



# UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

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GEOGRAPHY 0460/01

Paper 1 October/November 2007

1 hour 45 minutes

Additional Materials: Answer Booklet/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.

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

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

# Answer three questions.

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

The Insert contains Photographs A and B for Question 1, Figs 3A, 3B and 3C for Question 2 and Fig. 8 for Question 5.

At the end of the examination, fasten all your work securely together.

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



1 (a) Study Fig. 1, information about the number of immigrants to Australia, an MEDO

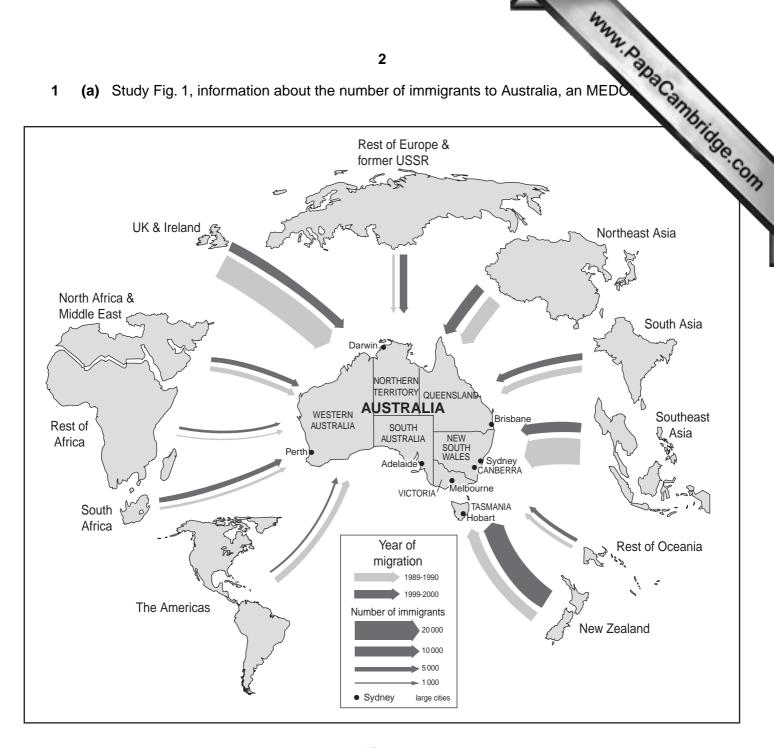


Fig. 1

What is meant by an immigrant?

- [1]
- (ii) Compare the number of immigrants in 1989-1990 with those in 1999-2000 and identify a place of origin:
  - which shows an increase in migration,
  - В which shows the largest decrease in migration. [2]
- Choose any area shown on Fig. 1. Write down the name of the area which you have chosen and suggest three reasons why people migrate from there to an MEDC such as Australia. [3]
- Many migrants from other countries move to cities in Australia, such as Sydney and (iv) Melbourne. Describe the effects of international migration on cities such as these.

- (b) Study Photographs A and B (Insert), which show parts of an area of sparse popul in an LEDC.
- www.PapaCambridge.com Use evidence from the photographs to explain why the area shown is spa-(i) populated.
  - (ii) Explain why towns may grow up in areas which are otherwise sparsely populated.
- (c) The size of the population in an area may change as a result of natural increase.

For an area which you have studied, explain why the rate of natural population growth is high. [7]

(a) Study Fig. 2, which shows census statistics about three areas of housing 2 Worcester, UK.

Study Fig. 2, which shows census statistics about three areas of housing Worcester, UK.    Housing characteristics   Barbourne   St. Peter's   Brickfields					
Housing characteristics	Barbourne	St. Peter's	Brickfields	A.	
% owner occupied	70	91	45	OH	
% rented from council or other social rented housing	10	3	47		
% privately rented	20	6	8		
% of households which are overcrowded (average greater than 1 person per room)	1.1	0.21	2.31		

Fig. 2

[1] (i) What is meant by owner occupied housing?

