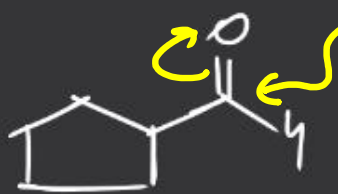


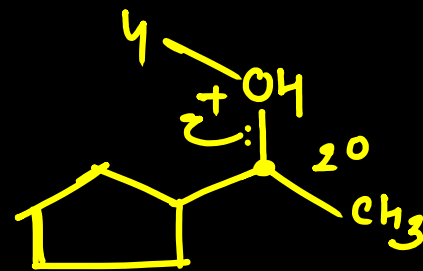
*
Howo

10 min *



1) $\text{CH}_3\text{-MgBr}$
 II) H_2SO_4
 III) BH_3/THF
 IV) $\text{H}_2\text{O}_2/\text{NaOH}$

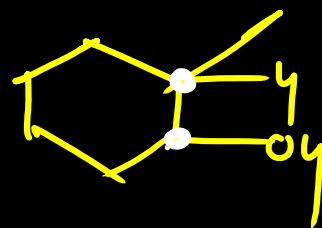
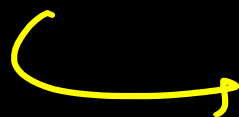
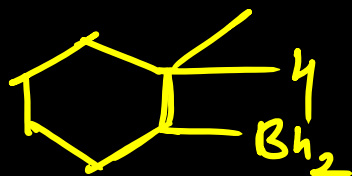
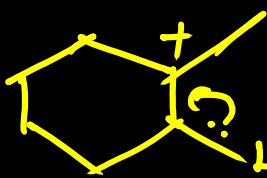
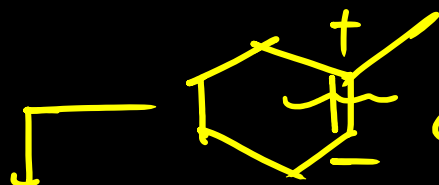
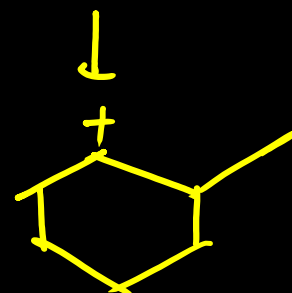
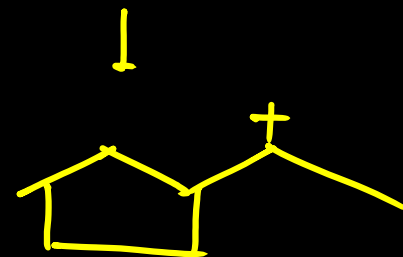
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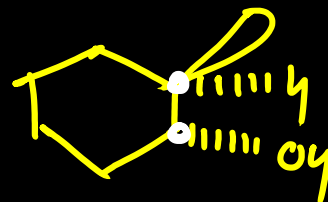
* Pord-1

IUPAC

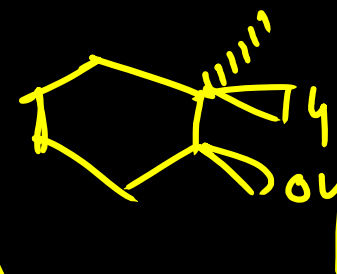
* Spino/Bicyclo



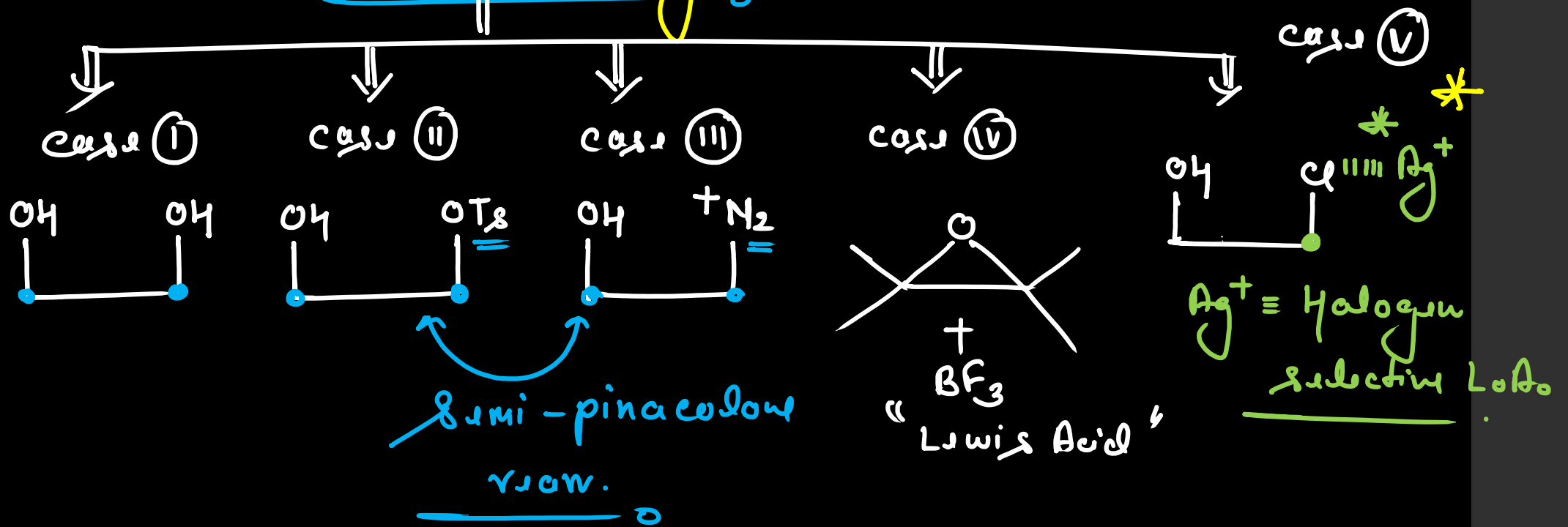
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OK

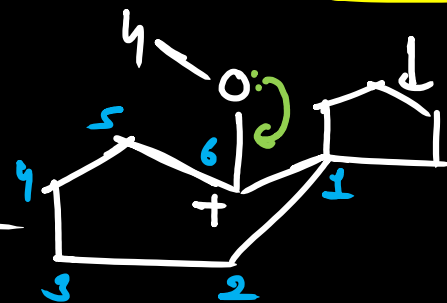
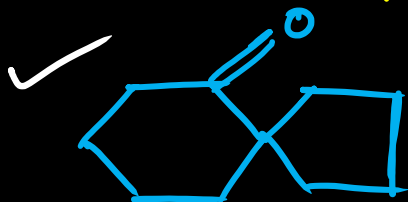
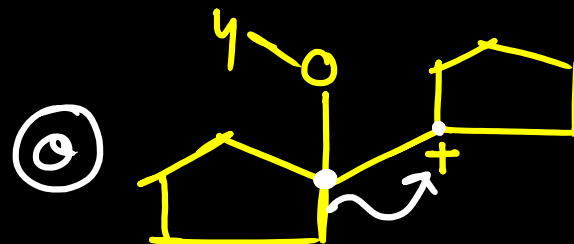
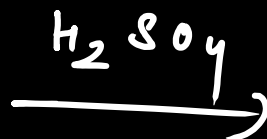
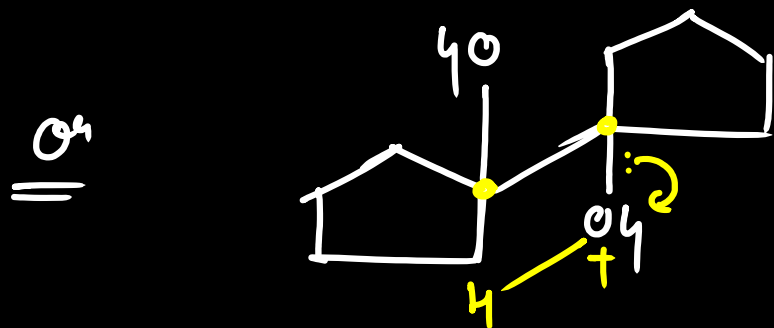
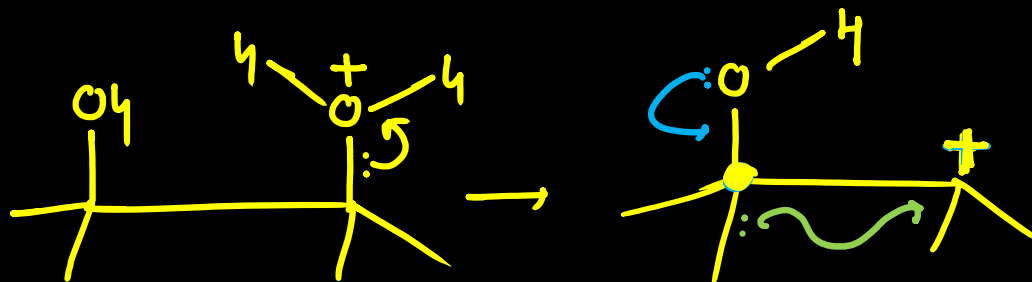
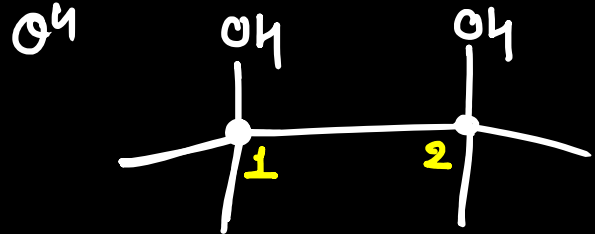


"Pinacol - Pinacolone rearrangement"

