

Chemistry 172Q
March 24, 2005

Exam 3

1 _____/15

2 _____/30

3 _____/30

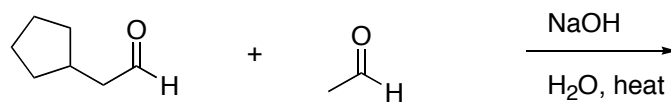
4 _____/20

5 _____/30

Total _____/125

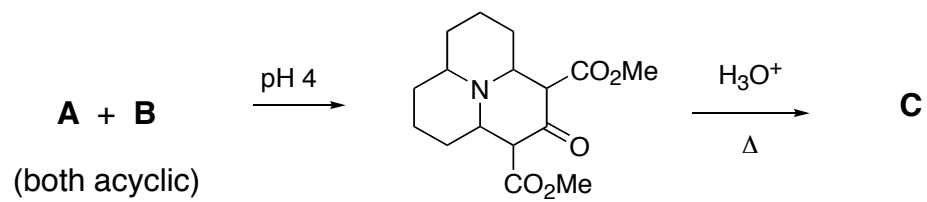
NAME _____

1. Predict the products of the following reaction.



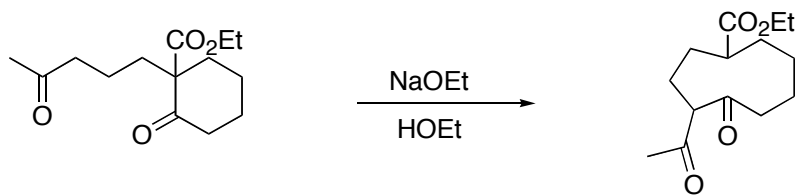
(15 points)

2. Give structures for A-C.



(30 points)

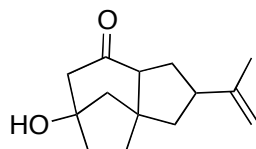
3. a. Provide a mechanism for the transformation below.



- b. Like all similar reactions, this reaction is reversible. Using drawings, explain why the equilibrium favors the 9-membered ring.

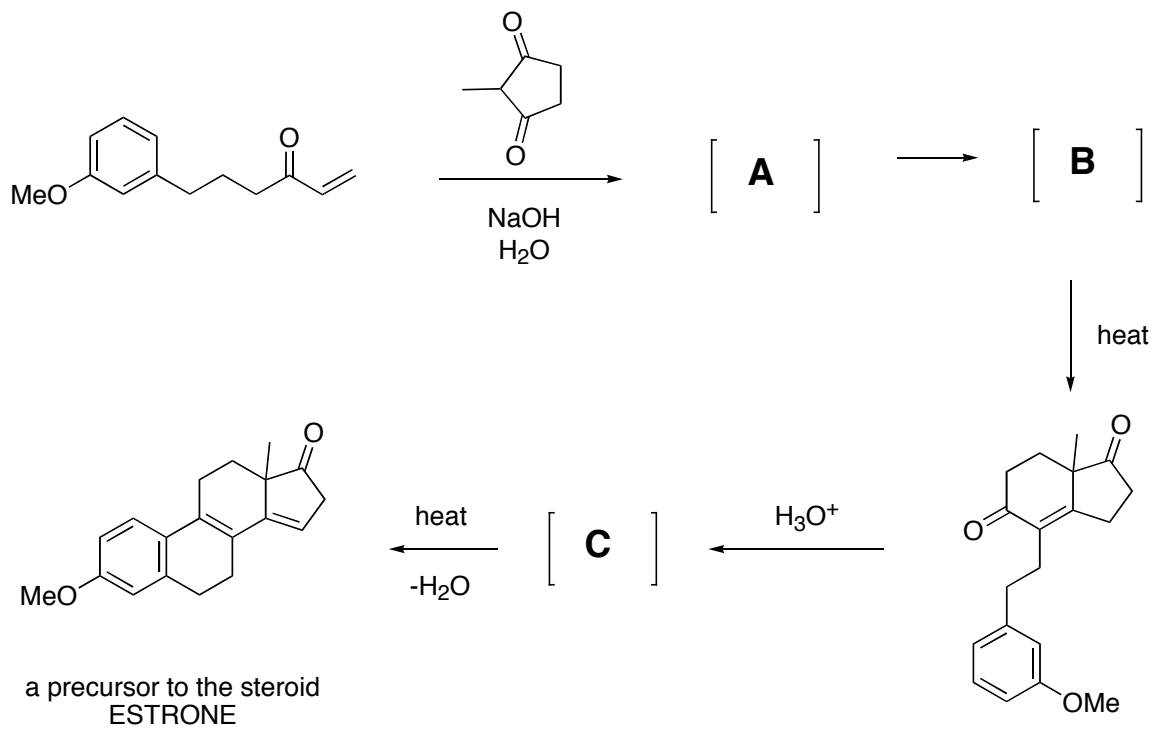
(30 points)

4. Propose a strategy for the synthesis of the target below, beginning with a **monocyclic precursor**. Do not use starting materials or intermediates containing halides.



(20 points)

5. Give structures for A-C.



(30 points)