

Science

Practice Sample Paper – 1

(Session 2026–27)

(Class 8)(Curiosity Chapter 1 – 6)

Time: 2 Hours 30 Minutes

Maximum Marks: 60

GENERAL INSTRUCTIONS

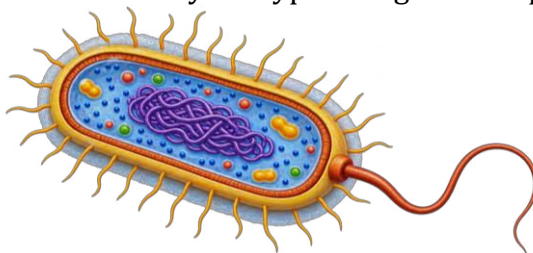
1. The question paper contains 15 questions divided into five sections - A to E.
2. All questions are compulsory. Internal choices are provided in selected questions.
3. Section A contains 12 objective-type questions of 1 mark each.
4. Section B contains 4 Very Short Answer questions of 2 marks each.
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-Based questions of 4 marks each.
8. The paper contains at least five image/diagram-based questions.

SECTION A

Objective Type Questions (12 x 1 = 12)

1. (i) Study the diagram below and identify the type of organism represented. [1]

- (A) Multicellular animal
(B) Bacterial cell
(C) Plant tissue
(D) Virus



(ii) Yeast makes dough soft and fluffy mainly because it releases: [1]

- (A) Oxygen (B) Carbon dioxide
(C) Nitrogen (D) Hydrogen

(iii) Which microorganism helps in fermentation of batter for idli and dosa? [1]

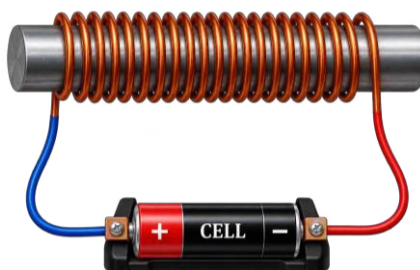
- (A) Lactobacillus (B) Amoeba
(C) Virus (D) Plasmodium

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

- (A) Malaria (B) Cholera
(C) Diabetes (D) Common cold

(v) Study the diagram below. What happens to the iron core when current flows through the coil? [1]

- (A) It becomes an electromagnet
(B) It melts immediately
(C) It becomes an insulator
(D) It loses mass



(vi) The heating effect of electric current occurs because a conductor offers: [1]

- (A) Pressure (B) Resistance
(C) Gravity (D) Magnetism only

- (vii)** The SI unit of force is: [1]
 (A) Pascal (B) Newton
 (C) Joule (D) Watt
- (viii)** Which force always acts opposite to the direction of motion or attempted motion? [1]
 (A) Friction (B) Gravity
 (C) Magnetic force (D) Muscular force
- (ix)** Which is a non-contact force? [1]
 (A) Muscular force (B) Friction
 (C) Electrostatic force (D) Push by hand
- (x)** Pressure becomes greater when the same force acts on: [1]
 (A) A larger area (B) A smaller area
 (C) No area (D) Equal areas only
- (xi)** Air generally flows from a region of: [1]
 (A) Low pressure to high pressure (B) High pressure to low pressure
 (C) Equal pressure to equal pressure (D) No pressure to high pressure
- (xii)** The calm central region of a cyclone is called the: [1]
 (A) Wall (B) Eye
 (C) Front (D) Core cloud

SECTION B

Very Short Answer Questions (4 x 2 = 8)

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

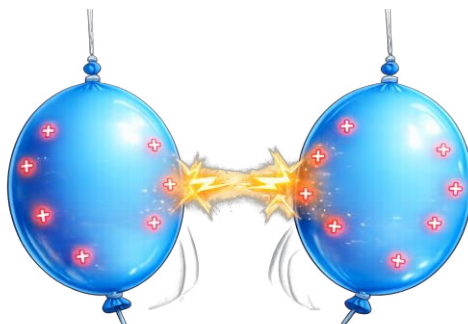
(A) Why can microorganisms be seen clearly only with a microscope? Mention one useful role of microorganisms. [2]

OR

(B) What is fermentation? State one use of yeast in food preparation.

3. Distinguish between communicable and non-communicable diseases. Give one example of each. [2]

4. Observe the diagram of the two balloons shown below after they have been rubbed with a woollen cloth. [2]



- (a) What type of force is acting between the balloons?
 (b) Why do the balloons move away from each other?

5. Why does a ball rolling on a rough surface stop sooner than on a smooth surface? [2]

SECTION C

Short Answer Questions (3 x 3 = 9)

6. Study the figure below showing a box acted upon by forces. Explain any three effects that a force can produce on an object. [3]



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

(A) Explain the magnetic effect of electric current using the compass-and-wire observation. [3]

OR

(B) What is the heating effect of electric current? Name two household appliances that use this effect.

8. Study the diagram below. The bottle has holes at different depths. Which jet is expected to travel farthest? Explain what this shows about pressure in liquids. [3]



SECTION D

Long Answer Questions (3 x 5 = 15)

9. Fill in the blanks using the words given below. Each word is to be used once. [5]

Word Bank: microscope, cells, unicellular, yeast, carbon dioxide

- (a) Tiny living organisms are observed using a _____.
- (b) The basic structural units of living organisms are _____.
- (c) Bacteria are generally _____ organisms.
- (d) _____ is a unicellular fungus used in fermentation.
- (e) During respiration in dough, yeast releases _____.

10. Match Column I with Column II:

[5]

Column I	Column II
(a) Friction	(i) Force due to muscles
(b) Gravitational force	(ii) Force exerted by Earth on objects
(c) Electrostatic force	(iii) Force between charged bodies
(d) Muscular force	(iv) Force that opposes relative motion between surfaces
(e) Magnetic force	(v) Force exerted by a magnet

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

[5]

(A) Explain how an electromagnet is made. Describe what happens when current is switched ON and OFF, and state two practical applications.

OR

(B) Explain how a storm can develop into a cyclone. Include the role of warm air, pressure differences, rising air and rotating winds.

SECTION E

Case-Based Questions (4 x 4 = 16)

12. A student adds yeast and a little sugar to warm water and flour. After some time, the dough rises and becomes fluffy.

(a) To which group of microorganisms does yeast belong?

[1]

(b) Name the gas responsible for making the dough fluffy.

[1]

(c) Explain why warm conditions help this process.

[2]

OR

(d) State two other food preparations in which microorganisms are useful.

[2]

13. Study the simplified cyclone diagram below and answer the questions.

[4]



(a) Name the central region marked in the diagram.

[1]

(b) Why do strong winds develop around a cyclone?

[1]

(c) State two safety measures to follow during a cyclone.

[2]

OR

(d) Explain in two points how pressure differences contribute to wind and cyclone formation.

[2]

14. A student rubs a plastic scale with polythene and brings it near small pieces of paper. The paper pieces move towards the scale without touching it.

(a) What type of charge develops on the rubbed scale? [1]

(b) Name the force responsible for attracting paper pieces. [1]

(c) Why is this force called a non-contact force? Explain. [2]

OR

(d) What happens when two similarly charged balloons are brought close? What does this show about like charges? [1]

15. A water tank is placed on the roof of a building. Water reaches the lower floors with greater pressure than points closer to the tank.

(a) What happens to liquid pressure as the depth of the liquid column increases? [1]

(b) Does a liquid exert pressure only at the bottom of a container? [1]

(c) Explain why raising the water tank higher can increase water pressure on the ground floor. [2]

OR

(d) A sharp knife cuts more easily than a blunt knife for the same applied force. Explain the relation between pressure and area. [2]