

## CH 203 Fall 2010: Sample NMR problems

(1) Assign the signals in the NMR spectrum of this compound to the appropriate set of protons.

**Assign.**      **Chemical shift [ppm]**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

$\delta$  0.93

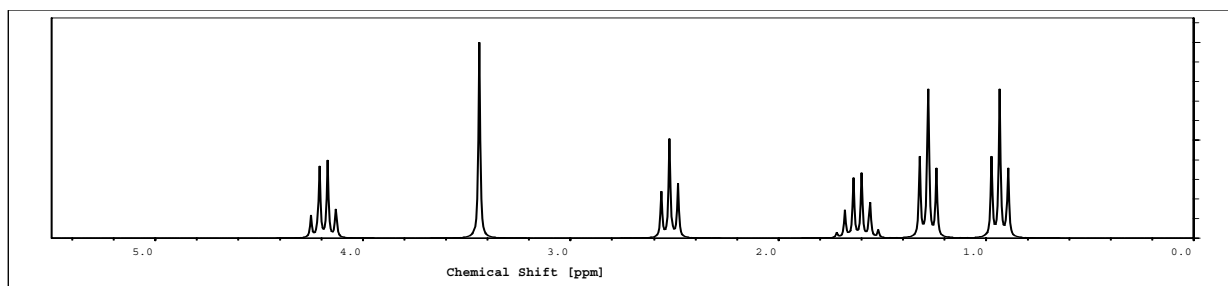
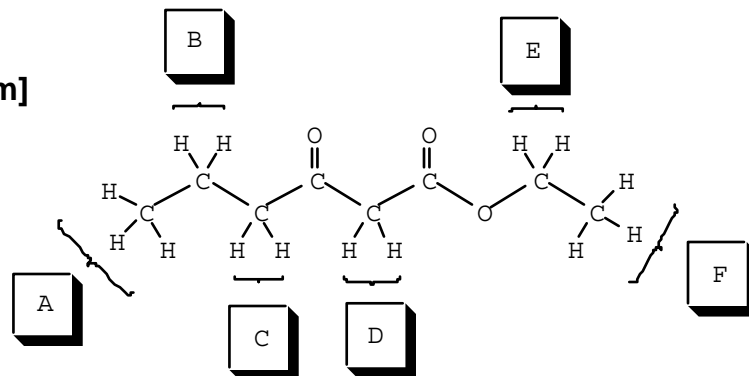
$\delta$  1.28

$\delta$  1.62

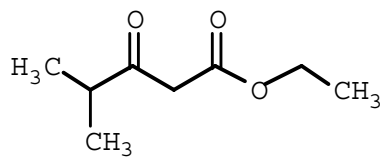
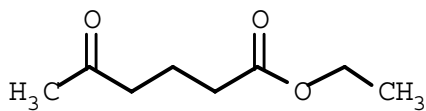
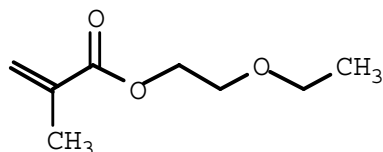
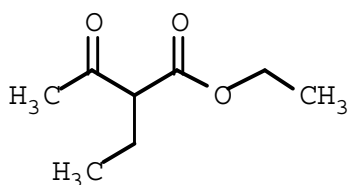
$\delta$  2.52

