

Chemistry 172Q
March 24, 2005

Exam 3

1 _____/15

2 _____/30

3 _____/30

4 _____/20

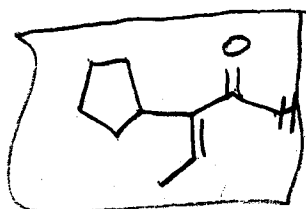
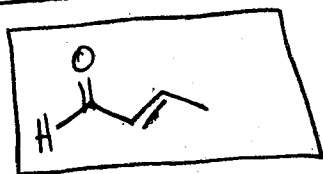
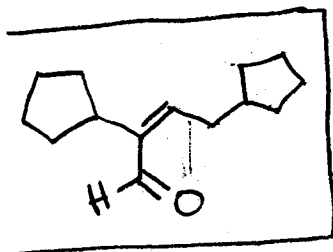
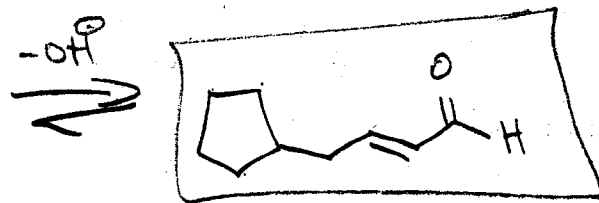
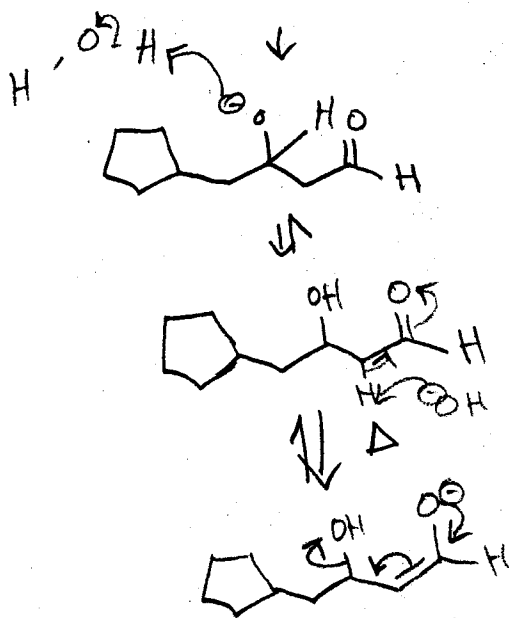
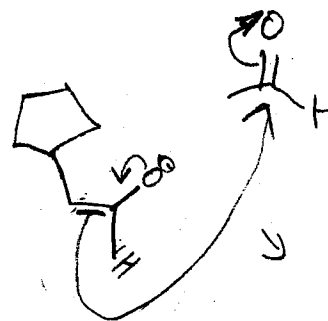
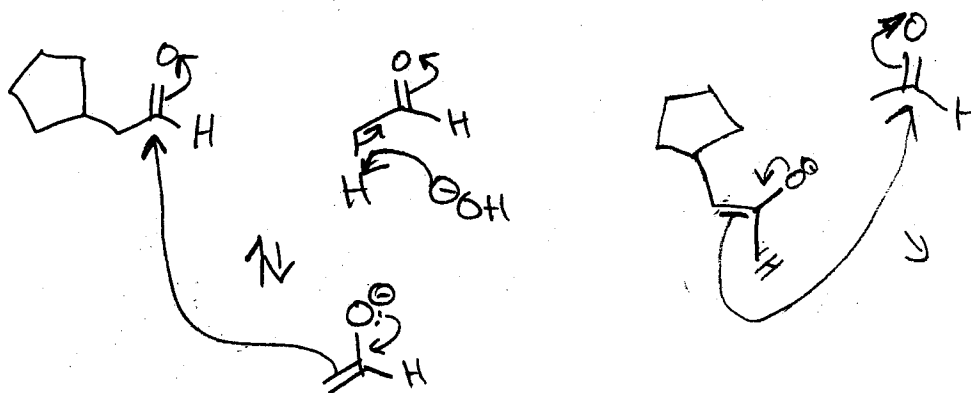
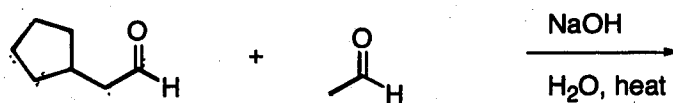
5 _____/30

