Chem 51C Quiz 3 (10 points; 10 minutes) April 27, 2015

Academic Honesty Policy. Academic honesty is strictly enforced on quizzes, exams, and other aspects of this course. Academic dishonesty will result in a failing grade in the class and a letter in the student's file. Activities constituting academic dishonesty include:

Cheating
• Copying from others during an examination.
• Communicating exam answers with other students during an examination.
• Offering another person's work as one's own.
• Taking an examination for another student or having someone take an examination for oneself.
• Tampering with an examination after it has been corrected, then returning it for more credit.
• Using unauthorized materials, prepared answers, written notes, or concealed information during an examination.

Dishonest Conduct
• Stealing or attempting to steal an examination or answer key from the instructor.
• Allowing another student to copy off of one's own work during a test.

Collusion
• Any student who knowingly or intentionally helps another student perform any of the above acts is subject to discipline for academic dishonesty.

I understand and will abide by this academic honesty policy: ____________________________ (signature) Seat: ______

1. What two enamines are formed when 2-methylcyclohexanone is treated with (CH₃)₂NH? (Smith 4th ed. 21.25, 2 pts)

2. What carbonyl compound and amine are formed by hydrolysis of the following imine? (Smith 4th ed. 21.26a, 2 pts)

3. What lactol (cyclic hemiacetal) is formed from intramolecular cyclization of the following hydroxy aldehyde (Smith 4th ed. 21.35b, 2 pts)

4. Draw the alkene product of the following reaction sequence. (Smith 4th ed. 21.46c, 2 pts)

5. Draw the missing step of the mechanism shown below. (Smith 4th ed. 21.70, 2 pts)