Oxford Cambridge and RSA

Wednesday 14 May 2025 – Morning

GCSE (9–1) Geography B (Geography for Enquiring Minds)

J384/01 Our Natural World

Time allowed: 1 hour 15 minutes

You must have:
- the Resource Booklet (inside this document)

You can use:
- a ruler (cm/mm)
- a scientific or graphical calculator

Please write clearly in black ink. **Do not write in the barcodes.**

Centre number | | | | | | Candidate number | | | | |

First name(s) _____

Last name _____

INSTRUCTIONS
- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.

INFORMATION
- The total mark for this paper is **70**.
- The marks for each question are shown in brackets **[ ]**.
- Quality of extended response will be assessed in questions marked with an asterisk (*****).
- Spelling, punctuation and grammar (SPaG) and the use of specialist terminology will be assessed in questions marked with a pencil (✎).
- This document has **20** pages.

ADVICE
- Read each question carefully before you start your answer.

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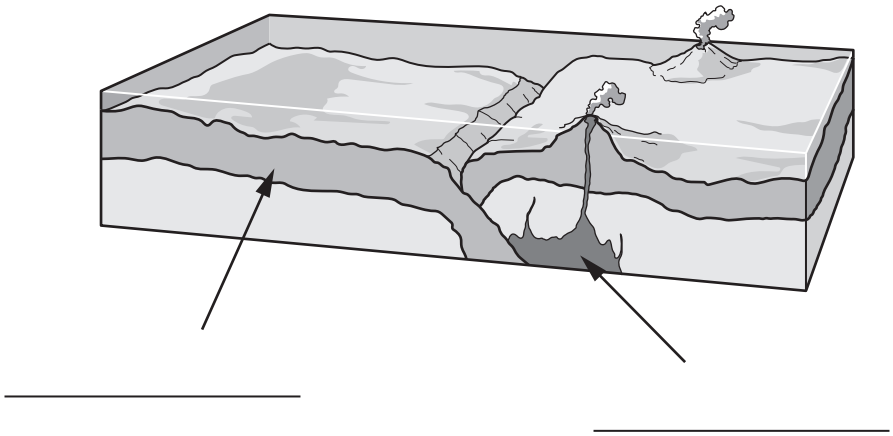
Section A

Global Hazards

1

(a) The diagram below shows a tectonic plate boundary.



(i) Add the **two** labels below to the diagram above.

magma	oceanic crust

[1]

(ii) Identify the plate boundary shown in the diagram above.

A conservative

B constructive

C destructive

D traction

Write the correct letter in the box. ☐ **[1]**

(iii) Explain how earthquakes can be caused at this type of plate boundary.

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..... **[3]**

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CASE STUDY

A natural weather hazard event

Name of weather hazard event .....

(b)* Evaluate the consequences of **either** a flash flood **or** a tropical storm.

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..... **[8]**

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Changing Climate

2

(a) Look at **Fig. 1** in the Resource Booklet.

(i) Suggest how the cave painting could be used as evidence for climate change.

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..... **[2]**

(ii) State **one** reason why cave paintings may **not** be reliable as evidence of climate change.

