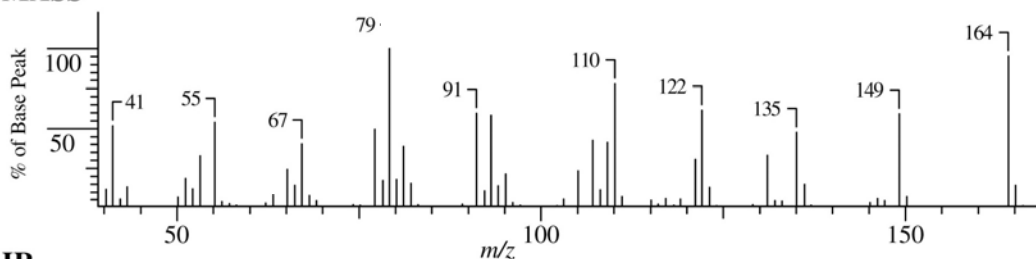


NAME _____

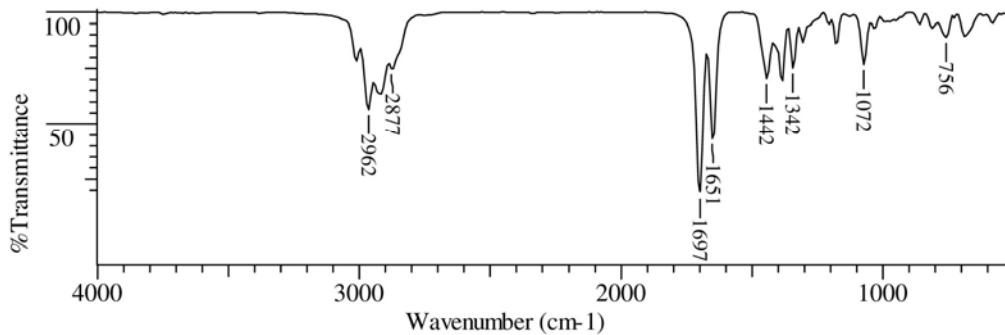
Organic Spectroscopy I
Fall 2008
Exam 2 Practice Problem

Use the data below to propose and defend a structure of a compound. You don't have to use every piece of data but for each spectrum you use, please, comment on what kind of information you obtained to confirm your structure.

