

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

GEOGRAPHY

0460/01

Paper 1

October/November 2006

Additional Materials: Answer Booklet/Paper

1 hour 45 minutes

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 Photograph A for Question 3 and Fig. 7 for Question 4.

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 **12** printed pages, **4** blank pages and **1** Insert.



- 1 (a) Study Fig. 1, a scatter graph which shows the birth and death rates of seven countries in 2004.

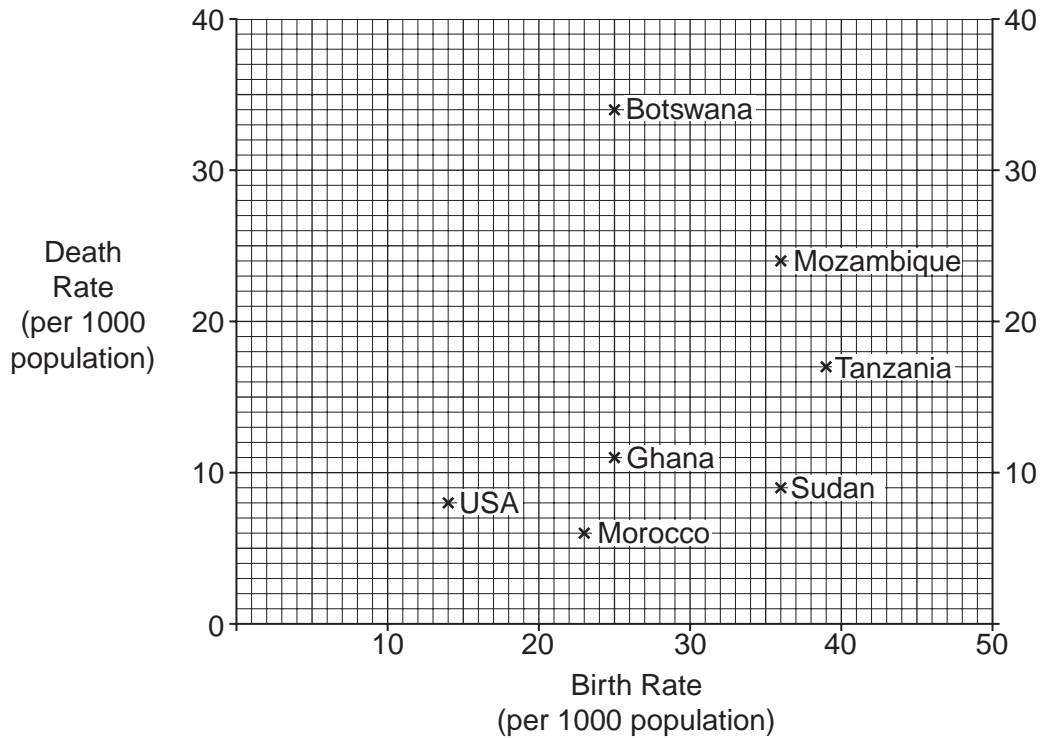


Fig. 1

- (i) Name the country with a birth rate of 36 per 1000 and a death rate of 24 per 1000. [1]
- (ii) Calculate the natural population growth rate of Tanzania. You must show your working. [2]
- (iii) Name the country shown on Fig. 1 which experienced:
- the highest rate of natural population growth,
 - natural population decline. [2]
- (iv) Suggest reasons why Botswana has a higher death rate than the USA. [3]

- (b) Study Fig. 2 which shows how birth and death rates in Mauritius (an LEDC in the Indian Ocean) changed during the 20th century.

