



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

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GEOGRAPHY

0460/13

Paper 1

October/November 2010

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 2, Photograph C for Question 4, Figs 8A and 8B for Question 5 and Photograph D for Question 6.

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.



This document consists of **11** printed pages, **1** blank page and **1** Insert.



- 1 (a) Study Fig. 1, population pyramids for Singapore (an MEDC in South East Asia).

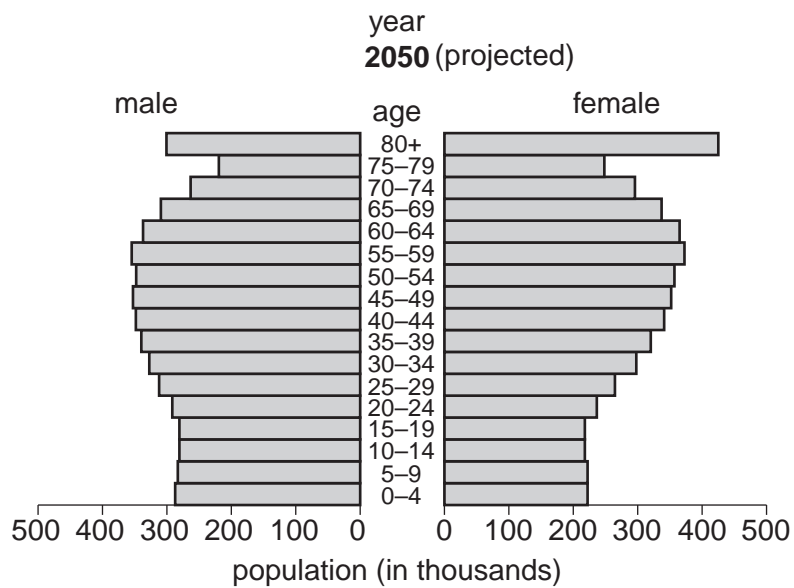
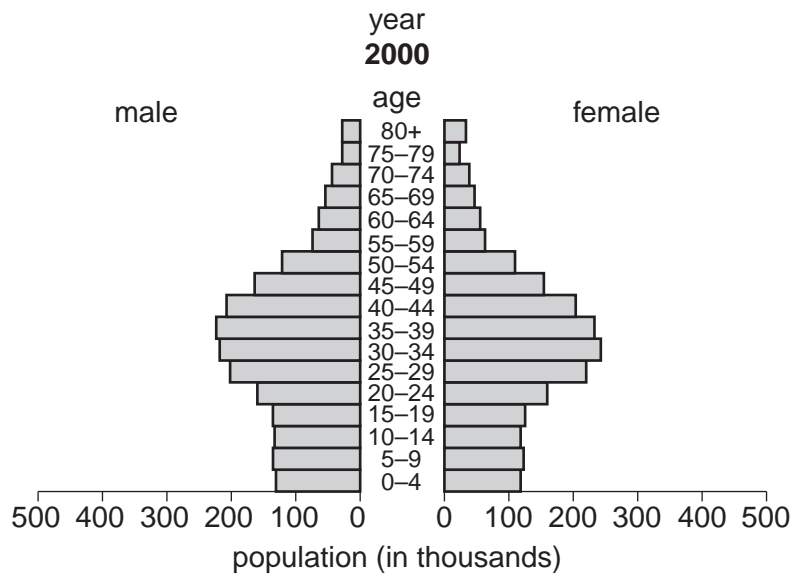


Fig. 1

- (i) Which age group had the largest number of males in the year 2000? [1]
- (ii) What evidence in the population pyramids suggests that by 2050 there is likely to be:
- A** an increase in the old dependent population,
- B** an increase in the dependency ratio in Singapore? [2]
- (iii) Explain how the expected increase in the number of dependents is likely to affect the economically active population of Singapore by 2050. [3]

- (b) Study Fig. 2, a newspaper article about Singapore's immigration policy.

Singapore homeowners resent immigration push

Koh Gui Qing
Reuters/Singapore

Resentment in Singapore is mounting over an increasing number of immigrant workers, as the country changes under an immigration policy aimed at boosting growth.

The government wants to raise population growth by increasing the population by 35 percent over the next 40 to 50 years through immigration, but locals fear the plan increases competition for jobs and homes.

About 1,600 homeowners in the Southeast Asian nation have signed a petition to stop the government from building a dormitory for 600 migrant workers in their neighbourhood.

