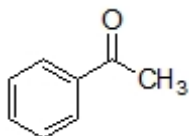


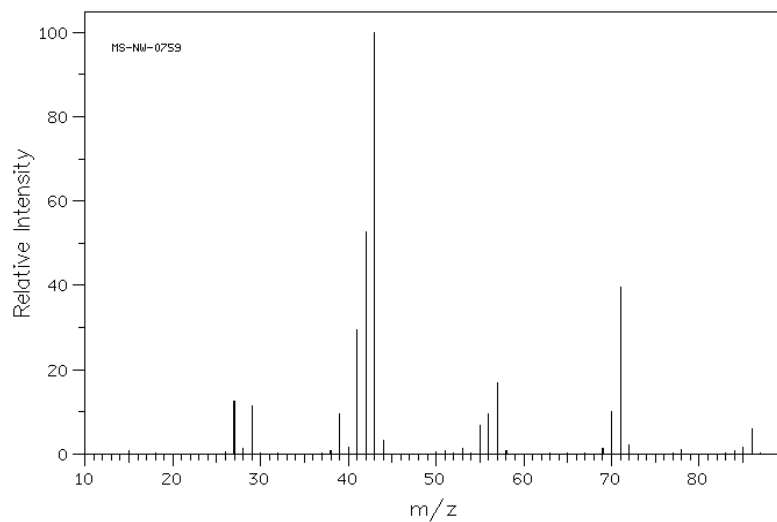
Name: _____

Organic II Lecture
Spring 2010
Quiz #1
(10 points)

1. Given that $1 \text{ cm} = 10,000 \text{ m}$, convert the IR wavelength of 5.85 m to wavenumbers. (1 point, problem 12-13c)
2. What characteristic features would be present in the IR spectrum of acetophenone, shown below. (3 points)



3. A saturated hydrocarbon gave the following mass spectrum. Provide a structure for the unknown hydrocarbon. (3 points)



- Turn the page over -

4. The following structure, having a molecular formula of $C_7H_{14}O_2$, gave the following 1H NMR spectrum. Provide a structure for the unknown compound. (3 points)

