



CHEMISTRY

BOOKS - BHARATI BHAWAN

CHEMISTRY (HINGLISH)

PRACTICALS

Viva Voce

1. What is the chemical name of common salt ?



Watch Video Solution

2. What do you understand by solute and solvent ?



Watch Video Solution

3. What the size of solute particle in a true solution ?



Watch Video Solution

4. Name any three substances which form true solutions when dissolved in water.



Watch Video Solution

5. What is the difference between a true solution and a suspension ?



Watch Video Solution

6. Is a true solution homogeneous or heterogeneous ?



[Watch Video Solution](#)

7. Is a suspension homogeneous ?



[Watch Video Solution](#)

8. Are the particles of the solute present in true solution visible to the naked eye ?



[Watch Video Solution](#)

9. Can you separate the particles of a solute from a true solution by the process of filtration ?



[Watch Video Solution](#)

10. The particles of a substance suspended in a suspension can be separated by



[Watch Video Solution](#)

11. What is the size of a particle of a solute in a suspension ?



Watch Video Solution

12. Do the particles of a solute in a colloidal solution go into solution ?



Watch Video Solution

13. Compare a true solution a suspension and a colloidal solution with respect to their stability.



Watch Video Solution

14. What type of system do you expect to obtain when finely powdered calcium carbonate is thoroughly stirred with water in a test tube ?



Watch Video Solution

15. What is colloid ?



Watch Video Solution

16. What is Tyndall effect ?



Watch Video Solution

17. What is a mixture ?



Watch Video Solution

18. List the points of differences between homogeneous and heterogenous mixtures.



Watch Video Solution

19. Give examples of two mixtures.



Watch Video Solution

20. What is compound ?





[Watch Video Solution](#)

21. Why is it that iron in a mixture of iron filings and sulphur powder is attracted by a magnet, but iron present in ferrous sulphide (FeS) is not ?



[Watch Video Solution](#)

22. What do you think would happen when a mixture of iron filings and sulphur powder is heated ?



[Watch Video Solution](#)

23. Does sulphur present in ferrous sulphide dissolve in carbon disulphide ?



[Watch Video Solution](#)

24. How can you separate solid particles present in a heap of grains such as wheat ?



[Watch Video Solution](#)

25. What is the colour of a solution of copper sulphate in water ?



Watch Video Solution

26. Why does the light green colour of a freshly prepared aqueous solution of ferrous sulphate becomes reddish-brown after some time ?



Watch Video Solution

27. Give the formula of a crystal of copper sulphate.



Watch Video Solution

28. what is the valency of Cu in $CuSO_4$?



Watch Video Solution

29. A copper plate dipped in a solution of ferrous sulphate does not displace iron. Give reason for this.



[Watch Video Solution](#)

30. What happens when an iron nail is dropped in a solution of copper sulphate ?



[Watch Video Solution](#)

31. Give the chemical equation for the reaction the occurs between iron and copper sulphate solution.



[Watch Video Solution](#)

32. Is the reaction between Fe and $CuSO_0$



Watch Video Solution

33. How is the reaction



reaction ?



Watch Video Solution

34. What is the colour of the light produced when magnesium burns in air ?



Watch Video Solution

35. Name the product formed when magnesium burns in air ?



Watch Video Solution

36. What is the nature of magnesium oxide ?



[Watch Video Solution](#)

37. What would be the colour of a moistened red litmus paper when it is brought in contact with the ash produced after the burning of magnesium ribbon in air ?



[Watch Video Solution](#)

38. Magnesium burns in air to form magnesium oxide. Do you know any other

compound that is formed along with magnesium oxide ?



[Watch Video Solution](#)

39. What is the valency of magnesium in magnesium oxide ?



[Watch Video Solution](#)

40. Why is magnesium nitride formed when magnesium burns in air ?



Watch Video Solution

41. What is the valency of nitrogen in magnesium nitride ?



Watch Video Solution

42. The gas evolved when zinc reacts with dilute HCl is



Watch Video Solution

43. Why does zinc displace hydrogen from dilute H_2SO_4 ?



Watch Video Solution

44. Name the product formed when hydrogen is burnt in air.



Watch Video Solution

45. What change does zinc undergo when it is reacted with dilute H_2SO_4 ?



Watch Video Solution

46. Why are sodium and potassium not used to prepare hydrogen gas in the laboratory ?



Watch Video Solution

47. Why does copper not replace hydrogen from acids?



Watch Video Solution

48. Name two metals which do not liberate hydrogen from acids.



Watch Video Solution

49. What happens when dehydrated copper sulphate is allowed to cool in air ?



Watch Video Solution

50. What is ' blue vitriol ?



Watch Video Solution

51. Does copper show variable valency ?



Watch Video Solution

52. Name a compound of copper in which copper shows the valency of 1.



Watch Video Solution

53. MIXTURE



Watch Video Solution

54. What is sublimation?



[Watch Video Solution](#)

55. Name two compounds which sublime on heating.



[Watch Video Solution](#)

56. Suggest a method other than sublimation by which the components of a mixture of sugar and camphor can be separated.



[Watch Video Solution](#)

57. Define 'melting point' of a substance ?

What is the melting point of ice ?



Watch Video Solution

58. what is boiling point ?



Watch Video Solution

59. What happens when a liquid boils ?





[Watch Video Solution](#)

60. Why is a delivery tube attached to the flask while determining the boiling points of water ?



[Watch Video Solution](#)

61. What is the valency of Pb in $Pb(NO_3)_2$?



[Watch Video Solution](#)

62. What is the valency of nitrate ion in lead nitrate ?



Watch Video Solution

63. Why does lead chloride get precipitated during the chemical reaction lead nitrate and sodium chloride ?



Watch Video Solution

64. Mention a reaction , other than the one mentioned in the above experiment , which can be carried out to verify the law of conservation of mass.



