Of course! Here is a 50-question multiple-choice quiz based on the "Acids, bases and salt" PDF you provided. Each question includes four options, the correct answer, and the source reference from the document.

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

A) Bitter in taste

B) Soapy to touch

C) Sour in taste

D) No specific taste

Correct Answer: C

Reference:

2. What color change does a blue litmus paper undergo when dipped in an acidic solution?

A) It turns green

B) It turns red

C) It remains blue

D) It turns yellow

Correct Answer: B

Reference:

3. Which of the following substances is a base?

A) Hydrochloric Acid (HCl)

B) Sulphuric Acid (H2 SO4 )

C) Sodium hydroxide (NaOH)

D) Acetic Acid (CH3 COOH)

Correct Answer: C

Reference:

4. What acid is naturally found in oranges and lemons?

A) Acetic Acid

B) Lactic Acid

C) Citric Acid

D) Tartaric Acid

Correct Answer: C

Reference:

5. Methanoic acid is found in which of the following?

A) Vinegar

B) Tomato

C) Sour milk (Curd)

D) Ant and Nettle sting

Correct Answer: D

Reference:

6. What is the color of phenolphthalein indicator in a basic solution?

A) Red

B) Yellow

C) Pink

D) Colorless

Correct Answer: C

Reference:

7. When a metal reacts with an acid, which gas is typically produced?

A) Oxygen

B) Carbon Dioxide

C) Hydrogen

D) Nitrogen

Correct Answer: C

Reference:

8. The "Pop test," which involves a burning candle making a 'pop' sound, is used to confirm the presence of which gas?

A) O2

B) CO2

C) H2

D) N2

Correct Answer: C

Reference:

9. What are the products when a metal carbonate reacts with an acid?

A) Salt, Water, and Hydrogen

B) Salt, Carbon Dioxide, and Hydrogen

C) Salt, Water, and Carbon Dioxide

D) Salt and Water only

Correct Answer: C

Reference:

10. The reaction between an acid and a base to form salt and water is known as:

A) Decomposition reaction

B) Combination reaction

C) Neutralisation reaction

D) Displacement reaction

Correct Answer: C

Reference:

11. Metallic oxides are generally \_\_\_\_\_\_ in nature.

A) Acidic

B) Basic

C) Neutral

D) Amphoteric

Correct Answer: B

Reference:

12. Non-metallic oxides are said to be \_\_\_\_\_\_ in nature.

A) Acidic

B) Basic

C) Neutral

D) Amphoteric

Correct Answer: A

Reference:

13. In the presence of water, acids produce which ions?

A) OH− ions

B) H+ ions

C) Na+ ions

D) Cl− ions

Correct Answer: B

Reference:

14. A base that is soluble in water is called a(n):

A) Acid

B) Salt

C) Alkali

D) Ore

Correct Answer: C

Reference:

15. What is the pH value of a neutral solution?

A) 0

B) 14

C) 7

D) 4

Correct Answer: C

Reference:

16. A solution with a pH of 10 would be considered:

A) Highly acidic

B) Acidic

C) Neutral

D) Alkaline

Correct Answer: D

Reference:

17. Which of the following is an example of a strong acid?

A) Acetic Acid (CH3 COOH)

B) Carbonic Acid (H2 CO3 )

C) Hydrochloric Acid (HCl)

D) Ammonium Hydroxide (NH4 OH)

Correct Answer: C

Reference:

18. The family of salts to which NaCl and Na2 SO4 belong is:

A) Chloride salts

B) Sodium salts

C) Sulphate salts

D) Neutral salts

Correct Answer: B

Reference:

19. What is used to neutralize excess acid in the stomach during indigestion?

A) Antacids

B) Disinfectants

C) Antibiotics

D) Analgesics

Correct Answer: A

Reference:

20. Rainwater is considered "Acid Rain" if its pH is:

A) Less than 7

B) More than 7

C) Exactly 7

D) Less than 5.6

Correct Answer: D

Reference:

21. Salts formed from a strong acid and a strong base will have a pH value of:

A) Less than 7

B) More than 7

C) Exactly 7

D) 0

Correct Answer: C

Reference:

22. Which of the following is the chemical formula for washing soda?

A) NaHCO3

B) Na2 CO3 .10H2 O

C) CaOCl2

D) CaSO4 .2H2 O

Correct Answer: B

Reference:

23. The process used for the preparation of Sodium Hydroxide (NaOH) is called:

A) Haber process

B) Contact process

C) Chlor-alkali process

D) Solvay process

Correct Answer: C

Reference:

24. What is the chemical formula for bleaching powder?

A) Ca(OH)2

B) CaOCl2

C) CaCl2

D) CaCO3

Correct Answer: B

Reference:

25. The common name for Sodium Hydrogen Carbonate (NaHCO3 ) is:

A) Washing Soda

B) Baking Soda

C) Bleaching Powder

D) Plaster of Paris

Correct Answer: B

Reference:

