Model Question Paper prepared by www.educationobserver.com

SUMMATIVE ASSESSMENT – TERM II, 2026–27

BASIC SCIENCE (English Medium)

SET 1

Standard: VIII **Time: 2 Hours**

Total Score: 60

Instructions

- The first 15 minutes is cool-off time. Use this time to read the questions carefully and plan your answers.
- The exam must be written in the order Physics, Chemistry and Biology. Each subject is allotted 40 minutes.
- After completing each subject, the answer sheet must be handed over to the teacher.
- While writing answers, consider both score and time.
- For questions with a choice, attempt only one of the given options.

PHYSICS

Time: 40 minutes Total Score: 20

Section A

Choose the correct answer for questions 1 and 2. Each carries 1 score. **(2 × 1 = 2)**

1. The SI unit of pressure is (1)

a) newton b) pascal c) joule d) kilogram

2. **Statement:** A glass rod rubbed with silk acquires a positive charge. (1)

Reason: Electrons move from the silk to the glass rod during rubbing.

a) The statement and the reason are true, and the reason explains the statement.

b) The statement and the reason are true, but the reason does not explain the statement.

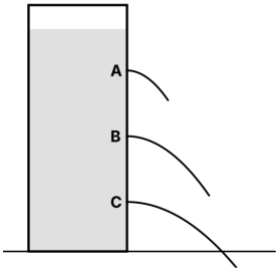
c) The statement is true, but the reason is false.

d) The statement is false, but the reason is true.

Section B

Answer questions 3 to 5. Questions 4 and 5 have a choice. Each carries 2 scores. **(3 × 2 = 6)**

3. Water is filled in a bottle having three holes A, B and C at different heights.

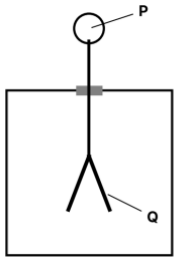


a) From which hole does water spurt out to the greatest distance? (1)

b) What do you understand about liquid pressure from this? (1)

www.educationobserver.com

4 A. Observe the figure of an electroscope.



a) Name the parts P and Q. (1)

b) What happens to Q when a charged body touches P? Why? (1)

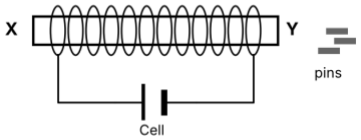
OR

4 B. "A charged balloon sticks to the wall for some time."

a) Which type of charge is induced on the part of the wall near the balloon? (1)

b) Why does the balloon fall down after some time? (1)

5 A. An iron nail wound with insulated copper wire is connected to a cell, as shown.



a) What happens to the pins when current flows through the wire? (1)

b) Suggest one way to increase the strength of this magnet. (1)

OR

5 B. Write two differences between a permanent magnet and an electromagnet. (2)

Section C

Answer questions 6 to 9. Question 8 has a choice. Each carries 3 scores. **(4 × 3 = 12)**

6. A box of weight 600 N rests on the floor. The area of its base is 2 m².

a) Calculate the pressure exerted by the box on the floor. (1)

b) If the box is turned so that it rests on a face of area 0.5 m², what will the pressure be? (1)

c) Why do school bags have broad straps? (1)

7. A cyclist covers 12 km in 30 minutes, while a runner covers 400 m in 50 s. Who is faster? Show your calculation. (3)

8 A. Lightning is an electric discharge.

a) How is lightning formed? (1)

b) Why is it unsafe to stand under a tall tree during a thunderstorm? (1)

c) How does a lightning conductor protect a building? (1)

OR

8 B. Atmospheric pressure acts on everything around us.

a) What is the normal atmospheric pressure at sea level? (1)

b) How does atmospheric pressure change as we go up a mountain? (1)

c) Explain how we drink juice using a straw. (1)

9. Give reasons.

a) A freely suspended bar magnet always comes to rest in the north–south direction. (1)

www.educationobserver.com

b) The wheels of heavy trucks are many in number and wide. (1)

c) Petrol tankers have a chain touching the ground. (1)

CHEMISTRY

Time: 40 minutes Total Score: 20

Answer all questions from 1 to 2. 1 score each. **(2 × 1 = 2)**

1. Which of the following is a non-metal that is a good conductor of electricity? (1)

a) Sulphur b) Graphite c) Iodine d) Phosphorus

2. Match the indicators with the colour they show in an acid. (1)

Indicator	**Colour in acid**
(i) Blue litmus	(a) Colourless
(ii) Phenolphthalein	(b) Red
(iii) Methyl orange	(c) Pink / red