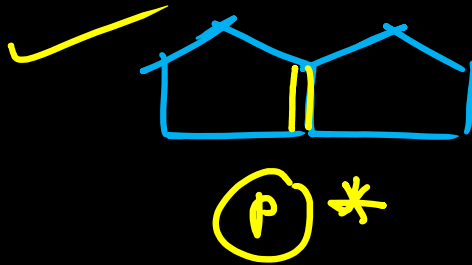
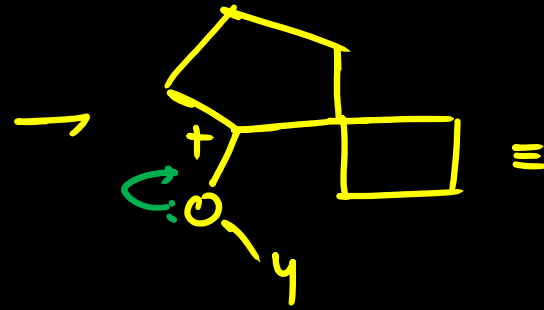
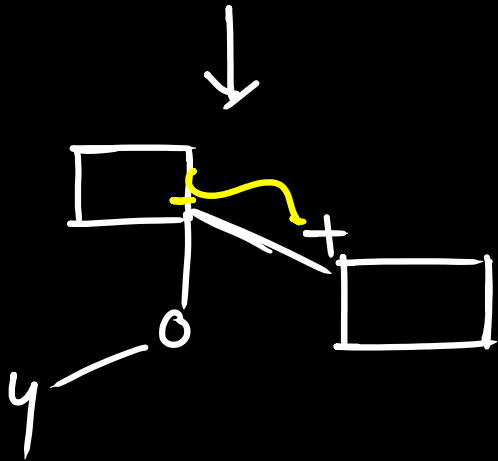
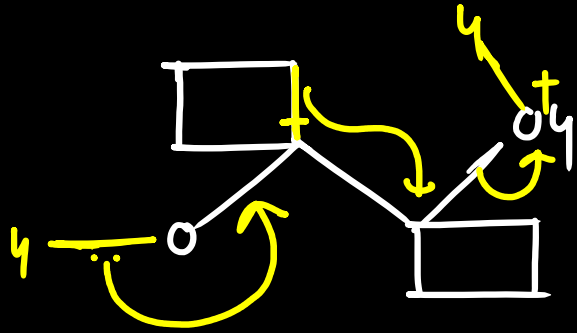


comp ①

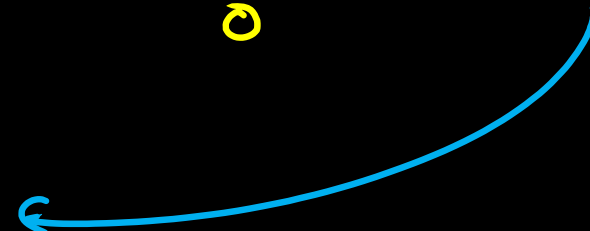
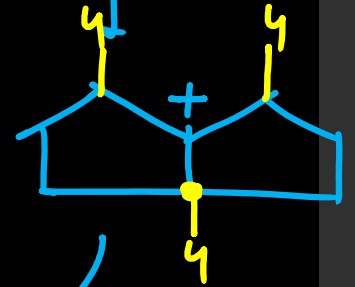
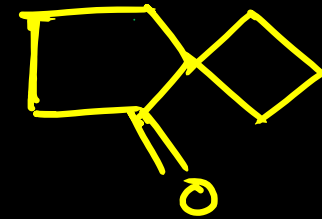
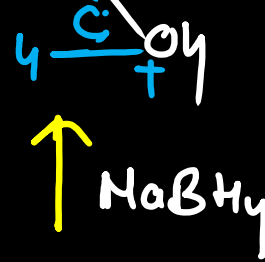
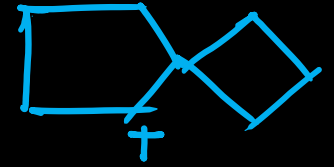
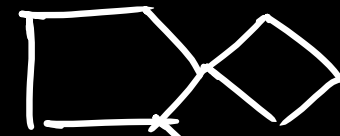
Level-①



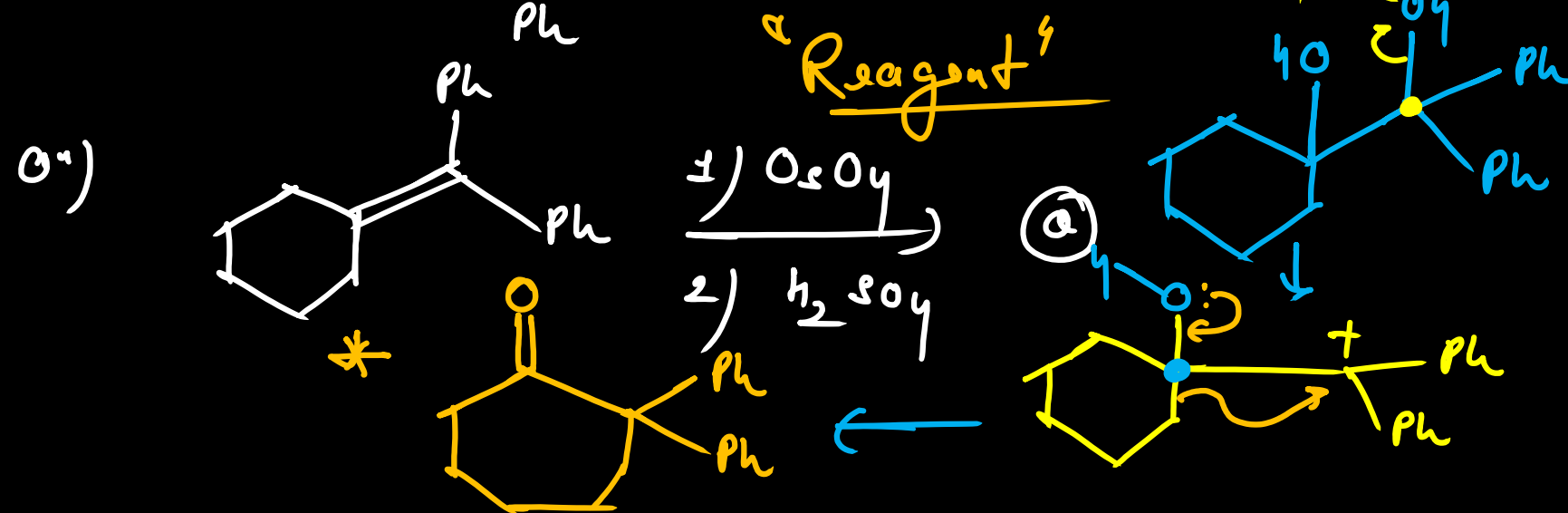
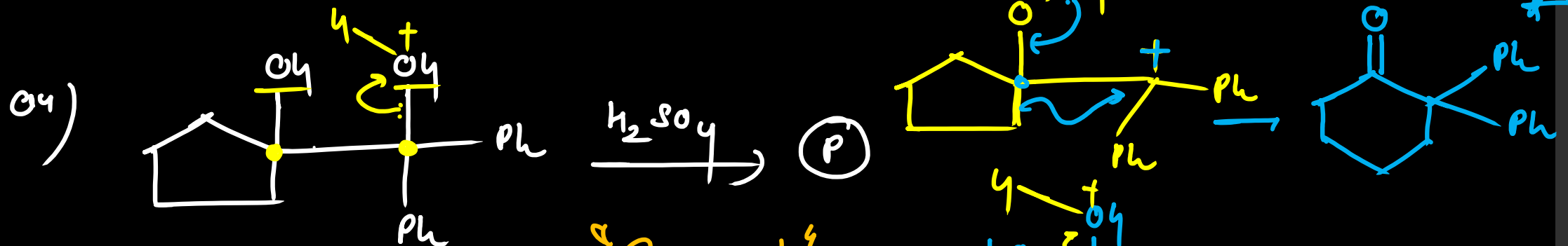
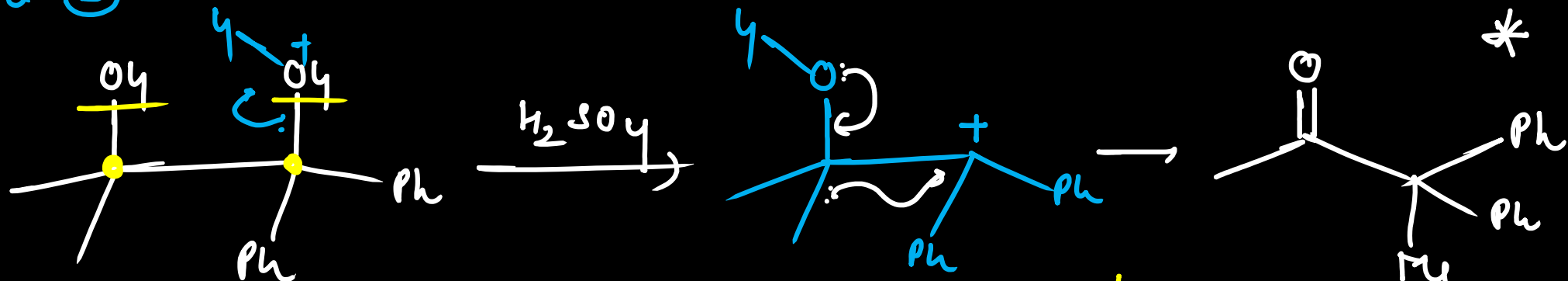
1102



