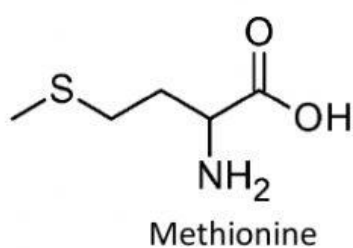
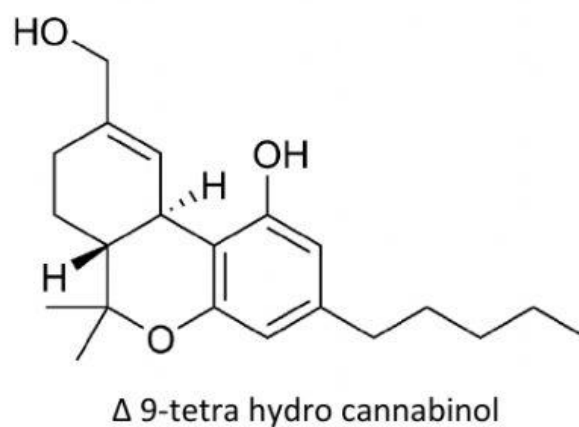
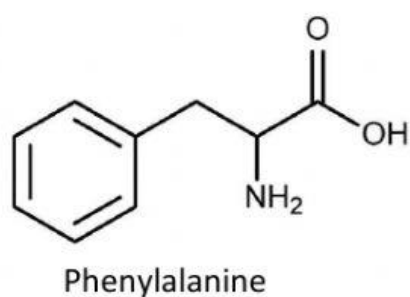
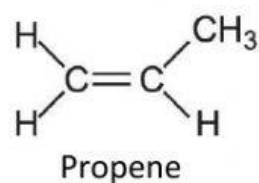
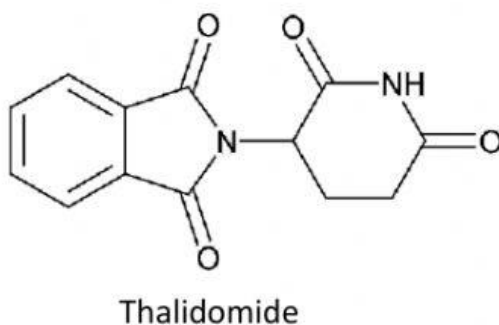
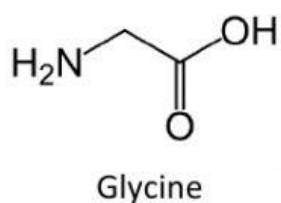
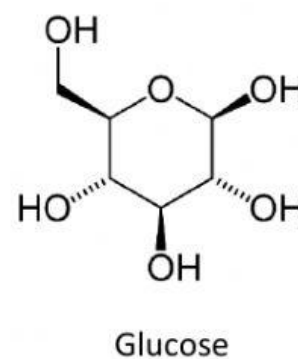
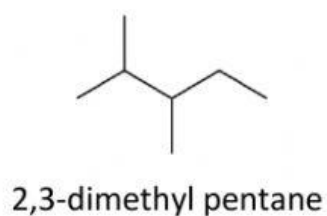
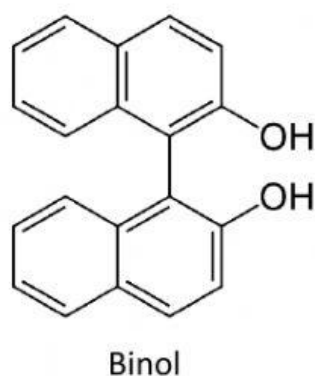
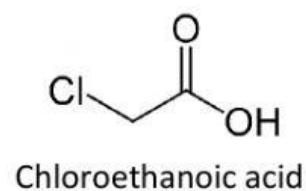
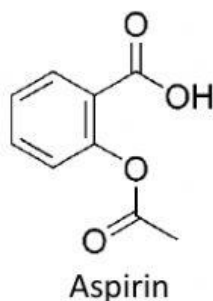
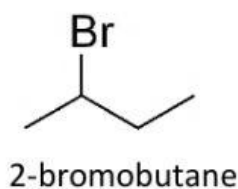


Name: _____

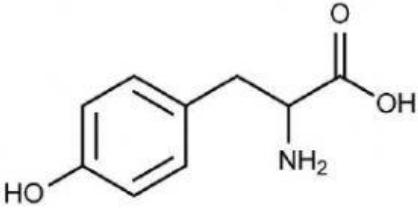
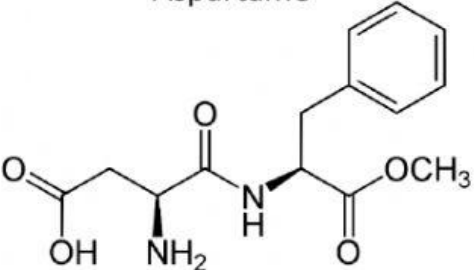
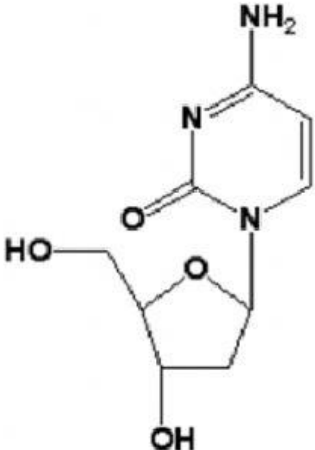
Set: _____

Optical Isomerism

1. Select the compound that has chiral carbon centre.



2. State the number of chiral carbon centre the following compounds possess.

Thirosine  The structure shows a benzene ring with a hydroxyl group (-OH) at the para position. A side chain is attached to the ring, consisting of a methylene group (-CH₂-), a chiral carbon atom bonded to an amino group (-NH₂), and a carboxylic acid group (-COOH).	
Aspartame  The structure shows a central amide bond. On the left, an aspartic acid derivative is shown with a carboxylic acid group (-COOH), a chiral carbon atom bonded to an amino group (-NH₂), and a methylene group (-CH₂-). On the right, a phenylalanine derivative is shown with a chiral carbon atom bonded to a hydrogen atom (indicated with a wedge bond), a benzyl group (-CH₂-C₆H₅), and a methyl ester group (-COOCH₃).	
Cytosine  The structure shows a pyrimidine ring system. It has an amino group (-NH₂) at the 4-position and a carbonyl group (=O) at the 2-position. The ring is attached to a ribose sugar at the 1-position via a glycosidic bond. The ribose sugar is shown in a five-membered ring form with hydroxyl groups (-OH) at the 2' and 3' positions.	