

CHAPTER-5 | Changes Around Us – Physical and Chemical

QUIZ
PART-05

1. Which of the following statements correctly describe a physical change?
- (i) and (ii)
 - (ii) and (iii)
 - (i) and (iii)
 - (iii) and (iv)

Explanation : In a physical change, the state of a substance may or may not change and no new substance is formed.

2. Which of the following changes is reversible in nature?
- Making idlis from batter
 - Grinding wheat grains to flour
 - Dissolving sugar in water
 - Ripening of fruits

Explanation : Sugar can be recovered from water by evaporation, so dissolving sugar in water is reversible.

3. Which change cannot be reversed once it occurs?
- Rolling up a mat
 - Twisting a straight string
 - Boiling water
 - Grinding wheat grains to flour

Explanation : Once wheat grains are ground into flour, they cannot be changed back into grains.

4. Melting of wax is necessary for burning a candle. This statement is _____.
- True
 - False
 - Partly true
 - Cannot be determined

Explanation : Wax must melt and vaporise before it can burn, so melting is necessary.

5. Collecting water vapour by condensation involves which type of change?
- Chemical change
 - Physical change
 - Irreversible change
 - Undesirable change

Explanation : Condensation changes only the physical state of water vapour to liquid water.

6. The brown deposits seen on the handle of a bicycle are due to _____, and this is a _____ change.
- Corrosion, physical
 - Rusting, chemical
 - Combustion, chemical
 - Erosion, physical

Explanation : Brown deposits are rust formed due to rusting, which is a chemical change.

7. A chemical process in which a substance reacts with oxygen with the evolution of heat is called _____.
- Rusting
 - Condensation
 - Combustion
 - Evaporation

Explanation : Combustion is defined as a chemical reaction with oxygen that releases heat.

8. Magnesium, when burnt in air, forms magnesium oxide. The substance formed is _____ in nature.
- Acidic
 - Neutral
 - Basic
 - Salty

Explanation : Magnesium oxide is basic in nature and turns red litmus blue.

9. Which of the following changes involves both physical and chemical changes?
- Melting of ice
 - Tearing of paper
 - Burning of a candle
 - Folding of clothes

Explanation : In a burning candle, wax melts (physical change) and wax vapour burns (chemical change).

10. Lime water turns milky when which gas is passed through it?
- Oxygen
 - Nitrogen
 - Carbon dioxide
 - Hydrogen

Explanation : Carbon dioxide reacts with lime water to form calcium carbonate, which turns the solution milky.