OCR
Oxford Cambridge and RSA

# Friday 17 May 2024 – Afternoon

## 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 **16** pages.

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

© OCR 2024 [601/8224/6]
DC (ST/CT) 318656/6
OCR is an exempt Charity

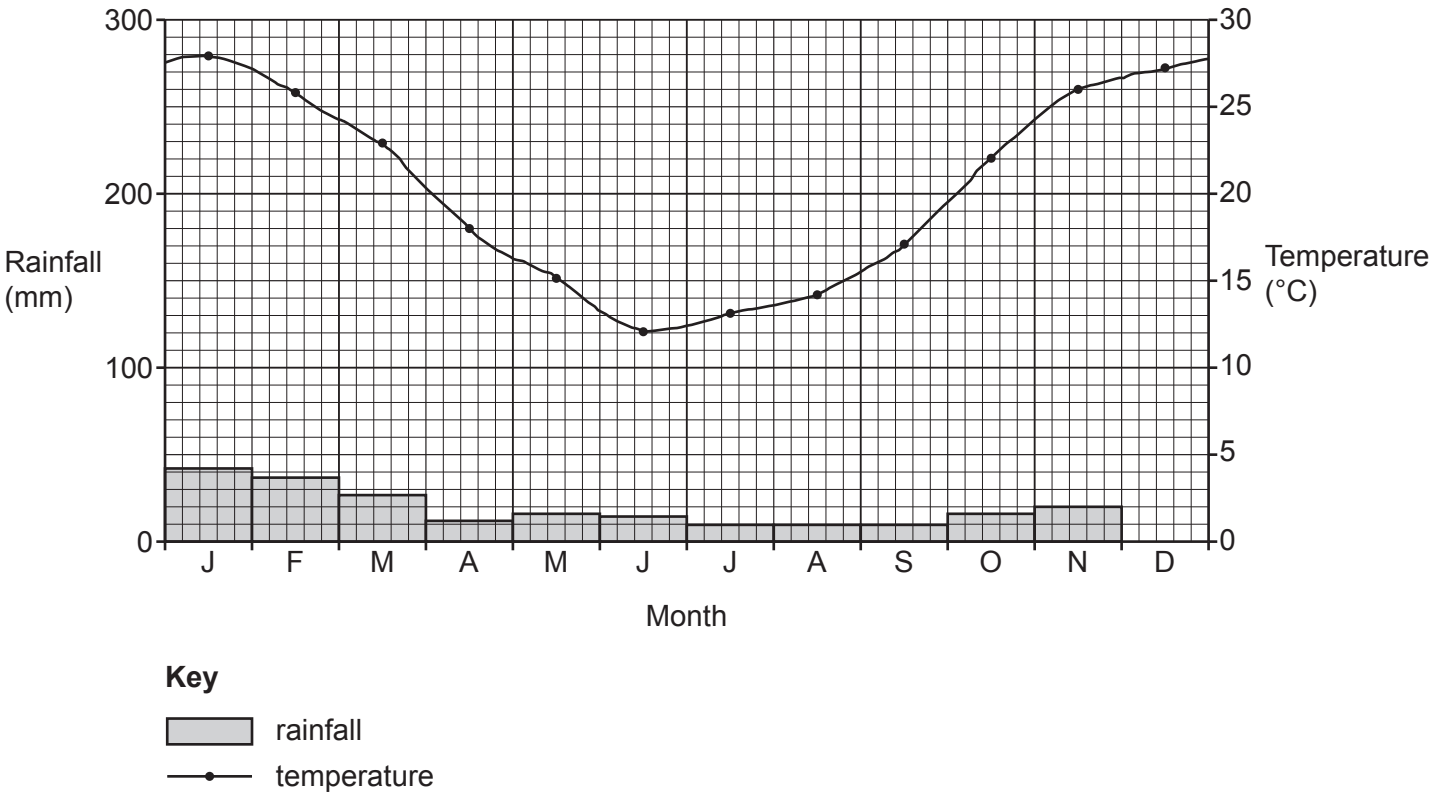
## Section A

### Global Hazards

**1**
**(a)**
**(i)** Use the data in the table below to **complete** the climate graph for location **A**.

| Month | Rainfall (mm) |
|---|---|
| December | 40 |

Climate graph for location **A**




**[1]**

**(ii)** Select which statement best describes the **climate** of location **A**.

**A** cold and dry

**B** hot and dry

**C** hot and wet

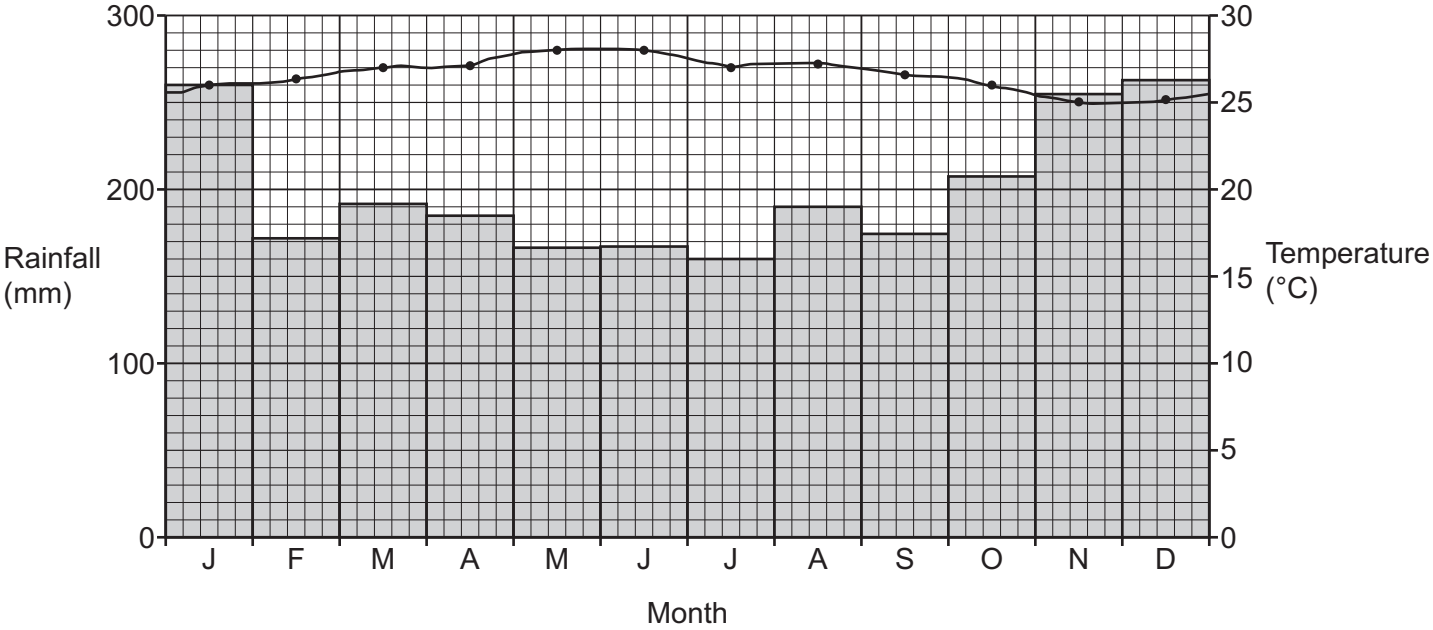
**D** warm and wet

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

© OCR 2024

The graph below shows the climate for location **B**.

Climate graph for location **B**




**(iii)** **Compare** the climates of location **A** and location **B**.

.....

.....

.....

.....

.....

.....

.....

..... **[4]**

**(iv)** Suggest **one** piece of additional data that could be measured to understand the nature of extreme weather at locations A and B.

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

© OCR 2024

**CASE STUDY**

**A non-UK natural weather hazard event arising from extreme weather conditions**

Name of weather hazard event .....

Location .....

**(b)** Explain the responses to this **non-UK** natural weather hazard.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

© OCR 2024

**Changing Climate**

**2**

**(a)** Define the term 'natural climate change'.

.....

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

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

**(i)** Calculate the **difference** in height between locations **X** and **Y**.

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

**(ii)** Measure the **distance** between locations **X** and **Y**.

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

Low-lying island communities are communities of people who live on islands close to sea level.

**(iii)** Explain **one** environmental impact of climate change for low-lying island communities.

.....

.....

.....

.....

.....

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

**(c)** Look at **Fig. 2** in the Resource Booklet.

**(i)** Calculate the **total percentage** of **natural** causes of climate change.

**A** 21%

**B** 36%

**C** 45%

**D** 58%

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

© OCR 2024

**(ii)** Explain the theory that **volcanic eruptions** cause natural climate change.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

