## 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).

Key



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)  $H-C'_{OH}$   
(4) > (2) > (3) > (4)  $H-C'_{OH}$   
strongest weakest

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

$$(CH_3^-)$$
  $NH_2^ HO^ F^ CI^ Br^ I^-$ 

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?

 $CH_3CH_2CH_3$   $CH_3NH_2$   $(CH_3)_2NH$   $(AlCl_3)$   $CH_3CH_2OCH_3$   $HO^-$