1. (a) CIRCLE the compound with the highest water solubility at pH = 7; draw a BOX around the least water-soluble compound.

(b) CIRCLE the most acidic compound shown below; draw a BOX around the least acidic compound.

(c) CIRCLE the compound most easily protonated by acid; draw a BOX around the least easily protonated compound.

(d) CIRCLE the compound with the highest boiling point; draw a BOX around the compound with the lowest boiling point.

2. What are the organic products of the following reactions.
3. (a) Reaction of (1-bromo-1-methylpropyl)cyclopentane with potassium t-butoxide in t-butyl alcohol gave a mixture of 4 hydrocarbons. Draw structures for all 4 compounds.

(b) What combination of RBr and NaOR' can be used in a successful synthesis of the ether shown below?

(c) What product is formed from each of these oxidizing agents?