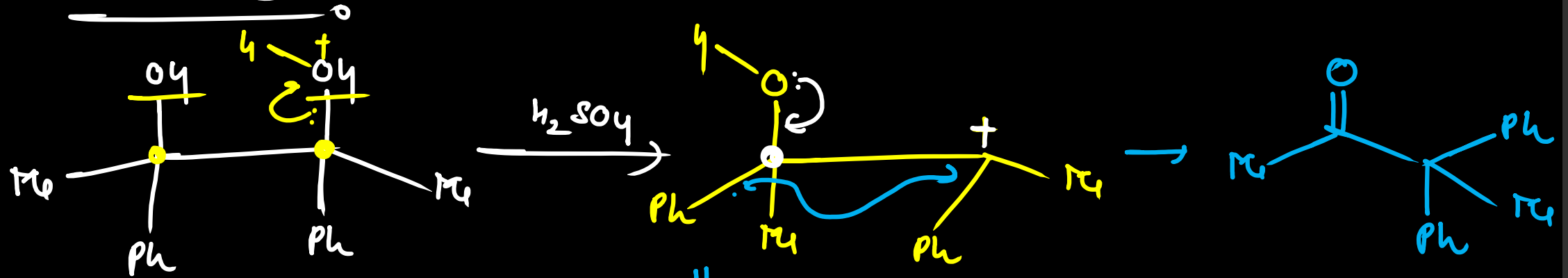
- ① H_2SO_4
- ② NaBH_4^*
- ③ H_2SO_4



Level-2

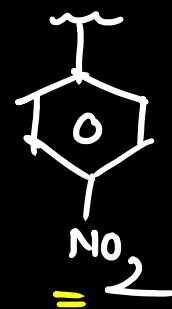
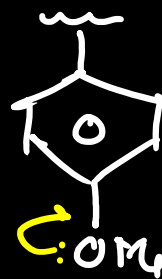
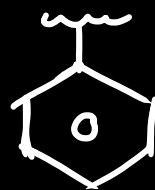


Level (3)



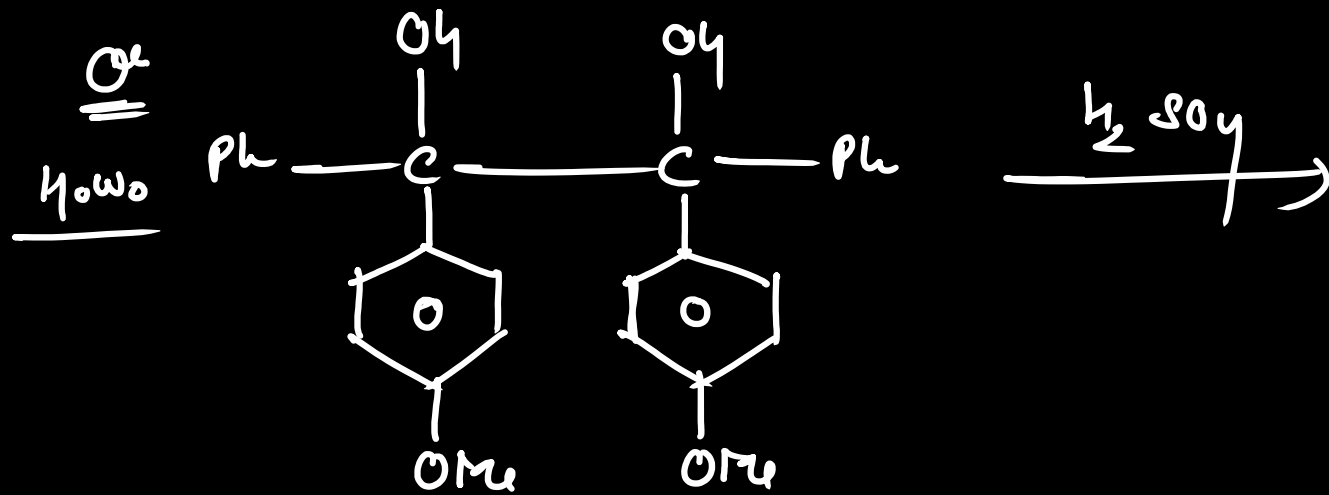
⇒ Migratory aptitude
 (1) $\text{H} > \text{Ph} > \text{Me}^*$

(2)



* $\boxed{b > a > c}$

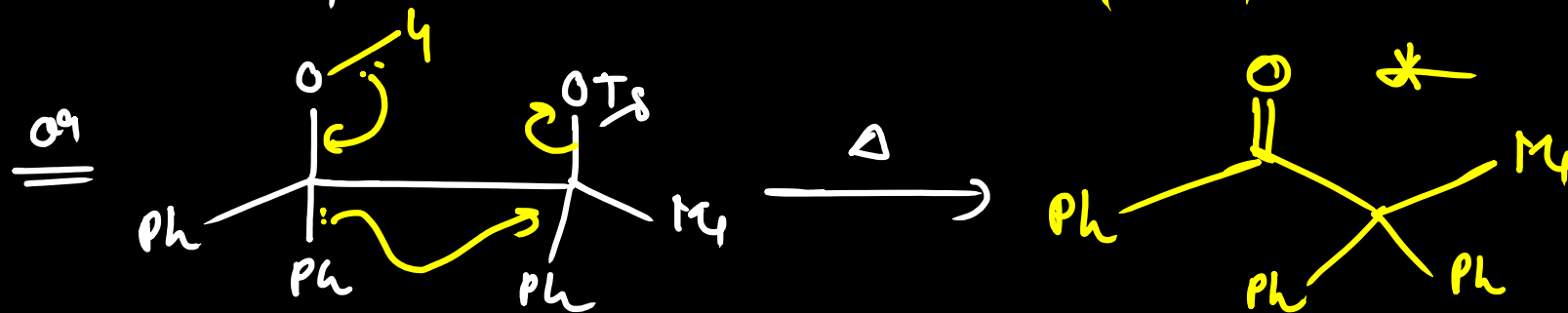
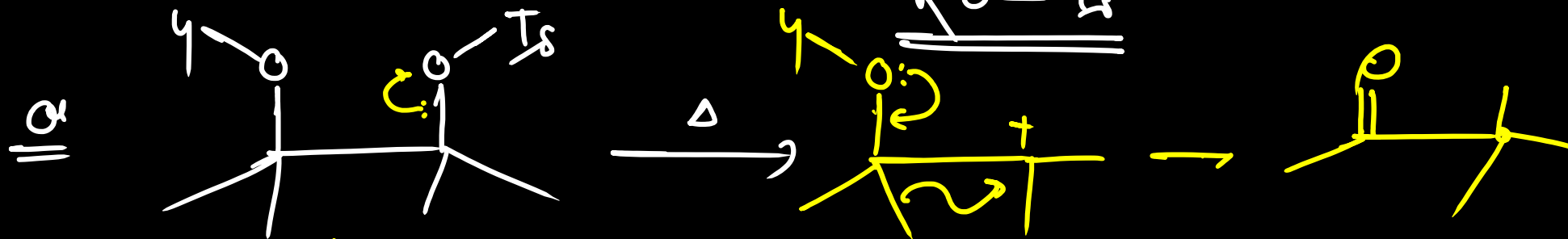
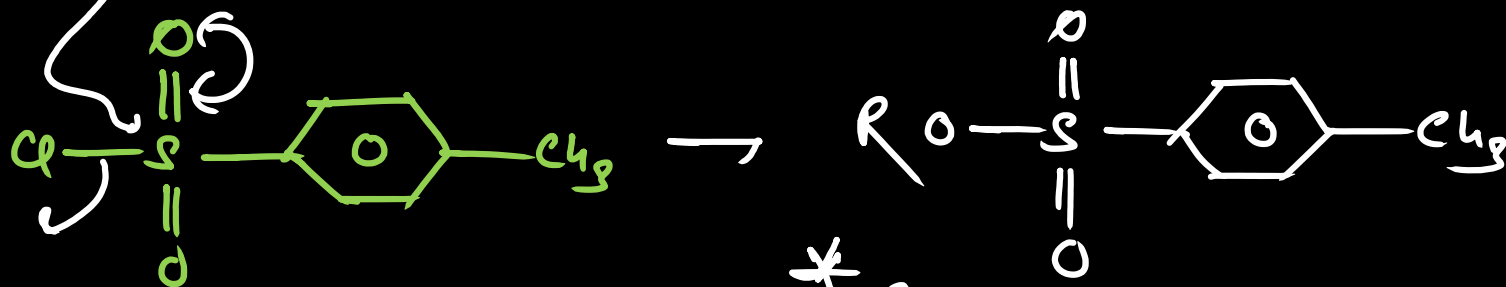
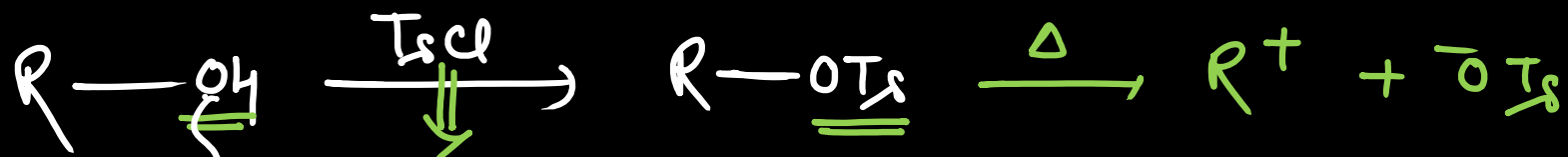
= 2



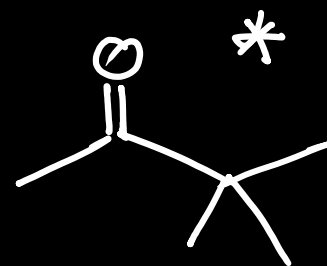
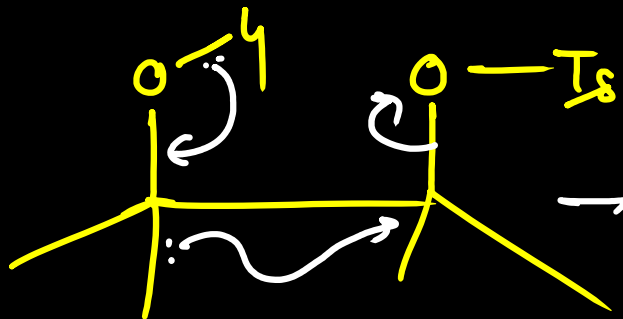
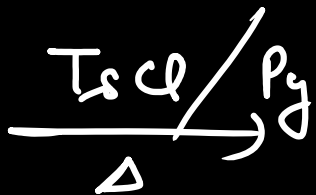
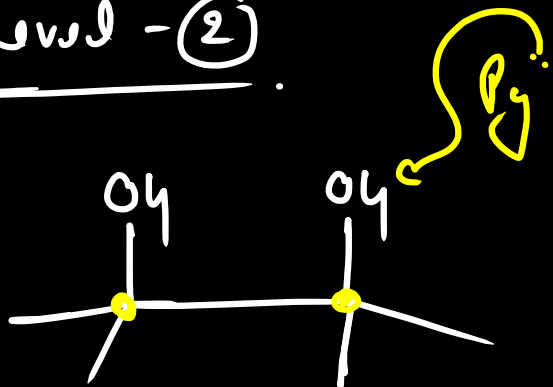
Case - (2)



