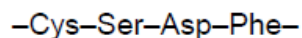


Amino acids, Proteins and DNA – A2 2022 Chemistry P2&P3

1. June/2022/Paper_7405/2/No.4

0 4

Proteins are polymers made from amino acids.
Part of the structure of a protein is shown.



Each amino acid in the protein is shown using the first three letters of its name.

0 4 . 1

Identify the type of protein structure shown.

[1 mark]

Tick (✓) **one** box.

Primary

Secondary

Tertiary

0 4 . 2

Draw a structure for the –Cys–Ser– section of the protein.
Use the Data Booklet to help you answer this question.

[2 marks]

2. June/2022/Paper_7405/3/No.29

Which is the main species present in an aqueous solution of aspartic acid at pH = 14?
[1 mark]



3. June/2022/Paper_7405/3/No.33

Which statement about $\text{HOCH}_2\text{CH}(\text{NH}_2)\text{COOH}$ is correct?

[1 mark]

A It decolourises bromine water.

B It is a component of DNA.

C It is insoluble in water.

D It reacts with hydrochloric acid.