



Cambridge International AS & A Level

GEOGRAPHY

9696/32

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 cross-section which shows some effects of the weathering of granite in a tropical environment.
- (a) Use Fig. 1.1 to describe the effects of weathering. [4]
- (b) Explain the effects of weathering you described in (a). [6]
- 2 To what extent are the plant communities of seasonally humid tropical (savanna) ecosystems climax communities? [20]
- 3 Assess the role of monsoons in the global distribution and climatic characteristics of tropical environments. [20]

Coastal environments

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

- 4 Fig. 4.1 shows hard engineering solutions to coastal erosion in north Norfolk, UK.
- (a) Describe the distribution of hard engineering solutions shown in Fig. 4.1. [3]
- (b) Suggest reasons why the type of hard engineering solutions varies along a stretch of coastline. [7]
- 5 Assess the role of wave characteristics in explaining the form and development of the cross-section (profile) of beaches. [20]
- 6 'Global warming is the greatest threat to coral reefs.'
- With the aid of 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 the global distribution of deaths from rainfall-triggered mass movement events, 2007–17.
- (a) Use Fig. 7.1 to describe the global distribution of mass movement events with over 100 deaths. [4]
- (b) Explain **two** reasons why the number of deaths from mass movement events varies. [6]
- 8** ‘Earthquakes are more difficult to predict, but easier to prepare for, than volcanic eruptions.’
- How far do you agree with this view? [20]
- 9** Assess the extent to which high winds are the most significant hazard of small-scale atmospheric disturbances (tornadoes). [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 desertified landscape in a semi-arid environment.
- (a) Describe the features of the landscape shown in Fig. 10.1. [4]
- (b) Explain how **one** physical factor and **one** human factor lead to the desertification of a semi-arid environment. [6]
- 11** Discuss the view that thermal fracture is the most important weathering process in hot arid and semi-arid environments. [20]
- 12** ‘The sustainable management of **either** a hot arid **or** semi-arid environment is difficult mainly because of the fragility of the vegetation.’
- With reference to a case study, how far do you agree? [20]

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