

Chemistry 334

Hour Examination #3

April 27, 1998

Professor Charonnat

Name: _____

Be certain that your examination has five (5) pages including this one.

Put your name on **each** page of this examination booklet.

By putting your name on this examination booklet you agree to abide by California State University, Northridge policies of academic honesty and integrity.

Name: _____

1. (25 points)

For each of the following five (5) questions write the reagent (or sequence of reagents) that will effect the desired transformation. More than one reaction may be required to achieve the conversion.

A.



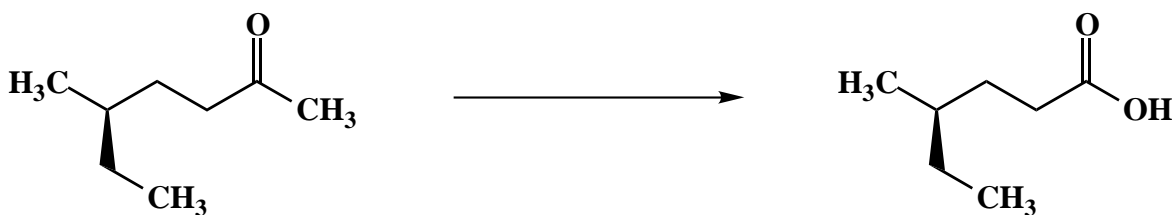
B.



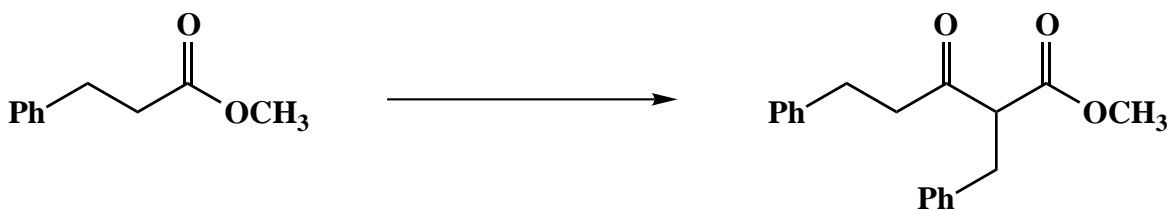
C.



D.



E.

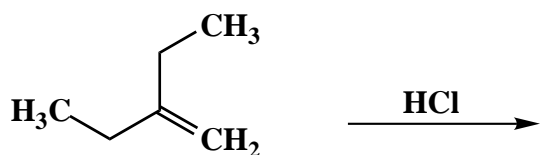


Name: _____

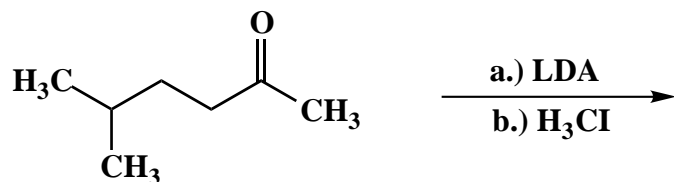
2. (25 points)

For each of the following five (5) questions draw the structure of the expected major organic product. If relevant, **explicitly** specify absolute and/or relative stereochemistry.

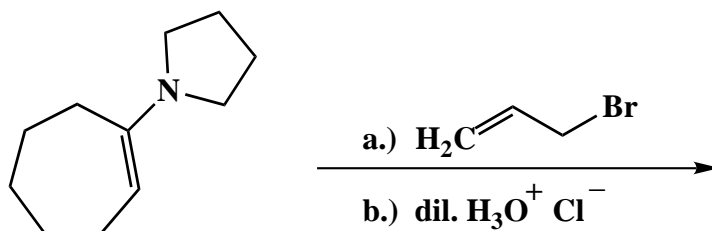
A.



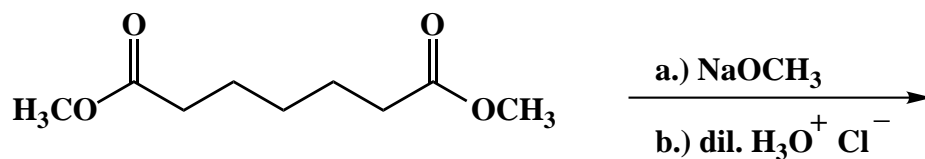
B.



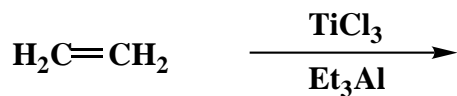
C.



D.



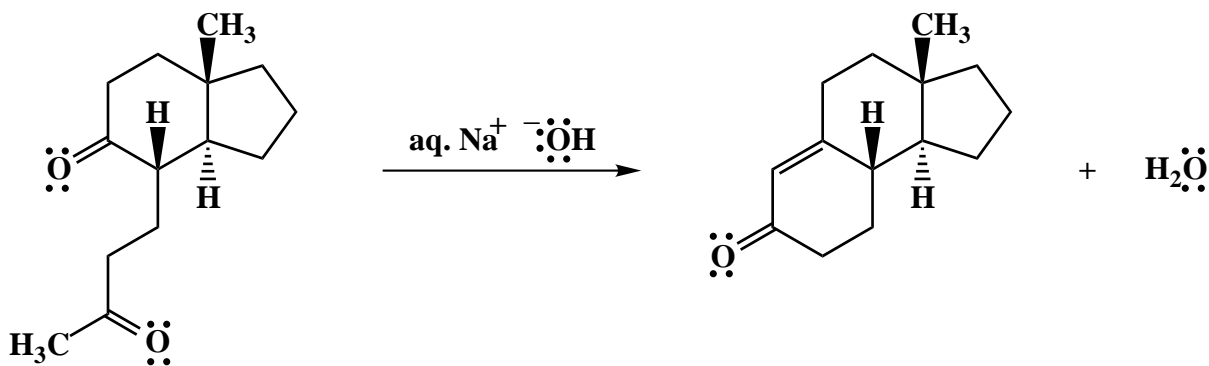
E.



Name: _____

3. (25 points)

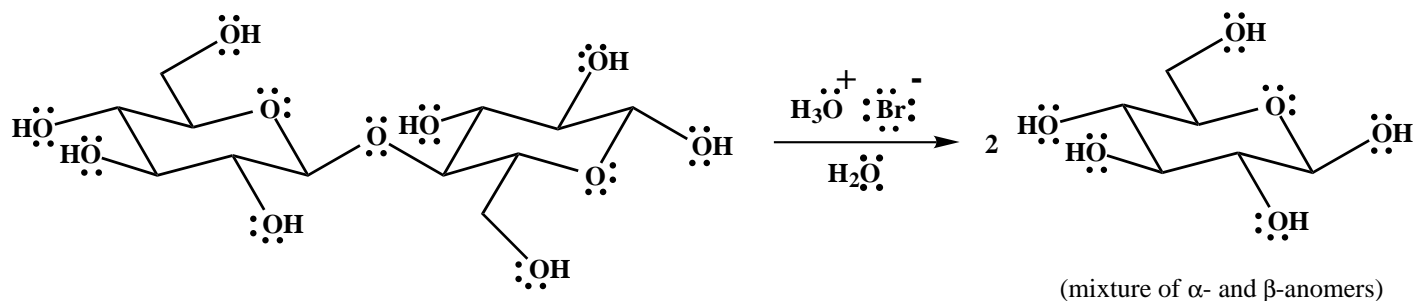
Draw the mechanism of the following reaction, using the curved-arrow notation to indicate the reorganization of electron density. Show **all** intermediates and denote **all** unshared electrons, formal charges and countercharges where appropriate. Clearly denote reversibility or irreversibility for each primary mechanistic step.



Name: _____

4. (25 points)

Draw the mechanism of the following reaction, using the curved-arrow notation to indicate the reorganization of electron density. Show **all** intermediates and denote **all** unshared electrons, formal charges and countercharges where appropriate. Clearly denote reversibility or irreversibility for each primary mechanistic step.



Congratulations!

1	/25
2	/25
3	/25
4	/25
Total:	/100