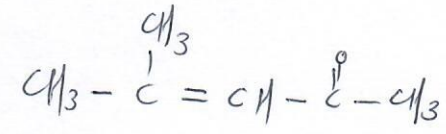
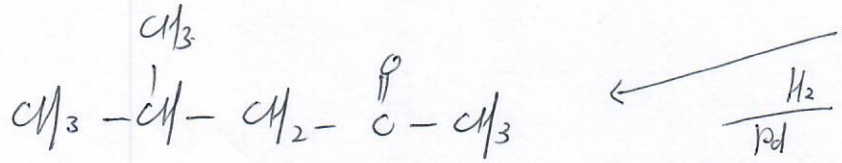
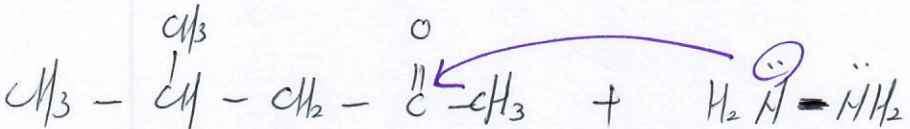
Problem 19-13.

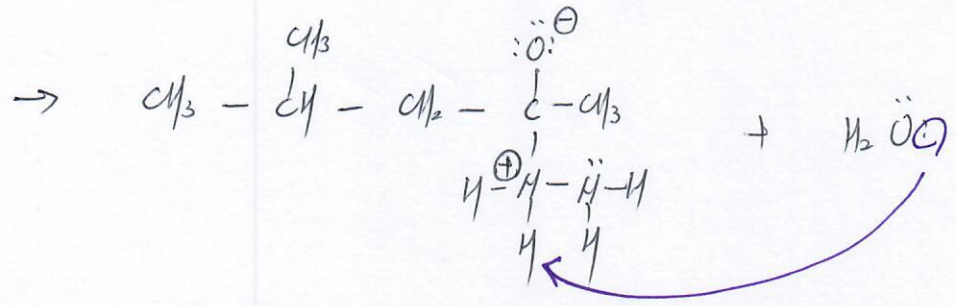


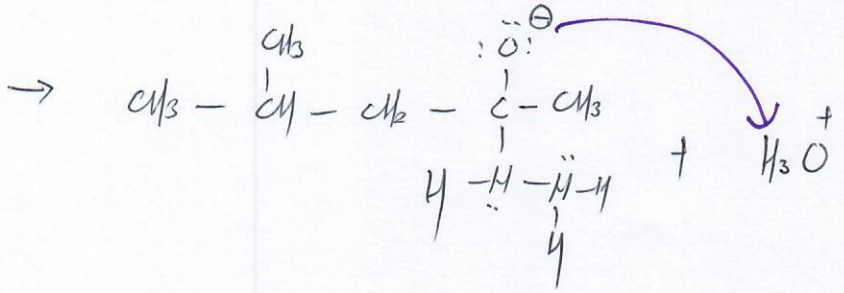
(a)

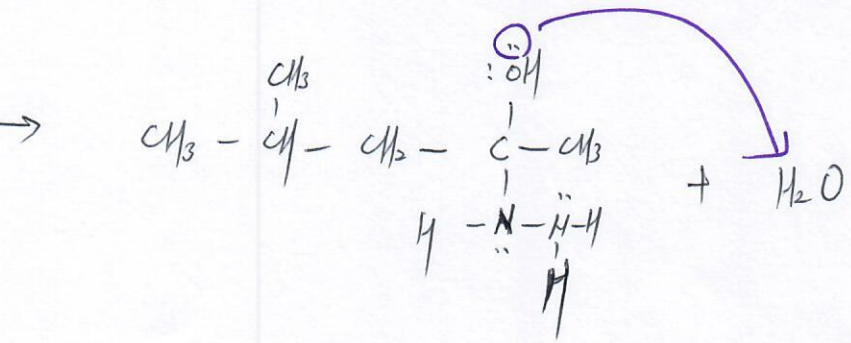


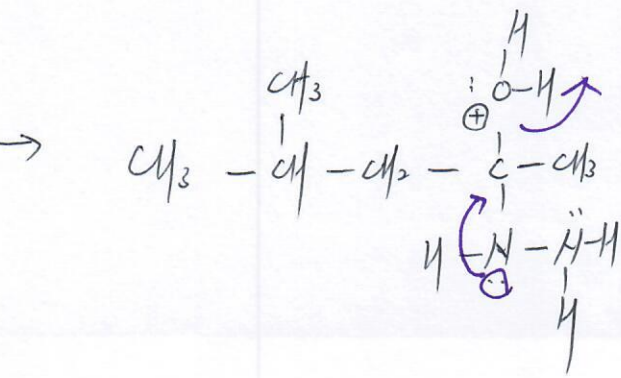
Wolff-Kishner rxn. $R_1-\overset{O}{\overset{\|}{C}}-R_2 \rightarrow R_1-CH_2-R_2$



