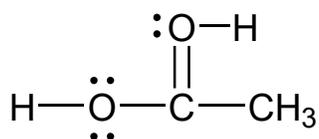
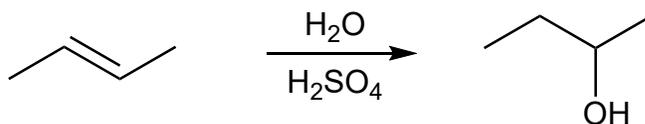


7A) (5 pts) For the Lewis structure below, **supply any missing formal charges** and draw **two additional** significant resonance forms.



7B) (10 pts) Provide a complete mechanism for the following reaction. Pay close attention to details, including lone pairs, formal charges and the use of curved arrows.



7C) (6 pts) Select the structure that is consistent with the given  $^1\text{H}$  NMR spectrum. Justify your answer by **labeling the protons on the structure a/b/c/d** to match the labeled peaks in the spectrum.