26. The fixed number of water molecules present in one formula unit of a salt is called:

A) Hydration

B) Water of crystallization

C) Dehydration

D) Saturation point

Correct Answer: B

Reference:

27. What is the chemical formula for Gypsum?

A) CaSO4 .21 H2 O

B) CaSO4 .2H2 O

C) CuSO4 .5H2 O

D) Na2 CO3 .10H2 O

Correct Answer: B

Reference:

28. Heating Gypsum at 373 K results in the formation of:

A) Washing Soda

B) Bleaching Powder

C) Plaster of Paris

D) Baking Soda

Correct Answer: C

Reference:

29. Which of the following is a use for Plaster of Paris?

A) As a disinfectant for water

B) In the manufacturing of glass

C) For plastering fractured bones

D) As an ingredient in antacids

Correct Answer: C

Reference:

30. What color does turmeric, a natural indicator, turn in a basic solution?

A) Yellow

B) Green

C) Red

D) Blue

Correct Answer: C

Reference:

31. Which of the following is an example of a weak base?

A) Sodium hydroxide (NaOH)

B) Potassium hydroxide (KOH)

C) Calcium hydroxide (Ca(OH)2 )

D) Ammonium hydroxide (NH4 OH)

Correct Answer: D

Reference:

32. What is the main component of a bee sting that causes pain and irritation?

A) Citric acid

B) Lactic acid

C) Methanoic acid

D) Acetic acid

Correct Answer: C

Reference:

33. In the chlor-alkali process, chlorine gas is produced at the:

A) Anode

B) Cathode

C) In the solution

D) It is not produced

Correct Answer: A

Reference:

34. A solution with a pH of 2 has a \_\_\_\_\_\_ H+ ion concentration than a solution with a pH of 5.

A) Lower

B) Higher

C) Equal

D) It cannot be determined

Correct Answer: B

Reference:

35. Which of the following acids is present in tomatoes?

A) Citric Acid

B) Acetic Acid

C) Oxalic Acid

D) Tartaric Acid

Correct Answer: C

Reference:

36. The chemical reaction 2NaOH+Zn→ ?

A) Na2 O+Zn(OH)2

B) Na2 ZnO2 +H2

C) 2NaH+ZnO2

D) No reaction occurs

Correct Answer: B

Reference:

37. The appearance of a blue-green color in the solution when copper oxide reacts with hydrochloric acid is due to the formation of:

A) Cu(OH)2

B) CuO

C) CuCl2

D) H2 O

Correct Answer: C

Reference:

38. What is the correct procedure for diluting an acid?

A) Add water to the acid

B) Add acid to the water

C) Mix them in any order

D) Heat the acid before adding water

Correct Answer: B

Reference:

39. Tooth decay can be prevented by using toothpaste which is generally:

A) Acidic

B) Basic

C) Neutral

D) Salty

Correct Answer: B

Reference:

40. Salts formed from a strong base and a weak acid will be:

A) Acidic (pH < 7)

B) Basic (pH > 7)

C) Neutral (pH = 7)

D) It depends on the salt

Correct Answer: B

Reference:

41. Which of the following is NOT a product of the chlor-alkali process?

A) Sodium hydroxide (NaOH)

B) Chlorine (Cl2 )

C) Hydrogen (H2 )

D) Carbon Dioxide (CO2 )

Correct Answer: D

Reference:

42. Which chemical is used in the manufacture of borax?

A) Baking Soda

B) Plaster of Paris

C) Washing Soda

D) Bleaching Powder

Correct Answer: C

Reference:

43. The formula for hydrated copper sulphate is:

A) CuSO4

B) CuSO4 .2H2 O

C) CuSO4 .5H2 O

D) CuSO4 .7H2 O

Correct Answer: C

Reference:

44. Olfactory indicators work by changing their:

A) Color

B) Taste

C) Odour

D) State

Correct Answer: C

Reference:

45. What happens when excess carbon dioxide (CO2 ) is passed through lime water (Ca(OH)2 )?

A) The solution remains milky

B) The milkiness disappears

C) The solution turns blue

D) The solution evaporates

Correct Answer: B

Reference:

46. Which acid is present in sour milk or curd?

A) Citric Acid

B) Lactic Acid

C) Acetic Acid

D) Oxalic Acid

Correct Answer: B

Reference:

47. A solution turns red litmus blue. Its pH is likely to be:

A) 1

B) 4

C) 5

D) 10

Correct Answer: D

Reference:

48. In the preparation of baking soda, the raw materials used are NaCl, H2 O, CO2 and \_\_\_\_\_\_?

A) N2

B) O2

C) NH3

D) H2

Correct Answer: C

Reference:

49. The pH of our body functions within a narrow range of:

A) 5.0 to 5.8

B) 6.0 to 6.8

C) 7.0 to 7.8

D) 8.0 to 8.8

Correct Answer: C

Reference:

50. The chemical formula for Sodium Zincate is:

A) NaZnO2

B) Na2 ZnO2

C) NaZn2 O2

D) Na2 ZnO

Correct Answer: B

Reference: