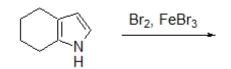
Name:

## Organic II Lecture Spring 2011 Quiz #6 (10 points)

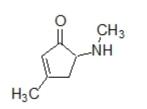
- 1. Draw a structure for the product resulting from treatment of N,N-dimethylhexan-2-amine with a peroxy acid and heat. (3 points, problem 19-21a)
- 2. Predict the correct  $pK_b$  value for the structure below within +/- 1 unit. (2 points)



3. Predict the product of the following reaction. (2 points)



4. Identify the correct systematic name for the following structure. (3 points)



a) 1,N-dimethyl-3-oxocyclopent-1-enamine
b) 4,N-dimethyl-2-oxocyclopent-3-enamine
c) 4-methyl-2-(methylamino)cyclopent-4-enone
d) 5-amino-3,N-dimethylcyclopent-2-enone
e) 3-methyl-5-(methylamino)cyclopent-2-enone