Residents say they do not want the dormitory near their homes because it may increase crime, worsen traffic congestion, and cause property prices to fall.

Singapore wants to increase its population of 4.8 million to tackle a low birth rate and ageing population.

"If the government goes for growth, Singaporeans have to accept the social costs of a growing foreign population in their midst," said former prime minister Goh Chok Tong.

Most Singapore citizens are descendants of immigrants who came to Singapore from China, India and the Indonesian island of Java at the turn of the 20th century.

Fig. 2

- (i) Explain why the government of Singapore wants to increase the population. [3]
- (ii) Suggest reasons why some people in Singapore disagree with the immigration policy. [4]
- (iii) What strategies, other than immigration, can be used by governments to increase population growth? [5]
- (c) For a country which you have studied, explain why the rate of natural population growth is low. [7]

[Total: 25 marks]

- 2 (a) Study Fig. 3, which shows part of Willerby, on the rural-urban fringe of the city of

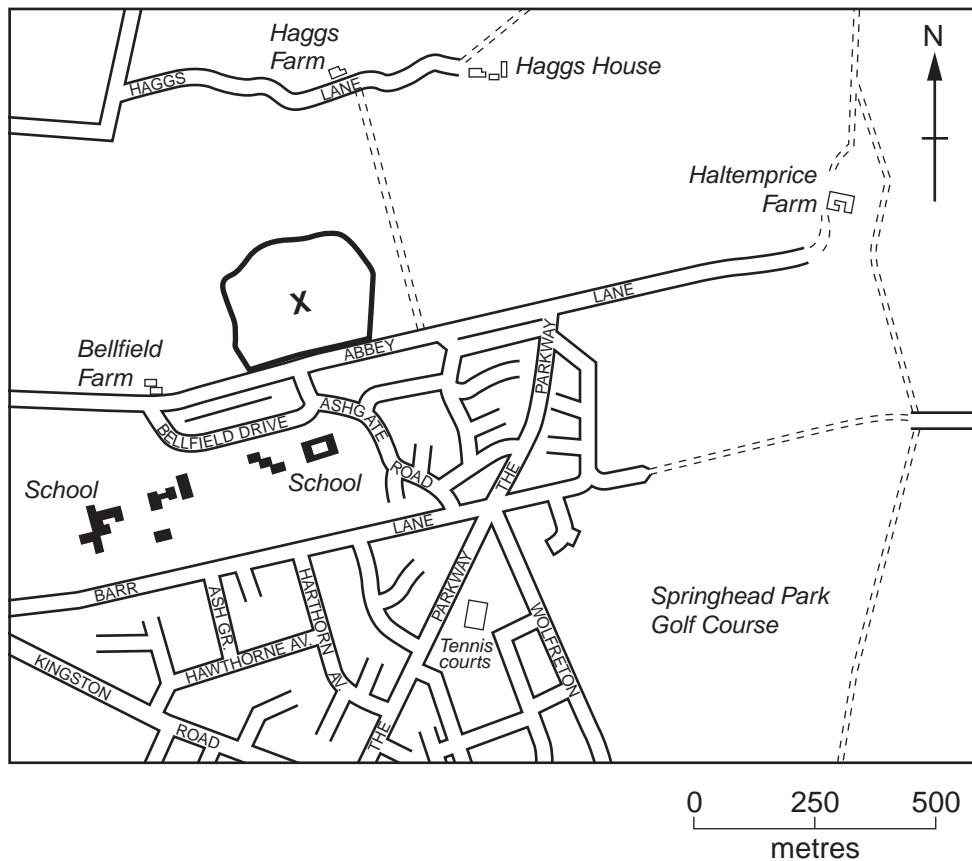


Fig. 3

- (i) What is meant by the rural-urban fringe of a city? [1]
- (ii) Identify **two** land uses shown on Fig. 3. [2]
- (iii) The owner of Bellfield Farm plans to sell some land for a new housing estate to be built in the area marked **X** on Fig. 3.
Explain why some people in Willerby are likely to object to this development. [3]
- (iv) A green belt is an area in the rural-urban fringe where new buildings are not normally allowed. Describe the advantages and disadvantages of creating areas of green belt land around cities. [4]

- (b) Study Photographs A and B (Insert) of two residential areas in Gdansk, a city in a MEDC in Europe), along with Fig. 4, which shows information about the areas.

