Complete the following reactions. Circle the most favored products.

1. 
$$\wedge$$
 HCI  $\rightarrow$ 

3. 
$$\frac{H_2/Ni}{\Lambda}$$

$$4. \quad -_{NH_2} \quad + \quad -_{NH_2} \quad + \quad -_{CI} \qquad \longrightarrow \quad$$

5. 
$$\downarrow$$
  $\rightarrow$   $\rightarrow$   $\rightarrow$   $\rightarrow$   $\rightarrow$   $\rightarrow$ 

6. 
$$NH_2 + NH_2 + CI$$

7. HO 
$$+$$
 NH  $[-H_2O]$ 

9. 
$$\underbrace{\frac{H_2/Ni}{\Delta}}$$

10. 
$$\frac{\text{N}}{\Delta}$$

12. 
$$-\sqrt{}$$
 + HCI  $\rightarrow$ 

15. 
$$NH \longrightarrow H_2/Ni$$
  $\Delta \longrightarrow$ 

16. 
$$_{\rm HN}^{\circ}$$
 + HCI + H<sub>2</sub>O  $\longrightarrow$ 

17. 
$$\downarrow$$
 +  $H_2O$   $\Longrightarrow$ 

19. 
$$\downarrow$$
 OH  $\downarrow$  OH  $\sqsubseteq$   $\vdash$   $\vdash$  OH

20. 
$$\begin{array}{c} N \\ \parallel \\ \Delta \end{array}$$

Question 1: 
$$\begin{array}{c} \begin{array}{c} H \\ -N \\ H \end{array}$$
 CI

Question 2: 
$$+$$
  $OH$   $+$   $ONa$ 

Question 4: 
$$+ \frac{H}{H} + CI^{-}$$

Question 5: 
$$\downarrow \stackrel{\mathsf{H}}{\downarrow} \stackrel{\mathsf{+H}}{\downarrow} + \mathsf{OH}$$

Question 7: 
$$\begin{array}{c} \begin{array}{c} \\ \\ \end{array} \end{array}$$
  $\begin{array}{c} \\ \end{array}$   $\begin{array}{c} \\ \\ \end{array}$   $\begin{array}{c} \\ \\ \end{array}$   $\begin{array}{c} \\ \\ \end{array}$   $\begin{array}{c} \\ \\ \end{array}$ 

Question 10: 
$$NH_2$$

Question 12: 
$$-N^{+}$$
H Cl

Question 16: 
$$\downarrow^{\circ}_{OH}$$
  $+ \downarrow^{H}_{H}$   $CI^{\circ}_{H}$ 

Question 17: 
$$\setminus_{N-H}^{I}$$
 + OH-

Question 19: 
$$+ H_2O$$

Question 20: 
$$\begin{picture}(100,0) \put(0,0){\line(0,0){100}} \put(0,0){$$