

**04. ACIDS, BASES AND SALTS**

1. Classify the following as acids and bases.

HCl                  HNO<sub>3</sub>                  NaOH                  KOH

2. Write any two uses of bleaching powder in your daily life.

3. Where can we observe water of crystallization in our daily life.

4. Write any two common uses of alkalis ?

5. Write any two examples of neutralization reactions in our daily life?

6. Draw a rough scale that shows the range of P<sup>H</sup> values of acids, bases, neutral substances.

7. Prabhakar has doubt about hydrolysis and Evaporation. Can you clarify ?

8. Classify the following salts as acids and bases and neutrals.

Na<sub>2</sub>CO<sub>3</sub>                  NaHCO<sub>3</sub>                  NaCl                  Na<sub>2</sub>SO<sub>4</sub>  
CH<sub>3</sub>COONa                  KNO<sub>3</sub>                  NH<sub>4</sub>Cl                  Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>

9. Pure water doesn't conduct electricity. But rain water conduct electricity. Why ?

10. Name some natural acidic/basic indicators ?

11. Mastan made an experiment with acids and bases. His observations are given in the table>

	Substance 'A'	Substance "B'
Phenolphthaleine indicator	Pink colour	No change in colour

(i) Which substance is a base ? Support your answer.

(ii) Which substance is an acid ? Support your answer.

12. Name any two acids and bases we use in our daily life?

13. Vasanth Kumar licked a chocolate. He observed that it tastes sour. He thought that it is an acidic substance and it will harmful to our body. What do you say ?

14. What is heat of neutralization ?

15. What is neutralization ? Where can we observe it in our daily life ?

16. What is the taste of bases ?

17. Name any two parts in our body that secretes acids ?

18. Can we say any substance whether it is an acid or a base or a salt on seeing ?

19. How can we identify that some salts present in water ? Explain an activity.

20. Observe the following P<sup>H</sup> scale ? X, Y, Z, P, R, and L are substances.

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
X				Y			P		Z				R	L

(i) Which substances does not show any reaction with blue litmus paper ?

(ii) Which substances give yellow colour with Methyl orange ?

(iii) Which does not react with either methyl orange or phenolphthaleine ?

(iv) Identify the strong acid and weak base.

21. Classify the following substances as per their  $P^H$  values.

Tamarind juice

Lemon juice

Soap water

Distilled water

Washing soda

Baking soda

Soda water

Tea

$P^H < 7$	$P^H = 7$	$P^H > 7$

22. Identify the acids and bases from which the following salts are obtained. Write the chemical equations.

(i)  $NaNO_3$

(ii)  $NH_4Cl$

23. Write any two uses of Plaster of Paris?

24. How can an acid rain effect the aquatic life?

25. Identify whether the following statements are true or false. If false, correct them.

(i) Common name of  $NaHCO_3$  is washing soda

(ii) Baking soda is used as antibiotic

(iii) If  $P^H=14$ , the substance is a strong base.

(iv) Water should not be added to acid.

