

# **Cambridge International AS & A Level**

#### GEOGRAPHY

9696/33

Paper 3 Advanced Physical Geography Options

May/June 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 photograph which shows seasonally humid tropical (savanna) vegetation in Africa.
  - (a) Using evidence from Fig. 1.1, describe the main features of the savanna vegetation shown. [4]
  - (b) Suggest reasons for two of the features you described in (a). [6]
- 2 Assess the extent to which humid tropical climates and seasonally humid tropical climates are influenced by the position of the intertropical convergence zone (ITCZ). [20]
- 3 'Cockpit karst and tower karst are formed in different conditions.'

With the aid of examples, how far do you agree? [20]

# **Coastal environments**

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

- 4 Fig. 4.1 shows summer and winter beach profiles at a location in the USA.
  - (a) Describe the similarities and differences between the summer and winter beach profiles shown in Fig. 4.1.
  - (b) Suggest reasons for the differences you described in (a). [6]
- 5 Assess the significance of different threats to coral reefs. [20]
- 6 Using a case study, evaluate the attempted solutions to the problems of sustainably managing a stretch, or stretches, of coastline. [20]

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#### Hazardous environments

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

- 7 Fig. 7.1 shows ash fallout from Mount Ruapehu, a volcano in New Zealand, 1995–6.
  - (a) Describe the pattern of ash fallout shown in Fig. 7.1. [4]
  - (b) Suggest two reasons for the pattern you described in (a). [6]
- 8 Assess the relative importance of prediction in reducing the impacts of large scale atmospheric disturbances. [20]
- **9** Assess the extent to which physical factors, rather than human factors, cause mass movements. [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 climate graph for Naghbi, Saudi Arabia.
  - (a) Describe the climate of Naghbi, Saudi Arabia, shown in Fig. 10.1. [4]
  - (b) Explain the high diurnal temperature range of hot arid environments. [6]
- 11 'Physiological drought has a more significant impact than physical drought on the vegetation of hot arid and semi-arid environments.'

How far do you agree?	[20]
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12 Assess the view that water action has the most important role in the formation of landforms of hot arid and semi-arid environments. [20]

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