Watch Video Solution

65. Why is the mouth of the conical flask corked ?



Watch Video Solution

66. What is the value of the ionic product of water at $25^{\circ}C$?



Watch Video Solution

67. Explain the term pH of a solution . What is pH of blood ?



Watch Video Solution

68. Can the pH value of a solution be zero ?





[Watch Video Solution](#)

69. What is the nature of the solution obtained when carbon dioxide gas is passed into water ?



[Watch Video Solution](#)

70. A solution does not change the colour of litmus paper . What would be the pH value of the solution ?



[Watch Video Solution](#)

71. The pH of an acid solution is



[Watch Video Solution](#)

72. What is the pH of an alkaline solution ?



[Watch Video Solution](#)

73. Why does lemon juice turn blue litmus solution red ?



Watch Video Solution

74. What is an indicator ?



Watch Video Solution

75. What is a universal indicator ?



Watch Video Solution

76. Name any three common indicators which are usually used in laborations.



Watch Video Solution

77. An acid solution is diluted with water. How will the pH of the solution change ?



Watch Video Solution

78. Blood has pH 7.4. what is the nature of blood ?



Watch Video Solution

79. Can the pH of a solution be determined accurately with the help of a universal indicator ?



Watch Video Solution

80. What is the product $[H^+] \times [OH^-]$ called ?



Watch Video Solution

81. When zinc metal is heated with caustic soda solution, the gas evolved is



Watch Video Solution

82. Explain with reaction why the lime water turns milky when carbon dioxide is passed through it.



Watch Video Solution

83. What happens when a piece of sodium metal is dropped in water taken in a beaker ?



Watch Video Solution

84. When a drop of dilute hydrochloric acid is added to a blue litmus paper, the colour of the litmus paper changes to



Watch Video Solution

85. Name the product formed when hydrogen is burnt in air.



Watch Video Solution

86. What is an alkail ?



Watch Video Solution

87. What is meant by alkali? Give two examples.



Watch Video Solution

88. What is the colour of anhydrous copper sulphate ?



Watch Video Solution

89. How would you test that a given gas is carbon dioxide ?



Watch Video Solution

90. What is an acid ?



Watch Video Solution

91. What happens when hydrogen chloride gas is dissolved in water ?



Watch Video Solution

92. An odourless and colourless gas burns in air with a 'pop' sound. What the gas may be ?



Watch Video Solution

93. An odourless and colourless gas extinguishes a burning splinter of wood and turns limewater milky. What is the gas ?



Watch Video Solution

94. What is the process called in which an acid reacts with a base to produce salt and water ?



Watch Video Solution

95. Name the products formed when an acid reacts with a base.



Watch Video Solution

96. Note the change in colour when a blue litmus paper is dipped in an aqueous solution of sodium hydroxide.



Watch Video Solution

97. Name two metals that react with both HCl and NaOH to produce H_2 gas.



Watch Video Solution

98. What will happen when a solution of sodium hydroxide is added to a solution of sodium carbonate?



Watch Video Solution

99. what is the nature of quicklime ?



Watch Video Solution

100. How does temperature change when quicklime is treated with water ?



Watch Video Solution

101. Which compound is produced when quicklime reacts with water ?



[Watch Video Solution](#)

102. what type of reaction takes place when calcium oxide is reacted with water ?



[Watch Video Solution](#)

103. Which substance becomes incandescent when heated in an oxyhydrogen flame ?



[Watch Video Solution](#)

104. Write the equation of the reaction that occurs when CaO is treated with HCl.



Watch Video Solution

105. When a when powdered solid is dropped in water, it produces a hissing sound. What the solid may be ?



Watch Video Solution

106. Green vitriol is



Watch Video Solution

107. Ferrous sulphate on heating gives:



Watch Video Solution

108. what is the valency or iron (Fe) in ferrous sulphate ?



Watch Video Solution

109. What is dichromater paper ?



Watch Video Solution

110. What will happen if a blue litmus paper is brought in contact with an aqueous solution of sulphur dioxide ?



Watch Video Solution

111. Why does the light green colour of a freshly prepared aqueous solution of ferrous sulphate becomes reddish-brown after some time ?



Watch Video Solution

112. A copper plate dipped in a solution of ferrous sulphate does not displace iron. Give reason for this.



Watch Video Solution

113. What happens when an iron nail is dropped in a solution of copper sulphate ?



Watch Video Solution

114. Give the chemical equation for the reaction that occurs between iron and copper sulphate solution.



Watch Video Solution

115. Is the reaction between Fe and $CuSO_4$ an oxidation - reduction (redox) reaction ?



Watch Video Solution

116. How is the reaction
 $Fe + CuSO_4 \rightarrow FeSO_4 + Cu$ a redox
reaction ?



Watch Video Solution

117. What are active metals? Give examples with equations.



Watch Video Solution

118. Metal A is more reactive than metal B. what happens when metal A is dispped in an aqueous solution of the salt of metal B ?



Watch Video Solution

119. Which one is more active , potassium or aluminium ?



Watch Video Solution

120. Name the least reactive metal.



Watch Video Solution

121. What are active metals? Give examples with equations.



[Watch Video Solution](#)

122. Does any reaction take place when a copper strip is dipped into a solution of zinc sulphate ?



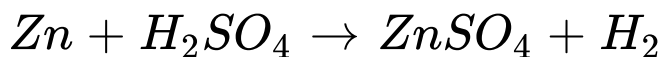
[Watch Video Solution](#)

123. Why does no reaction occur when Cu is dipped into a $ZnSO_4$ solution ?



[Watch Video Solution](#)

124. Name the type of the following reaction :



Watch Video Solution

125. A storekeeper was going to store a solution of copper sulphate in an aluminium container. But the class teacher stopped him. Why?



Watch Video Solution

126. Which of the following metals is most reactive ?

Fe, Zn, Mg, Hg



Watch Video Solution

127. In the reaction



role of Fe ?



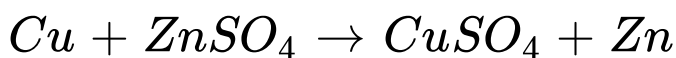
Watch Video Solution

128. Why does magnesium dipped into a $ZnSO_4$ solution displace Zn ?



[Watch Video Solution](#)

129. Does the following reaction occur ?



[Watch Video Solution](#)

130. Which one is more reactive , Cu or Al ?





[Watch Video Solution](#)

131. Name the functional group present in carboxylic acids.



[Watch Video Solution](#)

132. The IUPAC name of acetic acid is



[Watch Video Solution](#)

133. Name a solution in which acetic acid is an essential ingredient .



Watch Video Solution

134. Name the substance which should be added to acetic acid to test its acidic character.



Watch Video Solution

135. Name the product formed when acetic acid is treated with sodium hydroxide solution

.



