**CHEM 102 Recitation Ch 16 Name**

**Q1.** Which of the following is the **strongest** acid: HBrO3, HFO3, HIO3, and HClO3?

**Q2.** **Acid** strength increases in the series: HCN < HF < HSO4**-**. Which of the following species is the strongest **base**?

 **A)** CN-

 **B)** HSO4-

 **C)** SO42-

 **D)** F-

**Q3.** The conjugate base of **HS‒** is \_ \_ \_ \_ and the conjugate acid is \_ \_ \_ \_.

**Q4.** What is the pH of a **0.50 M** triethylamine, (C2H5)3N, solution? *K*b for triethylamine is 5.310-4.

 [12.21]

**Q5.** A **1.00 M** solution of a **weak** monoprotic acid undergoes 1.5 % dissociation. What is the percent dissociation of a **0.25 M** solution of this acid? [3.0 %]

**Q6.** Calculate the pH of a 0.50 M NH3 (*K*b = 1.8 x 10-5) solution. [11.48]

**Q7.** Calculate the concentration of **HC2O4−** in a **0.20 *M*** solution of oxalic acid (H2C2O4) at 25oC.

For oxalic acid, *K*a1 = 6.5×10–2 and *K*a2 = 6.1×10–5. [0.086 M]