**Homework #5: Chemistry 1013 Spring 2011**

**Due Wednesday 23 February 20 pts**

**5.1 Determine the formal charges on each atom in the compounds drawn below:**

**(1 pt per charge/ 8 pts total )**

1. **:C≡O: formal charge on C and O ? formal charge on C=-1 formal charge on O=+1**

**.. .. ..**

1. **:O-S=O: formal charge on O1, S and O2 ?**

**..  formal charge on O1= -1 formal charge on S=+1 formal charge on O2=0**

**(O1) (O2)**

**.. .. ..**

1. **: O=N-O: formal charge on O1, N and O2 ? (note: this molecule has a net**

**.. charge of -1)**

**(O1) (O2) formal charge on O1=0, formal charge on N=0, formal charge on O2= -1**

**5.2. Draw the bond line versions of the organic compounds below (2 pts each)**



**a)CH3 -CH2 -CH2 –OH b) CH2-CH2 c)**

**| |**





**CH2-CH2**



**5.3 Given the bond line forms below, write chemical formula for the molecule drawn (2 pt each)**

**Example: = C4H10**





1. **b) c)**





**C5H12 C3H6O C6H6**