(ii) Use Fig. 2 to identify the areas which have:

the largest percentage of rented housing, Α

[2] the houses with the most space per person. В

- www.papaCambridge.com (b) Study Figs 3A, 3B and 3C (Insert), which show street maps and photographs of housing areas in Worcester.
  - Identify **two** ways in which St. Peter's is typical of a suburban area in an MEDC.
  - (ii) Brickfields is an outer city estate of low cost housing. Suggest two advantages and two disadvantages of living in an area such as this.
  - (iii) Barbourne is an inner city area. Use evidence from Fig. 3A only to describe the street layout and housing characteristics of this area. [4]
  - (iv) There are plans for the redevelopment of the Barbourne area. Suggest reasons why some people are likely to want the existing houses to be improved, rather than the area to be redeveloped.
- (c) The area surrounding towns and cities is known as the rural-urban fringe. What problems are likely to occur in the rural-urban fringe as a result of the growth of towns and cities? You should refer to an example which you have studied. [7]

3 (a) Study Fig. 4, which shows an area of coastline.

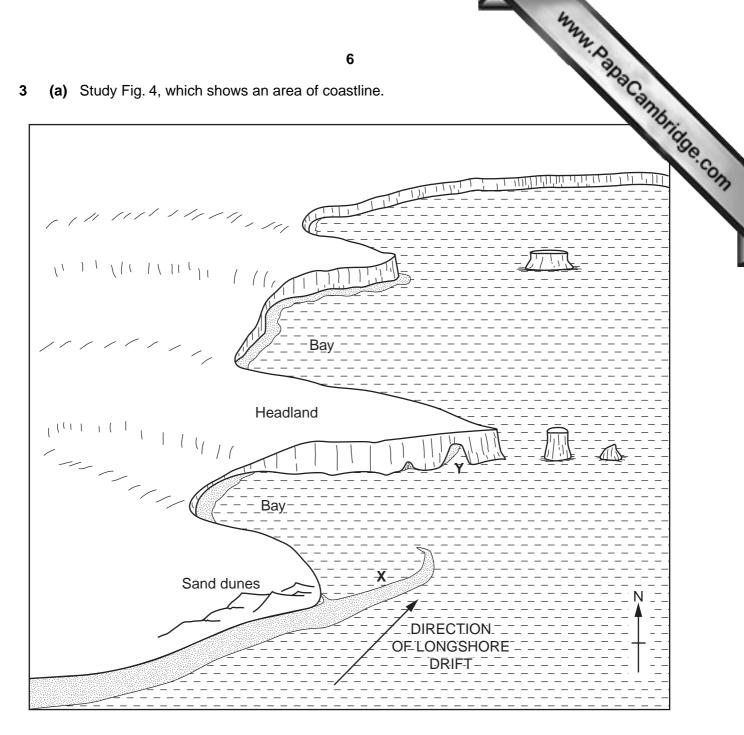


Fig. 4

In which direction is longshore drift taking place? [1] (i) (ii) Identify the landforms labelled X and Y. [2] (iii) Suggest reasons why there are bays and headlands along this stretch of coast. [3] (iv) Explain how wind action forms and shapes coastal sand dunes. [4] (b) Study Figs 5A and 5B, a map and field sketch of Slapton Sands and Start Bay in

