

CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education Advanced Subsidiary/Advanced Level
GEOGRAPHY **9696/1**
PAPER 1 Core Geography
OCTOBER/NOVEMBER SESSION 2002

3 hours

Additional materials:
Answer paper

TIME 3 hours

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.

Answer **all** questions in Section A.

Answer **one** question from Section B.

Answer **one** question from Section C.

Write your answers on the separate answer paper provided.

If you use more than one sheet of paper, fasten the sheets together.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [] at the end of each question or part question.

All the Figures referred to in the questions are contained in the Insert.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

You are advised to spend no longer than 1 hour 30 minutes on Section A.

Section A

Answer **all** the questions in this section. All questions carry 10 marks.

Atmosphere and weather

- 1 Fig. 1 shows unstable and stable air crossing a mountain.
- (a) State **two** similarities and **two** differences between Figs 1A and 1B. [4]
- (b) Which one of the circumstances shown in Figs 1A and 1B is likely to produce most rainfall? Briefly explain the reasons for your choice. [6]

Rocks and weathering

- 2 Fig. 2 shows the profile of a hill slope.
- (a) Using Fig. 2, name the parts of the slope marked A, B and C. [3]
- (b) Describe the direction and intensity of movement in each slope area (A, B, C) [2]
- (c) Describe the processes that bring about the shape of the slopes shown in A, B and C. [5]

Population change

- 3 Fig. 3 shows age/sex pyramids for four countries in 1995.
- (a) Identify,
- (i) the country with disproportionate numbers in the age groups 30-34 and 35-39 years,
- (ii) the country with a youthful or progressive age structure,
- (iii) the country with the largest numbers of people over 60 years. [3]
- (b) Briefly describe Mexico's age/sex pyramid. [2]
- (c) For **either** Iran **or** France, describe the dependency pattern and outline its likely social and economic consequences. (Calculations of dependency ratio should not be attempted). [5]

Population change

- 4 Fig. 4 shows changes in China's birth rate from 1962 to 1990 and Table 1 gives some information about that country's population campaigns.
- (a) What relationships between China's population campaigns and changes in the birth rate are suggested by the information in Fig. 4 and Table 1? [4]
- (b) Suggest some of the problems that governments may need to overcome for the successful reduction of the birth rate. [6]

Settlement dynamics

- 5 Figs 5A and 5B show different models of land-uses in and around an urban area.
- (a) (i) Using Fig. 5A, identify the land-use in each of zones A, B, C and D.
- (ii) Use the concept of bid-rent to explain the land-use in zone A. [4]
- (b) Describe the distribution of economic activities in Fig. 5B and suggest reasons why it is different from the distribution in Fig. 5A. [6]

Section B: The Physical Core

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

Hydrology and fluvial geomorphology

- 6 (a) (i) Briefly define the term *water balance*. [4]
(ii) Describe **one** reason why the water balance may vary over time. [3]
- (b) Using a labelled diagram (or diagrams) describe how water moves through a catchment system. [8]
- (c) Explain the ways in which human activities can affect the flows of water in a catchment system. [10]

Atmosphere and weather

- 7 (a) (i) Define the terms *long wave radiation* and *short wave radiation*. [4]
(ii) Identify the parts of the earth's surface which receive the most solar radiation each year. Briefly explain why these areas receive the most solar radiation. [3]
- (b) Explain how the global distribution of temperatures is influenced by:
(i) latitude,
(ii) the distribution of land and sea,
(iii) ocean currents. [8]
- (c) Explain the nature and causes of global warming in recent years. [10]

Rocks and weathering

- 8 (a) (i) Define the terms *rock joint* and *bedding plane*. [4]
(ii) Briefly explain how rock joints are formed. [3]
- (b) Describe the operation of **two** types of physical (mechanical) weathering. [8]
- (c) Show how rock joints and bedding planes can influence weathering and landforms in limestone regions. [10]

Section C: The Human Core

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

Population change

- 9 (a) Give the meaning of the term *international migration* and describe two contrasting examples of international migration flows. [7]
- (b) Fig. 6 shows net sending and receiving countries for international migrants between 1990 and 1995.
- (i) Describe the main features of the distribution of net receiving countries (countries with a positive migration balance of over 20 000 people). [8]
- (ii) Suggest some of the limitations of the information given in Fig. 6. [8]
- (c) With reference to one or more countries, assess the extent to which its policy on population migration is a barrier to potential international immigration. [10]

Settlement dynamics

- 10 (a) For a named rural settlement or rural area you have studied in detail,
- (i) draw a labelled sketch map to show its location and layout, [7]
- (ii) describe, and suggest reasons for, the economic growth (or decline) it has experienced since 1960. [8]
- (b) Settled rural areas of more economically developed countries (MEDCs) often have particular problems. To what extent do these problems arise from the desire for an urban lifestyle in a rural setting? [10]

Settlement dynamics

- 11 (a) Using examples, explain the meaning of the terms *urbanisation* and *counterurbanisation*. [7]
- (b) How may governments attempt to reduce the rate of urbanisation in less economically developed countries (LEDCs)? Illustrate your answer with examples from one or more countries you have studied. [8]
- (c) To what extent is it true that spontaneous settlements (shanty towns and squatter settlements) are a sign of the failure of the urban system? [10]

