



CHEM 8410_6410_4410 – Organic Synthesis

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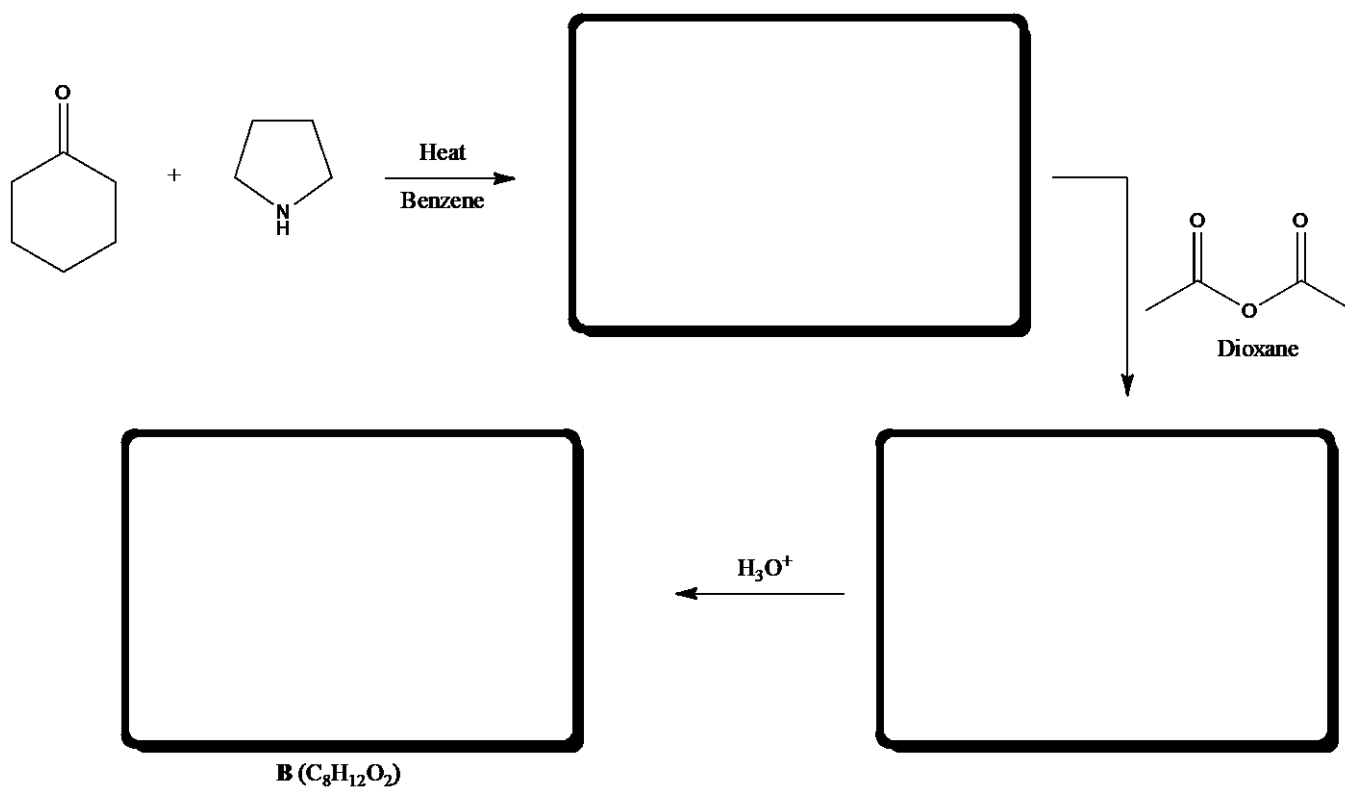
Instructor: Prof. Andreama
Room #: BO 2059

Quiz #3 of 5 10 PTS

Your Name: _____

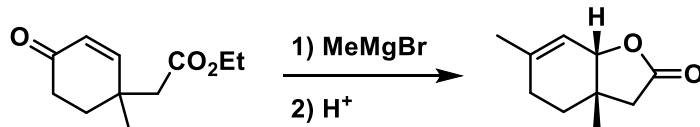
Student Number: _____

1) Provide the structure of product **B** as well as other missing intermediates in the following sequence of the reaction. **4 PTS**





- 2) What controls the stereochemistry of this product? You are advised to draw a mechanism first and then consider the stereochemistry. You should be able to draw the half-chair to convince yourself of the noted stereochemical outcome. Label which half-chair you will have drawn. **4 PTS**



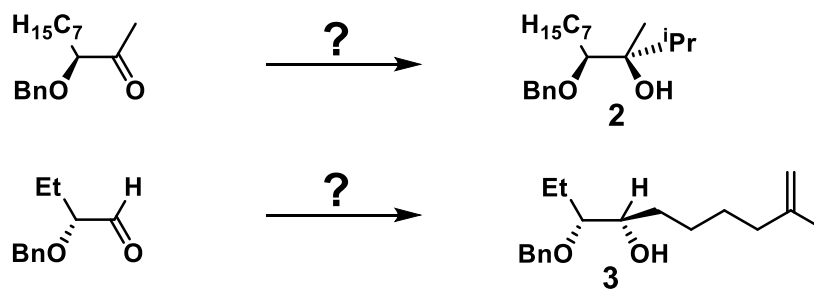
Answer:



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- 3) Provide the reagents required for the synthesis of **2** and **3**. Furthermore, provide the transition state(s), if any, for the reactions that will explain the stereochemical outcome. Is attack from the *Re*- or *Si*-face – note for both cases? **2 PTS**



Answer: