CHM151 Quiz#8a 25 Pts Spring 2011 Name:_____

SHOW ALL WORK TO RECEIVE CREDIT. DUE WED. APRIL 27TH.

1. (5 Pts) Use the table of bond energies found in your textbook to calculate ΔH for the combustion reaction of isopropyl alcohol. (You must first write out a balanced equation and draw the Lewis structures).

2. (12 Pts) For each of the following determine the number of valence electrons and then write out the Lewis structure and state the electron pair geometry name. Next draw the molecular structure (VSEPR) and state molecular structure name.

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a. SF_4	Valence electrons_____		b. SO_3	Valence electrons_____
Lewis Structrure	Molecular structure (3-D)		Lewis Structrure	Molecular structure (3-D)
e^- pair geometry name:	Molecular geometry name:		e^- pair geometry name:	Molecular geometry name:

3. (3 Pts) Draw the Lewis structure and show all of the resonance structures for carbonate anion.

4. (5 Pts) State orbital hybridization for each carbon atom and its molecular geometry or the following structure. (You must first draw the structure showing each bond.)

$CH_3CH_2CCCHCH_2$