



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education Advanced Subsidiary Level and Advanced Level

**GEOGRAPHY**

**9696/12**

Paper 1 Core Geography

**October/November 2013**

**3 hours**

Additional Materials: Answer Booklet/Paper



**READ THESE INSTRUCTIONS FIRST**

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

**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.

At the end of the examination, fasten all your work securely together.

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 **1** Insert.



**Section A**

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

**Hydrology and fluvial geomorphology**

- 1 Fig. 1 shows a cross-section of a meandering river channel.
- (a) (i) Briefly describe an erosional process at A. [2]
- (ii) Briefly describe the river transport process at B. [2]
- (b) Explain the formation of the main features of a meandering river channel. [6]

**Atmosphere and weather**

- 2 Fig. 2 shows, for various weather elements, the differences between a large urban area and a nearby rural area. The differences are shown as positive and negative percentage changes.
- (a) Identify the weather element that shows:
- (i) the largest percentage difference; [1]
- (ii) the smallest percentage difference. [1]
- (b) Describe the differences in precipitation shown in Fig. 2. [2]
- (c) Explain why temperature and precipitation differ between urban areas and rural areas. [6]

**Rocks and weathering**

- 3 Photograph A shows a mass movement in East Yorkshire, UK.
- (a) (i) Name feature X. [1]
- (ii) Name feature Y. [1]
- (iii) Name the type of mass movement. [1]
- (b) Describe the effect of the mass movement on the shape of the slope shown in Photograph A. [3]
- (c) Explain why a mass movement such as this may have occurred. [4]

**Population**

- 4 Fig. 3 shows the relationship between fertility rate and GDP per person, 2007.
- (a) Using Fig. 3, compare the data for Ghana and the USA. [3]
- (b) Describe and explain the relationship between fertility rate and GDP per person, shown in Fig. 3. [7]

**Migration**

- 5 Fig. 4 shows the top 10 source countries of refugees in 2006.
- (a) Using Fig. 4, state the country which was the source of the greatest number of refugees. [1]
- (b) Suggest reasons why the data in Fig. 4 is estimated rather than actual. [3]
- (c) Outline possible causes of refugee flows. [6]

**Settlement dynamics**

- 6 Photograph B shows part of Rio de Janeiro, Brazil, an NIC in South America.
- (a) Compare the features of Area X and Area Y in Photograph B. [4]
- (b) Briefly explain the problems when attempting to improve urban areas in LEDCs. [6]

**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 hydrological terms *infiltration* and *overland flow*. [4]
- (ii) Briefly describe how evapotranspiration occurs. [3]
- (b) Explain how rock type and soils can affect flows and stores of water in a drainage basin. [8]
- (c) Explain how river floods may be predicted and the extent to which they can be prevented. [10]

**Atmosphere and weather**

- 8 (a) (i) Define the terms *sublimation* and *humidity*. [4]
- (ii) Describe **one** condition under which temperature inversion may occur. [3]
- (b) With the aid of a diagram, explain the nature of orographic uplift of air and how it may lead to the formation of rainfall. [8]
- (c) Explain global warming and discuss its possible effects on global climate. [10]

**Rocks and weathering**

- 9 (a) (i) Define the terms *salt crystal growth* and *hydration*. [4]
- (ii) Briefly describe the process of exfoliation. [3]
- (b) Explain how human activities may affect the nature and intensity of weathering. [8]
- (c) With the aid of diagrams, explain how the movement of tectonic plates leads to the formation of mid-ocean ridges and island arcs. [10]

**Section C: The Human Core**

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

**Population**

- 10 (a)** Explain why a declining population may be a problem in some countries. [7]
- (b)** With the help of one or more examples, suggest reasons why a country may introduce a population policy to control its natural increase. [8]
- (c)** Assess the success of one or more attempts to control natural increase. [10]

**Migration**

- 11 (a)** Explain why rural-urban migration may occur in LEDCs. [7]
- (b)** Using an example from an LEDC, explain how rural-urban migration has both advantages and disadvantages for source areas. [8]
- (c)** To what extent do forced migration and voluntary migration cause different impacts on receiving areas? [10]

**Settlement dynamics**

- 12 (a) (i)** Give the meaning of the term *counterurbanisation*. [2]
- (ii)** Describe briefly the impacts of counterurbanisation on urban areas in MEDCs. [5]
- (b)** With the help of examples, outline the causes of urbanisation in LEDCs. [8]
- (c)** Assess the impact of one or more strategies for reducing urbanisation in LEDCs. [10]

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*Copyright Acknowledgements:*

Question 3 Photograph A	© <a href="http://www.bgs.ac.uk/science/landUseAndDevelopment/images/landslides/HolbeckHall">http://www.bgs.ac.uk/science/landUseAndDevelopment/images/landslides/HolbeckHall</a> .
Question 4 Fig. 3	© Graph of Fertility rate and GDP per person; 2007. The Economist; October 2009.
Question 5 Fig. 4	© Map of Top 10 source countries of refugees; 2006.
Question 6 Photograph B	Rocinha, Rio de Janeiro. P Saunt © UCLES.

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