



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

GEOGRAPHY

9696/11

Paper 1 Core Geography

May/June 2011

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 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 Photograph A shows features of a meander on the River Swale in North Yorkshire, UK.
- (a) Identify the features labelled in Photograph A.
- (i) A
- (ii) B [2]
- (b) Describe the processes that lead to the features you have identified in (a). [5]
- (c) Briefly explain how a floodplain is formed. [3]

Atmosphere and weather

- 2 Fig. 1 shows a selection of average urban climatic conditions compared with surrounding rural areas.
- (a) Should the table state 'more' or 'less' in the place of:
- (i) X,
- (ii) Y? [2]
- (b) Using Fig. 1, explain the differences in temperature and precipitation between an urban and a rural area. [5]
- (c) Give reasons why air pollution is higher in urban areas. [3]

Rocks and weathering

- 3 Fig. 2 shows a landslide.
- (a) Name and briefly describe the feature named A. [2]
- (b) Name and briefly describe the feature named B. [2]
- (c) Explain the role of rock type and structure in affecting the movement and stability of slopes. [6]

Population

- 4 Fig. 3 shows the top 10 risk factors to health for MEDCs and LEDCs in 2002 according to the World Health Organization.
- (a) Using Fig. 3, identify the greatest risk factor to health in:
- (i) LEDCs,
 - (ii) MEDCs. [2]
- (b) Use data from Fig. 3 to describe the impact of 'unsafe sex' on length of life in LEDCs and MEDCs. [3]
- (c) With the help of examples, briefly explain why it is difficult for governments to address the health issues identified in Fig. 3. [5]

Migration

- 5 Fig. 4A shows the age/sex structure of migrants to Switzerland. Fig. 4B shows the age/sex structure of the Swiss born population.
- (a) Compare the age/sex structure in Fig. 4A with that in Fig. 4B. [5]
- (b) Suggest reasons for the age/sex structure of the immigrant population. [5]

Settlement dynamics

- 6 Fig. 5 shows the population of selected cities in 1950 and 2005, their projected population size in 2025 and change in the cities' world rank 1950–2025.
- (a) Give the name of the city in Fig. 5 which is expected to have:
- (i) the greatest increase in world rank,
 - (ii) the least population growth after 1950. [2]
- (b) Using Fig. 5, compare the growth of New York and São Paulo. [3]
- (c) Outline some of the challenges associated with the continuing growth of cities in **either** MEDCs **or** 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 hydrological terms *groundwater* and *springs*. [4]
- (ii) Briefly describe how groundwater recharge occurs. [3]
- (b) Using diagrams, show how soils and vegetation within a catchment area (drainage basin) can affect the shape of storm hydrographs. [8]
- (c) Describe and explain the differences between the landforms found in braided and meandering river channels. [10]

Atmosphere and weather

- 8 (a) (i) Define the terms *atmospheric stability* and *atmospheric instability*. [4]
- (ii) Describe the conditions which may lead to the formation of *dew*. [3]
- (b) With the aid of a diagram, explain the generalised pattern of pressure and wind systems in **either** the northern **or** southern hemispheres. [8]
- (c) Explain how the *greenhouse effect* occurs in the earth's atmosphere. How have human activities affected it and with what consequences? [10]

Rocks and weathering

- 9 (a) (i) Define the terms *oxidation* and *freeze thaw*. [4]
- (ii) Explain the process of exfoliation. [3]
- (b) Explain how the differences in the chemical composition of limestone and granite lead to differences in the ways they are weathered. [8]
- (c) With the aid of diagrams describe and explain the formation of landforms found near convergent plate boundaries. [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 *natural increase rate*. [2]
- (ii) With the help of examples, describe the differences in natural increase between countries. [5]
- (b) Outline the main features of **one** country's population policy regarding natural increase. [8]
- (c) Assess the results of seeking to manage natural increase in the country you chose in (b). [10]

Migration

- 11 (a) With the help of examples, describe the ways in which potential migrants receive information about possible destinations. [7]
- (b) For any **one** voluntary migration, explain how push factors and pull factors combined to promote the movement. [8]
- (c) 'Migration is about taking risks.' How far do you agree? [10]

Settlement dynamics

- 12 (a) Explain why shanty towns (squatter settlements) develop. [7]
- (b) Why is it difficult for the authorities to manage shanty towns (squatter settlements)? [8]
- (c) Assess the extent to which shanty towns can be seen as positive forms of settlement. [10]

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Question 4 © Geofile Online No.578; Global patterns of death, disease and health; Nelson Thornes Ltd; September 2008.
Question 5 © www.migrationinformation.org/USfocus/display.cfm?ID=284; 10 June 2010.
Question 6 © Raconteur on Smart Cities; Total projected population by 2028; <http://np.netpublicator.com/netpublication/n04578744/5>.

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