



Cambridge International AS & A Level

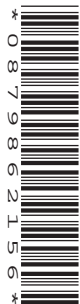
GEOGRAPHY

9696/32

Paper 3 Advanced Physical Geography Options

October/November 2023

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.

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 movement of the monsoon across India.
- (a) Describe the movement of the monsoon across India shown in Fig. 1.1. [4]
- (b) Explain the development and movement of monsoons. [6]
- 2 Assess the influence of climate on the characteristics of vegetation in tropical ecosystems. [20]
- 3 'The sustainable management of a tropical ecosystem is made more difficult because of the characteristics of the soil.'
- Using a case study of **one** tropical ecosystem, how far do you agree with this view? [20]

Coastal environments

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

- 4 Fig. 4.1 shows land lost and land gained for selected coastlines, 1984–2015.
- (a) Describe the pattern of land lost and land gained shown in Fig. 4.1. [4]
- (b) Suggest **two** reasons why coastlines lose or gain land. [6]
- 5 Assess the extent to which the characteristics of coastal cliffs are the result of marine processes. [20]
- 6 To what extent is hard engineering more successful than soft engineering in coastal management? [20]

Hazardous environments

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

- 7 Fig. 7.1 shows the duration of precursors and events for different natural hazards. Precursors are natural warning signs that often come before the event.
- (a) Compare the duration of precursors and events for the natural hazards shown in Fig. 7.1. [4]
- (b) Suggest reasons for the differences in duration of precursors for the natural hazards shown in Fig. 7.1. [6]
- 8 'Mass movement hazards vary in the extent to which they can be predicted and prepared for.'
How far do you agree with this view? [20]
- 9 Assess the extent to which it is possible to prepare for the impacts of earthquakes. [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 the vegetation in a semi-arid environment in Arizona, USA.
- (a) Describe the vegetation shown in Fig. 10.1. [4]
- (b) Explain how the vegetation in semi-arid environments is adapted to drought. [6]
- 11 'Variations in precipitation are the main problem for the sustainable management of **either** a hot arid **or** a semi-arid environment.'
How far do you agree with this view? [20]
- 12 Evaluate the role of wind in the formation of the landforms of hot arid and semi-arid environments. [20]

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