

Summative Assessment – Term 2 2025-26  
BASIC SCIENCE Standard: VIII  
Time: 2 hours Total Score: 60

Instructions • The first 15 minutes is cool-off time. This time is meant for reading the questions and planning your answers.

- This question paper includes 10 questions in Section A, B, C.
- Questions 7, 8 and 10 contain choices.
- You need to answer only one of the options provided for each of these choice-based questions.

Physics

Time: 40 minute

Total Score: 20

Section – A

Select the correct answer for questions 1 to 2. Answer all questions. (1 score for each question) ( $2 \times 1 = 2$ )

1. Which of the following is a vector quantity?  
a) Mass b) Distance c) Velocity d) Speed
2. Statement 1: When a force acts on an object, it can change the state of rest or motion of the object.  
Statement 2: A force can also change the shape and direction of motion of an object. Analyse the statements:  
a) Both statements are correct  
b) Only Statement 1 is correct  
c) Only Statement 2 is correct  
d) Both statements are incorrect

Section – B

Answer questions 3 to 8 in more than one sentence. Questions 7 and 8 have a choice. (2 score for each question) ( $6 \times 2 = 12$ )

3. Observe the figure of a liquid pressure experiment.



- a) In which hole does water come out with the greatest force? b) What conclusion do you arrive at regarding liquid pressure?

4. Classify the following into contact forces and non-contact forces.  
Muscular force, Gravitational force, Frictional force, Magnetic force

Contact forces

Non-contact forces

5. Complete the table.

Situation

State of motion / State of rest

A book lying on a table

.....

A ball rolling on the ground .....

6. Find the incorrect statements from a student's science diary and correct them.

- a) Pressure = Force  $\times$  Area
- b) The SI unit of pressure is pascal (Pa)
- c)  $1 \text{ atm} = 1.013 \times 10^5 \text{ Pa}$
- d) Atmospheric pressure decreases with altitude

7. A. Explain why sharp knives cut better than blunt knives using the concept of pressure.

OR

B. Why do army tanks and bulldozers have wide metal tracks instead of ordinary tyres?

8. A. A force of 200 N acts on an area of  $4 \text{ m}^2$ . Calculate the pressure exerted.

OR

B. The base area of two cylinders is  $50 \text{ cm}^2$  and  $200 \text{ cm}^2$  respectively. The same force acts on both. On which cylinder is the pressure greater? Why?

**Section – C Questions 9 to 10 carry 3 score each. Question 10 has a choice. ( $2 \times 3 = 6$ )**

9. A bag of cement of mass 50 kg is kept on the floor.

- a) Calculate the weight of the bag ( $g = 10 \text{ m/s}^2$ ).
- b) If the area of contact is  $0.5 \text{ m}^2$ , find the pressure exerted on the floor.
- c) Why do camels have broad feet?

10. A. Describe an experiment to demonstrate that liquids exert pressure sideways also. OR B. Explain atmospheric pressure with the help of Magdeburg hemisphere experiment.

### Chemistry

**Time: 40 minute**

**Total Score: 20**

**Answer all questions from 1 to 2. (1 score each) ( $2 \times 1 = 2$ )**

1. Match the following.

Metal	Non-metal
i) Sodium	a) Iodine
ii) Carbon	b) Calcium
iii) Chlorine	c) Potassium
iv) Magnesium	d) Sulphur

Choose the correct matching order.

2. Which of the following is a physical property of metals?

- a) They react with acids to produce hydrogen gas
- b) They are good conductors of heat
- c) They form basic oxides
- d) They lose electrons to form positive ions

**Questions 3 to 8 ( $6 \times 2 = 12$ )**

- 3. a) What are metalloids? Give two examples. b) Why is graphite used as a lubricant?
- 4. A. Burning of magnesium ribbon in air. B. Heating copper powder in air. Write the type of chemical reaction in each case.

OR

- B. Write any two differences between metals and non-metals.
- 5. a) What is meant by displacement reaction?
- b) Write the balanced chemical equation when zinc reacts with dilute hydrochloric acid.
- 6. What is galvanisation? Why is it done?
- 7. Sodium is stored in kerosene, but calcium is not. Give reason.
- 8. A. Explain the reactivity series of metals with an example.

OR

- B. Why is aluminium used to make cooking utensils even though it is a highly reactive metal?

**Questions 9 to 10 ( $2 \times 3 = 6$ )**

- 9. a) What is rusting of iron?
- b) Write any two methods to prevent rusting.
- c) Why does rusting occur faster near the seashore?
- 10. A. Describe an activity to show that metals are good conductors of electricity.

OR

- B. Explain the process of extraction of iron from its ore in a blast furnace (write any three main steps).

**Biology**

**Time: 40 minute**

**Total Score: 20**

Answer all questions from 1 to 2. (1 score each) ( $2 \times 1 = 2$ )

- 1. The organism that causes malaria is
- a) Housefly

- b) Anopheles mosquito
  - c) Aedes mosquito
  - d) Culex mosquito
2. Which of the following is a bacterial disease? a) Dengue b) Cholera c) Rabies d) Chickenpox

**Questions 3 to 8 ( $6 \times 2 = 12$ )**

3. Complete the flowchart of the life cycle of a mosquito.  
Egg → ..... → ..... → Adult mosquito
4. a) What are antibiotics?  
b) Name the scientist who discovered penicillin.
5. Distinguish between infectious and non-infectious diseases. Give one example each.
6. What is vaccination? Name any two diseases that can be prevented by vaccination.
7. A. Write any four personal hygiene habits to be followed to prevent communicable diseases.  
OR  
B. Why should we not allow water to stagnate near our houses?
8. A. Explain how food poisoning occurs. Write any two preventive measures.  
OR  
B. What is food preservation? Give two examples of natural preservatives.

**Questions 9 to 10 ( $2 \times 3 = 6$ )**

9. a) What are vectors? Give two examples.  
b) How does HIV spread from one person to another?  
c) Write any two preventive measures against AIDS.
10. A. Describe Pasteur's experiment that proved microbes are present in air.  
OR  
B. Explain any three principles of treatment of communicable diseases.