



Cambridge Pre-U

GEOGRAPHY

9768/01

Paper 1 Global Environments

May/June 2023

1 hour 30 minutes



You must answer on the answer booklet/paper.

You will need: Answer booklet/paper
Insert (enclosed)

INSTRUCTIONS

- Answer **two** questions in total:
Section A: answer **one** question.
Section B: answer **one** question.
- If you have been given an answer booklet, follow the instructions on the front cover of the answer booklet.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number on all the work you hand in.
- Do **not** use an erasable pen or correction fluid.
- You should support your answers with appropriate examples, sketch maps and diagrams.
- At the end of the examination, fasten all your work together. Do **not** use staples, paper clips or glue.

INFORMATION

- The total mark for this paper is 50.
- The number of marks for each question or part question is shown in brackets [].
- The insert contains all the resources referred to in the questions.

This syllabus is regulated for use in England, Wales and Northern Ireland as a Cambridge International Level 3 Pre-U Certificate.

This document has **8** pages. Any blank pages are indicated.

Section A

Answer **one** question from this section.

Hot arid and semi-arid environments

1 (a) Fig. 1.1 shows Lake Chad, Africa, in 1973, 1987 and 2007.

- (i) Describe the changes to Lake Chad shown in Fig. 1.1. [4]
- (ii) Suggest how physical and human factors may help to explain the changes you have described in (a)(i). [6]

(b) EITHER

- (i) Discuss the extent to which weathering processes in hot arid and semi-arid environments are the result of temperature changes. [15]

OR

- (ii) To what extent is desertification changing the traditional lifestyles of societies in hot arid and semi-arid environments? [15]

[Total: 25]

Glacial and periglacial environments

2 (a) Fig. 2.1 shows the number and orientation of corries/cirques in adjacent areas within a formerly glaciated environment in the United Kingdom.

- (i) Using Fig. 2.1, compare the number and orientation of corries/cirques between the two areas shown. [4]
- (ii) Explain the reasons for the comparisons you have described in (a)(i). [6]

(b) EITHER

- (i) To what extent do relict upland glacial landscapes reflect past glacial processes? [15]

OR

- (ii) Discuss the extent to which nature reserves and parks play an important role in the sustainable management of **either** glacial **or** periglacial environments. [15]

[Total: 25]

Coastal environments

3 (a) Fig. 3.1 shows a stretch of coastline at Del Mar ‘beach city’, California, USA, which is susceptible to rising sea levels. Fig. 3.2 is adapted from a recent podcast by the mayor of Del Mar.

- (i) Using Fig. 3.1, describe the ways in which the threat of rising sea levels is being managed. [4]
- (ii) Using Figs. 3.1 and 3.2, explain why managed retreat is not a suitable strategy to combat the threat of rising sea levels at Del Mar. [6]

(b) EITHER

- (i) Examine the extent to which sub-aerial processes determine the formation and characteristics of cliffs and shore platforms. [15]

OR

- (ii) Assess the extent to which coral reefs are fragile coastal ecosystems. [15]

[Total: 25]

Section B

Answer **one** question from this section.

Tropical environments

4 (a) Fig. 4.1 shows the annual rate of deforestation in the Brazilian Amazon, 2000–20.

- (i) Describe the trends in the annual rate of deforestation between 2000 and 2020 shown in Fig. 4.1. [4]
- (ii) Suggest **two** possible reasons for deforestation in tropical rainforest environments such as the Brazilian Amazon. [6]

(b) EITHER

- (i) With reference to **two** tropical environments, examine the extent to which their differences and location depend on climatic patterns. [15]

OR

- (ii) To what extent is the biological diversity of the tropical rainforest ecosystem a consequence of the interconnections between plants and animals? [15]

[Total: 25]

Temperate environments

5 (a) Fig. 5.1 shows the plant succession of a temperate deciduous woodland.

- (i) Using Fig. 5.1, describe the plant succession shown. [4]
- (ii) Suggest why the changes you have described in (a)(i) occur. [6]

(b) EITHER

- (i) Assess the extent to which the structure and functioning of the northern coniferous forest are dependent upon its nutrient cycling. [15]

OR

- (ii) 'The development of the "bread baskets" of the world, such as the American Mid-West, has had a detrimental effect on the environment.'

To what extent do you agree with this statement? [15]

[Total: 25]

The atmospheric environment

6 (a) Fig. 6.1 shows the atmospheric conditions of the January and July monsoon, South Asia.

- (i) Compare the atmospheric conditions in January with the atmospheric conditions in July as shown in Fig. 6.1. [4]
- (ii) Explain how the atmospheric conditions you have compared in (a)(i) influence the monsoon weather in January and July. [6]

(b) EITHER

- (i) Assess the extent to which the global redistribution of energy can be explained by the tri-cellular model. [15]

OR

- (ii) 'Short-term changes in the atmospheric environment of the cool temperate western maritime climate impact heavily on spending patterns and transport.'

To what extent do you agree with this statement? [15]

[Total: 25]

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