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CHEMISTRY

BOOKS - MODERN PUBLICATION

ACID, BASES AND SALTS

Example

1. Give two examples of strong acids and strong bases.

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2. Name three acids obtained from natural sources.

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3. A student dropped a few pieces of marble in dilute hydrochloric acid contained in a test tube. The evolved gas was passed through lime water. What change would be observed in lime water? Write the balanced chemical equations for both the change observed?

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4. During summer season, a milkman usually adds a very small amount of baking soda to fresh milk. Give one reasons.

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5. Why does distilled water not conduct electricity, whereas rain water does ?

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6. Dry hydrogen chloride gas does not turn blue litmus red whereas hydrochloric acid does. Give one reason.

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7. Name the gas evolved when dilute HCl reacts sodium hydrogen carbonate. How is it recognized?

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8. What effect does the concentration of H^+(aq) ions have on the nature of the solution?

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9. Fresh milk has a ph of 6. how do you think the ph will change as it turns into curds ? Explain your answer.

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10. Which one of these has a higher concentration of H^+ ions? 1M HCl or 1M CH_3COOH?

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11. Two solutions A and B have pH 3 and 5 respectively. Which of the two solutions has more hydrogen ion concentration and which one is more acidic? Give reason for your answer.

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12. State what does pH of a solution signify? Three solutions A,B and C have pH values of 6,2 and 10 respectively. Which of these solutions is highly acidic? Which solution will turn red litmus blue?

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13. Calculate the pH value of the followings :

0.001 M HCl

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14. Calculate the pH of the following solutions:

0.02 mol of hydrochloric acid in 2L of solution.

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15. Determine the pH of the solution when hydrogen ion concentration is

$1.0 \times 10^{-9} M$

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16. Determine the pH of the solution when hydrogen ion concentration is

$1.0 \times 10^{-5} M.$

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17. pH of a solution changes from 6 to 5. what changes do you expect in hydrogen ion concentration?

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18. The pH value of three acidic solutions having equal molar concentrations are

Vinegar=3.2, Coca cola=5.90, Beer=4.8

Arrange these acids in order of increasing acid strength.

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19. What is the pH of 0.1M NaOH solution?

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20. Write the formulae of the following salts:

Choose the salts which have

pH<7, pH>7, pH=7

Copper sulphate.

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21. Write the formulae of the following salts:

Choose the salts which have

pH<7, pH>7, pH=7

Potassium carbonate

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22. Write the formulae Choose the pH

pH<7, pH>7, pH=7

Sodium hydrogen carbonate

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23. Write the formulae and Choose the pH

pH<7, pH>7, pH=7

Sodium chloride

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24. Write the formulae and Choose the pH

pH<7, pH>7, pH=7

Sodium acetate

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25. Write the formulae and Choose the pH

pH<7, pH>7, pH=7

Aluminium chloride

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26. A white powder having an odour of chlorine is used to remove yellowness of which cloths in laundries. Name this powder, how is the prepared? Write the chemical reaction involved in its preparation?

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27. Write the chemical equation for the preparation of polyethene.

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28. Why is Plaster of Paris written as $CaSO_4.\frac{1}{2}H_2O$? How is its possible to have half a water molecule attached to $CaSO_4$?

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29. Why is sodium hydrogen carbonate an essential ingredient in antacids?

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30. When electricity is passed through an aqueous solution of sodium chloride, three products are obtained. Why is it's the process called chlor alkali?

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31. Baking soda is used in small amount in making bread and cake. It helps to make this soft and spongy and aqua solution of baking soda turns red litmus blue. It is also used in Soda acid fire extinguisher. Use this information to answer the following questions

How does baking soda help to make cakes and bread soft and spongy.

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32. Baking soda is used in small amount in making bread and cake. It helps to make this soft and spongy and aqua solution of baking soda

turns red litmus blue. It is also used in Soda acid fire extinguisher. Use this information to answer the following questions

HOw does it help in extinguishing fire?

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33. Baking soda is used in small amount in making bread and cake. It helps to make this soft and spongy and aqua solution of baking soda turns red litmus blue. It is also used in Soda acid fire extinguisher. Use this information to answer the following questions

Is the pH value of baking soda solution lesser than or greater than 7?

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34. You have been provided with three test tubes one of them contains distilled water and the other two contain an acidic solution and a basic soution respectively . If you are given only red litmus paper, how will you identify the contents of each test tube?

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35. Why should curd and sour substances not be kept in brass and copper vessels?

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36. Which gas is usualy libertad when an acid reacts with a metal? Illustrate with an example. How will you test for the presence of this gas?

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37. Metal compound A reacts with dilute hydrochloric acid to produce effervescence the gas evolved exinguishes a burning candle write a balanced chemical equation for the reaction if one the compunds formed is calcium chloride.

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38. Why do HCI,HNO_3 etc, show acidic characters in aqueous solutions while solutions of compunds like alcohol and glucose do not show acidic character?

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39. Why does an aqueous solution of an acid conduct electricity?

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40. Why does dry HCI gas not change the colour on the dry litmus paper?

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41. while diluting an acid, Why is it recommended that the acid should be added to water?

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42. How is the concentration of hydronium ions $\left(H_3O^+\right)$ affected when a solution of an acid is diluted ?

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43. How is the concentration of hydroxide ions(OH) affected when excess base is dissolved in a solution of sodium hydroxide?

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44. You have two solutions a and b the ph of solution a is 6 and ph of solution b is 8. which solution has more hydrogen ion concentration? Which of this is acidic and which one is basic?

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45. What effect does the concentration of H^+(aq) ions have on the nature of the solution?

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46. Do basic solution also haveH^+ (aq) ions? If yes, then why are these basic?

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47. Under what soil condition do you think farmer would treat the soil of his fields with quick lime (calcium oxide) or slaked lime (calcium hydroxide) or chalk (calcium carbonate)?

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48. What is the common name of the compound `CaOCl_2?

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49. Name the sodium compound which is used for softening hard water.

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50. Name the substance which on treatment with chlorine yields bleaching powder.

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51. What will happen if a solution of sodium hydrogencarbonate is heated? Give the equation of the reaction involved

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52. Write an equation to show the reaction between plaster of paris and water.

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53. A solution turns red litmus blue, its pH is likely to be

A. 1

B. 4

C. 5

D. 10

Answer:

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54. A solution reacts with crushed egg-shells to give a gas that turns lime water milky the solution contains:

A. NaCl

B. HCl

C. LiCl

D. KCl

Answer:

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55. 10 ml of a solution of NaOH is found to be completely neutralised by 8 ml of HCI. If we take 20 ml of the same solution of NaOH, the amount of HCl solution (the same solution as before) required to neutrallise it will be:

A. 4 mL

B. 8 mL

C. 12 mL

D. 16 mL

Answer:

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56. Which one of the following types of medicines is used for treating indegestion?

A. Antibiotic

B. Analgesic

C. Antacid

D. Antiseptic

Answer:

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57. Write word equations and then balanced equations for the reactions taking place when -dilute sulphuric acid reacts with zinc granules.

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58. Write word equation and balance equation for the reactions taking place when : dilute hydrochloric acid reacts with magnesium ribbon

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59. Write word equations and then balanced equations for the reactions taking place when -dilute sulphuric acid reacts with aluminium powder.

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60. Write word equations and then balanced equations for the reaction taking place, when

dilute hydrochloric acid reacts with iron filings.

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61. Compounds such as alchols and glucose also contain hydrogen but are not categorised as acids. Describe an activity to prove it,

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62. Why does distilled water not conduct electricity, whereas rain water does ?

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63. Why do acids not show acidic behaviour in the absence of water?

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64. Five solutions A, B, C, D and E when teasted with universal indicator showed ph as 4, 1, 11, 7, and 9 respectively, which solution is:

neutral?

stronly alkaline?

stongly acidic?

weakly acidic?

weakly alkaline?: arrange the ph in increasing order of hydrogen-ion concentration

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65. Equal lenghts of magnesium ribbons are taken is test tubes a and b hydrochloric acid (HCl) is added to test tube a, while acetic acid (CH_3COOH) is added to test tube b. amount and concentration taken for both the acids are same. In which test tube wil the fizzing occur more vigorously and why?

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66. Fresh milk has a ph of 6. how do you think the ph will change as it turns into curds ? Explain your answer.

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67. A milkman adds a very small amount of baking soda to fresh milk.

why does he shift the ph of the fresh milk from 6 to slightly alkaline?

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68. A milkman adds a very small amount of baking soda to fresh milk.

Why does this milk take a long time to set as curd?

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69. Plaster of paris should be stored in a moisture-proof container explain why?

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70. What is a neutralisation reaction? Give two examples

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71. Give two important uses of washing soda and baking soda.

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72. Match the acids given in column A with their correct source give in column B

Column (A)	Column (B)
(*a*) Lactic acid	(*i*) Tomato
(*b*) Acetic acid	(*ii*) Lemon
(*c*) Citric acid	(*iii*) Vinegar
(*d*) Oxalic acid	(*iv*) Curd

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73. Match the important chemicals given in column A with the chemical formulae given in column B.

Column (A)	Column (B)
(a) Plaster of Paris	(i) $Ca(OH)_2$
(b) Gypsum	(ii) $CaSO_4.1/2\,H_2O$
(c) Bleaching Powder	(iii) $CaSO_4.2H_2O$
(d) Slaked Lime	(iv) $CaOCl_2$

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74. What will be the action of the following substances on litmus paper ? Dry HCI gas, Moistened NH_3 gas, Lemon juice, Carbonated soft drink, Curd, Soap solution.

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75. Name the acid present in ant sting and give its chemical formula. Also give the common method to get relief from the discomfort caused by the ant, sting.

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76. What happens when nitric acid is added to egg shell?

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77. A student prepared solutions of (i)and acid and (ii) a base in two separate beakers. She forget to label the solutons and litmus paper is not available in the laboratory. Since both the solution are colourless, how will she distinguish between the two?

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78. How would you distinguish between baking powder and washing soda by heating?

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79. Salt 'A' commonly used in bakery products on heating gets converted into another salt 'B' which itself is used for removal of hardness of water

and a gas ‘C’ is evolved. The gas ‘C’ when passed through lime water, turns it milky. Identify A, B and C.

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80. In one of the industrial processes used for manufacture of sodium hydroxide, a gas ‘X’ is formed as a by-product. The gas ‘X’ reacts with lime water to give a compound ‘Y’ which is used as a bleaching agent in the chemical industry. Identify ‘X’ and ‘Y’ giving the chemical equations of the reactions involved.

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81. Fill in the missing data in the following table:

Name of the salt	Salt obtained from		
	Formula	Base	Acid
(i) Ammonium chloride	NH_4Cl	NH_4OH	—
(ii) Copper sulphate	—	—	H_2SO_4
(iii) Sodium chloride	NaCl	NaOH	—
(iv) Magnesium nitrate	$Mg(NO_3)_2$	—	HNO_3
(v) Potassium sulphate	K_2SO_4	—	—
(vi) Calcium nitrate	$Ca(NO_3)_2$	$Ca(OH)_2$	—

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82. What are strong acid and weak acids? In the following list of acids, separate strong acids from weak acids?

Hydrochloric acid, citric acid, acetic acid, nitric acid, formic acid, sulphuric acid.

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83. When zinc metal is treated with a dilute solution of a strong acid, a gas is evolved, which is utilised in the hydrogenation of oil. Name the gas

evolved. Write the chemical equation of the reaction involved and also write a test to detect the gas formed.

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84. In the following schematic diagram of the preparation of hydrogen gas as shown in figure 12, what would happen if following changes are made?

