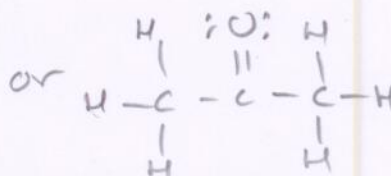
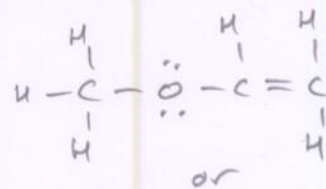
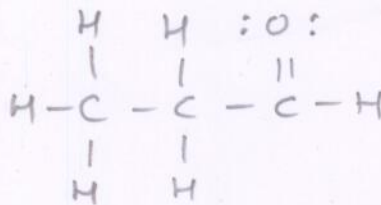
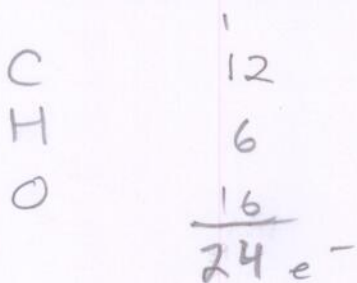


Quiz 2 (30 points)

Name Key

1. Consider the molecular formula C_3H_6O . (10 points)

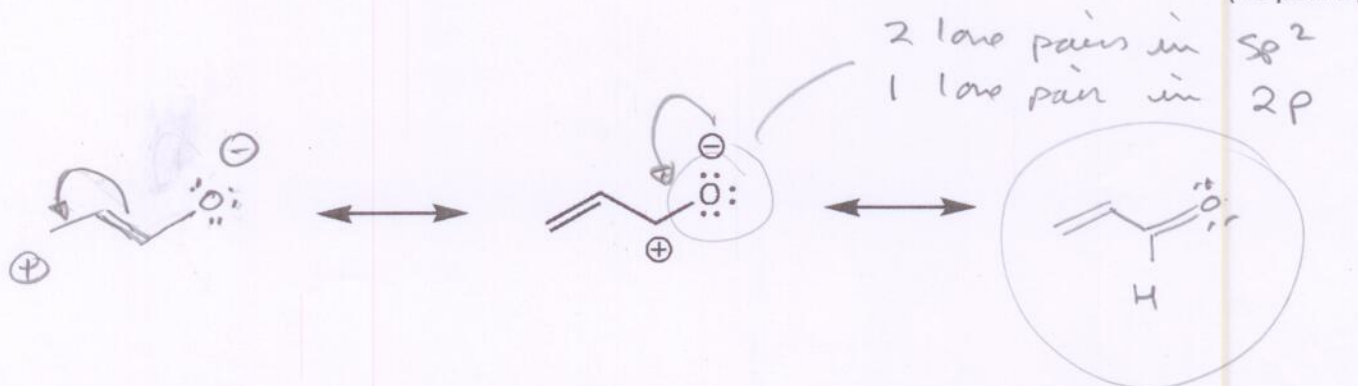
- How many valence electrons are present?
- Draw a Lewis structure for this molecule (there are many reasonable structures). Show all lone pairs of electrons.



3. Consider the structure shown below.

- Show the other two *reasonable* resonance structures (there are only three reasonable forms)
- Use electron-pushing to show how to "get" to the next resonance form (show from left to right).
- Circle which form is the *major* form.
- What is the hybridization of the oxygen atom?
- In the structure shown below, what type of atomic orbitals are the lone pair of electrons of the oxygen atom in? (are all three lone pairs in the same type?)

(20 points)



sp^2 in all
three structures
(doesn't change)

major -
- no charge separation
- all octets