

1. Define olfactory indicators. Name two substances which can be used as olfactory indicator.

(b) Choose strong acids from the following:

CH_3COOH , H_2SO_4 , H_2CO_3 , HNO_3

2. State the chemical properties on which the following uses of baking soda are based:

(i) as an antacid

(ii) as a soda acid fire extinguisher

(iii) to make bread and cake soft and spongy.

3. a) Write the name given to bases that are highly soluble in water. Give an example.

(b) How is tooth decay related to pH? How can it be prevented?

(c) Why does bee sting cause pain and irritation? Rubbing of baking soda on the sting area gives relief. How?

4. Compound P forms enamel of teeth. It is the hardest substance of the body. It does not dissolve in water but it is corroded when pH in the mouth is below 5.5. How does tooth paste prevent dental decay?

5. Write the composition of baking powder. What will happen if tartaric acid is not added to it? Does Tartaric acid helps in making cake or bread fluffy. Justify.

6. State the observations you would make on adding ammonium hydroxide to aqueous

solution of

(i) ferrous sulphate

(ii) Aluminium chloride?

7. Metal compound 'A' reacts with dilute hydrochloric acid to produce effervescence. The gas evolved extinguishes a burning candle. Write a balanced chemical equation for the reaction, if one of the compounds formed is calcium chloride.

8. A first aid manual suggests that vinegar should be used to treat wasp sting and baking soda for bee stings.

(a) What does this information tell you about the chemical name of the wasp sting?

(b) If there were no baking soda in the house, what other house hold substances would you use to treat as stings?