



CHEMISTRY

BOOKS - MBD

ACIDS, BASES AND SALTS

Example

1. 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 solution respectively . If you are given only red litmus paper, how will you identify the contents of each test tube?



Watch Video Solution

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



Watch Video Solution

3. Which gas is usually liberated when an acid reacts with a metal? Illustrate with an example. How will you test for the presence of this gas?



[Watch Video Solution](#)

4. Metal compound A reacts with dilute hydrochloric acid to produce effervescence the gas evolved extinguishes a burning candle write a balanced chemical equation for the

reaction if one the compounds formed is calcium chloride.



[Watch Video Solution](#)

5. Why do HCl , HNO_3 etc, show acidic characters in aqueous solutions while solutions of compounds like alcohol and glucose do not show acidic character?



[Watch Video Solution](#)

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



Watch Video Solution

7. Why does dry HCl gas not change the colour on the dry litmus paper?



Watch Video Solution

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



[Watch Video Solution](#)

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



[Watch Video Solution](#)

10. 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

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



Watch Video Solution

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



Watch Video Solution

13. 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)?



Watch Video Solution

14. What is the common name of the compound CaOCl_2 ?



[Watch Video Solution](#)

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



[Watch Video Solution](#)

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



Watch Video Solution

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



Watch Video Solution

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



Watch Video Solution

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

A. 1

B. 4

C. 5

D. 10

Answer:



Watch Video Solution

20. 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:



Watch Video Solution

21. 10 ml of a solution of NaOH is found to be completely neutralised by 8 ml of HCl. If we take 20 ml of the same solution of NaOH, the amount of HCl solution (the same solution as before) required to neutralise it will be:

A. 4ml

B. 8ml

C. 12 ml

D. 16 ml

Answer:



Watch Video Solution

22. Which one of the following types of medicines is used for treating indigestion?

A. antibiotic

B. analgesic

C. antacid

D. antiseptic

Answer:



Watch Video Solution

23. Write balance equation for the reaction taking place when:

A. A dilute sulphuric acid reacts with zinc granules

B. B dilute hydrochloric acid reacts with magnesium ribbon

C. C dilute sulphuric acid reacts with aluminium powder

D. D dilute sulphuric acid reacts with iron filings

Answer:



Watch Video Solution

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



Watch Video Solution

25. Why does not distilled water conduct electricity, whereas rainwater does?



Watch Video Solution

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



Watch Video Solution

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

neutral?

strongly alkaline?

strongly acidic?

weakly acidic?

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



[Watch Video Solution](#)

28. Equal lengths of magnesium ribbons are taken in 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 will the fizzing occur more vigorously and why?



[Watch Video Solution](#)

29. 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](#)

30. 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?



[Watch Video Solution](#)

31. 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?



[Watch Video Solution](#)

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





[Watch Video Solution](#)

33. What is a neutralisation reaction? Give two examples



[Watch Video Solution](#)

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



[Watch Video Solution](#)

35. What do you mean by neutralization reaction? explain with an experiment



Watch Video Solution

36. Write briefly chemical properties of acids.



Watch Video Solution

37. Write in brief chemical properties of bases/alkalis.



Watch Video Solution

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



Watch Video Solution

39. What are indicators? How do indicators are categorized ? Explain



Watch Video Solution

40. What is dilution?



Watch Video Solution

41. Give characteristics of acids



Watch Video Solution

42. Give four uses of acids in our everyday life.



Watch Video Solution

43. What are the uses of base in everyday life?



Watch Video Solution

44. Differentiate between strong acids and weak acids



Watch Video Solution

45. Differentiate between strong base and weak base.



[Watch Video Solution](#)

46. Categorize the following compound as strong and weak acid and base: HCl



[Watch Video Solution](#)

47. Categorize the following compound as strong and weak acid and base: HCN



[Watch Video Solution](#)

48. Categorize the following compound as strong and weak acid and base: NaOH



Watch Video Solution

49. Categorize the following compound as strong and weak acid and base: H_2CO_3



Watch Video Solution

50. Categorize the following compound as strong and weak acid and base H_2SO_4



[Watch Video Solution](#)

51. Categorize the following compound as strong and weak acid and base: NH_4OH



[Watch Video Solution](#)

