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Cambridge Assessment International Education

Cambridge International AS & A Level

GEOGRAPHY **9696/12**

Paper 1 Core Physical Geography **October/November 2025**

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:
  - Section A: answer **all** questions.
  - Section B: answer **one** question.
- 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.

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.

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Section A

Answer **all** questions in this section. All questions are worth 10 marks.

Hydrology and fluvial geomorphology

1 Fig. 1.1 shows the land use in areas at different levels of risk of river flooding in north-east Greece.

(a) Describe the relationship between land use and the level of risk of river flooding shown in Fig. 1.1. [4]

(b) Briefly explain how land use might influence the risk of river flooding. [3]

(c) Explain how river floods may be prevented by **one** method of hard engineering. [3]

Atmosphere and weather

2 Fig. 2.1 shows the distribution of temperatures in the urban area of Boston and surrounding areas, Massachusetts, USA, in the afternoon (15:00), 29 July 2019.

(a) State the temperature at South End shown in Fig. 2.1. [1]

(b) Describe the pattern of temperatures shown in Fig. 2.1. [4]

(c) Explain why temperatures might vary within an urban area. [5]

Rocks and weathering

3 Fig. 3.1 shows four simplified diagrams of tectonic boundaries.

(a) Name the type of tectonic boundary shown in diagram A in Fig. 3.1. [1]

(b) Compare the patterns of earthquakes between the four diagrams shown in Fig. 3.1. [4]

(c) Explain the pattern of earthquakes shown in diagram B in Fig. 3.1. [5]

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Section B

Answer **one** question from this section. All questions are worth 30 marks.

Hydrology and fluvial geomorphology

4 **(a)** **(i)** Describe the process of traction within river channels. [3]

(ii) Explain how point bars are formed in river channels. [4]

(b) Explain how the size and shape of a drainage basin may affect the shape of a storm hydrograph. [8]

(c) 'River velocity is the main factor influencing the formation of braided river channels.'

With the aid of examples, how far do you agree with this statement? [15]

Atmosphere and weather

5 **(a)** **(i)** Describe the atmospheric process of condensation. [3]

(ii) Explain why some areas experience radiation deficits. [4]

(b) Describe and explain the atmospheric impacts from global warming. [8]

(c) Assess the extent to which albedo is the main factor affecting the **diurnal** energy budget. [15]

Rocks and weathering

6 **(a)** **(i)** Define the mass movement terms 'heave' and 'fall'. [4]

(ii) Briefly explain the formation of ocean ridges. [3]

(b) Explain how human activity can cause slope instability. [8]

(c) 'Temperature is the main factor affecting physical weathering whereas rainfall is the main factor affecting chemical weathering.'

With the aid of examples, how far do you agree with this statement? [15]

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