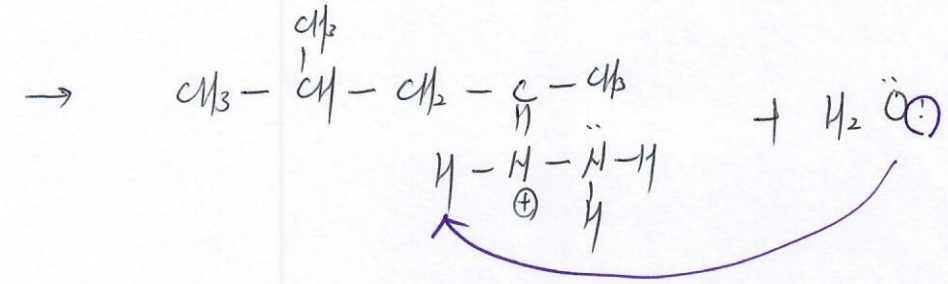


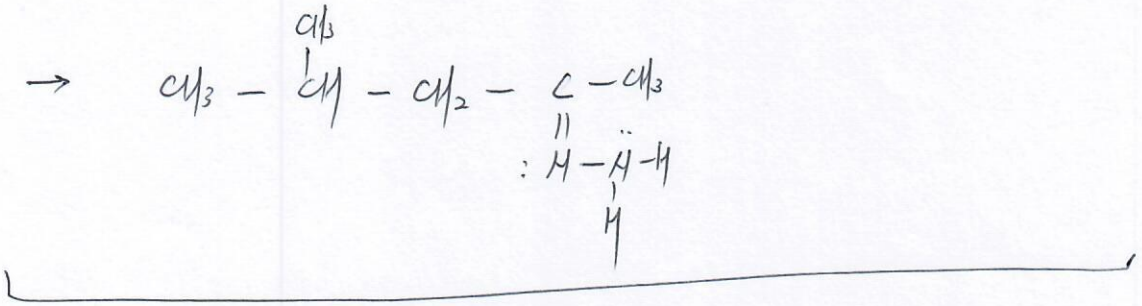




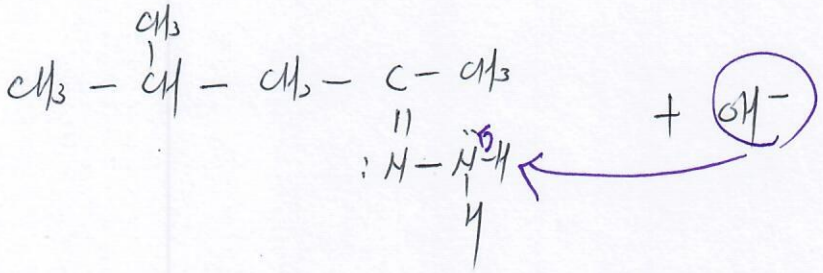


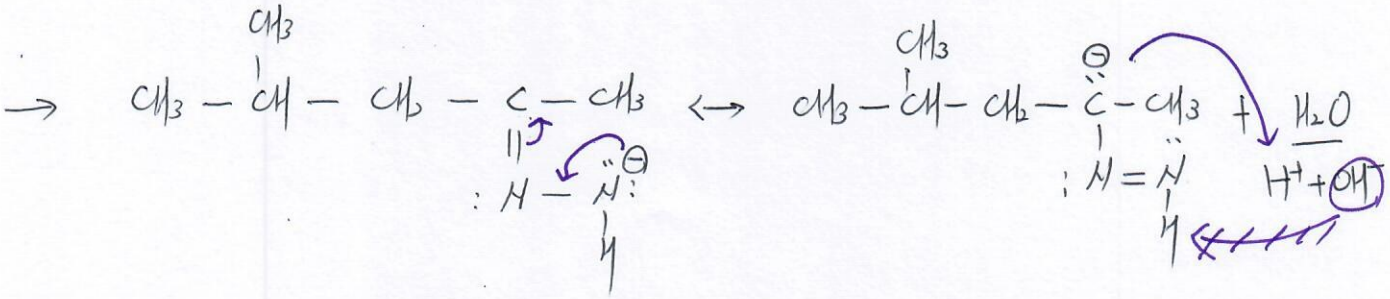
problem 19-13-2

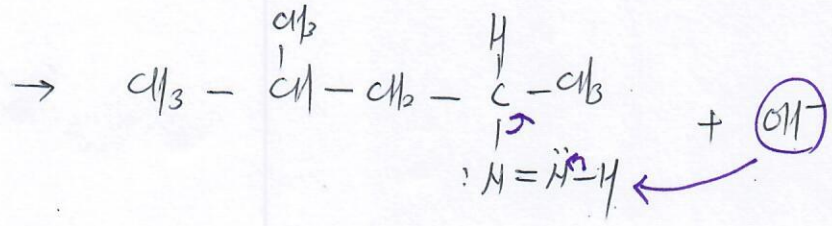


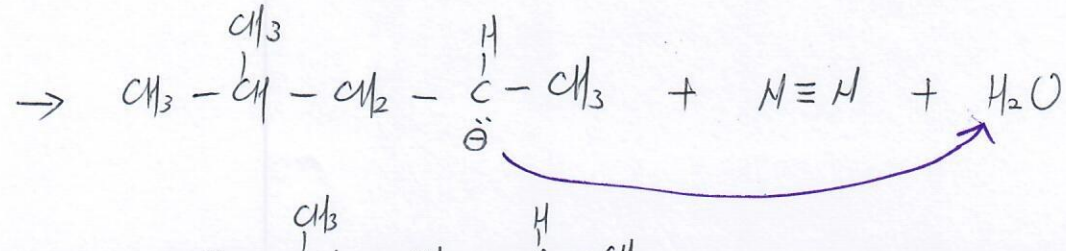


Same to imines mechanism.