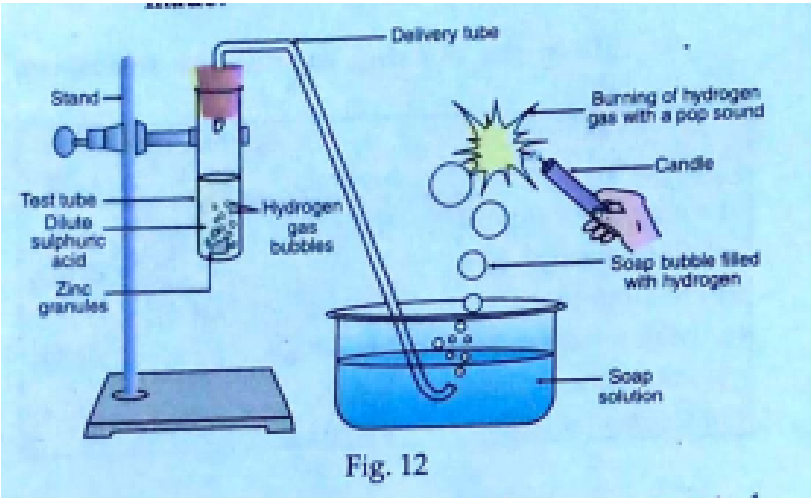

Fig. 12

In place of zinc granules, same amount of zinc dust is taken in the test tube.

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85. In the following schematic diagram of the preparation of hydrogen gas as shown in figure 12, what would happen if following changes are made?

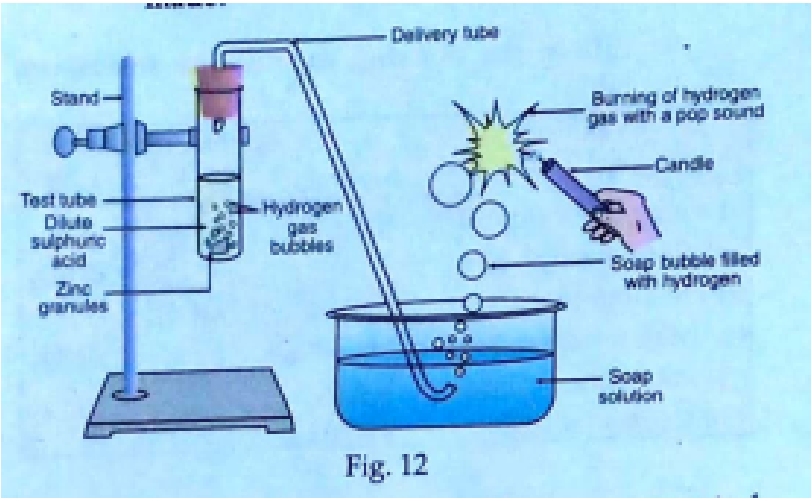

Fig. 12

Instead of dilute sulphuric acid, dilute hydrochloric acid is taken.

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86. In the following schematic diagram of the preparation of hydrogen gas as shown in figure 12, what would happen if following changes are made?

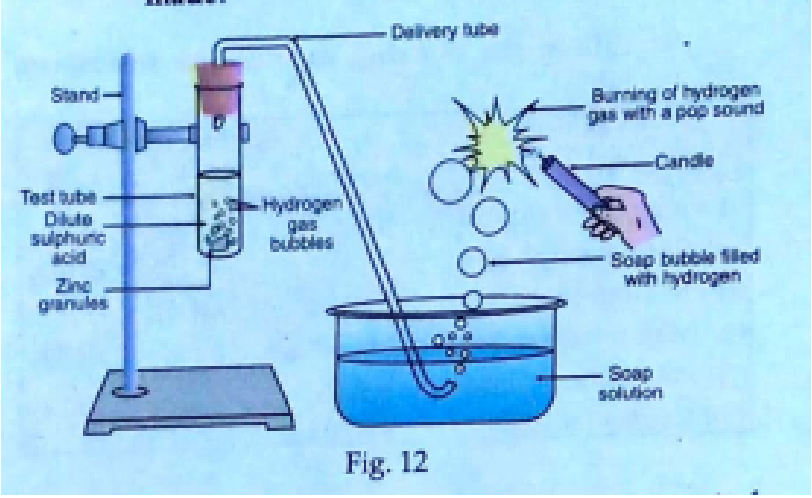

Fig. 12

In place of zinc, copper turnings are taken

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87. In the following schematic diagram of the preparation of hydrogen gas as shown in figure 12, what would happen if following changes are made?

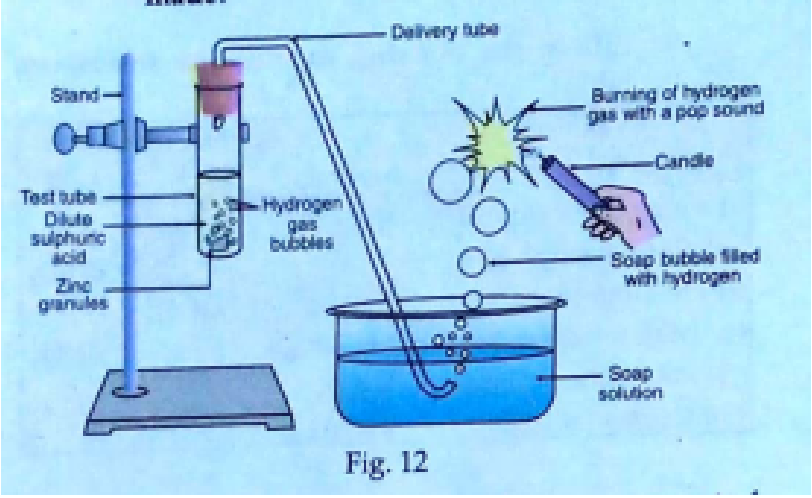

Fig. 12

Sodium hydroxide is taken in place of dilute sulphric acid and the tube is heated.

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88. What is the difference between baking soda and baking powder ?

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89. For making cake, baking powder is taken. If at home your mother uses baking soda instead of baking powder in cake,

how can baking soda be converted into baking powder?

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90. Baking soda is used for-.

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91. A metal carbonate X on reacting with an acid gives a gas which when passed through a solution gives the carbonate black. On the other hand, A gas G that is obtained at anode during electrolysis of brine is passed on dry Y, it gives compound Z, used for disinfecting water. Identify X, Y, G and Z.

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92. A dry pellet of a common base B, when kept in open absorbs moisture and turns sticky. The compound is also a by-product of chloralkali process. Identify B. What type of reaction occurs when B is treated with an acidic oxide ? Write a balanced chemical equation for one such solution.

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93. A sulphate salt of the group 2 element of the periodic table is a white, soft substance, which can be molded into different shapes by making its dough. When this compound is left in open for some time, it becomes a solid mass and cannot be used for molding purposes. Identify the sulphate salt and why does the show such a behaviour? give one reaciton involved.

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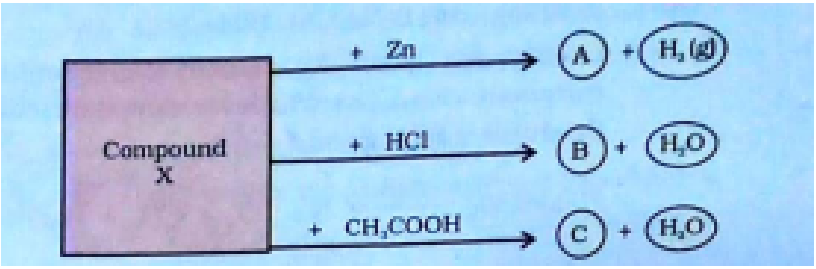
94. Identify the compound X on the basis of the reactions given below:

Also, write the name and chemical formulae of A,B and C.



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95. What is inducer in the lac operon? How does it ensure the "switching on" or of genes?

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96. What is baking powder? How does it make the cake soft and spongy?

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97. What is the meant by water by crystallisation in a substance? How would you show that blue copper sulphate crystals contain water of crystallisation?

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98. Write the chemical formula for washing soda. How is it be obtained from baking soda? Name one industrial use of washing soda other than washing clothes.

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99. For what purpose yeast is used?

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100. What is the formula of plaster of paris? How is it prepred? State the common and the chemical names of the compound formed when plaster of paris is mixed with water.

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101. A compound which is prepared from gypsum has the property of hardening when mixed with a proper quantity of water. Identify the compound. Write the chemical equation for its preparation. For what purpose is its used in hospitals?

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102. Why does tooth decay start when the pH of the mouth is lower than 5.5?

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103. What happens when solutions of sodium hydrogen carbonate is heated?

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104. Write the chemical equations for the reaction involved in the formation of sodium carbonate.

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105. Name the compound of calcium used for disinfecting drinking water. Give its chemical formula.

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106. Which bases are called alkalis? Give an example of alkali.

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107. Write the name and chemical formula of the products formed by heating gypsum at 373K?

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108. The pH of sample of vegetable soup was found to be 6.5. how is this soup likely to taste?

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109. Write the name and chemical formula of the main produrct formed by heating baking soda.

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110. A drop of litmus solution is added to each of the four solutions given below. State the colour all litmus solution observed in each: soap solution sodium carbonate solution, vinegar, lemon juice.

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111. An appratus was set up as shown in the figure. It was observed that when an aqueous solution of HCl was taken in the beaker and the circit was closed, the bulb in the circuit began to glow, but it did not glow when the experiment was repeated with glucose solution. what could be the reason?

Would the bulb glow if the same experiment is repeated with an aqueous solution of

NaOH? why?

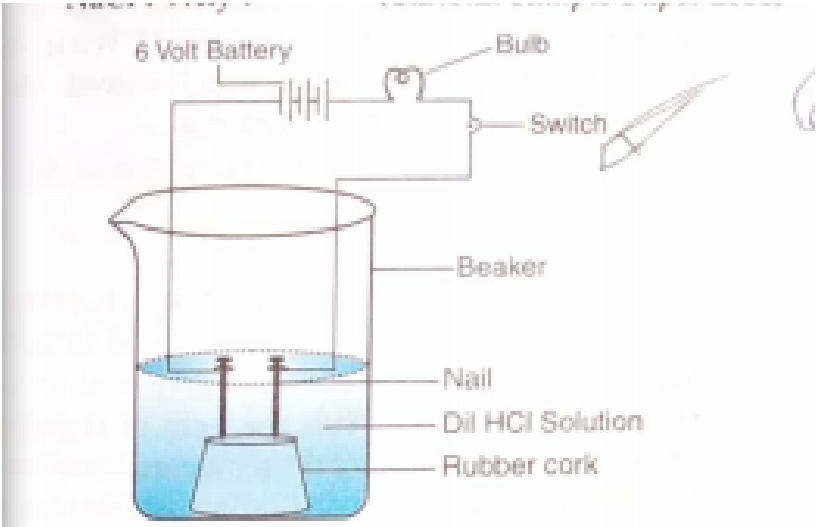

Fig. 13

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112. An appratus was set up as shown in the figure. It was observed that when an aqueous solution of HCl was taken in the beaker and the circit was closed, the bulb in the circuit began to glow, but it did not glow when the experiment was repeated with glucose solution. what could be the reason?

Would the bulb glow if the same experiment is repeated with an aqueous solution of

NaCl? why?

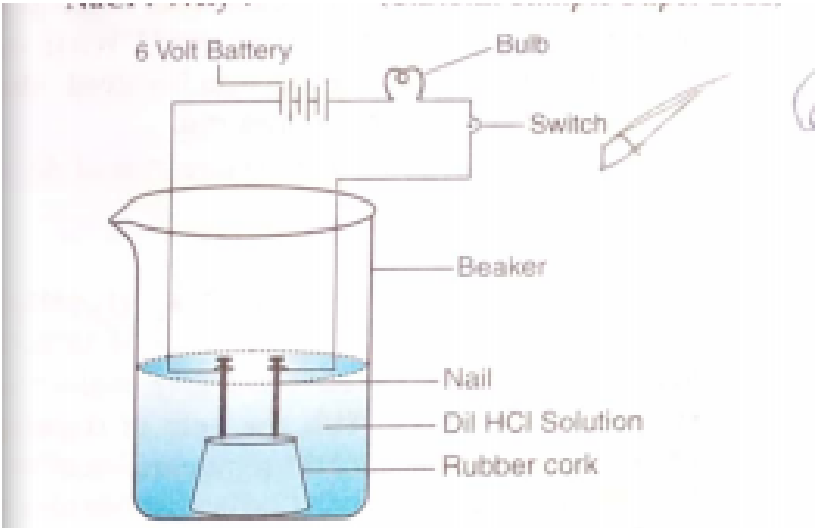

Fig. 13

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113. Give reasons for the following:

Tooth pastes are used to prevent tooth decay.

