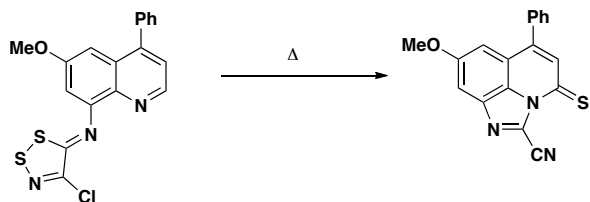


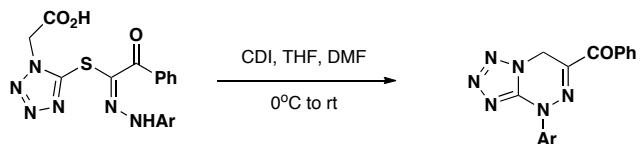
Due Date: May 3<sup>rd</sup> 2008

Provide reasonable mechanisms for the following transformations. (5 points each)

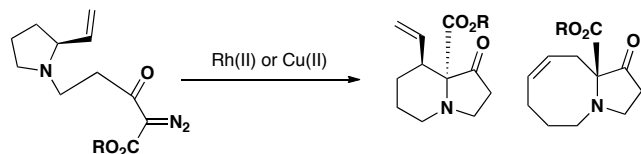
①



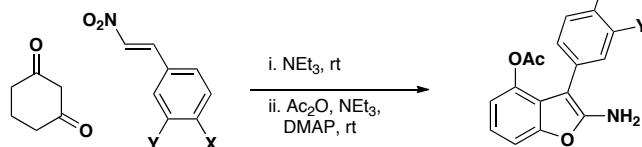
②



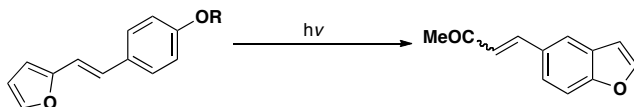
③



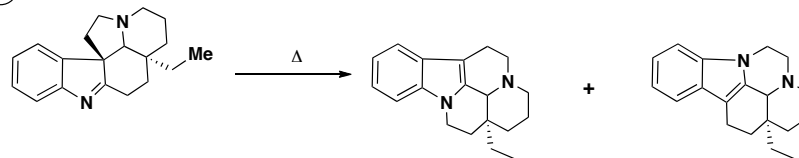
④



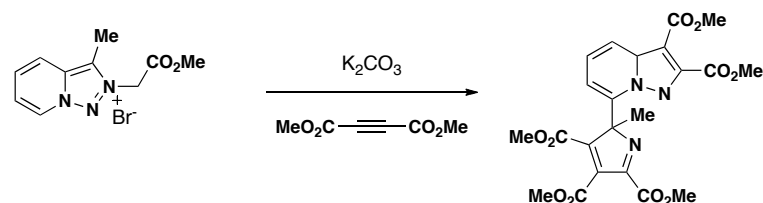
⑤



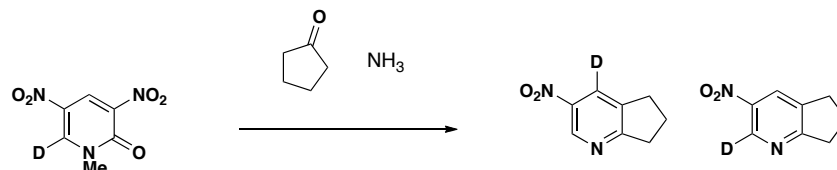
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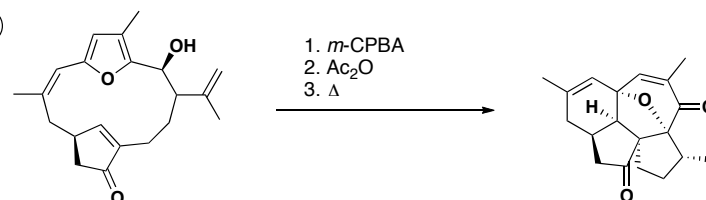
⑦



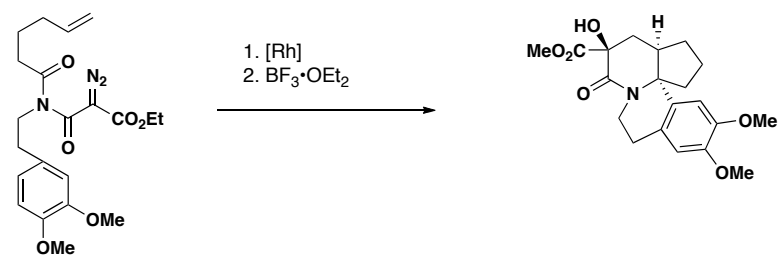
⑧



⑨



⑩



Provide simple syntheses for the following compounds. (5 points each)  
(You may not use Pd or other similar metals that achieve cross-coupling.)  
Hint: Most syntheses possible in 1–3 steps.

