



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International General Certificate of Secondary Education

**GEOGRAPHY**

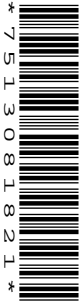
**0460/01**

Paper 1

**May/June 2008**

**1 hour 45 minutes**

Additional Materials:      Answer Booklet/Paper  
   Ruler



**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.

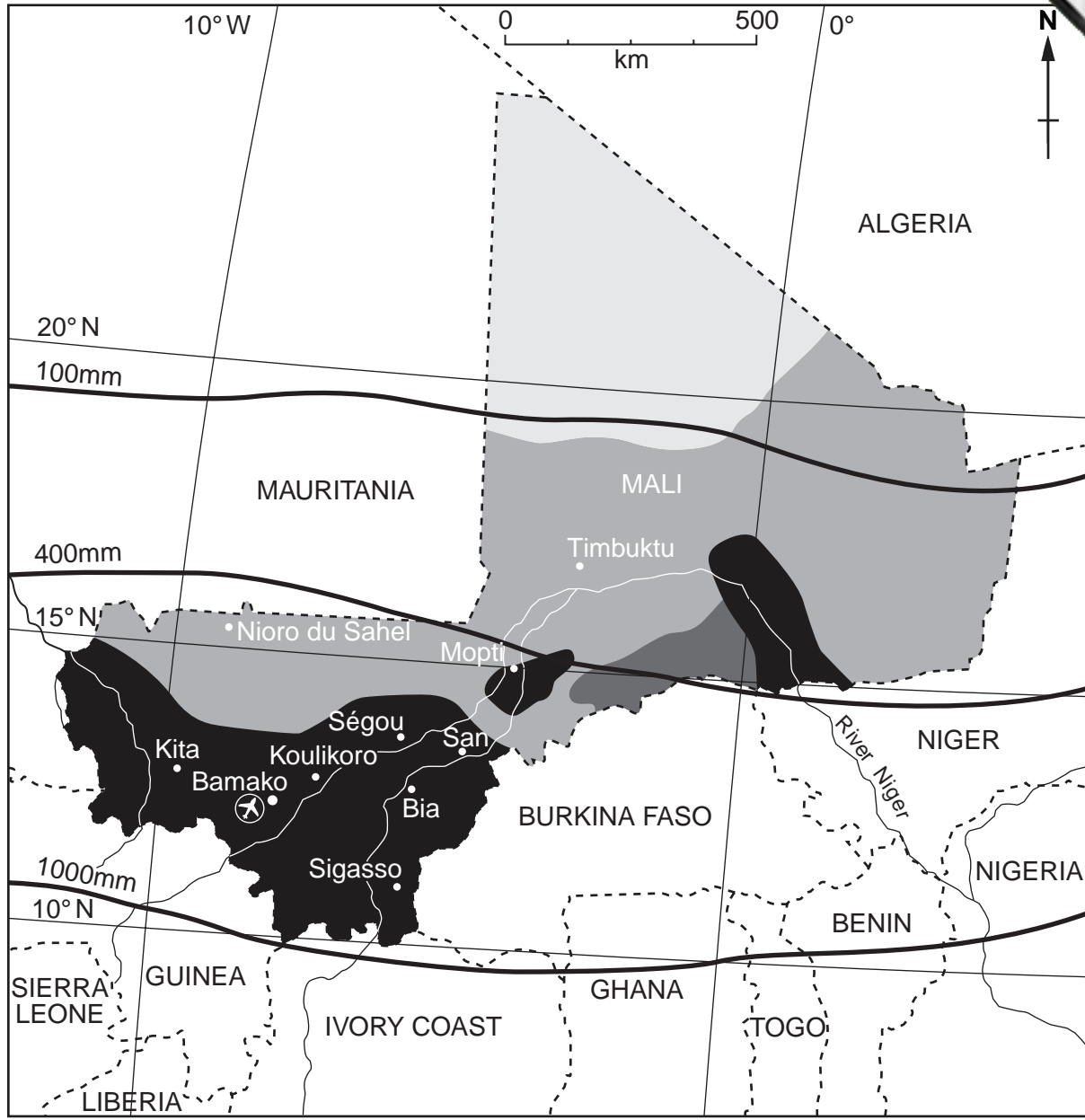
Answer **three** questions.  
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.  
The Insert contains Photographs A, B and C for Question 2, Photograph D for Question 3 and Figs 8A and 8B for Question 5.

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.

This document consists of **13** printed pages, **3** blank pages and **1** Insert.



1 (a) Study Fig. 1, which shows population density in Mali (an LEDC in Africa).



