



GEOGRAPHY (PRINCIPAL)

9768/01

Paper 1 Global Environments

May/June 2018

1 hour 30 minutes

Additional Materials: Answer Booklet/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or graphs.

Do not use paper clips, glue or correction fluid.

Answer **two** questions, **one** from Section A and **one** from Section B.

Candidates are encouraged to support their answers with appropriate examples, sketch maps and diagrams.

The Insert contains all the Figures and the Photographs referred to in the questions.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.



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

This document consists of **4** printed pages and **1** Insert.

Section A

Answer **one** question from this section.

Hot Arid and Semi-Arid Environments

1 Fig. 1 shows the global distribution of hot arid and semi-arid environments.

(a) (i) Identify the following:

- the hot arid areas marked **W** and **X**
- the semi-arid area marked **Y**
- the ocean current marked **Z**.

[4]

(ii) Briefly explain the pattern of hot arid and semi-arid environments shown in Fig. 1.

[6]

(b) **EITHER**

(i) To what extent is weathering in hot arid and semi-arid areas dominated by physical processes? [15]

OR

(ii) Discuss the extent to which humans contribute to, and reap the consequences of, desertification. [15]

Glacial and Periglacial Environments

2 (a) Photograph A shows a cirque (corrie/cwm) in Snowdonia, North Wales.

(i) Identify and briefly describe the features labelled as **E** and **F** on Photograph A. [4]

(ii) Explain how these features have formed. [6]

(b) **EITHER**

(i) 'Permafrost plays a dominant role in producing landforms in a periglacial environment.'

Discuss the validity of this statement.

[15]

OR

(ii) 'Glacial environments are environmentally fragile.'

Discuss the implications of this statement for the management of glacial environments.

[15]

Coastal Environments

3 Photograph B shows a section of beach on a coastline.

(a) (i) Describe the evidence in Photograph B that coastal protection strategies have been introduced in this section of coastline. [4]

(ii) Suggest how this section of coastline may be more effectively protected in the future. [6]

(b) EITHER

(i) 'Marine erosion is more significant than sub-aerial processes in the recession of cliffs.'

Discuss the validity of this statement. [15]

OR

(ii) 'Sand dunes contribute in a number of ways to the coastal environment but require careful management.'

To what extent is this statement true? [15]

Section B

Answer **one** question from this section.

Tropical Environments

4 Figs. 2A and 2B show nutrient cycling in a tropical rainforest ecosystem. Fig. 2A shows nutrient cycling before shifting cultivation and Fig. 2B shows changes to the nutrient cycle after clearance for shifting cultivation.

(a) (i) Using Figs. 2A and 2B, describe the changes in the stores and flows after clearance. [4]

(ii) Explain the reasons for the changes in the litter and soil stores before and after clearance shown in Figs. 2A and 2B. [6]

(b) EITHER

(i) To what extent is climate the only explanation for the global distribution of tropical rainforest environments? [15]

OR

(ii) Discuss the extent to which scale plays an important role in the successful management of tropical rainforest environments. [15]

Temperate Environments

5 Figs. 3A and 3B show the above to below ground biomass ratios for two temperate environments.

(a) (i) Describe the differences in the above and below ground ratios shown in Figs. 3A and 3B. [4]

(ii) Explain the reasons for the differences you have described in (a)(i). [6]

(b) EITHER

(i) With reference to temperate deciduous forest, discuss the extent to which climate influences its global distribution. [15]

OR

(ii) To what extent are heathland and moorland environments under threat from human activities? [15]

The Atmospheric Environment

6 Fig. 4 shows some of the possible consequences of global warming in North America.

(a) (i) Describe the distribution of the different possible consequences shown in Fig. 4. [4]

(ii) Explain how these consequences may be linked to changes in the composition of the atmosphere. [6]

(b) EITHER

(i) 'A new predictive study for future monsoon failure in Asia suggests that full season failure will become more likely in the next 200 years.'

Discuss the implications of this forecast. [15]

OR

(ii) To what extent does the weather in a cool temperate western maritime climate impact upon commercial spending patterns and upon leisure and tourism? [15]

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