1) The mass spectrum and infrared spectrum of a molecule are provided.
   
a) Match one of the following compounds to the spectra. (2 points)

\[ \text{Diagram of compounds} \]

b) Clearly identify and label with the functional group as many infrared bands as possible. (3 points)

2) For the mass spectrum, infrared spectrum and molecular formula, C₄H₇N:
   
a) Propose a reasonable structure. (2 points)

b) Clearly identify and label with the functional group as many infrared bands as possible. (3 points)