Chem 10123, Quiz 9

April 15, 2020

Name: _____(Please Print)

- 1. Consider the three organic compounds shown below.
 - (a) (6 points) Write the systematic name of each compound below its structure.
 - (b) (3 points) Circle any carbon atoms which are asymmetric (chiral) centers in these structures.

$$\begin{array}{c} {\rm CH_2CH_3} \\ {\rm Br-CH-C} \equiv {\rm C} \end{array}$$

$$O_2N$$

2. (5 points) Hydrocarbon **A** reacts with *excess* HBr as follows. Draw complete structural formulas for both reactant **A** and the underlined product.

A
$$\frac{\text{HBr}}{\text{(excess)}}$$
 2,3-dibromo-2-methylbutane

3 (6 points) Hydrocarbon **B** undergoes *aromatic substitution* with a certain chloroalkane (in the presence of AlCl₃ as a catalyst) to produce the hydrocarbon product **C**. Draw complete structural formulas for reactant **B** and the underlined chloroalkane.