

Cambridge International AS & A Level

GEOGRAPHY

Paper 1 Core Physical Geography

9696/13

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1 hour 30 minutes

You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed) Insert (enclosed)

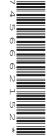
INSTRUCTIONS

- 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.



Section A

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

Hydrology and fluvial geomorphology

- 1 Table 1.1 shows the precipitation routes for three land uses.
 - (a) Calculate the percentage of precipitation that has entered the ground in the forested area. [1]
 - (b) Compare the precipitation routes for the three land uses shown in Table 1.1. [4]
 - (c) Suggest how the storm hydrograph for a drainage basin in a forested area would differ from that in an urban area. [5]

Atmosphere and weather

- 2 Fig. 2.1 shows a model of daytime and night-time surface temperatures across an urban area.
 - (a) With reference to Fig. 2.1, state the land use with the smallest difference between the daytime and night-time surface temperatures. [1]
 - (b) Compare the daytime and night-time surface temperatures across the urban area shown in Fig. 2.1. [4]
 - (c) Suggest reasons for the pattern of daytime and night-time surface temperatures shown in Fig. 2.1. [5]

Rocks and weathering

- 3 Fig. 3.1 is a photograph which shows mass movements on a coastal cliff in Dorset, UK.
 - (a) Name the mass movement feature labelled X in Fig. 3.1. [1]
 - (b) Describe the main features of the mass movements shown in Fig. 3.1. [4]
 - (c) Explain the conditions under which mass movements such as those shown in Fig. 3.1 occur. [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)	Define the fluvial terms cavitation and solution.	[4]
		(ii)	Briefly explain the process of saltation within a river channel.	[3]
	(b)	(b) Describe and explain how the landforms of a braided river channel differ from meandering river channel.(c) 'Soft engineering is more effective than hard engineering in the prevention of river.		of a [8]
	(c)			,

With the aid of examples, how far do you agree?	[15]	
with the ald of examples, now lar do you agree?	[10]	

Atmosphere and weather

5	(a)	(i)	Define the atmospheric terms snow and sensible heat transfer.	[4]
		(ii)	Describe the enhanced greenhouse effect.	[3]
	(b)	Des	scribe and explain how the energy budget is different between daytime and night-time.	[8]
	(c)		nd and sea distribution has the greatest effect on seasonal variations in global press tems.'	ure

With the aid of examples, to what extent do you agree? [15]

Rocks and weathering

6	(a)	(i)	Outline the main differences between continental tectonic plates and oceanic tector plates.	onic [3]
		(ii)	Explain the mass movement process of heave.	[4]
	(b)	Exp	lain how human activity may decrease the stability of slopes.	[8]

(c) With the aid of examples, assess the extent to which subduction is the most significant process in the formation of landforms associated with the movement of tectonic plates. [15]

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