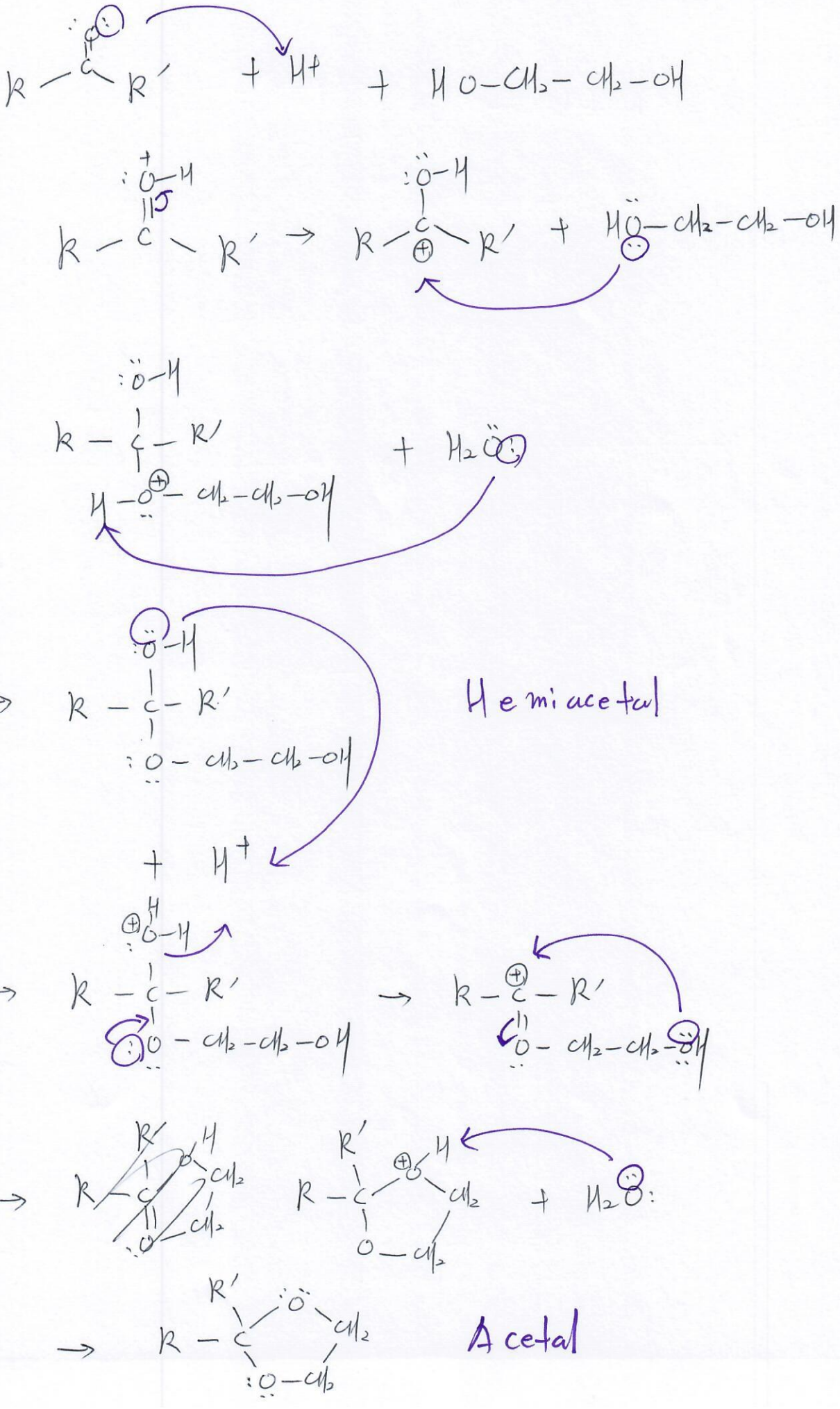




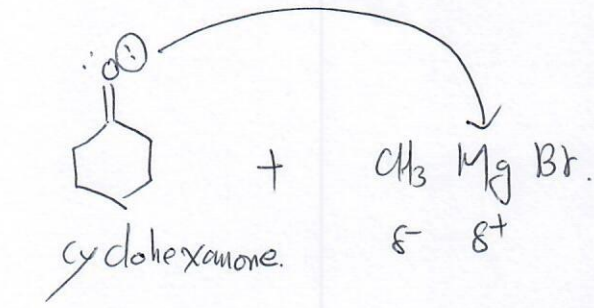


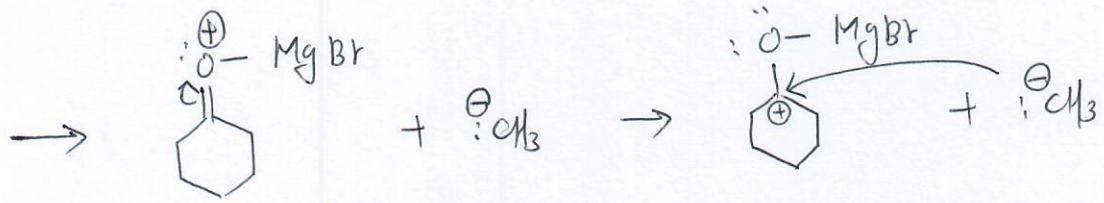


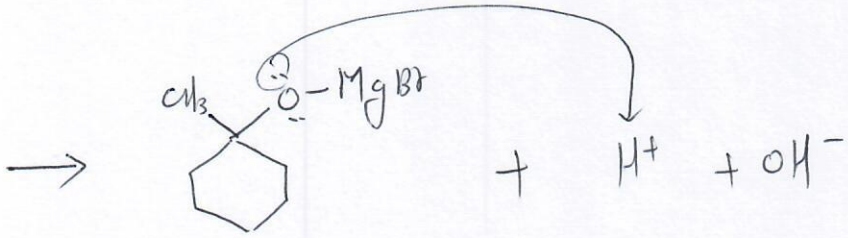
Problem 19-14

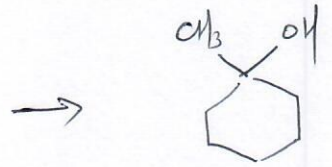


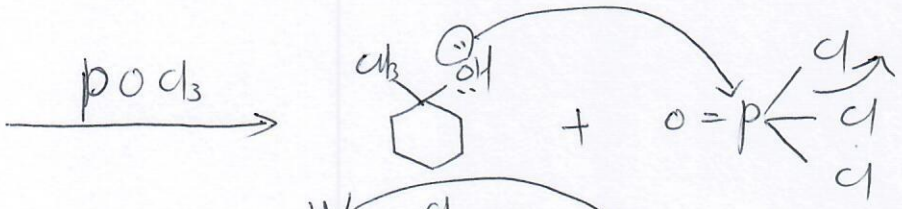
Section 19-11-A

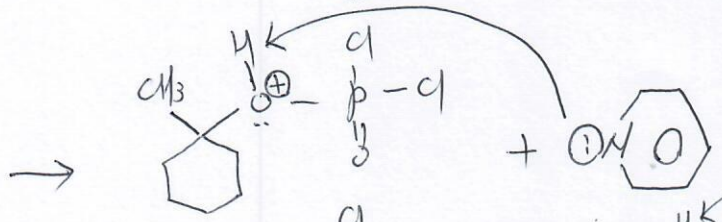


