



**Octahedral classes, kharadi**  
**2nd floor, yashwant plaza, near bank of India,**

**Class 10 - Science**  
**Acid base salt**

**Maximum Marks: 35**

**Time Allowed: 1 hour**

**Section A**

1. How will you show that acetic acid is monobasic acid. 1
2. Name the sodium compound which is used for softening of hard water. 1
3. Which solution is more acidic, one with a pH of 4 or one with a pH of 1? 1
4. Write the chemical name and formula of baking soda. 1
5. Why does dry HCl gas not change the colour on the dry litmus paper? 1
6. Name the chemicals used in making soda acid fire extinguisher. 1
7. Name three chemicals in which common salt is used as the raw material. 1
8. Name a sodium compound which is used of softening hard water. 1
9. What is an acid ? 1
10. A student dipped pH paper in rain water.what is the pH of water? What would be the colour of the pH paper? 1
11. How is the concentration of hydronium ions ( $\text{H}_3\text{O}^+$ ) affected when a solution of an acid is diluted? 1
12. Give one use of bleaching powder. 1
13. Name the compound of calcium used for disinfecting water. Give its chemical formula. 1
14. Out of two salts, baking soda and washing soda, which salt does not contain water of crystallisation? 1
15. Give the name and formula of two: 1
  - (i) strong monobasic acids
  - (ii) two weak dibasic acids
16. Write the name and chemical formula of the products formed by heating gypsum at 373 K. 1
17. What is the chemical name of washing soda? Name three raw materials used in making washing soda by Solvay process? 1
18. What happens when a solution of an acid is mixed with a solution of a base in 1

a test tube?

19. Why should curd and sour substance not be kept in brass and copper vessels. 1
20. Fresh milk has a pH of 6. What will be the PH value if milk changes into a curd. Justify. 1
21. How can  $\text{CuSO}_4$  be used for detecting the presence of water ? 1
22. How does the flow of acid rain water into a river makes the survival of aquatic life in the river difficult? 1
23. Which is the main constituent of cement ? 1
24. A solution has pH of 7. Explain how would you 1
  - i. decrease its pH?
  - ii. increase its pH
25. Why alkalis like sodium hydroxide and potassium hydroxide should not be left exposed to air? 1
26. Choose strong/weak acid and strong/weak bases from the following compounds: 2
  - $\text{H}_2\text{CO}_3$ ,  $\text{HNO}_3$ ,  $\text{CH}_3\text{COOH}$ ,
  - $\text{NaOH}$ ,  $\text{NH}_4\text{OH}$ ,  $\text{KOH}$ ,  $\text{Ca}(\text{OH})_2$ ,  $\text{HCl}$
27. Name the substance obtained by the action of chlorine on dry slaked lime. Write chemical equation of the reaction. 2
28. With the help of a chemical equation, explain how a soda-acid fire extinguisher helps in putting out a fire. 2
29. What is meant by water of crystallisation? How would you show that copper sulphate crystals contain water of crystallisation? 2
30. What is the chemical formula of washing soda? What happens when this soda is exposed to air? 2