UNITY TRAINING
ACADEMY FOR DDCET

LOGIN TO **WWW.UNITYEXAMS.COM**
AND START PREPARATION FOR DDCET

JOIN OUR **WHATSAPP GROUP**
AND ACCESS ALL MATERIAL

Practice Set 4

Acids, Bases & SALTS

Topics : 1. Understanding the Chemical Properties of Acids and Bases. 2. Reaction of Metallic Oxides with Acids. 3. Reactions of an Acid or a Base in Water Solutions. 4. Importance of pH in Everyday life. 5. Salts: Family of salts, pH of salts

DDCET final exam weightage of this topic : 4 Questions (8 Marks)

Total Practice sets of this topic :	8 (sets) x 25 (questions) = 200 Questions
Total Practice tests of this topic :	2 (exams) x 30 (questions) = 60 Questions
Offline / Online during lecture :	4 (lectures) X 50 (Questions) = 200 Question

DDCET 2025

Total 460 Questions to practice this topic

91739 04421

UNITY TRAINING ACADEMY FOR DDCET

Section 1 : 1. Understanding the Chemical Properties of Acids and Bases. 2. Reaction of Metallic Oxides with Acids. 3. Reactions of an Acid or a Base in Water Solutions. 4. Importance of pH in Everyday life. 5. Salts: Family of salts, pH of salts

1 Which of the following is a characteristic property of acids?

A) Bitter taste
B) Slippery feel
C) Sour taste
D) Non-reactive with metals

2 Which of the following is a property of bases?

A) Reacts with metals to produce hydrogen gas
B) Turns litmus paper red
C) Turns litmus paper blue
D) Releases carbon dioxide when reacted with an acid

3 Which of the following substances is considered a strong acid?

A) Hydrochloric acid (HCl)
B) Acetic acid (CH_3COOH)
C) Citric acid
D) Carbonic acid

4 Which of these bases is a weak base?
A) Sodium hydroxide (NaOH)
B) Potassium hydroxide (KOH)
C) Ammonia (NH_3)
D) Calcium hydroxide ($Ca(OH)_2$)

5 What does the pH scale measure?

A) Concentration of water
B) Concentration of hydrogen ions (H^+)
C) Amount of carbon dioxide
D) Volume of an acid solution

6 Which of the following is a neutral substance?

A) Hydrochloric acid
B) Water
C) Sodium hydroxide
D) Vinegar

7. What is the product when copper oxide (CuO) reacts with sulfuric acid (H_2SO_4)?

A) Copper sulfate ($CuSO_4$)
B) Water (H_2O)
C) Carbon dioxide (CO_2)
D) Hydrogen gas (H_2)

8. What type of compound is formed when a metallic oxide reacts with an acid?

A) A salt
B) A base
C) A non-metal oxide
D) A metal

9. Which of the following is the product of the reaction between calcium oxide (CaO) and hydrochloric acid (HCl)?

A) Calcium chloride ($CaCl_2$)
B) Water (H_2O)
C) Sodium chloride (NaCl)
D) Carbon dioxide (CO_2)

10 Which of the following metallic oxides will react with hydrochloric acid (HCl)?

A) Magnesium oxide (MgO)
B) Sodium oxide (Na_2O)
C) Iron(III) oxide (Fe_2O_3)
D) All of the above

UNITY TRAINING ACADEMY FOR DDCET

Section 1 : 1. Understanding the Chemical Properties of Acids and Bases. 2. Reaction of Metallic Oxides with Acids. 3. Reactions of an Acid or a Base in Water Solutions. 4. Importance of pH in Everyday life. 5. Salts: Family of salts, pH of salts

11. What is formed when aluminum oxide (Al_2O_3) reacts with sulfuric acid (H_2SO_4)?

A) Aluminum sulfate ($Al_2(SO_4)_3$)
B) Sodium sulfate (Na_2SO_4)
C) Hydrogen gas (H_2)
D) Magnesium sulfate ($MgSO_4$)

12. When sulfuric acid (H_2SO_4) is dissolved in water, it forms:

A) H_3O^+ and SO_4^{2-}
B) H^+ and HSO_4^-
C) H^+ and SO_4^{2-}
D) H_3O^+ and H_2O_2

13. Which of the following is a weak acid that dissociates partially in water?

A) HCl
B) H_2SO_4
C) Acetic acid (CH_3COOH)
D) HNO_3

14. Which of the following will happen when sodium hydroxide (NaOH) is dissolved in water?

A) It will form Na^+ and OH^- ions.
B) It will produce hydrogen gas.
C) It will form NaOH molecules.
D) It will decrease the pH.

15. What happens when ammonia (NH_3) dissolves in water?

A) It releases H^+ ions.
B) It produces OH^- ions.
C) It forms NH_4OH (ammonium hydroxide).
D) Both B and C.

16. Which of the following is the result when an acid is dissolved in water?

A) Increase in OH^- concentration.
B) Increase in H^+ or H_3O^+ concentration.
C) Decrease in pH.
D) Increase in pH.

17. Which of the following foods is acidic in nature and has a pH below 7?

A) Apples
B) Bananas
C) Milk
D) Honey

18. Why is pH important in swimming pool maintenance?

A) To prevent bacterial growth
B) To maintain the proper chlorine levels
C) To control the water temperature
D) To make the pool water clear

19. What pH value is considered neutral?

A) 7
B) 0
C) 14
D) 4

20. Which of the following is an example of an alkaline substance with a pH greater than 7?

A) Vinegar
B) Ammonia solution
C) Orange juice
D) Soft drink

Section 1 : 1. Understanding the Chemical Properties of Acids and Bases. 2. Reaction of Metallic Oxides with Acids. 3. Reactions of an Acid or a Base in Water Solutions. 4. Importance of pH in Everyday life. 5. Salts: Family of salts, pH of salts

21. What does the term "salts" refer to in chemistry?

A) Compounds formed from the reaction of an acid and a base
B) Organic compounds
C) Basic oxides
D) Non-reactive metals

22. Which of the following salts is acidic in nature?

A) Sodium chloride ($NaCl$)
B) Potassium nitrate (KNO_3)
C) Ammonium chloride (NH_4Cl)
D) Sodium carbonate (Na_2CO_3)

23. Which of the following salts is basic in nature?

A) Sodium chloride ($NaCl$)
B) Ammonium nitrate (NH_4NO_3)
C) Potassium hydroxide (KOH)
D) Sodium acetate ($NaCH_3COO$)

24. Which of the following is the family of salts formed from the neutralization of a strong acid and a strong base?

A) Acidic salts
B) Neutral salts
C) Basic salts
D) Complex salts

25. What is the pH of a salt formed from a strong acid and a weak base?

A) Neutral (pH 7)
B) Acidic (pH < 7)
C) Basic (pH > 7)
D) It depends on the salt.