

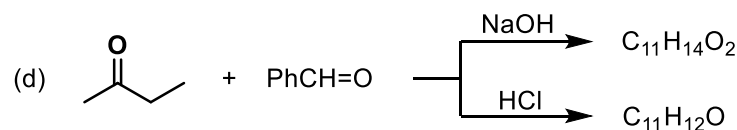
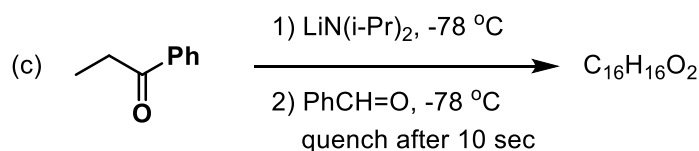
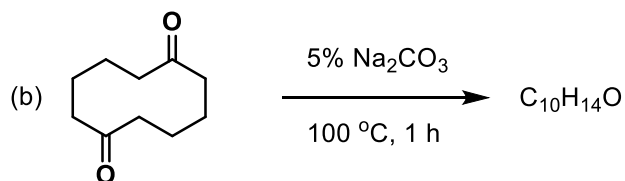
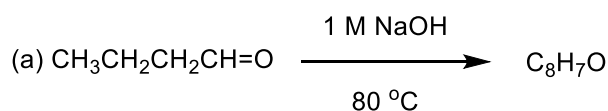


## CHEM 8410\_6410\_4410 – Organic Synthesis

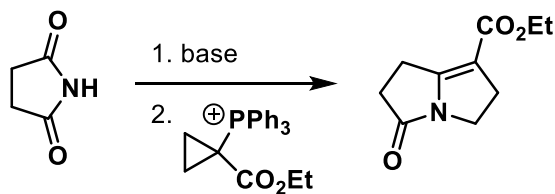
THE UNIVERSITY OF  
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1872

**Problem Set 2:** This problem set is now available at ([www.blackboard.utoledo.edu](http://www.blackboard.utoledo.edu)). It will be due in class 21 days (02/23/16) from today (02/02/16) in class. Grades will be administered as follows: 10 (exceptional effort), 8 (complete), 5 (incomplete or inadequate effort), 2 (poor effort), 0 (nonexistent) per question (3 questions total). **No late problem sets will be accepted.**

1. **Problem:** Give a specific structure, including all stereochemical features, for the product expected for each of the following reactions. Please provide mechanisms in all instances.



2. **Problem:** Provide the mechanism of this reaction that contains a cyclopropane reagent.



3. **Problem:** Explain the stereoselectivity in these reactions. Provide ALL the mechanisms for each step. According to my calculation there are 4 steps.