Watch Video Solution

136. Give the IUPAC name of formic acid.



Watch Video Solution

137. Name the gas evolved when sodium metal is added to acetic acid.



Watch Video Solution

138. Which organic compound is formed when acetic acid is warmed with ethyl alcohol in the presence of concentrated H_2SO_4 ?



Watch Video Solution

139. Glacial acetic acid is



Watch Video Solution

140. What is the smell of acetic acid ?



Watch Video Solution

141. Name the gas evolved when acetic acid is treated with sodium bicarbonate.



Watch Video Solution

142. What type of mixture is produced when acetic acid is mixed with water ?



Watch Video Solution

143. How does a soap solution behave with red litmus paper ?



Watch Video Solution

144. Why common salt is added to precipitate out soap from the solution during its manufacturing ?



Watch Video Solution

145. Can Na_2CO_3 be used in place of NaOH in the preparation of the soap ?



Watch Video Solution

146. What is the chemical name of the soap prepared from castor oil ?



Watch Video Solution

147. HARD AND SOFT WATER



Watch Video Solution

148. What problem does arise when hard water is treated with soap ?



[Watch Video Solution](#)

149. How does a soap behave in the presence of Ca^{2+} and Mg^{2+} ions in solution ?



[Watch Video Solution](#)

150. Which water is considered to be suitable for washing purposes ?



[Watch Video Solution](#)

151. Why do soaps produce lather with soft water ?gt



Watch Video Solution

152. Why is it necessary to shake when producing the lather.



Watch Video Solution

153. Why is the height of the lather formed measured immediately after it is formed ?



Watch Video Solution

Exercise

1. A true solution is

A. Clear and transparent

B. turbid and translucent

C. milky and opaque

D. none of the above

Answer: A



Watch Video Solution

2. which of the following will give a true solution when dissolved in water ?

A. Fine sand

B. Oil

C. Chalk powder

D. sugar

Answer: D



Watch Video Solution

3. when a small quantity of common salt is added to water

A. a suspension is formed

B. a colloidal solution is formed

C. a true solution is formed

D. water becomes turbid

Answer: C



Watch Video Solution

4. which of the following will give a true solution when dissolved in water ?

A. Fine sand

B. Kerosene

C. Charcoal powder

D. Potash alum

Answer: D



Watch Video Solution

5. A mixture of chalk powder and water makes

a

A. colloidal solution

B. suspension

C. clear solution .

D. homogeneous solution

Answer: B



Watch Video Solution

6. When a true solution is filtered

A. the filtrate obtained is turbid

B. a solid residue is left on the filter paper

C. the solute gets separated from the solvent

D. the filtrate is as good as the true solution .

Answer: D



Watch Video Solution

7. A true solution of cane sugar is prepared by dissolving

- A. cane sugar in water
- B. cane sugar in dilute HCl
- C. cane sugar in aqua regia
- D. cane sugar in sea water

Answer: A



Watch Video Solution

8. which of the following is least soluble in water ?

A. Common salt

B. Glucose

C. Potassium chloride

D. Egg albumen

Answer: A



Watch Video Solution

9. What is the substance called when it is present in a solution in lesser amount than the amount of the solvent ?

A. solution

B. solvent

C. solute

D. Catalyst

Answer: D



Watch Video Solution

10. Which of the following is an example of a homogeneous mixture ?

A. Potash alum in water

B. Oil and water

C. Sea water

D. Air

Answer: A



Watch Video Solution

11. Milk provides an example of a

A. suspension

B. colloidal solution

C. true solution

D. homogeneous mixture

Answer: A



Watch Video Solution

12. The size of colloidal particle is between

A. 10^{-7} cm and 10^{-5} cm

B. 10^{-4} cm and 10^{-3} cm

C. 10^{-10} cm and 10^{-9} cm

D. none of the above

Answer: A



Watch Video Solution

13. Which of the following statements is correct regarding the particles of a solute that get dissolved in a solvent ?

A. They can be separated by filtration

B. They cannot be seen under a microscope

C. They settle down at the bottom of the

vessel when the solution is left

undisturbed

D. They scatter a beam of light

Answer: B



Watch Video Solution

14. A suspension is

A. Homogeneous.

B. heterogeneous

C. transparent

D. none of these

Answer: B



Watch Video Solution

15. The particles of a substance suspended in a suspension can be separated by

A. filtration

B. heating

C. cooling

D. hand-picking

Answer: B



Watch Video Solution

16. When sodium chloride is dissolved in water the solution obtained is

A. Homogeneous.

B. heterogeneous

C. non - uniform in composition

D. turbid

Answer: A



Watch Video Solution

17. Which of the following statements is correct regarding the colloid of starch in water ?

A. It can be separated by filtration

B. It is transparent and unstable

C. It shows Tyndall effect

D. Its particles are visible to the naked eye

Answer: A,C



Watch Video Solution

18. Which of the following pairs can produce a colloidal solution ?

A. Sodium chloride and water

B. Soil and water

C. Glucose and water

D. None of these

Answer: C



Watch Video Solution

19. What is especially observed when a beam of light is passed through a colloidal solution?

A. Peltier effect

B. luminescence

C. phosphorescence

D. Tyndall effect

Answer: D



Watch Video Solution

20. A mixture of sand and sugar is an example of a

A. compound

B. mixture

C. homogeneous solution

D. homogeneous mixture

Answer: D



Watch Video Solution

21. Which of the following is not a homogeneous mixture ?

A. Aqueous solution of sugar

B. Aqueous solution of common salt

C. Oil mixed with water

D. Limewater

Answer: C



Watch Video Solution

22. When a mixture of iron filings and sulphur is treated with dilute hydrochloric acid,

- A. ferric chloride is formed
- B. iron filings remains unreacted
- C. Sulphur dissolves
- D. hydrogen gas is produced