52. Categorize the following compound as strong and weak acid and base: $Ca(OH)_2$



[Watch Video Solution](#)

53. Categorize the following compound as strong and weak acid and base: CH_3COOH



[Watch Video Solution](#)

54. Categorize the following compound as strong and weak acid and base: H_3PO_4



[Watch Video Solution](#)

55. Categorize the following compound as strong and weak acid and base: KOH



[Watch Video Solution](#)

56. What is the reason for electric conduction in acids? explain



Watch Video Solution

57. What happens when a base is dissolved in water? Explain it.



Watch Video Solution

58. Why are bases not touched or tasted?



Watch Video Solution

59. Write uses of alkalies/bases.



Watch Video Solution

60. Give characteristics of bases



Watch Video Solution

61. What are the sources to get common salt(NaCl) ? Explain



Watch Video Solution

62. Write characteristics of common salt.



Watch Video Solution

63. Give uses of common salt.



Watch Video Solution

64. What is chlor-alkali process? Give the reaction.



Watch Video Solution

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



Watch Video Solution

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



Watch Video Solution

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



Watch Video Solution

68. What is common name of the compound CaOCl_2 ? Name the substance which reacts with chlorine to produce bleaching powder?



Watch Video Solution

69. If during the preparation of plaster of paris the process of heating is not controlled then which substance is formed?



Watch Video Solution

70. Explain preparation and uses of baking soda ($NaHCO_3$).



Watch Video Solution

71. Explain the following processes
Deliquescence.



Watch Video Solution

72. what happen when metal reacts with base?





[Watch Video Solution](#)

73. What happens when carbon dioxide is passed through fresh lime water?



[Watch Video Solution](#)

74. What is pH scale ? How does it represent acidic and basic nature of a solution? .



[Watch Video Solution](#)

75. Are salt crystals really dry? Explain



[Watch Video Solution](#)

76. How is washing soda prepared? Give its uses



[Watch Video Solution](#)

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



[Watch Video Solution](#)

78. A baker found that a cake prepared by him is small in size and hard which constituent, he forget to add, due to which cake can become soft and big.give reason.



Watch Video Solution

79. when bleaching powder is left open in air,then what happens?



Watch Video Solution

80. What are the important uses of bleaching powder?



Watch Video Solution

81. Name the compounds used in hospitals for supporting fractured bones in the right position. How is it prepared?



Watch Video Solution

82. Write important uses of plaster of paris



Watch Video Solution

83. Many people complaint about gas problem in stomach. What is main reason for this? Why do they use milk of magnesia to get relief from this?



Watch Video Solution

84. What are antacids?



[Watch Video Solution](#)

85. Utensils made up of copper and brass become shiny when rubbed with lemon? Why?



[Watch Video Solution](#)

86. For the safety of teeth what type of toothpaste should be used. Why?



[Watch Video Solution](#)

87. How does change in ph-value helps in tooth decay?



Watch Video Solution

88. What is the remedy for sting of nettle plant? Write.



Watch Video Solution

89. What is acid rain? How is the pH of soil can be measured?



Watch Video Solution

90. What happens when hydrochloric acid reacts with sodium carbonate?



Watch Video Solution

91. Magnesium treated with dilute H_2SO_4 . Name the gas produced and write the reaction.



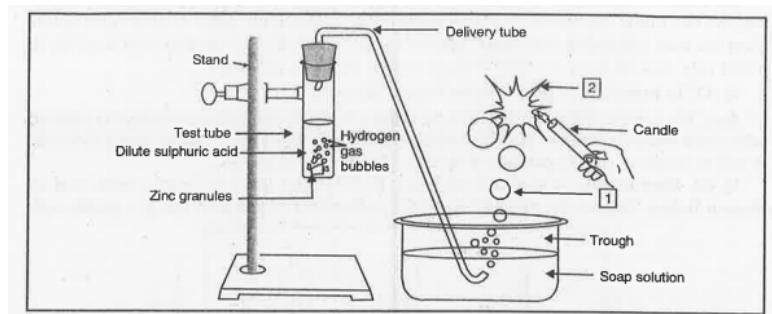
Watch Video Solution

92. Compounds such as alcohols and glucose also contain hydrogen but are not categorised as acids, describe an activity to prove it:



