

Acids Bases Salts Chemistry Questions with Solutions

Q1. State 3 properties of acids.

Answer: The 3 properties of acids are:

- (a) They are sour in taste
- (b) They react with metals to liberate hydrogen gas
- (c) They turn blue litmus red.

Q2. State 3 properties of bases.

Answer: The 3 properties of bases are:

- (a) They are bitter in taste
- (b) They turn red litmus blue
- (c) They react with acids to produce a salt and water

Q3. What is the value of pH of acid rain?

- (a) 7.0
- (b) Lesser than 5.6
- (c) Greater than 5.6
- (d) 6.0

Answer: (b)

Q4. What is the pH range for acids and alkalis?

Answer: The pH range for acids is 0-7 and the pH range for alkali is 7-14.

Q5. Which acid is used in lead acid batteries?

Answer: Sulphuric acid is used in lead acid batteries.

Q6. What is the chemical formula of potash alum?

Answer: Potash alum is a salt with the chemical formula $KAl(SO_4)_2$. It is used in purification of water.

Q7. Match the following items of column 1 with column 2 and choose the correct answer:

Column 1	Column 2
1) Acetic acid	a) Stomach
2) Formic acid	b) Curd
3) Lactic acid	c) Bee sting
4) Hydrochloric acid	d) Vinegar

Answer:

Column 1	Column 2
1) Acetic acid	d) Vinegar
2) Formic acid	c) Bee sting
3) Lactic acid	b) Curd
4) Hydrochloric acid	a) Stomach

Q8. Which acid is found in oranges and lemons?

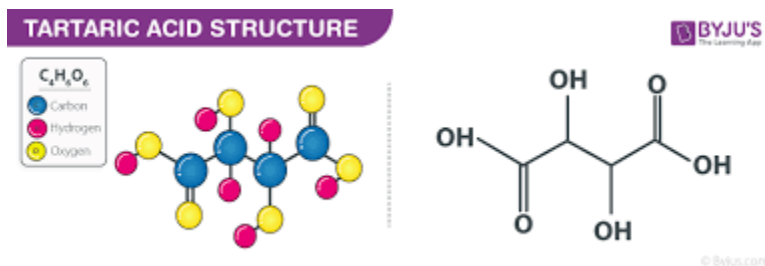
Answer: Citric acid is found in oranges and lemons.

Q9. Why is sulfuric acid a strong acid and acetic acid a weak acid?

Answer: Sulfuric acid is a strong acid because it completely dissociates into ions releasing H^+ in an aqueous solution whereas acetic acid is a weak acid because it does not dissociate completely in an aqueous solution.

Q10. What does baking powder contain?

Answer: Baking powder contains sodium bicarbonate and tartaric acid.



Q11. What is the effect of heat on sodium bicarbonate?

Answer: Sodium bicarbonate produces sodium carbonate, carbon dioxide and water when subjected to heat.

Q12. Which base neutralizes hyperacidity?

Answer: Baking soda (NaHCO_3) neutralizes hyperacidity.

Q13. What is the chemical name of gypsum?

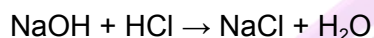
Answer: Calcium Sulfate Dihydrate is the chemical name of gypsum.

Q14. What is the formula for hydrated and anhydrous copper sulfate?

Answer: Hydrated copper sulfate: $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$
Anhydrous copper sulfate: CuSO_4 .

Q15. What is the reaction between NaOH and HCl called?

Answer: The reaction between NaOH and HCl is called a Neutralisation reaction.



Practice Questions on Acids Bases Salts

Q1. Which acid is present in Tamarind?

- (a) Oxalic acid
- (b) Acetic acid
- (c) Tartaric acid
- (d) Citric acid

Answer: (c)

Q2. How should acid and water be mixed together?

Answer: Acid should be added slowly to the water, as the reaction is highly exothermic. Adding water to the acid should be avoided.

Q3. Choose the strong acid from the following options

- (a) H_2SO_4
- (b) CH_3COOH
- (c) $\text{C}_2\text{H}_5\text{OH}$
- (d) H_2CO_3

Answer: (a)

Q4. Write the chemical equation for the reaction between Lithium and Sodium Hydroxide

Answer: $\text{Li} + \text{NaOH} \rightarrow \text{LiOH} + \text{Na}$

Q5. What is the formula for Plaster of Paris?

Answer: The formula for plaster of paris is $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$.

