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**GEOGRAPHY**

**9696/12**

Paper 1 Core Geography

**May/June 2017**

**3 hours**

No Additional Materials are required.

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**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.

The Photographs, 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.

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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 Photograph A shows a fluvial landform.

- (a) Describe the features of the landform shown in Photograph A. [4]
- (b) Explain how processes form the features shown in Photograph A, and suggest how the landform may develop over time. [6]

**Atmosphere and weather**

2 Fig. 1 shows a diagram of atmospheric circulation in the Northern Hemisphere.

- (a) Describe the main features of atmospheric circulation in the Northern Hemisphere shown in Fig. 1. [4]
- (b) Describe and explain how seasonal variations may affect atmospheric circulation. [6]

**Rocks and weathering**

3 Photograph B shows a mass movement.

- (a) (i) Name the type of mass movement shown in Photograph B. [1]
- (ii) Describe the evidence that suggests the mass movement shown in Photograph B has recently occurred. [3]
- (b) Explain how a mass movement, such as that shown in Photograph B, may occur. [6]

### Population

- 4 Table 1 shows average life expectancy for four continents in 1900, 2001 and 2012.
- (a) Using Table 1, state:
- (i) the continent in which life expectancy increased the most; [1]
  - (ii) the difference in life expectancy between Africa and Europe in 2012. [1]
- (b) Giving evidence from Table 1, suggest **two** reasons why data about life expectancy can be misleading. [3]
- (c) Explain why life expectancy increases as an area develops economically. [5]

### Migration

- 5 Fig. 2 shows remittance flows into Nigeria, an LEDC in Africa, 2006 to 2010.
- (a) Using evidence from Fig. 2, describe the trend in remittance flows. [3]
- (b) Suggest the link between remittance flows and migration. [2]
- (c) Explain the other links between migrants and their source area(s), apart from remittances. [5]

### Settlement dynamics

- 6 Fig. 3 shows sales by retail location in an MEDC, 2002 to 2012.
- (a) (i) Compare the trends in the percentage of retail sales for CBD and internet shown in Fig. 3. [3]
- (ii) Suggest why out-of-town centre retail sales have increased in many countries. [3]
- (b) Give **two** reasons why retail sales are highest in CBDs. [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 hydrological terms *porosity* and *antecedent moisture*. [4]
- (ii) Explain why the level of the water table may change over time. [3]
- (b) With the aid of a diagram, describe how water circulates within a drainage basin system. [8]
- (c) 'Floods can never be accurately predicted or prevented.'
- To what extent do you agree with this statement? [10]

#### Atmosphere and weather

- 8 (a) (i) Describe the terms *reflected solar radiation* and *earth (terrestrial) radiation*. [4]
- (ii) Briefly explain what is meant by a temperature inversion. [3]
- (b) Describe and explain how land and sea breezes form. [8]
- (c) 'The impact of global warming is mainly climatic.'
- How far do you agree with this statement? [10]

#### Rocks and weathering

- 9 (a) (i) Define the weathering terms *organic action* and *chelation*. [4]
- (ii) Briefly explain how human activity can increase acid rain. [3]
- (b) Describe the processes and explain the landforms produced at divergent plate boundaries. [8]
- (c) Discuss the view that strong physical weathering only occurs in climates of extreme temperature. [10]

**Section C: The Human Core**

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

**Population**

- 10 (a) Describe the main causes of food shortages. [7]
- (b) With the help of one or more examples, explain the main consequences of food shortages. [8]
- (c) 'Innovation is the solution to food shortages.'
- To what extent do you agree? [10]

**Migration/Settlement dynamics**

- 11 (a) (i) Define the term *intra-urban movements* of population. [2]
- (ii) Outline the main types of intra-urban movements of population. [5]
- (b) Explain why the volume of population movements within urban areas increases as countries develop. [8]
- (c) Assess the effects of urban-rural migration on rural areas. [10]

**Settlement dynamics**

- 12 (a) (i) Explain the meaning of the term *hierarchy of world cities*. [3]
- (ii) Outline **two** characteristics of world cities. [4]
- (b) Explain the growth of one or more world cities. [8]
- (c) 'The most rapid rates of urbanisation are occurring in LEDCs.'
- How far do you agree? [10]





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