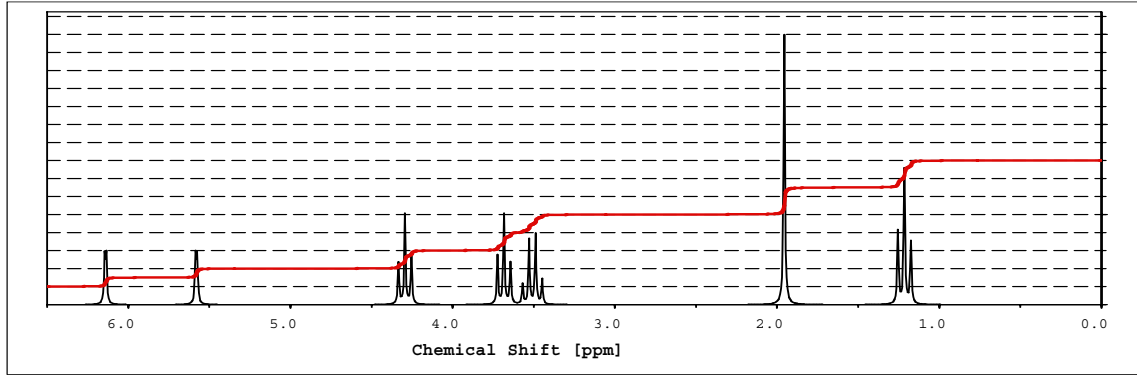
$\delta$  3.44

$\delta$  4.19

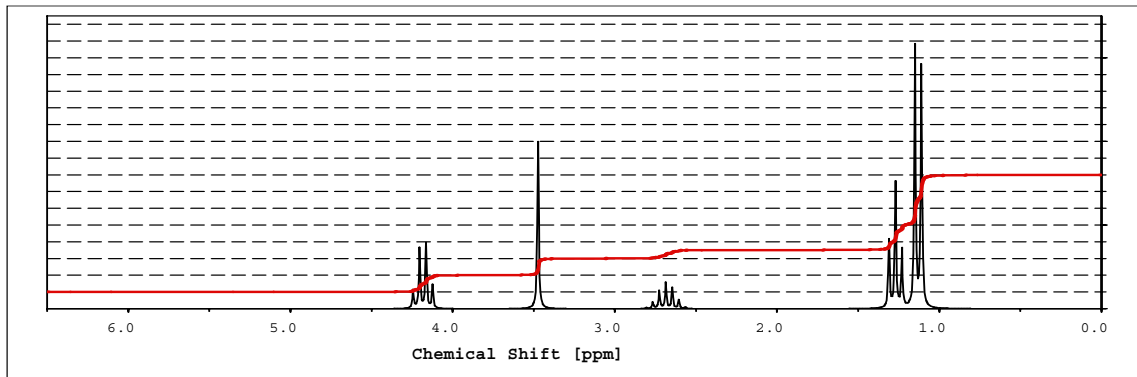


(2) Match each  $C_8H_{14}O_3$  isomer to its NMR spectrum.

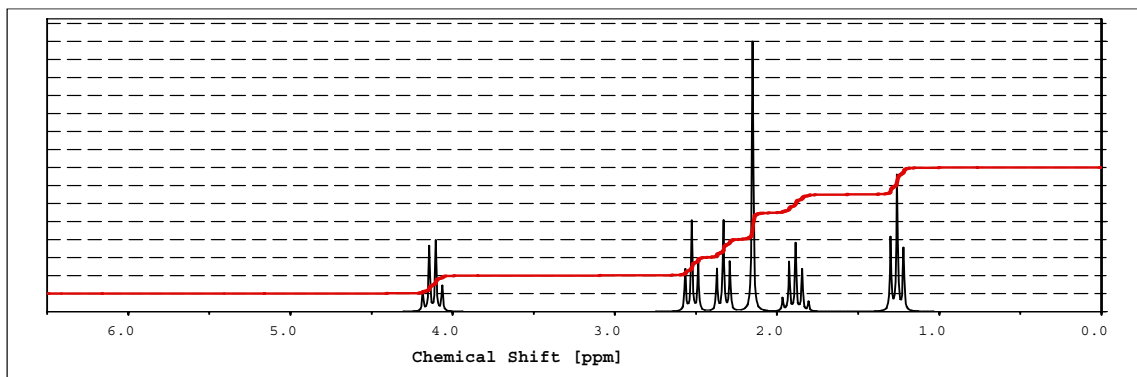




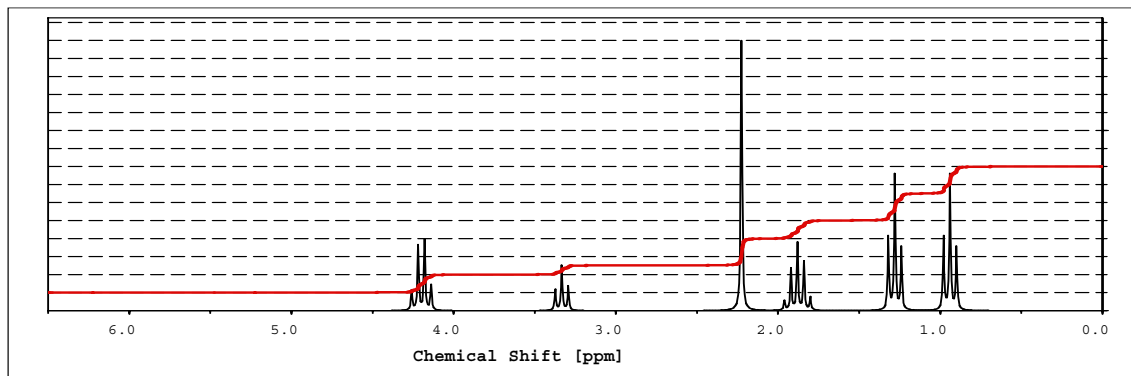
A



B



C



**D**