

CH 203 Fall 2010: Sample NMR problems key

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

Assign. **Chemical shift [ppm]**

A δ 0.93

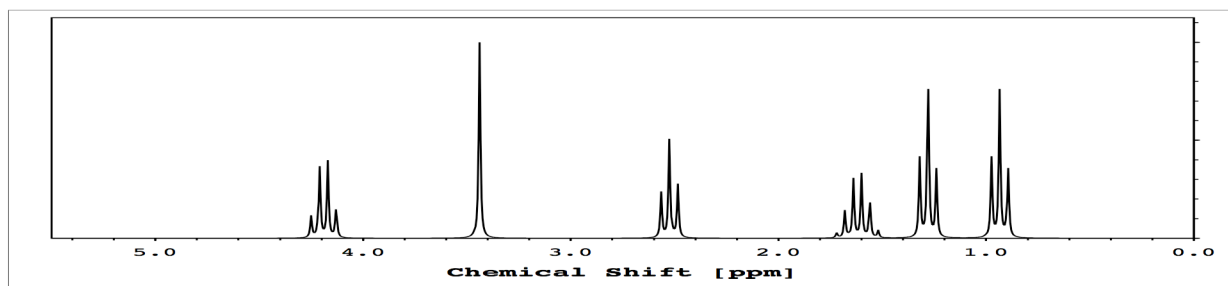
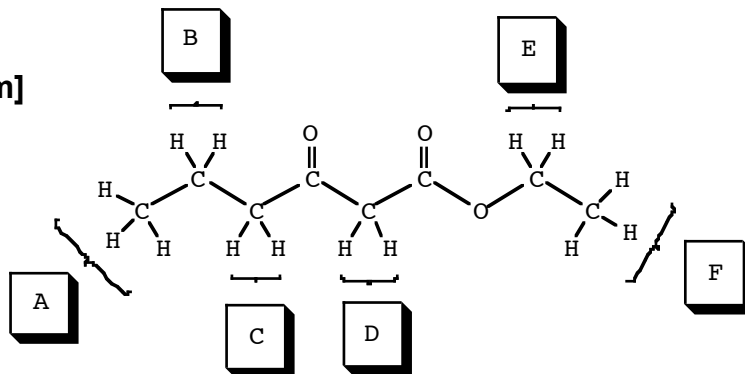
F δ 1.28

B δ 1.62

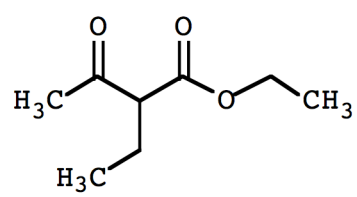
C δ 2.52

D δ 3.44

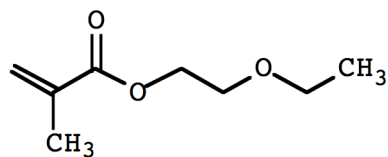
E δ 4.19



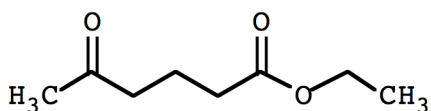
(2) Match each C₈H₁₄O₃ isomer to its NMR spectrum.



