

Cambridge International AS & A Level

GEOGRAPHY

9696/32

Paper 3 Advanced Physical Geography Options

October/November 2023

1 hour 30 minutes

A standard 1D barcode is positioned vertically on the left side of the page. It consists of a series of vertical black bars of varying widths on a white background.

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.

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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