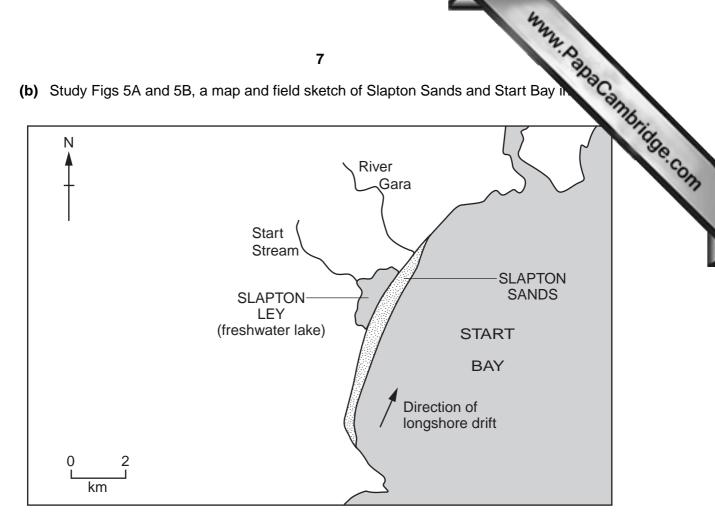


Fig. 5A

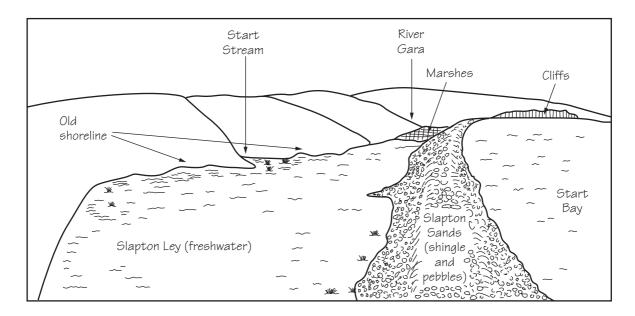


Fig. 5B

- (i) Using only evidence from Figs 5A and 5B, describe the main features of Slapton Sands. [3]
- Explain how coastal deposition has shaped this stretch of coastline. [5]
- (c) Describe the ways in which coastal areas can provide opportunities for the people who live there. You should give examples from an area you have studied. [7]

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(a) Study Fig. 6, which shows the short-term impacts of Hurricane Katrina on the

the USA, an MEDC.

www.PapaCambridge.com **US STATE MISSISSIPPI** • A 7 metre storm surge was recorded at Gulfport Memorial Hospital, which **US STATE** experienced major damage. • The storm hit Alabama's coast with huge • At least 50 people were killed in waves and tree-bending winds. Water Harrison County. Three other people were killed in the state by falling trees. swirled in the streets of Gulf Shores. · Homes in a rich section of Mobile Bay The Mississippi Emergency were awash in brown water. Management Agency said about 8 500 people were in 79 shelters. At least 400 000 homes and businesses American Red Cross shelters were lost power. filled to capacity. · Several of Mississippi's beachfront Alabama casinos were flooded. Mississippi Florida Paşcagoûla Gulfpor Biloxi Louisiana Vêŵ×Orleans 10Ó 0 ,km∕ 61/-12061 <u> – 120 </u> kph kph Over 120 kph winds winds winds **US STATE** LOUISIANA . In New Orleans, up to 6 metres of 0 200 water was standing in one poor neighbourhood on the city's east side. km Winds up to 160 kph shattered With 230 kph winds as it made landfall, Katrina left more windows of high-rise office buildings and ripped holes in the roof of the than a million people in three states without power and flooded highways hundreds of kilometres from the centre Key Superdome, where thousands of of the storm. refugees had sought shelter. A 15 metre water main broke, making it unsafe to drink the city's water without first boiling it. · Ports and harbours were wrecked Main track of Hurricane Katrina and bridges destroyed.

Fig. 6

- [1] Identify the state where the main track of Hurricane Katrina reached land.
- (ii) Identify two states where the wind speeds hit the coast at speeds of over 120 kilometres per hour. [2]
- Describe three different ways in which the hurricane affected the transport infrastructure.

[3]

[4]

(iv) Suggest reasons why the people who lived in New Orleans had to leave the city.

**(b)** Study Figs 7A and 7B.

www.PapaCambridge.com Fig. 7A is a newspaper article about the impacts of Hurricane Katrina on energy supply

Fig. 7B shows information about the oil and gas industry on the Gulf Coast.

# **FUEL FEARS:** Storm threatens oil production – petrol prices could rise further

By David R. Baker

Oil prices rose on Monday, as Hurricane Katrina tore through a stretch of Gulf Coast thick with pipelines and refineries, raising fears that already high petrol prices could rise further.

For the first time, the price of crude oil was higher than \$70 per barrel, as the storm raced through one of the country's most important oil producing areas.

By the time Katrina made landfall early Monday, companies such as Chevron evacuated their offshore platforms. Two drilling rigs used by Royal Dutch/Shell Group were drifting on the open sea, while the fate of others remained unknown.

