ORGANIC CHEMISTRY **FALL 2019** **LANEY COLLEGE**
CHEM 12A (L1/L1LA/L1LB) **INSTRUCTOR: STEPHEN CORLETT**

Quiz 2 (35 points) **Name** Key

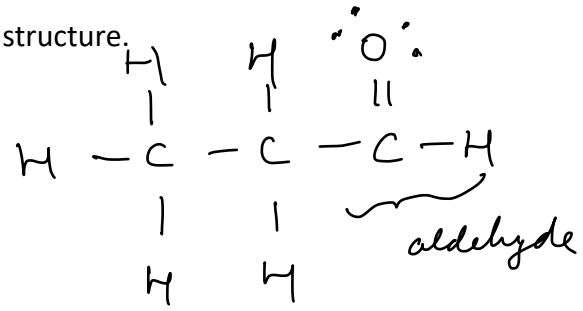
1. Consider the molecular formula C_3H_6O. (15 points)

   a. How many valence electrons are present?

   b. Draw a *Lewis* structure for this molecule (there is more than one possible). Show any lone pairs of electrons.

   c. Name the functional group shown in your structure.

a. 3 C 3(4)
6 H 6(1)
1 O 1(6)
24 e⁻

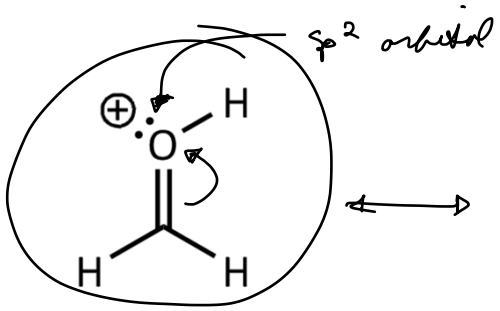


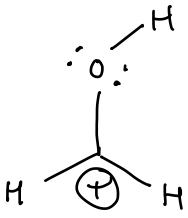
lots of other possibilities

3. Consider the structure shown below.

   a. Show the other resonance structure and use electron pushing to show how you arrived at it.
   b. Circle which form is the *major* form (the most reasonable).
   c. What is the hybridization of the oxygen atom?
   d. In the structure shown below, what type of atomic orbital is the lone pair of electrons in?

(20 points)





– more bonds + all octets