Characteristics	Area A	Area B
% unemployment	13.2	2.2
% of households with one or more cars	47	91
% of owner occupied houses	27	93
% of households which are overcrowded (average greater than 1 person per room)	2.1	0.2

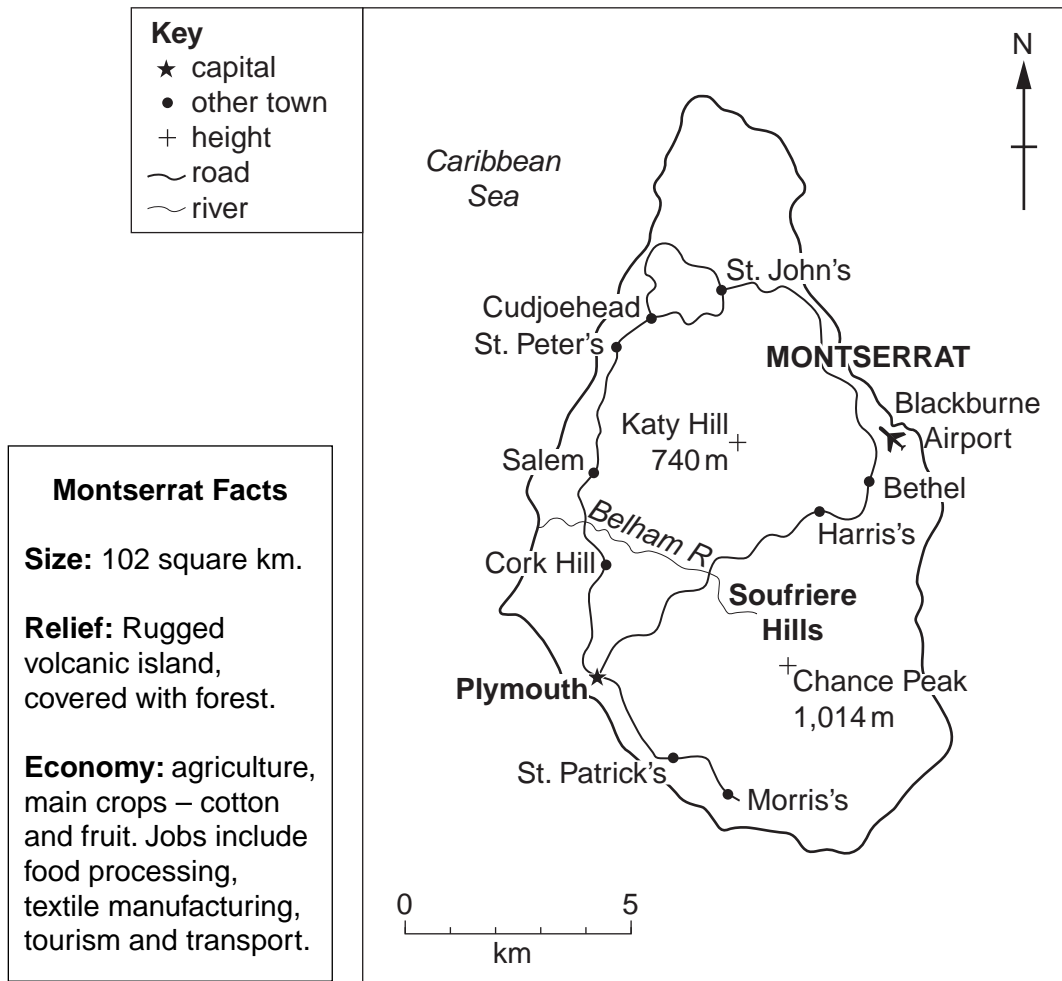
Fig. 4

- (i) Using evidence from Photographs A and B only, describe **three** differences between the two residential areas. [3]
- (ii) Compare the quality of life of the people who live in areas A and B. [5]
- (c) In all towns and cities there have been changes in land use in recent years. These include the development of transport, areas of housing, industries, leisure and shopping facilities.

Briefly describe **one** recent change in land use in or close to a town or city which you have studied. Describe the advantages and disadvantages of this change in land use for the people who live in the town or city. [7]

[Total: 25 marks]

- 3 (a) Study Fig. 5, which shows information about a volcanic eruption on the Caribbean island of Montserrat (an LEDC).