**Key**

100mm annual precipitation

Population density (people per km<sup>2</sup>):

- fewer than 1
- 1.0 to 2
- 2.1 to 10
- more than 10

Location of Mali



Fig. 1

- (i) Which part of Mali has the lowest population density? [1]
- (ii) Describe **two** features of the location of areas where population density is over 10 people per square kilometre. [2]
- (iii) Suggest reasons why the population of Mali is unevenly distributed. [2]

(b) Study Fig. 2, which shows population statistics for Mali between 2000 and 2005.

year	birth rate	death rate	net migration	life expectancy
2000	49.23	19.10	-0.37	46.66
2001	48.79	18.71	-0.36	47.02
2002	48.37	18.32	-0.35	47.39
2003	47.79	19.21	-0.34	45.43
2004	47.29	19.12	-0.33	45.28
2005	46.77	19.05	-0.33	45.09

**Fig. 2**

- (i) Calculate the population growth of Mali in 2005. You must show how you worked out your answer. [3]
- (ii) Explain why birth rates are still high in LEDCs such as Mali. [4]
- (iii) Describe and suggest reasons for the changes in life expectancy in Mali between 2000 and 2005. [5]
- (c) Choose any example of international migration which you have studied and name the countries between which people moved. Explain why many people made the decision to migrate. You should refer both to pull and to push factors. [7]

[Total: 25 marks]

- 2 (a) Study Fig. 3, which shows the location of the CBD and two modern shopping centres in Sheffield, a city in the UK.

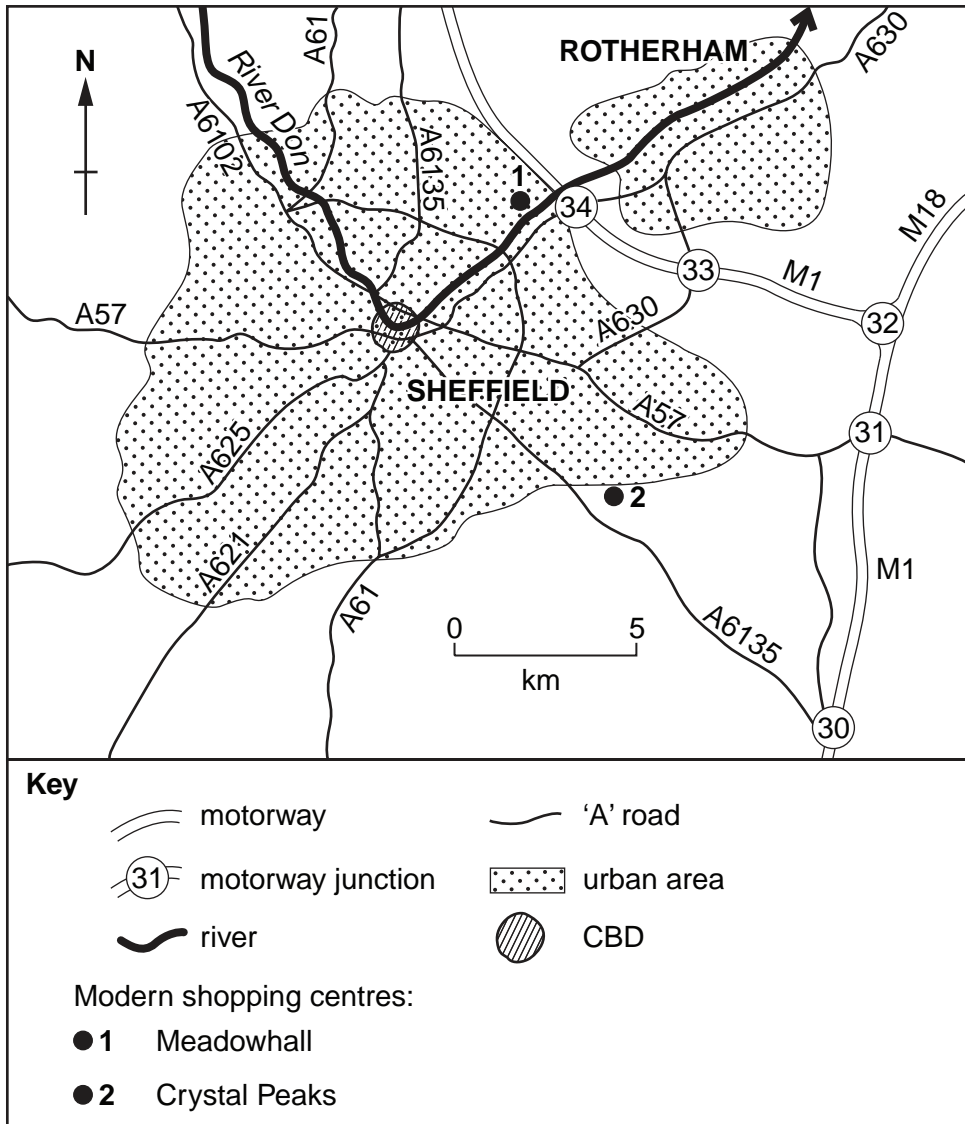


Fig. 3

- (i) What is meant by the initials *CBD*? [1]
- (ii) Meadowhall and Crystal Peaks are modern shopping centres. Identify **one** similarity and **one** difference between their locations. [2]
- (iii) Use evidence from Fig. 3 to suggest reasons for the location of Crystal Peaks shopping centre. [3]

(b) Study Fig. 4, which shows a hierarchy of settlements and services, and Photographs A, B and C (Insert).