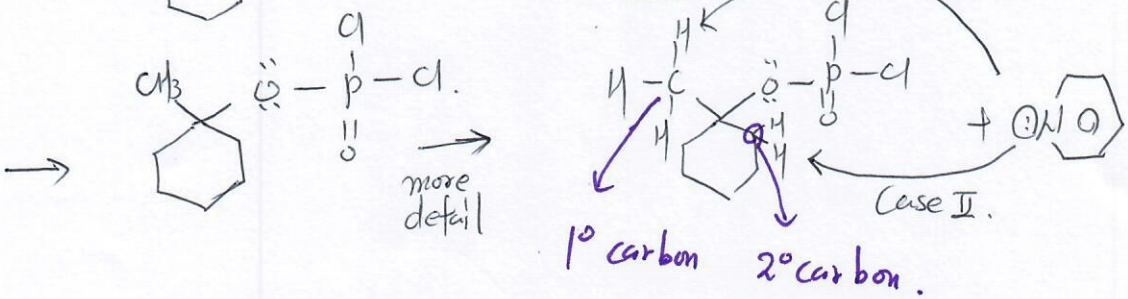


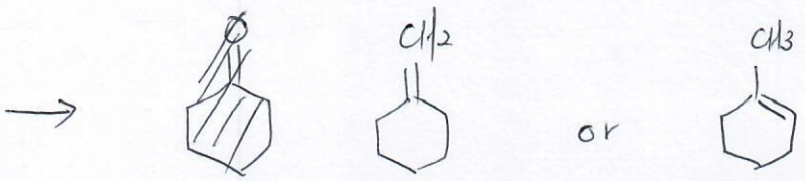








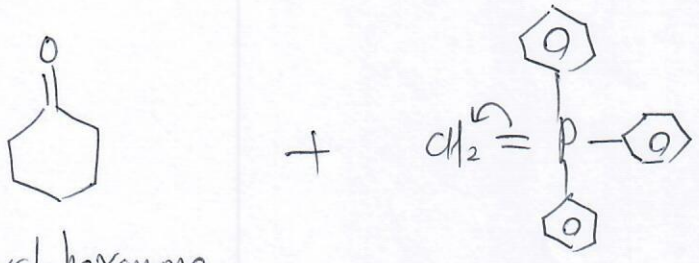




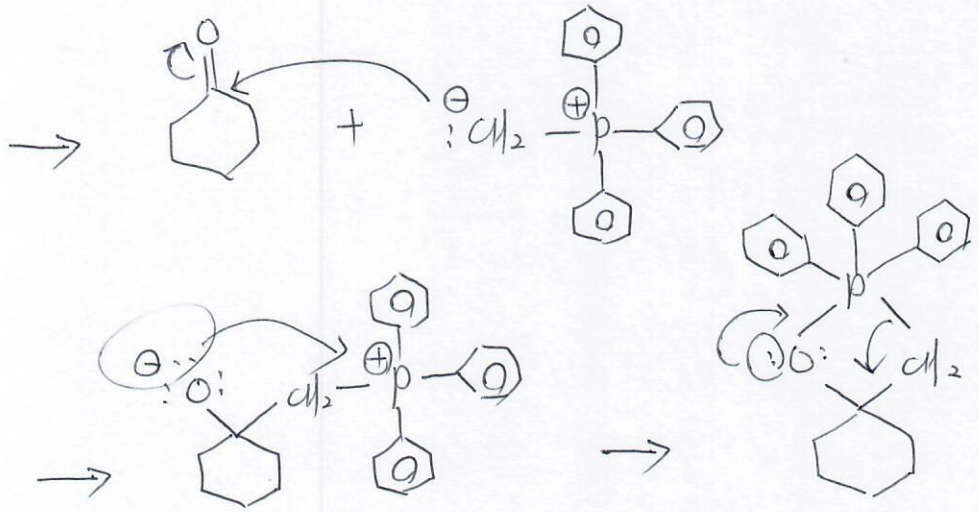
Section 19-11.-2

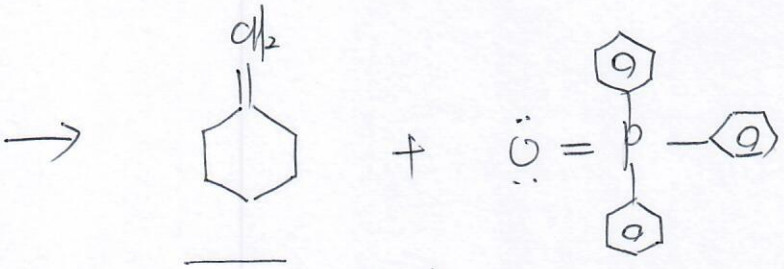
How to get the methylene cyclohexane from cyclohexanone?

⇒ wittig rxn.