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114. Give reasons for the following:

Adding baking powder to cake makes it spongy and soft.

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115. Why does dry HCI gas not change the colour on the dry litmus paper?

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116. What is meant by water of crystallistaion?

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117. Blue colour of copper sulphate crystals is due to water of cystallistation. Describe an activity with diagram to show it.

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118. Name any two other salts along with their chemical formulae which contain water of crystallisation?

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119. A metal carbonate X, and a metal bicarbonate Y on reacting with an acid gives a gas which turns lime water milky.

Identify the gas, compound X and Y.

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120. A metal carbonate X, and a metal bicarbonate Y on reacting with an acid gives a gas which turns lime water milky.

Write the chemical equatins for the reaction of X and Y with the acid.

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121. A metal carbonate X, and a metal bicarbonate Y on reacting with an acid gives a gas which turns lime water milky.

Identify the gas, compound X and Y.

Watch Video Solution

122. A metal carbonate X, and a metal bicarbonate Y on reacting with an acid gives a gas which turns lime water milky.

What would happen if you pass excess of this gas through water? Write the chemical equation for it?

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123. When electricity is passed through a common salt solution, sodium hydroxide is produced along with the liberation of two gases 'X' and 'Y' The gas X burns with a pop sound whereas 'Y' is used for disinfecting drinking water.

Identify X and Y.

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124. When electricity is passed through an aqueous solution of sodium chloride, three products are obtained. Why is it's the process called chlor alkali?

Watch Video Solution

125. When electricity is passed through a common salt solution, sodium hydroxide is produced along with the liberation of two gases 'X' and 'Y' The gas X burns with a pop sound whereas 'Y' is used for disinfecting

drinking water.

State the reaction of Y with slaked lime.

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126. Write the name of two bases that are highly soluble in water?

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127. How is tooth decay related to pH? How can it be prevented?

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128. Why does bee sting cause pain and irritation? Rubbing of baking soda on the sting area gives relief. How?

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129. You have two solutions a and b the ph of solution a is 6 and ph of solution b is 8. which solution has more hydrogen ion concentration? Which of this is acidic and which one is basic?

Watch Video Solution

130. You have two solutions a and b the ph of solution a is 6 and ph of solution b is 8. which solution has more hydrogen ion concentration? Which of this is acidic and which one is basic?

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131. Why is HCl a stronger acid than acetic acid? Explain.

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132. Identify the compound of calcium which is yellowish white powder and is used for disinfecting drinking water. Write its chemical name and formula. How is it manufactured? Write the chemical equation for the reaction involved. Also list two other uses of the compound.

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133. Write other balanced chemical equation of chlor alkali process.

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134. Write the monomers and chemical equation for the preparation of Nylon-66.

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135. State the number of water molecules present in crystals of washing soda and plaster of paris. What are these water molecules called as?

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136. Match the important chemicals given in column A with the chemical formulae given in column B.

Column (A)	Column (B)
(a) Plaster of Paris	(i) $Ca(OH)_2$
(b) Gypsum	(ii) $CaSO_4.1/2\,H_2O$
(c) Bleaching Powder	(iii) $CaSO_4.2H_2O$
(d) Slaked Lime	(iv) $CaOCl_2$

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137. Write the chemical equation for the action of atmosphere CO_2 gas on bleaching powder when exposed in open.

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138. Which one of these has a higher concentration of H^+ ions? 1M HCl or 1M CH_3COOH?

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139. The crystals of compound A on keeping in air get converted into a white powder. Its solution in water gives blue colour with red litmus. It is used to remove permanent hardness of water.

Identify the substance. Write chemical formula of its crystalline form.

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140. The crystals of compound A on keeping in air get converted into a white powder. Its solution in water gives blue colour with red litmus. It is used to remove permanent hardness of water.

Write two main uses of the substance.

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141. The crystals of compound A on keeping in air get converted into a white powder. Its solution in water gives blue colour with red litmus. It is used to remove permanent hardness of water.

Write two main uses of the substance.

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142. A substance X used as a antacid reacts with hydrochloric acid to produce a gas Y which is used in fire exitinguishers.

Name the substance X and Y.

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143. A substance X used as a antacid reacts with hydrochloric acid to produce a gas Y which is used in fire exitinguishers.

Write a balanced equation of the reaction of X with hydrochloric acid?

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144. Explain why an aqueous solution of sodium sulphate is neutral while an aqueous solution of sodium carbonate is basic in nature.

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145. Why does dry HCI gas not change the colour on the dry litmus paper?

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146. State reasons for the following:

alcohol and glucose also contain hydrogen, but do not conduct electricity.

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147. How is the concentration of hydronium ions $\left(H_3O^+\right)$ affected when a solution of an acid is diluted ?

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148. Write balanced chemical equations for the following statements:

NaOH solution is heated with zinc granules.

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149. Write balanced chemical equations for the following statements:

Excess of carbon dioxide gas is passed through lime water.

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150. Write balanced chemical equations for the following statements:

Dilute sulphuric acid reacts with sodium carbonate.

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151. Write balanced chemical equations for the following statements:

Egg shells are dropped in hydrochloric acid.

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152. Write balanced chemical equations for the following statements:

Copper oxide reacts with dilute hydrochloric acid.

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153. Write a chemical equation to describe how bakin g soda is produced on a large scale. Also write the chemical name of the products obtained.

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154. Which of the following is not a antacid ?

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155. Name the two main consituents of baking powder.

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156. Which number in each of the following pairs is to the right of the other on the number line?

4,9

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157. Give three practical applications of neutralisation reaction.

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158. When soap is rubbed on a stain curry on a white cloth, why does it becomes reddish brown and turns yellow again when the cloth is washed

with plenty of water?

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159. What is universal indicator?

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160. Solution A gives pink colour when a drop of phenopthalein indicator is added to it. Solution B gives red colour when a drop of methyl orange is added to it. What type of solutions are A and B and which one of the solutions A and B will have a higher pH value?

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161. Aluminium chloride solution has pH more than 7. True or False

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162. The blue colour of crystals of a substance changed on heating in a closed test tube but the colour was regained after some time on cooling. Name the substance and write its chemical formula. Explain the phenomenon involved.

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163. Write name and chemical formula of two such compounds whose one formula unit is associated with 10 and 2 water molecules respectively.

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164. Write the chemical formula of hydrated copper sulphate and anhydrous copper sulphate. Give an activity to illustrate how these two are interconvertible

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165. Write chemical names and formulae of plaster of paris and gypsum.

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166. Acid and base react to form salt and water. This reaction is called:

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167. An acid and a base react to form a salt

What substance other than a salt is always formed when an acid reacts with a base?

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168. An acid and a base react to form a salt

Is the reaction exothermic or endothermic?

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169. A student tested some solutions with universal indicator paper and wrote down their pH values are:

1,5,7 and 13 but the forgot to write the names of the solutions. Can you help him by matchicng the pHs to the correct solution:

Solution tested	pH
Distilled water	
Sulphuric acid	
Sodium hydroxide	
Vinegar	

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170. A substance 'S' is used as a building material and is insoluble in water. When reacted with dil H_2SO_4 it produces a gas 'X' which turned lime water milky. When the liberated gas 'K' passed in excess, the milkiness disappeared. Write the name and chemical formula of S and its reactions will dil H2SO4, name the acid and base from which the substance 'S' is made.

Watch Video Solution

171. The pH of rainwater collected from two cition P and Q was formed to be 5 and 6 respectively.

Water of which city is more acidic?

Watch Video Solution

172. The pH of rainwater collected from two cities P and Q was formed to be 5 and 6 respectively.

If 100 mL of rainwater of city P is diluted to 1000 mL by adding distilled water, will its pH increases or decrease?

Watch Video Solution

173. The pH of rainwater collected from two cition P and Q was formed to be 5 and 6 respectively.

Water of which city is more acidic?

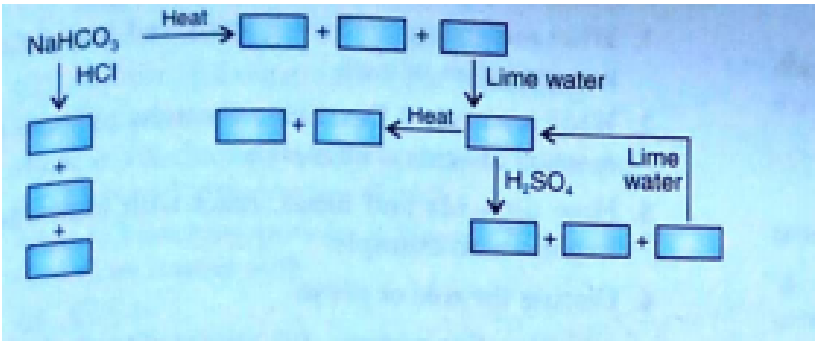
Watch Video Solution

174. The pH of rainwater collected from two cities P and Q was formed to be 5 and 6 respectively.

If 100 mL of rainwater of city P is diluted to 1000 mL by adding distilled water, will its pH increases or decrease?

Watch Video Solution

175. Complete the boxes by guessing the compounds:



Watch Video Solution

Exercise

1. Name the gas produced when

Sodium carbonate reacts with hydrochloric acid.

Watch Video Solution

2. Name the gas produced when

Magnesium carbonate reacts with hydrochloric acid. Write their chemical reactions.

Watch Video Solution

3. Name an indicator which is red in acid solution but turns blue in basic solution

Watch Video Solution

4. Name one strong and one weak acid.

Watch Video Solution

5. Why is cold milk helps a person in neutralising acidity in the stomach?

Watch Video Solution

6. Give the name and formula of acid present in vinegar?

Watch Video Solution

7. Name the acids present in

Orange?

Watch Video Solution

8. Name the acids present in

Lemon?

Watch Video Solution

Watch Video Solution

9. Name the acids present in

Tomatoes.

Watch Video Solution

10. The pH of fresh milk is 6. will its pH value increase or decrease when it changes into curd? Why?

Watch Video Solution

11. An acidic solution contains.....ions.

Watch Video Solution

12. A basic solution contains.....ions.

Watch Video Solution

13. Name two acid base indicators?

Watch Video Solution

14. The pH values of some substances are given below:(i)Apples: 5.0-6.5(ii)

Onion: 6.0-7.0(iii)Mint: 7.0-8.0

Which of these are most (i) acidic (ii)basic?

Watch Video Solution

15. What is the pH of an acid having $\left[H^{+}\right] = 10^{-3}M$

Watch Video Solution

16. Will the OH^{-} ions concentration increase or decrease if a 1M NaOH solution is diluted with water?

Watch Video Solution

17. Two solutions A and B have pH of 6 and 9 respectively. Which solution will be basic in nature?

Watch Video Solution

18. Four test tubes A,B,C and D contain solutions of pH 3.0, 5.0, 6.0 and 6.5. Arrange these in decreasing order of

$H_3O^+ ions$

Watch Video Solution

19. Four test tubes A,B,C and D contain solutions of pH 3.0, 5.0, 6.0 and 6.5. Arrange these in decreasing order of

acidic characters

Watch Video Solution

20. Which of the following have large pH values:

$1M\ CH_3COOH$ or $1M\ HCl$

Watch Video Solution

21. Which of the following have large pH values:

1M HCl or 1M NaOH

Watch Video Solution

22. Which of the following have large pH values:

1M HCl or 0.01 M HCl

Watch Video Solution

23. The following will have pH more than 7 or less than 7?

Saliva produced in the mouth by salivary glands.

Watch Video Solution

24. The following will have pH more than 7 or less than 7?

pH of Human blood.

Watch Video Solution

25. The following will have pH more than 7 or less than 7?

Bee sting

Watch Video Solution

26. The following will have pH more than 7 or less than 7?

Acid rain.

