Quiz 2

Proposed questions for Quiz 2
Question 1:
Match two of the following compounds with the correct H¹ NMR spectrum below.
Question 1
Associated spectra

Q1.1

quar(1)  
d(3)  
sep(2)

Q1.2

Quar(4)  
d(12)  
sep(2)  
t(6)
Question 2:
Predict the number of distinct $^1$H NMR absorptions and associated splitting for the following species
Question 2:
Predict the number of distinct $H^1$ NMR absorptions and associated splitting for the following species
Question 3: An unknown chemical has the following $^1\text{H}/^{13}\text{C}$/FT-IR spectrums. Given that its chemical formula is $\text{C}_5\text{H}_{10}\text{O}$, please propose a plausible structure. Please explain reasoning and expected structural features for partial credit!
Question 3: An unknown chemical has the following $\text{H}^1/\text{C}^{13}/\text{FT-IR}$ spectrum. Given that it’s chemical formula is $\text{C}_5\text{H}_{10}\text{O}$, please propose a plausible structure.