Watch Video Solution

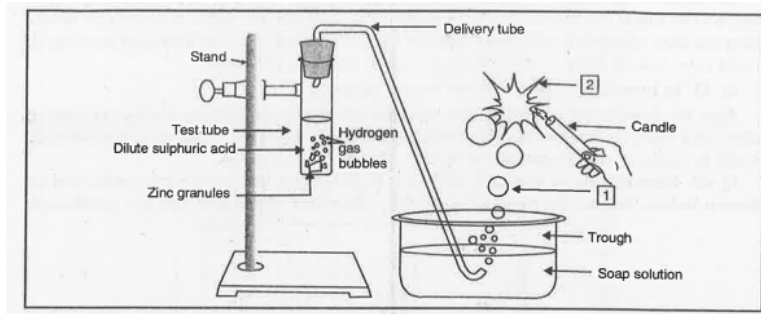
93. Observe the figure and answer the following: What are 1 and 2?



[Watch Video Solution](#)

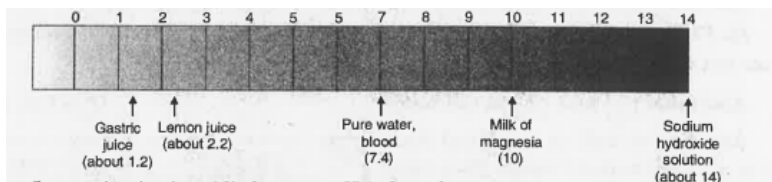
94. Observe the figure and answer the following: Write down the reaction taking

place in test tube.



[Watch Video Solution](#)

95. In the pH paper shown in figure given below pH of lemon juice is 2.2 and that milk of magnesia is 10. What is its significance?





[Watch Video Solution](#)

96. Which gas is being produced in the test tube when hydrochloric Acid is added to sodium carbonate ? How does gas react with calcium hydroxide/lime water?



[Watch Video Solution](#)

97. What makes food sour?



[Watch Video Solution](#)

98. What is neutralisation reaction?



Watch Video Solution

99. What is the reason of acidity in stomach?



Watch Video Solution

100. What is the effect of acid on litmus ?



Watch Video Solution

101. What are olfactory indicators?



Watch Video Solution

102. Give three examples of olfactory indicators.



Watch Video Solution

103. Which gas is produced when zinc reacts with sodium hydroxide?



[Watch Video Solution](#)

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



[Watch Video Solution](#)

105. What happens when CO_2 is passed through lime water?



[Watch Video Solution](#)

106. Why milkiness of lime water disappear when excess of CO_2 is passed through it?



Watch Video Solution

107. Write the name and colour of the compound formed when copper oxide reacts with dilute hydrochloric acid.



Watch Video Solution

108. Which name is used for metal oxide which show acidic or basic behaviour?



Watch Video Solution

109. What is the nature of non-metal oxide?



Watch Video Solution

110. Why does current flow in acids?



Watch Video Solution

111. Which ion is produced in acidic solution?



Watch Video Solution

112. What is used to dry, moist gas?



Watch Video Solution

113. How do we represent hydrogen ion?



Watch Video Solution

114. Which ions is produced by bases in water?



Watch Video Solution

115. What is base?



Watch Video Solution

116. What should we do to dilute an acid?



Watch Video Solution

117. What is dilution?



Watch Video Solution

118. What is name of mixture of various indicators?



Watch Video Solution

119. What is that which show different colour at different concentration of hydrogen ion in a

solution ?



