***CHEM-115, Section A Quiz 3 (Chapters 5,6) October 6, 2016***

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Section: \_\_\_\_\_\_

1. In addition to the mass of the solute and volume of solution, what else do you need to calculate molar concentration of an ionic compound? *Circle all that apply*

**(a) number of equivalents****(b) charge on ions****(c) molar mass****(d) volume of solvent**

1. One way to test for the relative concentration of dissolved particles in an unknown biological fluid is to put purified red blood cells into it. If you had a beaker of clear aqueous fluid and found that the cells lysed, you could confirm that the solution is:

**(a) hypotonic****(b) isotonic****(c) hypertonic**  **(d) not able to tell**

1. The term “geometric isomers” applies to which class(es) of hydrocarbons? *Circle all that apply*

**(a) alkane****(b) alkene****(c) alkyne****(d) cyclic hydrocarbon (e) aromatics**

1. Which of the following are unsaturated hydrocarbons? *Circle all that apply*

**(a) C3H8****(b) C4H10****(c) C5H10****(d) C2H2**

1. Circle the structure that does **NOT** represent a “structural isomer” of the molecule shown at left.

****

1. Provide the proper **IUPAC name** for the compound shown to the right:

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1. What is the geometry of a carbon atom in the triple bond of an alkyne?

 **(a) linear****(b) trigonal planar (c) trigonal pyramidal (d) tetrahedral (e) bent**

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**(a) C2H6****(b) C4H8****(c) C5H12****(d) C10H20**

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