CAMBRIDGE INTERNATIONAL EXAMINATIONS General Certificate of Education Advanced Level

GEOGRAPHY

9696/02, 9696/03

Papers 2 and 3 Advanced Geography Options

October/November 2003

3 hours

Additional Materials: Answer Booklets/Paper

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen on both sides of the paper.

You may use a soft pencil for any diagrams, graphs, rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

Each paper must be answered on separate answer papers/answer booklets.

Answer **two** questions from Paper 2, Advanced Physical Geography Options. Each question answered must be from a different topic.

Answer **two** questions from Paper 3, Advanced Human Geography Options. Each question answered must be from a different topic.

At the end of the examination hand in your answers to Paper 2 and Paper 3 separately.

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

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

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

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

You should make reference to appropriate examples studied in the field or the classroom, even where such examples are not specifically requested by the question.

You are advised to spend no more than 1 hour 30 minutes on each paper.

This document consists of 6 printed pages, 2 blank pages and an insert.

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PAPER 2: ADVANCED PHYSICAL GEOGRAPHY OPTIONS

Answer **two** questions, each from a different topic.

Start a new answer paper/answer booklet for answering the questions from Paper 2. Hand in the answer papers/answer booklets for Paper 2 separately from those for Paper 3. You are advised to spend no more than 1 hour 30 minutes on this paper.

Tropical environments

Only **one** question may be answered from this topic.

- 1 (a) Explain how and where monsoons occur and describe the weather characteristics associated with monsoons. [10]
 - (b) Explain the nature of nutrient cycles found in the Tropical Rainforest and in the Savanna. Why are nutrient cycles important in explaining the operation of tropical ecosystems? [15]
- **2** Fig.1 shows the formation of inselbergs.
 - (a) Explain the theory of inselberg formation shown in Fig. 1. [10]
 - **(b)** Describe the impact of human interference upon the soils, natural vegetation and nutrient cycle of **one** tropical ecosystem. [15]

Coastal environments

- **3** (a) Explain how waves can transport and deposit sediment in coastal areas. [10]
 - (b) With the help of diagrams, describe the features of **three** different types of coastal depositional landform and explain the formation of each. [15]
- 4 Fig. 2 shows the influence of lithology (rock structures) on cliff profiles.
 - (a) Explain how each cliff profile has been affected by the nature of rock structure. [10]
 - (b) Explain the problems of the sustainable management of a stretch or stretches of coastline you have studied. [15]

Hazardous environments

Only **one** question may be answered from this topic.

- **5** (a) Explain the nature and causes of earthquakes. [10]
 - (b) Using examples show why earthquakes can be hazardous and describe methods that can be used to limit their effects. [15]
- 6 Fig. 3 shows a tropical storm (hurricane) approaching the coast of Florida (USA).
 - (a) Describe the main features of the tropical storm and explain how it might have developed.

 [10]

(b) Describe the effects that such a tropical storm might have upon coastal areas. How and to what extent can such hazards be successfully predicted? [15]

Hot arid and semi-arid environments

- 7 (a) Describe the nature of hydrological regimes (water flows and stores) in hot arid areas. [10]
 - **(b)** Using examples, explain how water supplies and flows can affect the soils, vegetation and human occupation of hot arid environments.
- **8** Fig. 4 shows some landforms found in the Southern Sahara.
 - (a) Using diagrams, describe and briefly explain the formation of any **three** of the landforms shown on Fig. 4. [10]
 - (b) What evidence can be used to suggest that many desert landforms are the product of a much wetter past? [15]

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PAPER 3: ADVANCED HUMAN GEOGRAPHY OPTIONS

Answer **two** questions, each from a different topic.

Start a new answer paper/answer booklet for answering the questions from Paper 3. Hand in the answer papers/answer booklets for Paper 3 separately from those for Paper 2. You are advised to spend no more than 1 hour 30 minutes on this paper.

Production, location and change

Only **one** question may be answered from this topic.

- **9** Choose an example of an agricultural holding which has experienced agricultural change.
 - (a) Describe the reasons for, and the nature of, the changes in its agriculture. [10]
 - (b) To what extent can the changes described in (a) be considered successful? [15]
- **10 (a) (i)** Explain the meaning of the terms *economies of scale* and *diseconomies of scale* in industrial location. [4]
 - (ii) Fig. 5 shows employment in the major *maquiladora* centres along the United States/Mexico border in 1996.

A *maquiladora* is an assembly plant to which components and materials from the United States are imported duty-free, providing the products are then exported.

Suggest reasons for the concentration of *maquiladoras* in the border zone. [6]

(b) Assess the relative importance of different factors in the location of **one** manufacturing industry you have studied. [15]

Environmental management

- **11 (a)** Describe the environmental impacts of the production, transport and use of fossil fuels (excluding nuclear power). [10]
 - **(b)** Assess the extent to which the use of nuclear power may be considered sustainable. [15]
- **12** (a) Fig. 6 shows the rate of change in forest area plotted against the rate of change in arable area, for selected countries in three continents.
 - (i) Describe the relationship shown in Fig. 6 between the changes in forest area and the changes in arable area. [4]
 - (ii) Explain the meaning of the term *deforestation*. Suggest reasons why deforestation occurs.
 - (b) With reference to examples you have studied, assess the effectiveness of attempts to control water pollution. [15]

Global interdependence

Only **one** question may be answered from this topic.

- 13 (a) (i) Give the meaning of the term *tariff*. Explain the role of tariffs in international trade. [4]
 - (ii) Table 1 gives information about tariffs agreed by the World Trade Organisation on products from less economically developed countries (LEDCs).

Describe the main features of the tariff data in Table 1. [6]

Table 1

	mid 1980s	Tariff (%)	after 1995
Industrial products			
Raw materials	2.1		8.0
Semi-manufactured products	5.3		2.8
Finished products	9.1		6.2
Products based on natural resou	urces		
Raw materials	3.1		2.0
Semi-manufactured products	3.5		2.0
Finished products	7.9		5.9

- (b) Describe and explain changes in the international trading patterns (imports and exports) of one country since 1960. [15]
- **14 (a)** Why have some parts of the world experienced much greater tourist development than others?
 - (b) 'Take nothing but photographs. Leave nothing but footprints.' (A sign in Sikkim, North India.)
 - Describe, and explain the recent trend towards, forms of sustainable tourism. [15]

Economic transition

- **15** (a) Fig. 7 shows world variations in GNP (Gross National Product) per person.
 - (i) Describe **one** advantage and **one** disadvantage of using GNP per person to express inequality. [4]
 - (ii) To what extent may a North-South pattern be seen in Fig. 7? [6]
 - (b) Explain the need for social development. Describe the aims and character of attempts you have studied to improve social wellbeing. [15]
- **16** (a) Give the meaning of the terms transnational corporation and the spatial division of labour. [4]
 - **(b)** For **one** named transnational corporation which you have studied:
 - (i) describe how it is organised spatially, [6]
 - (ii) describe how, and explain why, it benefits from operating transnationally. [15]

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