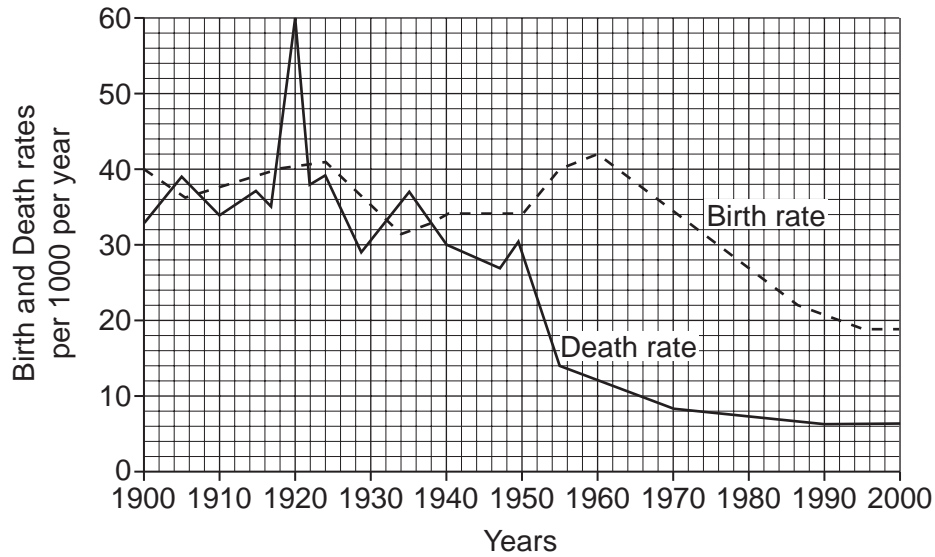


Fig. 2

- (i) Suggest possible reasons for the decline in the birth rate in Mauritius from the 1960s. [5]
- (ii) Describe how natural growth rates in Mauritius have changed during the 20th century. Support your answer with dates and figures. [5]
- (c) What policies can be used by governments to influence rates of natural population growth? You should refer to at least **one** example which you have studied. [7]

2 (a) Study Fig. 3A which shows a rural area in eastern England, along with Figs 3B and 3C which show the settlements of Saxby All Saints and Winteringham.

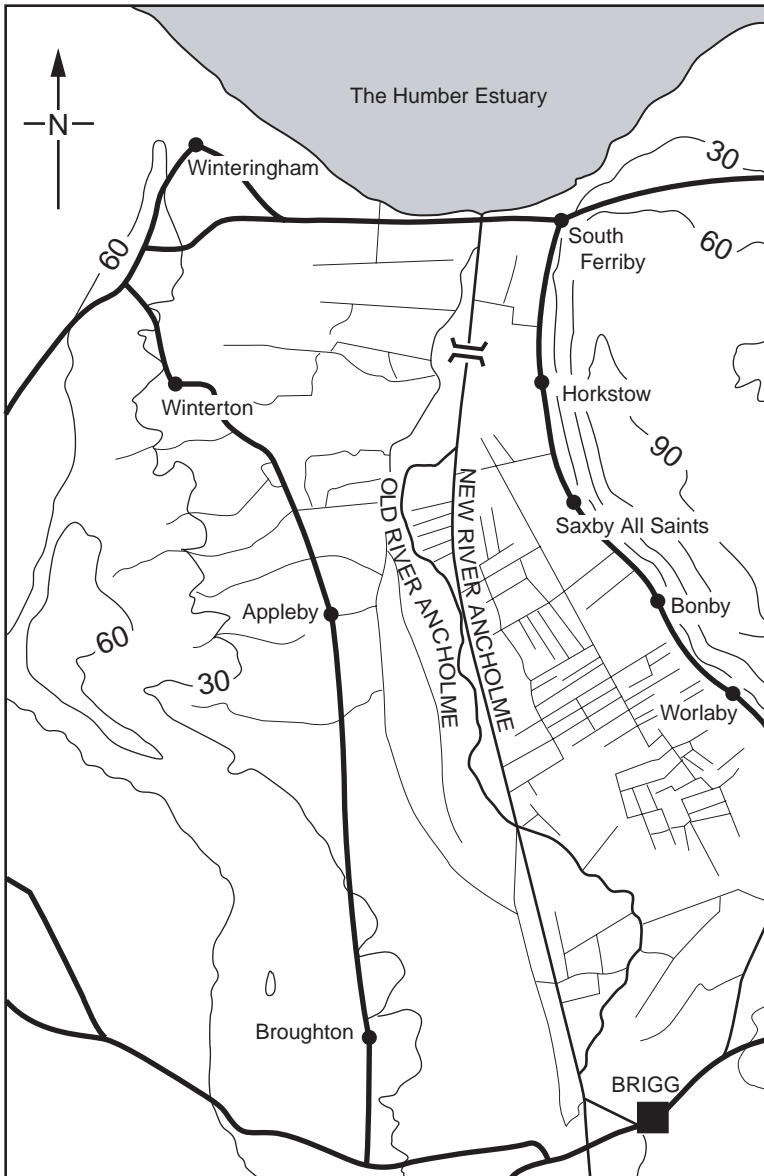
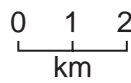


Fig. 3A



Key:

	Main roads
	Rural settlements
	Town
	River
	Drainage channels
	Contours (metres)