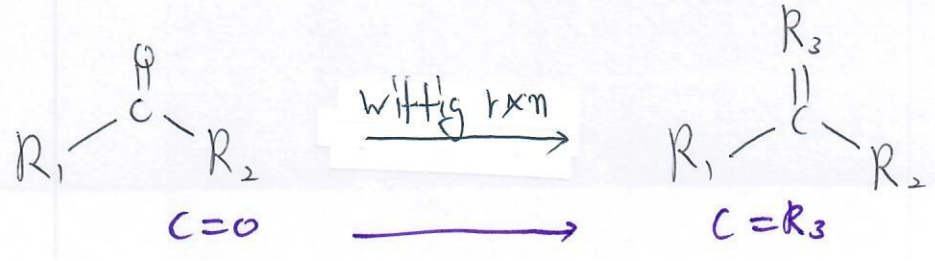


cyclohexanone

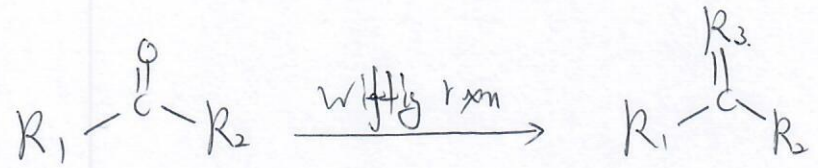




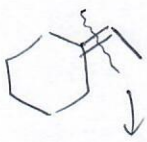
Major Product.



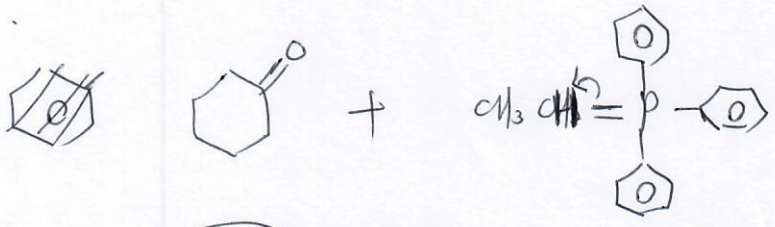
Problem 19-16.4

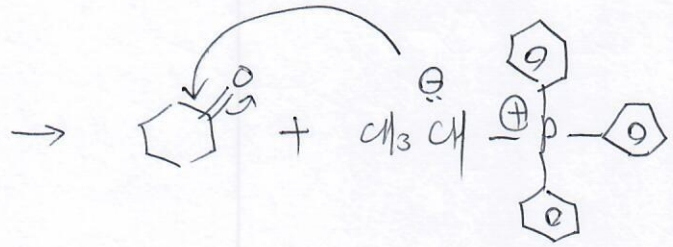


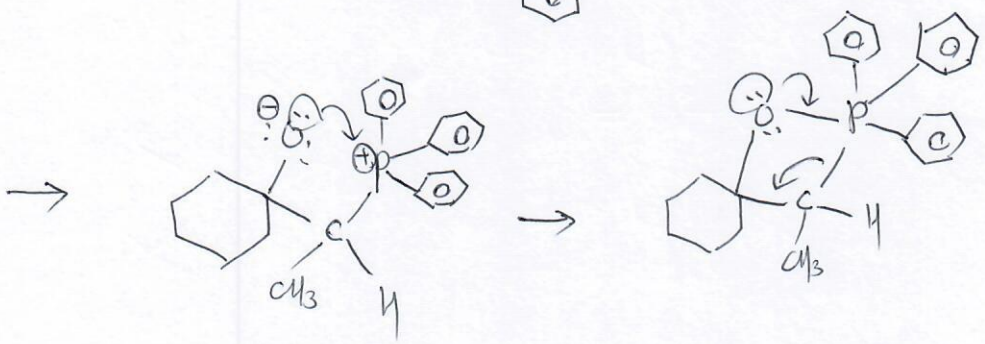
(a)

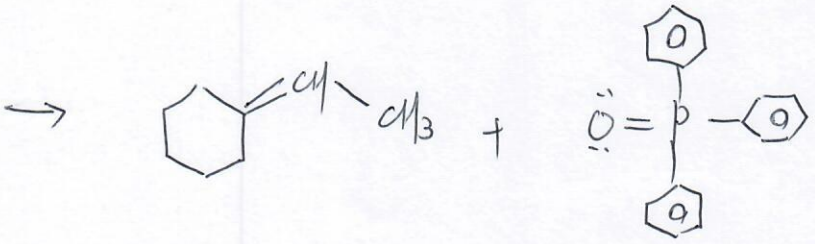


This part is ~~changed~~ cleaved.





