## Chemistry 2521; Fall 2001; Sample Quiz 4 (Ch. 4)

Printed Name (Last, First)

**1.** (12) Complete each of the following **acid-base** (or **Lewis acid-base**) reactions (2 pts each). Use **curved arrows** to show the flow of electrons in each reaction (2 pts each).



2. (4)Arrange the following compounds in order of <u>decreasing</u> acidity:

(1) 
$$CH_3CH_2CH_3$$
 (2)  $CH_3CH_2OH$  (3)  $CH_3CH_2NH_2$  (4)  $H-C$  OH

3. (3) Which one of the following compounds is the strongest base?

 $CH_3^ NH_2^ HO^ F^ Cl^ Br^ I^-$ 

 $HO^{-}$ 

4. (3) Which one of the following compounds has the most acidic C-H bonds?



5. (3) Which one of the following compounds is a strong Lewis acid?
CH<sub>3</sub>CH<sub>2</sub>CH<sub>3</sub> CH<sub>3</sub>NH<sub>2</sub> (CH<sub>3</sub>)<sub>2</sub>NH AlCl<sub>3</sub> CH<sub>3</sub>CH<sub>2</sub>OCH<sub>3</sub>