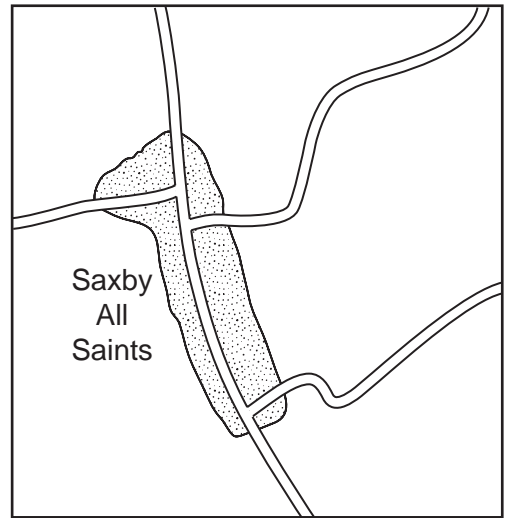


Fig. 3B

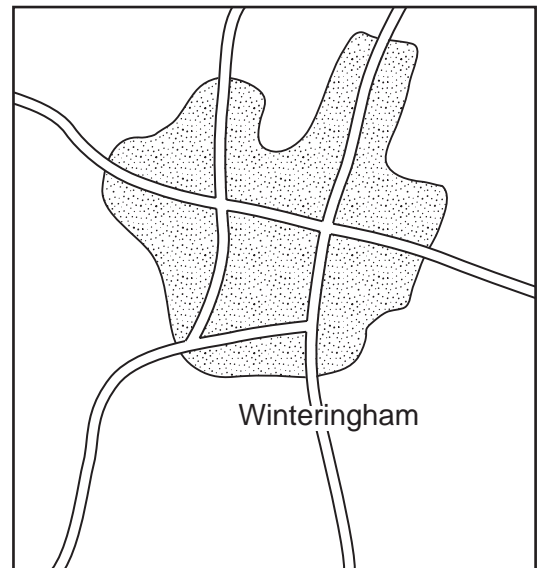


Fig. 3C

- (i) Winterringham is a nucleated settlement. What is meant by *nucleated* settlement? [1]
- (ii) Suggest **two** reasons why Saxby All Saints is a linear settlement. [2]
- (iii) Describe the distribution of rural settlements in the area shown by Fig. 3A. [3]
- (iv) Suggest reasons for the distribution of the settlements which you have described in (iii). [4]

- (b) Study Fig. 4, a map showing the population of market towns in part of eastern England, along with their spheres of influence.

