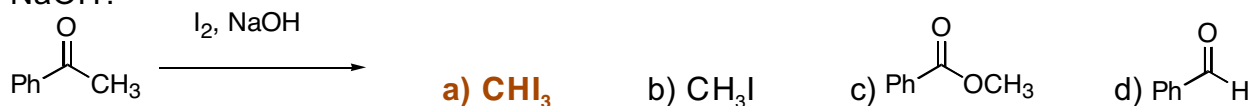
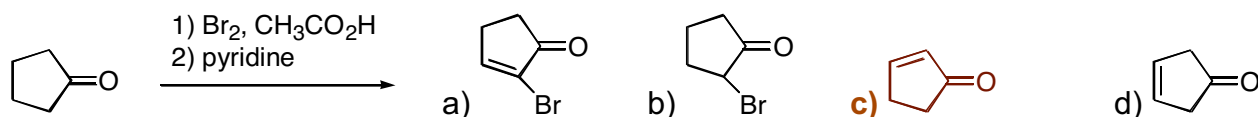


21 points (3 points each) Mark your answers on the scantron sheet. You may keep this copy.

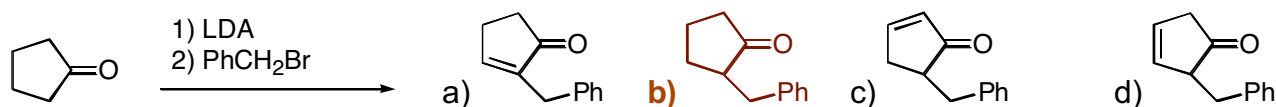
1. Which of the following structures is a product of the reaction of acetophenone with iodine and NaOH?



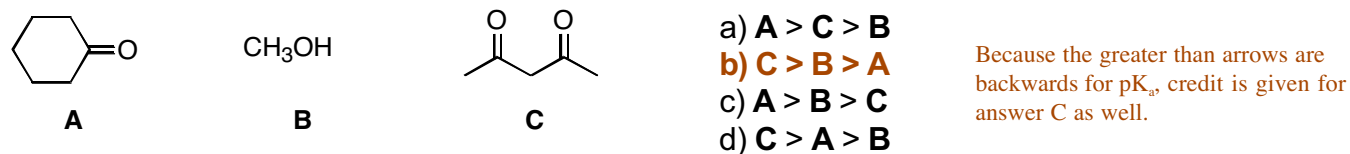
2. What is the product of the reaction of cyclopentanone with the following sequence of reagents?



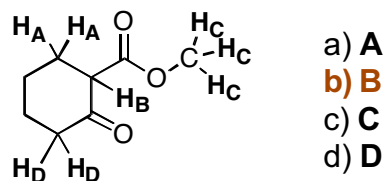
3. What is the product of the reaction of cyclopentanone with the following sequence of reagents?



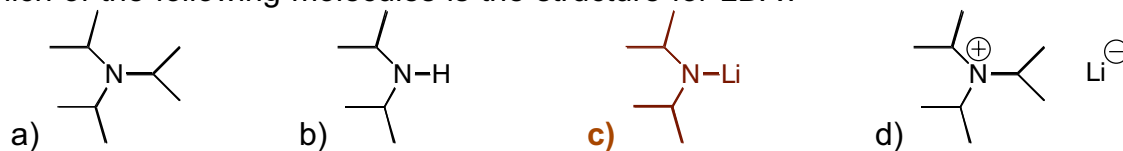
4. Rank the following molecules in order of increasing pK_a.



5. Which protons on the following molecule are most acidic?



6. Which of the following molecules is the structure for LDA?



7. What is the product after the following reaction sequence with ethylacetoacetate?