Watch Video Solution

27. The following will have pH more than 7 or less than 7?

Bee sting

Watch Video Solution

28. Complete the following table

Substance	Colour in			
	Blue litmus solution	Methyl orange	Phenol-phthalein	pH value <7 or >7
1. Acetic acid				
2. Magnesium hydroxide				
3. Lemon juice				
4. Hydrochloric acid				
5. Baking soda				

Watch Video Solution

29. Write the approximate colour of the universal indicator with the solutions having the given pH values.

pH	Colour	pH	Colour
1	.....	9	.....
5	.....	10	.....
7	.....	13	.....

Watch Video Solution

30. The following data about the pH of different solutions are given:

Substance	pH	Substance	pH
A. Vinegar	2.4–3.4	D. 0.1 M NH_3 (household ammonia)	11.6
B. Coffee	4.5–5.5	E. Milk of magnesia	10
C. Tomato juice	4.0–4.4	F. Battery acid	0.5

Which solution is most acidic?

Watch Video Solution

31. The following data about the pH of different solutions are given:

Substance	pH	Substance	pH
A. Vinegar	2.4–3.4	D. 0.1 M NH_3 (household ammonia)	11.6
B. Coffee	4.5–5.5	E. Milk of magnesia	10
C. Tomato juice	4.0–4.4	F. Battery acid	0.5

Which solution is most basic?

Watch Video Solution

32. The following data about the pH of different solutions are given:

Substance	pH	Substance	pH
A. Vinegar	2.4–3.4	D. 0.1 M NH_3 (household ammonia)	11.6
B. Coffee	4.5–5.5	E. Milk of magnesia	10
C. Tomato juice	4.0–4.4	F. Battery acid	0.5

Which substance in the above list is used as an antacid?

Watch Video Solution

33. The following data about the pH of different solutions are given:

Substance	pH	Substance	pH
A. Vinegar	2.4–3.4	D. 0.1 M NH_3 (household ammonia)	11.6
B. Coffee	4.5–5.5	E. Milk of magnesia	10
C. Tomato juice	4.0–4.4	F. Battery acid	0.5

Which solution can be used to treat wasp stings?

Watch Video Solution

34. The following data about the pH of different solutions are given:

Substance	pH	Substance	pH
A. Vinegar	2.4–3.4	D. 0.1 M NH_3 (household ammonia)	11.6
B. Coffee	4.5–5.5	E. Milk of magnesia	10
C. Tomato juice	4.0–4.4	F. Battery acid	0.5

Will pH soluton A increase or decrease on adding water to it?

Watch Video Solution

35. Select the substance from the following list which turn blue litmus solution red:

Tomato juice

Tooth paste

Milk of magnesia

Coffee

Wine

Household ammonia

Vinegar

Battery acid

Watch Video Solution

36. What do you call the property of losing water of crystallisation?

Watch Video Solution

37. Fill ups

The chemical formula of soda ash is..... .

Watch Video Solution

38. Common name of $Na_2\ CO_3$. 10H_2O

Watch Video Solution

39. Fill ups

Brine is a saturated solution of.....

Watch Video Solution

40. Write the chemical name and formula of baking soda?

Watch Video Solution

41. Write the formula of sodium carbonate and also state whether its water solution is acidic or base.

Watch Video Solution

42. Name the sodium compound which is used for softening hard water.

Watch Video Solution

43. Give one example each of

normal salt?

Watch Video Solution

44. Give one example each of

acidic salt.

Watch Video Solution

45. Give one example each of

basic salt.

Watch Video Solution

46. Name the acid and the base which from the salts:

Ammonium chloride.

Watch Video Solution

47. Name the acid and the base which from the salts:

Sodium chloride.

Watch Video Solution

48. State whether the following is acidic or basic :

Sodium formate?

Watch Video Solution

49. Name the most common antacid.

Watch Video Solution

50. State whether the following is acidic or basic:

Copper sulphate

Watch Video Solution

51. Which of the following salts has highest pH value

ammonium chloride, sodium nitrate, potassium carbonate

Watch Video Solution

52. A solution turns red litmus blue its ph is:

Watch Video Solution

53. Name the two main consituents of baking powder.

Watch Video Solution

54. What is efflorescence? Name one compound which show efflorescence?

Watch Video Solution

55. Give chemical formula of

Caustic soda?

Watch Video Solution

56. Write chemical formula for washing soda. When its crystals are open in air, then what happens?

Watch Video Solution

57. What is the chemical formula of Baking soda?

Watch Video Solution

58. What happens when solutions of sodium hydrogen carbonate is heated?

Watch Video Solution

59. Which compound is used as an antacid: Na_2CO_3 or $NaHCO_3$?

Watch Video Solution

60. Name the three main products of chlor alkali process?

Watch Video Solution

61. What is the chemical name of common salt?

Watch Video Solution

62. What is the chemical formula of Plaster of Paris? How it prepared?

Watch Video Solution

63. What is the common name of the compound `CaOCl_2?

Watch Video Solution

64. Name the compound of calcium used for disinfecting drinking water. Give its chemical formula.

Watch Video Solution

65. What is chemical formula of plaster of paris?

Watch Video Solution

66. Fill ups

The chemical formula of bleaching powder is.....

Watch Video Solution

67. Name the substance which on treatment with chlorine yields bleaching powder.

Watch Video Solution

68. Write an equation to show the reaction between plaster of paris and water.

Watch Video Solution

69. Complete the reactions:

$CaOCl_2 + H_2SO_4 \rightarrow$

Watch Video Solution

70. A white chemical compound becomes hard on mixing proper quantity of water. It is also used in surgery to maintain joints in a fixed position. Name the chemical compound and give its chemical formula.

Watch Video Solution

71. A piece of zinc metal is dropped in dilute solution of hydrochloric acid.

Answer the following:

Which gas is liberated when the metal reacts with the acid?

Watch Video Solution

72. A piece of zinc metal is dropped in dilute solution of hydrochloric acid.

Answer the following:

How will you test the presence of the gas evolved?

Watch Video Solution

73. A piece of zinc metal is dropped in dilute solution of hydrochloric acid.

Answer the following:

Is the gas liberated lighter or heavier than air?

Watch Video Solution

74. A piece of zinc metal is dropped in dilute solution of hydrochloric acid.

Answer the following:

Can we use dil. Sulphuric acid in place of dil. HCl?

Watch Video Solution

75. You are given three solutions A,B and C. the pH values of the solutions are 4.5, 7.0 and 10.0 respectively?

Which of these is acidic?

Watch Video Solution

76. You are given three solutions A,B and C. the pH values of the solutions are 4.5, 7.0 and 10.0 respectively?

Which of these is basic?

Watch Video Solution

77. You are given three solutions A,B and C. the pH values of the solutions are 4.5, 7.0 and 10.0 respectively?

Which of these has

maximum concentration of H_3O^+ ion.

Watch Video Solution

78. You are given three solutions A,B and C. the pH values of the solutions are 4.5, 7.0 and 10.0 respectively?

minimum concentration of H_3O^+ ion?

Watch Video Solution

79. Complete the table:

Substance	Chemical formula	Chemical name
(*i*) Bleaching power	.....	.....
(*ii*) Washing soda	.....	.....
(*iii*)	.....	Sodium hydroxide
(*iv*)	NaCl	.....
(*v*) Slaked lime	.....	.....
(*vi*) Plaster of Paris	.....	.....

Watch Video Solution

80. Give one example each of

basic salt.

Watch Video Solution

81. Give one example each of

acidic salt.

Watch Video Solution

82. Give one example each of

acidic salt.

Watch Video Solution

83. Give one example each of

normal salt?

Watch Video Solution

84. Complete the following table:

Atomic Number	Mass Number	Number of Neutrons	Number of Protons	Number of Electrons	Name of the Atomic Species
9	–	10	–	–	–
16	32	–	–	–	Sulphur
–	24	–	12	–	–
–	2	–	1	–	–
–	1	0	1	0	–

Watch Video Solution

85. Complete the following reactions:

$KOH + HNO_3 \rightarrow \ldots\ldots\ldots\ldots + \ldots\ldots\ldots\ldots$

Watch Video Solution

86. Complete the following reactions:

$Na_2CO_3 + 2HCl \rightarrow \ldots\ldots\ldots\ldots + \ldots\ldots\ldots + \ldots\ldots\ldots$

Watch Video Solution

87. Complete the following reactions:

$NaCl + CO_2 + NH_3 + H_2O \rightarrow \ldots\ldots\ldots\ldots + \ldots\ldots\ldots$

Watch Video Solution

88. Complete the following reactions:

$NaHCO_3 \rightarrow \ldots\ldots\ldots + \ldots\ldots\ldots + \ldots\ldots\ldots\ldots$

Watch Video Solution

89. Complete the following reactions:

$Ca(OH)_2 + Cl_2 \rightarrow \ldots\ldots\ldots\ldots + \ldots\ldots\ldots\ldots$

Watch Video Solution

90. Complete the following reactions:

$CaOCl_2 + H_2SO_4 \rightarrow \ldots\ldots\ldots\ldots + \ldots\ldots\ldots + \ldots\ldots\ldots\ldots\ldots$

Watch Video Solution

91. Complete the following reactions:

$CaSO_4.\frac{1}{2}H_2O + H_2O \rightarrow \ldots\ldots\ldots\ldots$

Watch Video Solution

92. Complete the following reactions:

$CaOCl_2 + CO_2 \rightarrow \ldots\ldots\ldots\ldots\ldots + \ldots\ldots\ldots\ldots$

Watch Video Solution

93. Complete the following reactions:

$NaOH + H_2SO_4 \rightarrow \ldots\ldots\ldots\ldots + \ldots\ldots\ldots\ldots$

Watch Video Solution

94. Will the pH of CH_3COOH be more or less than 7?

Watch Video Solution

95. Is the sting of ants acidic or basic?

Watch Video Solution

96. What is the pH of 0.0001 M HCl solution?

Watch Video Solution

97. Name the acids present in

Lemon?

Watch Video Solution

98. What is the formula of caustic soda?

Watch Video Solution

99. Give two examples of strong acids and strong bases.

Watch Video Solution

100. Which acid is called the king of chemicals?

Watch Video Solution

101. What is the effect of a basic solution on methyl orange?

Watch Video Solution

102. What is neutrilisation reaction?

Watch Video Solution

103. Two solution have pH of 3.5 and 4.5. Which is a stronger acid?

Watch Video Solution

104. Acids give colourless solution with phenol-phthalein?

Watch Video Solution

105. What is the colour of methyl orange in NaOH?

Watch Video Solution

106. Name two substances from daily life which contains acid.

Watch Video Solution

107. Name two substances from daily life which contains base.

Watch Video Solution

108. Can vanilla essence act as an indicator?

Watch Video Solution

109. What is the colour of phenolphthalein in basic solution?

Watch Video Solution

110. What happens when blue litmus paper is dipped in a cold drink?

Watch Video Solution

111. Name one antacid commonly used.

Watch Video Solution

112. Which acid is produced in our stomach?

Watch Video Solution

113. What is the colour hydrated copper sulphate?

Watch Video Solution

114. What is the colour of phenolphthalein in milk of magnesia?

Watch Video Solution

115. What is colour of gas evolved when sodium hydrogen carbonate reacts with dil. HCl?

Watch Video Solution

116. Is CO_2 gas supporter of combustion?

Watch Video Solution

117. Is $CuSO_4$ acidic, basic or neutral?

Watch Video Solution

118. Can dry HCl turn blue litmus red?

Watch Video Solution

119. Which has higher pH value: 1M NaOH(aq) or 1M HCl(aq)?

Watch Video Solution

120. Will glucose solution conduct electricity?

Watch Video Solution

121. How many water molecules are present in washing soda?

Watch Video Solution

122. What is the colour of pH paper in NaCl solution?

Watch Video Solution

123. Name the sodium compound present in baking powder.

Watch Video Solution

124. Which of the two: Plaster of Paris or Gypsum contains more water?

Watch Video Solution

125. What is the pH of NaCl solution?

Watch Video Solution

126. Is toothpaste acidic, basic or neutral?

Watch Video Solution

127. Name the substance which on treatment with chlorine yields bleaching powder.

Watch Video Solution

128. The pH of three acidic solutions are:

Beer=4.8, Lemon juice=2.3, Gastric juice=1.6

Arrange these in increasing order or acid strength?