© OCR 2024

BLANK PAGE

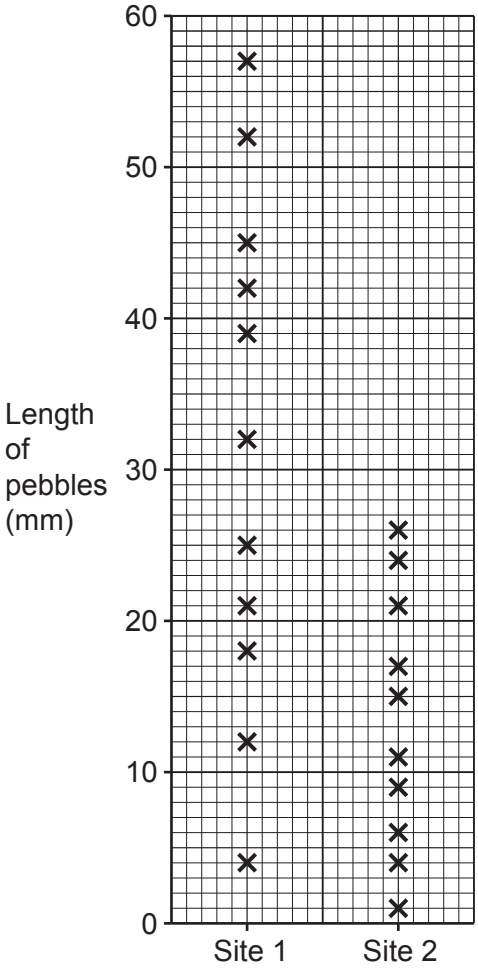
PLEASE DO NOT WRITE ON THIS PAGE

© OCR 2024

**Distinctive Landscapes**

**3**

**(a)** The dispersion graph below shows **beach sediment** size data collected at two sites.




**(i)** Use the data in the table below to **complete** the graph above.

| | Site 2 |
|---|---|
| Sediment size (mm) | 29 |

**[1]**

**(ii)** Identify the correct **median** value for Site 1.

**A** 25

**B** 31

**C** 32

**D** 39

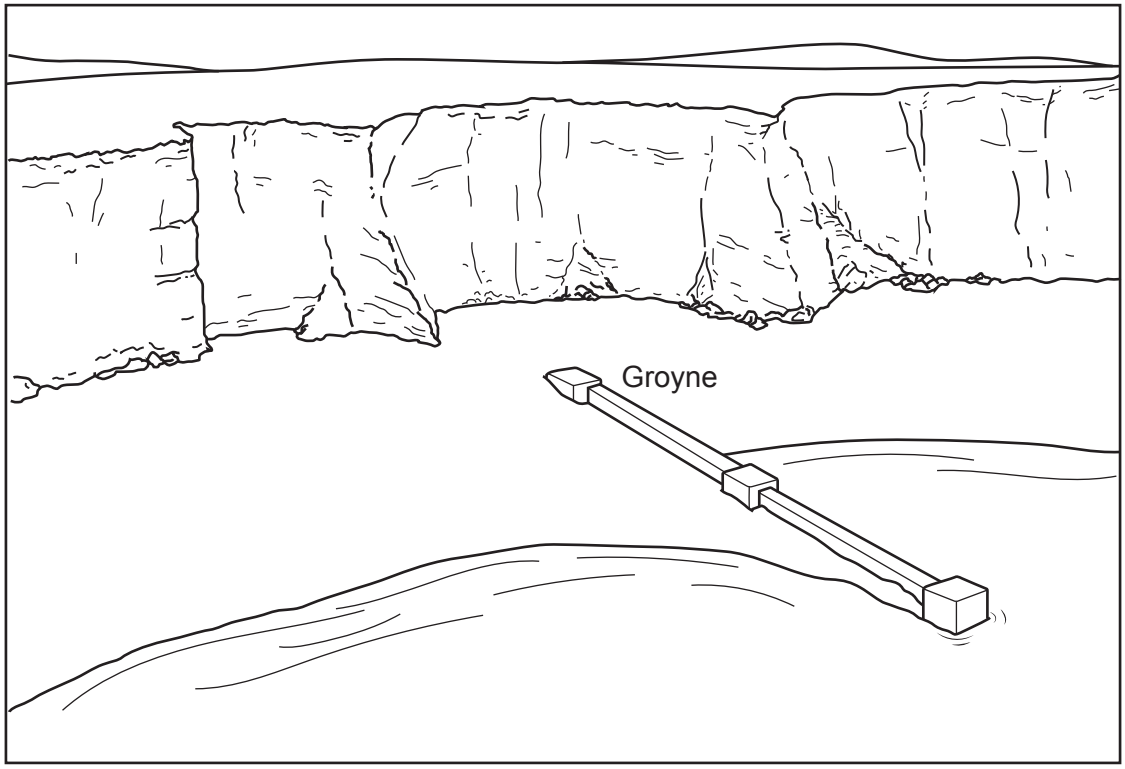
Write the correct letter in the box. ☐ **[1]**

© OCR 2024

**(iii)** Suggest **one** measure which can be used to understand the spread of data shown on the dispersion graph.

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

**(b)**




**(i)** **Add** an arrow to the diagram to show the direction of longshore drift. **[1]**

**(ii)** Suggest **one** piece of geographical information that could be added to the diagram.

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

© OCR 2024

**CASE STUDY**

**A UK coastal landscape**

Name of coastal location .....

