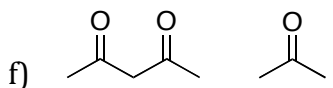
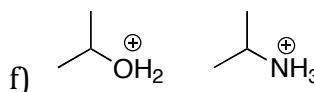
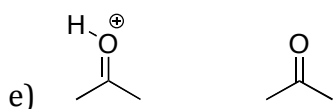
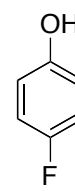
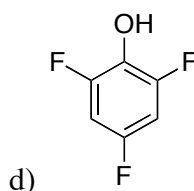
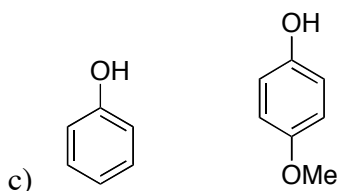
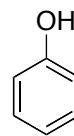
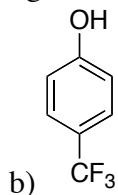
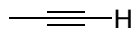
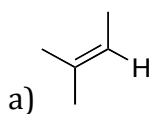


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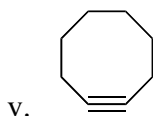
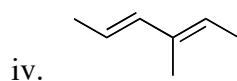
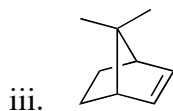
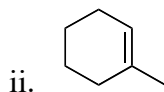
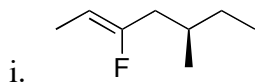
May 2, 2011

PEERS Workshop
Chemistry 30A
Worksheet 8

1. Arrange the following compounds in order of increasing acidity and explain your answer: Phenol (C_6H_5OH), ethanol (C_2H_5OH), and propanoic acid ($CH_3CH_2CO_2H$). Draw the anions resulting from deprotonation of both molecules and use resonance to explain this difference in acidity.
2. Arrange the conjugate bases of the acids given in problem (1) in order of decreasing basicity and explain this answer.
3. Consider the following pairs of molecules. Circle the molecule in each pair that has the lowest pK_a , and in a few words explain your reasoning.



4. Provide the IUPAC names for the following compounds:



5. Provide the products or reagents:

