Chemistry 220b, Section 1   Name _____

Quiz 4 (25 pts)

Thursday, April, 14, 2011

Chapter 17-19, 22

Write and sign the VU Honor Pledge:
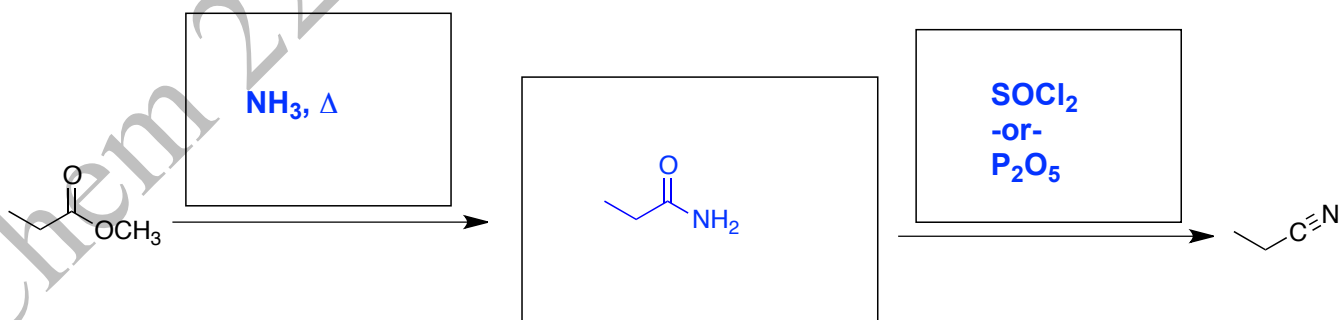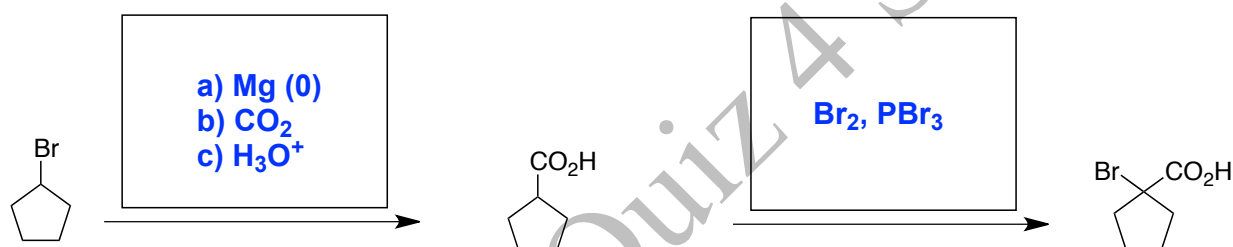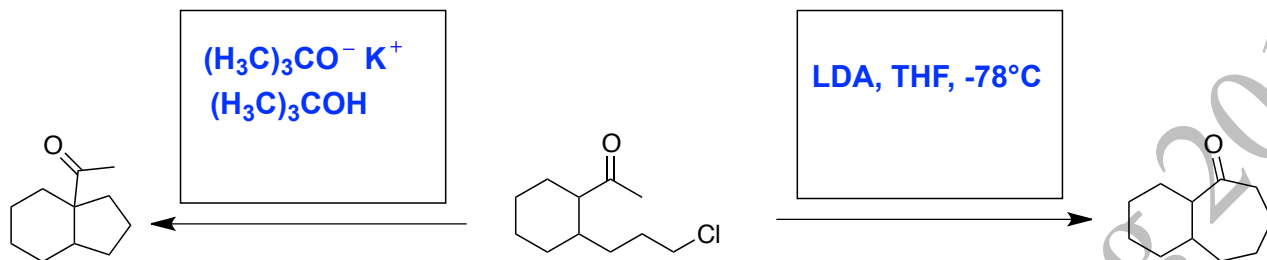
_____

signature

This Quiz is closed book and closed notes

NOTE: It is difficult for me to give you partial credit if you do not show your work!

Neatness counts
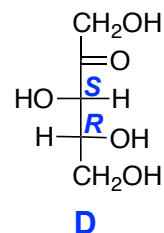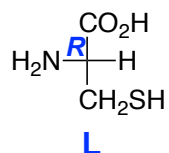
Good Luck !!

1. Fill in all necessary reagents, intermediates, and/or products. (14 pts)

$(H_3C)_3CO^- K^+$
$(H_3C)_3COH$

LDA, THF, -78°C

a) Mg (0)
b) CO_2
c) H_3O^+

Br_2, PBr_3

NH_3, Δ

$SOCl_2$
-or-
P_2O_5

2. Determine the absolute stereochemical configuration (*R*/*S*) of each stereocenter of the following Fischer projections *and* designate the compounds as either D or L. (8 pts)

CO₂H
H₂N—**R**—H
CH₂SH

L

CH₂OH
=O
HO—**S**—H
H—**R**—OH
CH₂OH

D

3. Convert the Fischer projection of D-galactose into its β-pyranose Haworth projection. (3 pts).

CHO
H——OH
HO——H
HO——H
H——OH
CH₂OH

D-Galactose
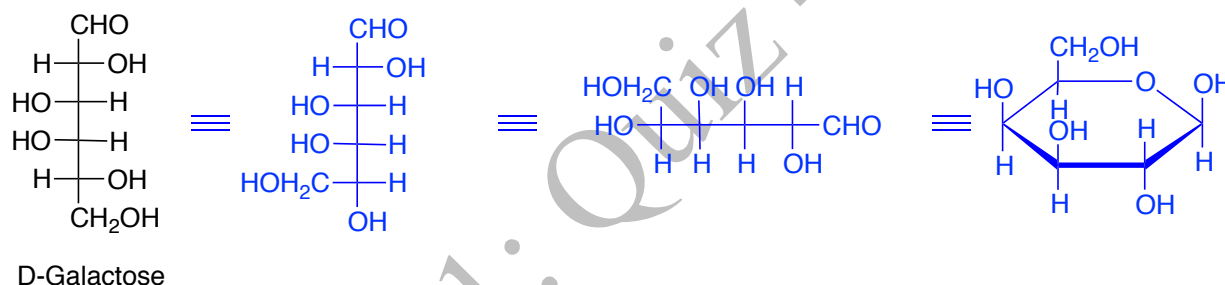
Problem   1:_____ (14 pts)

2:_____ (8 pts)

3:_____ (3 pts)

Total out of 25: _____