Section 18.3 SYNTHESIS OF TRANS-<i>p</i>-ANISALACETOPHENONE

NAME (print): ___________________________________________ DATE: ________________

INSTRUCTOR: ___________________________ LABORATORY SECTION: ________________

1. <i>p</i>-Anisaldehyde and acetophenone are used in equimolar amounts in this experiment. Suggest a complication that might result if two moles of ketone per mole of aldehyde were used.

2. The amount of sodium hydroxide used to promote the condensation reaction is less than an equimolar amount. What complication might result if a much larger amount of concentrated sodium hydroxide were used?

3. Why is the condensation (dehydrated) product rather than the aldol addition (hydrated) product obtained in this experiment?

4. Why does the enolate ion of an aromatic ketone react faster with an aldehyde group, producing a crossed-aldol reaction, than with the carbonyl group of another molecule of ketone?
5. List the possible effects of inhaling excessive amounts of acetophenone.

6. Is \( p \)-anisaldehyde listed as a mutagen?

7. List the possible effects of ingesting methanol.