Name:
Score: 0 / 14 points (0%) [1 open-ended question not graded]

C17PE

Multiple Choice
Identify the choice that best completes the statement or answers the question.

___ 1. The pH of a solution that contains 0.818 M acetic acid ($K_a = 1.76 \times 10^{-5}$) and 0.172 M sodium acetate is _____.
a. 4.077
b. 5.434
c. 8.571
d. 8.370
e. 9.922

ANSWER: A
POINTS: 0 / 1

___ 2. Consider a solution containing 0.100 M fluoride ions and 0.126 M hydrogen fluoride. The concentration of fluoride ions after the addition of 5.00 mL of 0.0100 M HCl to 25.0 mL of this solution is _____ M.
a. 0.0850
b. 0.00167
c. 0.0980
d. 0.0817
e. 0.00253

ANSWER: D
POINTS: 0 / 1

___ 3. Calculate the pH of a solution prepared by dissolving 0.750 mol of NH_3 and 0.250 mol of NH_4Cl in water sufficient to yield 1.00 L of solution. The K_b of ammonia is 1.77×10^{-5}.
a. 5.22
b. 4.27
c. 9.73
d. 8.78
e. 0.89

ANSWER: C
POINTS: 0 / 1

___ 4. A 25.0 mL sample of 0.723 M $HClO_4$ is titrated with a 0.273 M KOH solution. What is the $[H^+]$ (molarity) before any base is added?