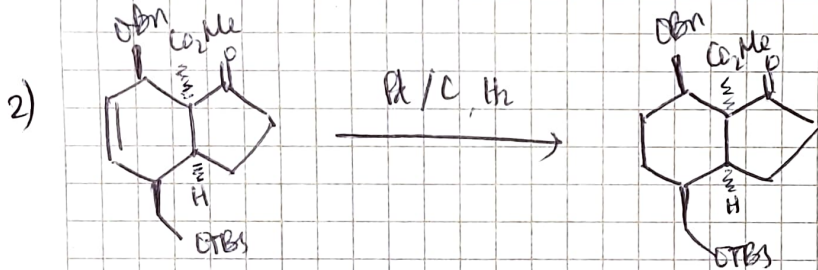
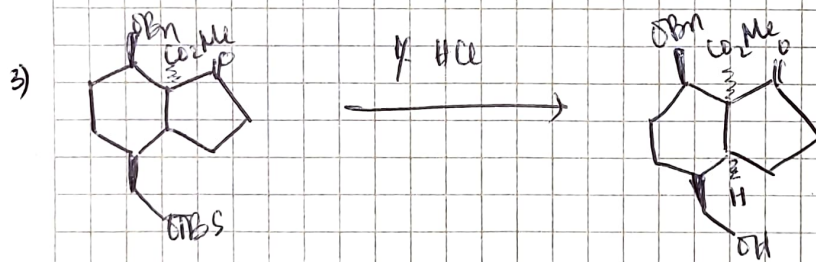


Diels Alder Cycloaddition

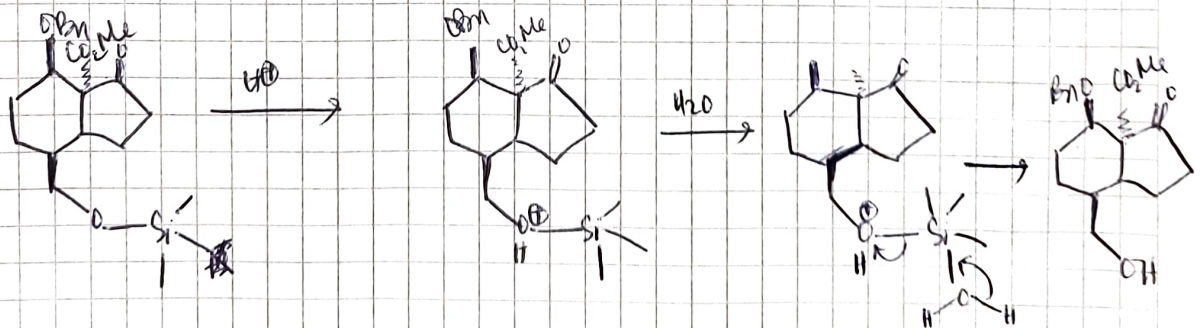
(endo: exo)

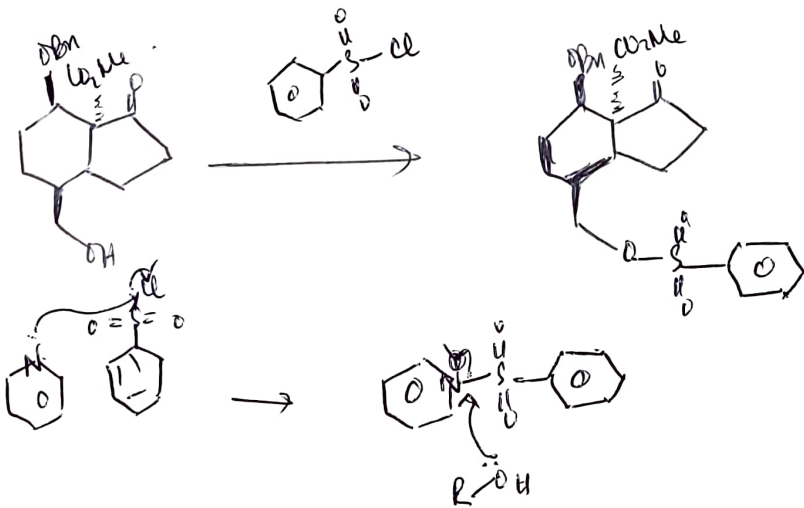
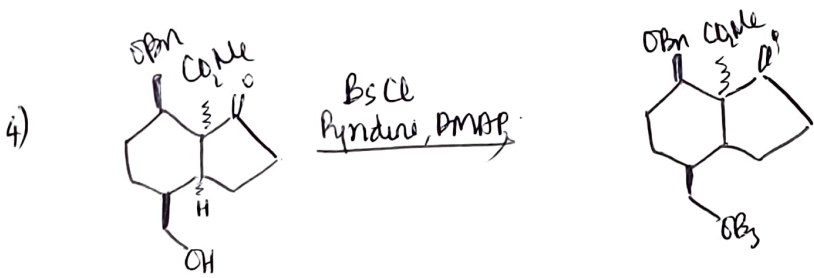


