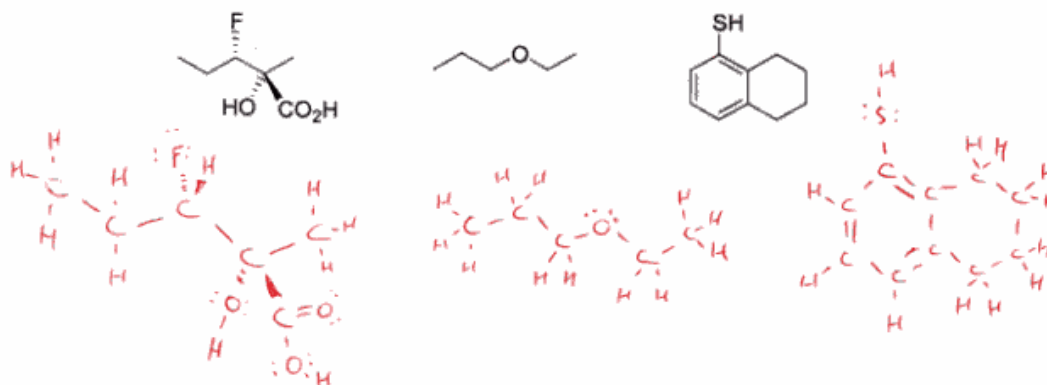


Mechanisms Quiz #1

20 points

NAME: _____

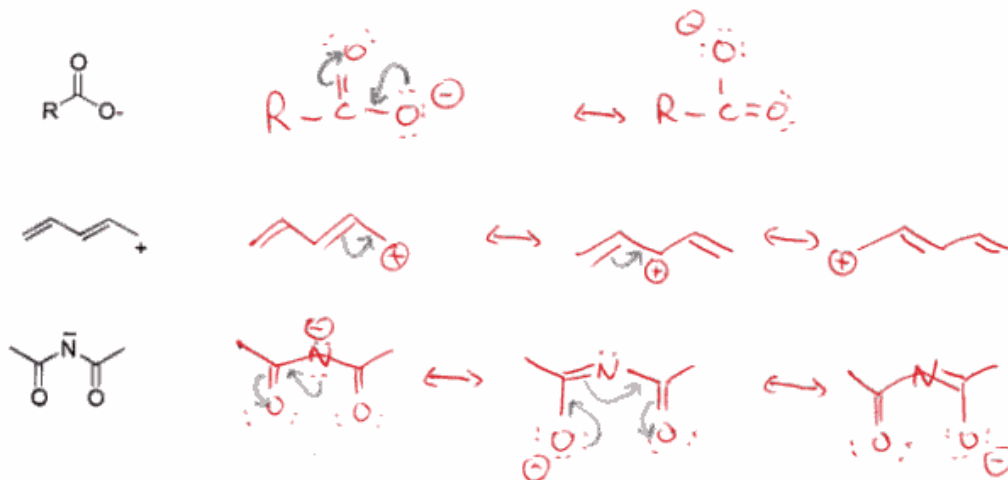
1-3) Draw Lewis structures (showing all hydrogens and including all lone pairs) for the following molecules:



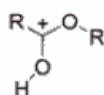
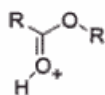
4-5) In the Ether above, what is the hybridization of the Oxygen, and hence what is the C-O-C bond angle?



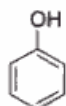
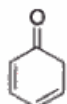
6-8) Draw all the resonance structures for the following species, and draw curly arrows to show the electron reorganization.



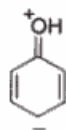
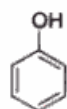
9-12) Indicate whether the pairs shown are tautomers or resonance structures.



Resonance



Tautomers



Resonance



Resonance

13-14) Indicate whether the following molecules are aromatic or non-aromatic.

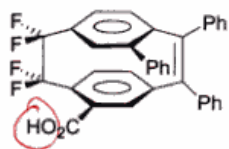
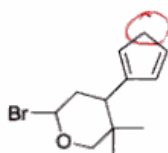
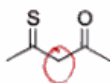
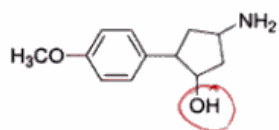


Non Aromatic

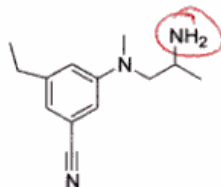


Non Aromatic

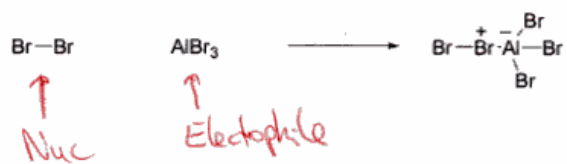
15-18) Identify the most acidic hydrogen in each molecule.



19) Circle the most basic atom in this molecule.



20) Identify the Nucleophile in this reaction.



Mech-Q1