Watch Video Solution

129. Fill ups

The chemical formula of bleaching powder is.....

Watch Video Solution

130. $Ca(OH)_2$ solution has pH greater than 7. Is it true or false?

Watch Video Solution

131. What are the formulae of gypsum and Plaster of Paris?

Watch Video Solution

132. What is a brine solution ?

Watch Video Solution

133. what is vinegar?

Watch Video Solution

134. What is the colour of universal indicator in very basic solutions?

Watch Video Solution

135. What is fusion mixture?

Watch Video Solution

136. The electrolysis of an aqueous solution of sodium chloride gives three products. Name these.

Watch Video Solution

137. What is the common name of water soluble bases?

Watch Video Solution

138. Name the two main consituents of baking powder.

Watch Video Solution

139. The basicity of CH_3COOH is 4.

Watch Video Solution

140. Vanilla essence of used as olfactory indicator.

Watch Video Solution

141. Ph of an acidic solution is:

Watch Video Solution

142. pH of a basic solution is always more than that of an acidic solution solution of same concentration.

Watch Video Solution

143. With dilution of an acidic solution its pH decreases

Watch Video Solution

144. Plaster of paris on heating gives gypsum.

Watch Video Solution

145. Anhydrous sodium carbonate is known as washing soda.

Watch Video Solution

146. T/F $NaHCO_3$ is called baking powder.

Watch Video Solution

147. T/F Aqueous solution of washing soda is alkaline in nature.

Watch Video Solution

148. The aqueous solution of copper sulphate salt is acidic. True or False

Watch Video Solution

149. Citric acid is present in vinegar. True or False

Watch Video Solution

150. Bleaching powder is obtained by passing Cl_2 gas over slaked lime. True or False

Watch Video Solution

151. T/F Washing soda is prepared by Solvay process.

Watch Video Solution

152. Caustic soda is KOH. True or False

Watch Video Solution

153. State whether the statement is true or false- The chemical name of baking soda is calcium carbonate.

Watch Video Solution

154. Blood is more acidic than urine (pH=5.6). True or False

Watch Video Solution

155. All acids ionise to give H_3O^+ ions. True or False

Watch Video Solution

156. A strong base give more number of OH^- ions than a weak base of same concentration. True or False

Watch Video Solution

157. Aluminium chloride solution has pH more than 7. True or False

Watch Video Solution

158. Sodium acetate is salt of strong acid and weak base. True or False

Watch Video Solution

159. Fill ups

Acids on ionisation give.....ions.

Watch Video Solution

160. What happens when blue litmus paper is dipped in a cold drink?

Watch Video Solution

161. Fill ups

pH of acids is .....than 7 while that of bases is .....than 7.

Watch Video Solution

162. Fill ups

A salt is made when the .....in an acid is replaced by a.....

Watch Video Solution

163. Name the two main consituents of baking powder.

Watch Video Solution

164. Fill ups

The chemical formula of washing soda is..... .

Watch Video Solution

165. Fill ups

The pH of $CuSO_4(aq)$ solution is..... .

Watch Video Solution

166. Fill ups

The chemical name of bleaching powder is..... .

Watch Video Solution

167. Fill ups

Plaster of Paris is obtained by heating..... .

Watch Video Solution

Watch Video Solution

168. Fill ups

Bee sting contains.....acid.

Watch Video Solution

169. Fill ups

Vinegar contains.....acid.

Watch Video Solution

170. Fill ups

Stomach has pH nearly equal to.....due its secretion of..... In gastric juices.

Watch Video Solution

171. On putting a few drops of a liquid on a pH strip, the colour of pH strip changed to green. The liquid is most probably.

A. lemon juice

B. dil HCl

C. NaOH solution

D. water

Answer:

Watch Video Solution

172. When a few drops of universal indicator were added to a dilute solution of HCl, it is observed that the colour of the solution changes from

A. colourless to blue

B. colourless to red

C. blue to colourless

D. colourless to green

Answer:

Watch Video Solution

173. Dilute hydrochloric acid is added to sodium carbonate. It is observed that

A. brisk efferescence occurs

B. the gas evolved turns lime water milky

C. the gas evolved extinguishes a burning matchstick

D. all of the above

Answer:

Watch Video Solution

174. A student was given three samples containing hydrochloric acid, sodium bicarbonate solution and water in test tubes I, II and III respectively. On dipping a pH paper in them he observed that the colour turned orange in I, blue in II, and green in III. If arranged in increasing order of their pH it would be

A. I,II,III

B. III,II,I

C. I,III,II

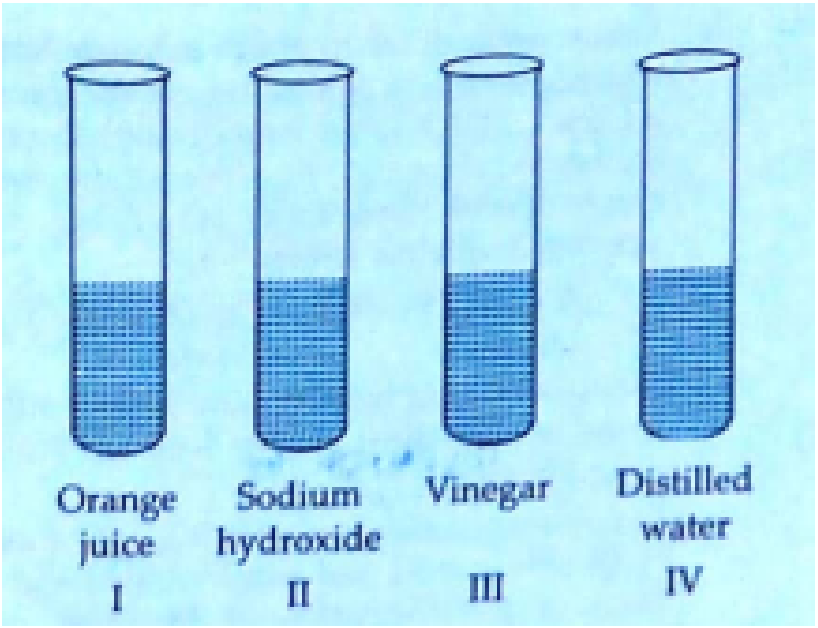
D. II,III,I

Answer:

Watch Video Solution

175. The following solutions were tested for their pH value of by using pH paper. The solutions which would show a value of a pH less than 7 would

be.



A. I,III

B. II,IV

C. I,IV

D. II,III

Answer:

Watch Video Solution

176. The colour of pH strip turned red when it was dipped in a sample, the sample could be

A. dilute NaOH solution

B. tap water

C. dilute HCl solution

D. dilute $NaHCO_3$ solution

Answer:

Watch Video Solution

177. pH of saliva is :

A. Heat the solution in the test tube and expsoe the pH paper to the vapour formed.

B. Pour solution from the test tube on pH paper

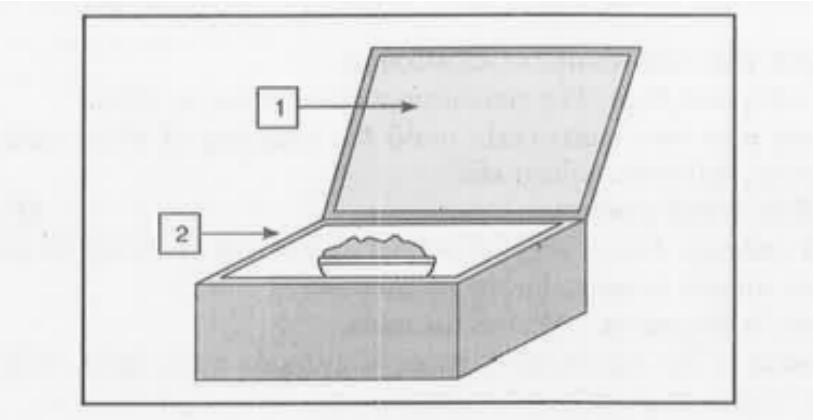
C. drop of pH paper into the solution

D. add a drop of solution on the pH using a dropper.

Answer:

Watch Video Solution

178. Label 1 and 2 in the given figure.



A. Slow reaction in (A) and rapid reaction in (B)

B. Rapid reaction in (A) but a slow reaction in (B)

C. Rapid reaction in both the test tubes

D. No reaction in any of the tubes.

Answer:

Watch Video Solution

179. On putting a few drops of an unknown liquid on the pH strip, the colour of the pH strip is changed to violet. The liquid taken is likely to be

A. dilute sodium hydroxide

B. dilute hydrochloric acid

C. dilute acetic acid

D. water

Answer:

Watch Video Solution

180. A student was given three samples containing hydrochloric acid, sodium bicarbonate solution and water in test tubes I, II and III

respectively. On dipping a pH paper in them he observed that the colour turned orange in I, blue in II, and green in III. If arranged in increasing order of their pH it would be

A. Gas is evolved vigrously in both

B. Gas is evolved vigorously in beaker I and not in the beaker II

C. Gas is evovled vigorusly in beaker if the not in the beaker I

D. No gas is evolved in either, of the two beakers.

Answer:

Watch Video Solution

181. Which of the following chemical properties are shown in dilute hydrochloric acid?

A. turns blue litmus red

B. turns red litmus blue.

C. reacts with zinc and a gas is evolved

D. reacts with solid sodium carbonate to give brisk effervescence

Answer:

Watch Video Solution

182. On adding methyl orange to a solution A it imparts a pink colourand on adding it to solution 'B' a yelow colour is obtained. A and B solution are respectively.

A. Neutral, acidic

B. Acidic, basic

C. Basic, acidic

D. Neutral,basic

Answer:

Watch Video Solution

183. Quick lime is

A. white powder

B. brown powder

C. blue powder

D. yellow powder

Answer:

Watch Video Solution

184. Identify the colour changes in pH paper when a drop of a sample, which has pH 14 in standard pH colour chart is placed on it.

A. Red

B. Yellow

C. Blue

D. Green

Answer:

Watch Video Solution

185. When a few drops of universal indicator were added to a dilute solution of HCl, it is observed that the colour of the solution changes from

A. colurless to red

B. colourless to blue

C. Blue to colourless

D. colourless to green

Answer:

Watch Video Solution

186. If HCl is added to distilled water, the pH of new solution will be:

A. greater than 7

B. less than 7

C. 7

D. 0

Answer:

Watch Video Solution

187. Two solutions A and B have pH of 6 and 9 respectively. Which solution will be basic in nature?

A. 0-3

B. $4 - 6$

C. $7 - 9$

D. $10 - 12$

Answer:

Watch Video Solution

188. The pH value of a sample of hydrochlroic acid is 2, pH value of this sample when diluted by adding water will be

A. less than 2 but more than 0

B. more than 2 but less than 7

C. more than 7

D. no change in pH

Answer:

Watch Video Solution

189. The products of reaction between zinc and sodium hydroxide solution are:

A. sodium carbonate and water

B. sodium zincate and hydrogen

C. zinc hydroxide and hydrogen

D. zinc carbonate and hydrogen

Answer:

Watch Video Solution

190. Find the mode of the following distribution :

Marks	0 – 10	10 – 20	20– 30	30 – 40	40 – 50	50 – 60	60 – 70
Frequency	5	15	20	20	32	14	14

A. indigo, light red,green,red

B. red,indigo,green,light red

C. indigo, red, green, yellow

D. green, red, yellow, indigo

Answer:

Watch Video Solution

191. Rachel, an engineering student, was asked to make a model shaped like a cyclinder. with two cones attached at its two ends by using a thin aluminium sheet. The diameter of the model is 3 cm and its length is 12 cm. If each cone has a height of 2 cm, find the volume of air contained in the model the Rachel made. (Assume the outer and inner dimensions of the model to be nearly the same.)

