# Cambridge Pre-U

GEOGRAPHY 9768/01

Paper 1 Global Environments

May/June 2022

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 part of a hot arid landscape in Arizona, USA.
  - (i) Briefly describe the landscape shown in Fig. 1.1.

[4]

(ii) Identify and explain how the landform at A may have been formed.

[6]

## (b) EITHER

(i) To what extent is desertification the result of climate change?

[15]

OR

(ii) To what extent does climate play a role in the natural sources of water found in hot arid and semi-arid environments? [15]

[Total: 25]

#### Glacial and periglacial environments

- **2** (a) Fig. 2.1 shows the predicted changing extent of permafrost in northern Eurasia and North America.
  - (i) Describe the predicted changes to the extent of permafrost by 2050. [4]
  - (ii) Explain **two** ways that the predicted changes, such as those shown in Fig. 2.1, may impact upon human activities. [6]

## (b) EITHER

(i) To what extent is the formation of a corrie (cirque) the result of abrasion?

[15]

OR

(ii) Assess the role of mass movement in the formation of landforms in the periglacial environment. [15]

[Total: 25]

[4]

#### Coastal environments

- 3 (a) Fig. 3.1 shows the outcome of a recent mass movement event on a stretch of coastline in the UK.
  - (i) Describe the features of the cliff-line shown in Fig. 3.1.
  - (ii) Explain how the instability of the cliff-line has affected the human activities shown in Fig. 3.1.

## (b) EITHER

(i) To what extent do the landforms found in macrotidal environments differ from those found in microtidal environments? [15]

OR

(ii) 'Coastal environments present more opportunities than constraints for settlement and port development.'

Discuss the validity of this statement.

[15]

[Total: 25]

#### **Section B**

Answer **one** question from this section.

## **Tropical environments**

- **4** (a) Fig. 4.1 shows the number of species with height in a tropical rainforest.
  - (i) Describe the changes in the number of species with height shown in Fig. 4.1. [4]
  - (ii) Explain why the greatest number of species are found in the canopy layer. [6]

#### (b) EITHER

(i) 'Tropical rainforests can be managed sustainably only at individual and local scales.'

Discuss the validity of this statement.

[15]

OR

(ii) To what extent are the structure and formation of soils in the tropical rainforest ecosystem the result of rainfall? [15]

[Total: 25]

## **Temperate environments**

- **5 (a)** Fig. 5.1 shows the theoretical effect of a natural disturbance on the percentage of vegetation cover in a temperate environment.
  - (i) Using Fig. 5.1, describe the changes in the percentage of vegetation cover over time. [4]
  - (ii) Suggest **one** cause of natural disturbance and using Fig. 5.1 explain how it may impact on a temperate environment. [6]

## (b) EITHER

(i) To what extent does the functioning of a temperate deciduous woodland depend upon its annual leaf-fall? [15]

OR

(ii) 'Climate change is only one factor responsible for changing the natural landscape in temperate environments.'

To what extent do you agree with this statement?

[15]

[Total: 25]

## The atmospheric environment

- **6** (a) Fig. 6.1 shows average surface air pressure for January and July.
  - (i) Using Fig. 6.1, describe the pattern of average surface air pressure in January. [4]
  - (ii) Explain why the differences in average surface air pressure for January and July shown in Fig. 6.1 cause seasonal variations in weather in Asia. [6]

## (b) EITHER

(i) 'In 2019 the UK set a target to bring all greenhouse gas emissions to net zero by 2050.'

To what extent can this target be achieved?

[15]

OR

(ii) 'The polar front dominates the annual weather patterns in the cool temperate western maritime climate.'

To what extent do you agree with this statement?

[15]

[Total: 25]

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