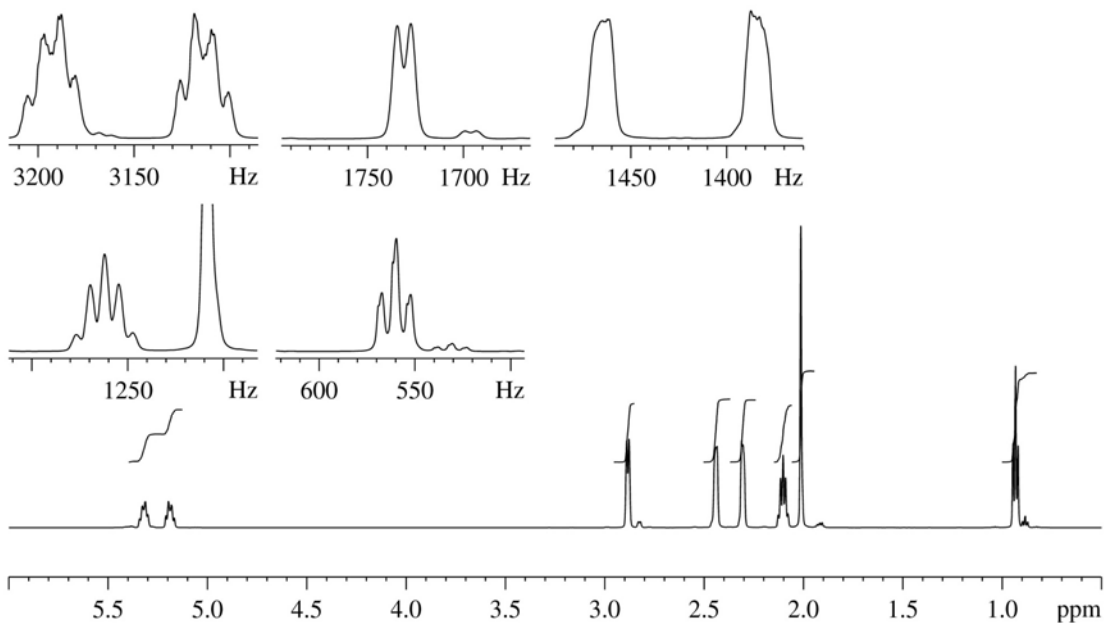
MASS



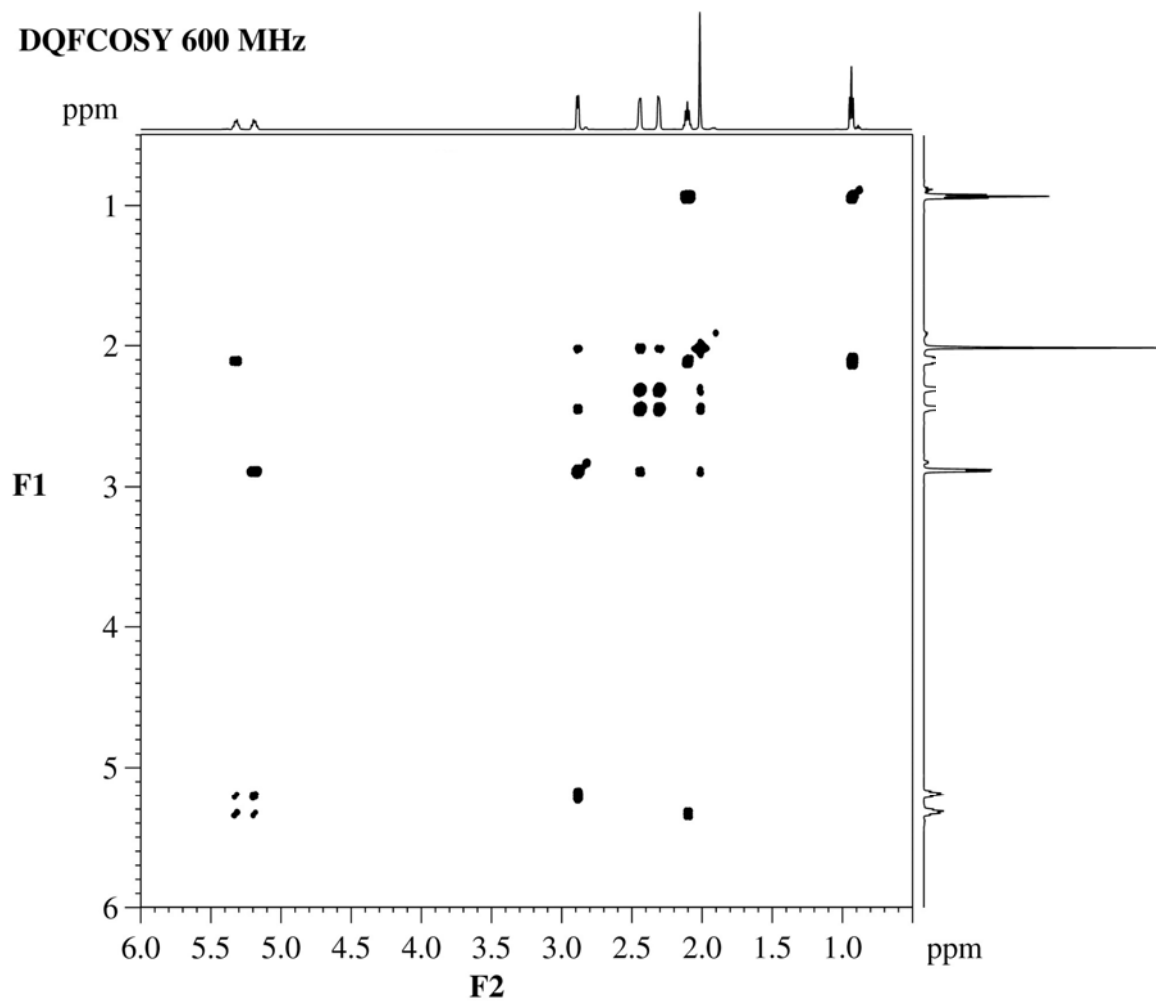
IR



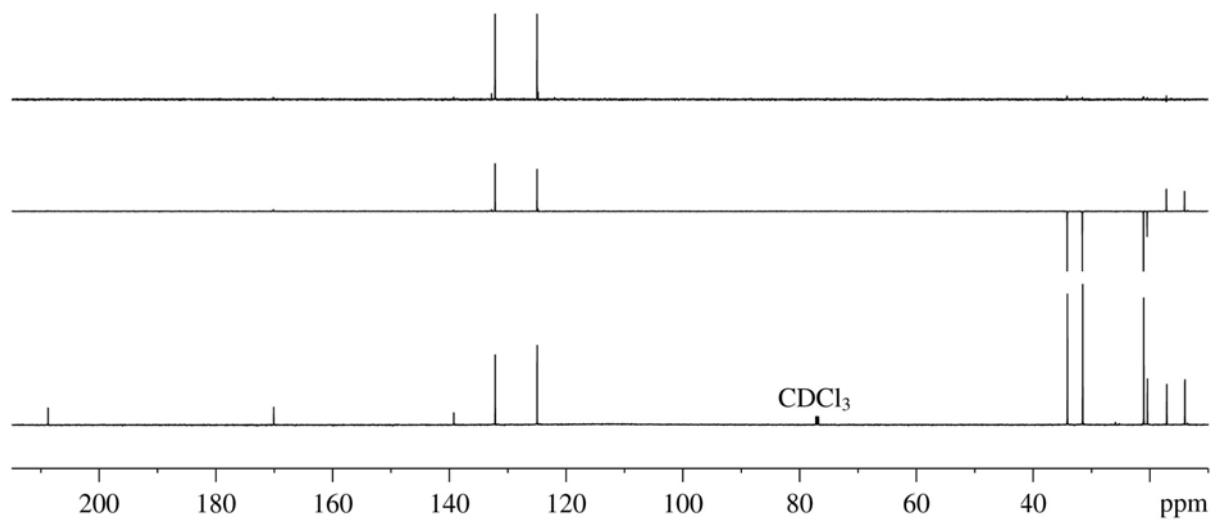
^1H NMR 600 MHz



