



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

**GEOGRAPHY**

**9696/12**

Paper 1 Core Geography

**October/November 2012**

**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, the Tables and the Photograph 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 (a) Photograph A shows a meandering river. Draw a labelled diagram of the river naming its main features and landforms. [4]
- (b) Explain how the landforms you have identified are produced and how they might develop in the future. [6]

**Atmosphere and weather**

- 2 Fig. 1 shows the trend in night time temperatures across an urban area.
- (a) Describe the trend in night time temperatures shown, supporting your answer with data from Fig. 1. [4]
- (b) Explain why the night time temperatures vary across an urban area such as that shown in Fig. 1. [6]

**Rocks and weathering**

- 3 Fig. 2 shows the relationship between weathering processes and mean annual temperature and rainfall.
- (a) (i) Identify the main type of weathering occurring at **A**. [1]
- (ii) Identify the main type of weathering occurring at **B**. [1]
- (iii) Name a weathering process occurring at **C**. [1]
- (iv) Name a weathering process occurring at **D**. [1]
- (b) With reference to **two** different weathering processes explain how they are affected by temperature and precipitation. [6]

**Population**

4 Tables 1A and 1B show countries with population aged over 65 years in 2004.

- (a) Name the country which appears in both Table 1A and in Table 1B. [1]
- (b) Compare the data given for the countries ranked 1 in Tables 1A and 1B. [3]
- (c) Use your knowledge of the demographic transition to help explain the differences in the percentages shown in Table 1B. [6]

**Migration**

5 Fig. 3 shows remittances received from international migrants as a percentage of the country's GDP in 2006. Remittances are money sent back home to families.

- (a) Describe the global distribution of remittances received shown in Fig. 3. [4]
- (b) Suggest reasons why receiving remittance money sent back by relatives working in other countries may be significant for the migrants' families left at home. [6]

**Settlement dynamics/Population/Migration**

6 Fig. 4 shows the percentage urban population in 1950, 1975 and 2000 and the predicted percentage urban population in 2025.

- (a) In which year did the urban population in **LEDCs** reach 40%? [1]
- (b) Compare the trends in percentage urban population in LEDCs and MEDCs between 1975 and 2025. Support your response with data from Fig. 4. [4]
- (c) Give reasons for the increase in urbanisation in LEDCs over time. [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 terms *interception* and *throughflow* as they apply to water in a drainage basin. [4]
- (ii) Briefly explain how the shape of a storm hydrograph can be affected by drainage basin shape. [3]
- (b) With the help of a diagram, explain how drainage basins operate as a system of inputs, outputs, stores and flows. [8]
- (c) Explain how human activities might affect the flows and stores within a drainage basin. [10]

**Atmosphere and weather**

- 8 (a) (i) Define the terms *condensation* and *convection*. [4]
- (ii) Briefly explain the conditions needed for atmospheric stability. [3]
- (b) With the help of diagrams, explain how the daytime and night time energy budgets are different. [8]
- (c) Describe the greenhouse effect. Explain how human activities may affect its operation. [10]

**Rocks and weathering**

- 9 (a) (i) Define the terms *ocean ridges* and *island arcs*. [4]
- (ii) Briefly describe the process of subduction. [3]
- (b) With the help of diagrams, explain how fold mountains are formed at tectonic plate margins. [8]
- (c) Explain how mass movements can affect the development of slopes. [10]

**Section C: The Human Core**

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

**Population/Migration**

- 10 (a) (i) Give the meaning of the term *fertility rate*. [3]
- (ii) Explain how **two** factors influence levels of fertility. [4]
- (b) Outline the two components of population change and explain how they affect the size of the population. [8]
- (c) How far do you agree with the view that population change is unpredictable? [10]

**Migration/Settlement dynamics**

- 11 (a) (i) Give the meaning of the term *rural-urban migration*. [3]
- (ii) Suggest **two** ways of reducing rates of rural-urban migration. [4]
- (b) With the help of examples, explain some of the circumstances in which **urban-urban** migration occurs. [8]
- (c) How far do you agree that pull factors are more powerful than push factors in migration decision-making? [10]

**Settlement dynamics**

- 12 (a) (i) Give the meaning of the term *spatial competition*. [3]
- (ii) Outline **two** reasons why spatial competition occurs in urban areas. [4]
- (b) With the help of one or more examples, describe how the locations chosen for manufacturing industry in urban areas change over time and explain why this occurs. [8]
- (c) To what extent has providing infrastructure for a named city created more problems than it solved? [10]

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Question 2 Figure 1	© <a href="http://www.sde.nus.edu.sg/common/images/research_highlightsB01b.jpg">http://www.sde.nus.edu.sg/common/images/research_highlightsB01b.jpg</a> .
Question 4 Tables 1a & 1b	© John R Weeks; <i>Population: An Introduction to Concepts and Issues</i> ; Wadsworth; 2008.
Question 5 Figure 3	© <a href="http://www.nytimes.com/ref/world/20070622_CAPEVERDE_GRAPHIC.html#">http://www.nytimes.com/ref/world/20070622_CAPEVERDE_GRAPHIC.html#</a> .
Question 6 Figure 4	© John R Weeks; <i>Population: An Introduction to Concepts and Issues</i> ; Wadsworth; 2008.

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