

CHM 202-01

Take-home question for Exam II

Due at 12:00 noon on February 28, 2014

Name \_\_\_\_\_

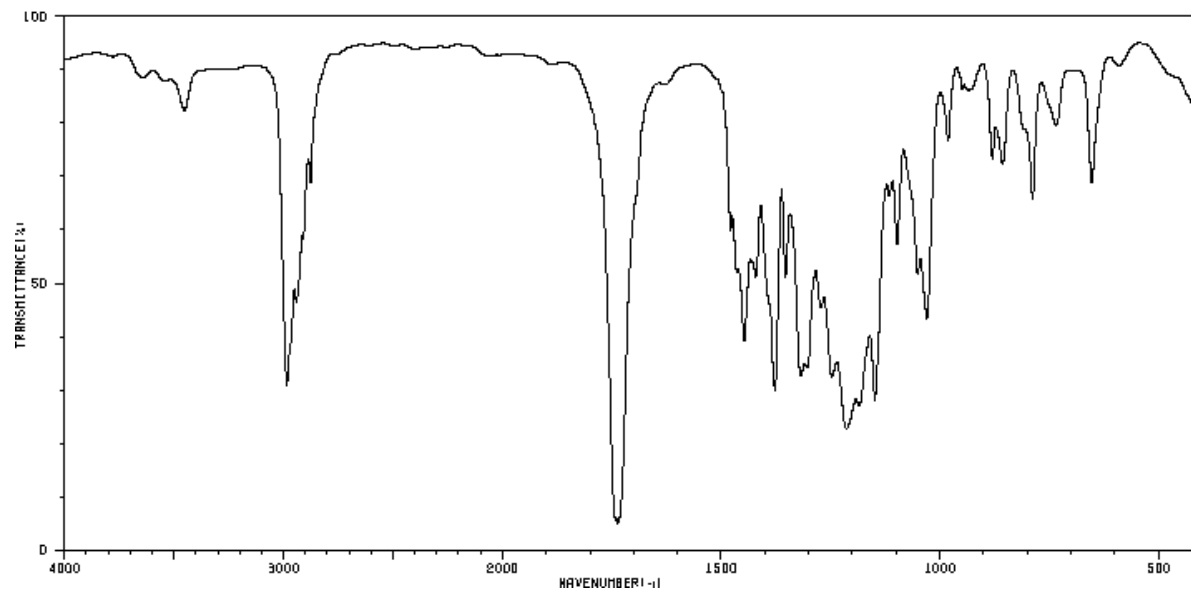
**You are to work individually** – no collaboration with peers. You **may not** use the internet for any reason. You may use your text only (although I don't think you will need it).

Your signature below states that you have abided by the above guidelines.

