Chem 228

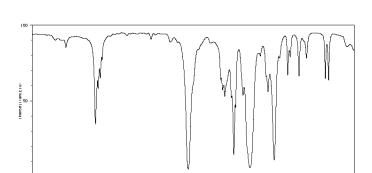
IR/NMR Hwk (60 pts., due week of 3/7-3/9)

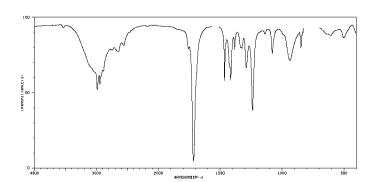
WS2012

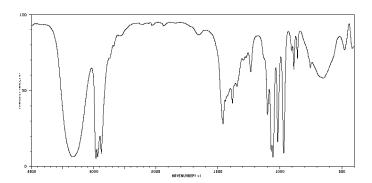
Name

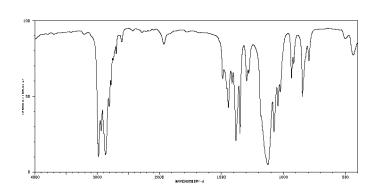
Section

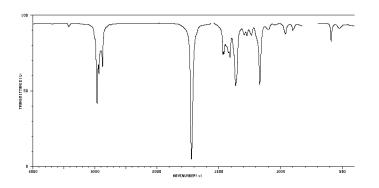
IR-Identify the following IR spectra by functional group. Only one functional group is present per spectrum. Possible functional groups: alkane, alkene,, ketone, aldehyde, acid, ester, anhydride, alcohol. **You must identify the major peaks used to make the determination to receive credit.**

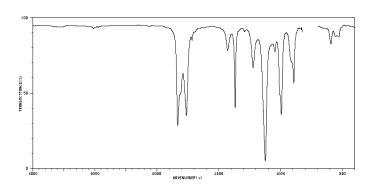








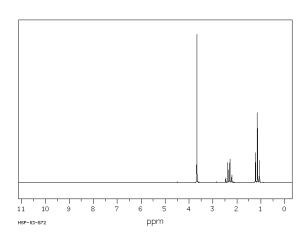




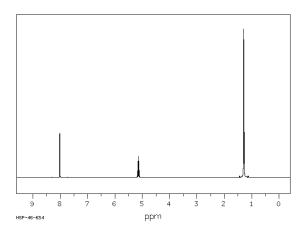
H-NMR-Determine the structure of the following compounds from their ¹H spectra. Structures are chosen from those given below. Label H's on structures showing expected splitting (s, d, t, m, etc.). Show structural assignments on NMR spectral peaks used to make the identification. **No credit if work is not shown.**

Possible structures:

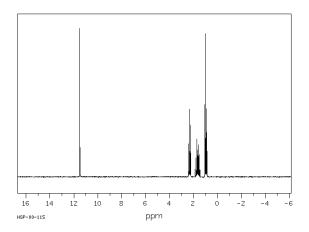
$$H_3$$
C H_3 C



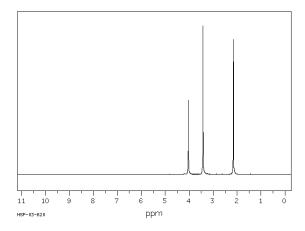
H-NMR Peaks are s, q, t.



H-NMR Peaks are s, m(7x), d



H-NMR Peaks are s, t, m(6x), t



H-NMR Peaks are s, s, s.