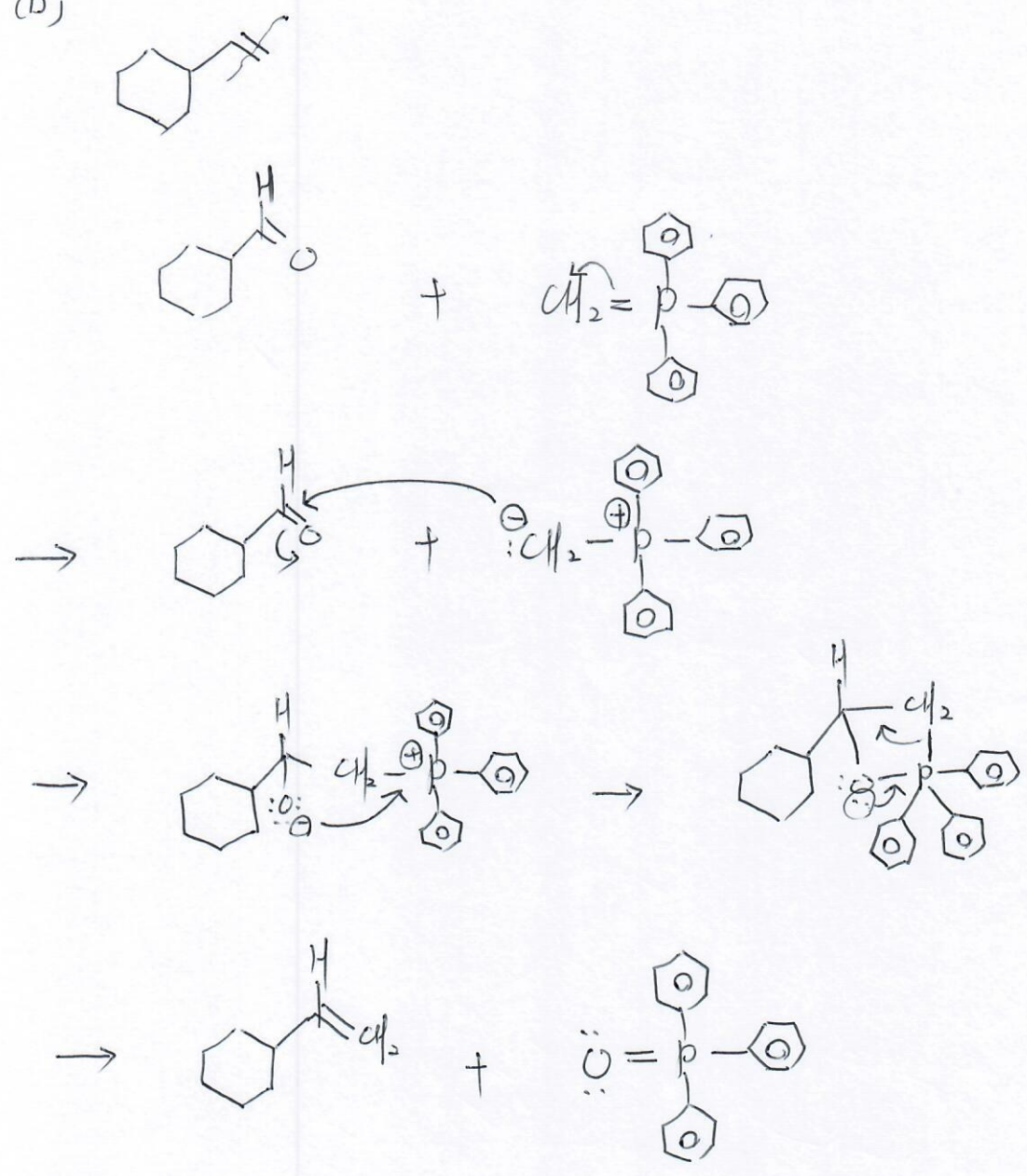




Ketone → alkene

Problem 19-16-2

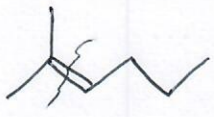
(b)

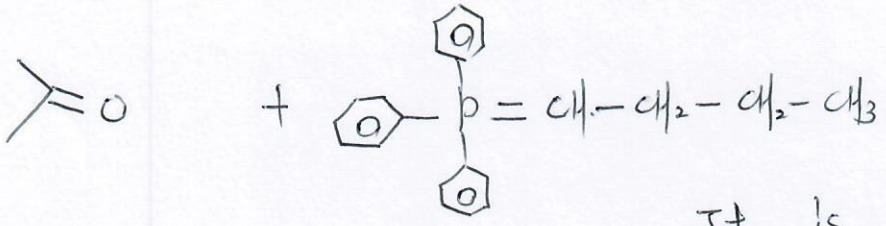


Aldehyde → alkene.

Problem 19-16-3.

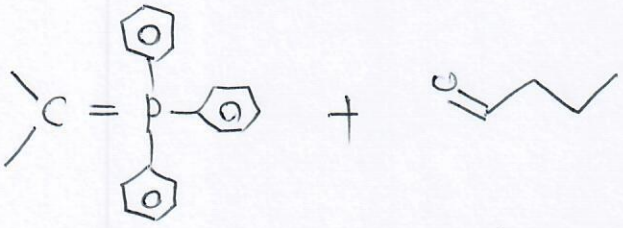
(c)



→ 

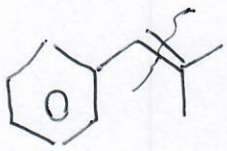
It is possible?

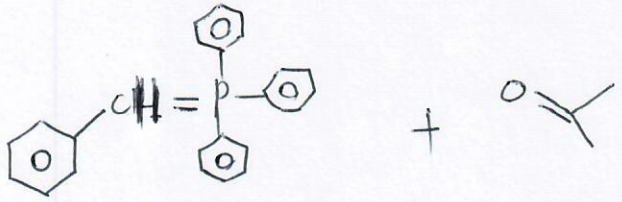
or.



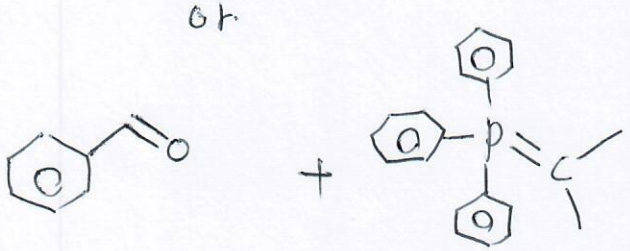
Is it possible?.

(d)



→ 

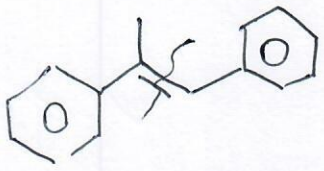
or



possible?.

Problem 19-16-4.

