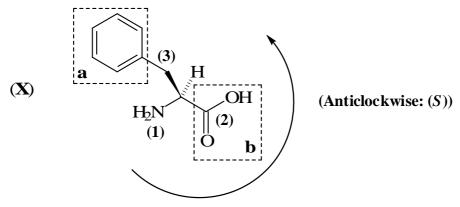
ullet Phenylalanine is a naturally occurring amino acid. Only the enantiomer (X) is commonly produced in nature.

Marks 6

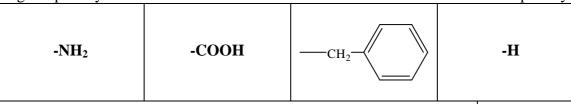


What is the molecular formula of (X)?

 $C_9H_{11}O_2N$

List the substituents attached to the stereogenic centre in descending order of priority according to the sequence rules.

highest priority lowest priority



What is the absolute stereochemistry of (X)? Write (R) or (S).

(S)

Name the functional groups, highlighted by the boxes **a** and **b**, present in (**X**).

a = arene (aromatic ring)	b = carboxylic acid
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