CHM 3150 Organic Chemistry II Dr. Laurie S. Starkey, Cal Poly Pomona

For clicker question voting, go to: https://pollev.com/lauriestarke263



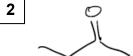
1

Chapter 19 Aldehydes & Ketones Part 2 – Practice Problems

Predict the major products for the following reactions.

HC
$$\stackrel{\text{CH}}{\longrightarrow}$$
 $\stackrel{\text{CH}}{\longrightarrow}$ $\stackrel{\text{CH}}{\longrightarrow}$

Draw a mechanism for the following reaction



Add missing lone pairs, formal charges, and curved arrows.

4

3

Predict the major products for the following reactions.

5

Predict the major product(s) of the following acetal hydrolysis reaction.

HC
$$\stackrel{\text{CH}}{\longrightarrow}$$
 $\stackrel{1) \text{ NaNH}_2}{\longrightarrow}$ $\stackrel{2) \longrightarrow}{\longrightarrow}$ $\stackrel{\bigcirc}{\longrightarrow}$ $\stackrel{\bigcirc}{\longrightarrow}$

- A) ОН
- CCH B) OH
- C) CCH -OH
- D) OH
- E) ОН

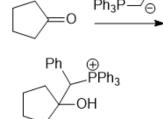
$$\bigcirc O = 0 \xrightarrow{1) \text{NaCN}}$$

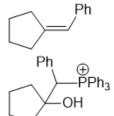
No Reaction



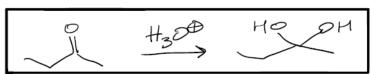
- CN -OH
- CN -OH

No Reaction



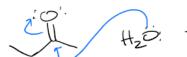


Which of the following is the likely mechanism for the following reaction?

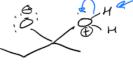


A)

2

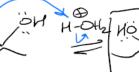












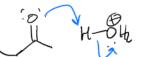
B)











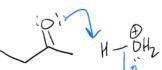


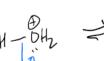




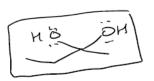


D)

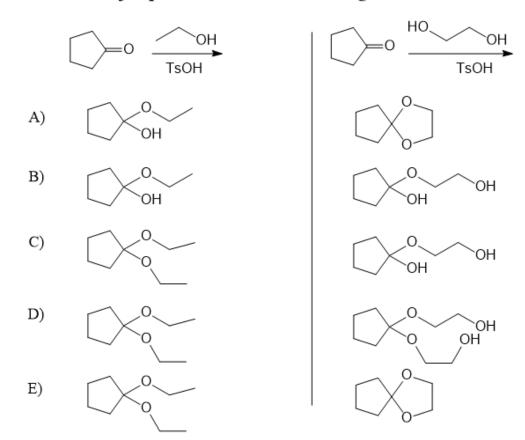








Predict the major products for the following reactions.



Predict the major product(s) of the following acetal hydrolysis reaction.

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