Answer: D



Watch Video Solution

23. Which of the following statements is valid for a mixture ?

A. It is always homogeneous .

B. The components do not have their individual properties.

C. The components retain their individual properties.

D. none of the above

Answer: D



Watch Video Solution

24. Which one of the following is an example of a heterogeneous mixture ?

A. Alum and water

B. Lime and water

C. Sodium chloride and water

D. Sand and sugar

Answer: D



Watch Video Solution

25. What is the mass ratio of iron and sulphur in which they combine to form iron sulphide ?

A. 2 : 3

B. 3 : 2

C. 5.6 : 3.2

D. 3 : 3

Answer: C



Watch Video Solution

26. Which of the following is a mixture ?

A. An aqueous solution of sugar

B. An aqueous solution of potassium
nitrate

C. Air

D. Sulphuric acid

Answer: A,B,C



Watch Video Solution

27. Which of the following is a mixture ?

A. Air

B. Hydrogen sulphide gas

C. Alcohol

D. Limestone

Answer: A



Watch Video Solution

28. Which of the following do you expect to be formed when iron filings are heated with sulphur powder ?

- A. A homogeneous mixture
- B. A heterogeneous mixture
- C. A compound of iron and sulphur
- D. A suspension of iron and sulphur

Answer: C



Watch Video Solution

29. What happens when a small amount of baking soda is taken in a test tube and some dilute hydrochloric acid is added to it ?

A. A rapid reaction occurs but no gas evolves

B. A blue - coloured solution is obtained

C. A brisk efferevescence occurs with the evolution of carbon dioxide gas

D. hydrogen gas is produced

Answer: C



Watch Video Solution

30. Which of the following compounds is formed when iron reacts with hydrochloric acid ?

A. Ferrous chloride

B. Ferric chloride

C. Iron hydride

D. Limestone

Answer: C



Watch Video Solution

31. A mixture of iron filings and sulphur is treated with a solvent in which sulphur dissolves. Name the solvent.

A. Water

B. Honey

C. Milk

D. Carbon disulphide

Answer: D



Watch Video Solution

32. Which of the following melts at a certain temperature ?

A. Gun powder

B. An mixture of iron and sulphur

C. Sodium chloride

D. A mixture of sand and sugar

Answer: C



Watch Video Solution

33. Which of the following processes is used to separate the components of a mixture of sulphur and charcoal ?

A. Evaporation

B. Distillation

C. Filtration

D. Dissolution in carbon disulphide

Answer: C



Watch Video Solution

34. Pick the correct sentence from the following

A. A mixture has a fixed melting point and boiling point.

B. A compound is formed by the combination of two or more elements in

a definite ratio by mass.

C. A mixture is always heterogenous .

D. A mixture is always homogeneous

Answer: B



Watch Video Solution

35. Which of the following statements is valid for a compound ?

A. It is heterogeneous throughout .

B. Its compounds are visible to the naked eye.

C. It melts at a definite temperature .

D. none of the above

Answer: C



Watch Video Solution

36. Which of the following statements is correct ?

A. In a mixture the components are present in a definite ratio by mass.

B. The boiling point of water is uncertain .

C. A compound is formed by the combination of two or more elements in a definite ratio by mass.

D. Gun powder melts at a particular temperature.

Answer: C



Watch Video Solution

37. A mixture is made of two substance .
Carbon disulphide is added to the mixture.
The substance that dissolves may be

A. Charcoal

B. Sand

C. Sulphur

D. sugar

Answer: C



Watch Video Solution

38. A small amount of soil mixed with pure water. The process you can apply to recover pure water from the mixture is

- A. decantation
- B. sedimentation
- C. Filtration
- D. none of these

Answer: C



Watch Video Solution

39. Which of the following does make a homogeneous mixture ?

- A. Fine sand in water
- B. Sugar in water
- C. Soil in water
- D. Powdered marble in water

Answer: B



Watch Video Solution

40. The colour of copper sulphate crystal is

A. red

B. yellow

C. green

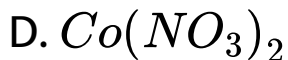
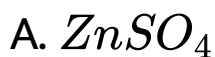
D. blue

Answer: D



Watch Video Solution

41. Which of the following represents the formula of blue vitriol ?



Answer: B



Watch Video Solution

42. When a copper plate is dipped into a solution of ferrous sulphate , the colour of the solution will change to

A. red

B. green

C. blue

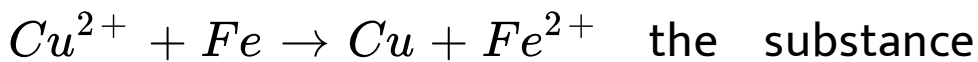
D. none of these

Answer: D



Watch Video Solution

43. In the reaction ,



that is oxidized is



Answer: B



Watch Video Solution

44. The valency of copper in $CuSO_4 \cdot 5H_2O$ is

A. 1

B. 3

C. 2

D. 0

Answer: C



Watch Video Solution

45. When magnesium is burnt in oxygen , the compound formed is

A. magnesium peroxide

B. magnesium oxide

C. magnesium nitrate

D. magnesium chloride

Answer: B



Watch Video Solution

46. When magnesium burn in air , another compound is formed along with magnesium oxide . Name the compound.

A. Magnesium peroxide.

B. Magnesium nitrite

C. Magnesium nitride

D. none of the above

Answer: C



Watch Video Solution

47. Burning of a magnesium ribbon in air takes place with

- A. a green flame
- B. a yellow flame
- C. a dazzling white light
- D. an orange flame

Answer: C



Watch Video Solution

48. The reaction between zinc and dilute sulphuric acid is a

- A. Combination reaction .
- B. neutralization reaction
- C. redox reaction
- D. decomposition reaction

Answer: C



Watch Video Solution

49. The reaction between Zn and dilute H_2SO_4 may be represented by the equation $Zn + 2H^+ \rightarrow Zn^{2+} + H_2$ in this reaction

- A. H^+ ion is oxidized
- B. H^+ ion is reduced
- C. H^+ ion is neutralized
- D. H^+ ion remains unchanged