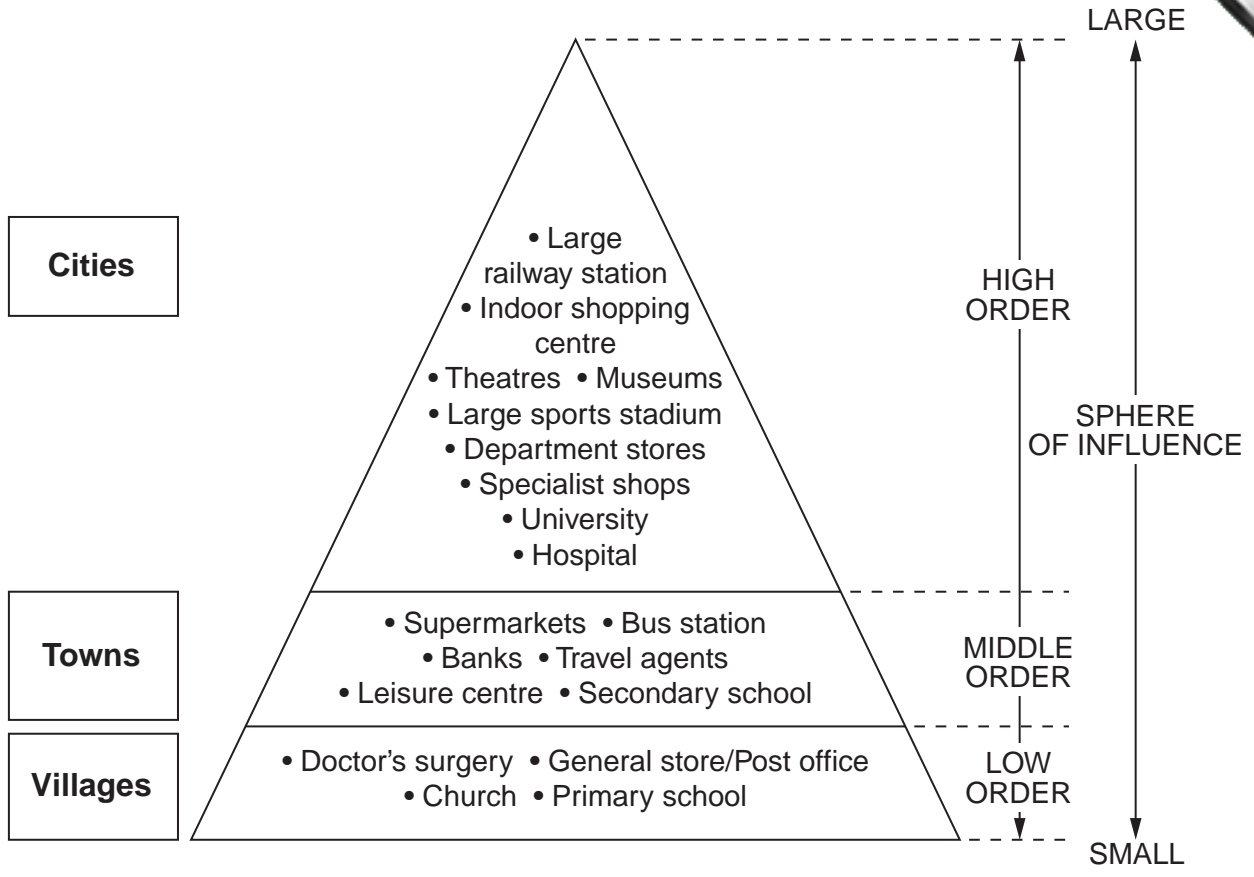


Fig. 4

- (i) Photographs A, B and C (Insert) were taken in three different types of settlement. For each photograph, state whether it was taken in a city, a town or a village, judging by the services shown. [3]
  - (ii) Use the information in Fig. 4 to explain what is meant by *hierarchy of settlements and services*. [4]
  - (iii) Explain why people travel further for some shops and services than for others. [5]
- (c) The building of new housing, roads and services often results in urban sprawl. Name an example of a town or city which you have studied where urban sprawl has taken place. Describe its effects on people and the natural environment. [7]

[Total: 25 marks]

- 3 (a) Study Fig. 5A, which shows the location of the Mojave Desert, along with Fig. 5B, which shows its climate.