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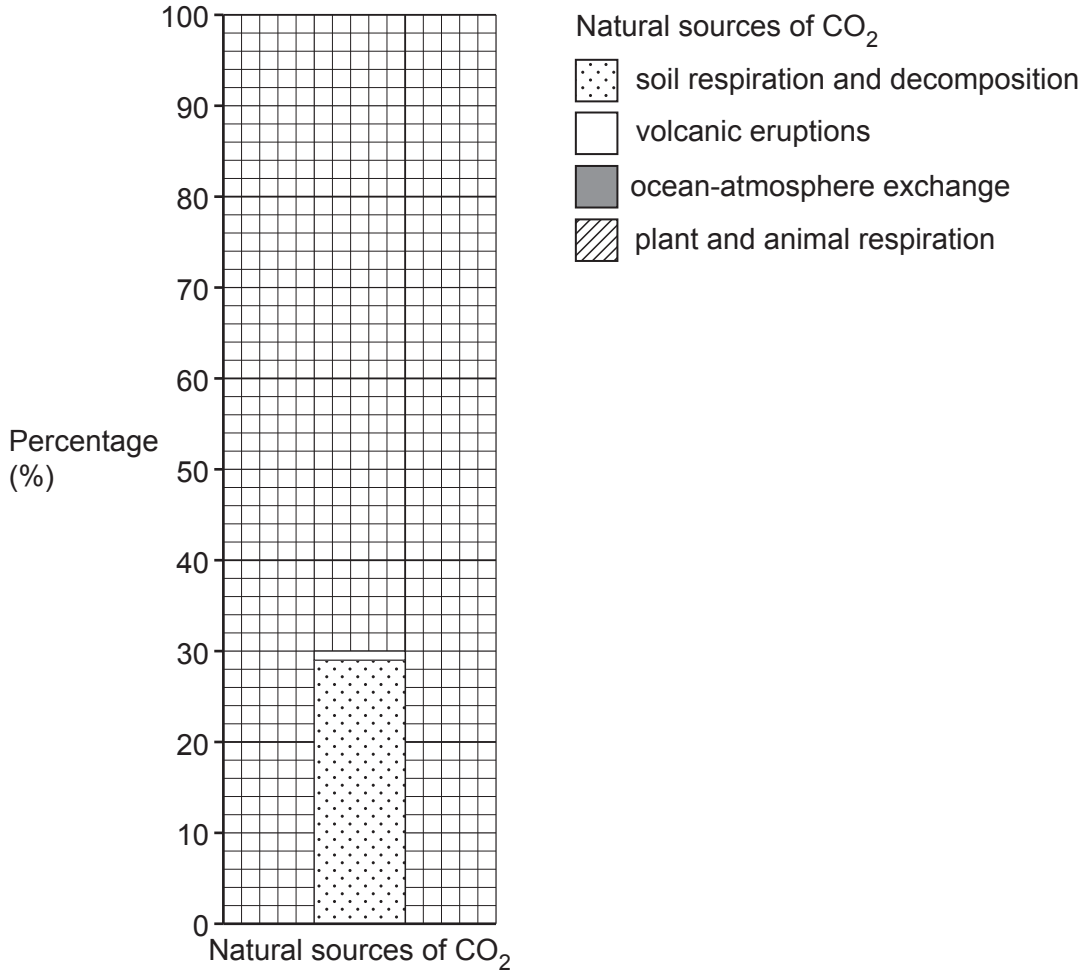
..... **[1]**

(b)

(i) Using the data in the table below, **complete** the divided bar graph showing natural sources of CO_2.

Ocean-atmosphere exchange	42%	
Plant and animal respiration	28%	



[2]

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(ii) Describe **one** way Milankovitch cycles can cause natural climate change.

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..... **[2]**

(c) Evaluate how humans have contributed to the enhanced greenhouse effect.

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Distinctive Landscapes

3 Look at **Fig. 2** in the Resource Booklet.

(a) Use the photograph to draw a labelled sketch of this glaciated landscape.

[2]

