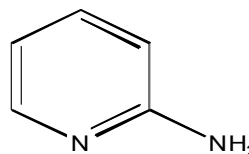
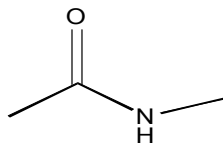
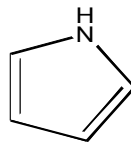
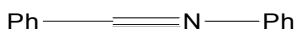


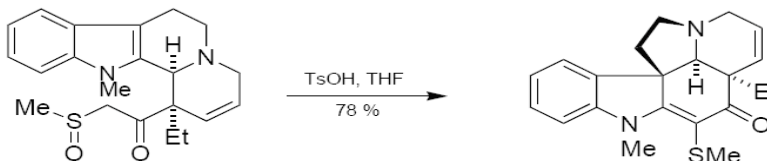
Questions: Group Meeting Oct 18, 2006

1) Predict the energetically preferred site of protonation of the molecules below and explain your preference. [Carey and Sundberg, Vol A, 3rd edition, page 60]



2)

An interesting rearrangement has been reported by Langlois & coworkers (*J.Org. Chem.* **1985**, *50*, 961). This rearrangement is illustrated below.



Provide a mechanism for the above transformation.

3) Draw a reasonable mechanism for the formation of an acetal, under acidic conditions. Any ketone and alcohol(s) are acceptable. Remember to include all arrow pushing etc.

4) What are the measurement errors associated with taking the optical rotation of any enantioenriched and/or pure compound. Briefly mention the magnitude of the errors relative to one another. [shamefully stolen from Dale E. Ward]