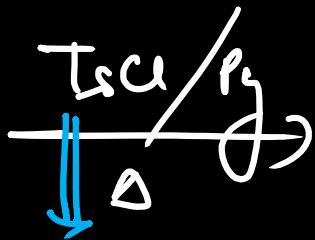
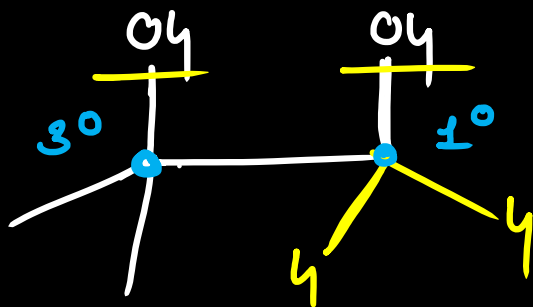
Level - (1)



Level - (2)



04



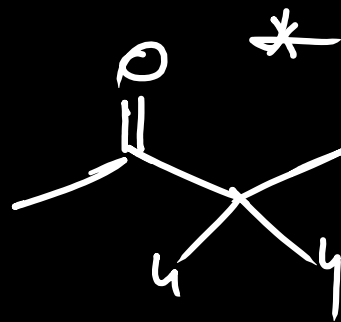
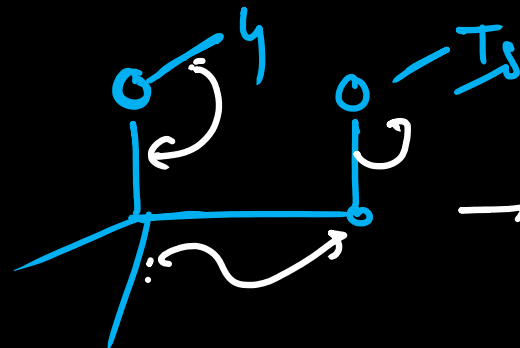
Bulky

Tosylation

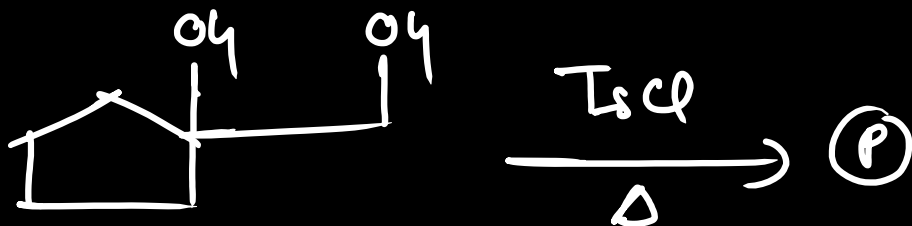
$1^\circ > 2^\circ > 3^\circ$

* Rate

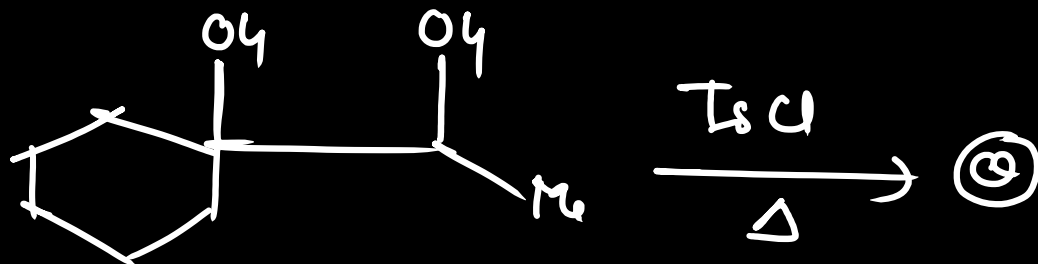
(P)



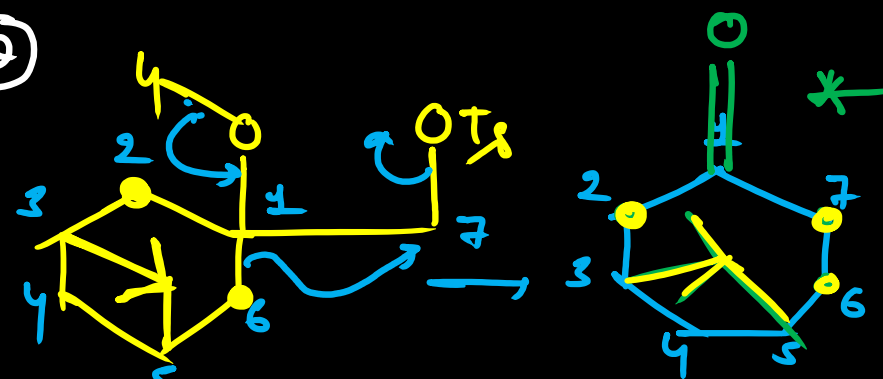
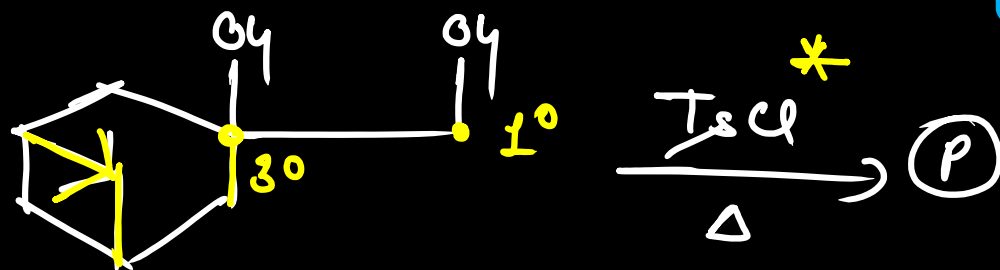
Q4
Howo



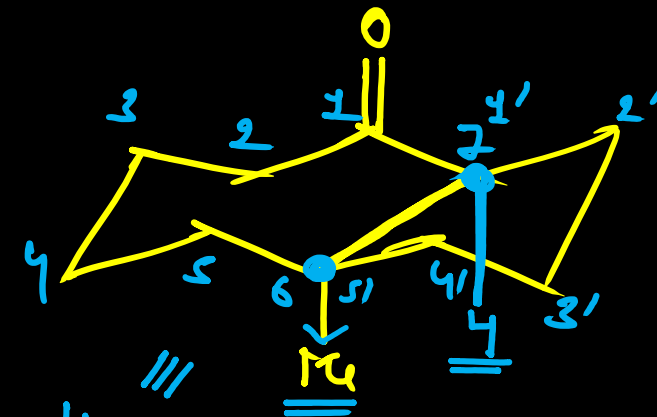
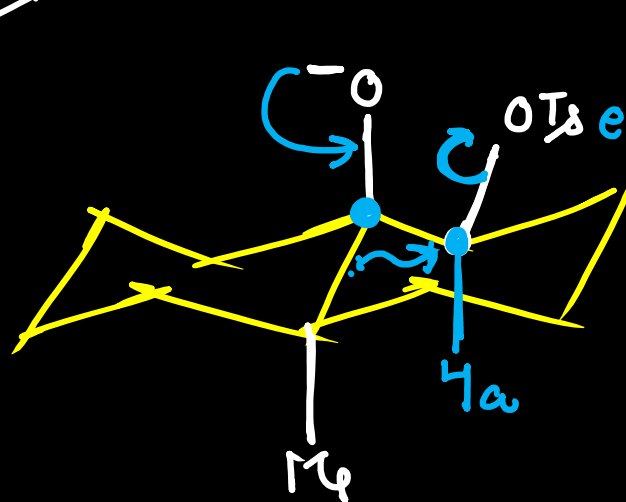
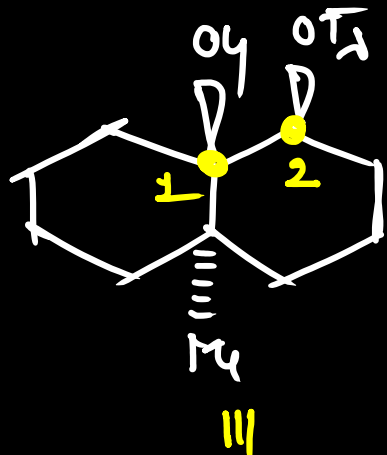
Q5
Howo



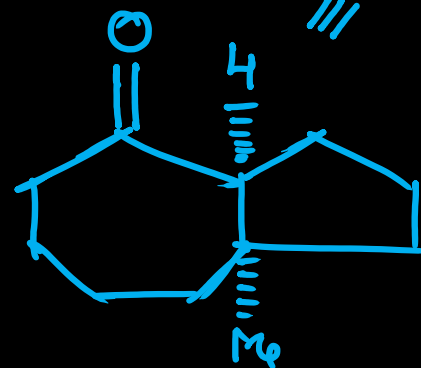
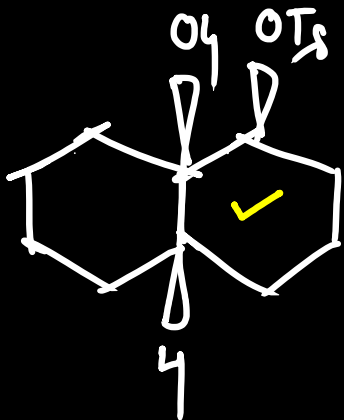
Q6