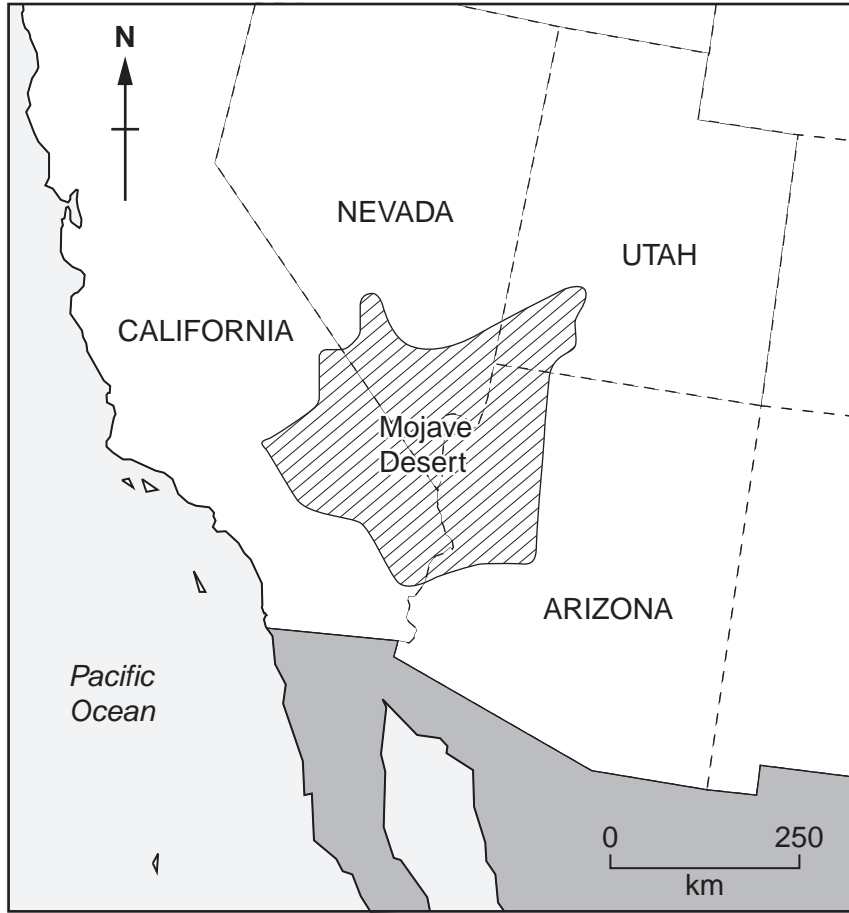
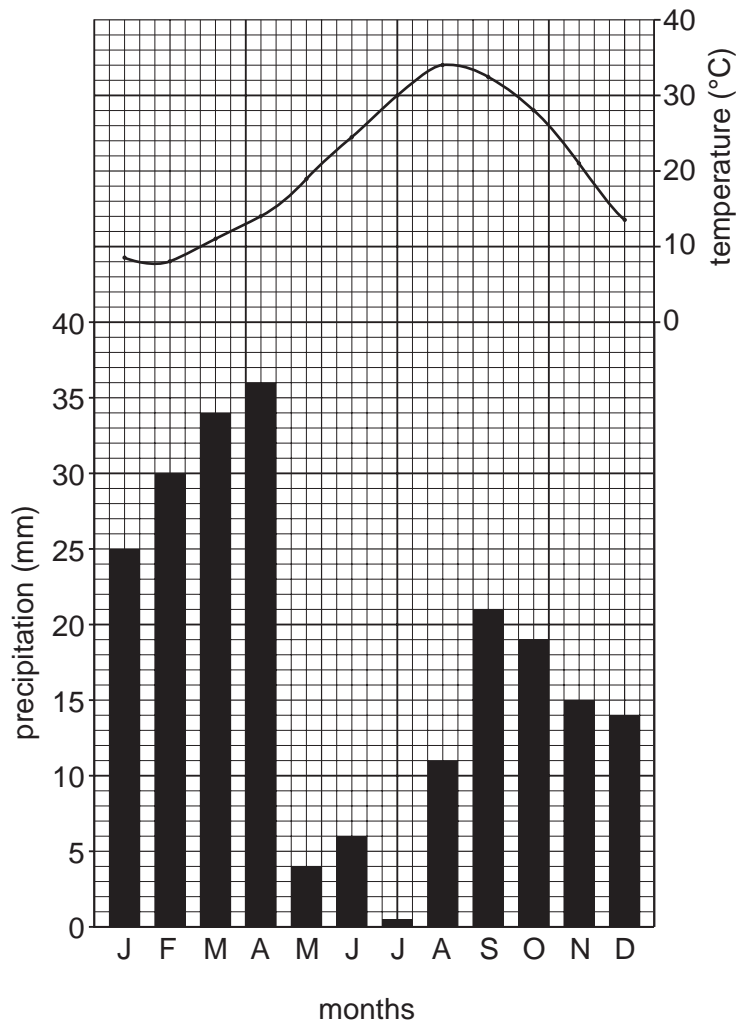