Fig. 7A

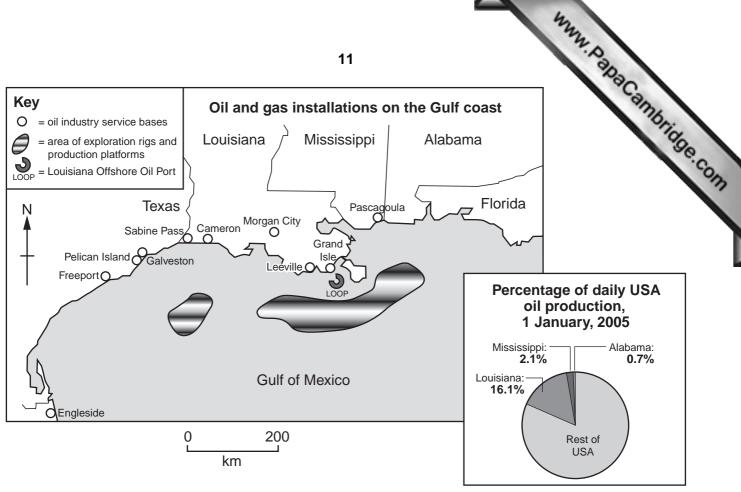


Fig. 7B

- (i) Explain why people were worried about the long-term impacts of Hurricane Katrina on energy supplies in the USA.
- Explain why MEDCs, such as the USA, normally recover more quickly from natural (ii) disasters than LEDCs. [5]
- (c) In many parts of the world the natural environment presents hazards to people.

Choose an example of one of the following:

a volcanic eruption, an earthquake, a drought.

For a named area, describe the causes of the example which you have chosen and its impacts on the people living there. [7]

- www.PapaCambridge.com (a) Study Fig. 8 (Insert), a map showing information about food consumption in diffe 5 the world.
  - Name a continent where most countries have an average daily consumption of than 3000 calories per person.
  - (ii) Countries with a low average calorie intake may suffer food shortages. Describe the distribution of countries which have an average daily consumption of less than 2500 calories per person.
  - (iii) Explain how food shortages can be caused by:

Α	the natural environment,	[3]
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economic and political factors. [4] В

(b) Study Fig. 9, which shows information about a recent aid programme in Burund, Central Africa.

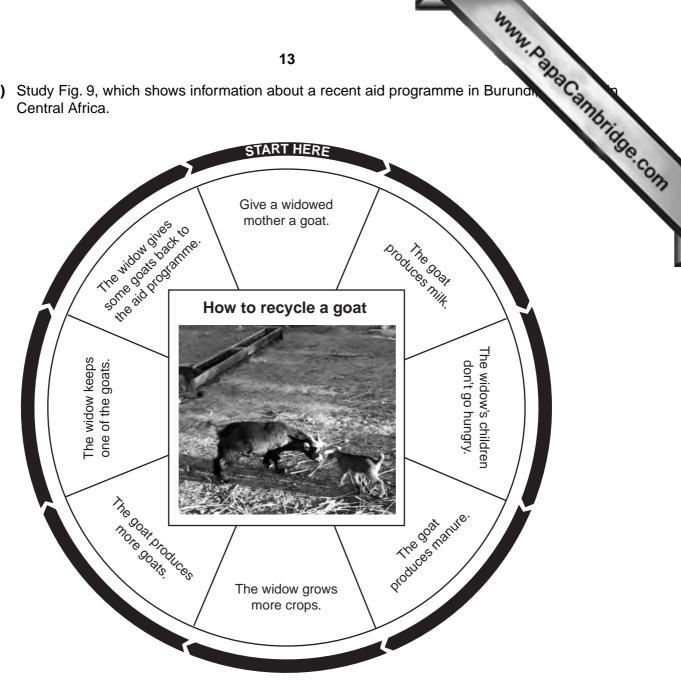


Fig. 9

- State **three** outputs from the system.
- (ii) Explain how the aid programme is likely to improve the quality of life of the people who live in Burundi. [5]

[3]

(c) All farming systems have inputs, processes and outputs.

Name an example which you have studied of either small-scale subsistence farming or largescale commercial farming.

Give the name of an area where your chosen farming type takes place. Describe the inputs, processes and outputs of this farming system. [7]

www.papaCambridge.com (a) Study Figs 10A, 10B and 10C, which show information about the Lesotho High 6 Project.

Lesotho is an LEDC in the mountains of southern Africa. It aims to build a series of dams. These will collect and store water to sell to South Africa, its richer neighbour. Water will also be used at the dams to generate hydro-electric power (HEP).