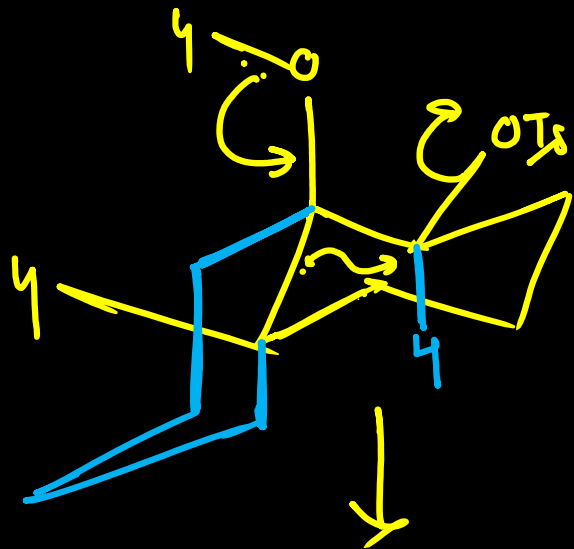


|| Q

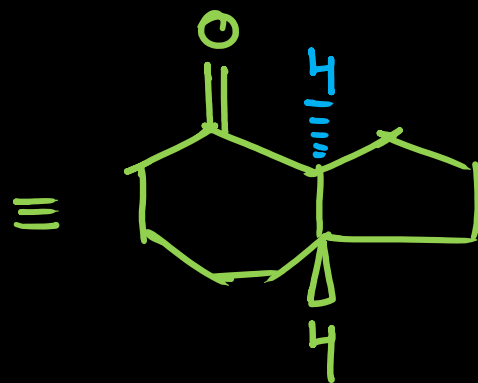
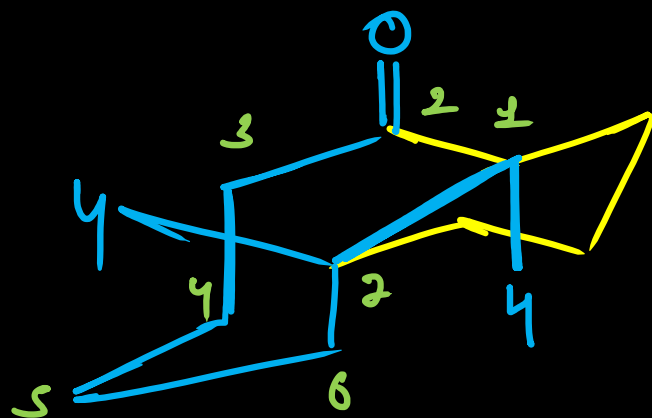


|| Q

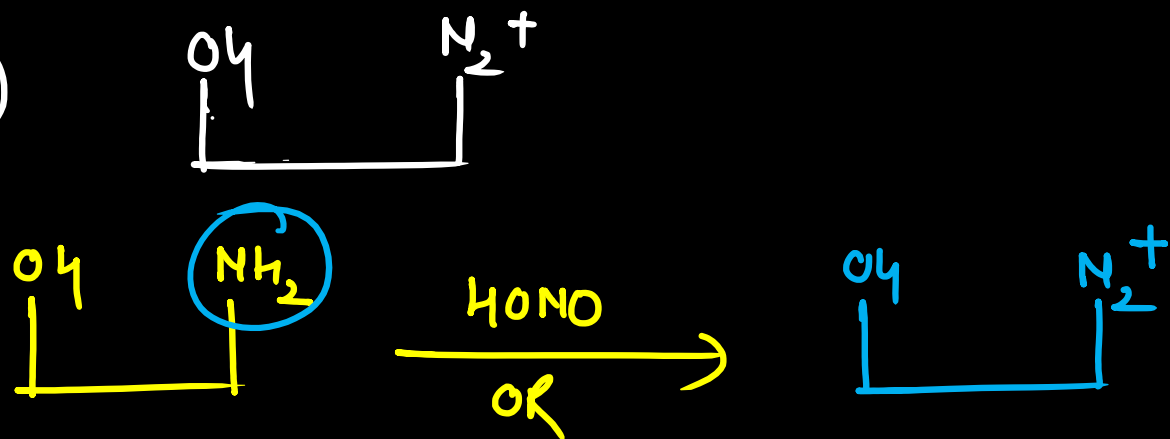




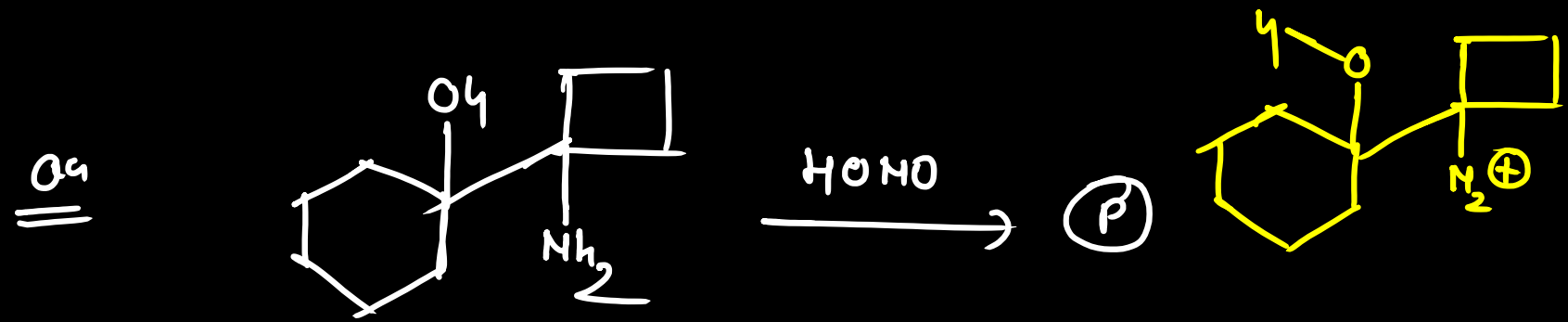
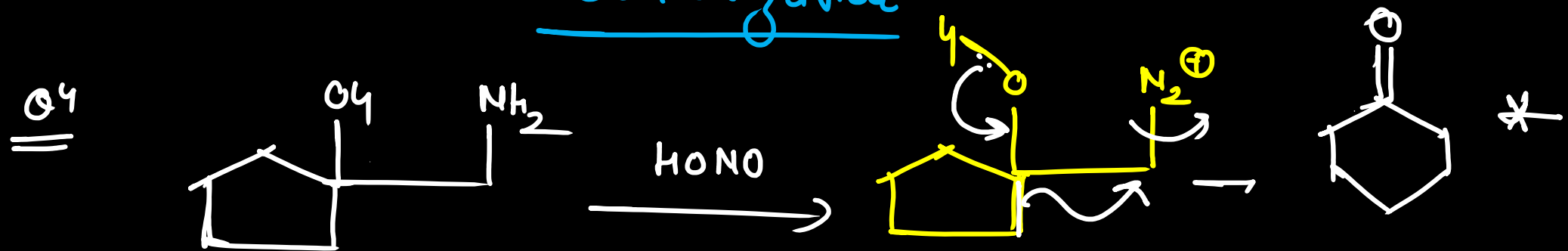
"cis-decaline"



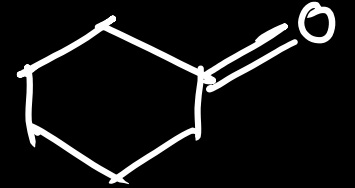
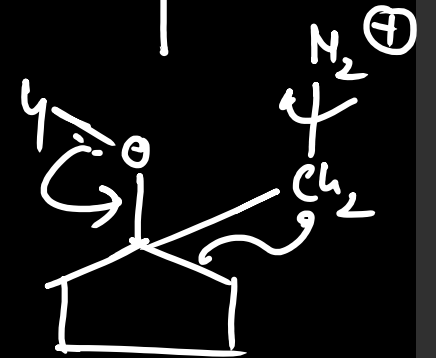
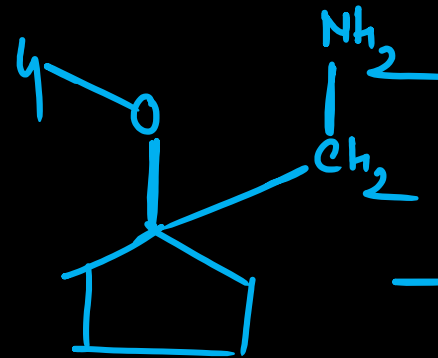
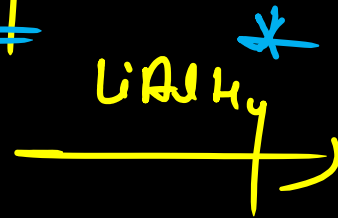
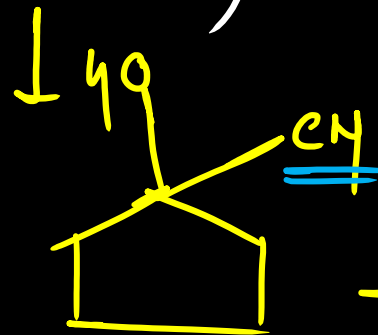
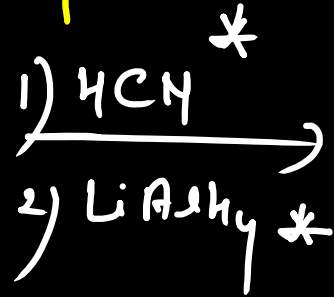
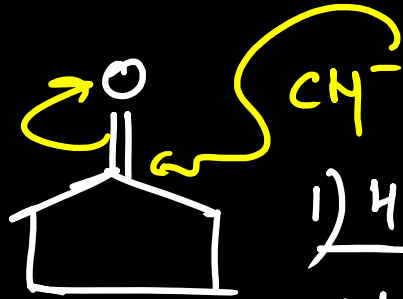
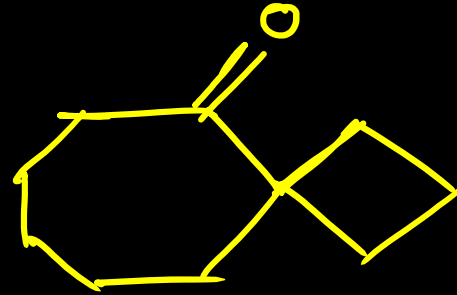
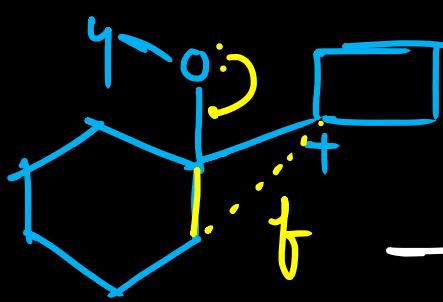
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(SET)