Fig. 5A





**Fig. 5B**

- (i) Estimate the total annual precipitation in the Mojave Desert. [1]
  - (ii) What is the annual temperature range in the Mojave Desert? You must show how you worked out your answer. [2]
  - (iii) Describe the location of the Mojave Desert. [3]
  - (iv) Explain why tropical desert areas, such as the Mojave Desert, are hot and dry. You may use labelled diagrams or sketch maps in your answer. [4]
- (b)** Study Photograph D (Insert), which shows vegetation in part of the Mojave Desert.
- (i) Describe the main features of the vegetation shown in Photograph D. [3]
  - (ii) Explain the effects of climate on the natural vegetation in tropical desert areas. [5]
- (c)** Many areas of natural vegetation are at risk from human activities. Name **either** an area of tropical rain forest **or** tropical desert which you have studied and explain why and how it is at risk from human activities. [7]

[Total: 25 marks]

- 4 (a) Study Fig. 6, which shows major plates and the location of fold mountains.

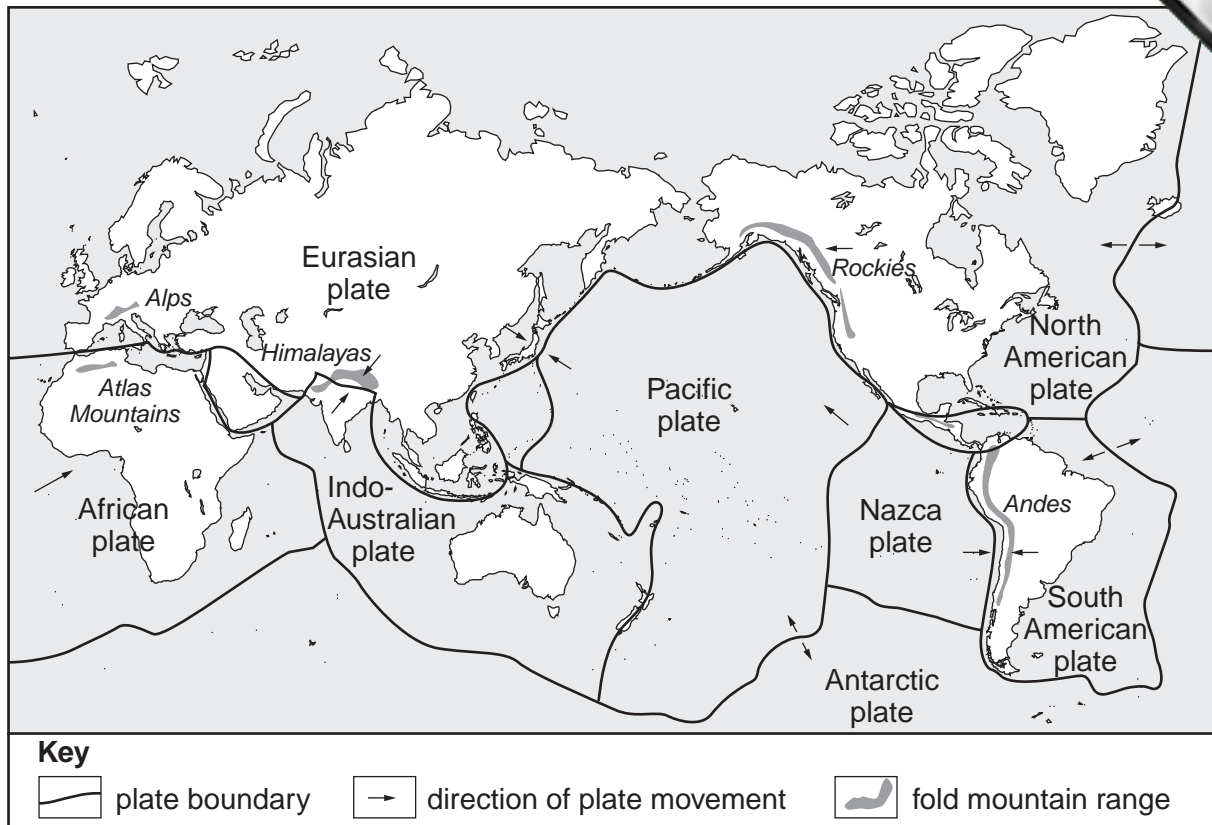


Fig. 6

- (i) What is meant by *fold mountains*? [1]
- (ii) Name the fold mountains which have been formed close to the boundaries between:
- A the South American and the Nazca plates;
- B the Eurasian and the Indo-Australian plates. [2]
- (iii) The following processes take place at certain plate boundaries, shown on Fig. 6. For each process, name **two** plates which share a boundary along which it is happening.
- A sea floor spreading
- B subduction
- C plates sliding past each other [3]
- (iv) Explain why fold mountains are formed close to some plate boundaries. You may use labelled diagrams in your answer. [4]



(b) Study Fig. 7, which shows information about the location of volcanoes in relation to constructive and destructive plate boundaries.

