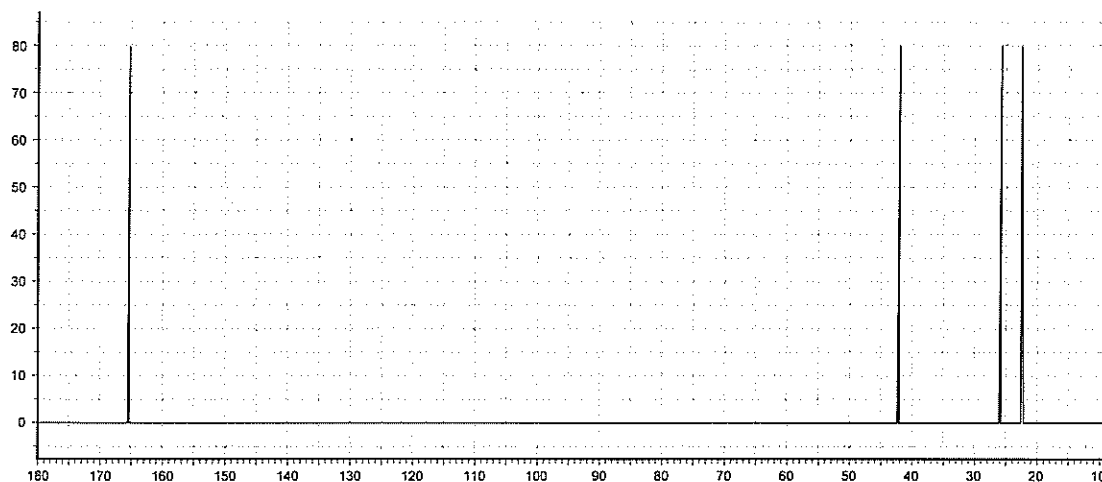
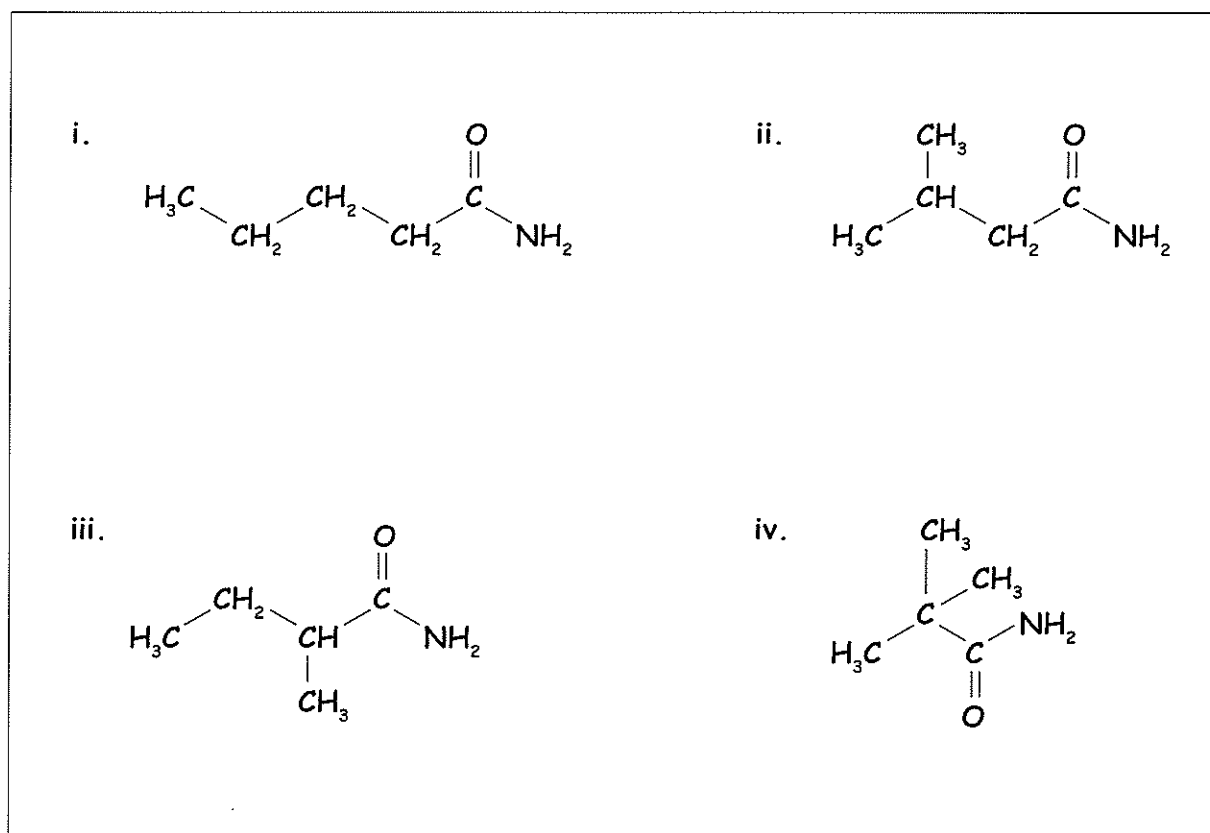


5. The spectrum below is for a primary amide $C_5H_{11}NO$.



a. Draw and label possible structures for the amide and then determine the structure of the molecule from the spectrum shown.



b. Justify your answer.

There are four possible structures for a primary amide with the formula $C_5H_{11}NO$.

i and iii have five chemical environments, ii has 4 chemical environments and iv has

3 chemical environments. As there are four signals in the spectrum, the amide must

be ii.