Answer: B



Watch Video Solution

50. In the reaction ,



A. an oxidizing agent

B. a reducing agent

C. a catalyst agent

D. none of these

Answer: B



Watch Video Solution

51. The metal that does not displace hydrogen from dilute acids is

A. Fe

B. Na

C. Cu

D. Zn

Answer: C



Watch Video Solution

52. Barium sulphate dissolves in which of the following ?

A. sulphur dioxide

B. carbon dioxide

C. hydrogen

D. hydrogen sulphide

Answer: C



Watch Video Solution

53. Barium sulphate dissolves in which of the following ?

- A. Dilute hydrochloric acid
- B. Concentrated sulphuric acid
- C. Concentrated hydrochloric acid
- D. In none of these

Answer: D



Watch Video Solution

54. The colour of the precipitate obtained when an aqueous solution sodium chloride is treated with silver nitrate solution is

A. black

B. yellowish

C. pink

D. curdy white

Answer: D



Watch Video Solution

55. Which of the following remains undissolved when treated with water ?

A. Washing soda

B. Common salt

C. Sand

D. Sugar

Answer: C



Watch Video Solution

56. The insoluble product obtained when a solution of barium chloride is added to a solution of sodium sulphate is

A. barium sulphate

B. barium sulphite

C. sodium nitrate

D. sodium chloride

Answer: A



Watch Video Solution

57. Common salt can be separated from its aqueous solution by

A. filtration

B. decantation

C. evaporation

D. sublimation

Answer: C



Watch Video Solution

58. Which of the following pairs make pairs make a homogeneous mixture ?

A. sand and water

B. Soil and water

C. Oil and water

D. Glucose and water

Answer: D



Watch Video Solution

59. During the determination of the boiling point of water the thermometer is kept

A. dipped in water

B. a little above water

C. far above water

D. out of contact with the water vapour

Answer: B



Watch Video Solution

60. When water freezes into ice

A. Temperature increases.

B. temperature decreases

C. heat is absorbed

D. heat is released

Answer: D



Watch Video Solution

61. The temperature at which a solid changes into liquid is called

- A. melting point of the solid
- B. boiling point of the solid
- C. critical temperature of the solid
- D. transition temperature of the solid

Answer: A



Watch Video Solution

62. The temperature at which a liquid starts boiling is called

- A. its melting point
- B. its freezing point
- C. its boiling point
- D. none of these

Answer: C



Watch Video Solution

63. The melting point of ice under normal conditions is

A. 100°C

B. 0°C

C. 10°C

D. -10°C

Answer: B



Watch Video Solution

64. The boiling point of water at 1 atmospheric pressure is

A. 100°C

B. 0°C

C. 100.5°C

D. -5°C

Answer: A



Watch Video Solution

65. In which of the following states the internal energy of a substance is the lowest ?

A. Gaseous

B. Liquid

C. Solid

D. None of these

Answer: C



Watch Video Solution

66. During the melting of ice, temperature .

A. decreases

B. increases

C. remains fixed

D. first increases then decrease

Answer: C



Watch Video Solution

67. If water sample are taken from sea, rivers or lake, they will be found to contain hydrogen and oxygen in the approximate ratio of 1:8.

This indicates the law of :

- A. conservation of mass
- B. constant proportions
- C. multiple proportions
- D. gaseous volumes

Answer: B



Watch Video Solution

68. The scientist who heated tin in a retort to verify the law of conservation of mass in a chemical reaction

A. pristley

B. Lavoisier

C. Dalton

D. Thomson

Answer: B





Watch Video Solution

69. The element essentially present in all acids is

A. oxygen

B. hydrogen

C. sulphur

D. chlorine

Answer: B



Watch Video Solution

70. The gas evolved when zinc reacts with dilute HCl is

A. chlorine

B. oxygen

C. hydrogen

D. carbon dioxide

Answer: C



Watch Video Solution

71. When a drop of dilute hydrochloric acid is added to a blue litmus paper, the colour of the litmus paper changes to

A. red

B. yellow

C. green

D. orange

Answer: A



Watch Video Solution

72. The gas evolved when solid sodium carbonate is treated with dilute HCl is

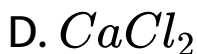
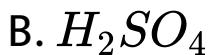
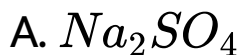
- A. Hydrogen .
- B. carbon dioxide
- C. chlorine
- D. none of these

Answer: B



Watch Video Solution

73. Which of the following compounds will react with hydrochloric acid to form salt and water ?

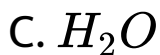


Answer: C



Watch Video Solution

74. Which of the following compounds in solution will make blue litmus paper red ?



Answer: B



Watch Video Solution

75. A solution of hydrochloric acid is dropped on baking soda. The gas evolved is

A. sulphur dioxide

B. hydrogen

C. carbon dioxide

D. oxygen

Answer: C



Watch Video Solution

76. The solution of a substance in water is slippery. It combines with an acid to produce a salt. The substance is

A. an acid

B. a salt

C. a base

D. none of these

Answer: C



Watch Video Solution

77. When a red litmus paper treated with sodium hydroxide solution , the colour of the litmus paper becomes

A. blue

B. brown

C. green

D. violet

Answer: A



Watch Video Solution

78. One of the metals which reacts with hot sodium hydroxide solution to produce hydrogen gas is

A. sodium

B. magnesium

C. zinc

D. gold

Answer: C



Watch Video Solution

79. A colourless liquid turns neither blue litmus red nor red litmus blue

A. Acidic .

B. neutral

C. basic

D. none of these

Answer: B



Watch Video Solution

80. The chemical substance present in limewater is

- A. calcium chloride
- B. calcium oxide
- C. calcium hydroxide
- D. calcium nitrate

Answer: C



Watch Video Solution

81. Acid rain is

A. Basic.

B. acidic

C. neutral

D. none of these

Answer: B



Watch Video Solution

82. Which of the following is determined with the help of universal indication ?

A. Acidity

B. Basicity

C. pH

D. Neutrality

Answer: C



Watch Video Solution

83. Which of the following is an alkali ?

A. Ferrous hydroxide

B. Copper hydroxide

C. Zinc hydroxide

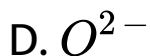
D. Sodium hydroxide

Answer: D



Watch Video Solution

84. Which of the following ions can turn red litmus solution blue ?



Answer: B



Watch Video Solution

85. What product is formed ions can turn red litmus solution blue ?

A. Hydrochloric acid

B. Carbonic acid

C. Carbolic acid

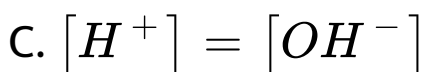
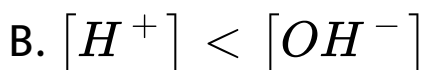
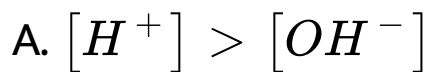
D. Malic acid

