

# 2.3 Proteins

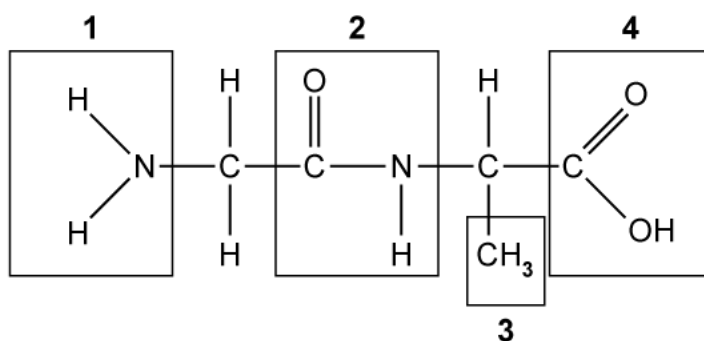
## Question Paper

Course	DP IB Biology
Section	2. Molecular Biology
Topic	2.3 Proteins
Difficulty	Easy

**Time allowed:** 10  
**Score:** /5  
**Percentage:** /100

### Question 1

The following diagram shows a dipeptide with various parts of the molecule numbered (1 to 4).



Which row of the table below correctly identifies each labelled part of this dipeptide?

	1	2	3	4
A.	Carboxyl group	Peptide bond	R-group	Amino group
B.	R-group	Amino group	Peptide bond	Carboxyl group
C.	Amino group	Carboxyl group	Peptide bond	R-group
D.	Amino group	Peptide bond	R-group	Carboxyl group

[1 mark]

### Question 2

Which of the following is **not** a function of proteins?

- A. Involved in the formation of the cytoskeleton within a cell that facilitates chromosome movement
- B. Act as a store of chemical potential energy in cells
- C. Act as chemical messengers that are secreted by glands and act on different parts of the body
- D. They may speed up chemical reactions within a cell

[1 mark]

### Question 3

A simple tetrapeptide consists of four amino acids.

How many different combinations of amino acids would be possible for this peptide?

- A. 16 000
- B. 160 000
- C. 1 600 000
- D. 16 000 000

[1 mark]

### Question 4

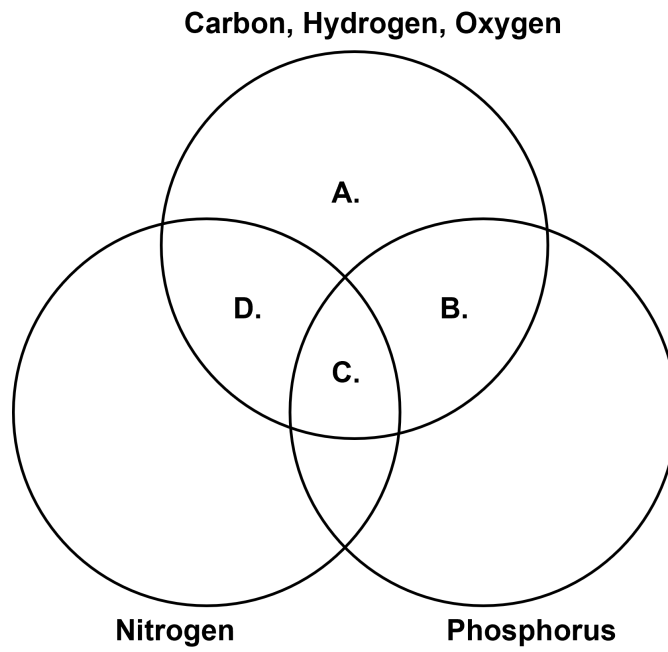
Which of the following are **ALL** examples of proteins?

- A. Rubisco, collagen, amylopectin
- B. Amylopectin, collagen, guanine
- C. Insulin, amylose, spider silk
- D. Rhodopsin, immunoglobulins, rubisco

[1 mark]

### Question 5

Which of the following would represent all the elements that are present in proteins?



[1 mark]