INDIAN SCHOOL NIZWA - WORKSHEET

CHEMISTRY

CH 2: EXPLORING SUBSTANCES: ACIDS, BASES & SALTS

Name: Date: 27.05.2025 Class: VII

I.Choose the correct answer.

1.A student studies that a substance that tastes sour is generally acidic in nature. Among the given list of few substances found in the kitchen, which of these substances are acidic in nature?

ORANGE, CURD, CORN, BANANA

a) Curd and Corn
b) Corn and banana
c) Orange and corn
d) Orange and curd

2. A student took a half-filled test tube with dilute hydrochloric acid and a few drops of phenolphthalein in the solution. As he put a few drops of sodium hydroxide into the solution, it turned light pink. Further, he put a few extra drops of the acid and observed that the colour disappeared. What caused the colour to disappear from the solution?

a) The volume of the solution increased
b) The mixture turned into a neutral solution.
c) The amount of acid in the solution decreased.
d) The amount of base in the solution increased.

3. A scientist tests a soil sample from an uncultivated field and concludes that the soil is highly basic in nature. She suggests that adding organic matter to the soil could improve the quality of the soil. How does organic matter improve the quality of the soil?

a) It releases acids which neutralise the soil.
b) It traps water vapour and increases the moisture content.
c) It makes the soil lighter so that it can be easily transported.
d) It acts as food for the organisms already present in the soil.

4. A substance 'X' is found in the milk of magnesia which on testing with red litmus turned blue. What is 'X'?

a) An acid
b) A base
c) Water
d) A salt

5. What property of olfactory indicators makes them useful in identifying acids and bases?
a) They change color in the presence of an acid or base.
b) They emit a specific smell when mixed with an acid or base.
c) They dissolve in both acidic and basic solutions.
d) They form salts when reacted with acids or bases.

6. Which of the following indicators turns red in an acidic solution?
a) Methyl orange
b) Litmus
c) Phenolphthalein
d) Water

II. Identify the acids and bases present in the following.
a) Baking soda - _____
b) Soap - _____
c) Lemon juice - _____
d) Lime water- _____
e) Tamarind - _____
f) Grapes - _____
g) Ant's sting - _____
h) Slaked lime - _____

III. Identify the colour change of the following samples given below with phenolphthalein, litmus paper and China rose indicators.

Sample	**Phenolphthalein**	**Litmus paper**	**China rose**
Vinegar			
Milk of magnesia			
Curd			
Quick lime			
Slaked lime			
Baking soda			

IV. Find out the products of the following.
a) Potassium hydroxide + Hydrochloric acid →
b) Nitric acid + Magnesium hydroxide →
c) Magnesium hydroxide + Sulphuric acid →
d) Calcium hydroxide + Acetic acid→

V. Mark 'T' if the statement is true and 'F' if it is false:
(i) Nitric acid turns red litmus blue.
(ii) Sodium hydroxide turns blue litmus red.
(iii) Sodium hydroxide and hydrochloric acid neutralise each other and form salt and water.
(iv) Indicator is a substance which shows different colours in acidic and basic solutions.
(v) Tooth decay is caused by the presence of a base.