Physical Change

A. Choose the Correct Answer:

1. What happens to the shape and size of a substance during a physical change?

- A) It changes permanently
- B) It changes temporarily without forming a new substance
- C) It creates a new chemical compound
- D) It disappears completely

2. Which of the following is an example of a physical change?

- A) Burning of paper B) Rusting of iron
- C) Melting of ice D) Cooking of food
- **3.** What happens to the molecular composition of a substance during a physical change?
 - A) It remains the same
 - B) It changes completely
 - C) It transforms into a new compound
 - D) It vanishes

B. Fill in the Blanks:

1. A physical change does not create a new ______.

- 2. The process of water turning into steam is known as ______.
- 3. Cutting a piece of paper is an example of a ______ change.

C. Case Study:

A science teacher, Mr. Sharma, conducted an experiment to demonstrate physical changes. He took a block of ice and heated it until it melted into water. Then, he continued heating the water until it turned into steam. After that, he cooled the steam back into water and froze it into ice again.

He asked the students:

- Did the substance remain the same throughout the process?
- Was a new substance formed at any stage?
- Could the original ice be obtained back after melting and freezing?

Case Study Questions:

1. What was Mr. Sharma trying to demonstrate through this experiment?

- 2. Why is melting of ice considered a physical change?
- 3. What does this experiment prove about the reversibility of physical changes?
- 4. Give another example of a physical change that can be reversed.

D. Short Answer Questions:

- 1. What is a physical change?
- 2. How is a physical change different from a chemical change?
- 3. Give two examples of physical changes that occur in daily life.

E. Long Answer Questions:

- 1. Explain how physical changes are reversible with examples.
- 2. Describe at least five different physical changes that we experience in our surroundings.
- 3. Discuss the importance of understanding physical changes in daily life and scientific applications.