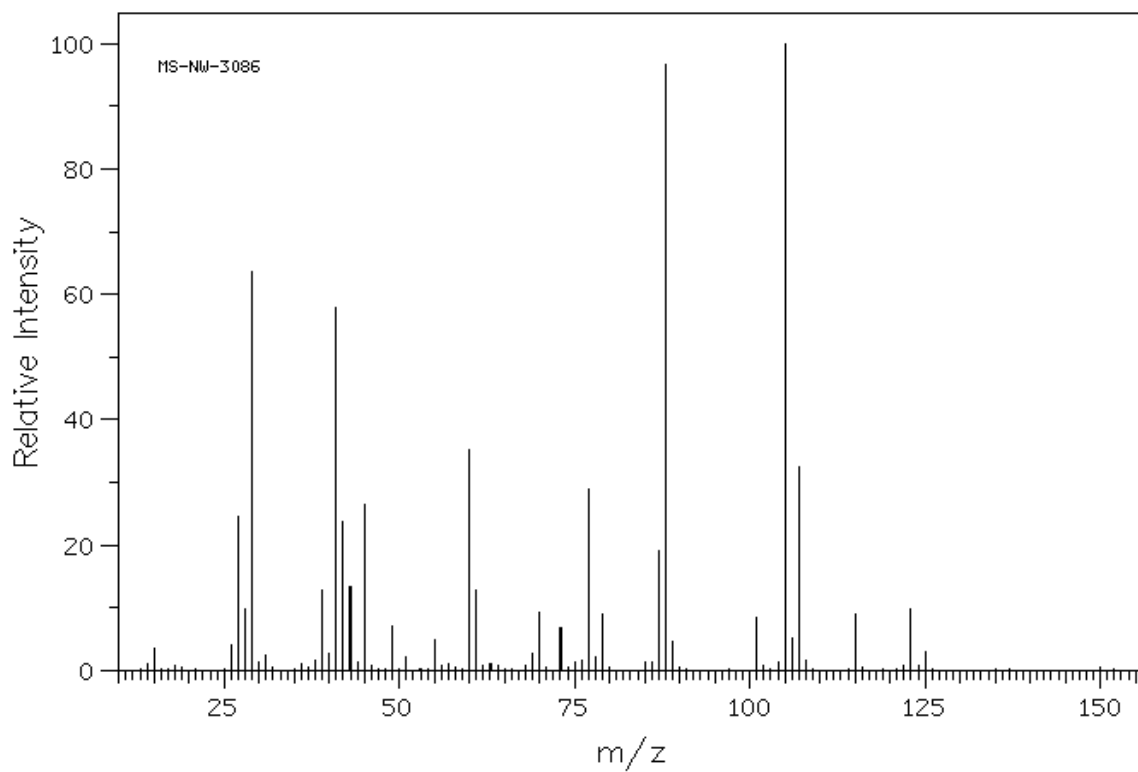
\_\_\_\_\_

8.(15) Identify (draw the structure) the compound that gives rise to the following IR, mass, and  $^1\text{H}$  NMR spectra. Show all of your thought processes. The  $^1\text{H}$  NMR spectrum shows 3 different triplets, a quartet and a quintet (not in that order).

IR:

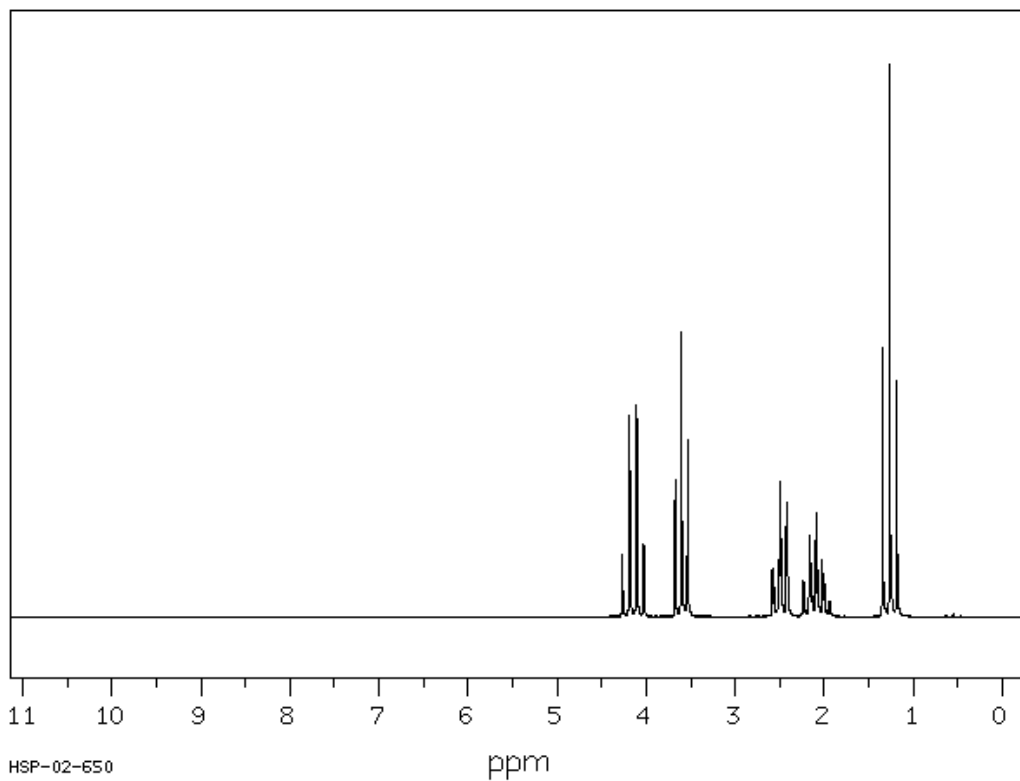


Mass:  $m^+ = 150$ ;  $m+2 = 152$



8.(continued)

**$^1\text{H}$  NMR:** Integration upfield to downfield is 3:2:2:2:2



**$^{13}\text{C}$  NMR:**

