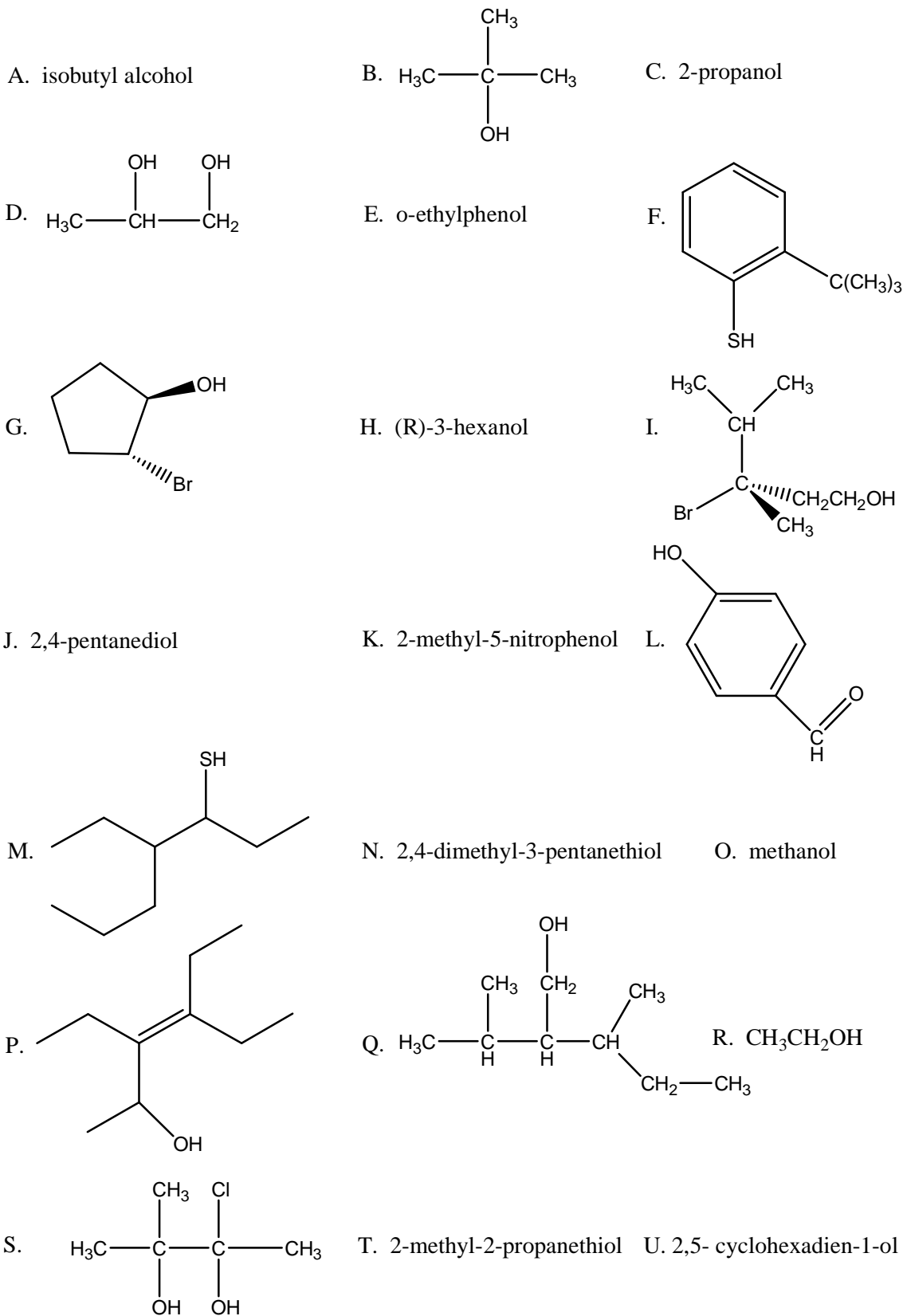
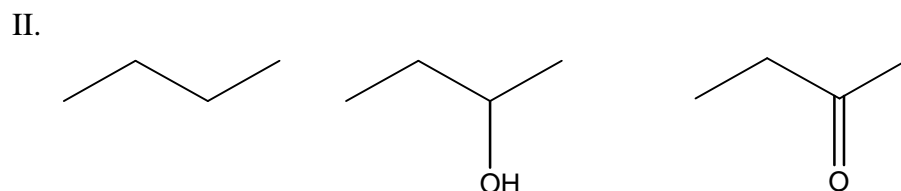
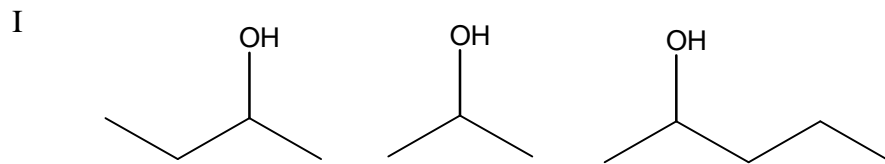


Chem 231: Problem Set #7 (on Chapter 7)