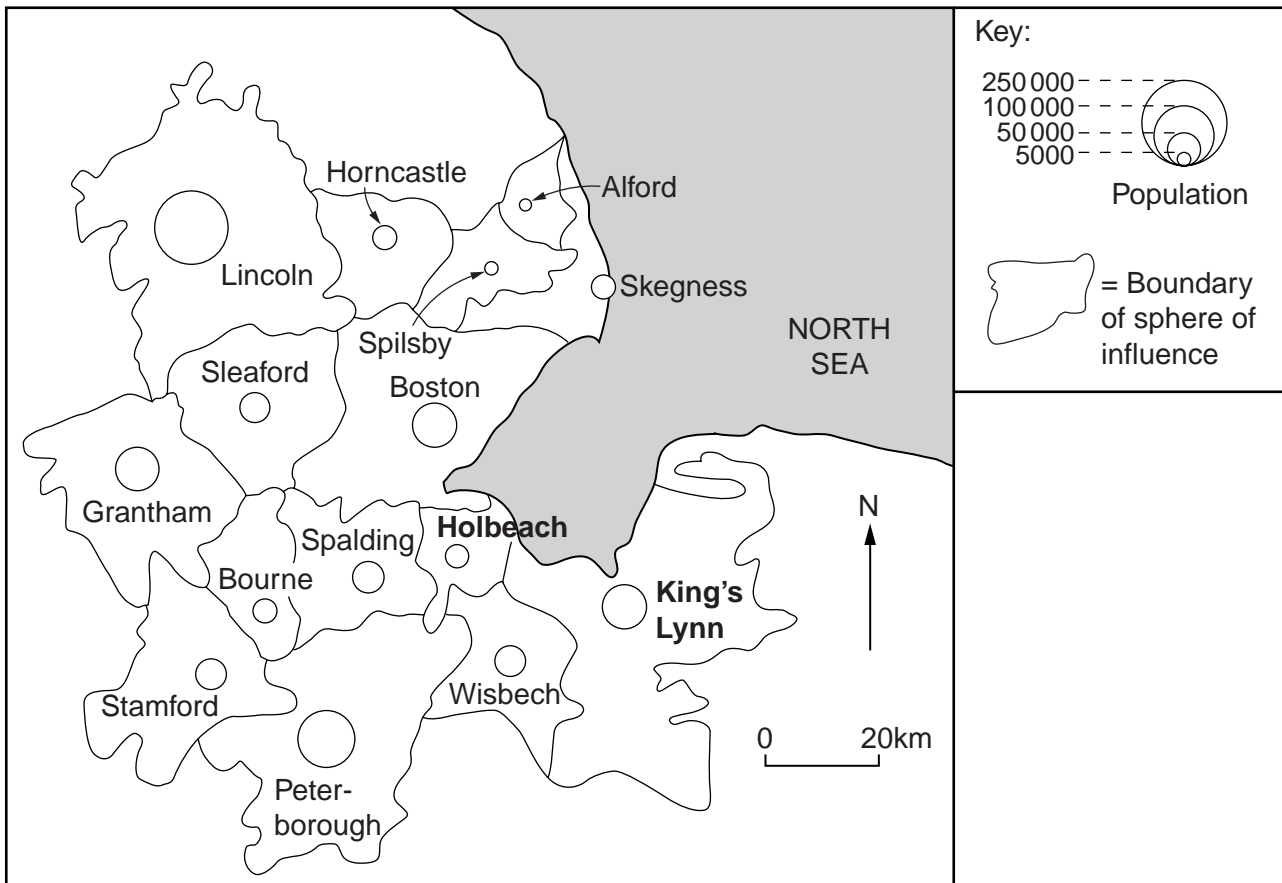


Fig. 4

- (i) Give **three** different examples of the types of services in the towns shown on Fig. 4 to which people from surrounding rural settlements might travel. [3]
- (ii) Using evidence from Fig. 4, describe and suggest reasons for the differences in the size and shape of the spheres of influence of Holbeach and King's Lynn. [5]
- (c) Many settlements have grown over the years into large urban areas. These include towns and cities with main functions such as:
- ports,
 - industrial towns,
 - tourist resorts,
 - administrative centres.
 - capital cities.

For a named example of a large settlement which you have studied, identify its main function and explain the reasons for its growth. [7]

- 3 (a) Study Fig. 5, which is a block diagram of an upland area in a temperate region.

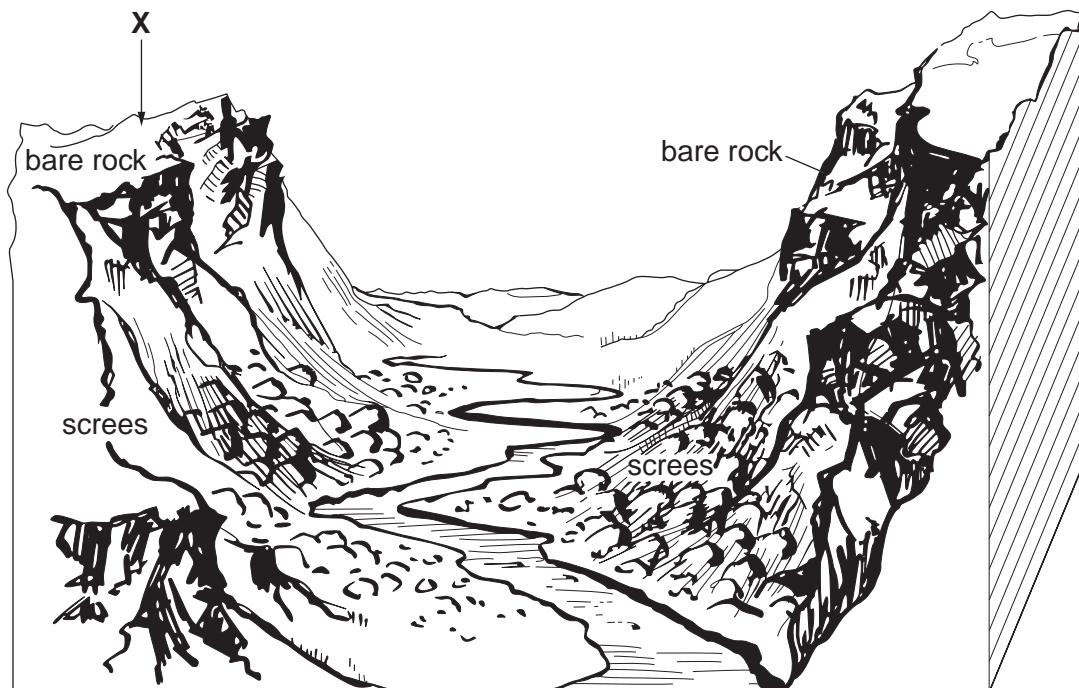


Fig. 5

- (i) State **one** piece of evidence that weathering has taken place in the area shown by Fig. 5. [1]
- (ii) What is the difference between *weathering* and *erosion*? [2]
- (iii) Name and describe **three** processes by which the river may erode its channel in the area shown by Fig. 5. [3]
- (b) Study Photograph A (Insert) which was taken in the area marked X on Fig. 5.
- (i) Describe the main features of the landscape shown in the photograph. [3]
- (ii) Describe the main process of weathering operating in the area shown in the photograph. You may use a labelled diagram in your answer. [4]
- (iii) Explain why weathering processes are more rapid in humid tropical regions than in temperate regions like those shown in the photograph. [5]
- (c) There is a plan to build a dam across the valley shown in Fig. 5, to create a reservoir as part of a multi-purpose scheme.

Explain fully why people will have different opinions about whether this scheme should go ahead. [7]

- 4 (a) Study Fig. 6A, a climate graph for Manaus in the Amazon tropical rainforest, and Fig. 6B a sketch of the natural vegetation.

