

Hydrogen ion concentration- pH scale and Buffer solution



110. If 4.0 gm $NaOH$ is present in 1 litre solution, then its pH will b]
(a) 6 (b) 13
(c) 18 (d) 24

111. The pOH of beer is 10.0. The hydrogen ion concentration will b]
(a) 10^{-2} (b) 10^{-10}
(c) 10^{-8} (d) 10^{-4}

112. When a buffer solution of sodium acetate and acetic acid is diluted with water]
(a) Acetate ion concentration increases
(b) H^+ ion concentration increases
(c) OH^- ion concentration increases
(d) H^+ ion concentration remain unaltered

113. What is the pH of $Ba(OH)_2$ if normality is
(a) 4 (b) 10
(c) 7 (d) 9

114. What will be the pH of a solution formed by mixing 40ml of 0.10M HCl with 10ml of 0.45M $NaOH$
(a) 12 (b) 10
(c) 8 (d) 6

115. The pH of a solution having $[H^+] = 10 \times 10^{-4}$ moles/litre will be

116. If 0.4gm $NaOH$ is present in 1 litre solution, then its pH will be
(a) 2 (b) 10
(c) 11 (d) 12

117. Which of the following is not a Bronsted acid
(a) $CH_3NH_4^+$ (b) CH_3COO^-
(c) H_2O (d) HSO_4^-

118. pH of 0.005 M H_2SO_4 solution will be
(a) 0.005 (b) 2
(c) 1 (d) 0.01

119. A buffer solution is a mixture of
(a) Strong acid and strong base
(b) Weak acid and weak base
(c) Weak acid and conjugate acid
(d) Weak acid and conjugate base

120. When pH of a solution decreases, its hydrogen ion concentration
(a) Decreases
(b) Increases
(c) Rapidly increases
(d) Remains always constant