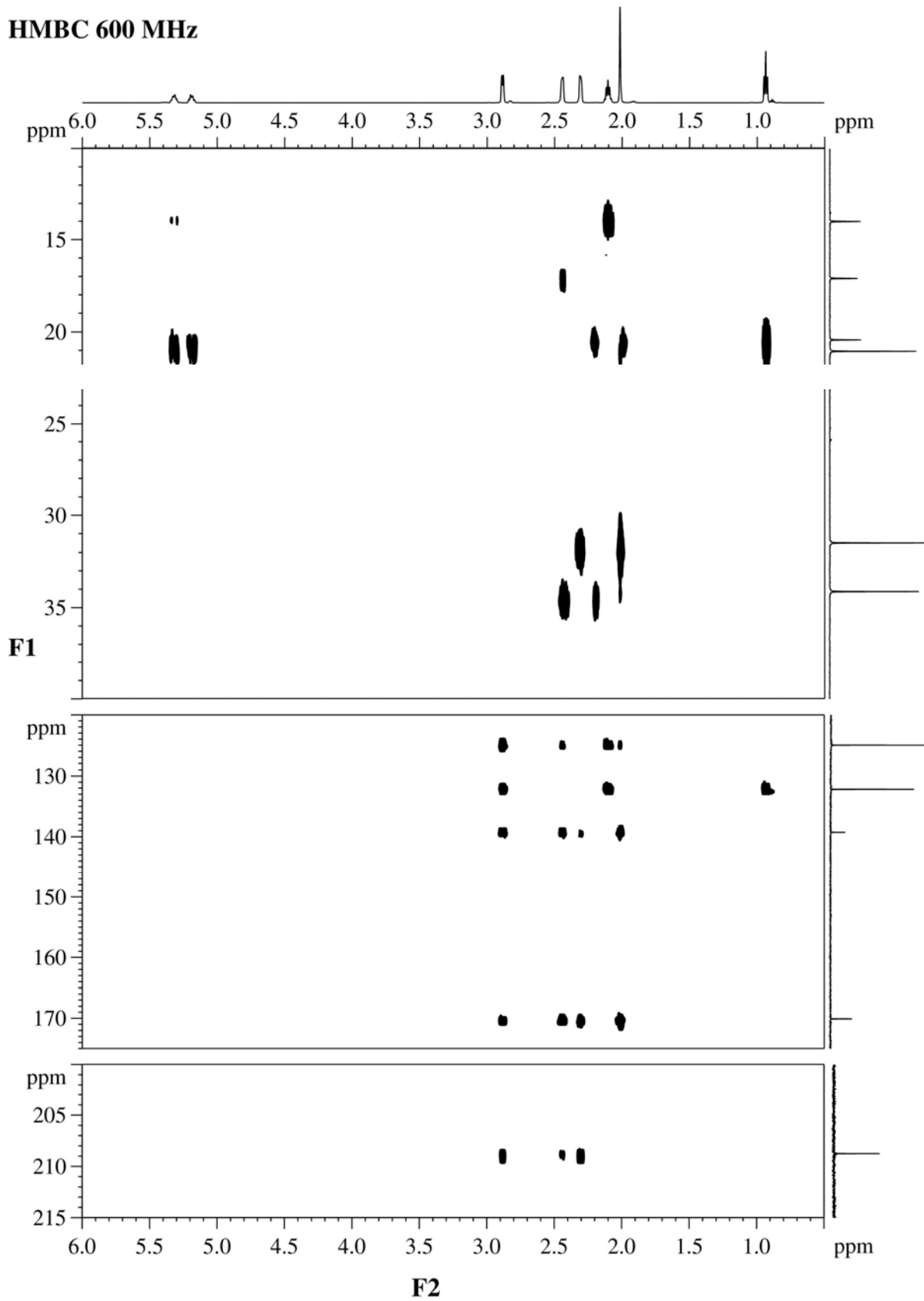
DQFCOSY 600 MHz



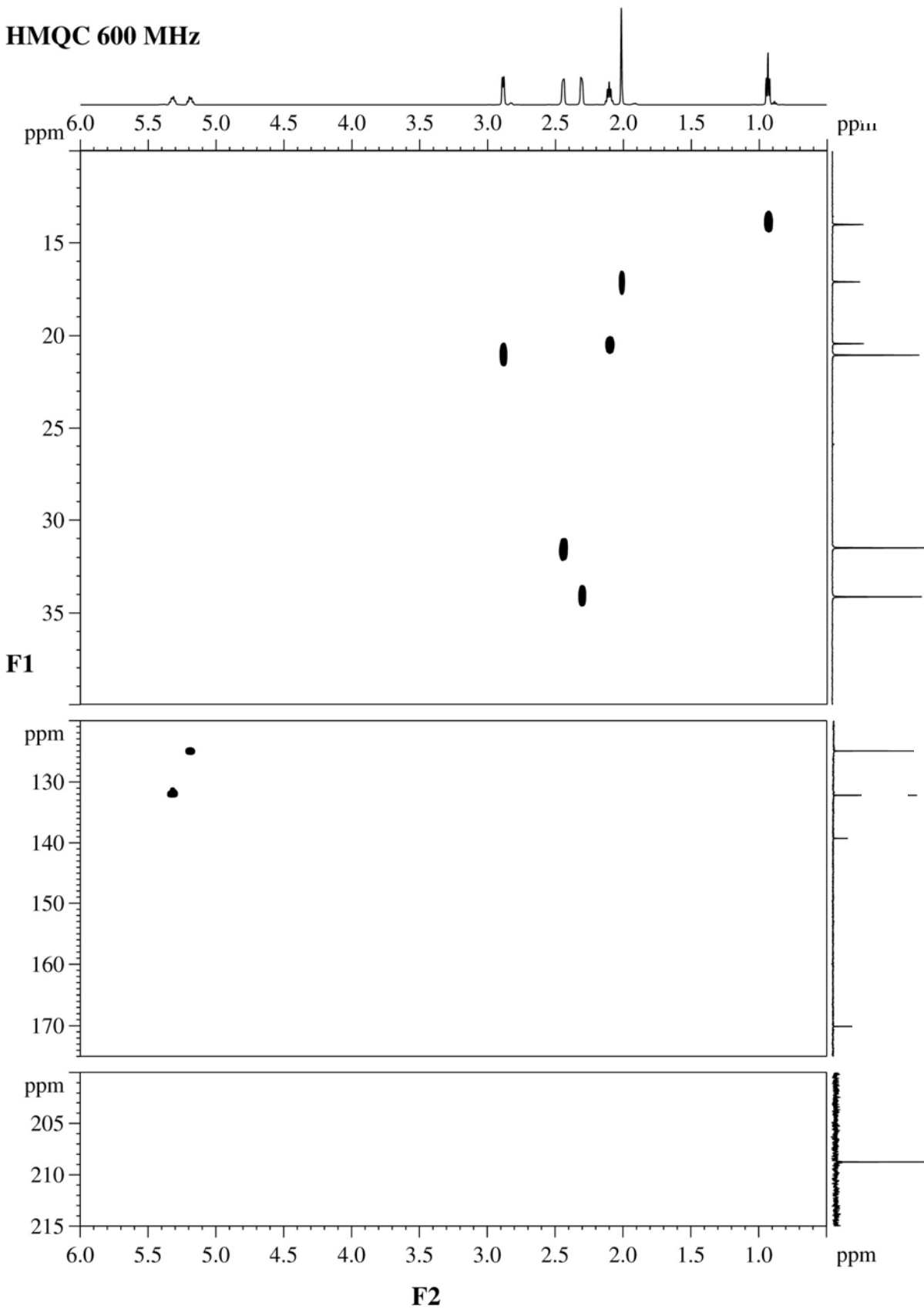
¹³C/DEPT NMR 150.9 MHz



HMBC 600 MHz



HMQC 600 MHz



Structure Assignment.

Explain your reasoning, support by whatever spectral data you used.

(The correct structure has the CAS number of 488-10-8, try to solve before looking it up).