Organic II Lecture  
Summer 2001  
Quiz #1

1. For 2-hexene answer the following questions regarding Mass Spectrometry:

   a) Predict the mass of the molecular ion peak. (1 point)

   b) What is the structure corresponding to the base peak? (2 points)

2. Provide the structure corresponding to the following mass spectrum and contains a peak at 53.8 ppm and a peak at 27.3 ppm in $^{13}$C NMR spectroscopy. (3 points)
3. A compound (C$_{10}$H$_{12}$O$_2$) whose spectrum appears below was isolated from a reaction mixture containing 2-phenylethanol and acetic acid. (4 points)

a) Propose a structure for this compound.

b) Make peak assignments, showing which protons give rise to which absorptions in the spectrum.