



Cambridge International AS & A Level

GEOGRAPHY

9696/33

Paper 3 Advanced Physical Geography Options

October/November 2025

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 extent of tree cover loss in Madagascar, 2001–22.
 - (a) Describe the distribution of tree cover loss shown in Fig. 1.1. [4]
 - (b) Explain how the loss of tree cover affects the nutrient cycle in tropical rainforest ecosystems. [6]

 - 2 'The plant communities of seasonally humid tropical (savanna) ecosystems are affected more by human activity than the plant communities of humid tropical (rainforest) ecosystems.'
- How far do you agree with this statement? [20]
- 3 Assess the extent to which the characteristics of granite landforms of tropical environments are the result of deep weathering. [20]

Coastal environments

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

- 4 Fig. 4.1 is a photograph which shows coastal sand dunes at Sefton, northern England, UK.
 - (a) Describe the main features of the coastal sand dunes shown in Fig. 4.1. [4]
 - (b) Explain the formation of coastal sand dunes. [6]

 - 5 'Wave energy is the main factor in the formation of caves, arches and stacks.'
- How far do you agree with this statement? [20]
- 6 With reference to a case study of a stretch or stretches of coastline, assess the extent to which hard engineering has been an effective solution to the problems of sustainable management. [20]

Hazardous environments

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

- 7** Fig. 7.1 shows the magnitude and frequency of earthquakes recorded in the Philippines, 17 February 2021.
- (a) Describe the distributions of the magnitude **and** frequency of earthquakes shown in Fig. 7.1. [4]
- (b) Explain how the magnitude **and** frequency of earthquakes influences the impact of earthquakes. [6]
- 8** To what extent is hazard mapping the most effective way of managing mass movement hazards? [20]
- 9** Assess the relative importance of sea-surface temperature in the formation and development of large-scale atmospheric disturbances (cyclones, hurricanes, typhoons). [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 the global distribution of hot semi-arid environments.
- (a) Describe the global distribution of hot semi-arid environments shown in Fig. 10.1. [4]
- (b) Suggest why the area labelled X in Fig. 10.1 is a hot semi-arid environment. [6]
- 11** Assess the evidence for past climate change in hot arid and semi-arid environments. [20]
- 12** 'Wind action is the main cause of desertification in semi-arid environments.'
- How far do you agree with this statement? [20]

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