



Cambridge International AS & A Level

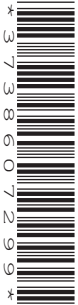
GEOGRAPHY

9696/33

Paper 3 Advanced Physical Geography Options

May/June 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 is a photograph which shows vegetation in a seasonally humid tropical (savanna) ecosystem in Botswana, Africa.
 - (a) Describe **four** characteristics of the vegetation shown in Fig. 1.1. [4]
 - (b) Explain how the seasonally humid tropical climate has influenced the characteristics of the vegetation shown in Fig. 1.1. [6]

 - 2 'The characteristics of the humid tropical climate are mainly caused by the intertropical convergence zone (ITCZ).'
- How far do you agree with this statement? [20]
- 3 Assess the relative importance of the factors influencing tropical soil formation. [20]

Coastal environments

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

- 4 Fig. 4.1 shows beach volume changes along the coastline in Netarts Bay, Oregon, USA, 1997–99.
 - (a) Describe the pattern of beach volume changes shown in Fig. 4.1. [4]
 - (b) Suggest **two** reasons for the pattern shown in Fig. 4.1. [6]

- 5 To what extent are erosional landforms influenced by sub-aerial processes in coastal environments? [20]

- 6 Discuss the extent to which pollution can be regarded as the greatest threat to coral reefs. [20]

Hazardous environments

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

- 7** Fig. 7.1 shows the Typhoon Haiyan storm surge, San Pedro Bay, Philippines, 2013.
- (a) Describe the variations in the height of the storm surge shown in Fig. 7.1. [3]
- (b) Suggest reasons for the variations you described in (a). [7]
- 8** 'Soil liquefaction is the most significant hazard resulting from earthquakes.'
- How far do you agree with this view? [20]
- 9** Assess the effectiveness of different ways of managing hazards resulting from atmospheric disturbances. [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 is a climate graph for Lajamanu, Northern Territory, Australia.
- (a) Describe the climate of Lajamanu shown in Fig. 10.1. [4]
- (b) Suggest **two** reasons for the climate you described in (a). [6]
- 11** Assess the influence of water action on the formation of landforms in hot arid and semi-arid environments. [20]
- 12** Using a case study of **either** a hot arid environment **or** a semi-arid environment, evaluate solutions to the problems of sustainable management. [20]

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