(e)



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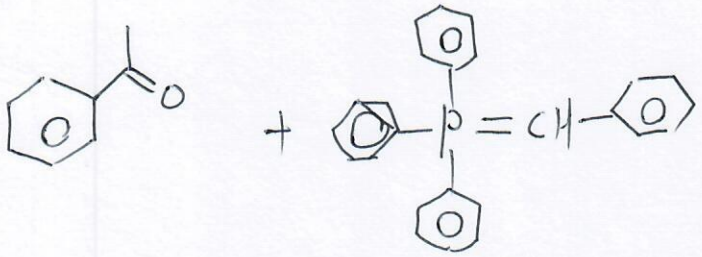

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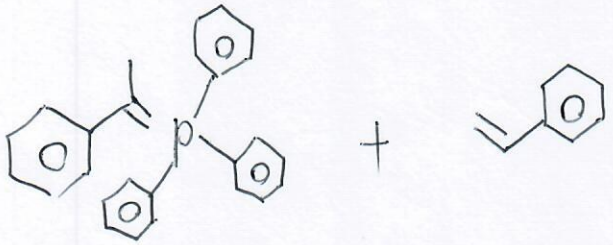
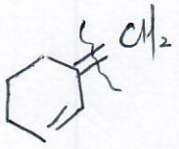


possible?

(f)



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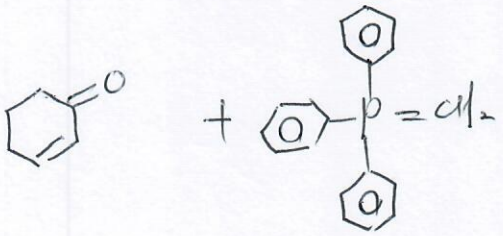

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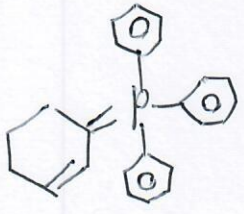
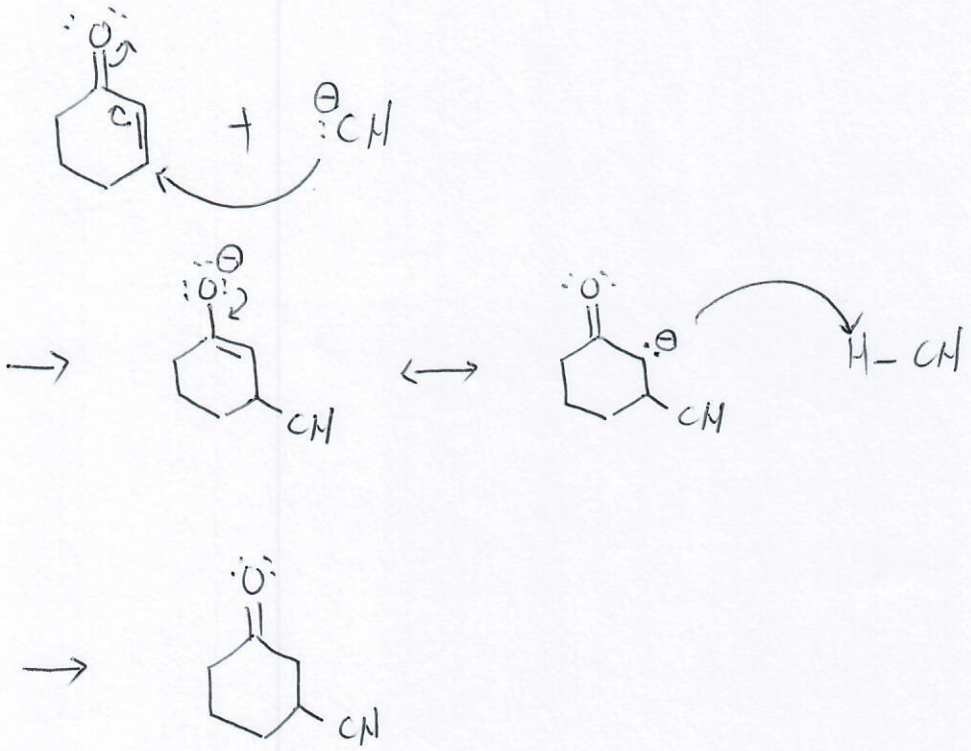


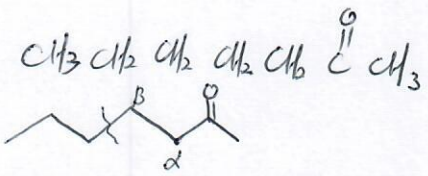
(possible?)

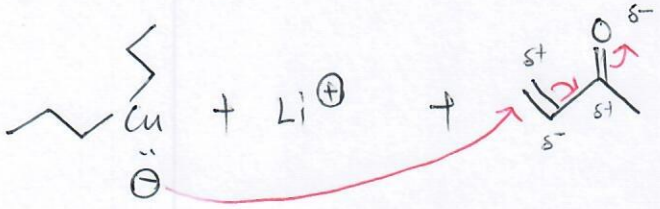
Problem 19-21.

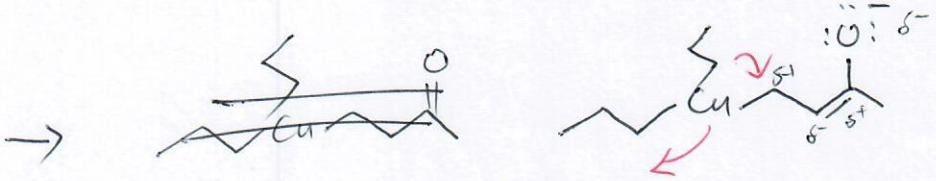


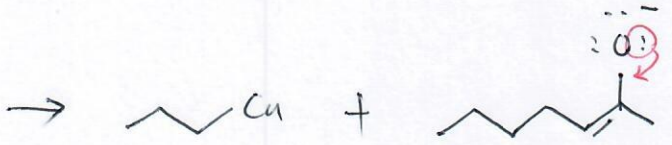
problem 19-22 -1

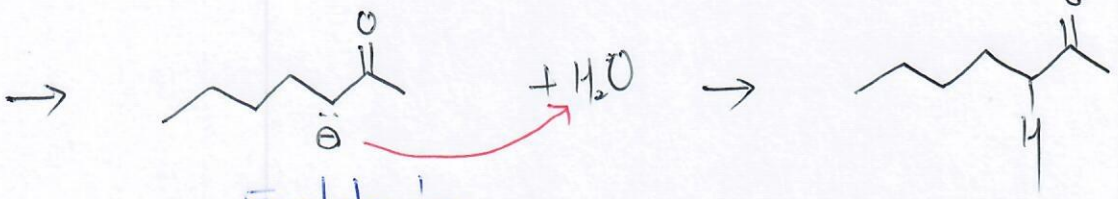
(a)





