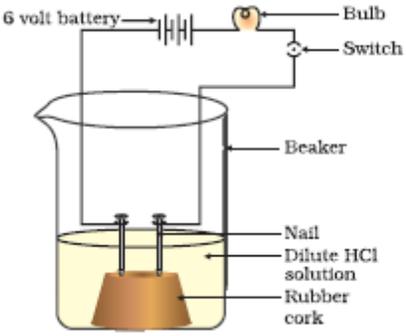


9.	Name one natural source of each of the following acids. (a) Citric acid (b) Oxalic acid (c) Lactic acid (d) Tartaric acid	1
10.	A farmer has found that pH of soil in his fields is 4.2. Name any two chemical material that he can mix with the soil to adjust the pH.	1
11.	While diluting an acid, why 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