Hydrogenation



Silyl-ether cleavage



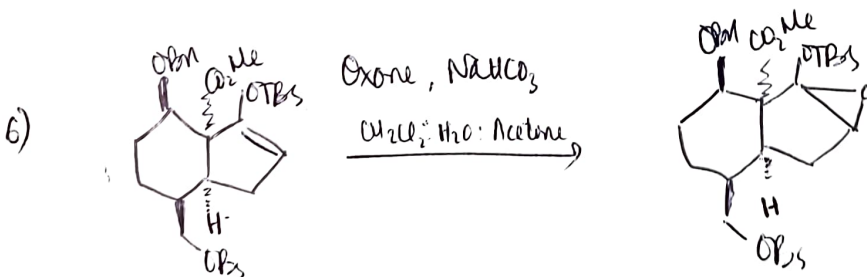
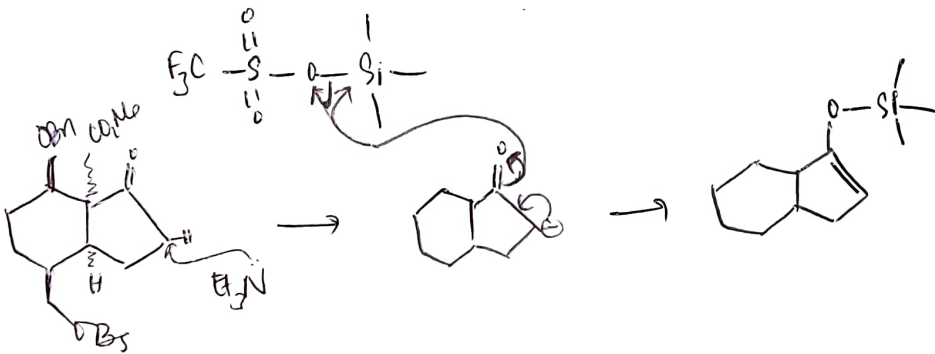
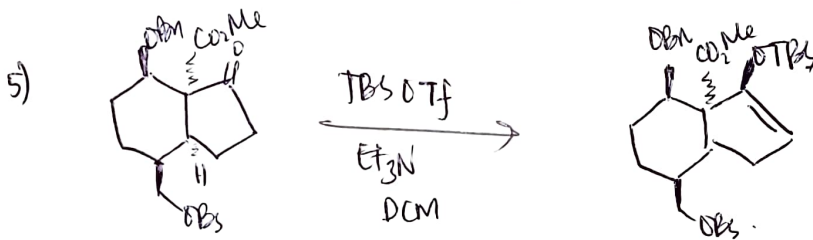


