Chemistry 115 Name

Dr. Cary Willard

Quiz 9a (20 points) April 26, 2011

All work must be shown to receive credit. S = kHP

1. (4 points) Explain why ammonia, NH3, is soluble in water but benzene, C6H6, is not.
2. (4 points) A solution is composed of 43.2 grams of ethanol and 73.2 grams of benzene. Identify the solvent and the solute.
3. (4 points) What is meant by the term “hydrated ion”?
4. (4 points) A person preparing a fish tank used preboiled (and then cooled) water to fill it. When the fish is put into the tank, it dies. Explain.
5. (4 points) The solubility of carbon dioxide in water at 3.5 atm is 0.12 M. Calculate the solubility of carbon dioxide in water at a pressure of 7.2 atm.

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Quiz 9b (20 points) April 26, 2011

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1. (4 points) Explain why ammonia, NH3, is soluble in water but benzene, C6H6, is not.
2. (4 points) A solution is composed of 84.4 grams of ethanol and 73.2 grams of benzene. Identify the solvent and the solute.
3. (4 points) What is meant by the term “hydrated ion”?
4. (4 points) A person preparing a fish tank used preboiled (and then cooled) water to fill it. When the fish is put into the tank, it dies. Explain.
5. (4 points) The solubility of carbon dioxide in water at 3.5 atm is 0.12 M. Calculate the solubility of carbon dioxide in water at a pressure of 9.4 atm.