Consider acetic acid, whose line structure is shown below.

1) Give the hybridization of each of the following (numbered) atoms (2 pts each):

   Atom 1:

   Atom 2:

   Atom 5:

   Atom 7:

2) (2 pts) Which pair of atoms has a $\pi$ bond between them?
   a) 1-2
   b) 1-5
   c) 1-7
   d) 7-8
   e) all of the above
   f) none of the above