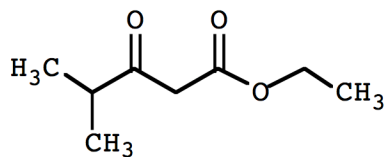
D



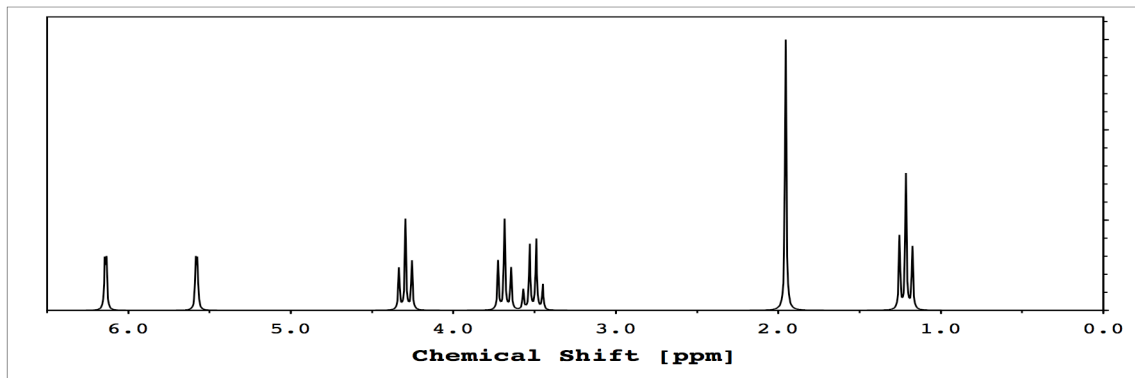
A



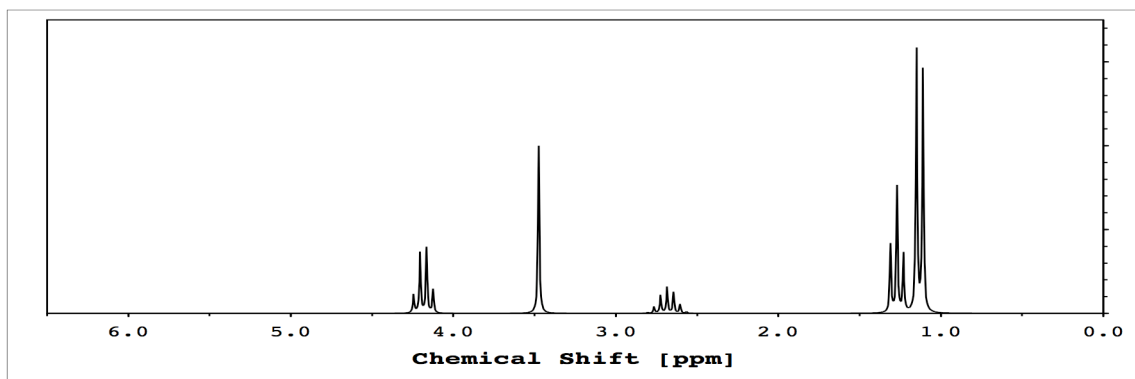
C



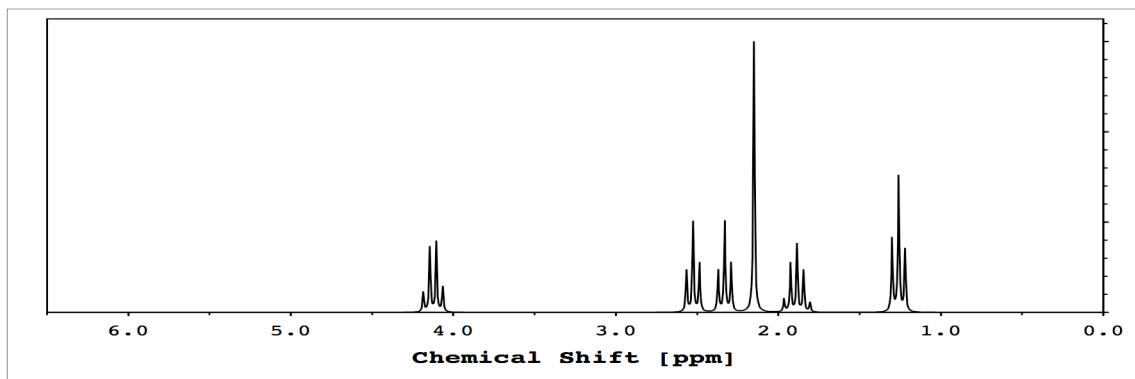
B



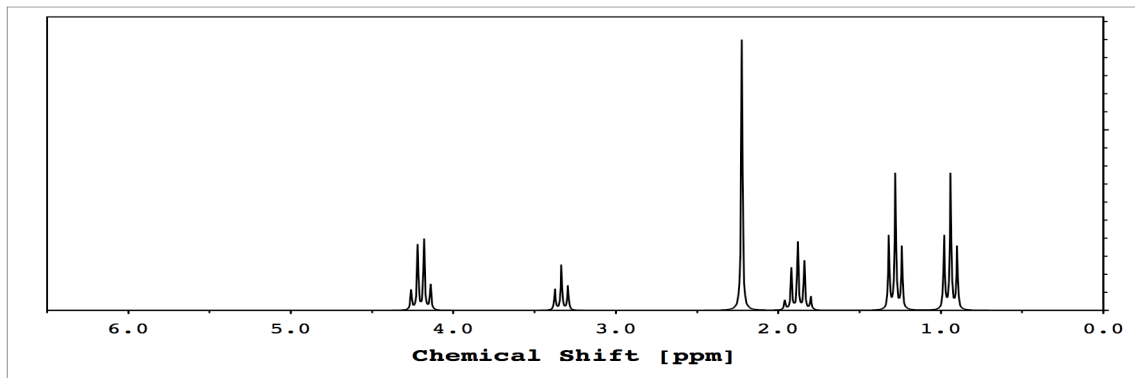
A



B



C



D