



Cambridge International AS & A Level

GEOGRAPHY

9696/31

Paper 3 Advanced Physical Geography Options

October/November 2020

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. 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 climate graph for Kampala, Uganda, in Africa.
 - (a) Describe the climate of Kampala shown in Fig. 1.1. [4]
 - (b) Suggest reasons for the variation in precipitation shown in Fig. 1.1. [6]
- 2 Assess the extent to which the characteristics of soil profiles in savanna ecosystems are the result of climatic characteristics. [20]
- 3 Describe some of the problems of sustainable management of **either** the tropical rainforest ecosystem **or** the savanna ecosystem and evaluate attempted solutions to the problems. [20]

Coastal environments

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

- 4 Fig. 4.1 shows marine processes operating on a coastline in north-east USA, in 2017.
 - (a) Describe the pattern of marine processes shown in Fig. 4.1. [4]
 - (b) Suggest **two** reasons for variations in rates of marine deposition. [6]
- 5 Assess the extent to which rock type and rock structure are important factors in explaining the characteristics of coastal cliffs. [20]
- 6 'The successful management of a stretch of coastline is helped by an understanding of the operation of sediment cells.'
With the aid of one or more examples, how far do you agree? [20]

Hazardous environments

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

- 7 Fig. 7.1 shows warning times and hazard durations of hurricanes, earthquakes and volcanoes.
- (a) Contrast the warning times and hazard durations shown in Fig. 7.1. [3]
- (b) Explain the variations in the warning times and hazard durations shown in Fig. 7.1. [7]
- 8 'The type of eruption is the most important factor influencing the hazards from volcanoes.'
- With the aid of examples, how far do you agree? [20]
- 9 Using a case study, assess the extent to which a hazardous environment can be sustainably managed. [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 photograph which shows a hot arid environment in California, USA.
- (a) Describe the main features of the environment shown in Fig. 10.1. [4]
- (b) Suggest how temperature has influenced the features you described in (a). [6]
- 11 'Soil degradation in semi-arid environments is the result of human factors.'
- With the aid of examples, how far do you agree? [20]
- 12 Assess the extent to which the global distribution of hot arid environments is the result of pressure and wind systems. [20]

BLANK PAGE

The boundaries and names shown, the designations used and the presentation of material on the 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.