A. collection of apparatus

B. cleaning of all apparatus

C. making of pH paper wet and then dip it is sample

D. recording observation.

Answer:

Watch Video Solution

192. Complete the following reactions:

$NaHCO_3 \xrightarrow{Heat}$

Watch Video Solution

193. Complete the following reactions:

$CaClO_2 + CO_2 \rightarrow$

Watch Video Solution

194. You are given two solution A and B having pH 1 and 6. which of these has more hydrogen ion concentration?

Watch Video Solution

195. Which gas is produced when Al metals reacts wth NaOH solution?

Watch Video Solution

196. Which colour is produced when a drop of phenophthalein is added to HCl solution.

Watch Video Solution

197. Which colour is produced when a drop of phenophthalein is added to NaOH solution.

Watch Video Solution

198. Which has higher pH value: 1M NaOH(aq) or 1M HCl(aq)?

Watch Video Solution

199. What will be the colour of litmus in a solution of sodium carbonate?

Watch Video Solution

200. Which of the two $CuSO_4$ or CH_3COONa solutoin has pH>7?

Watch Video Solution

201. What will be the colour produced when a drop of methyl orange is added to each of the following solutions:

NaCl?

Watch Video Solution

202. What will be the colour produced when a drop of methyl orange is added to each of the following solutions:

NH_4Cl?

Watch Video Solution

203. What will be the colour produced when a drop of methyl orange is added to each of the following solutions:

Na_2CO_3?

Watch Video Solution

204. Which of the two HCl or CH_3COOH is a strong acid?

Watch Video Solution

205. What are olfactory indicators?

Watch Video Solution

206. Give two examples of strong acids and strong bases.

Watch Video Solution

207. Write a general equation for the reaction of a metal carbonate with an acid.

Watch Video Solution

208. The basicity of CH_3COOH is 4.

Watch Video Solution

209. Give two examples of weak acid?

Watch Video Solution

210. Is the sting of ants acidic or basic?

Watch Video Solution

211. What is the acidity of aluminium hydroxide?

Watch Video Solution

212. Will the pH of milk and magnesia less than or more than 7?

Watch Video Solution

213. Name the acid and base from which the salt $CuSO_4$ has been derived.

Watch Video Solution

214. What is the chemical formula of washing soda?

Watch Video Solution

215. Dissolution of an acid in water is.....thermic reaciton. Complete the reaction.

Watch Video Solution

216. What is ph value of neutral solution?

Watch Video Solution

217. Give two examples of strong acids and strong bases.

Watch Video Solution

218. Is CH_3COOH strong or weak acid? Will its 0.1 M solution have pH more or less than HCl of same concentration?

Watch Video Solution

219. 10mL of 0.1 M HCl solution reacts completely with 10 mL of 0.1 M NaOH solution. What will be the pH of the resulting solution?

Watch Video Solution

220. The pH of same concentration of gastric juice and lemon juice are 1.5 and 2.4 respectively. Which is more acidic?

Watch Video Solution

221. The pH of a solution is 6. what is the hydrogen ion concentration?

Watch Video Solution

222. Which of the following has larger pH value

1M HCl?

Watch Video Solution

223. Which of the following have large pH values:

1M HCl or 1M NaOH

Watch Video Solution

224. Which of the following have large pH values:

1M HCl or 1M NaOH

Watch Video Solution

225. Common name of $Na_2\ CO_3$. 10H_2O

Watch Video Solution

226. Fill in the blanks: The sodium compound used for softening hard water is _____

Watch Video Solution

Watch Video Solution

227. What happens when bleaching powder is exposed to air?

Watch Video Solution

228. What is gypsum? What happens when gypsum is heated to 373K?

Watch Video Solution

229. What are the important uses of bleaching powder?

Watch Video Solution

230. What is used for plastering fractured bones?

Watch Video Solution

231. Write an equation to show the reaction between plaster of paris and water.

Watch Video Solution

232. What is a neutralisation reaction? Give two examples

Watch Video Solution

233. How does the pH of an acid solutoin change when it is diluted?

Watch Video Solution

234. Will the solution of sodium carbonate acidic or basic?

Watch Video Solution

235. Ph of an acidic solution is:

Watch Video Solution

236. What do all acids and all bases have common? Explain.

Watch Video Solution

237. Why does an aqueous solution of an acid conduct electricity?

Watch Video Solution

238. Distilled water is a poor conductor of electricity.

Watch Video Solution

239. Why do acids not show acidic behaviour in the absence of water?

Watch Video Solution

240. Fresh milk has a ph of 6. how do you think the ph will change as it turns into curds ? Explain your answer.

Watch Video Solution

241. What is efflorescence? Name one compound which show efflorescence?

Watch Video Solution

242. State important properties of washing soda.

Watch Video Solution

243. What is the action of heat on

washing soda

Watch Video Solution

244. What is gypsum? What happens when gypsum is heated to 373K?

Watch Video Solution

245. What is the action of heat on

washing soda

Watch Video Solution

246. What is the action of heat on

Lime stone?

Watch Video Solution

247. Describe with chemical equaiton what happens when

Carbon dioxide gas reats with ammoniacal brine.

Watch Video Solution

248. What happens when bleaching powder is exposed to air?

Watch Video Solution

249. Explain giving reasons:

Tartaric acid is an important consituent of baking powder used in making cakes.

Watch Video Solution

250. Baking soda is used for-.

Watch Video Solution

251. What is the chemical formula of washing soda?

Watch Video Solution

Watch Video Solution

252. What will happen if a solution of sodium hydrogencarbonate is heated? Give the equation of the reaction involved

Watch Video Solution

253. How is bleaching powder prepared? Give its uses.

Watch Video Solution

254. Doctors use a paste of white substance in water to maintain a fractured bone fixed in its place. Identify this substance and write its chemical formula.

Watch Video Solution

255. Name the substance obtained by action of chlorine on dry slaked lime. Write chemical equation of the reaction.

Watch Video Solution

256. A white powder having an odour of chlorine is used to remove yellowness of which cloths in laundries. Name this powder, how is the prepared? Write the chemical reaction involved in its preparation?

Watch Video Solution

257. Describe an activity to show that acidic solution conducts electricity.

Watch Video Solution

258. Among HCl, H_2SO_4 and CH_3COOH, ...is weak acid.

Watch Video Solution

259. Potassium nitrate has pH value equl to..... .

Watch Video Solution

260. Fill ups

Plaster of Paris is obtained by heating..... .

Watch Video Solution

261. Washing soda has chemical formula..... .

Watch Video Solution

262. What are strong and weak acids

Watch Video Solution

263. Describe an activity to show that acidic solution conducts electricity.

Watch Video Solution

264. How do acids and bases, react with each other. Explain with example.

Watch Video Solution

265. Discuss the role of bile in digestion of food.

Watch Video Solution

266. Discuss the role of a pH in

causes of tooth decay.

Watch Video Solution

267. How are plants and animals kept in museums?

Watch Video Solution

268. Define pH, which of the following salts will have pH less or more than 7?

Zinc sulphate.

Watch Video Solution

269. Define pH, which of the following salts will have pH more than 7?

Sodium acetate.

Watch Video Solution

270. Define pH, which of the following salts will have pH more than 7?

Sodium acetate.

Watch Video Solution

271. Complete the following reactions:

Sodium hydroxide+.....acid $\rightarrow$ Sodium chloride+Water

Watch Video Solution

272. Complete the following reactions:

Copper oxide+Sulphuric acid $\rightarrow$ .....+.....

Watch Video Solution

273. Complete the following reactions:

Sodium carbonate+.....acid $\rightarrow$ sodium nitrate+.....+.....

Watch Video Solution

274. Complete the following reactions:

$Ca(OH)_2(aq)$+..... $\rightarrow CaCO_3$

Watch Video Solution

275. Complete the following reactions:

Alminium +Sulphuric acid $\rightarrow$ .....+.....

Watch Video Solution

276. Complete the following reactions:

Sodium hydrogen carbonate+..... $\rightarrow$ Sodium chloride+.....+..... .

Watch Video Solution

277. All alkalines are bases but all bases are not alkalies.

Watch Video Solution

278. Acetic acid is monobasic though it contains four H atoms.

Watch Video Solution

279. Why does distilled water not conduct electricity, whereas rain water does ?

Watch Video Solution

280. What happens when acids are added to the following? Give at least two equations :

Carbonates.

Watch Video Solution

281. What happens when acids are added to the following? Give at least two equations in each case:

Metal Hydrogen carbonates.

Watch Video Solution

282. What happens when acids are added to the following? Give at least two equations in each case:

Metal Hydrogen carbonates.

Watch Video Solution

283. How is bleaching powder prepared? Give its uses.

Watch Video Solution

284. What is the chemical formula of washing soda?

Watch Video Solution

285. Give two important uses of washing soda and baking soda.

Watch Video Solution

286. What happens when

Bleachin powder reacts with dilute sulphuric acid?

Watch Video Solution

287. What happens when

Slaked lime reacts with chlorine?

Watch Video Solution

288. What happens when solutions of sodium hydrogen carbonate is heated?

Watch Video Solution

289. What is gypsum? What happens when gypsum is heated to 373K?

Watch Video Solution

290. Give one use of each

X-rays

Watch Video Solution

291. What is bleaching powder? How its prepared? How does its react with

CO_2?

Watch Video Solution

292. What is bleaching powder? How its prepared? How does its react with

CO_2?

Watch Video Solution

293. Complete the following reactions:

$Ca(OH)_2 + Cl_2 \rightarrow \ldots\ldots\ldots\ldots\ldots + \ldots\ldots\ldots\ldots\ldots$

Watch Video Solution

294. Complete the following reaction : $CaO + H_2O \rightarrow$

Watch Video Solution

295. Complete the following reactions:

$NaHCO_3 \xrightarrow{Heat}$

Watch Video Solution

296. Acids turn.....litmus solution to.....

Watch Video Solution

297. Acid+Metal a salt+..... .

Watch Video Solution

298. pH of acid solution is always .....than 7.

Watch Video Solution

299. According to Arrhenius concept NaOH is base because it gives.....ions.

Watch Video Solution

300. pH of 10^{-5} M HCl solution is.....

Watch Video Solution

301. HCl behaves as an acid because it turns.....litmus solution..... .

Watch Video Solution

302. Which gas is produced when metal carbonates and metal hydrogen carbonates react with acid?

Watch Video Solution

303. What is the importance of pH in everyday life?

Watch Video Solution

304. Discuss method of preparation and two uses of each of the following:

Plaster of Paris.

Watch Video Solution

305. Discuss method of preparation and two uses of each of the following:

Washing soda.

Watch Video Solution

306. Discuss method of preparation and two uses of each of the following:

Bleacing powder.

Watch Video Solution

307. Explain the following with remedy

Feeling of acidity after over eating.

Watch Video Solution

308. Explain the following with remedy

too much acidic soil.

Watch Video Solution

309. Explain the following with remedy

self defence by animals and plants through chemical warfare.

Watch Video Solution

310. Explain the following with remedy

tooth decay due to eating sugary substances.

Watch Video Solution

311. What are acids and bases? Give two tests to distinguish these.

Watch Video Solution

312. How dihydrogen chemically reacts with metals ?

Watch Video Solution

313. What happens when H_2 and O_2 react with each other?

Watch Video Solution

314. Give three practical applications of neutralisation reaction.

Watch Video Solution

315. Discuss method of preparation and two uses of each of the following:

Bleacing powder.

Watch Video Solution

316. Give method of preparation and two uses of each of the following:

Baking soda.

Watch Video Solution

317. Give method of preparation and two uses of each of the following:

Baking soda.

