

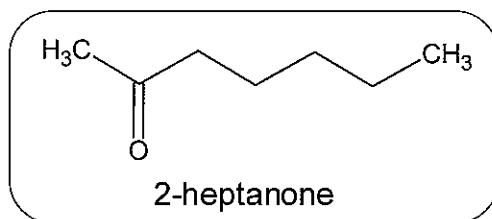
Ch 335

Name _____

Problem Set #1 (25 pts)

Due April 6, 2009

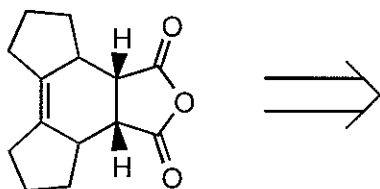
1. (7 pts) Synthesize 2-heptanone. The only organic compounds that you may use without first synthesizing them are acetylene and 1-pentene. There will be multiple steps. You do not need to look up odd reactions in your text book to solve this problem. Anything you need we talked about in class during Ch 335.



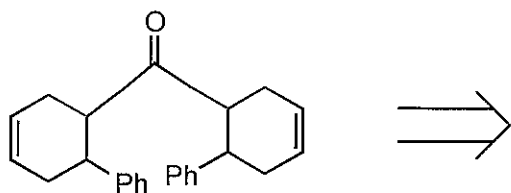
Retrosynthetic Analysis:

Synthesis:

2. (6 pts) Draw the reagents that can be used to synthesize the following molecule. Identify which is the diene and which is the dienophile.



3. (6 pts) Draw the reagents that can be used to synthesize the following molecule. (Hint: there are two cyclohexene rings!)



Ph = benzene ring

4. (6 pts) Draw the starting materials needed to make the following molecule. You must show the stereochemistry required in these starting materials.

