

## CHAPTER-2 | Exploring Substances Acidic, Basic and Neutral

QUIZ  
PART-07

1. Grape juice gives a red colour with red rose extract. What does this indicate about grape juice?
- A. It is basic  
B. It is neutral  
C. It is acidic  
D. It is salty (C)

**Explanation :** Red rose indicator turns red in acidic substances, showing that grape juice is acidic.

2. What colour will appear if excess baking soda is added to a mixture of grape juice and red rose extract?
- A. Red  
B. Yellow  
C. Green  
D. Blue (C)

**Explanation :** Baking soda is basic, and red rose indicator turns green in basic solutions.

3. Keerthi wrote a secret message using orange juice. Which indicator would help reveal the message?
- A. Red litmus solution  
B. Blue litmus solution  
C. Turmeric solution  
D. Onion extract (B)

**Explanation :** Orange juice is acidic and turns blue litmus red, making the message visible.

4. Why can red rose indicator be used to reveal a message written with orange juice?
- A. It reacts with neutral substances  
B. It changes colour in acidic solutions  
C. It smells different in acids  
D. It produces heat (B)

**Explanation :** Red rose indicator turns red in acidic substances like orange juice.

5. Natural indicators are generally prepared from which of the following?
- A. Metals and salts  
B. Plastics and chemicals  
C. Vegetables, fruits, or flowers  
D. Oils and fats (C)

**Explanation :** Natural indicators are prepared from plant sources such as flowers, fruits, and vegetables.

6. Which of the following steps is involved in preparing red rose extract?
- A. Freezing rose petals  
B. Burning rose petals  
C. Crushing petals and adding hot water  
D. Mixing petals with oil (C)

**Explanation :** Red rose extract is prepared by crushing petals and adding hot water, then filtering.

7. Using only turmeric paper, which solution can be identified from vinegar, baking soda solution, and sugar solution?
- A. Vinegar  
B. Sugar solution  
C. Baking soda solution  
D. All three (C)

**Explanation :** Turmeric turns red only in basic solutions, so only baking soda can be identified.

8. If red rose extract turns a liquid green, what is the nature of the liquid?
- A. Acidic  
B. Neutral  
C. Basic  
D. Salty (C)

**Explanation :** Red rose indicator turns green in basic solutions.

9. What happens when excess amla juice is added to a basic solution tested with red rose extract?
- A. The solution remains green  
B. The solution turns red  
C. The solution turns blue  
D. No colour change occurs (B)

**Explanation :** Amla juice is acidic, and red rose indicator turns red in acidic solutions.

10. Soil showing poor plant growth may be acidic or basic. Which substance is used to treat acidic soil?
- A. Manure  
B. Compost  
C. Lime  
D. Vinegar (C)

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