

## MCQs Class 10 Science Chapter 2: Acids, Bases and Salts

1. Some fruits like mango, lemon, raw grapes, orange, etc., have a sour taste due to the presence of:

- a. Acetic acid
- b. Citric acid
- c. Lactic acid
- d. Oxalic acid

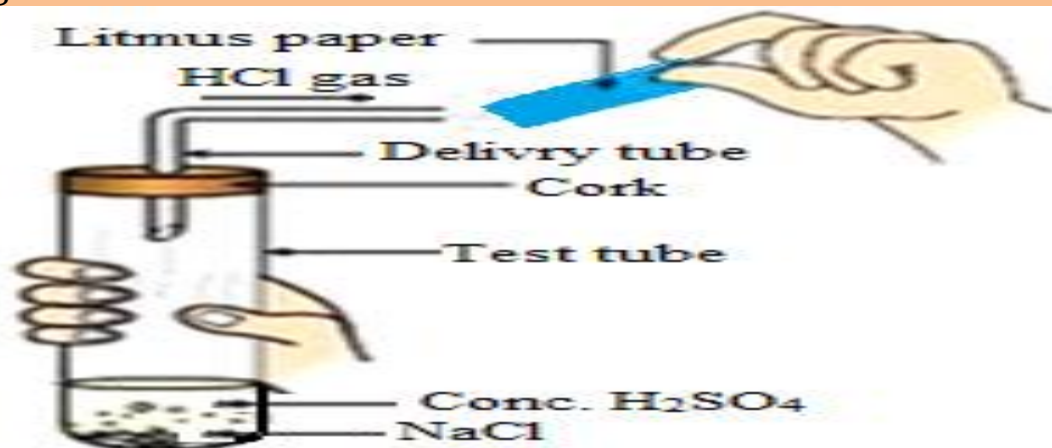
**Answer. b. Citric acid**

2. Zinc granules on treating with an acid X, form the zinc sulphate ( $\text{ZnSO}_4$ ) salt along with the evolution of a gas Y which burns with a pop sound when brought near to a burning candle. Identify the acid X and gas evolved Y.

- a. X- Sulphuric acid and Y- Oxygen gas
- b. X- Hydrochloric acid and Y- Oxygen gas
- c. X- Sulphuric acid and Y- Hydrogen gas
- d. X- Hydrochloric acid and Y- Hydrogen gas

**Answer. c. X- Sulphuric acid and Y- Hydrogen gas**

3. The figure given below represents the experiment carried out between conc. sulphuric acid and sodium chloride, which react with each other to form HCl gas.



Blue litmus paper is brought near the mouth of the delivery tube to check the presence of HCl acid but no change is observed in the color of litmus paper because:

- a. The litmus paper used is dry
- b. The litmus paper used is moist
- c. Blue litmus paper does not change its color with an acid
- d. The litmus paper is kept very close to the mouth of the delivery tube

**Answer. a. The litmus paper used is dry**

**4. Which of the following phenomena occur, when a small amount of acid is added to water?**

- i. Ionisation
- ii. Neutralisation
- iii. Dilution
- iv. Salt formation

- a. (i) and (ii)
- b. (i) and (iii)
- c. (ii) and (iii)
- d. (ii) and (iv)

**Answer. b. (i) and (iii)**

**5. Which of the following indicators turn red in an acidic solution?**

- i. Phenolphthalein
- ii. Litmus
- iii. Turmeric
- iv. Methyl orange

Choose the correct option:

- a. (i) and (ii)
- b. (ii) and (iii)
- c. Only (ii)
- d. (ii) and (iv)

**Answer. d. (ii) and (iv)**

**6. Dilute acid does not produce carbon dioxide on being treated with:**

- a. Marble
- b. Lime
- c. Baking soda
- d. Limestone

**Answer. b. Lime**

7. The sample of soil from a particular place was tested for its pH value. It came out to be 5. Which one of the following should be added to the soil to make it suitable for the plant growth?

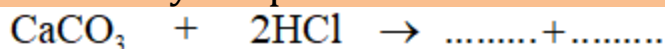
- i. Calcium chloride
- ii. Calcium Hydroxide
- iii. Calcium oxide

Choose the correct option:

- a. Both (i) and (ii)
- b. Both (ii) and (iii)
- c. Only (i)
- d. Only (iii)

**Answer. b. Both (ii) and (iii)**

8. Identify the products of the following reaction:



- a. Calcium hydrogencarbonate and chlorine gas
- b. Calcium chloride and water
- c. Calcium oxide, carbon dioxide and water
- d. Calcium chloride, carbon dioxide and water

**Answer. d. Calcium chloride, carbon dioxide and water**

9. An ant's sting can be treated with .....which will neutralise the effect of the chemical injected by the ant's sting into our skin.

Choose the correct option from the following to be filled in the blank space:

- a. Methanoic acid
- b. formic acid
- c. Baking soda
- d. Caustic soda

**Answer. c. Baking soda**

10. In the following reaction, identify the salt formed



- a.  $\text{NH}_4\text{NO}_3$
- b.  $(\text{NH}_4)_2\text{SO}_4$
- c.  $(\text{NH}_4)_3\text{PO}_4$

d.  $(\text{NH}_4)_2\text{S}$

**Answer. b.  $(\text{NH}_4)_2\text{SO}_4$**

11. Which of the following salt will give acidic solution when dissolved in water?

a.  $\text{NH}_4\text{Cl}$

b.  $\text{NaCl}$

c.  $\text{Na}_2\text{CO}_3$

d.  $\text{CH}_3\text{COONa}$

**Answer. a.  $\text{NH}_4\text{Cl}$**

12. Bleaching powder is used as a disinfectant for water to:

a. Make water tastier

b. Remove all the dirt from water

c. Make water germ-free

d. Make water clear

**Answer. c. Make water germ-free**

a.  $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$

b.  $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$

c.  $\text{CaSO}_4 \cdot \text{H}_2\text{O}$

d.  $\text{CaSO}_4 \cdot 10\text{H}_2\text{O}$

**Answer. b.  $\text{CaSO}_4 \cdot \frac{1}{2}\text{H}_2\text{O}$**

14. Which one of the following salts will dissolve in water to form an alkaline solution?

a. Potassium carbonate

b. Sodium chloride

c. Sodium carbonate

d. Potassium sulphate

**Answer. a. Potassium carbonate**

15. Copper sulphate crystals when heated strongly, lose their water of crystallization to give anhydrous copper sulphate accompanied by a change in

color from:

- a. Blue to green
- b. Blue to white
- c. Blue to sky blue
- d. Blue to grey

**Answer. b. Blue to white**