



GEOGRAPHY (PRINCIPAL)

Paper 1 Global Environments

9768/01

May/June 2016

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 Photograph 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.

The 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 (a) Fig. 1A shows four different types of sand dune found in hot arid environments. Fig. 1B is a table describing four different types of sand dune.

(i) Match each sand dune type in Fig. 1A with the letter of the appropriate description given in Fig. 1B. [4]

(ii) Explain why any **two** of the sand dune types shown in Fig. 1A are different in form. [6]

(b) **EITHER**

(i) 'Management strategies in hot arid and semi-arid environments are essential.'

To what extent is this a valid statement? [15]

OR

(ii) 'The traditional lifestyles of societies that inhabit hot arid and semi-arid environments have been subject to change in the last 50 years.'

Discuss the extent to which these changes have compromised their lifestyles. [15]

Glacial and Periglacial Environments

2 (a) Figs. 2A and 2B show information about the velocity of a glacier.

(i) Describe the horizontal and vertical profiles shown in Figs. 2A and 2B. [4]

(ii) Explain how and why the profile shown in Fig. 2B helps to demonstrate the nature of glacier movement. [6]

(b) **EITHER**

(i) Discuss the significance of the active layer in the formation of periglacial landforms. [15]

OR

(ii) Discuss the extent to which environmental, political and economic issues may influence management of glacial and/or periglacial environments. [15]

Coastal Environments

3 (a) Photograph A shows an area of coastline. The landform found at **X** in Photograph A is a spit on the south coast of England.

(i) Describe **two** features of the spit shown in Photograph A. [4]

(ii) Explain how the spit shown in Photograph A may have been formed. [6]

(b) **EITHER**

(i) 'Haloseres are being degraded by economic development.'

With reference to coastal ecosystems, discuss the arguments for and against this statement. [15]

OR

(ii) To what extent is hard engineering the preferred option for the management of coastal environments? [15]

Section B

Answer **one** question from this section.

Tropical Environments

4 (a) Fig. 3 is a series of cartoons about human impact on tropical rainforests.

(i) Name the type of cultivation shown in Fig. 3, identify the inputs and briefly describe the process of cultivation portrayed in Fig. 3. [4]

(ii) Explain the relationship between this type of cultivation and population densities in tropical rainforest environments. [6]

(b) **EITHER**

(i) 'The greatest biodiversity in a tropical rainforest lies in the canopy layer.'

Discuss the validity of this statement. [15]

OR

(ii) Consider the ways in which tourism may be used to maintain the sustainability of tropical rainforest environments. [15]

Temperate Environments

- 5 (a) Figs. 4A, 4B and 4C show nutrient cycling for three temperate ecosystems.
- (i) Identify the ecosystem for Figs. 4A and 4B and give **one** reason for your choice in each case. [4]
 - (ii) Using Fig. 4C, explain the nutrient cycling shown. [6]
- (b) **EITHER**
- (i) 'Some temperate ecosystems may be considered plagioclimax communities.'
- With reference to at least **one** temperate ecosystem, discuss the arguments for and against this statement. [15]
- OR**
- (ii) 'The distribution of temperate deciduous forest is the result of precipitation and temperature.'
- How far do you agree with this statement? [15]

The Atmospheric Environment

- 6 (a) Fig. 5 shows an extract from a blog on the internet in which the writer is expressing views about global warming.
- (i) Define **two** of the terms underlined in the extract. [4]
 - (ii) Briefly explain why adaptation to global warming may be preferable to mitigation. [6]
- (b) **EITHER**
- (i) To what extent are the short-term variations in the weather of the cool temperate western maritime climate the result of low pressure zones (depressions)? [15]
- OR**
- (ii) Discuss the extent to which ENSO events have an impact beyond the Pacific region. [15]

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