

# 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.



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# 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 crosssection (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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