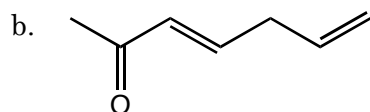
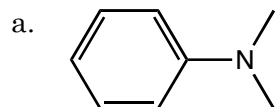
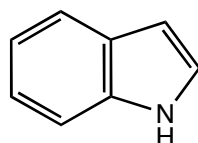


Quiz 4

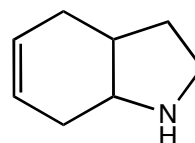
1. a. Draw resonance structures for the molecules pictured below, and
b. rank the structures in order from lowest to highest energy (in the event of a tie, assign the structures the same rank). If you draw any structures that are considered to be insignificant contributors to the resonance hybrid, remember to indicate that fact.



2. Two cyclic amines are drawn below, (a) determine which will be the stronger base and (b) explain your choice.



A



B

3. Predict the major products for the following reaction (do not concern yourself with the stereochemistry).

