

1. Most of the oxides of metals when react with acid, form____
- A. A base. B. An acid C. A salt D. Either (1) or (2)
2. Lime water is
- (a) CaO (b) Ca(OH)₂ (c) CaCO₃ (d) CaCl₂
3. What happens when a solution of an acid is mixed with a solution of a base in a test tube?
- (1) Temperature of the solution decreases
(2) Temperature of the solution increases
(3) Temperature of the solution remains the same
(4) Salt formation takes place
- (a) 1 & 4 (b) 1 & 3 (c) 2 only (d) 2 & 4
4. When hydrogen chloride gas is prepared on a humid day, the gas is usually passed through the guard tube containing calcium chloride. The role of calcium chloride taken in the guard tube is to
- (a) Absorb the evolved gas (b) moisten the gas
(c) Absorb moisture from the gas (d) Absorb Cl⁻ ions from the evolved gas
5. What is formed when zinc reacts with sodium hydroxide?
- (a) Zinc hydroxide and sodium (b) Sodium zincate and hydrogen gas
(c) Sodium zinc-oxide and hydrogen gas (d) Sodium zincate and water
6. Tomato is a natural source of which acid?
- (a) Acetic acid (b) Citric acid (c) Tartaric acid (d) Oxalic acid
7. Which one of the given is incorrect?
- A. Acids turns blue litmus paper red
B. Aqueous solutions of acids conduct electricity
C. Acids react with certain metals to form hydrogen gas D. None of these

8. $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$ is
- (a) Washing soda (b) baking soda
(c) Bleaching powder (d) tartaric acid
9. Which one of the given is formed when sodium hydrogen carbonate reacts with hydrochloric acid?
- A. Sodium chloride B. Carbon dioxide C. Water D. All of these
10. A strong acid:
- A. Completely gets ionized in water B. Partially gets ionized in water
C. Do not get ionized in water D. All of these
11. Which of the given is used as an antacid?
- A. Sodium hydro carbonate B. Calcium hydroxide
C. Magnesium hydroxide D. All of these
12. Which of the following phenomena occurs when acid is mixed with water
- (A) Neutralization (B) Dilution (C) Ionization
- A. Only (B) is correct B. (A) & (B) are correct
C. (B) & (C) are correct D. Only (C) is correct
13. Due to excess passing of CO_2 through an aqueous solution of slaked lime, its milkiness fades because
- A. Calcium carbonate is produced B. Calcium bi-carbonate is produced
C. Calcium oxide is produced D. Due to the production of more heat
14. Alkalis are
- (a) Acids, which are soluble in water (b) Acids, which are insoluble in water
(c) Bases, which are insoluble in water (d) Bases, which are soluble in water

15. Which of the following statements is correct about an aqueous solution of an acid and of a base?

- (i) Higher the pH, stronger the acid (ii) Higher the pH, weaker the acid
(iii) Lower the pH, stronger the base (iv) Lower the pH, weaker the base
- (a) (i) and (iii) (b) (ii) and (iii) (c) (i) and (iv) (d) (ii) and (iv)

16. Nettle sting is a natural source of which acid?

- (a) Methanoic acid (b) Lactic acid (c) Citric acid (d) Tartaric acid

17. Tooth enamel is made up of

- (a) Calcium phosphate (b) Calcium carbonate (c) Calcium oxide (d) Potassium

18. What is the pH range of our body?

- (a) 7.0 – 7.8 (b) 7.2 – 8.0 (c) 7.0 – 8.4 (d) 7.2 – 8.4

19. Rain is called acid rain when its:

- (a) pH falls below 7 (b) pH falls below 6 (c) pH falls below 5.6 (d) pH is above 7

20. Sodium hydroxide is a

- (a) Weak base (b) weak acid (c) Strong base (d) Strong acid

21. An aqueous solution turns red litmus solution blue. Excess addition of which of the following solution would reverse the change?

- (a) Baking powder (b) Ammonium hydroxide solution
(c) Lime (d) Hydrochloric acid

22. When copper oxide and dilute hydrochloric acid react, color changes to

- (a) White (b) Bluish-green (c) Blue-black (d) Black

23. Sodium hydroxide is used

- (a) As an antacid (b) In manufacture of soap
(c) As a cleansing agent (d) In alkaline batteries

24. Sodium hydroxide turns phenolphthalein solution

- (a) Pink (b) Yellow (c) Colorless (d) Orange

25. Chemical formula of washing soda is

- (a) $\text{Na}_2\text{CO}_3 \cdot 7\text{H}_2\text{O}$ (b) $\text{Na}_2\text{CO}_3 \cdot 5\text{H}_2\text{O}$ (c) $\text{Na}_2\text{CO}_3 \cdot 2\text{H}_2\text{O}$ (d) $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$

26. When acids dissolve in water it releases ____.

- A. H^+ ion B. H^- ion C. H_3O^+ ion D. H_3O_2^+ ion

27. When sodium hydroxide reacts with Zinc it produces ____

- A. Sodium oxide and water B. Sodium zincates and water
C. Sodium zincates and hydrogen D. Sodium oxide and hydrogen

28. You are given 3 unknown solutions with pH value as 6,8 & 9.5 respectively. Which solution will contain maximum OH^- ion?

- A. Solution sample-1 B. Solution sample-2
C. Solution sample-3 D. Data are insufficient