Model Question Paper prepared by www.educationobserver.com

SUMMATIVE ASSESSMENT – TERM II, 2026–27

BASIC SCIENCE (English Medium)

SET 2

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. Pressure is equal to (1)

a) force × area b) force ÷ area c) area ÷ force d) force + area

2. **Statement:** Like poles of two magnets repel each other. (1)

Reason: A magnet attracts iron filings.

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.

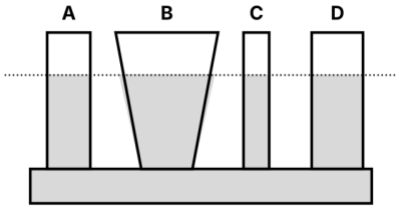
c) The statement is true, but the reason is false.

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 poured into connected vessels A, B, C and D of different shapes.



a) In which vessel does the water stand at the highest level? (1)

b) What can you conclude from this about liquid pressure? (1)

4 A. A plastic comb rubbed in dry hair attracts small bits of paper.

a) Why does the comb attract the paper? (1)

b) Why does this activity not work well on a humid day? (1)

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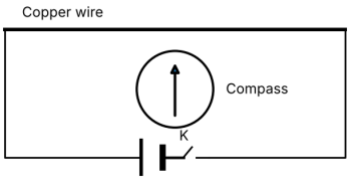
OR

4 B. What is earthing? Why is it done for electrical appliances? (2)

5 A. Observe the arrangement given below.



a) What happens to the compass needle when the key K is closed? (1)

b) What does this show? (1)

OR

5 B. Write two uses of electromagnets. (2)

Section C

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

6. A woman of weight 500 N stands on the heel of one sandal of area 0.0005 m². An elephant of weight 40 000 N stands on four feet of total area 0.4 m².

a) Calculate the pressure exerted by the woman. (1)

b) Calculate the pressure exerted by the elephant. (1)

c) Which of them is more likely to damage a wooden floor? Why? (1)

7. A train covers 180 km in 3 hours.

a) Find its speed in km/h. (1)

b) Express this speed in m/s. (1)

c) How long will it take to cover 300 km at this speed? (1)

8 A. Static electricity.

a) Name the two types of electric charge. (1)

b) What happens when a charged glass rod is brought near another charged glass rod? Why? (1)

c) Why is it dangerous to stand in an open field during a thunderstorm? (1)

OR

8 B. Torricelli measured atmospheric pressure using mercury.

a) What is the height of the mercury column at sea level? (1)

b) Why is water not used in a barometer? (1)

c) Why are we not crushed by the atmospheric pressure acting on us? (1)

9. Give reasons.

a) Bar magnets are stored in pairs with soft iron keepers. (1)

b) Nails are made with pointed tips. (1)

c) A lightning conductor is made of copper. (1)

CHEMISTRY

Time: 40 minutes Total Score: 20

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

1. Which non-metal is stored under water? (1)

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

2. Match the substances with the acids present in them. (1)

Substance	**Acid**
(i) Vinegar	(a) Lactic acid
(ii) Lemon	(b) Acetic acid
(iii) Curd	(c) Citric acid

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

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

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

3. The oxides of metals and non-metals behave differently. Write the nature of each with one example. (2)

4 A. Why is aluminium used for making aircraft bodies? Write two reasons. (2)

OR

4 B. a) What is an alloy? (1)

b) Name the metals present in brass. (1)

5. A drop of soap solution turns turmeric paper red.

a) What is the nature of soap solution? (1)

b) Name another natural indicator. (1)

6. $HCl + NaOH \rightarrow NaCl + H_2O$

a) Name this type of reaction. (1)

b) Which salt is formed? (1)

7. Hard water is not good for washing clothes.

a) How can temporary hardness be removed? (1)

b) Name a substance that removes permanent hardness. (1)

8 A. Arrange the steps of purifying water for a town supply in the correct order: filtration, chlorination, sedimentation, loading (adding alum). (2)

OR

8 B. Write the chemical formulae of:

a) Calcium hydroxide (lime water) (1)

b) Sodium carbonate (washing soda) (1)

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

9. An iron nail is dipped in blue copper sulphate solution for some time.

a) What changes do you observe? (1)

b) Write the chemical equation. (1)

c) What does this show about the reactivity of iron and copper? (1)

10 A. pH plays an important role in daily life.

a) Below which pH does tooth decay begin? (1)

b) Why is toothpaste basic? (1)

c) What is added to soil that is too acidic? (1)

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OR

10 B. Write one use each of the following non-metals: a) oxygen b) nitrogen c) chlorine (3)

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. Which cell organelle is known as the powerhouse of the cell? (1)

a) Ribosome b) Mitochondrion c) Golgi body d) Lysosome

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

i. Robert Hooke observed cells in a thin slice of cork.

ii. Schleiden studied only animal cells.

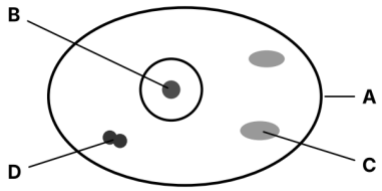
iii. Schwann stated that all animals are made of cells.

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 an animal cell.



a) Identify A and B. (1)

b) Write the function of C. (1)

4. Mushrooms grow in soil, but they are not considered plants. Why? (2)

5. Xylem and phloem are complex tissues. Why are they called complex tissues? (2)

6 A. Name two diseases in human beings caused by fungi. (2)

OR

6 B. Write two uses of yeast. (2)

7 A. What are nanofertilisers? Write one advantage of using them. (2)

OR

7 B. How is compost different from chemical fertilisers? Write two points. (2)

8. Name any four kingdoms of the five-kingdom classification. (2)

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

9. The scientific name of human beings is Homo sapiens.

a) Which word denotes the genus? (1)

b) Which word denotes the species? (1)

c) People differ in colour and height, yet all belong to the same species. Why? (1)

10 A. Meristematic tissues help plants grow.

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a) Where is apical meristem found? (1)

b) Where is intercalary meristem found? (1)

c) Write one feature of meristematic cells. (1)

OR

10 B. Write one function each of the following animal tissues: a) epithelial tissue b) muscular tissue c) nervous tissue (3)

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