Sulfonation

DMAP: Cat amount

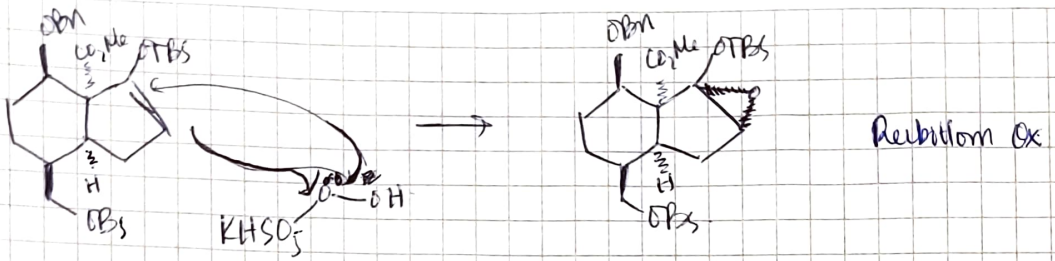
RT Rxn, Reduce

[Pyr] by a factor of 5

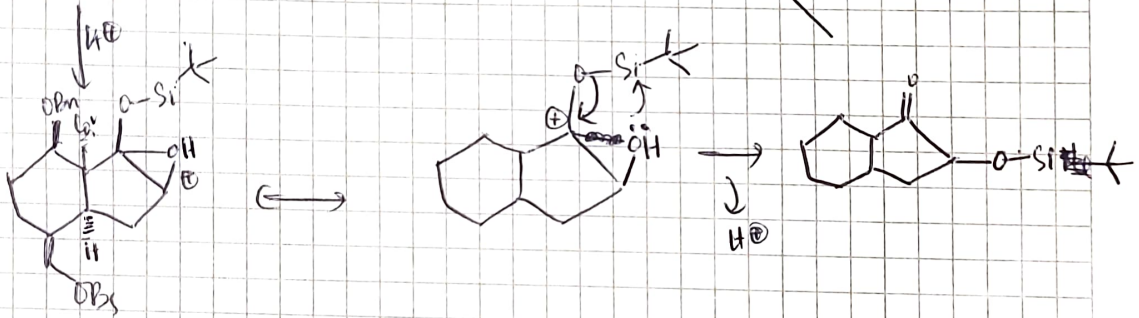
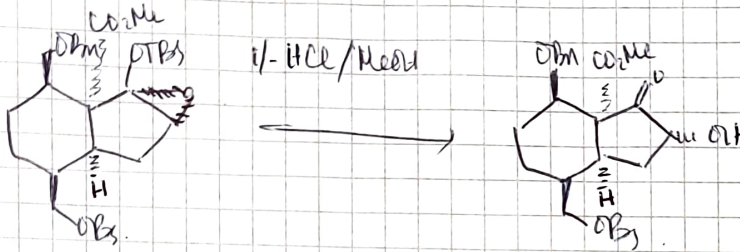


Oxone + H<sub>2</sub>O

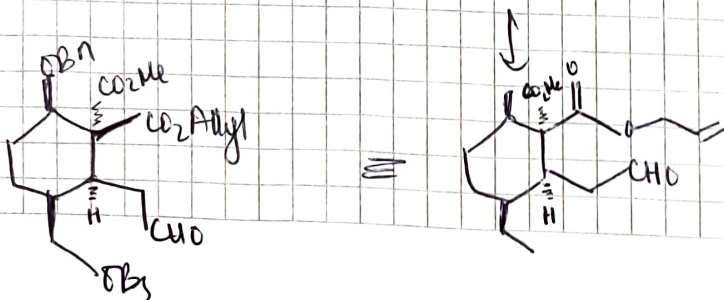
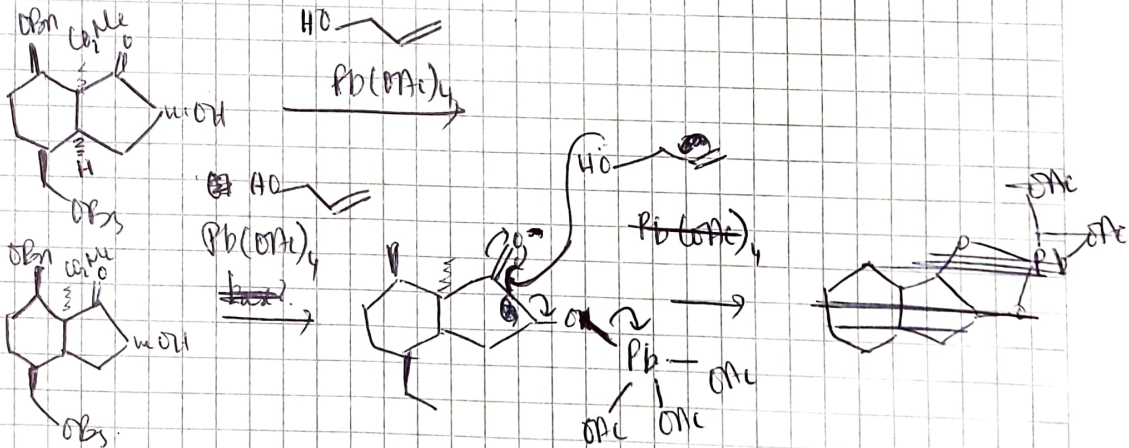