Watch Video Solution

318. What happens when a solution of an acid is mixed with a solution of a base in a test tube?

A. The temperature of the solution increases

B. The temperature of the solution decreases

C. The temperature of the solution remains the same

D. Salt formation of takes place

Answer:

Watch Video Solution

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

A. Baking powder

B. Lime

C. Ammonium hydroxie solution

D. Hydrochlroic acid

Answer:

Watch Video Solution

320. Why calcium fluoride is added durig the electrolysis of calcium chloride ? Explain.

A. absorb the evovled gas

B. moisten the gas

C. abosorb moisture from the gas

D. absorb Cl^- ions from the evolved gas

Answer:

Watch Video Solution

321. Which of the following salts does not contain water of crystallisations?

A. Blue vitriol

B. Baking soda

C. Washing soda

D. Gypsum

Answer:

Watch Video Solution

322. Sodium carbonate is a basic salt because it is a salt of

A. strong acid and strong base

B. weak and weak base

C. strong acid and weak base

D. weak acid and strong base

Answer:

Watch Video Solution

323. Calcium phosphate is present in tooth enamel. Its nature is

A. basic

B. acidic

C. neutral

D. amphoteric

Answer:

Watch Video Solution

324. A sample of soil is mixed with water and allowed to settle. The clear supernatent soluton turns the pH paper yellowish orange. Which of the following would change the colour of this pH paper to greenish blue?

A. Lemon juice

B. Vinegar

C. Common salt

D. An antacid

Answer:

Watch Video Solution

325. Which of the following gives the corret increasing order or acidic strenght?

A. waterltAcetic acidltHydrochloric acid

B. WaterltHydrochloric acidltAcetic afcid

C. Acetic acidltWaterltHydrochloric acid

D. Hydrochloric acidltWaterltAcetic acid

Answer:

Watch Video Solution

326. If a few drops of a concentrate acid accidently spills over the hand of a student, what should be done?

A. wash the hand with saline solution

B. wash the hand immdeidately with plenty of water and apply a paste of sodium hydrogen carbonate

C. after washing soda with plenty of water apply solution of sodium hydroxie on the hand

D. neutralise the acid with a strong alkali.

Answer:

Watch Video Solution

327. Sodium hydrogen carbonate when added to acetic acid evolves a gas. Which of the following statements are true about the gas evolved

It turns lime water millky

It extinguishes a burning splinter

It dissolves in a solution of sodium hydroxide

It has a pungent odour

A. (i) and (ii)

B. (i),(ii) and (iii)

C. (iii),(ii) and (iv)

D. (i) and (iv)

Answer:

Watch Video Solution

328. Common salt besides being used in kitchen can also be used as the raw material for making

washing soda

baking soda

slaked lime

bleaching powder

A. (i) and (ii)

B. (i),(ii) and (iii)

C. (i) and (iii)

D. (i),(ii) and (iv)

Answer:

Watch Video Solution

329. To protect tooth decay we are advised to brush our teeth regularly

A. acidic

B. neutral

C. basic

D. corrosive

Answer:

Watch Video Solution

330. One of the consituent of bakking powder is sodium hydrogen carbonate, the other constituent is

A. hydrochlric acid

B. tartaric aid

C. Acetic acid

D. sulphuric acid

Answer:

Watch Video Solution

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

A. Higher the pH, stronger the acid

B. Higher the pH, weaker the acid

C. Lower the pH, weaker the acid

D. Lower the pH, stronger the base

Answer:

Watch Video Solution

332. The pH of the gastric juices released during digestion is

A. less than 7

B. more than 7

C. equal to 7

D. equal to 0

Answer:

Watch Video Solution

333. Which of the following phenomena occur, when a small amount of acid is added to water?

Ionisation

Neutralisaton

Dilution

Salt formation

A. (i) and (ii)

B. (I) and (iii)

C. (ii) and (iii)

D. (ii) and (iv)

Answer:

Watch Video Solution

334. Which one of the following can be used as an acid base indicator by a visually impared student?

A. Litmus

B. Turmeric

C. Vanilla essence

D. Petunia leaves

Answer:

Watch Video Solution

335. Which of the following substance is brittle?

A. Marble

B. Limestone

C. Baking soda

D. Lime

Answer:

Watch Video Solution

336. Which of the following is acidic in nature?

A. Lime juice

B. Human blood

C. Lime water

D. Antacid

Answer:

Watch Video Solution

337. In an attempt to demonstarate electrical conductivity through an electrolyte, the following apparatus was set up

Which among the following statement is correct?

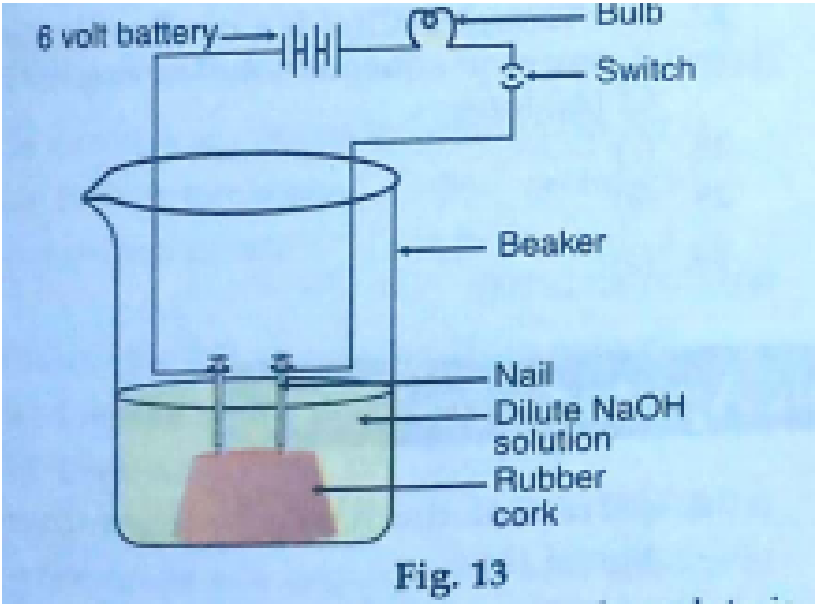


Fig. 13

Bulb will not glow because electrolyte is not acidic

Bulb will glow because NaOH is a strong base and furnishes ions for conduction.

Bulb will not glow because circuit is incomplete.

Bulb will not glow because it depends upon the type of electrolytic solution

A. (i) and (iii)

B. (ii) and (iv)

C. (ii) only

D. (iv) only

Answer:

Watch Video Solution

338. Which of the following is used for dissolution of gold?

A. Hydrochloric acid

B. sulphric acid

C. Nitric acid

D. Aqua regia

Answer:

Watch Video Solution

339. Which of the following is not a mineral acid?

A. Hydrochloric acid

B. Citric acid

C. Sulphuric acid

D. Nitric acid

Answer:

Watch Video Solution

340. Which among the following is not a base?

A. NaOH

B. KOH

C. NH_4OH

D. C_2H_5OH

Answer:

Watch Video Solution

341. Which of the following statements is not correct?

A. All metal carbontate react with acid to give a salt, water and carbon dioxde

B. All metal oxides react with water to give salt and acid

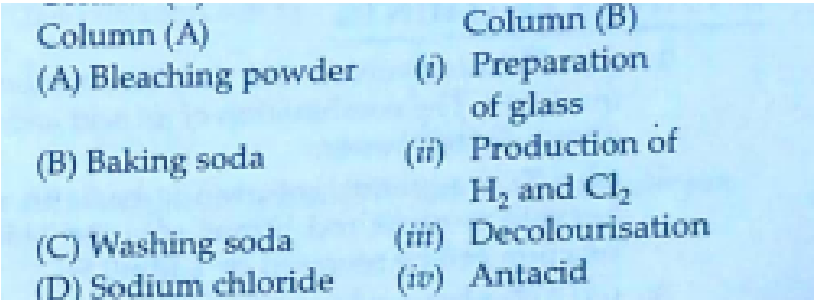
C. Some metals reacts with acids to give salt and hydrogen

D. Some non metal oxides react with water to form and acid

Answer:

Watch Video Solution

342. Match the chemical substances given in column with their appropirate application given in column B.



Column (A)	Column (B)
(A) Bleaching powder	(i) Preparation of glass
(B) Baking soda	(ii) Production of H_2 and Cl_2
(C) Washing soda	(iii) Decolourisation
(D) Sodium chloride	(iv) Antacid

A. A-(ii),B-(i),C-(iv),D-(iii)

B. A-(iii),B-(ii),C-(iv),D-(i)

C. A-(iii),B-(iv),C-(i),D-(ii)

D. A-(ii),B-(iv),C-(i),D-(iii)

Answer:

Watch Video Solution

343. Equal volumes of hydrochlric acid and sodium hydroxide solutions of the same concentration are mixed and the pH of the resulting solution is checked with a pH paper. What would be the same colour obtained?

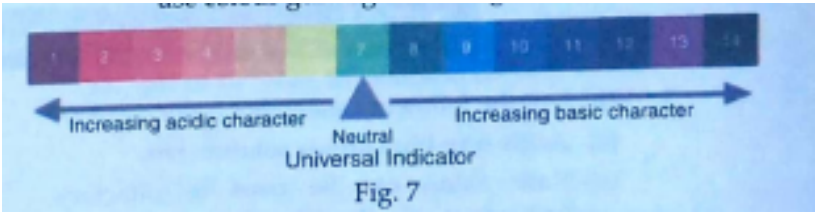


Fig. 7

A. REd

B. Yellow

C. Yellowish green

D. Blue

Answer:

Watch Video Solution

344. Which of the following is true when HCl is passed throug water?

A. It does not ionise in the solution

B. it ionises in the soluton

C. It gives both hydrogen and hydroxyl ion in the solution

D. It forms hydronium ion in the solution due to the combination of hydrogen ionss with water molecule.

Answer:

Watch Video Solution

345. Which of the following statements is true for acids?

A. Bitter and chnge red litmus to blue

B. Sour and change red litmus to blue

C. Sour and change blue litmus to red

D. Bitter and change blue litmus to red

Answer:

Watch Video Solution

346. Which of the following are present in a dilute aqueous solution of hydrochloric acid?

A. $H_3O^+ + Cl^-$

B. $H_3O^+ + OH^-$

C. $Cl^- + OH^-$

D. unionised HCl

Answer:

Watch Video Solution

347. Identify the correct representation of reaction occuring during chloralkali process

A. $2NaCl(l) + 2H_2O(l) \rightarrow 2NaOH(l) + Cl_2(g) + H_2(G)$

B. 2 N a C l (A q) + 2 H 2 O (l) → 2 N a O H (a q) + C l 2 (a q) + H 2 (a q)

C. $2NaCl(Aq) + 2H_2O(l) \rightarrow 2NaOH(aq) + Cl_2(aq) + H_2(aq)$

D. $2NaCl(aq) + 2H_2O(l) \rightarrow 2NaOH(aq) + Cl_2(g) + H_2(g)$

Answer:

Watch Video Solution

348. Which of the following statement is not correct?

A. Acids turn blue litmus solution red

B. Raw onion can be used as olfactory indicator to check acid or base

C. Bases are sour in taste

D. Vanilla essence does not give colour in strongly basic solutions

Answer:

Watch Video Solution

349. When black copper oxide placed in a beaker is treated with dilute HCl, its colour changes to

A. white powder

B. dark red

C. bluish green

D. no change

Answer:

Watch Video Solution

350. Metal hydrogen carbonates react with acids to give

A. salt, water,chlorine

B. salt,water,carbon dioxide

C. salt and carbon dioxde

D. salt,hydrogen and carbon dioxide

Answer:

Watch Video Solution

351. pH of the solution having hydrogen ions concentration of 1M is

A. 0

B. 1

C. 10

D. 14

Answer:

Watch Video Solution

352. Which of the following acidic solutions having given pH values is most acidic?

A. Coffee (pH=4.8)

B. Beer (pH=4.2)

C. Tomato juice (pH=4.4)

D. Lemon juice(pH=2.3)

Answer:

Watch Video Solution

353. Which of the following aqueous solution will have highest depression in freezing point?

A. sodium chloride

B. potassium carbonate

C. copper sulphate

D. ammonium chlroide

Answer:

Watch Video Solution

354. Which of the following is not a strong acid?

A. H_2SO_4

B. CH_3COOH

C. HNO_3

D. HCl

Answer:

Watch Video Solution

355. The pH of a solution is 3. When its pH changes to 5, then H^+ ion concentration

A. increse to times

B. decrease two times

C. increases 100 times

D. decreases 100 times.

Answer:

Watch Video Solution

356. Bleaching powder is

A. CaO_2Cl_2

B. $CaOCl_2$

C. $CaClO_2$

D. $CaCl_2 + O_2$

Answer:

Watch Video Solution

357. Plaster of paris is

A. $CaSO_4$

B. $CaSO_4.\ H_2O$

C. $CaSO_4.\ 2H_2O$

D. $CaSO_4.\ \frac{1}{2}H_2O$

Answer:

Watch Video Solution

358. Sodium carbonate is also called

A. baking soda

B. washing soda

C. bleaching powder

D. bread soda

Answer:

Watch Video Solution

359. What is the pH of 0.1M NaOH solution?

A. 13

B. 12

C. 11

D. 10

Answer:

Watch Video Solution

360. Name the two main consituents of baking powder.

A. sodium benxoate

B. acetic acid

C. sodium lactate

D. tartaric acid

Answer:

Watch Video Solution

361. Which of the following is acidic in nature?

A. Lime juice

B. Human blood

C. Lime water

D. Antacid

Answer:

Watch Video Solution

362. If a few drops of a concentrate acid accidently spills over the hand of a student, what should be done?

A. wash the hand with saline solution

B. wash the hand immdeidately with plenty of water and apply a paste of sodium hydrogen carbonate

C. after washing soda with plenty of water apply solution of sodium hydroxie on the hand

D. Neutralsie the acid with a strong alkali.

Answer:

Watch Video Solution

363. What happens when

Slaked lime reacts with chlorine?