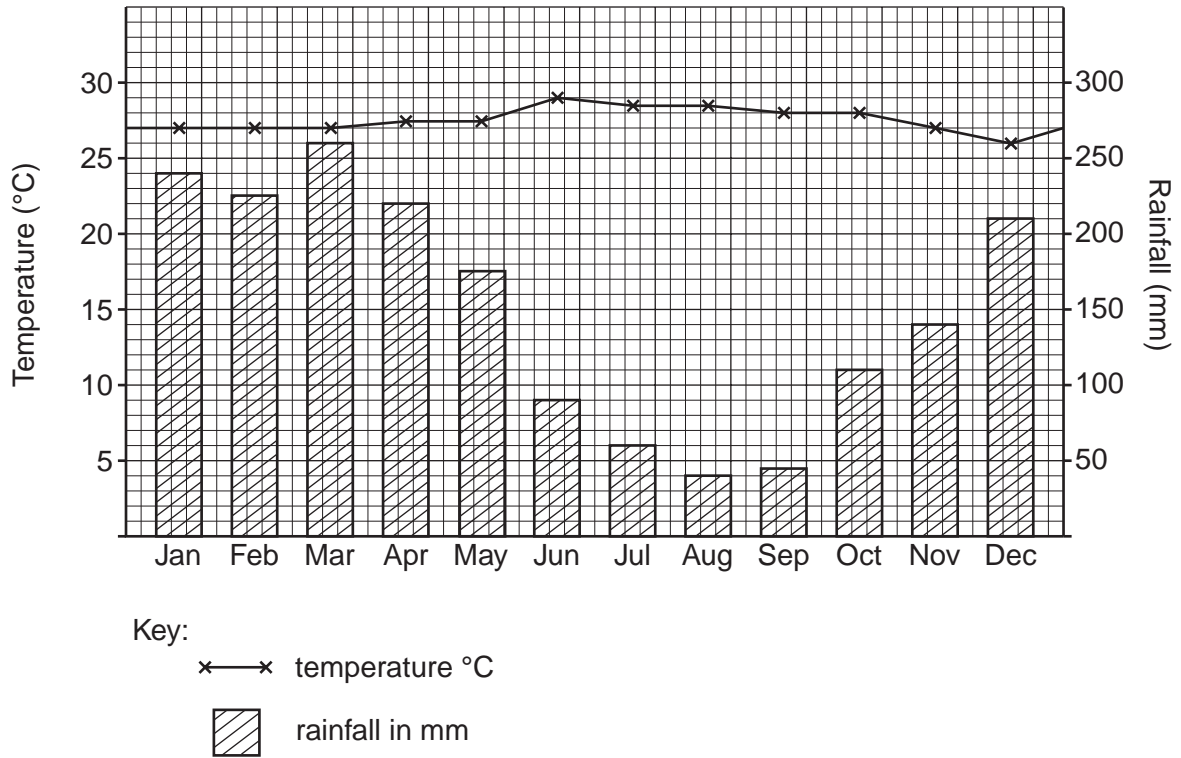


Fig. 6A



Fig. 6B

- (i) What is the annual range of temperature of Manaus? [1]
- (ii) Estimate the total annual amount of rainfall in Manaus. You must show your working. [2]
- (iii) **Using evidence from Fig. 6B only**, describe **three** characteristics of the natural vegetation in areas of tropical rainforest. [3]
- (iv) Explain the relationship between the natural vegetation characteristics and the climate of the tropical rainforest. [4]
- (b) Study Fig. 7 (Insert), information produced by McDonald's, a fast food restaurant chain.
- (i) Identify **three** pieces of evidence from Fig. 7 which suggest that McDonald's is aware of the importance of using the natural environment in a sustainable way. [3]
- (ii) Explain why many people are concerned that '*rainforest destruction threatens the well-being of the environment*'. [5]
- (c) Explain why parts of some continents, such as South America and Africa, experience a tropical rainforest climate whilst other parts experience a tropical desert climate. [7]

- 5 (a) Study Fig. 8, which shows the employment structure of selected countries.