Fig. 10A

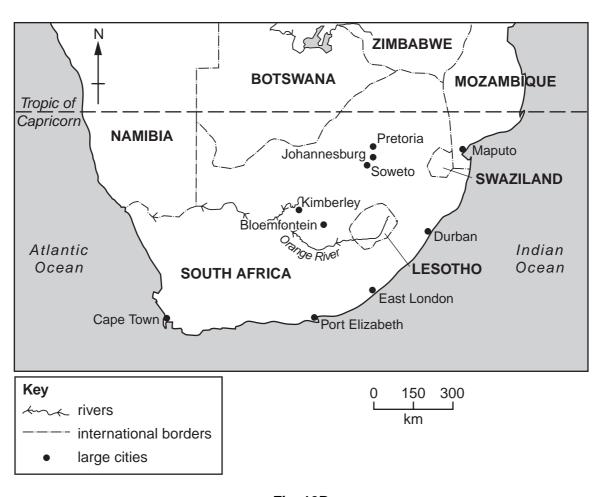


Fig. 10B

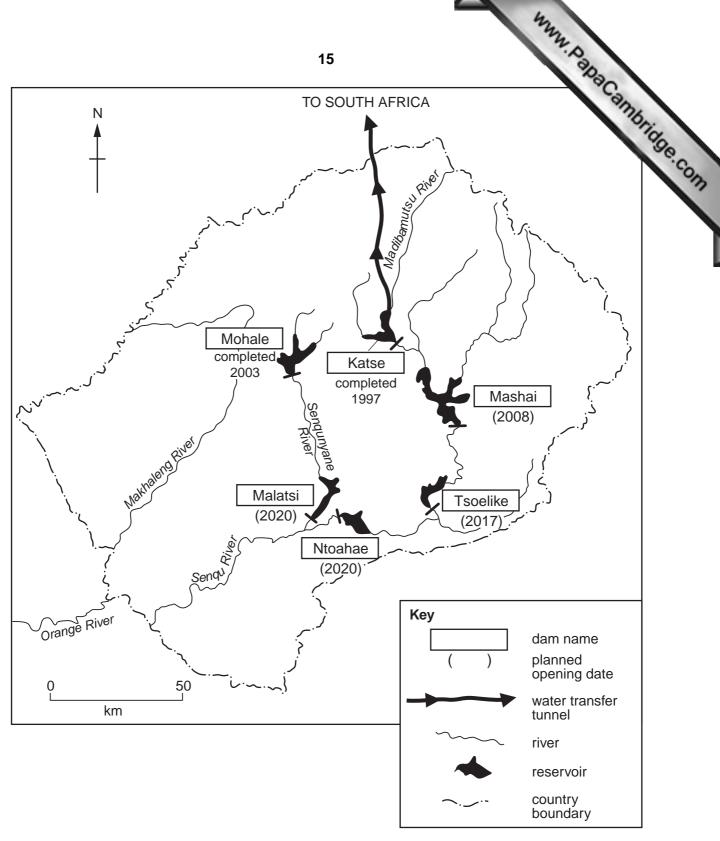


Fig. 10C

- [1] (i) Identify a dam in Lesotho which has already been built.
- (ii) The building of the Malatsi Dam by 2020 is expected to complete the Project. Briefly describe the planned location of this dam. [2]
- (iii) Suggest reasons for the increasing demand for water in South Africa. [3]
- Suggest reasons why Lesotho has enough water to be able to sell to South Africa. [4]

www.papaCambridge.com (b) Study Fig. 11, which shows the opinions of selected people about the Leson Water Project.

#### Lesotho farmer

"The best land for my cattle will be gone."

#### A worker on the dam site

"Lesotho will get hydroelectricity from the dam and tourists will come."



# Minister of Energy

"Hydro-electric power is far cleaner than other forms of energy."

# Opposition politician in Lesotho **Parliament**

"Lesotho will be more dependent on South Africa."

# Lesotho government spokesman

"We will have many new roads and jobs, and money to spend on education and health."

#### **Environmentalist**

"It will do permanent environmental damage."

Fig. 11

- Describe the advantages of using hydro-electric power (HEP), rather than other sources of energy.
- (ii) Explain the positive and negative effects which the Highlands Water Project will have on Lesotho. [5]
- (c) Water and air may be polluted by human activities.

Name an example of a place which you have studied where either the air or the water is polluted. Describe the causes of this pollution and its effects on people and the environment.

#### Copyright Acknowledgements:

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Question 2(b) Figs 3A, 3B & 3C; S. Sibley © UCLES.

Question 4 Fig. 7A © David R. Barker; 'Fuel Fears: Storm threatens oil production - petrol prices could rise further'; San Francisco

Chronicle, 30 August 2005.

Question 5 Fig. 9 @ Christian Aid.

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