**(c)*** To what extent does **geology** influence the geomorphic processes that shape coastal landforms?

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

© OCR 2024

**Sustaining Ecosystems**

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

**(a)** Identify **two** features of this tropical rainforest flora and explain the purpose of **one** of the features.

Feature .....

Feature .....

Purpose .....

.....

**[3]**

**(b)** Look at **Fig. 3b** in the Resource Booklet.

**(i)** Choose **one** statement that describes why the sub-soil in the rainforest soil profile has a thick red layer.

**A** Iron oxides are present which are red

**B** It contains high amounts of organic matter

**C** The red layer is weathered from red rocks

**D** The soil is always waterlogged

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

**(ii)** Give **one** reason to explain why rainforests have soils which are **nutrient rich** in the **upper part** of the soil profile.

.....

.....

**[1]**

**(iii)** Suggest **one** way in which human activity could influence the **upper part** of the soil profile.

.....

.....

.....

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

© OCR 2024

**CASE STUDY**

**Sustainable management of an area of tropical rainforest**

Name of tropical rainforest area .....

**(c)** Evaluate the success of **one** attempt to **sustainably manage** an area of tropical rainforest.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

© OCR 2024

## Section B

### Physical geography fieldwork

**5** Look at Fig. 4 in the Resource Booklet.
Geography students have undertaken a fieldwork investigation.

**(a)** What are **two other** investigative steps in the geography fieldwork process that the students could do?

1 .....

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

**(b)** For a **physical geography fieldwork investigation** which you have completed, explain **one** way you could have **improved** the data presentation.

.....

.....

.....

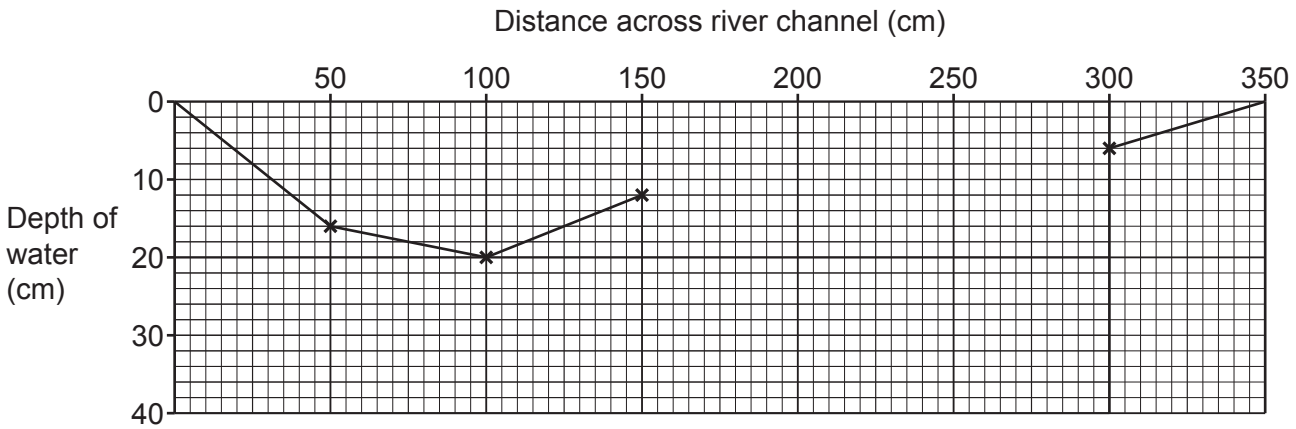
..... **[2]**

© OCR 2024

**(c)** Geography students have carried out fieldwork to investigate how the depth of a river channel **changes** as you travel downstream.

**(i)** **Complete** the graph using the data below.

| Depth of water (cm) | Distance across river channel (cm) |
|---|---|
| 12 | 200 |
| 23 | 250 |




**[2]**

**(ii)** How **deep** is the river 50 cm across the river channel?

**A** 12 cm

**B** 14 cm

**C** 16 cm

**D** 18 cm

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

© OCR 2024

Look at **Fig. 4** in the Resource Booklet.

**(iii)*** Suggest how the students could **improve** their data collection to make their results more **accurate** and **reliable**.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

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

✎ Spelling, punctuation and grammar and the use of specialist terminology **[3]**

**END OF QUESTION PAPER**

© OCR 2024

## EXTRA ANSWER SPACE

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

OCR
Oxford Cambridge and RSA

**Copyright Information**

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of Cambridge University Press & Assessment, which is itself a department of the University of Cambridge.

© OCR 2024