[Watch Video Solution](#)

120. What is ph scale?



[Watch Video Solution](#)

121. What is p in ph?



[Watch Video Solution](#)

122. What is the range of ph scale



Watch Video Solution

123. What is ph value of neutral solution?

A. 9

B. 3

C. 7

D. 13

Answer:



[Watch Video Solution](#)

124. If ph value of solution is less than 7, then what does it indicate?



[Watch Video Solution](#)

125. If ph value of a solution is more than 7, then what does it indicate?



[Watch Video Solution](#)

126. What is the value on pH scale for lemon juice?



Watch Video Solution

127. What is the value on pH scale for pure water?



Watch Video Solution

128. What is the value on pH scale for sodium hydroxide?



Watch Video Solution

129. What is ph range in which our body works?



Watch Video Solution

130. What is ph value of acid rain?



Watch Video Solution

131. In which type of river survival of aquatic animals is difficult?



Watch Video Solution

132. what is the ph of curd



Watch Video Solution

133. Which acid is produced in our stomach?



Watch Video Solution

134. What is used for treating excess of acid in the stomach?



Watch Video Solution

135. When does tooth decay begin?



Watch Video Solution

136. Tooth enamel are made up of which substance?



Watch Video Solution

137. Why do we feel pain due to bee sting?



Watch Video Solution

138. Which substance is applied on the stinging area which gives relief from pain?



[Watch Video Solution](#)

139. What do the stinging hair of nettle plant ?



[Watch Video Solution](#)

140. What is the remedy for sting of herbaceous plant nettle?



[Watch Video Solution](#)

141. Which acid is in curd ?



Watch Video Solution

142. What is the ph of blood?



Watch Video Solution

143. What is exothermic reaction?



Watch Video Solution

144. What is endothermic reaction?



Watch Video Solution

145. Solid sodium chloride does not conduct electric current why?



Watch Video Solution

146. what happen when a piece of zinc is added to copper sulphate solution?



[Watch Video Solution](#)

147. What is solute?



[Watch Video Solution](#)

148. What is a strong electrolyte?



[Watch Video Solution](#)

149. What is weak electrolyte?



Watch Video Solution

150. Which is acid?

A. NaOH

B. H_2CO_3

C. HCl

D. Both b and c

Answer:



Watch Video Solution

151. Which acids are found in animals?



Watch Video Solution

152. why aqueous solution of acids conduct electricity?



Watch Video Solution

153. Who gave ph scale and when?



Watch Video Solution

154. what is baking soda?



Watch Video Solution

155. What is the reason for burn feeling in stomach and chest ? How to get rid of this situation?



Watch Video Solution

156. What is bleaching powder?



Watch Video Solution

157. If we do not use tartaric acid in baking powder for making a cake how will the cake taste?



Watch Video Solution

158. Which chemicals are used in fire extinguishers?



Watch Video Solution

159. Which gas is produced in soda acid fire extinguisher?



Watch Video Solution

160. Which compound is used to make water free of germs?



Watch Video Solution

161. Write chemical name of quick lime?



Watch Video Solution

162. what is electrolysis?



Watch Video Solution

163. What type of smell is given by bleaching powder?



Watch Video Solution

164. What is alkali?



Watch Video Solution

165. write one word for following : a reaction between an acid and a base to form salt and water



Watch Video Solution

166. Write one word for following : a substance which dissociates on dissolving in water to produce hydrogen ions.



Watch Video Solution

167. What is the relation of paris in plaster of paris?



Watch Video Solution

168. What is heated to which temperature for preparing plaster of Paris?



Watch Video Solution

169. Ph of an acidic solution is:

A. $gt7$

B. $lt7$

C. $= 7$

D. 14

Answer:



Watch Video Solution

170. Neutral solution has ph:

A. 7

B. $gt7$

C. $lt7$

D. 14

Answer:



Watch Video Solution

171. Common name of $Na_2CO_3 \cdot 10H_2O$

A. Bleaching powder

B. baking powder

C. plaster of pairs

D. washing soda

Answer:



Watch Video Solution

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

A. Washing soda

B. chloro-akali

C. reduction

D. none of these

Answer:



Watch Video Solution

173. What is used for plastering fractured bones?

A. cement

B. gypsum

C. plaster of paris

D. soda

Answer:



Watch Video Solution

174. Toothpaste used for cleaning teeth is

A. acidic

B. neutral

C. basic

D. none of these

Answer:



Watch Video Solution

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

A. 1

B. 4

C. 5

D. 10

Answer:



Watch Video Solution

176. Fill in the blanks: The common name of $CaOCl_2$ is _____



Watch Video Solution

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



 [Watch Video Solution](#)

178. Fill in the blanks: The common name of

$Na_2CO_3 \cdot 10H_2O$ is _____



[Watch Video Solution](#)