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**GEOGRAPHY**

**9696/11**

Paper 1 Core Geography

**May/June 2016**

**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 Photograph, 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 meander.

(a) Using Photograph A, name the feature labelled:

(i) X; [1]

(ii) Y. [1]

(b) With the aid of a diagram, explain how the meander shown in Photograph A may have been formed. [5]

(c) Describe the changes over time that are likely to occur at line Z on Photograph A. [3]

**Atmosphere and weather**

2 Fig. 1 shows the global surface air pressure (mb) for one month.

(a) State the pressure at:

(i) A; [1]

(ii) B. [1]

(b) State whether Fig. 1 shows the global surface air pressure (mb) for January or July. Give **one** reason for your answer. [3]

(c) Explain how the variation in surface air pressure contributes to the transfer of global energy. [5]

**Rocks and weathering**

3 Fig. 2 shows the dominant type of weathering in different climates.

(a) Using Fig. 2, state:

(i) the dominant type of weathering which occurs at 20 °C and 1000 mm rainfall; [1]

(ii) the lowest temperature at which strong chemical weathering is dominant; [1]

(iii) the range of temperature over which moderate chemical weathering with frost action is dominant. [2]

(b) Explain how temperature influences weathering. [6]

### Population

- 4 Table 1 shows birth rate and population growth rate for selected countries in 2014.
- (a) (i) Describe the relationship, shown in Table 1, between birth rate and population growth rate. [2]
- (ii) Name the country that does **not** fit the relationship described in (i). [1]
- (b) Suggest why there is a relationship between birth rate and population growth rate. [2]
- (c) Explain why the birth rate is decreasing in many countries. [5]

### Migration/Settlement dynamics

- 5 Fig. 3 shows the migration between an urban area and a rural area in 1970 and 2012.
- (a) (i) Using Fig. 3, describe how migration changes from 1970 to 2012. [3]
- (ii) Suggest **two** reasons for the changes you described in (i). [2]
- (b) Explain some of the effects of urban-rural migration. [5]

### Settlement dynamics

- 6 Fig. 4 shows the bid-rent for three urban land uses.
- (a) (i) Name the land use shown in Fig. 4 which is found at X. [1]
- (ii) Compare the bid-rent lines for commercial land use and residential land use. [2]
- (b) Suggest **two** factors, other than bid-rent, that influence the location of industrial zones in urban areas. [2]
- (c) Explain why a location in the Central Business District (CBD) is attractive to retailing. [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 *percolation* and *infiltration*. [4]
- (ii) Explain what is meant by the term *drainage density*. [3]
- (b) With the aid of diagrams, describe and explain **two** different patterns of flow that are found within rivers. [8]
- (c) Assess the extent to which floods are caused by human activity. [10]

**Atmosphere and weather**

- 8 (a) (i) Define the atmospheric terms *latent heat* and *evaporation*. [4]
- (ii) Explain **one** way a temperature inversion forms. [3]
- (b) With the aid of diagrams, explain how convection and orographic uplift can lead to precipitation. [8]
- (c) To what extent does the distribution of land and sea affect the global distribution of temperature? [10]

**Rocks and weathering**

- 9 (a) (i) Define the weathering terms *hydration* and *freeze-thaw*. [4]
- (ii) Briefly explain how organic action can weather rocks. [3]
- (b) Explain the influence of rock type on the nature and rate of weathering. [8]
- (c) Examine the significance of subduction in the formation of tectonic landforms. [10]

### Section C: The Human Core

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

#### Population

- 10 (a) (i) Define the term *dependency ratio*. [3]
- (ii) Suggest **two** pieces of evidence that might indicate an area has a large young population. [4]
- (b) Explain the development of an ageing population structure. [8]
- (c) 'Controlling migration is the only way to reduce overpopulation.'
- To what extent do you agree with this statement? [10]

#### Migration/Settlement dynamics

- 11 (a) (i) Give the meaning of the term *forced (involuntary) migration*. [2]
- (ii) Suggest **two** reasons why forced migration occurs. [5]
- (b) Explain how the arrival of large numbers of forced migrants affects the receiving area. [8]
- (c) To what extent is **voluntary** international migration the result of economic factors? [10]

#### Settlement dynamics

- 12 (a) (i) Define the term *urban renewal*. [3]
- (ii) Describe **two** of the characteristics of urban renewal. [4]
- (b) Explain why there are large areas of urban renewal in many cities. [8]
- (c) Evaluate the idea that shanty towns (squatter settlements) are areas of hope rather than of despair. [10]





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