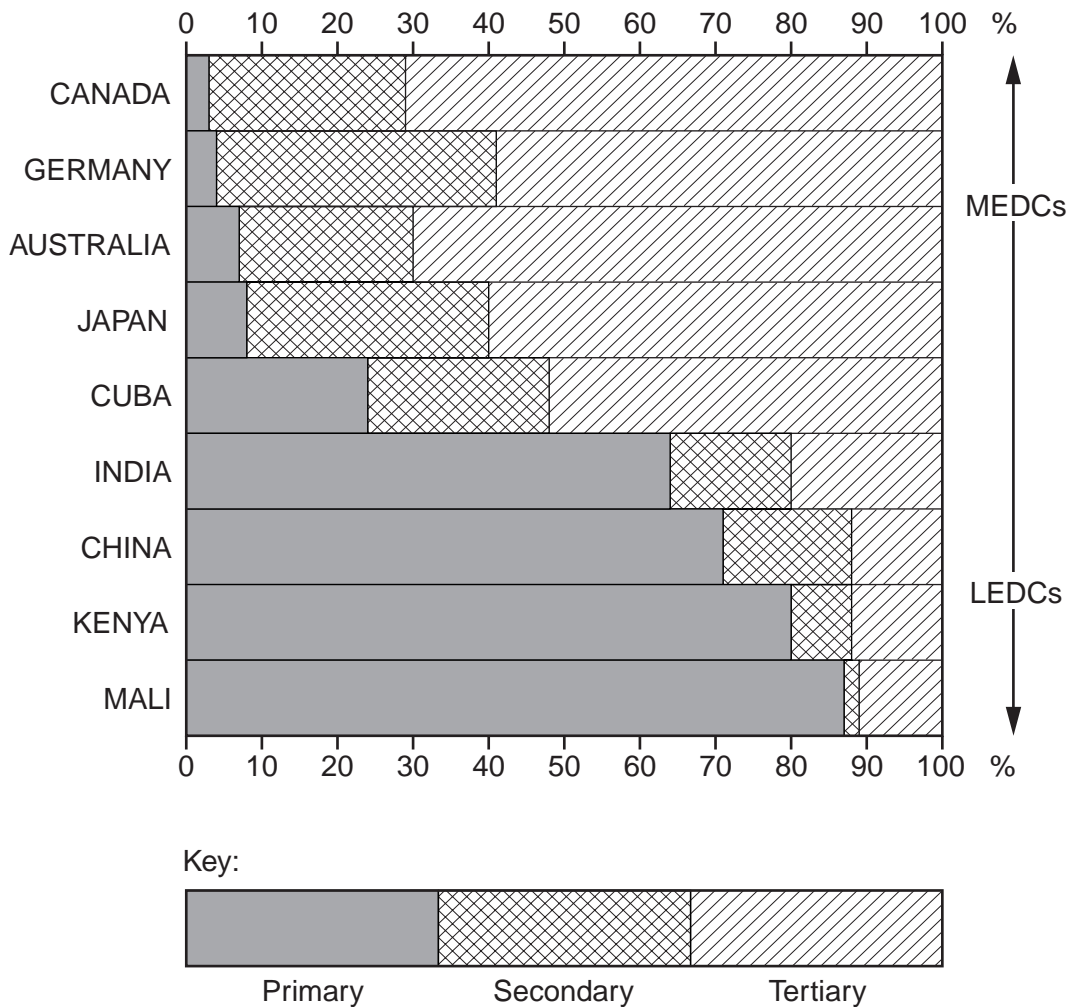


Fig. 8

- (i) What percentage of the population of Mali work in the primary sector? [1]
- (ii) Explain why many people in LEDCs such as Kenya and Mali work in the primary sector. [3]
- (iii) In Cuba the main employment used to be on plantations, growing crops like sugar and tobacco. Now more people are employed in the tourist industry. In which employment sector would the following Cuban people work:
- a worker on a tobacco plantation,
 - a waitress in a hotel,
 - a worker in a factory making cigars? [2]
- (iv) How do you think the employment structure of Cuba is likely to change in the future? Give reasons for your answer. [4]

- (b) Study Fig. 9, which shows the percentage value of exports from Taiwan in 1960 and 2000. Taiwan is a newly industrialised country (NIC).

