CHEM 2311
Homework 5

NAME: _____

Provide the structures for the FIVE (5) compounds for which you are assigned: the empirical formula, (or elemental analysis), mass spectral molecular ion, IR, $_{13}$C NMR and $_{1}$H NMR spectra. You may handwrite your answers in the boxes below.

Indicate each assigned problem number in the first row of the table below (**in numerical order**). *Verify that you have the correct listing of assigned problems. Incorrect problems will not be graded.* Provide a neatly drawn line-bond structure of the compound beneath the appropriate number. Most of the data sets are consistent with a single compound. More than one structure might be consistent with a few of the data sets. You should provide a single best answer. If the correct structure is not given, you may receive partial credit **For any partial credit, you must show your work in the boxes below.**

Problem Number					
Empirical or Molecular Formula					
SODAR					
IR: Key Functional Groups					
^{13}C NMR: Number of different carbons					
^{1}H NMR: Number of Types of Protons					
Structure					