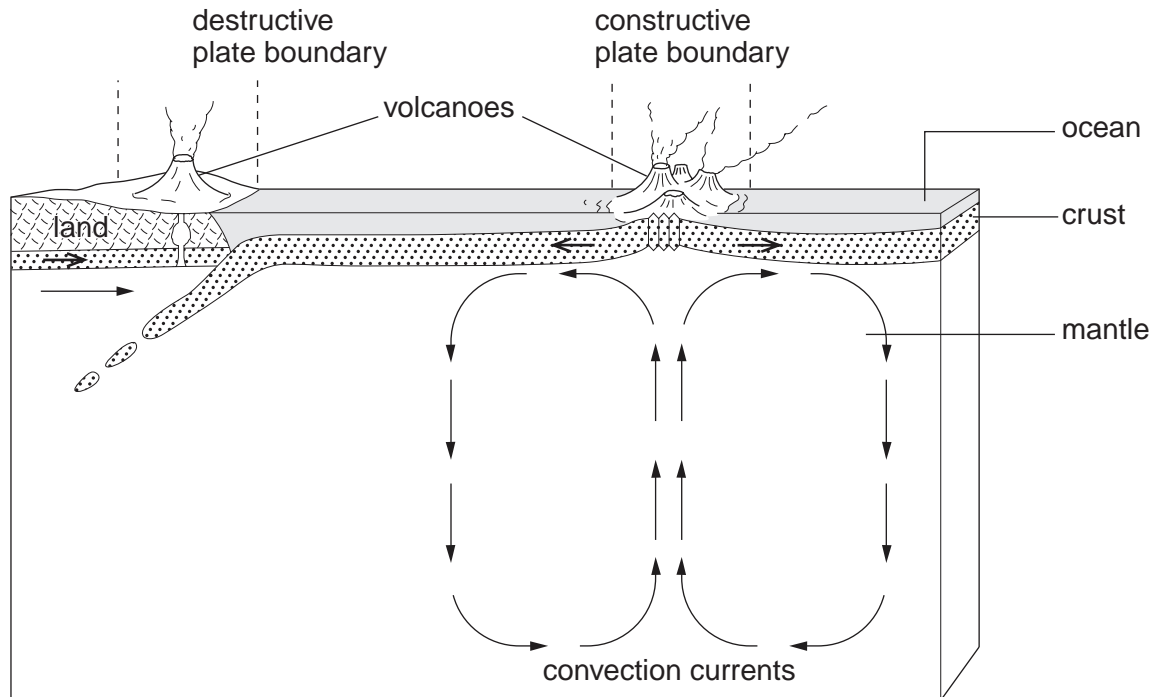


Fig. 7

Explain how plate movement results in volcanoes being formed at:

- A constructive plate boundaries; [3]
- B destructive plate boundaries. [5]

You may use labelled diagrams in your answers.

(c) Many people live in areas where there are natural hazards such as:

- volcanic eruptions
- earthquakes
- tropical storms
- flooding
- drought

Name an area which you have studied and state the natural hazard(s) faced by the people who live there.

Explain why people live in the area. [7]

[Total: 25 marks]

- 5 (a) Study Fig. 8A (Insert), which shows information about the physical geography of New Zealand along with Fig. 8B (Insert), which shows information about pastoral farming.
- What is meant by *pastoral farming*?
  - Using Fig. 8B (Insert), identify a region:
    - where more dairy cattle are kept per square kilometre than beef cattle;
    - which is one of the most important sheep farming regions in New Zealand. [2]
  - Use evidence from Fig. 8B (Insert) to identify differences in farming between Taranaki and Hawke's Bay. [3]
  - Suggest reasons why more cattle are kept on North Island than on South Island. [4]
- (b) Study Fig. 9, which shows the location of meat processing factories in New Zealand.

