A.
(C) A is true, but R is false.
(D) A is false, but R is true.

SECTION B

Very Short Answer Questions (4 x 2 = 8)

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

(A) What is a hypothesis? Why should it be testable?

OR

(B) State two roles played by decomposer microorganisms in the environment.

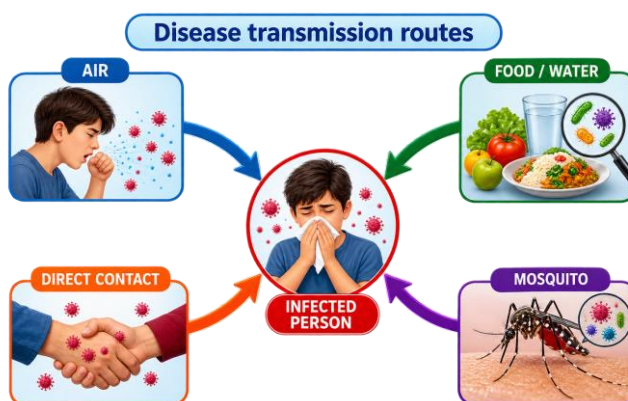
[2]

3. Why can poor nutrition affect health even when no pathogen is involved? Give two points.

[2]

4. Observe the diagram showing common routes of disease transmission. Name any two routes shown and give one preventive measure for either route.

[2]



5. A stone feels lighter when held under water than when held in air. Name the force responsible and state its direction.

[2]

SECTION C

Short Answer Questions (3 x 3 = 9)

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

(A) Explain how yeast helps dough rise during bread making.

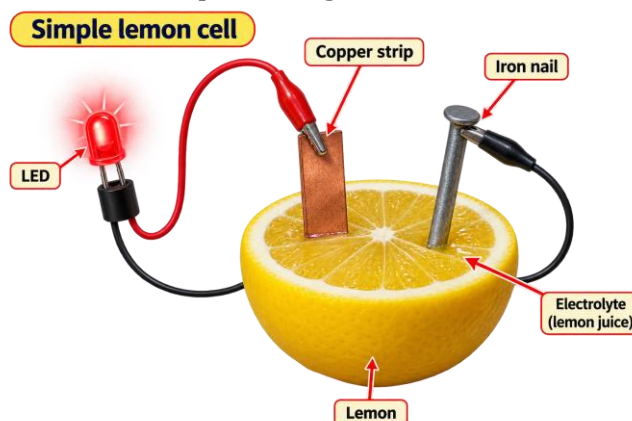
[3]

OR

(B) Differentiate between prevention by healthy habits and prevention by vaccination, with one example of each.

7. Study the lemon-cell diagram below. Identify the two electrodes and the electrolyte. What observation would indicate that the cell is producing electric current?

[3]



8. Explain with examples how a force can (i) change speed, (ii) change direction and (iii) change shape.

[3]

SECTION D

Long Answer / Skill-Based Questions (3 x 5 = 15)

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

[5]

[methane, pathogen, zinc, newton, low]

- (a) A disease-causing organism is called a _____.
- (b) Biogas contains a high proportion of _____.
- (c) The container of a common dry cell is made of _____ and acts as the negative terminal.
- (d) The SI unit of force is _____.
- (e) Air generally moves from a high-pressure region towards a _____-pressure region.

10. Match Column A with Column B:

[5]

Column A	Column B
(i) Frictional force	(a) A compass needle responding to a magnet
(ii) Gravitational force	(b) A fruit falling from a tree
(iii) Electrostatic force	(c) A rubbed comb attracting tiny paper pieces
(iv) Magnetic force	(d) A moving object slowing on a rough surface
(v) Upthrust	(e) An immersed object experiencing an upward force

11. Answer the following about electric cells and batteries:

[5]

- (a) What is an electrolyte? (1)
- (b) Name the positive and negative parts used as electrodes in the lemon-cell activity. (2)
- (c) State one advantage of rechargeable batteries. (1)
- (d) Why should use batteries be sent to appropriate e-waste collection or recycling facilities? (1)

OR

Answer the following about force and buoyancy:

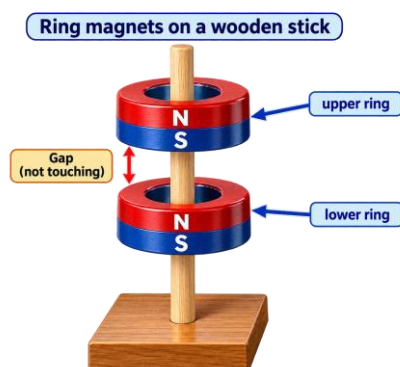
- (a) Define force. (1)
- (b) Distinguish between contact and non-contact forces with one example of each. (2)
- (c) What is upthrust? (1)
- (d) State one situation in which friction is useful. (1)

SECTION E

Case / Source-Based Questions (4 x 4 = 16)

12. Observe the arrangement of two ring magnets on a vertical wooden stick. The upper magnet remains suspended above the lower one without touching it.

[4]



- (a) Which type of force acts between the magnets? (1)
- (b) Is this a contact or non-contact force? (1)
- (c) What can you infer about the poles facing each other? Explain. (2)

OR

(d) What would you expect if one ring magnet were reversed? Explain using magnetic poles. (2)

13. A family prepares two bowls of dough with equal amounts of flour, sugar and warm water. Yeast is added only to Bowl A. After some time, Bowl A becomes more swollen than Bowl B. [4]

(a) Which microorganism was added to Bowl A? (1)

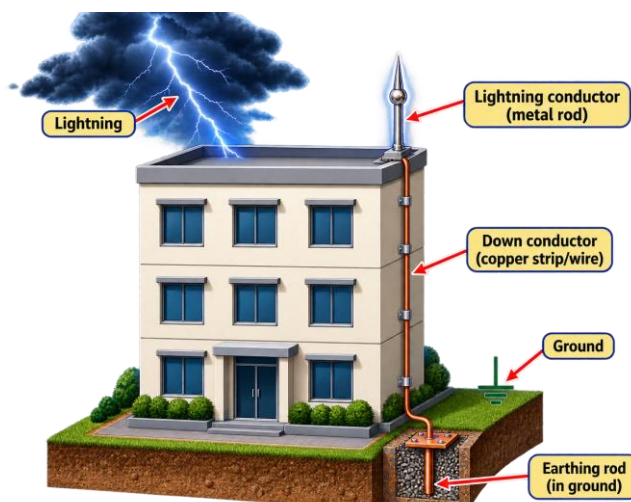
(b) What process carried out by this microorganism causes the dough to rise? (1)

(c) Explain why Bowl B shows much less change in volume. (2)

OR

(d) State two other useful roles of microorganisms in food or fuel production. (2)

14. Observe the lightning-conductor arrangement on the building. [4]



(a) What is the device shown along the building called? (1)

(b) Where is its lower end connected? (1)

(c) Explain how this device helps protect a building during lightning. (2)

OR

(d) State two safety precautions a person should follow during a thunderstorm outdoors. (2)

15. A weather report states that warm, moist air over the ocean is rising rapidly. The pressure near the centre continues to fall, surrounding air rushes inward, and the moving air begins to spin. [4]

(a) What weather system may develop under these conditions? (1)

(b) What is the central region of lowest pressure called? (1)

(c) Explain why the system gradually weakens after moving over land. (2)

OR

(d) Explain how condensation of water vapour helps intensify the rising air during cyclone formation. (2)