A) i – b, ii – a, iii – c B) i – a, ii – b, iii – c

C) i – c, ii – a, iii – b D) i – b, ii – c, iii – a

Answer questions 3 to 8. Questions 4 and 8 have a choice. Each carries 2 scores. **(6 × 2 = 12)**

3. Write two physical properties that help us identify a metal. (2)

4 A. a) Why are electric wires made of copper? (1)

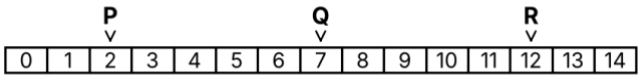
b) Why is gold used for making jewellery? (1)

OR

4 B. a) Name a metal that is liquid at room temperature. (1)

b) Name the property of metals that allows them to be drawn into thin wires. (1)

5. The pH values of three solutions are marked on the pH scale.



a) Which of these solutions is acidic? (1)

b) Which solution could be pure water? (1)

6. When a person suffers from acidity, doctors suggest an antacid.

a) What is the nature of an antacid? (1)

b) Name the reaction that takes place in the stomach. (1)

7. Water is called a universal solvent.

a) Why? (1)

b) Name one substance that does not dissolve in water. (1)

8 A. Soap does not lather well in well water of some places.

a) What is this type of water called? (1)

b) Write the name of one salt responsible for it. (1)

OR

8 B. Write the chemical names of the following.

www.educationobserver.com

a) Common salt (1)

b) Baking soda (1)

Answer questions 9 and 10. Question 10 has a choice. Each carries 3 scores. **(2 × 3 = 6)**

9. Dilute hydrochloric acid is added separately to zinc granules and to marble chips.

a) Name the gas formed in each case. (2)

b) How can you test the gas formed from marble chips? (1)

10 A. Iron gates and railings rust when exposed to air and moisture.

a) Write two methods to prevent rusting. (2)

b) Why does iron rust faster in coastal areas? (1)

OR

10 B. Drinking water reaches our homes after purification.

a) Name two substances used to purify water. (2)

b) Why should we boil water before drinking? (1)

BIOLOGY

Time: 40 minutes Total Score: 20

Choices are given for questions 6, 7 and 10.

Answer questions 1 and 2. Each carries 1 score. **(2 × 1 = 2)**

1. Who stated that all new cells are formed from pre-existing cells? (1)

a) Robert Hooke b) Rudolf Virchow

c) Matthias Schleiden d) Theodor Schwann

2. Read the statements and choose the correct option. (1)

i. Xylem and phloem are complex tissues.

ii. Parenchyma cells have thick, lignified walls.

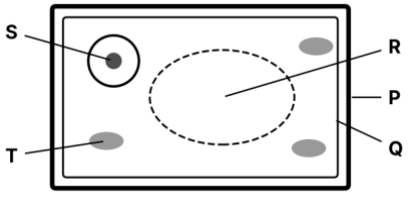
iii. Meristematic tissue is responsible for growth in plants.

a) i and ii are correct b) i and iii are correct

c) only ii is correct d) ii and iii are correct

Answer questions 3 to 8. Each carries 2 scores. **(6 × 2 = 12)**

3. Observe the diagram of a plant cell.



a) Identify the parts P and T. (1)

b) Write the function of S. (1)

4. "Lichens are good examples of symbiosis." Justify the statement. (2)

5. Bacteria and blue-green algae are prokaryotes. Write two features of prokaryotic cells. (2)

www.educationobserver.com

6 A. Mushrooms grow on dead logs. Why are fungi called saprophytes? (2)

OR

6 B. Write two ways in which fungi are useful to human beings. (2)

7 A. Rhizobium is called a biofertiliser. Explain why. (2)

OR

7 B. Write two advantages of using biofertilisers instead of chemical fertilisers. (2)

8. Complete the classification levels in the correct order. (2)

Kingdom → (a) ..... → Class → (b) ..... → Family → Genus → Species

Answer questions 9 and 10. Each carries 3 scores. **(2 × 3 = 6)**

9. The scientific name of the tiger is Panthera tigris.

a) What does 'Panthera' indicate? (1)

b) Who introduced the two-name system (binomial nomenclature)? (1)

c) Why do we need scientific names when every place has a local name? (1)

10 A. Different tissues in a plant do different jobs.

a) Which tissue helps the stems of grasses to bend without breaking? (1)

b) Which tissue forms the protective outer layer of leaves? (1)

c) How are complex tissues different from simple tissues? (1)

OR

10 B. Compare a plant cell and an animal cell.

a) Name two parts found only in plant cells. (2)

b) Name a cell organelle found in animal cells but usually absent in plant cells. (1)

www.educationobserver.com