Total _____/125

NAME

Answer Key

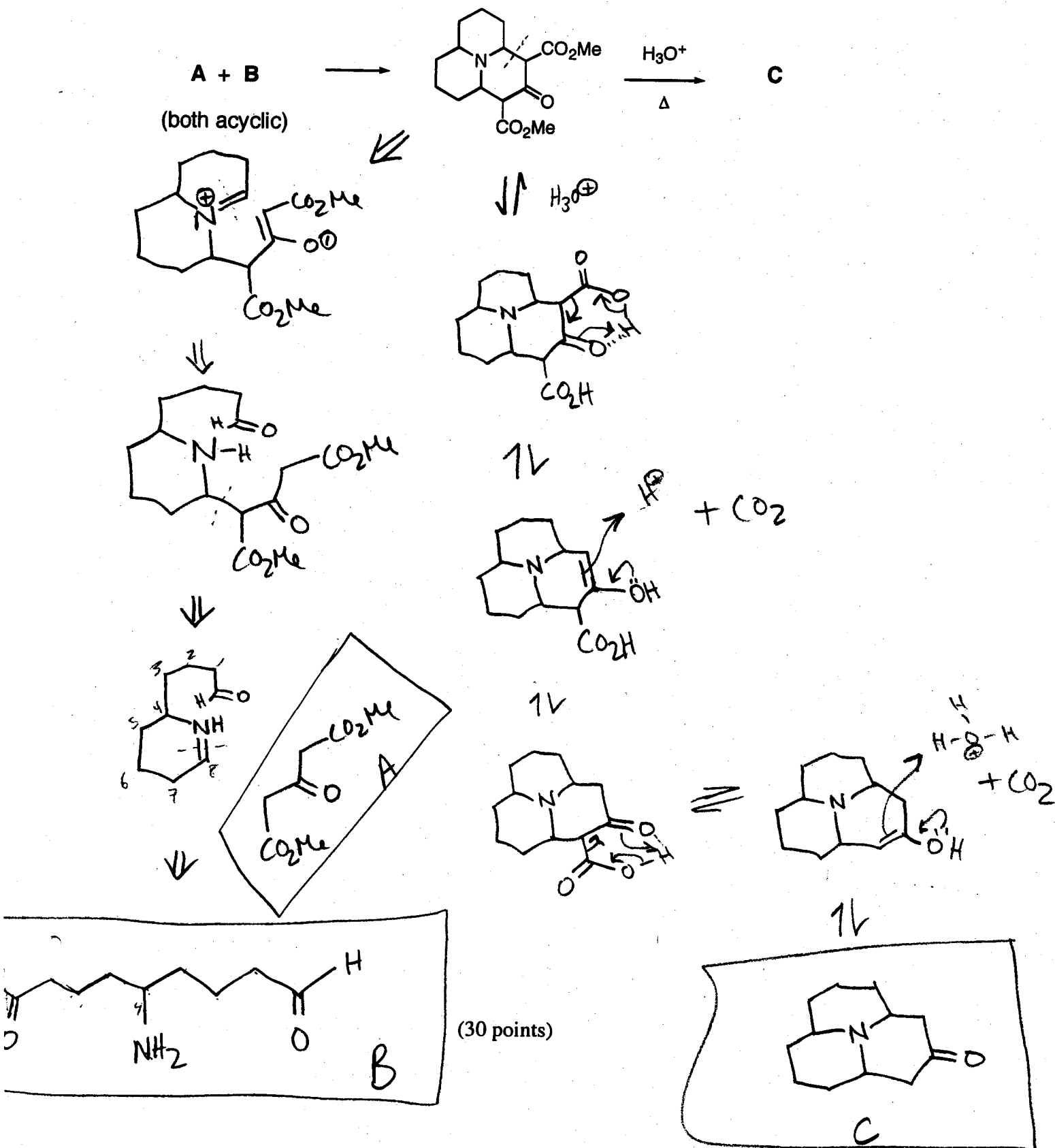
1. Predict the products of the following reactions. Provide a general mechanism for the process.



