GEOGRAPHY **9696/13**

Paper 1 Core Geography **May/June 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 Photograph 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.

[Turn over

Section A

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

Hydrology and fluvial geomorphology

1   Fig. 1 shows the hydrological cycle.

   (a)   Using Fig. 1, name:

   (i)   input A;   [1]

   (ii)   flow B;   [1]

   (iii)   store C;   [1]

   (iv)   output D.   [1]

   (b)   Explain how the characteristics of rocks **and** soils influence the flows and stores within drainage basins.   [6]

Atmosphere and weather

2   Photograph A shows early morning mist in a valley.

   (a)   Using evidence from Photograph A, describe the weather phenomenon and explain how it may have been formed.   [4]

   (b)   Describe and briefly explain **two** differences between daytime and night-time energy budgets.   [6]

Rocks and weathering

3   Fig. 2 shows types of mass movement.

   (a)   Using Fig. 2, identify:

   (i)   mass movement A;   [1]

   (ii)   mass movement B;   [1]

   (iii)   mass movement C;   [1]

   (iv)   the rate of movement at D.   [1]

   (b)   Describe and explain differences between flows and slides.   [6]

Population

4 Fig. 3 shows a simplified age/sex pyramid for an MEDC in 2013.

    (a) Calculate the dependency ratio for the age/sex pyramid in Fig. 3 and show your working. [3]

    (b) Give **two** reasons why it is difficult to predict future dependency ratios accurately. [2]

    (c) Explain the issues that an ageing population creates for countries. [5]

Migration

5 Fig. 4 shows the main origins of international migrants into Australia, an MEDC, in 2013.

    (a) (i) Describe the pattern of migration shown in Fig. 4. [3]

        (ii) Suggest **two** reasons for the pattern you described in **(i)**. [2]

    (b) Explain some of the factors that can limit international migration. [5]

Migration / Settlement dynamics

6 Fig. 5 shows the location of the top 20 world cities with most high-rise buildings in 2013.

    (a) (i) Name the world region shown in Fig. 5 which had the smallest proportion of cities with high-rise buildings. [1]

        (ii) Compare the proportion of world cities with most high-rise buildings in Asia and the Americas. [2]

    (b) Suggest **two** reasons why some cities do not have many high-rise buildings. [2]

    (c) Explain why many cities in LEDCs develop shanty towns (squatter settlements). [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 *traction* and *saltation*. [4]

(ii) Briefly describe the conditions under which material is deposited within a river. [3]

(b) With the aid of a diagram, describe pools and riffles. Explain how pools and riffles may lead to the formation of meandering channels. [8]

(c) 'The prediction of floods is often difficult.'

Use examples to explain how far you agree with this statement. [10]

Atmosphere and weather

8 **(a)** **(i)** Define the atmospheric terms *stability* and *instability*. [4]

(ii) Briefly explain the greenhouse effect. [3]

(b) With the aid of a diagram, describe and explain the reasons for the latitudinal pattern of radiation excesses and deficits. [8]

(c) Examine urban effects on climate in comparison with surrounding rural areas. [10]

Rocks and weathering

9 **(a)** **(i)** Define the terms *sea floor spreading* and *divergent plate boundaries*. [4]

(ii) Briefly describe **one** landform found on a convergent plate boundary. [3]

(b) With the aid of diagrams, explain how rock type and structure may influence the development of slopes. [8]

(c) To what extent does the type of human activity affect the stability of slopes? [10]

Section C: The Human Core

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

Population

10 **(a)** **(i)** Define the term *optimum population*.   [3]

(ii) Suggest **two** pieces of evidence that show a rural area is underpopulated.   [4]

(b) Using examples, explain how overpopulation may occur.   [8]

(c) 'Economic development is the only way to reduce overpopulation.'

To what extent do you agree?   [10]

Population/Migration

11 **(a)** **(i)** Define the term *internal migration*.   [3]

(ii) Outline the role of economic factors in internal migration.   [4]

(b) Explain why governments of LEDCs may wish to control internal migration.   [8]

(c) Assess the role of environmental factors in the volume and direction of refugee flows.   [10]

Settlement dynamics

12 **(a)** **(i)** Give the meaning of the term *CBD*.   [2]

(ii) Describe the main characteristics of CBDs.   [5]

(b) Explain why activities are moving out of the CBD in many cities.   [8]

(c) Assess the role of government planning in the location of activities within urban areas.   [10]

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