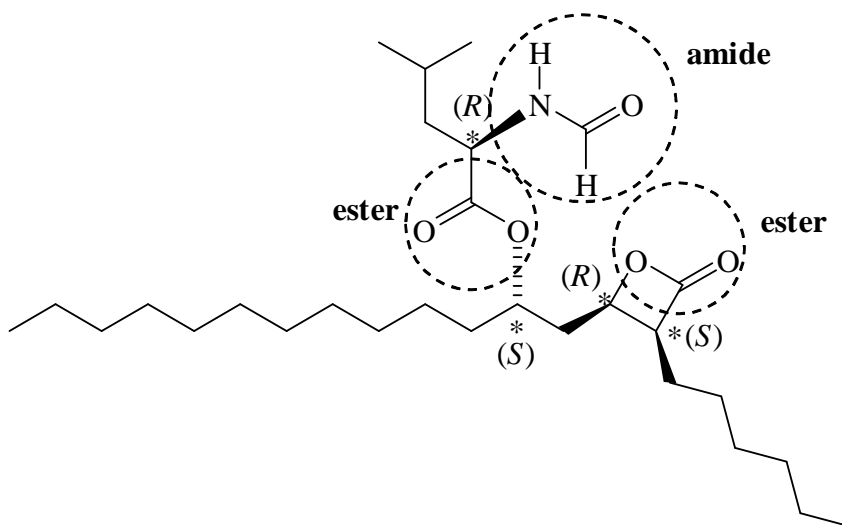


Marks
6

- Orlistat (shown below) is a drug for obesity management which acts by inhibiting the absorption of dietary fats.



Is it likely to be soluble in water? Why?

The molecule contains long-chain hydrocarbon areas which are hydrophobic. Although oxygen atoms are present, there are no O-H groups to allow H-bonding. The molecule is thus unlikely to be soluble in water.

Indicate on the above structure all stereogenic centres. Select one of these centres and clearly assign its stereochemical configuration.

Name the functional groups present in orlistat.

Ester \times 2 and amide (see structure).