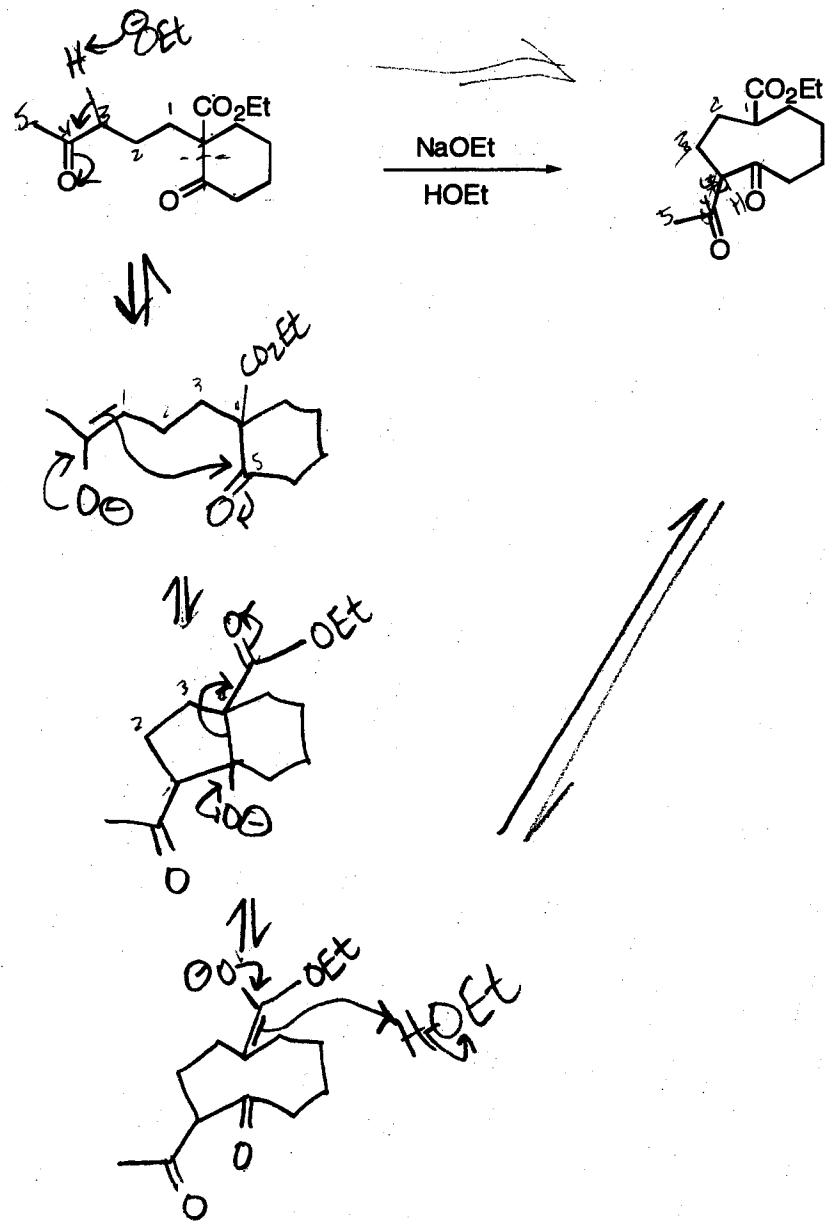
(20 points)

Don't draw Iminium ion formation

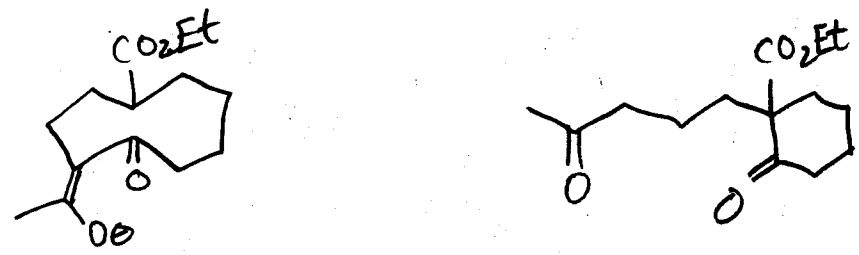
2. Give structures for A-C. Give intermediates to earn partial credit.



3. (a) Provide a mechanism for the transformation below, and explain why the reaction is efficient.



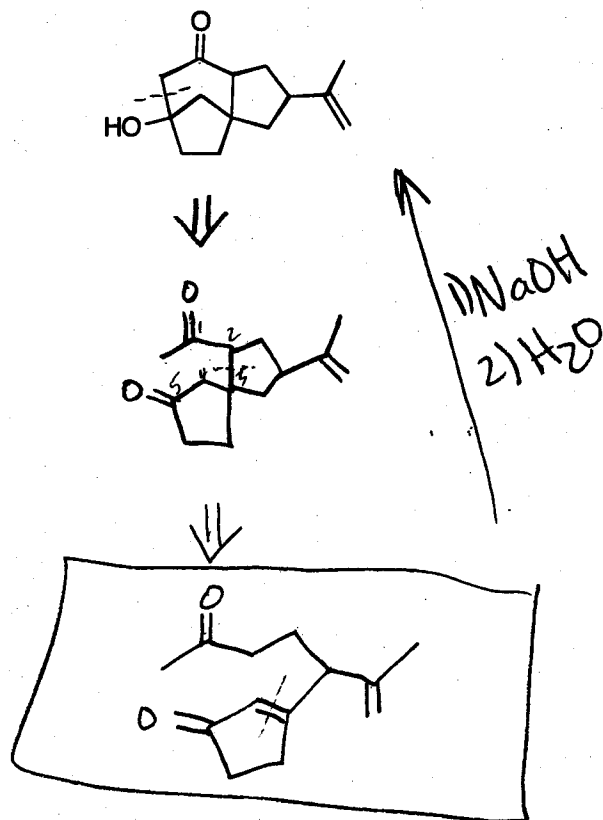
3(b)



stabilizing (25 points)