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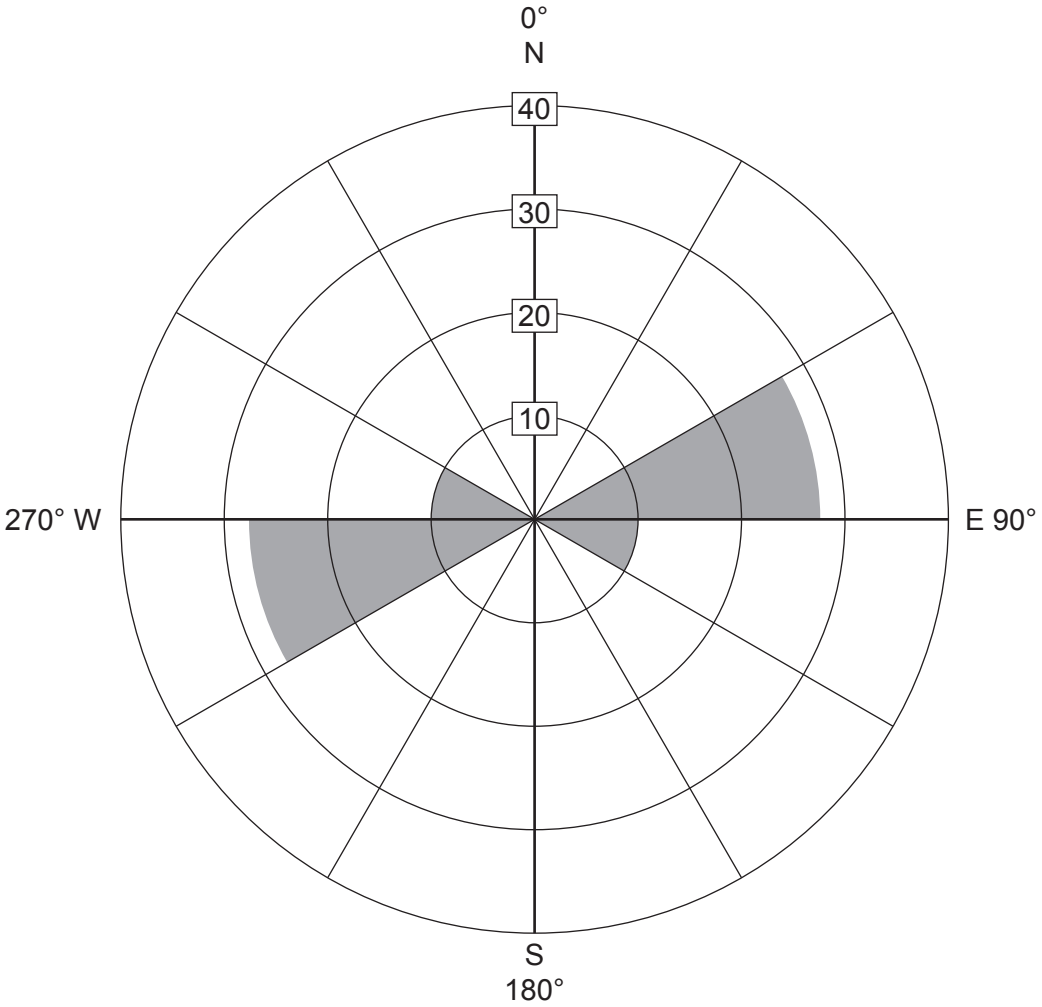
(b) Rocks carried in glaciers can erode by scratching the ground surface beneath the ice. Students collected data showing the direction of these scratches in a glaciated valley.

(i) Use the data in the table below to **complete** the rose chart.

Direction	Number of scratches
0–30° and 180–210°	20
31–60° and 211 to 240°	35



[2]

(ii) In which direction does the data in the rose chart suggest the glacier was travelling?

