Complete the following reactions. Circle the most favored products.

$$2. \qquad \begin{array}{c} \bigcirc \\ \bigcirc \\ \bigcirc \\ \bigcirc \\ \end{array} \qquad \begin{array}{c} [-H_2 \bigcirc] \\ \bigcirc \\ \end{array}$$

$$3.$$
 CI + NaOH \rightarrow

$$4.$$
 $\stackrel{\text{CI}}{\longleftarrow}$ + NaOH \longrightarrow

$$5. \qquad \underbrace{ \left[\frac{\left[K_2 \mathrm{Cr}_2 \mathrm{O}_7 / \mathrm{H}_2 \mathrm{SO}_4 \right]}{\Delta} \right]}_{\Delta}$$

$$6. \qquad \xrightarrow[\Delta]{[K_2\mathrm{Cr}_2\mathrm{O}_7/\mathrm{H}_2\mathrm{SO}_4]}$$

$$9. \qquad \text{OH} \qquad \tfrac{[K_2 \mathrm{Cr}_2 \mathrm{O}_7/\mathrm{H}_2 \mathrm{SO}_4]}{\Delta}$$

10.
$$\bigcirc$$
H $[-H_2O]$

11.
$$\underbrace{\frac{[K_2Cr_2O_7/H_2SO_4]}{\Delta}}_{OH}$$

$$12. \quad \xrightarrow[\Delta]{\text{OH}} \quad \xrightarrow{[K_2 Cr_2 O_7/H_2 SO_4]} \quad$$

18.
$$\stackrel{\text{OH}}{\longleftarrow}$$
 $\stackrel{\text{[-H_2O]}}{\longrightarrow}$

20. OH +
$$\bigcirc$$
 [H₂O]

21.
$$\bigcirc$$
OH + \bigcirc OH $[-H_2O]$

22.
$$\downarrow$$
 HCI $\underline{[ZnCl_2]}$

23.
$$+$$
 HCI $\underline{[ZnCl_2]}$

$$24. \hspace{1cm} \text{OH} \hspace{1cm} + \hspace{1cm} \text{OH} \hspace{1cm} \underline{\text{\tiny [-H_2O]}}$$

$$25.$$
 OH + HCI $\boxed{\text{ZnCl}_2}$

CHE102 - Extra Practice C22 - S18 - Ver. 4

Question 2:
$$H_2O$$

Question 7: No Reaction

Question 8:
$$+ H_2O$$

$${
m Question} \ 11: \ \ {
m No} \ {
m Reaction}$$

Question 12: No Reaction

Question 13:
$$+ H_2O$$
 Rate: Fast

Question 14:
$$+ H_2O$$

Question 15:
$$+ H_2O$$

Question 16:
$$+ H_2O$$

- Question 18: $+ H_2O$
- Question 19: $+ H_2O$
- Question 20: $+ H_2O$
- Question 21: + H_2O
- Question 22: \downarrow \downarrow + $_2$ O Rate: Slow
- Question 23: $+ H_2O$ Rate: Fast
- Question 25: $+ H_2O$ Rate: Very Slow