DORMANT VOLCANO COMES TO LIFE ON MONTSERRAT

On July 18th 1995, Soufriere Hills, a volcano on the Caribbean island of Montserrat began erupting. This was the first recorded eruption of this volcano. The Caribbean islands are the only example of 'island arc' volcanoes in the Atlantic Ocean.

In August 1997 lava flows reached the capital, Plymouth, and over 80% of the buildings were either badly damaged or destroyed. The Governor ordered the evacuation of several towns. By the end of the month only 4000 of the original 12000 residents remained on the island. The volcano was still hissing and rumbling in October 1997.

Fig. 5

- (i) Why do you think some of the people living on Montserrat were surprised by the volcanic eruption in 1995? [1]
- (ii) Lava flows from the volcano reached the capital city, Plymouth. What is the distance and direction from Chance Peak, in the Soufriere Hills, to Plymouth? [2]

- (iii) Use evidence from Fig. 5 to describe **three** possible effects of the volcanic eruption on Montserrat.
- (iv) Suggest reasons why people living on Montserrat found it hard to deal with the effects of this volcanic eruption.

(b) Study Fig. 6, which shows plate margins, and zones where earthquakes and volcanoes occur.

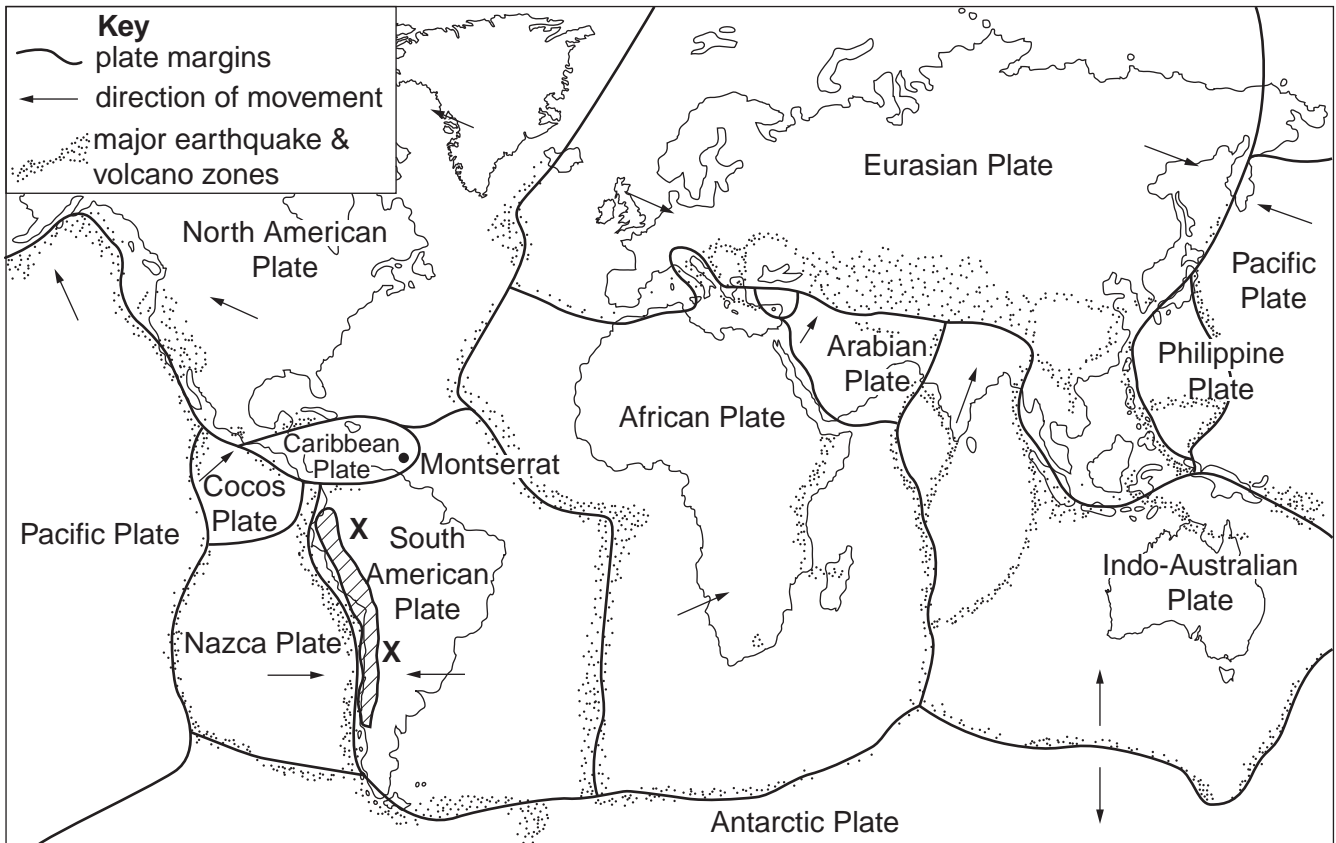


Fig. 6

- (i) Describe the distribution of the major earthquake and volcano zones which are shown on Fig. 6. [3]
- (ii) Explain the processes which result in the eruption of volcanoes in the area shaded and labelled X on Fig. 6. You may use labelled diagrams in your answer. [5]
- (c) In many parts of the world the natural environment presents hazards to people.

Choose an example of **one** of the following:

- a flood,
- a tropical storm,
- a drought.

For a named area, describe the causes of the hazard which you have chosen. [7]

[Total: 25 marks]

- 4 (a) Study Fig. 7, which shows types of weathering process.

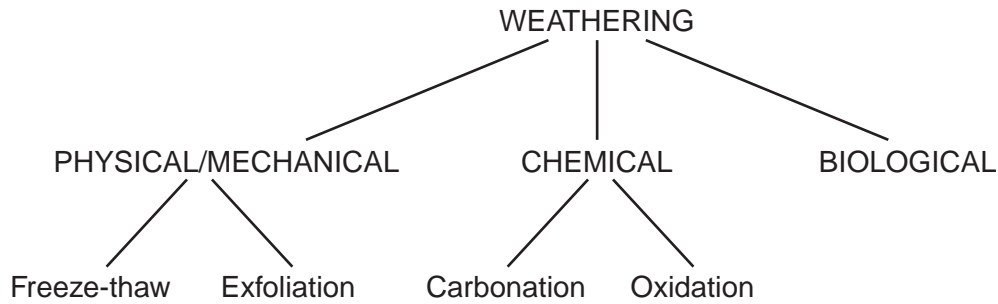


Fig. 7

- (i) Identify **one** example of physical (mechanical) weathering and **one** example of chemical weathering from Fig. 7. [1]
- (ii) What is the main difference between physical (mechanical) weathering and chemical weathering? [2]
