


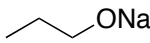
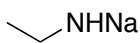
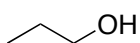
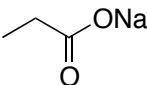
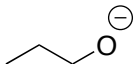
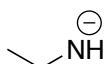
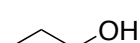
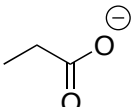

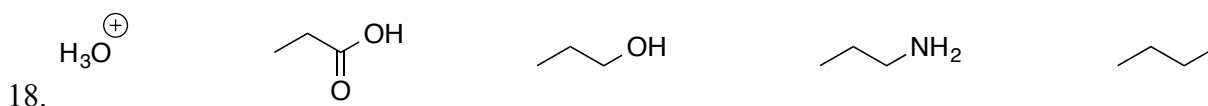
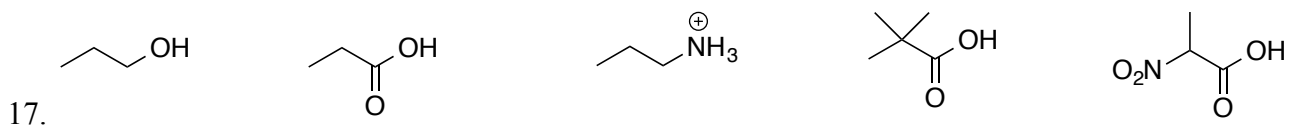
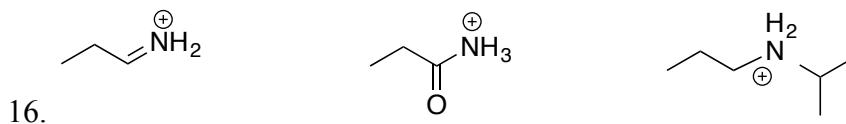
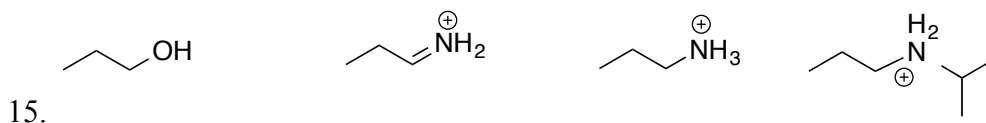
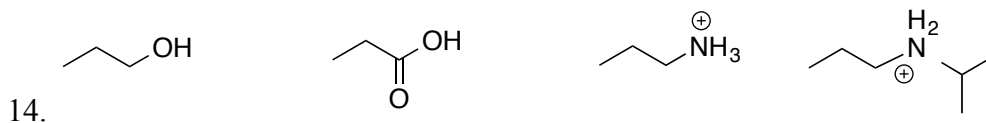
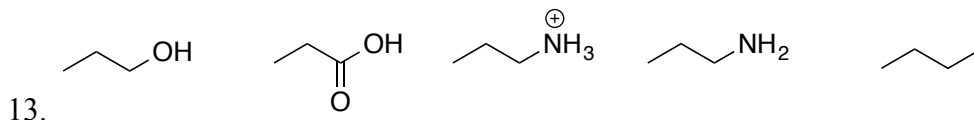
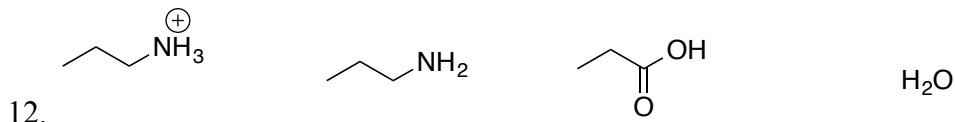
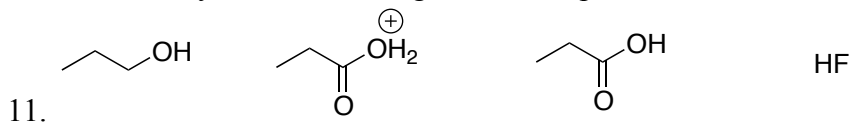


A. Rank the basicity of the following sets: Multiple Variable Problems

1. CH_3MgBr CH_3NHNa CH_3NH_2 $(\text{CH}_3)_2\text{NH}$
2.    CH_3NH_2
3.    
4.     
5. CH_3NHNa $\text{CH}_3\text{C}(\text{O})\text{NH}_2$ $(\text{CH}_3)_3\text{N}$ pyridine
6. $(\text{CH}_3)_3\text{N}$ pyridine CH_3NH_2 water
7. $(\text{CH}_3)_3\text{N}$ PhCO_2Na CH_3NH_2 PhCH_2ONa water
8. $(\text{CH}_3)_3\text{N}$ 4-methylaniline aniline pyrrole
9. methylamine 4-ethanoylaniline aniline pyridine
10. CH_3NH_2 $\text{CH}_3\text{CH}_2\text{ONa}$ PhCO_2Na methanol

B. Rank the acidity of the following sets: Multiple Variable Problems



19. For the following structures:

- Which will extract from ether into neutral water?
- Which will extract from ether into basic (NaOH) water?
- Which will extract from ether into acid (HCl) water?

