

Science

Practice Sample Paper – 2

(Session 2026–27)

(Class 8)(Curiosity Chapter 1 – 6)

Time: 2 Hours 30 Minutes

Maximum Marks: 60

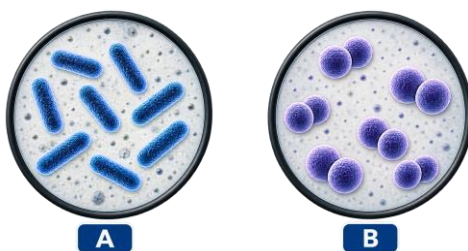
GENERAL INSTRUCTIONS

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. The paper includes image/diagram-based questions. Observe each figure carefully before answering.

SECTION A

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

1. (i) Observe the microscopic views A and B. Which view most closely represents rod-shaped bacteria? [1]



- (A) A only
(B) B only
(C) Both A and B
(D) Neither A nor B

- (ii) Which practice best demonstrates scientific investigation? [1]

- (A) Accepting the first explanation without testing it
(B) Asking a question, collecting evidence and revising an explanation
(C) Memorising an answer without observation
(D) Ignoring results that disagree with an idea

- (iii) Which microorganism is commonly used in making bread rise? [1]

- (A) Yeast
(B) Amoeba
(C) Virus
(D) Alga

- (iv) Which of the following is a communicable disease? [1]

- (A) Scurvy
(B) Diabetes
(C) Tuberculosis
(D) Rickets

- (v) A current-carrying coil wound around an iron core behaves like: [1]

- (A) a permanent insulator
(B) an electromagnet
(C) a pressure gauge
(D) a thermometer

- (vi) The heating effect of electric current is useful in: [1]

- (A) an electric iron
(B) a compass needle only
(C) a rain gauge
(D) a barometer

- (vii) Which situation involves a non-contact force? [1]
 (A) Pushing a trolley (B) Pulling a rope
 (C) A magnet attracting an iron pin (D) Kicking a ball
- (viii) A force can change: [1]
 (A) only the colour of an object (B) the state of motion or shape of an object
 (C) only the mass of an object (D) the chemical formula of an object
- (ix) Pressure increases when the same force acts on: [1]
 (A) a larger area (B) a smaller area
 (C) no area (D) an unchanged volume only
- (x) Winds are produced mainly because air moves: [1]
 (A) from low pressure to high pressure (B) from high pressure to low pressure
 (C) only upward everywhere (D) only over oceans
- (xi) The calm central region of a mature cyclone is called the: [1]
 (A) wall (B) eye
 (C) front (D) funnel
- (xii) Assertion (A): Vaccination can help prevent some infectious diseases. [1]
 Reason (R): Vaccines prepare the body's defence system to respond to disease-causing agents.
 (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 × 2 = 8)

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

(A) Why are microorganisms called the 'invisible living world'? Mention one instrument that helps us observe them.

OR

(B) State two precautions that help prevent the spread of communicable diseases. [2]

3. A student touches a hot metal spoon and quickly pulls the hand away. Name the body's rapid protective response and state why such responses are useful. [2]

Replace Q4 with this completely different image-based question:

4. Observe the diagram of a spring balance being used to pull a wooden block. [2]



- (a) What does the reading of the spring balance represent?
 (b) Name the force that opposes the motion of the block along the surface.

5. Why does a sharp knife cut more easily than a blunt knife when the same force is applied? Explain using pressure. [2]

SECTION C

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

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

[3]

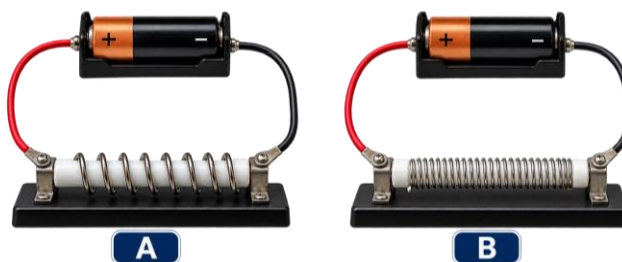
(A) Explain three ways in which useful microorganisms benefit humans.