A East-west

B North-south

C Northeast-southwest

D Northwest-southeast

Write the correct letter in the box. ☐ **[1]**

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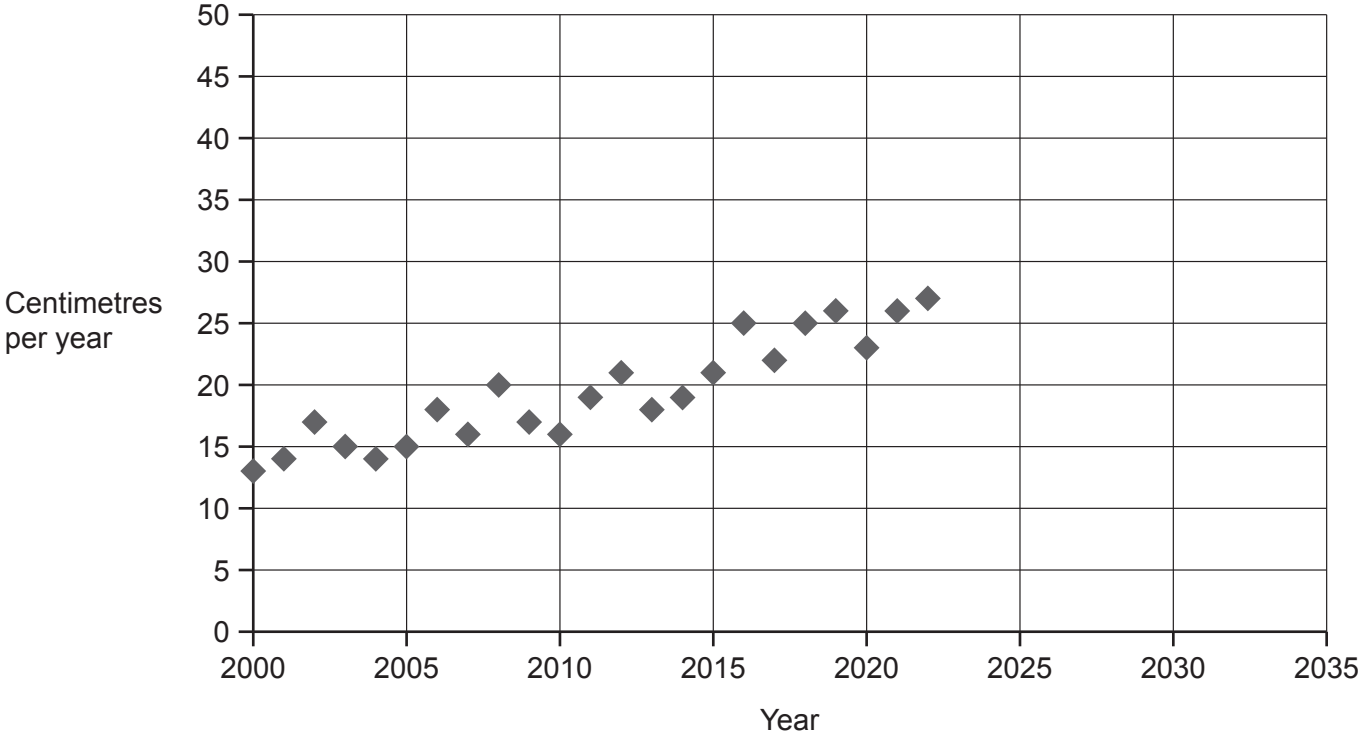
(c) Look at the scatter graph below showing rates of coastal erosion over time.

(i) Draw a **best fit line** on the scatter graph.



[1]

(ii) Use your **best fit line** to predict the rate of coastal erosion in 2035.

A 15 cm

B 20 cm

C 35 cm

D 50 cm

Write the correct letter in the box. ☐ **[1]**

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CASE STUDY

UK coastal landscape

Name of UK coastal landscape .....

(d) Explain the formation of **one** coastal landform in this landscape.

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..... **[6]**

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Sustaining Ecosystems

4

(a) **Overfishing** is when too many adult fish are removed so there are not enough remaining to breed and sustain the population.

Look at **Fig. 3** in the Resource Booklet.

(i) Suggest how **overfishing** of Arctic cod by humans could affect this Arctic food chain.

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..... **[2]**

(ii) Outline **two** other impacts human activity could have on polar environments.

1. .....

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2. .....

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[2]

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(b) Scientists collected data on the height of Arctic land plants. The data is shown in the table below.

	Plant height				
	Up to 0.5 cm	**0.6–5 cm**	**5.1–15 cm**	**15.1–40 cm**	**40.1–200 cm**
Number	9	6	4	3	1

(i) Select the **most** suitable way to present the data in the table.

A Climate graph

B Histogram

C Line graph

D Radial graph

Write the correct letter in the box. ☐ **[1]**

(ii) Identify **one** weakness in the data shown in the table above.

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..... **[1]**

(iii) Suggest **one** way a weakness in the data shown could be reduced.

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..... **[1]**

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CASE STUDY

Global sustainable management in the Antarctic or Arctic

Name of Antarctic **or** Arctic example .....

(c) Explain how your global sustainable management example offers a sustainable solution for polar environments.

