

Cambridge
International
AS & A Level

Cambridge International Examinations
Cambridge International Advanced Subsidiary and Advanced Level

GEOGRAPHY

9696/13

Paper 1 Core Geography

October/November 2016

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 Table 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.

Section A

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

Hydrology and fluvial geomorphology

- 1 Fig. 1 shows some components of the hydrological cycle for a forested area and an urban area.
- (a) Describe the main differences in the flows between the forested area and the urban area shown in Fig. 1. [4]
- (b) Explain the differences you identified in (a). [6]

Atmosphere and weather

- 2 Fig. 2 shows the pattern of temperatures for an urban area.
- (a) Describe the pattern of temperatures shown in Fig. 2. [4]
- (b) Suggest reasons for the pattern you identified in (a). [6]

Rocks and weathering

- 3 Fig. 3 shows some processes and features of mass movements.
- (a) Identify:
- (i) mass movement A; [1]
 - (ii) mass movement B; [1]
 - (iii) mass movement C; [1]
 - (iv) feature D. [1]
- (b) Briefly explain how human activities can both increase and decrease mass movements on slopes. [6]

Population

- 4 Fig. 4 shows, for the USA in 2012, the age structure of the Native American population and the age structure of the total population.
- (a) Identify the largest age group amongst the Native American population. [1]
- (b) Compare the age structure of the Native American population with that of the total population, supporting your response with data from Fig. 4. [5]
- (c) Suggest how periods of higher birth rates in a country may be explained. [4]

Migration

- 5 Fig. 5 shows remittance inflows to Kenya, an LEDC in Africa, 1975–2012.
- (a) State the total remittance inflow to Kenya in 1999 shown in Fig. 5. [1]
- (b) Compare the trends in remittance inflows for 1975–90 and 2003–12, supporting your response with data from Fig. 5. [4]
- (c) Explain some of the **negative** impacts on LEDCs of emigration. [5]

Population/Migration/Settlement dynamics

- 6 Table 1 shows predictions of the top 5 cities in the world in 2025 using 5 different measures.
- (a) State the predictions for New York in Table 1. [2]
- (b) Using evidence from Table 1, will Tokyo or Shanghai be the world's top city in 2025? [3]
- (c) Suggest reasons why the top 5 cities in terms of population under 15 years of age are all predicted to be in LEDCs and NICs. [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 *saltation*. [4]
(ii) Describe turbulent flow and briefly explain how it occurs in a river channel. [3]
- (b) With the aid of diagrams, explain the formation of waterfalls and deltas. [8]
- (c) 'Meanders are the result of helicoidal flow.'
How far do you agree? [10]

Atmosphere and weather

- 8 (a) (i) Define the atmospheric terms *high pressure* and *orographic uplift of air*. [4]
(ii) Briefly explain how atmospheric pressure influences wind direction and strength. [3]
- (b) Explain how fog and temperature inversions are affected by local energy budgets. [8]
- (c) 'The only climatic impact of human activity is global warming.'
How far do you agree with this statement? [10]

Rocks and weathering

- 9 (a) (i) Define the terms *sea floor spreading* and *island arcs*. [4]
(ii) Briefly explain the process of subduction. [3]
- (b) For **either** granite **or** limestone, explain how physical structure and chemical composition of the rock influences its weathering. [8]
- (c) 'Volcanic activity occurs at all tectonic plate margins.'
How far do you agree? [10]

Section C: The Human Core

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

Population

10 For **one** country's population policy on natural increase:

- (a) explain why the government introduced a population policy; [7]
- (b) describe government attempts at managing natural increase; [8]
- (c) assess the success of the attempts you described in (b). [10]

Population/Migration/Settlement dynamics

- 11 (a) (i) Define the terms *push factor* and *pull factor* and give an example of each. [4]
- (ii) Briefly explain how constraints may affect migration. [3]
- (b) Outline the causes and impacts of migration **within** urban settlements (intra-urban migration). [8]
- (c) Assess the impacts of rural-urban migration on the rural source areas. [10]

Settlement dynamics

- 12 (a) Define the term *spatial competition* and explain how spatial competition occurs within urban settlements. [7]
- (b) With reference to one or more urban settlements, describe how and explain why the location of retailing has changed. [8]
- (c) Explain why it is difficult for urban authorities to manage shanty towns (squatter settlements). [10]

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