- (iii) Describe how biological weathering occurs. [3]
- (iv) Explain the main factors which influence the type and rate of weathering. [4]
- (b) Study Photograph C (Insert), which shows a landscape formed in an upland area in a temperate country.
- (i) Describe the appearance of the landscape shown on Photograph C. [3]
- (ii) Freeze-thaw is one process of weathering operating in the area shown in the photograph. Describe how this process occurs. You may use a labelled diagram in your answer. [5]
- (c) Choose a named example of **one** of the following:
- an area of mountains,
a fast-flowing river,
a flood plain.
- Describe the ways in which your chosen type of natural environment can provide opportunities for the people who live there. [7]

[Total: 25 marks]

- 5 (a) Study Figs 8A and 8B (Insert), which show information about Norwich Research Park, an area of new industry in the UK.
- (i) Norwich Research Park has attracted businesses which use advanced methods, such as computer technology. What term best describes such businesses?
Choose from the following list:
- Assembly industries,
Food processing industries,
High technology industries,
Manufacturing industries. [1]
- (ii) Suggest **two** examples of businesses which might be located on Norwich Research Park. [2]
- (iii) Using Fig. 8A, describe the location of Norwich Research Park. [3]
- (iv) Explain the advantages of the location chosen for Norwich Research Park. [4]
- (b) Study Fig. 9, a newspaper headline.

**NOKIA TO BUILD NEW FACTORY TO
ASSEMBLE CELLPHONES IN BEIJING**

Fig. 9

- (i) Explain why many large businesses, such as the European company Nokia, have located factories in cities in LEDCs. [3]
- (ii) Explain the advantages and disadvantages, for the people who live there, of foreign companies building factories in LEDCs. [5]
- (c) Name an example of an area where manufacturing or processing industry has been located and explain the factors which have attracted this type of industry to the area. [7]

[Total: 25 marks]

- 6 (a) Study Fig. 10, which shows information about the numbers of international tourists who stayed in Barbados (a Caribbean island which is an LEDC) between 1980 and 2004.

