

SURPRISE CLASS TEST

Date: 22.06.26

Full Marks-10

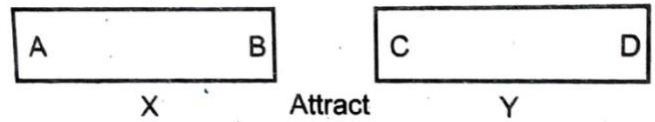
- **Case 1-** One morning, Riya could not find her iron key. Her brother gave her a magnet and asked her to move it under the sofa. Soon, the key stuck to one end of the magnet. Riya noticed that the key was attracted more strongly at the ends than at the middle.

Next day during the science exhibition, Riya brought a small wooden box that had a toy fish inside it. The fish moved from one side of the box to the other without anyone touching it. Her classmates were surprised. Riya then showed them a bar magnet hidden under the box. Whenever she moved the magnet, the fish inside also moved.

1. Riya says, "The middle part of the magnet is useless because the key did not stick there strongly." Which statement is correct?
 - A. She is correct because the middle has no magnetic property at all
 - B. She is incorrect because the middle also has magnetic effect, but weaker than the poles
 - C. She is correct because only the north pole works
 - D. She is incorrect because the middle attracts wood and plastic better
2. Assertion (A): If the key is wrapped in paper, the magnet may still attract it.
Reason (R): Magnetic force can act through some non-magnetic materials like paper.
 - A. Both A and R are true, and R is the correct explanation of A.
 - B. Both A and R are true, but R is not the correct explanation of A.
 - C. A is true, but R is false.
 - D. A is false, but R is true.
3. If the same magnet attracts a key weakly today but strongly tomorrow, which of the following is the most reasonable explanation?
 - A. The magnet has changed its poles overnight.
 - B. The key has become non-magnetic.
 - C. The distance of the magnet used might have changed.
 - D. The magnet attracts differently on different days.
4. Observe the given image:

If B is the south pole of the magnet X, which is the north pole of magnet Y?

- A. C
- B. D
- C. Both C and D
- D. None of these



5. Riya wants the fish to move more easily. Which change would most likely help?

- A. Replace the fish with a rubber toy
- B. Use a larger cardboard box with thicker walls
- C. Keep the magnet farther from the fish
- D. Use a thinner wooden base

- **Case 2-** Dipti and her brother visited their grandparents' village during the holidays. Early in the morning, they went to a nearby farm. There, they saw a hen sitting on a nest full of eggs, while in another shed a cow was feeding her newborn calf.

As they walked further, a farmer showed them different fields. In one field, rice was growing in wet, muddy land, while in another field, millets were growing well in a dry area with less water.

6. Why does a hen lay many eggs, while a cow usually gives birth to only one calf at a time?

- A. Cows cannot produce more than one baby because they do not eat enough food.
- B. Hens are larger animals, so they lay more eggs.
- C. A hen lays many eggs because most eggs do not receive as much protection and care as a calf developing inside a cow's body.
- D. A cow gives birth to one calf because mammals can never produce more than one young one at a time whereas birds like hen can as they are not mammals.

7. In one field, rice was growing in wet, muddy land, while in another field, millets were growing well in a dry area with less water. What does this show?

- A. Rice and millets can grow equally well in all types of soil and climate.
- B. Different crops are adapted to grow in different environmental conditions and habitat.
- C. Millets need more water than rice for healthy growth.
- D. Rice can grow only in dry and sandy soil.

8. The leaves of a rice plant show parallel venation. What does this indicate about the rice plant?

- A. It is a dicot plant with tap root system.
 - B. It is a non-flowering plant with monocot seed.
 - C. It has reticulate venation and broad leaves.
 - D. It is a monocot plant with fibrous root system.
9. Assertion (A): Most desert plants have long and well-developed roots.
Reason (R): The spines in desert plant help reduce water loss.
- A. Both A and R are true, and R is the correct explanation of A.
 - B. Both A and R are true, but R is not the correct explanation of A.
 - C. A is true, but R is false.
 - D. Both A and R are false.
10. Four children are talking about animals they saw near a pond. Dipti and her brother were amazed to hear their conversation.
- Asha: "A crab is an invertebrate because it has no backbone."
- Dev: "A tortoise is a vertebrate because it has a backbone inside its shell."
- Ishaan: "A starfish is a vertebrate because its body has arms spreading out from the centre."
- Naina: "A pigeon is a vertebrate because birds have backbones."
- Who has made a mistake?
- A. Asha
 - B. Dev
 - C. Ishaan
 - D. Naina