Answer: C



Watch Video Solution

86. Water is neutral of litmus paper. This is because in water ?



D. none of these

Answer: C



Watch Video Solution

87. The pH of a solution is 7.5 . The solution is

A. Acidic .

B. basic

C. neutral

D. none of these

Answer: B



Watch Video Solution

88. The pH of gastric juice is

A. slightly acidic

B. slightly basic

C. highly acidic

D. neutral

Answer: C



Watch Video Solution

89. The pH scale extends from

A. 0 to 10

B. 0 to 14

C. 10 to 14

D. 5 to 15

Answer: B



Watch Video Solution

90. Pure water is

A. Acidic .

B. basic

C. neutral

D. none of these

Answer: C



Watch Video Solution

91. Solutions A and B have pH 5 and 10 respectively . Which one of these solutions is alkaline ?

A. A

B. B

C. both

D. None of these

Answer: B



Watch Video Solution

92. Which of the following pH values corresponds to that of a basic solution ?

A. 2

B. 4

C. 6

D. 8

Answer: D



Watch Video Solution

93. The pH of milk lies between

A. 6.6 and 6.9

B. 2.6 and 4.4

C. 7.0 and 7.5

D. 7.3 and 7.4

Answer: A



Watch Video Solution

94. The pH values of three acid solutions A, B and C are 1, 0 and 2 respectively. The order of their acid strength is

A. $A < B < C$

B. $B > A > C$

C. $C < A < B$

D. $C < B < A$

Answer: C



Watch Video Solution

95. A solution makes red litmus blue. The pH of the solution is

A. less than 7

B. equal to 7

C. greater than 7

D. none of these

Answer: C



Watch Video Solution

96. A solution of sodium carbonate in water is

A. Acidic

B. basic

C. neutral

D. none of these

Answer: B



Watch Video Solution

97. The pH value of pure water can be increased by

A. adding an acid

B. removing some water

C. adding a base

D. none of the above

Answer: C



Watch Video Solution

98. When CO_2 gas is dissolved in water, the pH of the solution becomes.

A. more than 7

B. equal to 7

C. less than 7

D. none of these

Answer: C



Watch Video Solution

99. The pH of pure water is

A. 1.0

B. 3.5

C. 6.0

D. 7.0

Answer: D



Watch Video Solution

100. The pH of lemon juice is

A. 2.5

B. 3.5

C. 4.1

D. 6.5

Answer: A



Watch Video Solution

101. The approximate pH value of a solution can be measured by using

- A. litmus paper
- B. an universal indicator
- C. pH scale
- D. none of these

Answer: B



Watch Video Solution

102. The pH of an acid solution is

- A. less than 7
- B. equal to 7
- C. greater than 7
- D. none of these

Answer: A



Watch Video Solution

103. The pH of a solution increases when

- A. its H^+ ion concentration increases
- B. its H^+ ion concentration decreases
- C. its H^+ ion concentration remains constant
- D. none of these

Answer: B



Watch Video Solution

104. The pH of limewater is

- A. less than 7
- B. more than 7
- C. 0
- D. none of these

Answer: B



Watch Video Solution

105. The pH of an aqueous solution of sodium hydroxide is

- A. equal to 7
- B. greater than 7
- C. less than 7
- D. 0

Answer: B



Watch Video Solution

106. The hydrogen ion concentration of a liquid is equal to its hydroxide ion concentration . The liquid is

A. Acidic .

B. alkaline

C. rainwater

D. a neutral solution

Answer: D



Watch Video Solution

107. When rain is accompanied by a thunderstorm, the collected rain water will have a pH value

- A. lower than rainwater without lightning
- B. higher than rainwater without lightning
- C. unchanged
- D. none of the above

Answer: A



Watch Video Solution

108. A universal indicator is

- A. an individual indicator
- B. a mixture of indicators
- C. a solution of methyl orange in ethanol
- D. none of the above

Answer: B



Watch Video Solution

109. The usefulness of a universal indicator is that

A. it gives a better result

B. it does not change the colour of the solution

C. it covers a wide range of pH

D. its colour does not fade away

Answer: C



Watch Video Solution

110. The colour of the pH strip turned red when it was dipped into a sample. The sample could be:

A. dilute $NaHCO_3$ solution

B. tap water

C. dilute NaOH solution

D. dilute HCl

Answer: D



Watch Video Solution

111. A drop of colourless liquid was placed on blue litmus paper. The litmus paper turned red. The liquid could be:

- A. dilute HCl
- B. dilute NaOH solution
- C. distilled water
- D. $NaHCO_3$ solution

Answer: A



Watch Video Solution

112. Which of the following solutions would you use test the pH of a given sample?

A. Blue litmus solution

B. Red litmus solution

C. Universal indicator solution

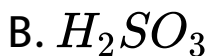
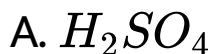
D. A mixture of blue and red litmus solutions

Answer: C



Watch Video Solution

113. solution of SO_2 gas in water is acidic due to the formation of



Answer: B



Watch Video Solution

114. The smell of sulphur dioxide is

A. like that of burning sulphur

B. like that of rotten eggs

C. pleasant

D. nauseating

Answer: A



Watch Video Solution

115. Crystals of ferrous sulphate when exposed to air become

A. red

B. brown

C. colourless

D. black

Answer: B



Watch Video Solution

116. In the reaction with acidified $K_2Cr_2O_7$ solution, SO_2 acts as

- A. an oxidizing agent
- B. a reducing agent
- C. a bleaching agent
- D. a catalytic agent

Answer: B



Watch Video Solution

117. A colourless gas produces irritation in lungs when inhaled and gives the smell of burning sulphur. The gas is

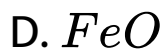
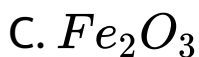
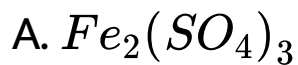


