

Cambridge
International
AS & A Level

Cambridge International Examinations
Cambridge International Advanced Subsidiary and Advanced Level

GEOGRAPHY

9696/12

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, Photographs 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 a storm hydrograph.
- (a) Using Fig. 1, name the component labelled:
- (i) A; [1]
 - (ii) B; [1]
 - (iii) C. [1]
- (b) Briefly describe bankfull discharge. [2]
- (c) Explain **two** factors that may lead to a steep rising limb of a storm hydrograph. [5]

Atmosphere and weather

- 2 Fig. 2 shows night time temperatures across an urban area.
- (a) Using Fig. 2, state:
- (i) the highest temperature and its location; [2]
 - (ii) the lowest temperature and its location. [2]
- (b) Using Fig. 2, explain how the features of the urban area affect its night time temperatures. [6]

Rocks and weathering

- 3 Photograph A shows a mudflow.
- (a) With the aid of a diagram, identify the main features of the mudflow shown in Photograph A. [4]
- (b) Explain how mudflows occur. [6]

Population

- 4 Table 1 shows the number of people undernourished, by world region, in 1992 and 2012.
- (a) (i) State the change in the **total** number of people undernourished between 1992 and 2012. [1]
- (ii) Using data from Table 1, compare the changes in the number of people undernourished in Asian regions with the changes in the Middle East and African regions. [3]
- (b) Explain how food shortages may be reduced. [6]

Migration/Settlement dynamics

- 5 Fig. 3 shows migration from London to regions of England in 2012.
- (a) Using data from Fig. 3, describe the pattern of migration from London. [4]
- (b) Explain why people migrate **from** large cities in MEDCs. [6]

Settlement dynamics

- 6 Photograph B shows part of the Central Business District (CBD) of a city in South-East Asia.
- (a) Using evidence from Photograph B, describe the characteristics of the CBD. [3]
- (b) Suggest why retailing is located in CBDs. [3]
- (c) Explain why manufacturing industry is often located at the outer edge of urban areas. [4]

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 *thalweg* and *riffle*. [4]
- (ii) Describe the differences between laminar flow and turbulent flow in a river channel. [3]
- (b) Describe the processes of erosion in river channels. Explain how these processes lead to the formation of **two** channel landforms. [8]
- (c) Explain the extent to which floods can be predicted and their effects limited. [10]

Atmosphere and weather

- 8 (a) (i) Define the terms *environmental lapse rate* and *dry adiabatic lapse rate*. [4]
- (ii) Describe how latent heat transfer occurs. [3]
- (b) Describe how greenhouse gases affect the Earth's energy budget. [8]
- (c) Explain how stability and instability in the atmosphere produce different types of weather. [10]

Rocks and weathering

- 9 (a) (i) Define the terms *continental plate* and *oceanic plate*. [4]
- (ii) Briefly describe the process of sea floor spreading. [3]
- (b) With the aid of a diagram, explain how plate tectonics can lead to mountain building. [8]
- (c) Explain the extent to which rock type, climate and vegetation can influence 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 *dependency ratio*. [3]
- (ii) Explain why an area may have more males than females in its economically active population. [4]
- (b) Explain why many LEDCs have a young population. [8]
- (c) With reference to one or more countries, assess the challenges of an ageing population. [10]

Migration

- 11 (a) (i) Define the term *refugee*. [3]
- (ii) Suggest **two** reasons why the number of refugees in the world is increasing. [4]
- (b) Describe and explain the impacts of large numbers of refugees on receiving areas. [8]
- (c) With reference to **voluntary** international migration, to what extent is there a typical migrant? [10]

Settlement dynamics

- 12 (a) (i) Give the meaning of the term *world city*. [3]
- (ii) Suggest **two** reasons why the hierarchy of world cities may change. [4]
- (b) Describe and explain the location of shanty towns (squatter settlement) in cities in LEDCs. [8]
- (c) With reference to examples, evaluate the attempts to improve living conditions in shanty towns (squatter settlement) in LEDCs. [10]

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