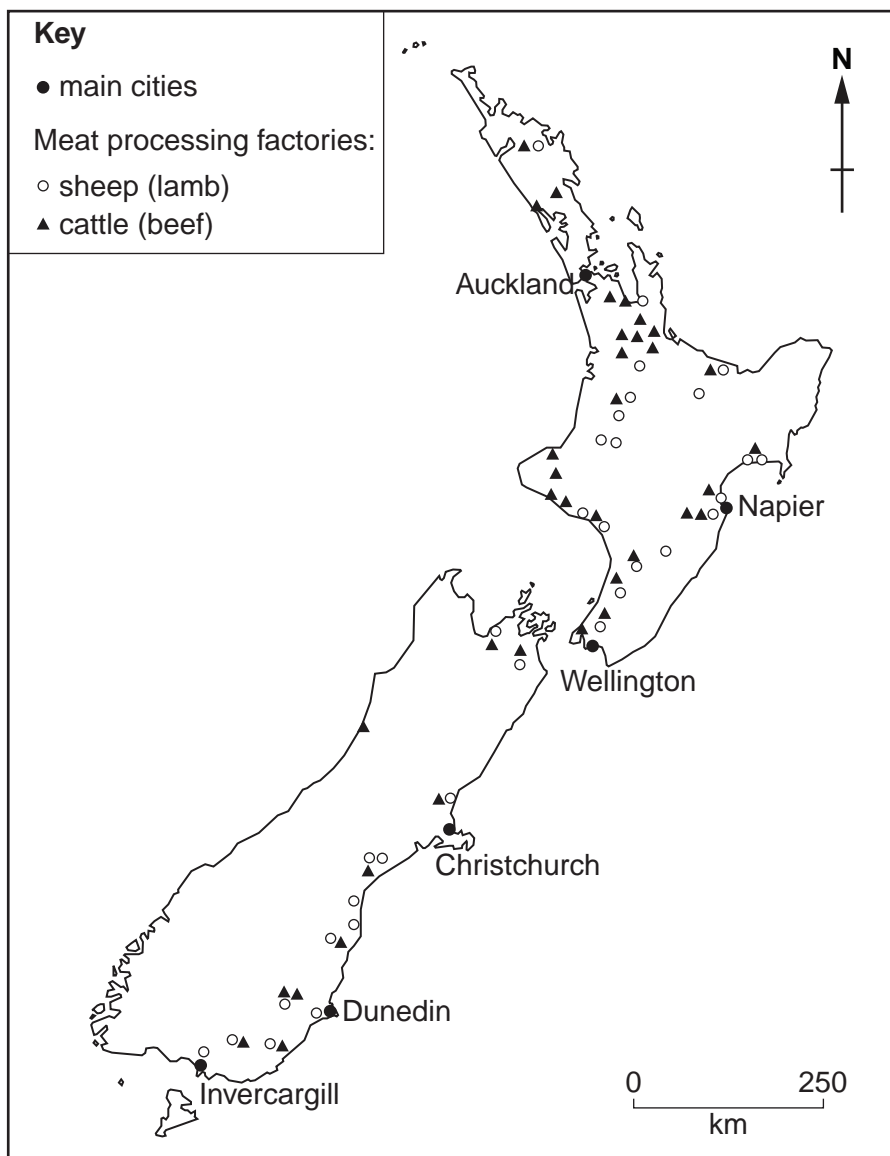


Fig. 9

- Describe the distribution of meat processing factories in New Zealand. [3]
- Suggest reasons for the distribution of meat processing factories in New Zealand. [5]

(c) Human activities cause both benefits and problems for people and the natural environment. Name an area you have studied where **one** of the following activities is important:

- agriculture
- manufacturing industry
- energy production

Describe the benefits and problems to people and the natural environment from this activity in your chosen area. [7]

[Total: 25 marks]

6 (a) Study Fig. 10, a scatter graph which shows the relationship between GDP and the of population with access to safe water in ten countries.

GDP is an indicator of the wealth of a country.