Answer: A



Watch Video Solution

118. Mohr's salt is



Answer: B



Watch Video Solution

119. The bleaching action of sulphur dioxide is due to

A. oxidation

B. evaporation

C. substitution

D. reduction

Answer: D



Watch Video Solution

120. Sulphur dioxide is not recognized by

A. odour test

B. litmus paper test

C. acidified $K_2Cr_2O_7$

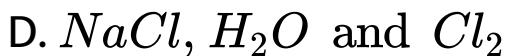
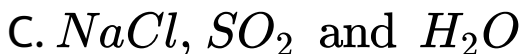
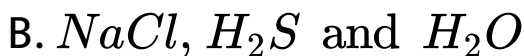
D. colour test

Answer: D



Watch Video Solution

121. The products formed when sodium sulphite is made to react with dilute hydrochloric acid are



Answer: C



Watch Video Solution

122. When SO_2 gas is passed through an acidified solution of $K_2Cr_2O_7$ the orange colour of the solution changes to

A. red

B. orange

C. green

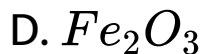
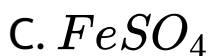
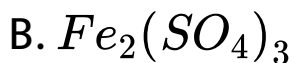
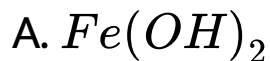
D. black

Answer: C



Watch Video Solution

123. Name the substance which is used to prepare blue-black ink



Answer: C



Watch Video Solution

124. Sulphur dioxide gas is dried by passing through concentrated H_2SO_4 because.

A. concentrated H_2SO_4 because

B. concentrated H_2SO_4 oxidizes SO_2

C. concentrated H_2SO_4 is a dibasic acid

D. none of the above

Answer: A



View Text Solution

125. Sulphur dioxide gas should not be inhaled directly because

A. it smells like a rotten egg

B. it excites laughter

C. it can damage lungs

D. it smells like rotten fish

Answer: C



Watch Video Solution

126. When a flower bleached by sulphur dioxide is brought in contact with air and light

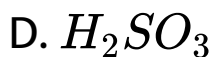
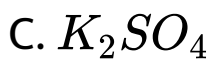
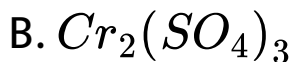
- A. the flower becomes red
- B. the flower becomes red
- C. the flower of the flower is restored
- D. none of the above happens

Answer: C



Watch Video Solution

127. When SO_2 gas is allowed to react with acidified potassium dichromate solution, the yellow colour of the solution changes to green. This is due to the formation of



Answer: B



Watch Video Solution

128. Metals that lie above hydrogen in the actively series are know as

- A. active metals
- B. normal metals
- C. catalysts
- D. oxidants

Answer: A



Watch Video Solution

129. In the reaction



A. an oxidizing agent

B. a reducing agent

C. a bleaching agent

D. a catalytic agent

Answer: B



Watch Video Solution

130. Iron displaces copper from copper sulphate solution because

A. copper is more reactive than iron

B. copper and iron equally reactive

C. iron is more reactive than copper

D. none of the above is true

Answer: C



Watch Video Solution

131. When a piece of iron is placed in a solution of copper sulphate, the blue color of the solution is changed to

A. yellow

B. brown

C. green

D. orange

Answer: C



Watch Video Solution

132. A reddish-brown metal which lies below hydrogen in the activity series of metals reacts with concentrated H_2SO_4 to produce sulphur dioxide gas. The metal is

A. Zinc

B. mercury

C. copper

D. gold

Answer: C



Watch Video Solution

133. Metallic zinc displaces hydrogen from dilute acids and water because

A. zinc is more electropositive than hydrogen

B. zinc and hydrogen are both electropositive

C. zinc is less electropositive than hydrogen

D. zinc and hydrogen are equally reactive

Answer: A



Watch Video Solution

134. The metal which can react both with acids and alkalis to produce hydrogen gas is

A. sodium

B. calcium

C. magnesium

D. zinc

Answer: D



Watch Video Solution

135. When zinc powder is heated with sodium hydroxide solution , the substances formed are

- A. zinc hydroxide and hydrogen
- B. zinc oxide and oxygen
- C. sodium zincate and hydrogen
- D. zinc hydroxide and water

Answer: C



Watch Video Solution

136. When a piece of zinc is added to blue copper sulphate solution, the solution becomes

A. orange

B. green

C. colourless

D. violet and then turns greens

Answer: C



Watch Video Solution

137. The order of reactivity of Zn, Fe, Cu and Al is

A. Zn \gt Cu \gt Al \gt Fe

B. Zn \gt Al \gt Cu \gt Fe

C. Al \gt Zn \gt Fe \gt Cu

D. Zn \gt Al \gt Fe \gt Cu

Answer: C



Watch Video Solution

138. A piece of granulated zinc was dropped into copper sulphate solution. After some time the colour of the solution changed from:

- A. light green to blue
- B. blue to colourless
- C. light green to colourless
- D. blue to yellow

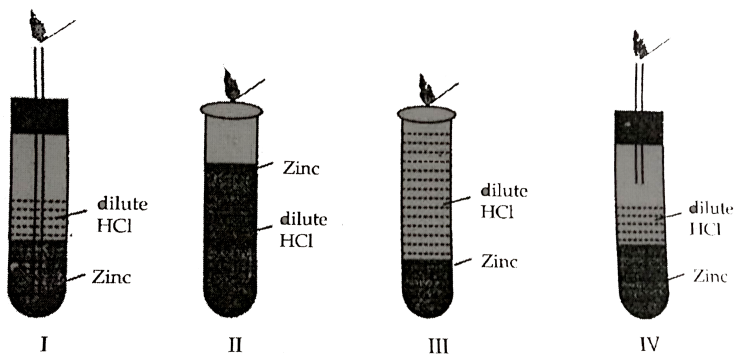
Answer: B



Watch Video Solution

139. Four set ups a given below were arranged to identify the gas evolved when dilute hydrochloric acid was added to zinc granules.

The most appropriate set up is:



A. 

B. 

