



Cambridge International AS & A Level

GEOGRAPHY

9696/33

Paper 3 Advanced Physical Geography Options

May/June 2021

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 diurnal temperature pattern in a humid tropical environment in the Ecuadorian rainforest, April 2018.
 - (a) Using evidence from Fig. 1.1, describe the diurnal temperature pattern shown. [4]
 - (b) Suggest how the pattern shown in Fig. 1.1 might influence diurnal precipitation variations. [6]
- 2 Assess the relative importance of human activity in the development of plant communities in seasonally humid tropical (savanna) ecosystems. [20]
- 3 Using a case study, evaluate the attempted solutions to the threats facing **either** the rainforest ecosystem **or** the savanna ecosystem. [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 a coastal landscape in the Algarve, Portugal.
 - (a) With the aid of a labelled diagram, describe the main physical features of the landscape shown in Fig. 4.1. [4]
 - (b) Suggest how geology has influenced the landscape shown in Fig. 4.1. [6]
- 5 'The characteristics and formation of different types of coral reef are very similar.'
How far do you agree? [20]
- 6 Assess the significance of longshore drift in the formation of depositional landforms. [20]

Hazardous environments

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

7 Fig. 7.1 shows the global distribution of earthquakes.

(a) Describe the global distribution of earthquakes shown in Fig. 7.1. [4]

(b) Explain why the depth of focus of earthquakes varies from place to place. [6]

8 Assess the effectiveness of strategies for managing mass movement hazards. [20]

9 'Sea temperature is the most important factor influencing the formation and development of large-scale atmospheric disturbances.'

Assess this view. [20]

Hot arid and semi-arid environments

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

10 Table 10.1 shows climate data for Monterrey, Mexico.

(a) Describe the main characteristics of the climate of Monterrey, Mexico, shown in Table 10.1. [4]

(b) Explain the influence of latitude on the seasonal variation in precipitation of Monterrey, Mexico, shown in Table 10.1. [6]

11 Assess the role of the upward movement of water on the formation and development of soil in hot arid and semi-arid environments. [20]

12 To what extent are landforms of hot arid and semi-arid environments influenced by past processes rather than those of the present? [20]

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