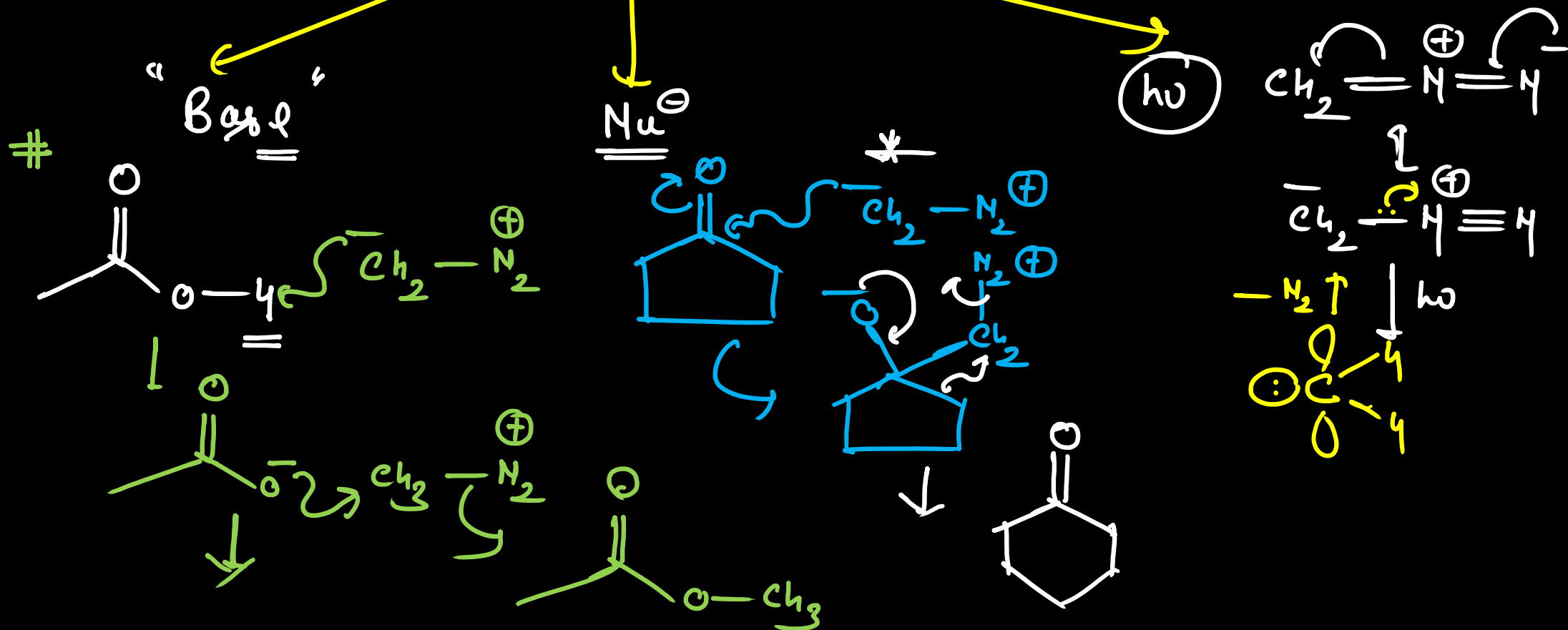


HNO₂ di tel
diazotization

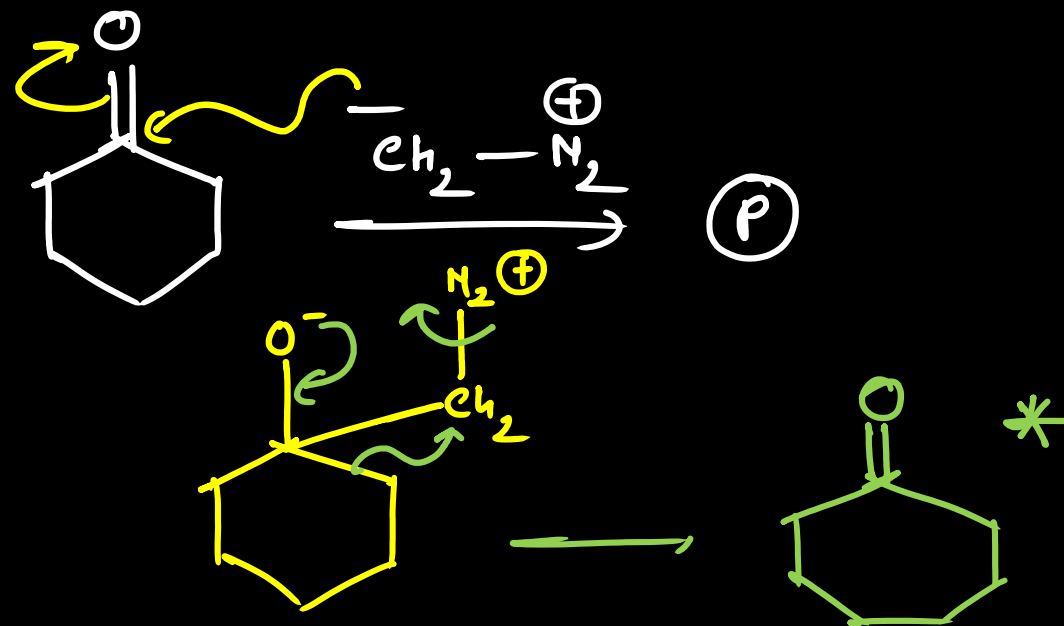


1102

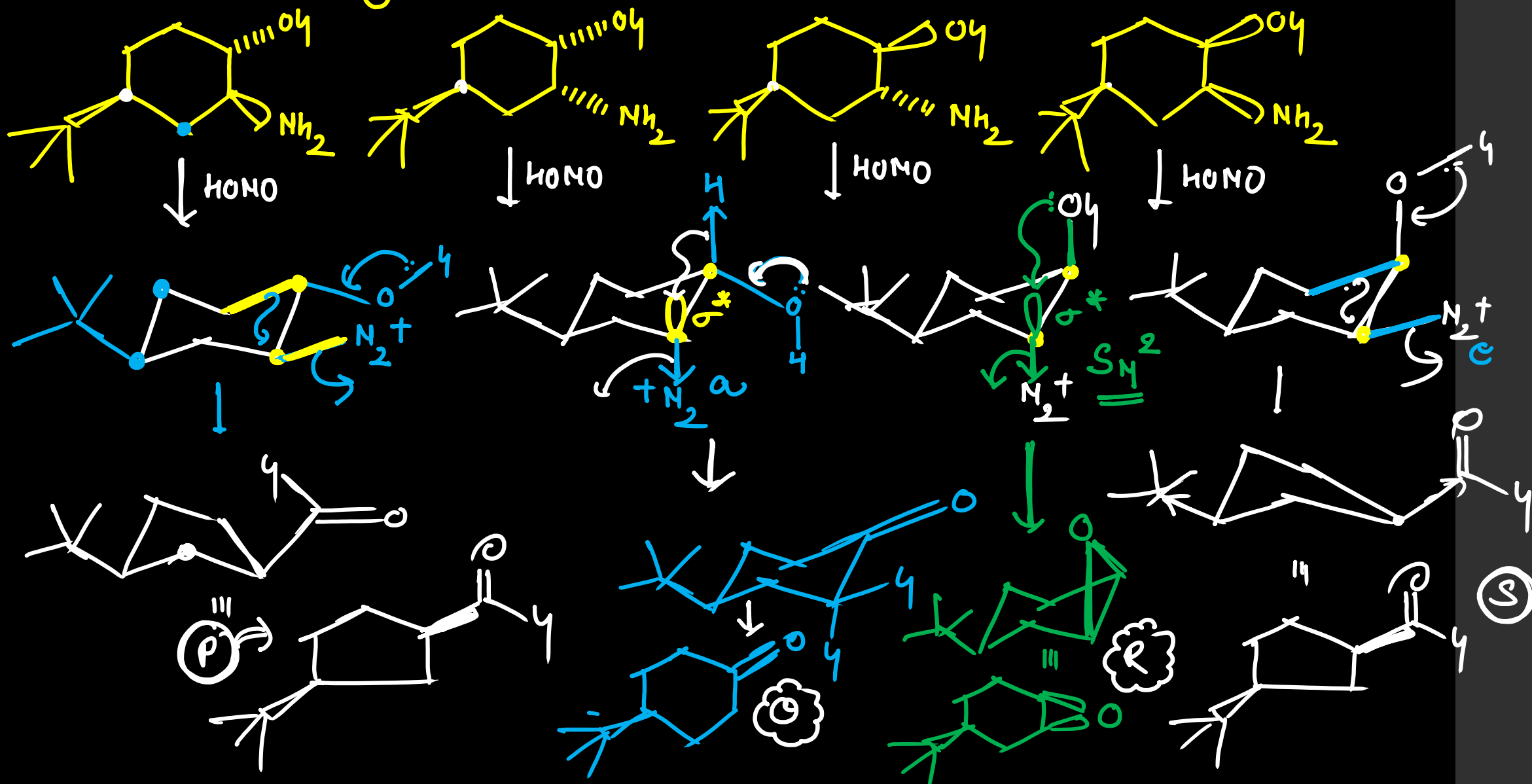


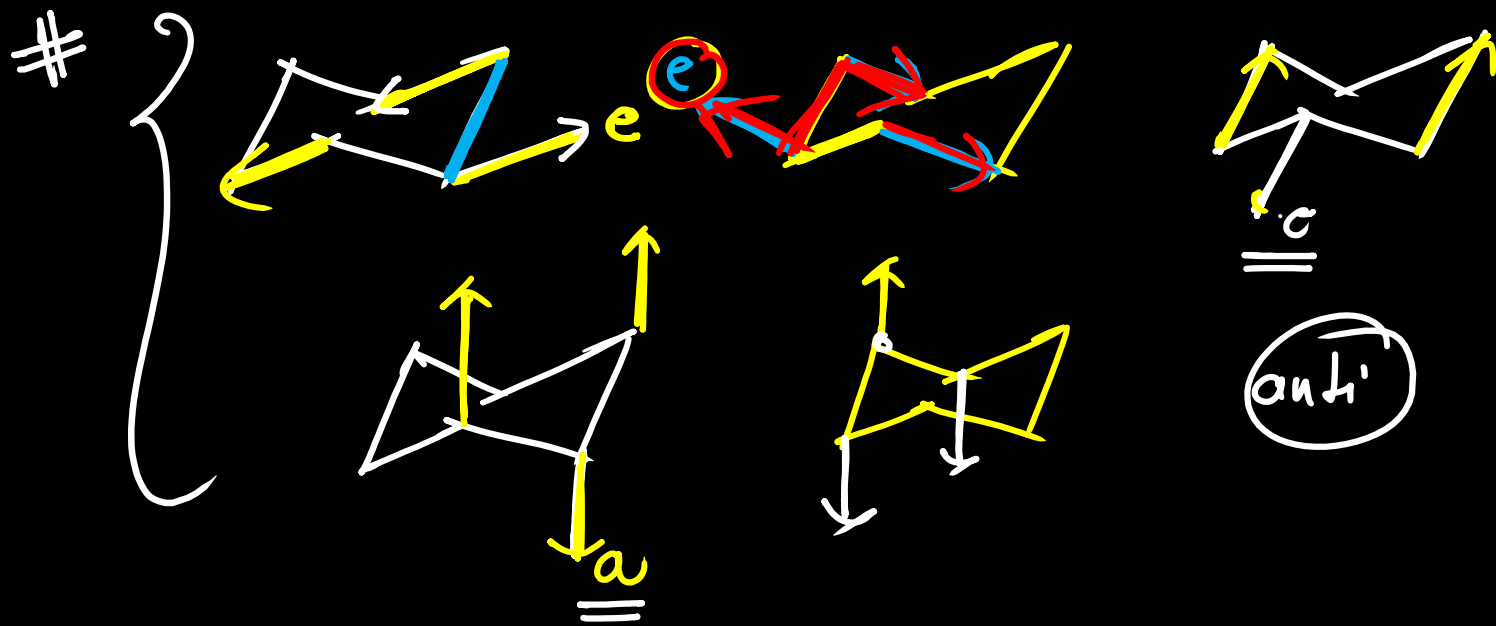


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