

CHAPTER-2 | Exploring Substances Acidic, Basic and Neutral

QUIZ
PART-05

1. What is the reaction called when an acidic substance mixes with a basic substance?

- A. Combustion reaction
- B. Neutralisation reaction
- C. Oxidation reaction
- D. Decomposition reaction (B)

Explanation : When an acid reacts with a base, a neutralisation reaction takes place.

2. Which substances are formed during a neutralisation reaction?

- A. Acid and heat
- B. Base and salt
- C. Salt, water, and heat
- D. Water and acid (C)

Explanation : Neutralisation produces salt and water with the evolution of heat.

3. What colour change is observed when blue litmus is added to lemon juice?

- A. Blue to green
- B. Blue to red
- C. Red to blue
- D. No change (B)

Explanation : Lemon juice is acidic, so it turns blue litmus red.

4. What happens to the colour of a red acidic solution when lime water is added?

- A. It remains red
- B. It turns yellow
- C. It turns blue
- D. It becomes colourless (C)

Explanation : Lime water is basic and neutralises the acid, turning the solution blue.

5. Which statement best explains neutralisation?

- A. Acid strengthens a base
- B. Base strengthens an acid
- C. Acid and base cancel each other's effect
- D. Acid changes into a base (C)

Explanation : Neutralisation cancels the acidic and basic effects of substances.

6. Which acid is responsible for the stinging effect of an ant bite?

- A. Citric acid
- B. Acetic acid
- C. Lactic acid
- D. Formic acid (D)

Explanation : Ant bites inject formic acid into the skin.

7. What substance is used to neutralise the effect of an ant bite?

- A. Vinegar
- B. Lemon juice
- C. Baking soda
- D. Salt water (C)

Explanation : Baking soda is a base that neutralises the acid from an ant bite.

8. What is added to soil when it becomes too acidic?

- A. Manure
- B. Compost
- C. Lime
- D. Water (C)

Explanation : Lime is a base and is added to neutralise acidic soil.

9. What should be added when soil becomes too basic?

- A. Lime
- B. Baking soda
- C. Organic matter like manure
- D. Acid (C)

Explanation : Organic matter such as manure helps neutralise basic soil.

10. Why is factory waste treated with basic substances before releasing into water bodies?

- A. To make it colourful
- B. To increase pollution
- C. To neutralise acidic waste
- D. To heat the water (C)

Explanation : Basic substances neutralise acidic factory waste to protect aquatic life.