



Cambridge Pre-U

GEOGRAPHY

9768/01

Paper 1 Global Environments

October/November 2020

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 4 pages. Blank pages are indicated.

Section A

Answer **one** question from this section.

Hot arid and semi-arid environments

- 1 (a) Fig. 1.1 shows the contribution of overgrazing and other human activities to soil degradation in hot arid and semi-arid environments in each global region.
- (i) Using Fig. 1.1, compare the contribution made by overgrazing to soil degradation in each global region. [4]
- (ii) Explain how overgrazing is a significant factor in the process of soil degradation. [6]

[Total: 10]

(b) EITHER

- (i) 'The hydrological cycle and water balance in hot arid and semi-arid environments are influenced by rainfall and potential evapotranspiration.'
- To what extent is this statement true? [15]

OR

- (ii) Consider the extent to which wind produces landforms in hot arid and semi-arid environments. [15]

Glacial and periglacial environments

- 2 (a) Fig. 2.1 is a photograph which shows part of the periglacial landscape of Northern Canada.
- (i) Identify and briefly describe the landform labelled **X** on the photograph. [4]
- (ii) Explain how the landform you have described in (a)(i) may have been formed. [6]

[Total: 10]

(b) EITHER

- (i) Discuss the extent to which abrasion is the most significant process in the formation of glacial troughs. [15]

OR

- (ii) To what extent is tourism the most significant threat to periglacial environments? [15]

Coastal environments

3 (a) Fig. 3.1 shows a storm and swell beach profile.

(i) Describe the differences between the storm profile and the swell profile shown in Fig. 3.1. [4]

(ii) Explain why the two profiles shown in Fig. 3.1 are different. [6]

[Total: 10]

(b) EITHER

(i) To what extent is the formation and development of a halosere the result of marine processes? [15]

OR

(ii) 'The tertiary sector provides opportunities for, and constraints on, human activity in coastal environments.'

To what extent is this statement valid? [15]

Section B

Answer **one** question from this section.

Tropical environments

4 (a) Figs. 4.1 and 4.2 are photographs which show some adaptations of vegetation to the tropical rainforest environment.

(i) Using Figs. 4.1 and 4.2, identify and briefly describe **one** vegetation adaptation from each photograph. [4]

(ii) Explain how each of the vegetation adaptations you have described in (a)(i) is a response to the characteristics of the tropical rainforest environment. [6]

[Total: 10]

(b) EITHER

(i) To what extent is plantation agriculture responsible for the increasing deforestation of tropical rainforests? [15]

OR

(ii) 'Traditional lifestyles in tropical rainforest environments are increasingly under threat from a range of sources.'

Discuss the validity of this statement. [15]

Temperate environments

- 5 (a) Fig. 5.1 shows the number of species and the rate of growth of vegetation during secondary succession in temperate deciduous woodland.
- (i) Describe the trends in the number of species and the rate of growth of vegetation during the secondary succession shown in Fig. 5.1. [4]
- (ii) Explain the reasons for the trends you have described in (a)(i). [6]

[Total: 10]

(b) EITHER

- (i) To what extent can temperate deciduous woodlands be considered to be plagioclimax communities? [15]

OR

- (ii) Discuss the extent to which the exploitation of 'the bread baskets' of the world has resulted in environmental degradation. [15]

The atmospheric environment

- 6 (a) Fig. 6.1 is a satellite image showing weather systems in the Earth's atmosphere.
- (i) Identify and briefly describe the weather systems at A and B shown on Fig. 6.1. [4]
- (ii) Explain how the general circulation of the atmosphere in the northern hemisphere has produced the pattern of weather systems you have described in (a)(i). [6]

[Total: 10]

(b) EITHER

- (i) To what extent is it possible to manage the impacts of an El Niño event at the global scale? [15]

OR

- (ii) 'The climate change lobby is unequivocal that (a) climate change is happening and (b) that the primary cause is human-induced.'

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

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