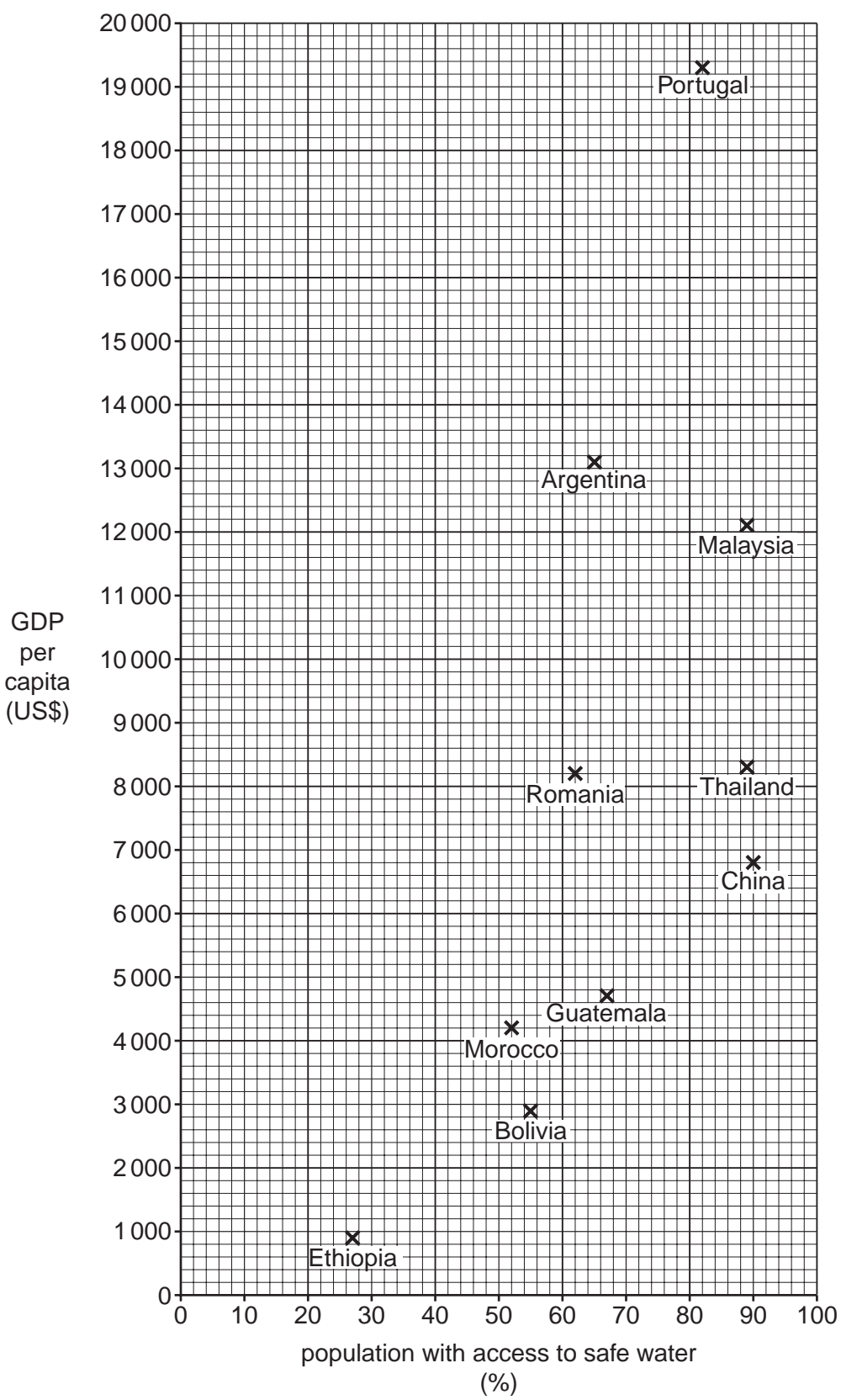


Fig. 10

- (i) Which country has a GDP per capita of US\$8200 and 62% of its population with access to safe water? [6]
  - (ii) What is the general relationship shown by Fig. 10 between GDP per capita and the percentage of population with access to safe water? Use examples and figures to illustrate your answer. [2]
  - (iii) Suggest **three** reasons why there is better access to reliable supplies of safe water in some countries than there is in others. [3]
  - (iv) Explain how providing reliable supplies of clean water in LEDCs improves the quality of life of the people. [4]
- (b) Study Fig. 11, which is an article from a website about drought in Portugal. Portugal is an MEDC in Europe.

**Drought threatens water supply for 10 percent of Portuguese**

Portugal is suffering its worst drought in decades. The country received an average of 542 millimetres of precipitation in 2004, compared with an average annual precipitation of 930 millimetres between 1961 and 1990.

The dry weather, which has harmed crops and caused livestock to starve, continued into 2005, with the country experiencing precipitation levels which were less than 20% of normal levels in January.

The regions most at risk are those in the centre and south of the country, which rely mostly on wells instead of dams for their water.

In January the Environment Minister threatened to ration water in the southern province of Algarve, if the region did not receive enough rain by the end of the year.

Tourism industry officials had condemned talk of water rationing, arguing it could frighten visitors away from the Algarve, the nation's main tourist centre.

Environmentalists estimate Portugal wastes some three billion litres of water each year.

**Fig. 11**

- (i) Use evidence from Fig. 11 to suggest **three** reasons why people are short of water in some regions of Portugal. [3]
  - (ii) Describe methods which could be used to reduce water shortages. [5]
- (c) Name an area which you have studied where the tourist industry is important. Explain why the tourist industry has grown up in the area. You should refer in detail to the area's physical and human attractions. [7]

[Total: 25 marks]





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*Copyright Acknowledgements:*

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Question 2 Photograph B S. Sibley © UCLES.  
Question 2 Photograph C S. Sibley © UCLES.  
Question 3 Photograph D S. Sibley © UCLES.  
Question 6 Fig. 11 © [www.terradaily.com](http://www.terradaily.com) 7 September, 2006.

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