



Cambridge International AS & A Level

GEOGRAPHY

9696/33

Paper 3 Advanced Physical Geography Options

May/June 2024

1 hour 30 minutes



You must answer on the enclosed answer booklet.

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

INSTRUCTIONS

- Answer **four** questions in total:
Answer questions from **two** options.
For **each** option, follow the instructions inside on which questions to answer.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.
- Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.
- You should make reference to appropriate examples studied in the field or the classroom, even where such examples are not specifically requested by the question.

INFORMATION

- The total mark for this paper is 60.
- 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 document has **4** pages. Any blank pages are indicated.

Answer questions from **two** different options.

Tropical environments

If answering this option, answer Question 1 and **either** Question 2 **or** Question 3.

- 1 Fig. 1.1 shows the global distribution of humid tropical climates.
- (a) Describe the global distribution of humid tropical climates shown in Fig. 1.1. [4]
- (b) Explain the climatic characteristics of humid tropical environments. [6]
- 2 Assess the relative importance of the factors influencing the formation of characteristic granite landforms in tropical environments. [20]
- 3 'Plant communities in seasonally humid tropical (savanna) ecosystems rarely reach their climatic climax.'
- How far do you agree with this view? [20]

Coastal environments

If answering this option, answer Question 4 and **either** Question 5 **or** Question 6.

- 4 Fig. 4.1 shows a coastal environment in Cantabria, Spain.
- (a) Describe the main landscape features of the coastal environment shown in Fig. 4.1. [4]
- (b) Explain the formation of landform A shown in Fig. 4.1. [6]
- 5 Assess the relative importance of the factors influencing the generation and characteristics of waves. [20]
- 6 Evaluate the problems of sustainably managing a stretch or stretches of coastline. [20]

Hazardous environments

If answering this option, answer Question 7 and **either** Question 8 **or** Question 9.

- 7 Fig. 7.1 shows the predicted development of a tsunami after an earthquake in Japan, 11 March 2011.
- (a) Describe the predicted development of the tsunami shown in Fig. 7.1. [4]
- (b) Explain the formation of a tsunami such as the one shown in Fig. 7.1. [6]
- 8 To what extent is the Coriolis force the most important factor influencing the formation and development of large-scale atmospheric disturbances? [20]
- 9 Evaluate the most effective way of managing mass movement hazards. [20]

Hot arid and semi-arid environments

If answering this option, answer Question 10 and **either** Question 11 **or** Question 12.

- 10 Fig. 10.1 shows mean wind speeds during a month in a semi-arid environment, northern Iraq, 2011.
- (a) Describe the variations in wind speed shown in Fig. 10.1. [4]
- (b) Explain why hot arid and semi-arid environments have high wind energy. [6]
- 11 'Salinisation is the most important soil process in hot arid and semi-arid environments.'
- How far do you agree with this view? [20]
- 12 Assess the extent to which landforms in hot arid and semi-arid environments are formed by water rather than wind. [20]

BLANK PAGE

The boundaries and names shown, the designations used and the presentation of material on any maps contained in this question paper/insert do not imply official endorsement or acceptance by Cambridge Assessment International Education concerning the legal status of any country, territory, or area or any of its authorities, or of the delimitation of its frontiers or boundaries.

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of Cambridge Assessment. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which is a department of the University of Cambridge.