

CHAPTER-2 | Exploring Substances Acidic, Basic and Neutral

QUIZ
PART-03

1. What is used to prepare the red rose indicator?
 A. Red rose leaves
 B. Red rose petals immersed in cold water
 C. Red rose petals immersed in hot water
 D. Red rose stem extract (C)

Explanation : The indicator is prepared by immersing red rose petals in hot water to obtain the extract.

2. Which apparatus is required for preparing the red rose indicator?
 A. Beaker and burner
 B. Test tube and test tube stand
 C. Measuring cylinder and funnel
 D. Flask and dropper (B)

Explanation : A test tube and test tube stand are shown as required materials for preparing the indicator.

3. Red rose extract is mainly used to test the _____ of substances.
 A. Temperature
 B. Odour
 C. Nature (acidic or basic)
 D. Density (C)

Explanation : Red rose extract works as a natural indicator to identify whether a substance is acidic or basic.

4. Which sample was tested using the red rose indicator in Activity-2?
 A. Sugar solution
 B. Salt solution
 C. Lemon juice
 D. Tap water (C)

Explanation : Lemon juice is listed as one of the samples tested with red rose indicator.

5. What change is observed in red rose extract when lemon juice is added?
 A. It turns green
 B. It shows no change
 C. It changes colour indicating acidic nature
 D. It becomes colourless (C)

Explanation : Lemon juice is acidic and causes a colour change in the red rose extract.

6. What does the colour change of red rose extract indicate when soap solution is added?
 A. Acidic nature
 B. Basic nature
 C. Neutral nature
 D. Salty nature (B)

Explanation : Soap solution is basic and produces a different colour change in the red rose extract.

7. Which of the following is also a plant-based acid-base indicator?
 A. Plastic
 B. Beetroot
 C. Glass
 D. Salt (B)

Explanation : Beetroot is shown as one of the plant-based acid-base indicators.

8. Which option correctly lists plant-based acid-base indicators?
 A. Beetroot, turmeric, purple cabbage
 B. Soap, vinegar, lemon
 C. Salt, sugar, water
 D. Oil, milk, curd (A)

Explanation : Beetroot, turmeric, and purple cabbage are all shown as plant-based indicators.

9. What colour do hydrangea flowers show in acidic soil?
 A. Red
 B. Yellow
 C. Blue
 D. Green (C)

Explanation : Hydrangea flowers appear blue when grown in acidic soil.

10. Red rose indicator gives which colour in basic solutions?
 A. Red
 B. Pink
 C. Green
 D. Colourless (C)

Explanation : In basic solutions, red rose indicator changes to a greenish colour.