

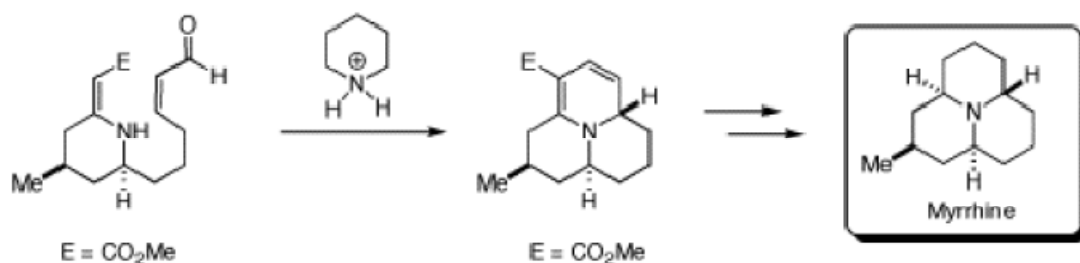
PROBLEMS

MAY, 21

1.- In Hsung's synthesis of myrrhine the following transformation was achieved with amazing selectivity.

a) Please provide a 3-D drawing of myrrhine.

b) Provide a mechanism with 3-D drawings to rationalize the observed selectivity.



2.- As a pivotal step in the synthesis of the freshwater cyanobacterial hepatoxin cylindrospermopsin, Weinreb and co-workers carried out the following transformation:



Provide a mechanism of the overall transformation and identify intermediate A.