

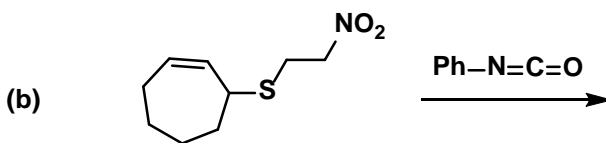
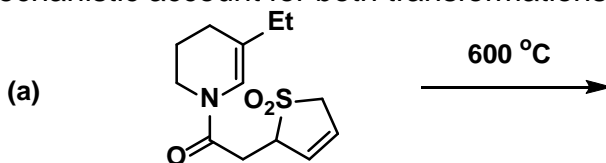


CHEM 8410_6410_4410 – Organic Synthesis

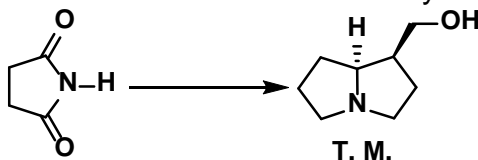
THE UNIVERSITY OF
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Problem Set 5: This problem set is now available at (www.blackboard.utoledo.edu). It will be due in my mailbox 14 days (05/03/16) from today (04/19/16). Grades will be administered as follows: 10 (exceptional effort), 8 (complete), 5 (incomplete or inadequate effort), 2 (poor effort), 0 (nonexistent). **No late problem sets will be accepted.**

1. **Problem:** For each of the following reactions give the major product with correct regiochemistry and stereochemistry. Provide all intermediates in the most appropriate manner. Also, give a mechanistic account for both transformations.



2. **Problem:** How would you synthesize the target molecule (T.M.) from the starting material given? Use as many steps as you need, however, for every step you use, please provide the mechanism! Do not forget about the noted stereochemistry!



3. **Problem:** How would you synthesize the target molecule (T.M.) from the starting material given? Use as many steps as you need, however, for every step you use, please provide the mechanism! Do not forget about the noted stereochemistry!