OR

(B) Distinguish between communicable and non-communicable diseases and give one example of each.

7. Study the two electric heating arrangements A and B shown below. Both use identical cells, but the resistance-wire arrangements are different. State any three factors that can affect the heating produced in an electric circuit.

[3]



8. Explain how unequal heating of the Earth's surface can produce differences in air pressure and cause wind.

[3]

SECTION D

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

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

[5]

[microscope, pathogen, balanced diet, immunity, vaccination]

(a) A disease-causing microorganism is called a _____.

(b) A _____ helps us observe objects too small to be seen clearly with naked eyes.

(c) The body's ability to resist infection is called _____.

(d) _____ helps protect people against certain infectious diseases.

(e) A _____ supplies different nutrients needed for growth and good health.

10. Study the force diagram below and answer the following:

[5]



(a) Which force is greater, P or Q?

(1)

(b) Calculate the resultant force on the box.

(1)

(c) State the direction of the resultant force.

(1)

(d) Are the forces balanced or unbalanced?

(1)

(e) State one possible effect of these forces on the box.

(1)

11. Explain the magnetic effect of electric current. Describe how a simple electromagnet can be made and mention two practical uses of electromagnets.

OR

Explain pressure in liquids and gases. Give suitable examples to show that fluids exert pressure and describe how pressure differences are connected with movement of air.

[5]

SECTION E

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

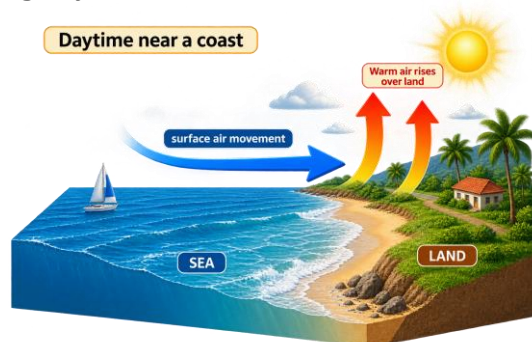
12. Riya notices that several students in her class have cough and fever. The school advises students to cover their mouth while coughing, wash hands regularly and avoid sharing personal items. [4]

- (a) What type of diseases can spread from one infected person to another? (1)
- (b) Name one route by which respiratory infections may spread. (1)
- (c) Explain why regular handwashing can reduce transmission. (2)

OR

(d) Suggest two responsible actions a student should take when suffering from a contagious respiratory illness. (2)

13. Observe the diagram showing daytime conditions near a coast. [4]



- (a) Which surface generally heats faster during the day—land or sea? (1)
- (b) In which direction is the surface air shown moving? (1)
- (c) Explain why this movement of air takes place. (2)

OR

(d) What change would you expect in the direction of this local wind at night? Explain briefly. (2)

14. During a storm warning, a coastal family receives an official alert about very strong winds and heavy rainfall. They secure loose outdoor objects, charge emergency lights and move away from low-lying areas when instructed. [4]

- (a) Name the severe rotating storm system associated with very strong winds around a low-pressure centre. (1)
- (b) Why should loose outdoor objects be secured? (1)
- (c) Give two reasons why following official evacuation instructions is important. (2)

OR

(d) Mention any two items that should be kept in an emergency kit for such a situation and state their use.

15. A student pushes a heavy cupboard, but it does not move at first. With the help of another student, the cupboard starts moving. They later place rollers underneath it and find it easier to move. [4]

- (a) What is a force? (1)
- (b) Why did the cupboard start moving when the second student helped? (1)
- (c) Explain why rollers make the cupboard easier to move. (2)

OR

(d) Give two examples from daily life where force changes the motion or shape of an object.