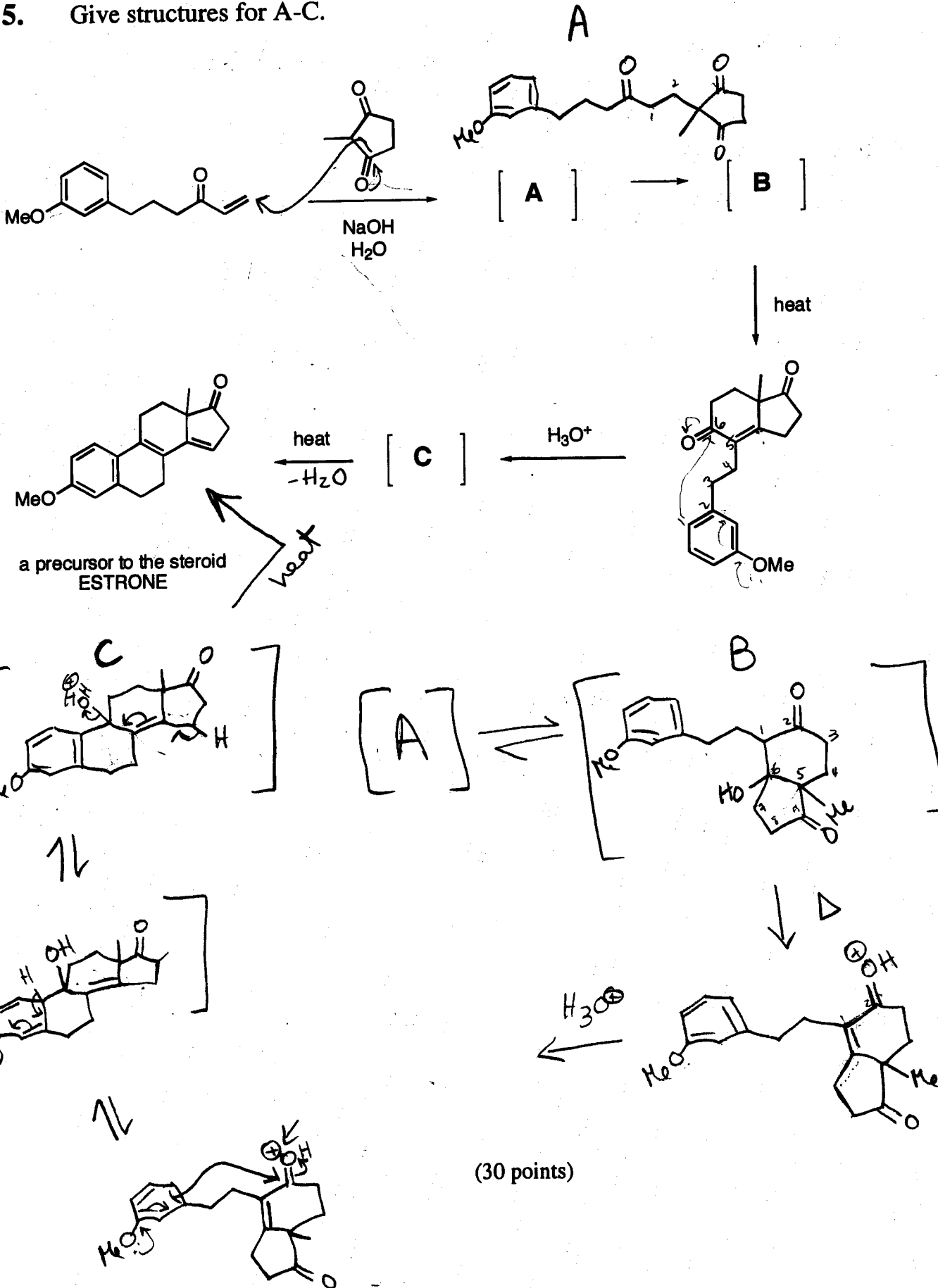
no α -hydrogens
can't
stabilize

4. Propose a strategy for the synthesis of the target below.
Do not use starting materials or intermediates containing halides.



(20 points)

5. Give structures for A-C.



(30 points)