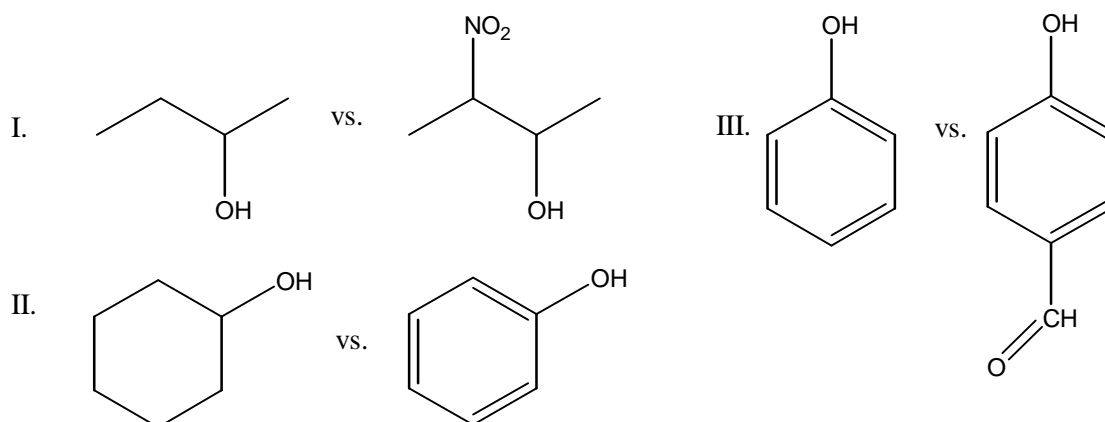
1. Name or draw structural or line formula for the following compounds.



2. A. Arrange the following compounds: 1) in order of decreasing boiling point and 2) in order of decreasing solubility in water.



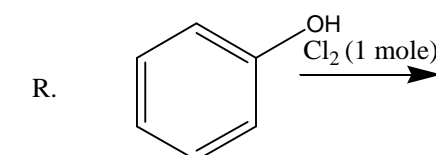
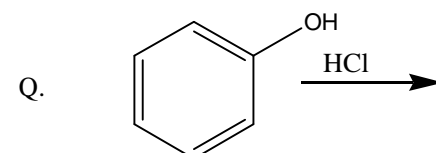
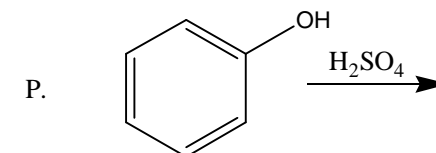
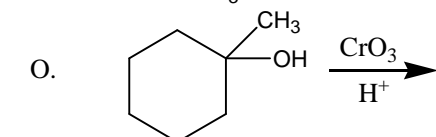
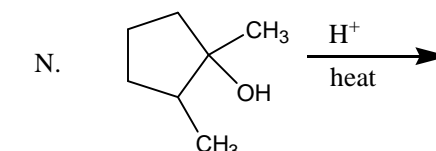
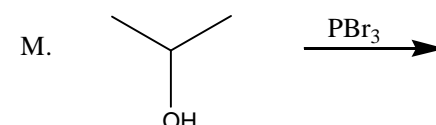
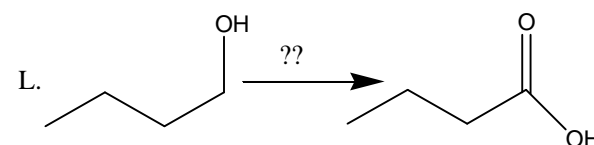
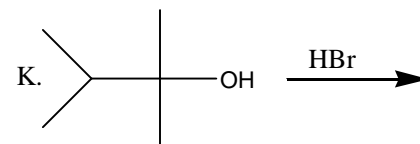
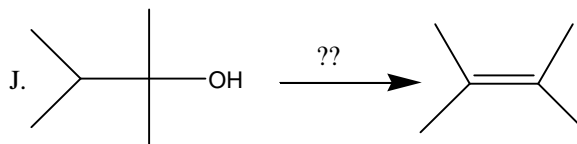
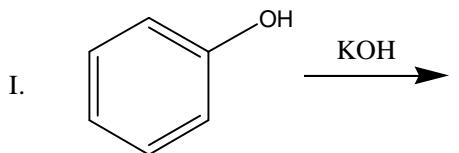
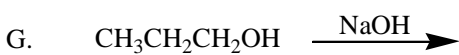
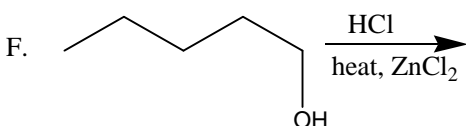
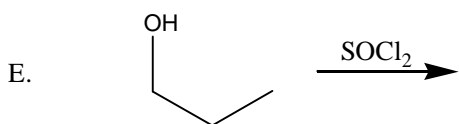
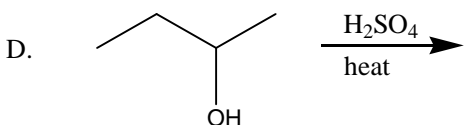
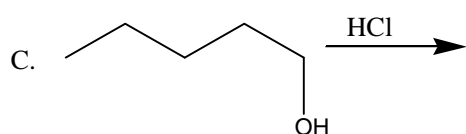
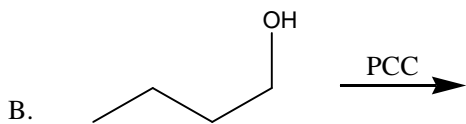
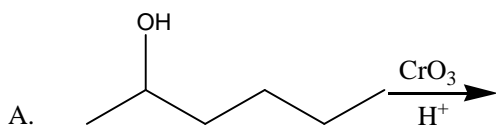
- B. Alcohols and phenols can act as weak acids. For each of the following pairs of alcohols, circle the stronger acid.



- C. For each alcohol or phenol given in question 2B above, give the conjugate base (alkoxide or phenoxide). For each pair, indicate which conjugate base is stronger. (Remember: Weak acids have strong conjugate bases. Therefore, the weaker the acid, the stronger the conjugate base.)

- D. What reagent should be used to prepare each of the conjugate bases specified in question 2C?

3. Give the major organic product or the necessary reagent(s) for each reaction. Show stereochemistry where appropriate.



4. Write step-step mechanisms for the reactions given in question 3D, 3J and 3K.