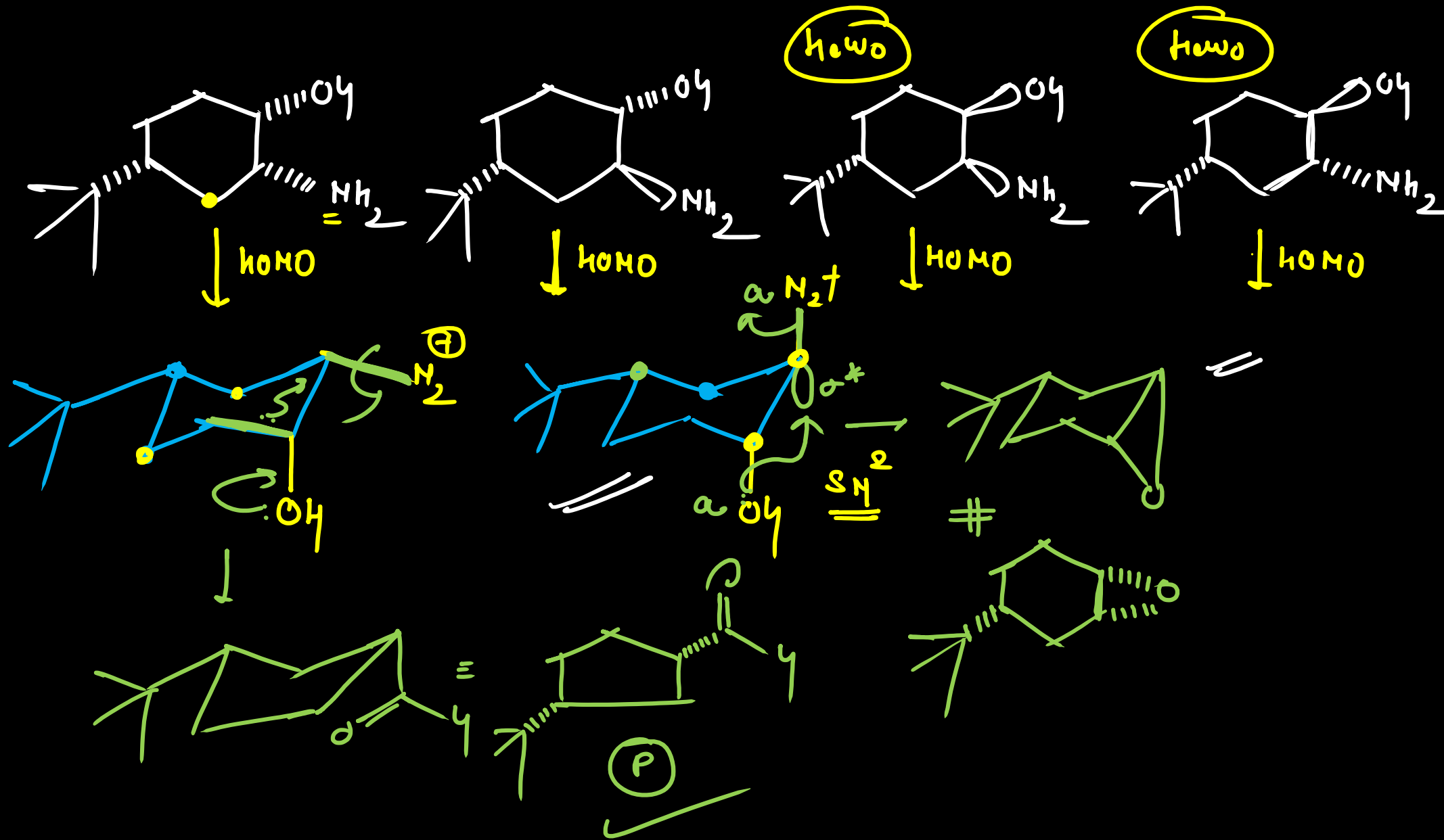


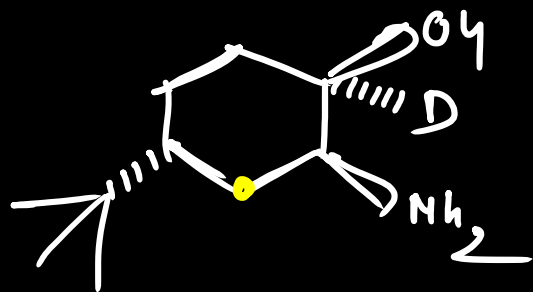
Stereochemistry *



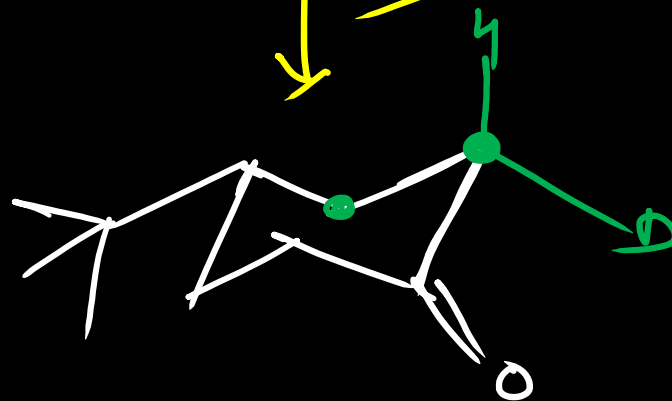
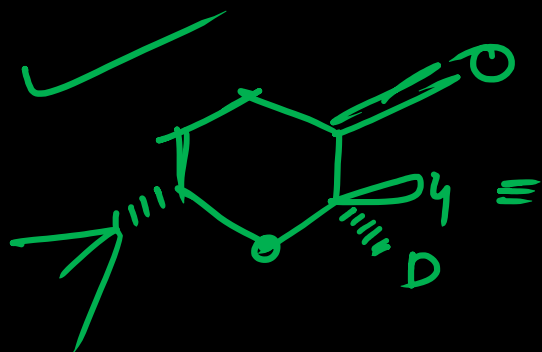
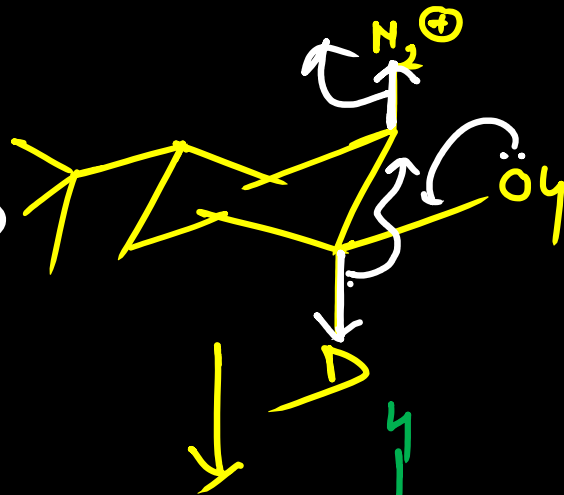


