



INDIAN SCHOOL DARSAIT
DEPARTMENT OF CHEMISTRY
WORKSHEET



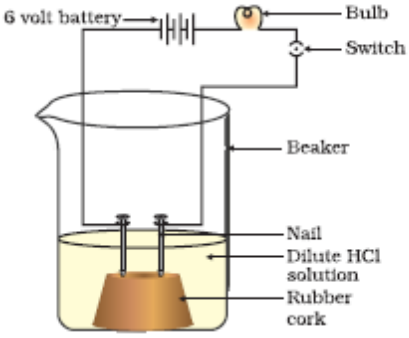
Subject : CHEMISTRY Chapter : Acids, Bases and Salts Date of Worksheet : 20-5-19

Resource Person: Mr. Harikrishnan P

Name of the Student : _____ Class & Division : X---- Roll Number : -----

1.	A solution reacts with marble chips to produce a gas which turns lime water milky. The solution contains: (a) Na_2SO_4 (b) CaSO_4 (c) H_2SO_4 (d) K_2SO_4	1
2.	Wasp stings can be treated with: (a) Baking soda (b) Vinegar (c) Washing soda (d) Milk of magnesia	1
3.	The salt which will give an alkaline solution on dissolving in water is: (a) Na_2CO_3 (b) Na_2SO_4 (c) NaCl (d) $(\text{NH})_2\text{SO}_4$	1
4.	In which of the following cases will a gas be given off? (a) Hydrochloric acid is added to sodium carbonate. (b) Sulphuric acid is added to sodium hydroxide. (c) Sulphuric acid is added to copper oxide. (d) Hydrochloric acid is added to zinc oxide.	1
5.	Which of the following salt will give an aqueous solution having pH almost 7? (a) NH_4NO_3 (b) NH_4Cl (c) KCl (d) CaCl_2	1
6.	What is an indicator? Name an indicator which is pink in alkaline solution but turns colourless in acidic solution.	1
7.	What are the ions present in the solutions of following substances? (a) Hydrochloric acid (b) Nitric acid (c) Sulphuric acid (d) Potassium hydroxide (e) Magnesium hydroxide	1
8.	Two solutions X and Y are tested with universal indicator. Solution X turns orange whereas solution Y turns red. Which of the solutions is a stronger acid?	1

9.	Name one natural source of each of the following acids. (a) Citric acid (b) Oxalic acid (c) Lactic acid (d) Tartaric acid	1
10.	A farmer has found that pH of soil in his fields is 4.2. Name any two chemical material that he can mix with the soil to adjust the pH.	1
11.	While diluting an acid, why is it recommended that the acid should be added to water and not water to the acid?	1
12.	Fresh milk has a pH of 6. When it changed into curd, will its pH value increase or decrease? Why?	1
13.	Name the sodium compound used to remove the permanent hardness of water.	1
14.	A white chemical compound becomes hard on mixing proper quantity of water. It is also used in surgery to maintain joints in a fixed position. Name the chemical compound.	1
15.	What is the commercial name of calcium sulphate hemi hydrate?	1
16.	What will happen if heating is not controlled while preparing plaster of Paris?	2
17.	CO ₂ gas is passed through lime water. Write the chemical equation to show the change. (a) What happens if excess of CO ₂ is passed through lime water? (b) What is the product formed? (c) How will you represent the reaction?	2
18.	A metal compound reacts with dilute hydrochloric acid. The gas evolved here extinguishes a burning candle. What is this metal compound? The other product formed here is MgCl ₂ . Write the chemical equation involved here.	2
19.	What is meant by 'hydrated' and 'anhydrous' salts? Explain with an example.	2
20.	What is the common name of Na ₂ CO ₃ .10 H ₂ O? Write any two uses of the compound.	2
21.	When the concentrated aqueous solution of substance X is electrolysed, then NaOH, Cl ₂ , and H ₂ are produced. Name the substance X. What is the special name of this process?	2
22.	Describe how sodium hydrogen carbonate is produced on large scale. Write the chemical equation of the reaction involved.	2
23.	A white powdery substance having strong smell of chlorine is used for disinfecting water. Identify the substance. Give its chemical name and write the chemical equation for its preparation.	2

24.	 <p>(a) Why does an aqueous solution of hydrochloric acid conduct electricity? (b) Will the bulb glow if glucose solution is taken in the beaker instead of hydrochloric acid? Why?</p>	2
25.	Write the name and formula of one salt each which contains: (a) two molecules of water of crystallisation. (b) five molecules of water of crystallisation. (c) ten molecules of water of crystallisation.	3
26.	Describe how washing soda is produced starting from sodium chloride. Write the chemical equation of all reactions involved. Also write any two important uses of this salt.	3
27.	Complete the following chemical reactions: (a) $\text{NaOH} + \text{Zn} \xrightarrow{\text{heat}} \text{-----} + \text{-----}$ (b) $\text{NaHCO}_3 \rightarrow \text{-----} + \text{-----} + \text{-----}$ (c) $\text{Na}_2\text{CO}_3 + \text{H}_2\text{SO}_4 \rightarrow \text{-----} + \text{-----} + \text{-----}$	3
28.	A milkman adds a very small amount of baking soda to fresh milk. (a) Why does he shift the pH of the fresh milk from 6 to slightly alkaline? Milk is made slightly alkaline so that it may not become sour easily due to the formation of lactic acid in it. (b) Why does this milk take a long time to set as curd? This is because the lactic acid being formed has to first neutralise the alkali present in it.	3