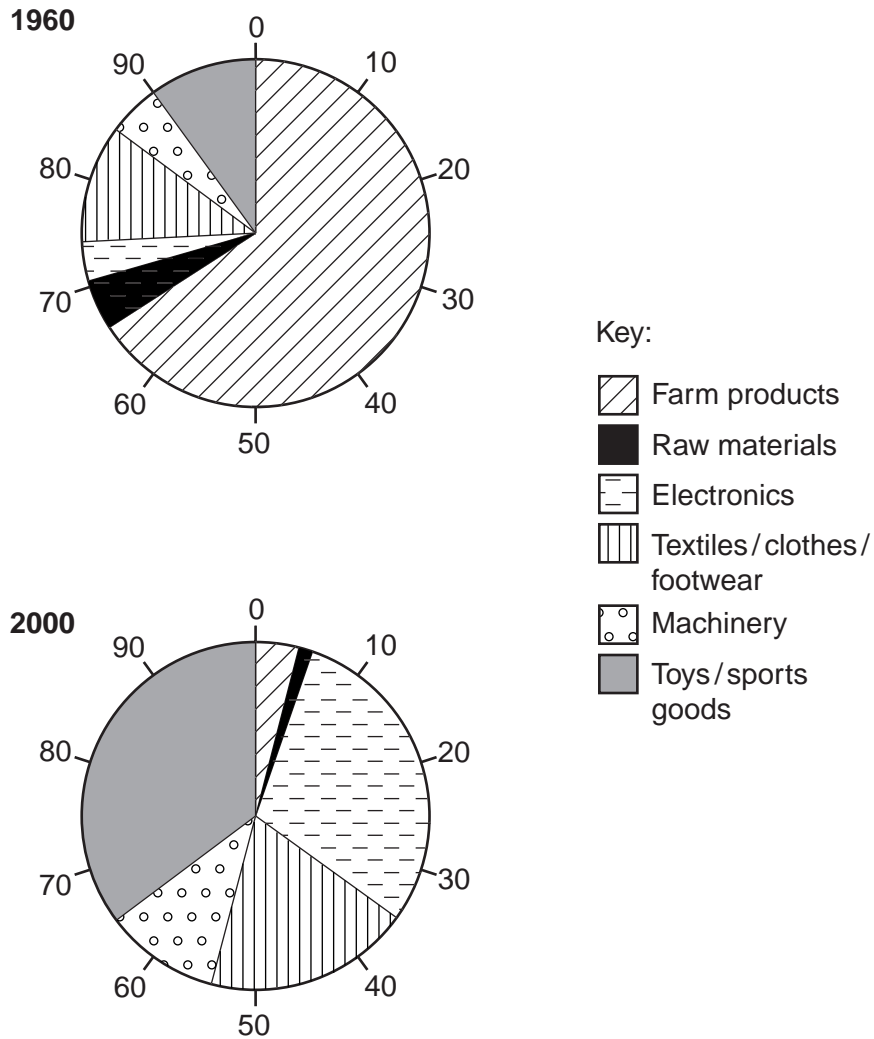


Fig. 9

- (i) Describe the change in the export of primary and secondary products between 1960 and 2000. Support your answer with examples and figures. [3]
- (ii) Explain why high technology industries, such as electronics, are important in NICs such as Taiwan. You may refer to other examples. [5]
- (c) How have the lives of people in NICs changed as a result of economic growth? You may refer to examples which you have studied. [7]

- 6 (a) Study Figs 10A and 10B. Fig. 10A shows changes in average global temperatures and Fig. 10B shows how the greenhouse effect works.

