

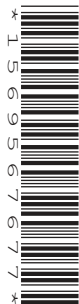


Cambridge International AS & A Level

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.

2

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]

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 the Cambridge Assessment Group. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which itself is a department of the University of Cambridge.