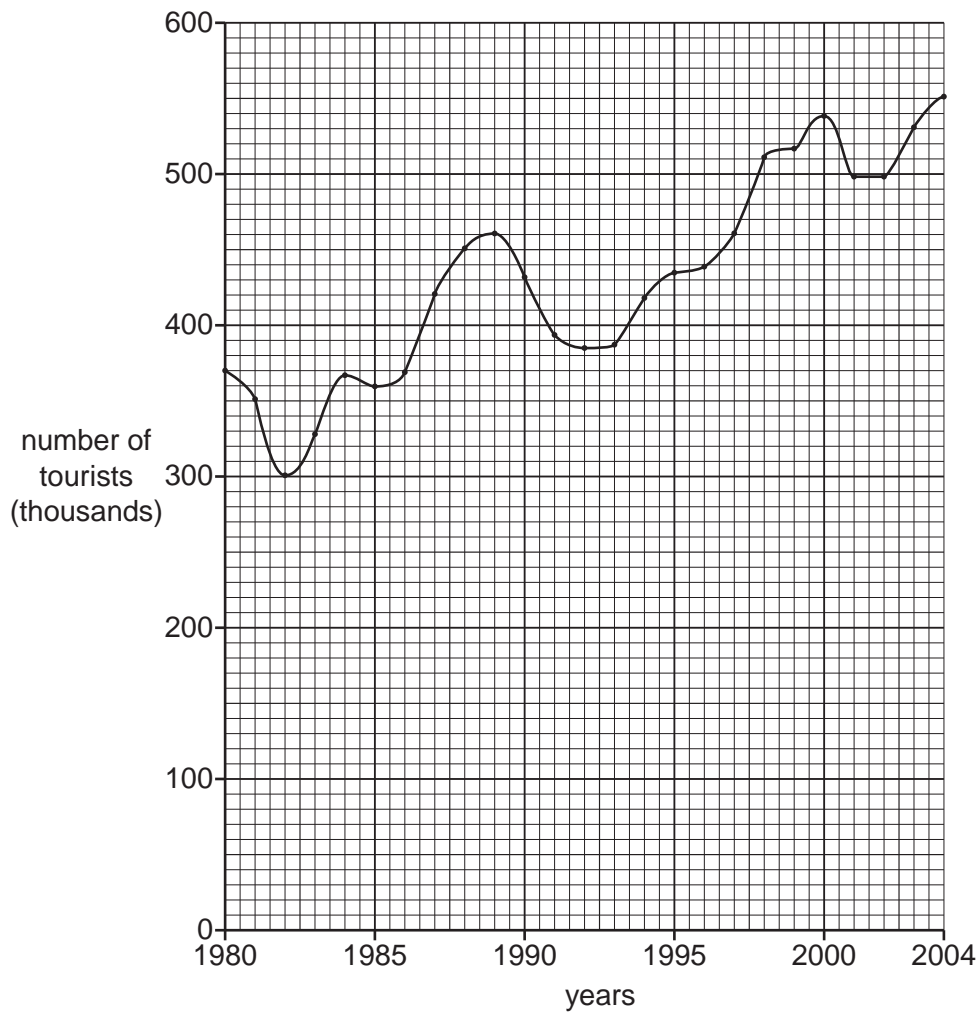


Fig. 10

- (i) What was the number of international tourists who stayed in Barbados in 1980? [1]
- (ii) Identify a year during which the number of international tourists who stayed in Barbados:
- A** increased by more than 30 000,
- B** decreased. [2]

- (iii) Describe the overall trend in the numbers of international tourists who stayed in hotels in LEDCs between 1980 and 2004. Refer to statistics and years in your answer.
- (iv) Explain why more holidays are now being offered in LEDCs than were offered in the 1980s.
- (b) Study Photograph D (Insert), which shows local people selling products to tourists on a beach in an LEDC.
- (i) Explain why many people in tourist areas in LEDCs work in the informal sector. [3]
- (ii) Explain other benefits for local people which tourism brings to an LEDC. [5]
- (c) For a named area which you have studied, explain why the tourist industry has developed there. You should refer to the area's natural and built attractions. [7]

[Total: 25 marks]

Copyright Acknowledgements:

Question 1 Figure 2	© Amended from the Jakarta Post; 24 October 2008.
Question 2 Photographs A, B and C	S. Sibley © UCLES.
Question 5 Figures 8A & 8B	© Wideworld Magazine; November 2004.
Question 6 Photograph D	S. Sibley © UCLES.

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