A. Baking soda

B. sodium hydroxide

C. Bleaching powder

D. Cement

Answer:

Watch Video Solution

364. One of the consituent of bakking powder is sodium hydrogen carbonate, the other constituent is

A. Tartaric acid

B. sodium hydroxide

C. Calcium chlrode

D. Acetic acid

Answer:

Watch Video Solution

365. Fill ups

Plaster of Paris is obtained by heating..... .

A. Gypsum

B. Limestone

C. Sodium chlrode

D. Acetic acid

Answer:

Watch Video Solution

366. quick Lime reacts with water to give:

A. $Ca(OH)_2$

B. $CaCl_2$

C. $CaOCl_2$

D. CaO

Answer:

Watch Video Solution

367. The common salt is

A. NaOH

B. KCl

C. Na_2CO_3

D. NaCl

Answer:

Watch Video Solution

368. pH of a solution is zero. The nature of this solutoin is

A. acidic

B. basic

C. neutral

D. amphoteric

Answer:

Watch Video Solution

369. The nature of soluton when sodium carbonate is dissolved in water will be

A. acidic

B. basic

C. neutral

D. amphoteric

Answer:

Watch Video Solution

370. pH of 10^{-6}N KOH solution is

A. 6

B. 0.6

C. 8

D. 0.8

Answer:

Watch Video Solution

371. Baking soda is:

Sodium hydrogen carbonate

On heating gives sodium cabronate

an ingredient of baking powder

used for manufacture of soap

which of the following is true:

A. (i) and (iv)

B. (i),(ii) and (iii)

C. (i),(iii) and (iv)

D. (i),(iii) and (iv)

Answer:

Watch Video Solution

372. The substance having pH more than 7 are

common salt

washing soda

vinegar

sodium hydroxide

A. (i),(ii)and (iv)

B. (ii)and (iv)

C. (i),(iii) and (iv)

D. (iv) only

Answer:

Watch Video Solution

373. A milkman adds a very small amount of baking soda to fresh milk.

why does he shift the ph of the fresh milk from 6 to slightly alkaline?

A. became close to 2

B. became close to 4

C. did not undergo any change

D. became close to 8

Answer:

Watch Video Solution

374. Which of the chemical formulae of the compounds are wrong?

Brine solution: NaCl

Baking powder: $NaHCO_3$, Bleaching powder: $CaCl_2$

Gypsum: $CaSO_4.\ H_2O$

A. (i) and (iv)

B. (i),(ii) and (iii)

C. (ii) and (iv)

D. (ii) and (iv)

Answer:

Watch Video Solution

375. The acid obtained from curd is

A. Oxalic acid

B. Tartaric acid

C. Acetic acid

D. Lactic acid

Answer:

Watch Video Solution

376. By dissolving metal oxide in water, we get

A. acid

B. base

C. salt

D. none of these

Answer:

Watch Video Solution

377. Which of the following acid is present in sour milk?

A. citric acid

B. Acetic acid

C. Lactic acid

D. tartaric acid

Answer:

Watch Video Solution

378. Which of the following is a diabasic acid?

A. nitric acid

B. Phsphoric acid

C. Sulphuric acid

D. Acetic acid

Answer:

Watch Video Solution

379. The acid used in batteries of trucks and cars is

A. HNO_3

B. HCl

C. H_2SO_4

D. CH_3COOH

Answer:

Watch Video Solution

380. Which of the following salt is used as an antacid?

A. copper sulphate

B. potash alum

C. Potassium nitrate

D. Sodium bicarbonate

Answer:

Watch Video Solution

381. The basicity of CH_3COOH is 4.

A. 1

B. 4

C. 2

D. 0

Answer:

Watch Video Solution

382. The main component of baking powder responsible for fluffy nature of cakes is

A. Tartaric acid

B. Sodium carbonate

C. Sodium bicarbonate

D. Citric acid

Answer:

Watch Video Solution

383. Which of the following salts does not contain water of crystallisations?

A. Blue vitriol

B. washing soda

C. Baking soda

D. Gypsum

Answer:

Watch Video Solution

384. Aqueous solution of sodium chloride turns

A. red litmus blue

B. blue litmus red

C. red litmus orange

D. not change the colour of either red or blue litmus

Answer:

Watch Video Solution

385. On passing CO_2 gas through a brine soluton saturated with ammonia, the substane obtained is

A. NaOH

B. $NaHCO_3$

C. $Na_2CO_3 . 10H_2O$

D. $Na_2CO_3 . H_2O$

Answer:

Watch Video Solution

386. What is the difference of water molecules in plaster of paris and gypsum ?

A. $\frac{5}{2}$

B. 2

C. $\frac{1}{2}$

D. $\frac{3}{2}$

Answer:

Watch Video Solution

387. Chemical formula of gypsum is

A. $CaSO_4$

B. $ZnSO_4$

C. $CaSO_4.2H_2O$

D. $CaSO_4.H_2O$

Answer:

Watch Video Solution

388. Which of the following salts does not contain water of crystallisations?

A. Baking soda

B. Blue vitriol

C. Gypsum

D. Washing soda

Answer:

Watch Video Solution

389. Which of the following is not true

A. $CuSO_4$

B. NH_4Cl

C. $FeCl_3$

D. CH_3COONa

Answer:

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390. When black copper oxide placed in a beaker is treated with dilute HCl, its colour changes to

A. white

B. dark red

C. bluish green

D. no change

Answer:

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391. Which of the following acidic solutions having given pH values is most acidic?

A. Coffee(pH=4.8)

B. Beer(pH=4.2)

C. Tomato juice (pH=4.4)

D. Lemon juice(pH=2.3)

Answer:

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392. pH of the solution having hydrogen ions concentration of 1M is

A. 0

B. 1

C. 10

D. 14

Answer:

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393. The pH of a solution is 3. When its pH changes to 5, then H^+ ion concentration

A. increases two times

B. decrease two times

C. increases 100 times

D. decreases 100 times.

Answer:

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394. Which of the following is not a strong acid?

A. H_2SO_4

B. CH_3COOH

C. HNO_3

D. HCl

Answer:

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395. One of the consituent of bakking powder is sodium hydrogen carbonate, the other constituent is

A. Tartaric acid

B. Washing soda

C. Calcium chlrode

D. Acetic acid

Answer:

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396. What happens when

Slaked lime reacts with chlorine?

A. baking soda

B. washing soda

C. bleaching powder

D. cement

Answer:

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397. Metal hydrogen carbonates react with acids to give

A. salt, water,chlorine

B. salt,water,carbon dioxide

C. salt and carbon dioxde

D. salt, hydrogen and carbon dioxide

Answer:

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398. True/false

Washing soda is $Na_2SO_4.10H_2O$

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399. Bleaching powder is obtained by passing Cl_2 gas over slaked lime.

True or False

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400. Do basic solution also have H^+ (aq) ions? If yes, then why are these basic?

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401. True/false

Copper sulphate solutoins turns red litmus blue.

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402. True/false

Tamarind contains oxalic acid.

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403. Fill ups

When dil HCl is added to black copper oxide, the solution

becomes.....in colour.

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404. Fill ups

Brine is a saturated solution of.....

Watch Video Solution

405. Fill ups

Salts of strong acids and weak bases are.....in nature.

Watch Video Solution

406. Fill ups

Tooth pastes are generally.....in nature.

Watch Video Solution

407. Fill ups

The colour of universal indicator in very acidic solution is..... .

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408. Why is sodium hydrogen carbonate an essential ingredient in antacids?

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409. Dry hydrogen chloride gas does not turn blue litmus red whereas hydrochloric acid does. Give one reason.

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410. Write a chemical equation for the reaction of carbon dioxide with bleaching powder.

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411. Fresh milk has a ph of 6. how do you think the ph will change as it turns into curds ? Explain your answer.

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412. How is the concentration of hydronium ions $\left(H_3O^+\right)$ affected when a solution of an acid is diluted ?

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413. A piece of zinc metal is dropped in dilute solution of hydrochloric acid. Answer the following:

Which gas is liberated when the metal reacts with the acid?

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414. A piece of zinc metal is dropped in dilute solution of hydrochloric acid. Answer the following:

How will you test the presence of the gas evolved?

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415. Name the two main consituents of baking powder.

Watch Video Solution

416. Name the two main consituents of baking powder.

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417. Tooth enamel is one of the hardest substances in our body. How does it damage due to eating chocolate and sweets? What should we do to prevent it?

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418. What is the meant by water by crystallisation in a substance? How would you show that blue copper sulphate crystals contain water of crystallisation?

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419. Complete the following reactions:

$NaCl + CO_2 + NH_3 + H_2O \rightarrow \ldots\ldots\ldots\ldots\ldots + \ldots\ldots\ldots\ldots$

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420. Compelte the following reactions:

$CaSO_4.\, 2H_2O \rightarrow$

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421. Compelte the following reactions:

$CaCO_3 + H_2SO_4(dil) \rightarrow$

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422. What is universal indicator?

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423. Solution A gives pink colour when a drop of phenopthalein indicator is added to it. Solution B gives red colour when a drop of methyl orange is added to it. What type of solutions are A and B and which one of the solutions A and B will have a higher pH value?

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424. Name one salt whose solution has pH more than 7 and one salt whose has pH less than 7?

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425. Hydrated copper sulphate on heating changes to

A. Blue

B. Black

C. White

D. Yellowish

Answer:

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

A. Baking powder

B. Lime

C. Ammonium hydroxide

D. Hydrochlroic acid

Answer:

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427. When a few drops of universal indicator were added to a dilute solution of HCl, it is observed that the colour of the solution changes from

A. 0-3

B. $4-6$

C. $7-9$

D. $10-12$

Answer:

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428. Dilute hydrochloric acid is added to sodium carbonate. It is observed that

A. brisk effrervescence occurs

B. the gas evolved turns lime water milky

C. the gas evolved extinguishes a burning matchstick

D. all of the above

Answer:

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429. Which gas is produced when Al metals reacts wth NaOH solution?

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430. What will be the colour produced when a drop of pehnolphthalein is added to

Sodium nitrate?

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431. What will be the colour produced when a drop of pehnolphthalein is added to

Copper chloride.

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432. What will be the colour produced when a drop of pehnolphthalein is added to

Sodium chloride.

Watch Video Solution

433. What will be the colour produced when a drop of pehnolphthalein is added to

Sodium acetate.

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