Chapter 21, Enols & Enolates, Part 2 – Practice Problems

What is the most likely first step in the mechanism for the given reaction?

Which of the following could NOT be a product of an aldol reaction?

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Predict the major products for the following reactions.

 $\begin{array}{c} \bullet \\ H \end{array} \begin{array}{c} \begin{array}{c} \text{NaOH} \\ \hline \\ \text{H}_2\text{O} \\ \text{heat} \end{array}$

$$0 \longrightarrow \frac{1) \text{ EtONa, EtOH}}{2) \text{ H}_3\text{O}^+ \text{ mild}}$$

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Provide a mechanism for the second reaction.

EtO-C-CH₂CH₂CH₂CH₂-C-OEt
$$\frac{1) \text{ EtONa, EtOH}}{2) \text{ H}_3\text{O}^+ \text{ mild}}$$

To obtain a neutral product, each of the following reactions requires an acidic aqueous workup EXCEPT:

4

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Which of the following is NOT a likely step in the mechanism for the given reaction?

⁶ Predict the major product.

EtO-C-CH₂CH₂CH₂CH₂-C-OEt
$$\begin{array}{c}
O \\ \parallel \\
2) \text{ H}_3\text{O}^+ \text{ (mild)}
\end{array}$$

A)
$$\beta$$
OEt β
OE β

To obtain a neutral product, each of the following reactions requires an acidic aqueous workup EXCEPT:

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