Cambridge International AS & A Level

Cambridge International Examinations
Cambridge International Advanced Subsidiary and Advanced Level

GEOGRAPHY **9696/11**

Paper 1 Core Geography **October/November 2015**

3 hours

No Additional Materials are required.

READ THESE INSTRUCTIONS FIRST

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Section A
Answer **five** questions.
Section B
Answer **one** question.
Section C
Answer **one** question.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.
All the Figures and the Photographs referred to in the questions are contained in the Insert.

The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **5** printed pages, **3** blank pages, and **2** Inserts.

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CAMBRIDGE International Examinations

Section A

Answer **five** questions from this section. All questions carry 10 marks.

Hydrology and fluvial geomorphology

1 Fig. 1 shows the main features of the hydrological system of a drainage basin.

(a) (i) Name the store labelled A. [1]

(ii) Name the flow labelled B. [1]

(iii) Name the flow labelled C. [1]

(iv) Name the flow labelled D. [1]

(b) Describe and explain the factors that may lead to a high amount of overland flow. [6]

Atmosphere and weather

2 Fig. 2 shows atmospheric lapse rates.

Using Fig. 2:

(a) (i) Name the lapse rate labelled A. [1]

(ii) Name the lapse rate labelled B. [1]

(iii) State the height in metres at which clouds begin to form. [1]

(iv) Identify the feature shown by the line labelled C. [1]

(b) Describe conditional instability and explain how it might lead to rainfall. [6]

Rocks and weathering

3 Photograph A shows a large rock fall.

(a) Describe the physical features of the cliff face and rock fall shown in Photograph A. [4]

(b) Explain the factors and processes that may lead to rock falls. [6]

Population

4 Fig. 3 shows actual and projected total fertility rates for MEDCs, LEDCs and the world, 1970 to 2050.

(a) (i) In which year is the world's total fertility rate predicted to be at replacement level in Fig. 3? [1]

(ii) Using data from Fig. 3, compare the changes in the total fertility rates of MEDCs and LEDCs between 1970 and 2050. [3]

(b) Explain why total fertility rates are lower in MEDCs than in LEDCs. [6]

Migration

5 Photograph B shows a refugee camp in an LEDC.

(a) (i) Using evidence from Photograph B, describe the refugee camp. [2]

(ii) Using evidence from Photograph B, describe **two** impacts of refugees on the area. [3]

(b) Explain why some countries receive more refugees than others. [5]

Settlement dynamics

6 Fig. 4A shows percentage urban population and city sizes in Asia and Oceania in 2011. Fig. 4B shows projected data for 2025.

(a) (i) Compare the percentage urban population and city sizes in Australia in 2011 and 2025. [2]

(ii) Identify **two** changes in city sizes in South Asia between 2011 and 2025. [3]

(b) Explain why the percentage of population living in urban areas is higher in MEDCs than in LEDCs. [5]

Section B: The Physical Core

Answer **one** question from this section. All questions carry 25 marks.

Hydrology and fluvial geomorphology

7 **(a)** **(i)** Define the fluvial terms *abrasion* and *hydraulic action*. [4]

(ii) Briefly describe the conditions under which rivers entrain (pick up) and transport their sediment load. [3]

(b) With the aid of a labelled diagram, explain how helicoidal flow leads to the formation of river cliffs and point bars. [8]

(c) Explain the extent to which the growth of urban areas can affect the amount and speed of water flowing in a river channel. [10]

Atmosphere and weather

8 **(a)** **(i)** Define the terms *relative humidity* and *sublimation*. [4]

(ii) Describe what is meant by a temperature inversion. [3]

(b) Describe and explain seasonal variations in the global distribution of pressure and wind. [8]

(c) Describe the nature of greenhouse gases. To what extent could an increase in greenhouse gases lead to climate change? [10]

Rocks and weathering

9 **(a)** **(i)** Define the terms *subduction* and *convection currents* as they apply to plate tectonics. [4]

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

(b) Describe the nature and effectiveness of physical weathering processes in different climates. [8]

(c) Describe the properties of granite and examine the relationships between its chemical composition and physical structure and the way in which it is weathered. [10]

Section C: The Human Core

Answer **one** question from this section. All questions carry 25 marks.

Population

10 (a) (i) Give the meaning of the term *carrying capacity*. [3]

(ii) Outline **two** possible responses of the population in an area that has reached its carrying capacity. [4]

(b) Explain the constraints on increasing food production in LEDCs. [8]

(c) Outline the population policy of **one** named country and assess its success. [10]

Migration

11 (a) (i) Define the term *international migration*. [3]

(ii) Describe the political barriers to international migration. [4]

(b) Explain why voluntary international migration is increasing. [8]

(c) With reference to **one** named example of international migration, evaluate its impacts on the source and the receiving areas. [10]

Settlement dynamics

12 (a) (i) Define the term *urbanisation*. [3]

(ii) Briefly explain why there is a high rate of urbanisation in many LEDCs. [4]

(b) Explain the positive and negative consequences of rapid urban growth in LEDCs. [8]

(c) With reference to examples, assess the effectiveness of strategies for reducing urbanisation in LEDCs. [10]

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