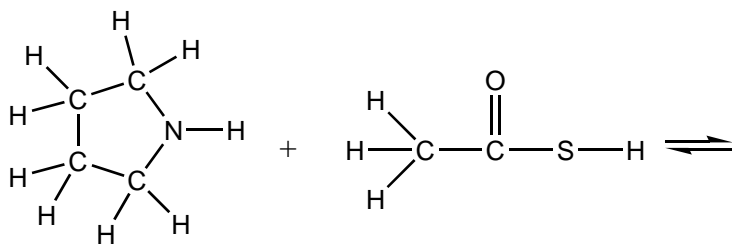
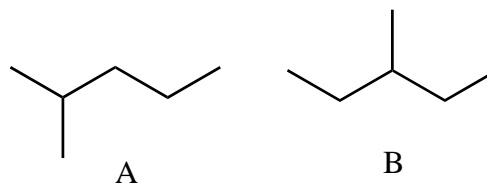


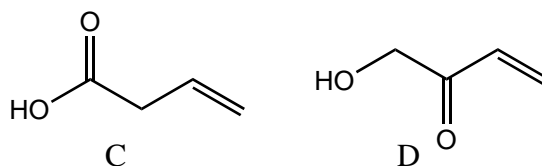
- IV. 1. Complete the acid-base reaction shown by drawing the products.
 2. Label each reactant and product as either an acid or a base
 3. Use curved arrow formalism to show how the reactants reacted to give the products shown.



- V. 1. Compounds A and B have at least one major difference in their mass spectra. One of them has a large peak that is either much smaller or absent in the spectrum of the other compound. Identify the m/z value of such a peak and in which molecule's MS it is significant.



2. Compounds C and D have at least one major difference in their IR spectra. One of them has a large peak that is not the same size and/or location in the IR spectrum of the other compound. Identify (a) the frequency (give the number) of such a peak, (b) which compound would have it (c) what structural feature led to it and (d) how it is different in the other compound.



- VI. Interpret the IR spectrum shown by identifying the significant peaks, structural features responsible for each of these significant peaks, and the class(es) of compound present in the sample.