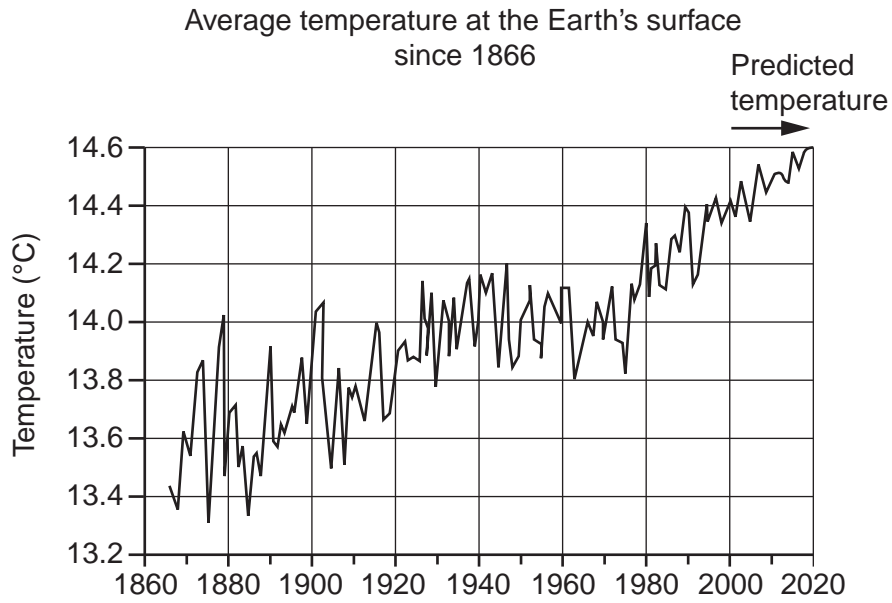


Fig. 10A

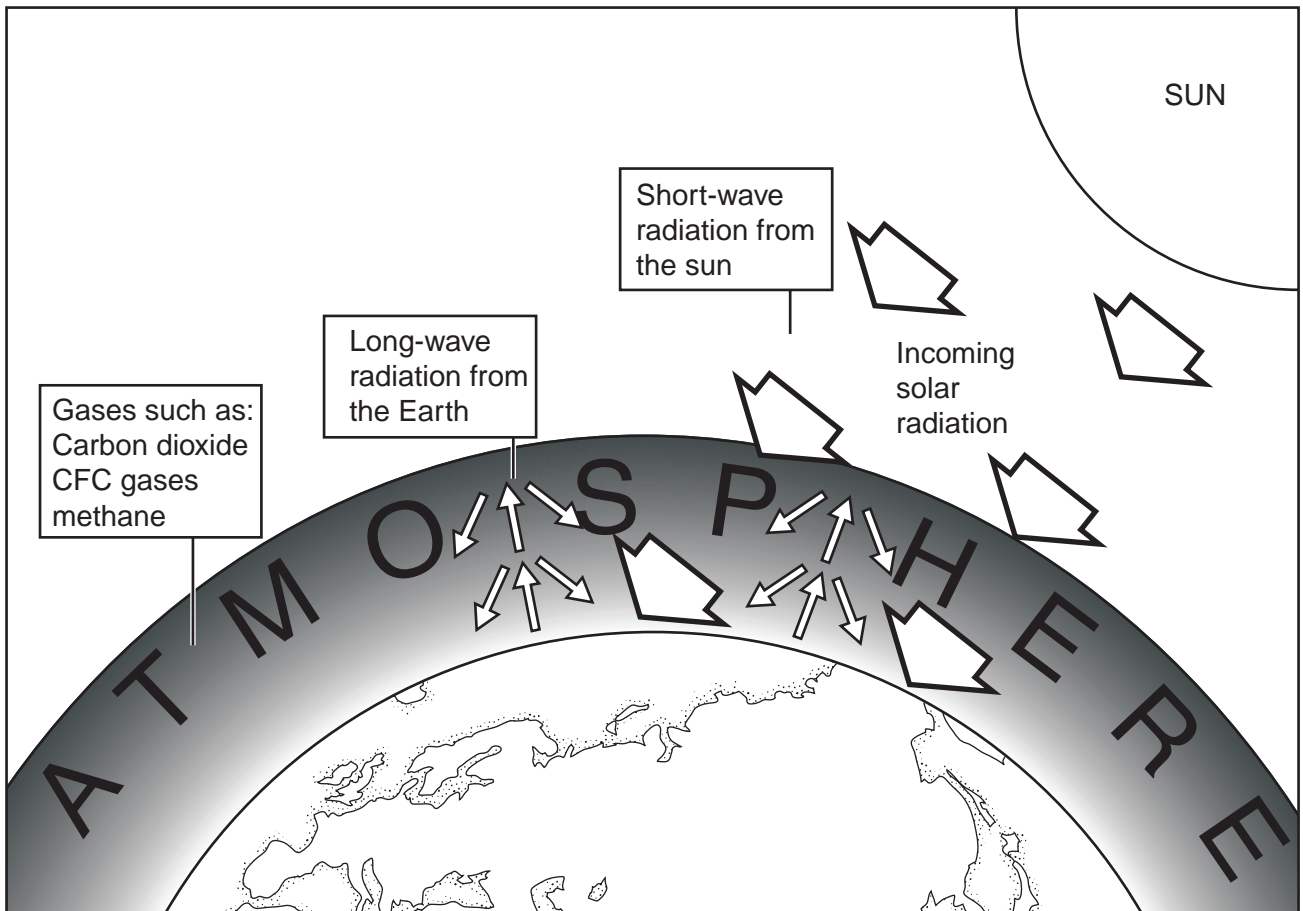


Fig. 10B

- (i) According to the prediction in Fig. 10A, what will be the average global temperature in 2010? [1]
- (ii) Use Fig. 10A to describe the changes in average global temperatures between 1960 and 2000. [2]
- (iii) Use Fig. 10B to help explain how the greenhouse effect works. [3]
- (iv) Explain how human activities may increase the greenhouse effect to produce higher global temperatures. [4]

(b) Study Fig. 11, a newspaper article written in 2004 about the likely impacts of global warming.

Tuvalu's tides revive global warming debate

It is predicted that the Pacific atoll nation of Tuvalu will disappear under the waves today, and become the first victim of rising global sea levels.

High tides will sweep onto Tuvalu, just 26 km² of land scattered over nine atolls, none of it more than 4.5m above sea level.

"We are not quite sure what will happen but we expect most of the areas will be flooded

by the sea for an hour or so," Hilia Vavae, of the Tuvalu Meteorological Office said.

Tuvalu has long said it is at risk from a rise in sea levels caused by global warming. During negotiations on the Kyoto Convention on global warming a decade ago, the prime minister warned "the world's first victims of climate change" would be the 11,500 Tuvaluans.

Prime Minister Saufatu Sopo'aga says his Government is thinking of suing Australia and the United States for their carbon emissions.

Ms Vavae said most homes in Funafuti, which consists of 30 islets populated by 4000 people, would be flooded, along with her office and perhaps the airport.

Fig. 11

- (i) Explain why Tuvalu is at risk from global warming. [3]
- (ii) Explain why people in Tuvalu may have different attitudes towards global warming from people living in Australia and the United States. [5]

(c) Human activities often pose a threat to the natural environment.

These include economic activities such as:

- tourism,
- agriculture,
- manufacturing industry,
- mining.

Name an area which you have studied where the environment is at risk from human activities. Describe the human activities causing the risk and explain how they have affected the natural environment of your chosen area. [7]

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Question 6 Fig. 11 © New Zealand Herald

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