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Section B

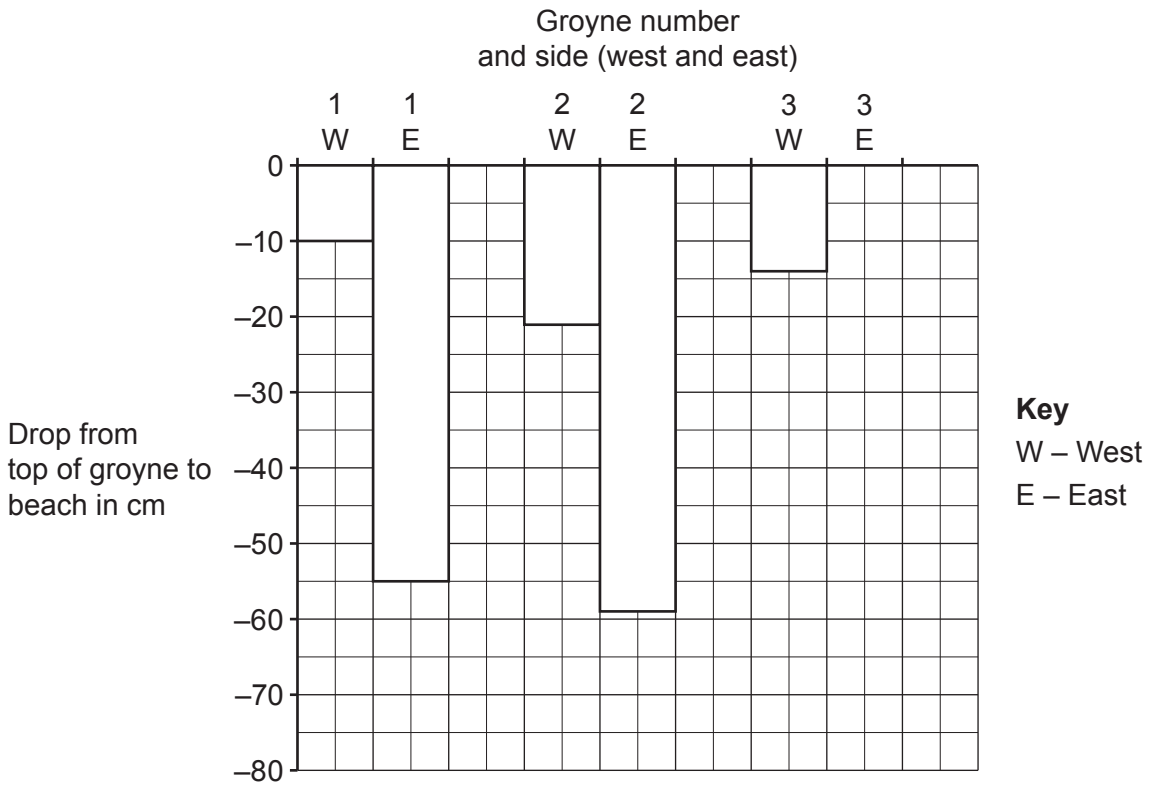
Physical Geography Fieldwork

5 Geography students were investigating the effect of groynes on longshore drift at a beach.

Longshore drift is the movement of sediment along the coastline in the direction of the prevailing wind. A groyne is a structure, usually made of wood, which can be built on a beach to try to prevent longshore drift.

The students measured the drop from the top of three groynes to the beach on both the west and east sides.

The graph below shows the drop from the top of the groyne to the top of the beach on the west and east side of the three groynes.



(a)
(i) The drop from the top of the groyne to the beach on the east side of groyne number three was –63 cm.

Use this data to **complete** the graph above. **[1]**

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(ii) Calculate the **mean** drop from the top of the groyne to the beach on the **west** side of the 3 groynes.

You **must** show your working.

..... cm **[2]**

(iii) Identify the **range** of the drop of the top of the groyne to the beach on the **east** side of the 3 groynes.

A 11

B 20

C 8

D 15

Write the correct letter in the box. ☐ **[1]**

(iv) Identify **one** factor that could have affected the data collected on the beach.

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..... **[1]**

(b) Suggest **one** conclusion that the students could make about the effect of the groynes on longshore drift.

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..... **[2]**

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(c)* You will have carried out physical geography fieldwork.

Fieldwork title .....

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To what extent was your primary data collection successful in allowing you to reach a conclusion?

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..... **[8]**

✎ Spelling, punctuation and grammar **[3]**

END OF QUESTION PAPER

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EXTRA ANSWER SPACE

If you need extra space use these lined pages. You must write the question numbers clearly in the margin.

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