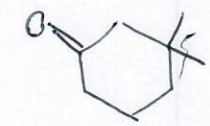


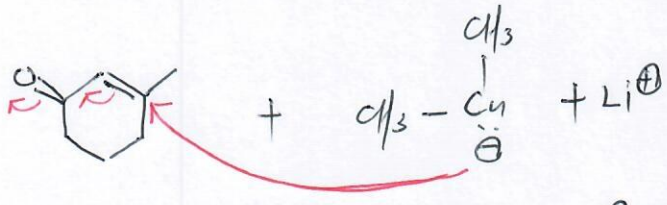


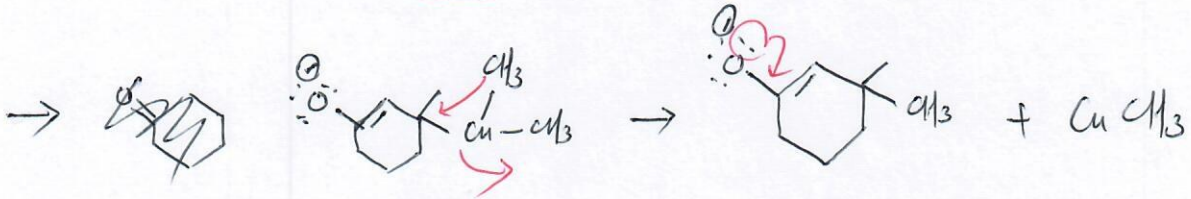


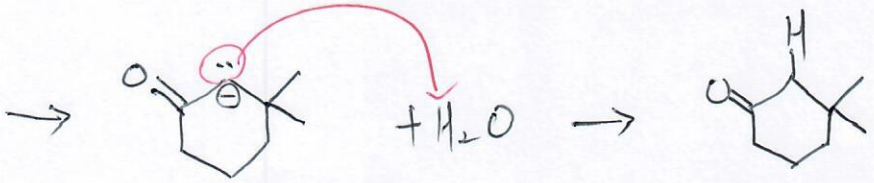
Enolate ion

(b)





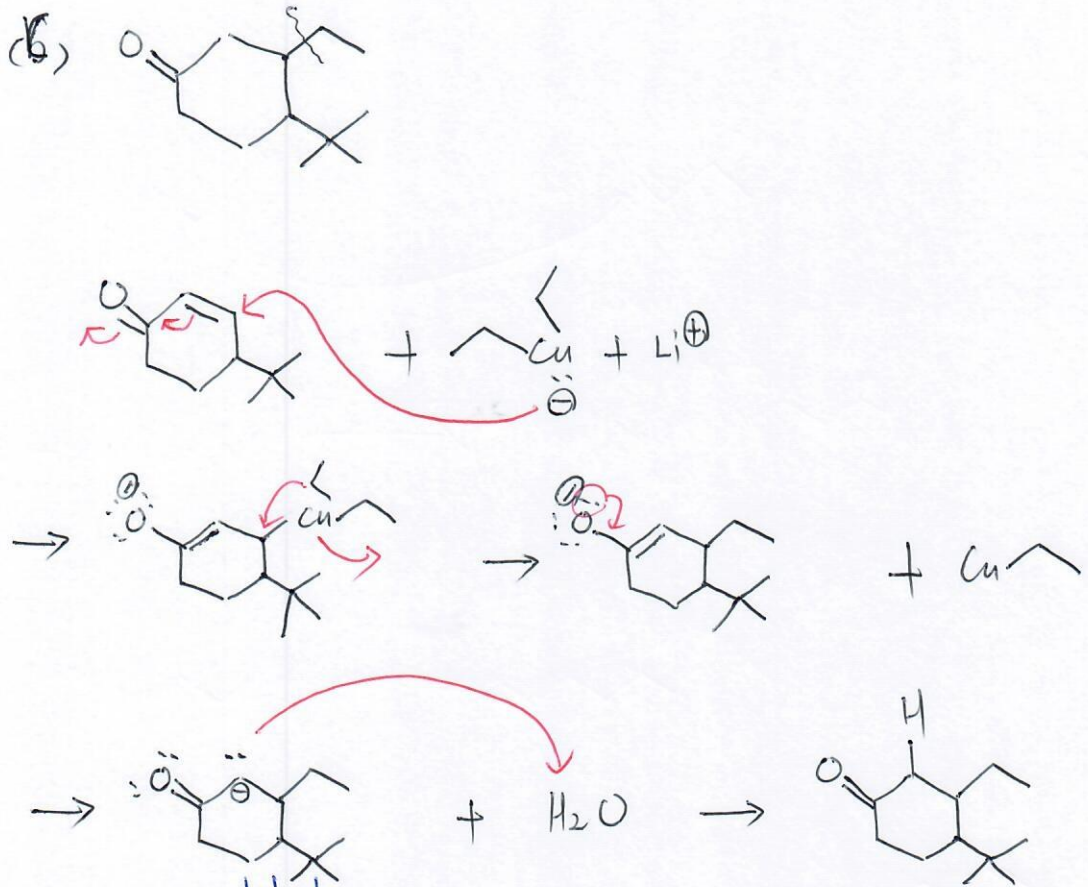




enolate ion

Problem 19-22-2.

(b)



(d)