

1. Complete the following: -
- (i) The sour things we eat contain \_\_\_\_\_ [1]
  - (ii) Ammonium hydroxide is \_\_\_\_\_ [1]
  - (iii) An acid is \_\_\_\_\_ in taste. [1]
  - (iv) Milk contains \_\_\_\_\_ acid. [1]
  - (v) Litmus is extracted from \_\_\_\_\_ [1]
2. Multiple choice questions (Choose the correct option)
- (A) Which of the following is a strong acid? [1]
- (a) Nitric acid
  - (b) Citric acid
  - (c) acetic acid
  - (d) Tartaric acid
- (B) Which of the following is not a base? [1]
- (a) Sodium Hydroxide
  - (b) Magnesium Hydroxide
  - (c) Copper Carbonate
  - (d) Ammonium Hydroxide
- (C) Which of these metals cannot be used to prepare hydrogen by the action of an acid.? [1]
- (a) Sodium
  - (b) Iron
  - (c) Zinc
  - (d) Copper
- (D) What is the common name of Sodium bicarbonate? [1]
- (a) Phitkari
  - (b) Caustic Soda
  - (c) Baking Soda
  - (d) Blue vitriol Nonrenewable & cannot be recycled
- (E) Sodium chloride will turn- [1]
- (a) Blue Litmus Red
  - (b) Methyl orange yellow
  - (c) Red Litmus blue
  - (d) None of these
3. Name one each of acidic, basic and neutral substances. [1]
- Ans. \_\_\_\_\_
4. What is the color of litmus paper which changes its color in acidic solution? [1]
- Ans \_\_\_\_\_
5. What are the general properties of an acid and a base? [2]
- Ans. \_\_\_\_\_
- \_\_\_\_\_
6. Name four substances that can serve as indicators. [2]

Ans \_\_\_\_\_  
\_\_\_\_\_

7. Turmeric indicator does not indicate whether the substance is acidic or neutral. Is the statement true? Explain. [2]

Ans. \_\_\_\_\_  
\_\_\_\_\_

8. If few drops of purple-cabbage juice are added to the colorless solution of an acidic material. What would be the color of the resulting solution? [2]

Ans \_\_\_\_\_  
\_\_\_\_\_

9. A few drops of china rose indicator are added to the colourless solution of a chemical the resulting solution will become light green. What does it indicate about the nature of the chemical? [2]

Ans \_\_\_\_\_  
\_\_\_\_\_

10. Answer in 40 words: -

1. Name an acidic gas which is discharged into the atmosphere on the burning of fuels like coal & natural gas. How is this gas formed? [2]

Ans. \_\_\_\_\_  
\_\_\_\_\_

2. Non-Metal Oxides are called Acidic. Give reason. [2]

Ans \_\_\_\_\_  
\_\_\_\_\_

3. Metal Oxides such as MgO are used for making refractory bricks. Give reason. [2]

Ans \_\_\_\_\_  
\_\_\_\_\_

11. Name the following: - [3]  
1. Soluble bases.

Ans \_\_\_\_\_  
2. A Chemical used as a food preservative.

Ans \_\_\_\_\_

3. Chemical name of Chile Salt Petre.

Ans \_\_\_\_\_

12. What is an indicator? Give examples of two natural indicators? [3]

Ans \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

13. What is an acid rain? How is it formed? Mention three bad effects of acid rain. [5]

Ans \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

14. What substance is used to treat the soil when it is too acidic?

Ans. \_\_\_\_\_

1. When soil becomes too basic, plants do not grow well in it. To improve its quality, what must be added to the soil [1]

- (A) Organic matter
- (B) Quick lime
- (C) Slaked lime
- (D) Calamine solution

Ans \_\_\_\_\_

2. Phenolphthalein is a synthetic indicator. Its colour in the acidic and basic solutions, respectively are- [1]

- (A) Red and blue
- (B) Blue and red
- (C) Pink and colourless
- (D) Colourless and pink

Ans \_\_\_\_\_

3. Turmeric is a natural indicator. On adding its paste to acid and base separately, which colours would be observed

[1]

- (A) Yellow in both acid and base
- (B) Yellow in acid and red in base
- (C) Pink in acid and yellow in base
- (D) Red in acid and blue in base

Ans \_\_\_\_\_

4. 'LITMUS' a natural dye is an extract of which of the following [1]

- (A) China rose
- (B) Beet root
- (C) Lichen
- (D) Blue berry

Ans \_\_\_\_\_

5. Match the following: [2]

- |                       |                   |
|-----------------------|-------------------|
| (a) Tartaric acid     | 1. Soap           |
| (b) Calcium hydroxide | 2. Curd           |
| (c) Formic acid       | 3. Unripe mangoes |
| (d) Lactic acid       | 4. Ant sting      |
| (e) Sodium hydroxide  | 5. Lime water     |

Ans \_\_\_\_\_

6. Ram was suffering from acidity. Is it advisable to give him orange juice in this situation and why? [2]

Ans \_\_\_\_\_

\_\_\_\_\_

7. Why do we use indicators? Give examples. [2]

Ans \_\_\_\_\_

\_\_\_\_\_

8. You are provided with three test tubes A, B and C.

(a) **Test tube A** contains solution of tartaric acid

(b) **Test tube B** contains soap solution

(c) **Test tube C** contains pure water

What will you observe when you put?

(a) A piece of red litmus paper in each test tube. [2]

**Ans** \_\_\_\_\_  
\_\_\_\_\_

(b) A piece of blue litmus paper in each test tube [2]

**Ans** \_\_\_\_\_  
\_\_\_\_\_

(c) A drop of phenolphthalein in each test tube [2]

**Ans** \_\_\_\_\_  
\_\_\_\_\_

9. State differences between acids and bases. [2]

**Ans** \_\_\_\_\_  
\_\_\_\_\_

10. While playing in a park, a child was stung by a wasp. Some people suggested applying the paste of baking soda while others suggested of lemon juice as remedy. Which remedy do you think is appropriate and why? [3]

**Ans** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

11. Three liquids are given to you. One is hydrochloric acid; another is sodium hydroxide and third is a sugar solution. How will you identify them? You have only turmeric indicator. [3]

**Ans** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. Classify the following substances into acidic and basic substances- [3]  
Tomato juice, soap solution, toothpaste, lemon juice, vinegar, salt

**Ans** \_\_\_\_\_  
\_\_\_\_\_

13. What is neutralisation reaction? Give one example.

[3]

Ans

14. The wastes of many factories contain acids. Why is it considered necessary to neutralize them before allowing the waste to flow into water bodies?

[3]

Ans.

15. Fill in the blanks:

[4]

(a) Bases are \_\_\_\_\_ in taste.

(b) The chemical name of common salt is \_\_\_\_\_

(c) When you use blue litmus paper as an indicator, it gives the colour \_\_\_\_\_ with acids.

(d) Methyl orange has \_\_\_\_\_ colour in acidic solution.