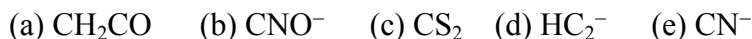


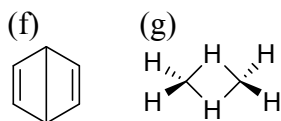
CH105: Organic Chemistry

Tutorial-0

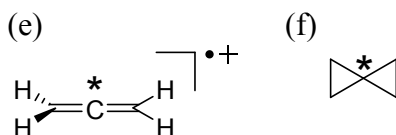
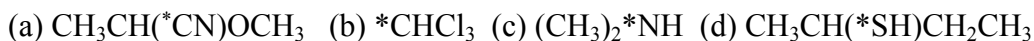
1. Draw the Lewis structure (including formal charges) of the following molecules. For those who have resonance forms indicate the most stable resonance structure as well.



2. Write Lewis type representation for the following molecules



3. Identify the hybridization of the atom marked with * in the following molecules



4. Draw important resonance forms of H_2CNOH , H_2CNO^- and $\text{CH}_3\text{NHC}(\text{NH}_2^+)\text{NH}_2$

- (a) Using curved “electron pushing” arrows, show how Lewis structures may be interconverted by electron pairs.
(b) Determine, which resonance form/form(s) will be the major contributor to the real structures

5. Use curved “electron pushing” arrows to show the movement of electrons in the following reactions (**Show using Lewis representation**)