7)

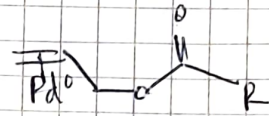
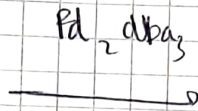
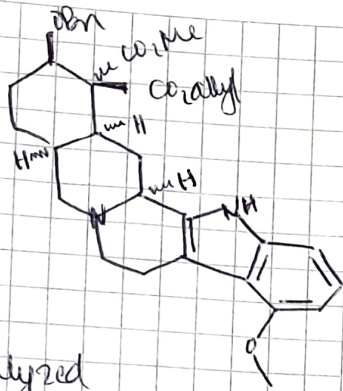


8)



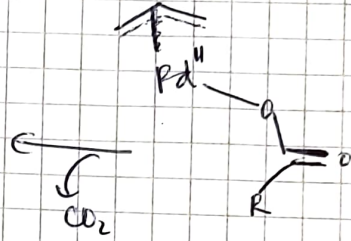


11)

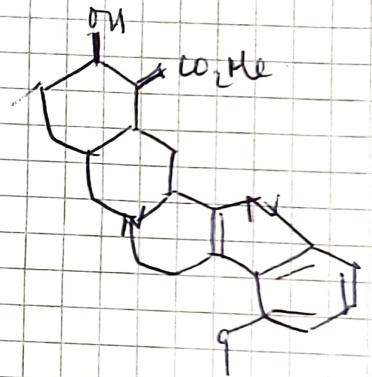
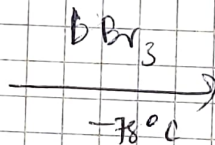
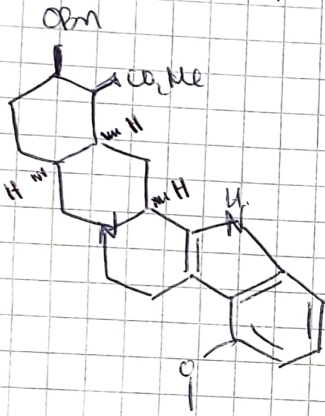


Pd Catalyzed

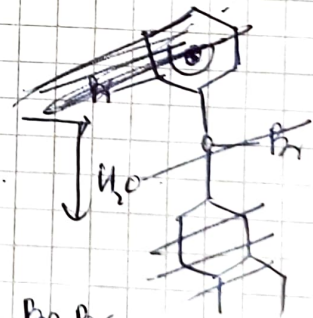
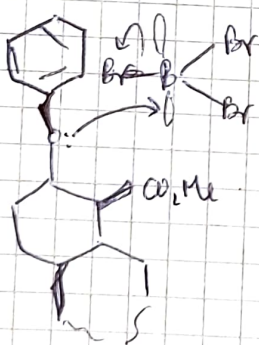
deallylation / decarboxylation



12)



13)



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