

ACIDS AND BASES

TEST

pH and pOH and Neutralization

Date:

- 5 liters solution that contains 3.7 gram Ca(OH)_2 . What is the concentration of H^+ ions in the solution? (Ca(OH)_2 : 74)
A) $5 \cdot 10^{-11}$ B) $5 \cdot 10^{-12}$ C) $5 \cdot 10^{-13}$ D) $5 \cdot 10^{-14}$ E) 10^{-13}
- A V L solution that is prepared by using n mol KOH, to find the H^+ ion concentration of the solution, which one of the following calculation can be used?
A) nV B) $(10^{-14} \cdot V)/n$ C) $10^{-14}nV$ D) V/n E) $10^{-14}nV$
- When 400 ml pure water is added to 100 ml of HCl solution the H^+ ion concentration become 10^{-3} M. What is the concentration of the initial solution?
A) $5 \cdot 10^{-3}$ B) $1 \cdot 10^{-3}$ C) $5 \cdot 10^{-4}$ D) $1 \cdot 10^{-4}$ E) $5 \cdot 10^{-2}$
- When 30 ml of pure water is added into $4 \cdot 10^{-2}$ M NaOH solution pH becomes 12. What is volume of first solution in ml?
A) 100 B) 90 C) 370 D) 10 E) 70
- The H^+ ion concentration of a solution would be $2 \cdot 10^{-12}$ M, when 2.8 grams KOH is dissolved in x L water. What is x? (KOH:56)
A) 5 B) 6 C) 8 D) 10 E) 20
- What is the OH^- ion concentration in the solution, which is prepared by dissolving 0.98 g H_2SO_4 in 2 L?
A) $2 \cdot 10^{-12}$ B) $5 \cdot 10^{-12}$ C) $2 \cdot 10^{-11}$ D) $1 \cdot 10^{-12}$ E) $4 \cdot 10^{-12}$
- What is the pH of the 2 L is solution that is prepared by using 8 milligram NaOH? (NaOH : 40)
A) 10 B) 12 C) 3 D) 4 E) 2
- When 9.8 gram H_2SO_4 dissolve in 20 L solution, what would be the H^+ ions concentration?
A) 10^{-1} B) 10^{-2} C) 10^{-3} D) 10^{-4} E) 10^{-5}
- 100 ml of a solution with pH = 3 and 100 ml of a solution with pH = 11 are mixed. What is the final pH = ?
A) 7 B) 8 C) 9 D) 10 E) 11
- 200 ml of 0,014 M HCl and 300 ml of 0,011 M NaOH solutions are mixed. What is the pH of resulting solution?
A) 11 B) 12 C) 13 D) 2 E) 3
- 100 ml of a solution with pH = 2 and 100 ml of a solution with pH = 12 are mixed. What is the pH of final solution?
A) 6 B) 2 C) 7 D) 4 E) 5
- 2 L solution contains $5 \cdot 10^{-2}$ M OH^- ion concentration. Which one of the given substance must be dissolved to prepare the given solution?
A) 0.1 mol NaOH
B) 0.1 mol HCl
C) 0.1 mol H_2SO_4
D) 0.1 mol Ca(OH)_2
E) 0.1 mol NaCl