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

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## Chapter 20 Carboxylic Acids & Their Derivatives, Part 3 – <u>Practice Problems</u>

Predict the major product of the following reaction sequence.

$$\begin{array}{c|c}
\bullet & SOCl_2 & (CH_3)_2NH \\
\hline
 & pyridine
\end{array}$$

3

Arrange the given species in the order of DECREASING electrophilicity (best E<sup>+</sup> to worst E<sup>+</sup>).

For each, predict whether the forward or reverse reaction is favored.

Predict the major products for the following reactions.

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$$\begin{array}{c|c} O & & \\ \hline & 1) \operatorname{LiAlH_4} \\ \hline & 2) \operatorname{H_2O} \end{array} \qquad \begin{array}{c|c} O & & \\ \hline & 1) \operatorname{LiAlH_4} \\ \hline & 2) \operatorname{H_3O^+} \end{array} \qquad \begin{array}{c|c} O & & \\ \hline & O & \\ \hline & O & \\ \hline \end{array}$$

7 Provide the necessary reagents.