

पु•ना International School

Shree Swaminarayan Gurukul, Zundal

Student Name					
Date		Grade	X	Roll No.	
Subject	Science			Teacher's Sign	

## Worksheet ( Chapter 02 Acid Base and Salt)

- 1. Electrolysis of brine solution produces chlorine gas and hydrogen at
  - a. Anode and cathode, respectively.
  - b. Both at cathode
  - c. Cathode and anode respectively
  - d. Both at Anode
- 2. Name the substance which on treatment with chlorine yields bleaching powder.
  - a. CaO
  - b.  $Ca(OH)_2$
  - c. CuO
  - d. CaCo<sub>3</sub>
- 3. Which one of the following is not required to find the pH of a solution?
  - a. Litmus paper
  - b. Standard pH value chart
  - c. pH paper
  - d. Universal indicator
- **4.** A blue litmus paper was first dipped in dil. HCl and then in dil. NaOH solution. It was observed that the colour of the litmus paper
  - a. changed first to red and then to blue
  - b. changed to red
  - c. remained blue in both the solutions
  - d. changed first to red and then to blue

- 5. Under what soil condition do you think a farmer would spread or treat the soil of his fields with quick lime (CaO) or slaked time  $(CaCO_3)$ ?
  - a. When the pH of the soil increases
  - b. When the nutrients of the soil is lost
  - c. When the pH of the soil decreases
  - d. All of these
- **6.** An aqueous solution turns red litmus solution blue. Excess addition of which solution would reverse the change?
- 7. Give one example of natural indicator.
- 8. Although acetic acid is highly soluble in water but still it is a weak acid. Explain why?
- **9.** Why is sodium hydrogen carbonate an essential ingredient in most antacids?
- 10. Why acids are not stored in metal containers?
- 11. You have two solutions. A and B, the pH of solution A is 6 and pH of solution B is 8. Which solution has more hydrogen ion concentration? Which of this is acidic and which one is basic?
- **12.** Write some uses of caustic soda?
- 13. i. A chemical compound X is used in glass and soap industry. Identify the compound and give its chemical formula.
  - ii. How many molecules of water of crystallisation are present in compound X?
  - **iii.** How will you prepare the above compound starting from sodium chloride? Write all relevant equations involved in the process.
- **14.** Give important properties of bases (alkalies).
- **15.** Write the formulae of the salts given below:

Potassium sulphate, sodium sulphate, calcium sulphate, magnesium

sulphate, copper sulphate, sodium chloride, sodium nitrate, sodium carbonate and ammonium chloride.

Identify the acids and bases from which the above salts may be obtained. How many families can you identify among these salts?