CH1011 Tutorial 9

Name:

1. How would you make up a **buffer solution**? Illustrate your answer using acetic acid (CH₃COOH; pKa = 4.74).

2. Explain why the **pH of rainwater** is not neutral (pH 7.0).

3. Calculate the hydrogen ion concentration, pH and pOH for a 0.200 M solution of **propanoic acid** (HPr, $pK_a = 4.89$).

4.	Explain the chemical basis for the COD test and why the COD test is important in environmental monitoring.
5.	Reverse osmosis is a useful process in obtaining freshwater from marine water. How does this process work and what are the disadvantages?