119



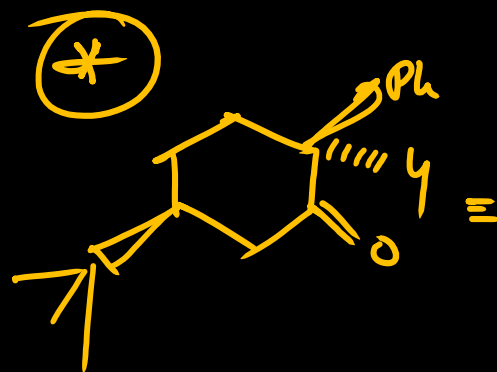
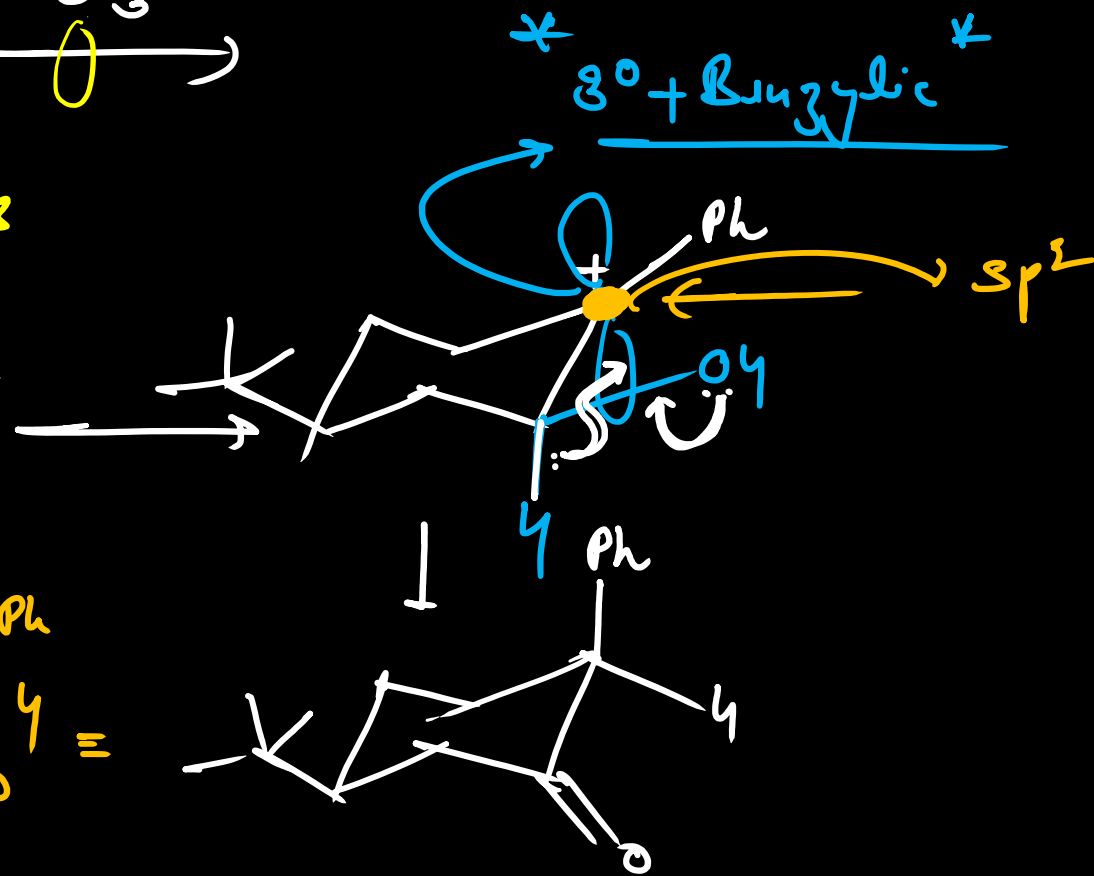
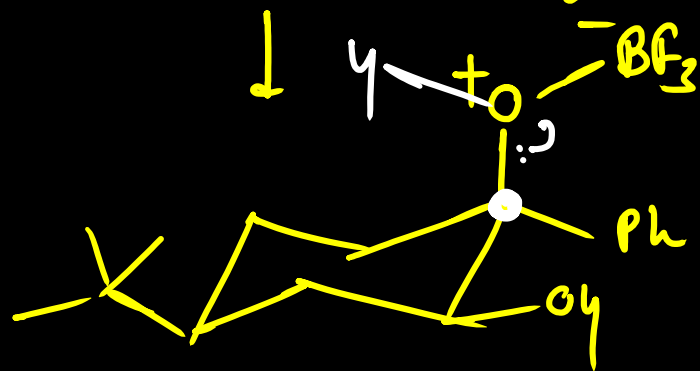
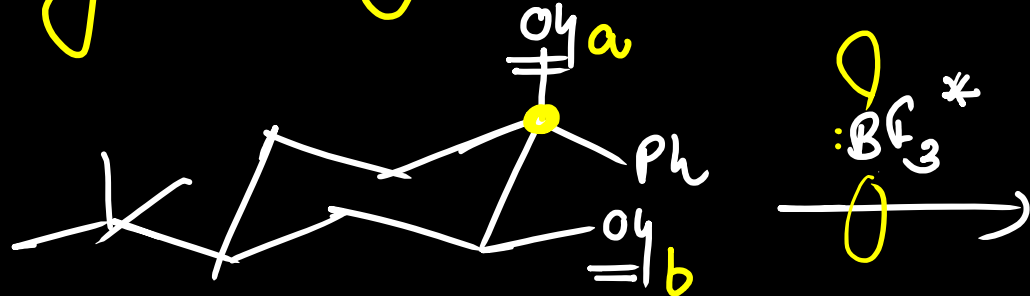


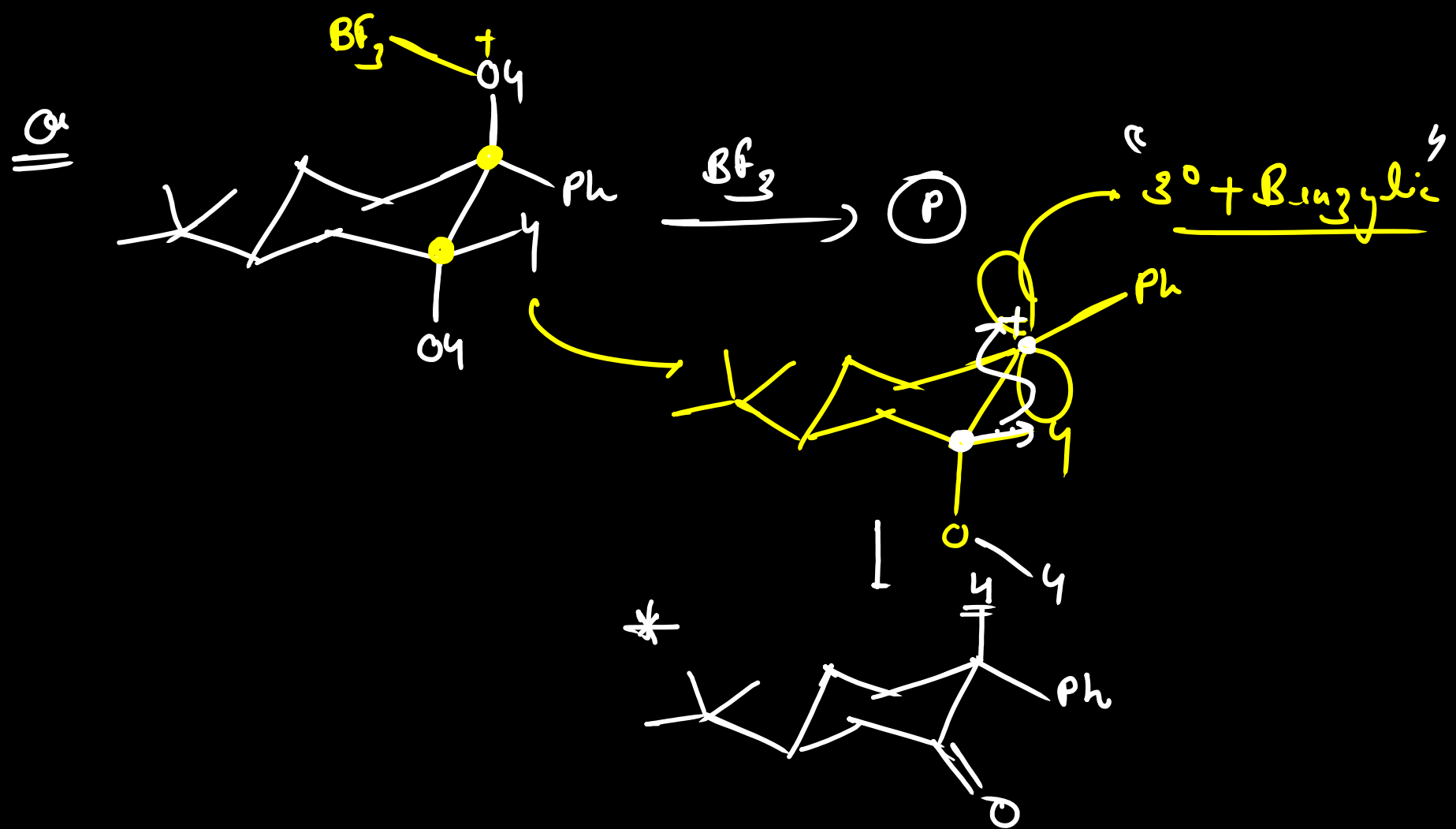
HONO



* Carry over Burg Beck *

10





Thank you:

