

## CHAPTER-8 | Nature of Matter: Elements, Compounds, and Mixtures

### QUIZ PART-05

1. A compound is formed when elements:

- A. Mix physically
- B. Combine chemically
- C. Stay separate
- D. Melt together (B)

*Explanation:* Compounds form by chemical combination.

2. Elements in a compound combine in:

- A. Any ratio
- B. Fixed ratio
- C. Random amount
- D. Equal mass (B)

*Explanation:* Compounds have fixed composition.

3. Properties of compound are:

- A. Same as elements
- B. Different from elements
- C. Identical to mixture
- D. Always metallic (B)

*Explanation:* New substance with new properties.

4. Water (H<sub>2</sub>O) is made from:

- A. Hydrogen only
- B. Oxygen only
- C. Hydrogen and oxygen
- D. Nitrogen and oxygen (C)

*Explanation:* Water is compound of hydrogen and oxygen.

5. Sodium chloride is formed by:

- A. Sodium + Oxygen
- B. Sodium + Chlorine
- C. Chlorine + Water
- D. Sodium + Nitrogen (B)

*Explanation:* Common salt forms from sodium and chlorine.

6. Compounds can be separated by:

- A. Filtration
- B. Physical methods
- C. Chemical methods
- D. Hand picking (C)

*Explanation:* Chemical change needed to separate.

7. Iron and sulfur when heated form:

- A. Mixture
- B. Iron sulfide
- C. Alloy
- D. Element (B)

*Explanation:* Chemical reaction forms compound.

8. Chemical formula represents:

- A. Colour
- B. Composition of compound
- C. Shape
- D. Size (B)

*Explanation:* Formula shows elements and ratio.

9. In compound, original elements:

- A. Keep properties
- B. Lose properties
- C. Stay separate
- D. Visible (B)

*Explanation:* Properties change after reaction.

10. Carbon dioxide is a:

- A. Mixture
- B. Element
- C. Compound
- D. Alloy (C)

*Explanation:* CO<sub>2</sub> is compound of carbon and oxygen.