C. 

D. 

Answer: D



Watch Video Solution

140. When an iron rod is dipped into a solution of copper sulphate, copper is displaced. This is because

- A. iron is more electropositive than copper
- B. iron is less electropositive than copper
- C. both iron and copper are metals
- D. copper is more reactive than iron

Answer: A



Watch Video Solution

141. The reaction



is an example of a

A. displacement reaction

B. double displacement reaction

C. dissociation reaction

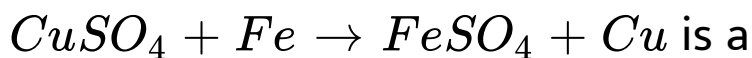
D. disproportionation reaction

Answer: B



Watch Video Solution

142. The reaction represented by the equation



- A. synthesis reaction
- B. decomposition reaction
- C. neutralization reaction
- D. displacement reaction

Answer: D



Watch Video Solution

143. The burning of magnesium in air is a

- A. synthesis reaction

B. decomposition reaction

C. displacement reaction

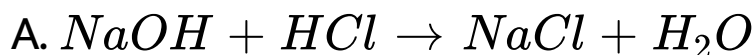
D. neutralization reaction

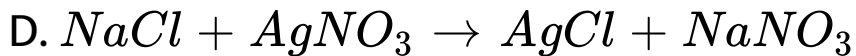
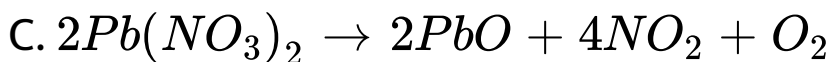
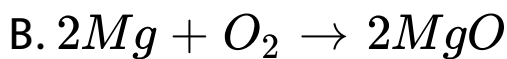
Answer: A



Watch Video Solution

144. Which of the following is a decomposition reaction ?





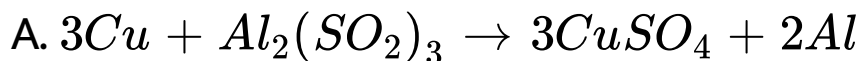
Answer: C

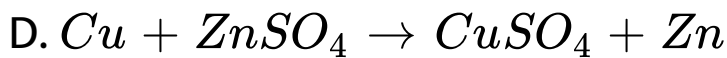
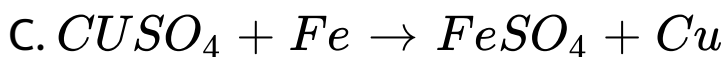
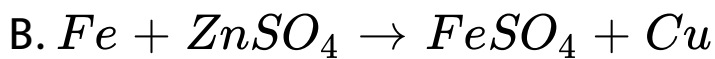


Watch Video Solution

145. Which of the following reaction is feasible

?



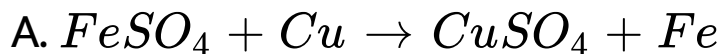


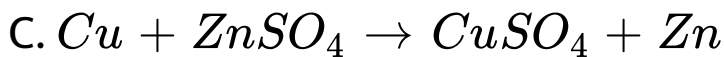
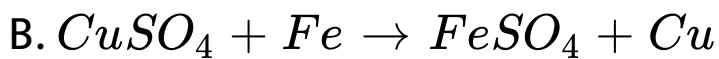
Answer: C



Watch Video Solution

146. Which of the following reactions is possible ?





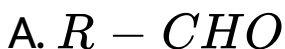
D. none of these

Answer: B



Watch Video Solution

147. The general formula of carboxylic acids is



C. $R - COOH$

D. $R - O - R$

Answer: C



Watch Video Solution

148. Acetic acid is essentially present in

A. wine

B. whisky

C. vinegar

D. lemon juice

Answer: C



Watch Video Solution

149. Acetic acid is

A. red

B. green

C. yellow

D. colourless

Answer: D



Watch Video Solution

150. The IUPAC name of acetic acid is

A. Methanoic acid.

B. ethanoic acid

C. propanone

D. formamide

Answer: B



[Watch Video Solution](#)

151. Acetic acid is

- A. a dibasic acid
- B. a tribasic acid
- C. a monobasic acid
- D. none of these

Answer: C



[Watch Video Solution](#)

152. When a piece of sodium metal is dipped into acetic acid, a colourless, odourless and inflammable gas is produced. The gas is

A. oxygen

B. carbon dioxide

C. methane

D. hydrogen

Answer: D



Watch Video Solution

153. Some vinegar is dropped on solid sodium carbonate. Brisk efferevescence takes place with the evolutions of colourless gas. The gas is

A. carbon monoxide

B. hydrogen

C. carbon dioxide

D. oxygen

Answer: C



Watch Video Solution

154. 5 mL of acetic acid is dissolved in 20mL of water. The volume of the solution becomes.

- A. 25 mL
- B. more than 25 mL
- C. less than 25 mL
- D. none of these

Answer: C



155. When a blue litmus paper is dropped into a dilute solution of acetic acid, the colour of the litmus becomes

A. green

B. yellow

C. orange

D. red

Answer: D



Watch Video Solution

156. The product formed when ethyl alcohol is heated with acetic acid in presence of concentrated sulphuric acid is

- A. acetadehyde
- B. ethyl acetate
- C. ethyl sulphate
- D. methyl sulphate

Answer: B



[Watch Video Solution](#)

157. Vinegar is a

- A. strong solution of acetic acid
- B. weak solution of acetic acid
- C. solution of ethanol in acetic acid
- D. mixture of ethanol and methanol

Answer: B



[Watch Video Solution](#)

158. 5mL of dilute acetic acid were added to 5mL of water and the mixture was shaken for one minute. It was observed that:

A. turbidity appeared in the test tube

B. the acid formed a separate layer at the bottom

C. the water formed a separate layer at the bottom

D. a clear solution was formed.

Answer: D



Watch Video Solution

159. The odour of ethanoic acid resembles with:

A. tomato juice

B. Kerosene

C. orange juice

D. vinegar

Answer: D



Watch Video Solution

160. Which of the following two experimental set-ups would be appropriate for the preparation and collection of SO_2 gas in the laboratory ?

A. 

B. 

C. 

D. 

Answer: A::D



View Text Solution