Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME		

CENTRE NUMBER		CANDIDATE NUMBER	

GEOGRAPHY **0460/01**

Paper 1 Geographical themes **For Examination from 2016**

SPECIMEN PAPER

1 hour 45 minutes

Candidates answer on the Question Paper.

Additional Materials: Calculator
Ruler

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces provided.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams, graphs or rough working.

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

DO **NOT** WRITE IN ANY BARCODES

Write your answer to each question in the space provided.

If additional space is required, you should use the lined pages at the end of this booklet. The question number(s) must be clearly shown.

Answer **three** questions, each from a different section.

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

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

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 **28** printed pages, **2** blank pages and **1** Insert.

International Examinations **[Turn over**

Section A

Answer **one** question from this section.

1 **(a)** Study Fig. 1, which shows population density in Mali (a country at a lower level of development in Africa).

Key

100mm annual precipitation

Population density (people per km²):

fewer than 1
1.0 to 2
2.1 to 10
more than 10
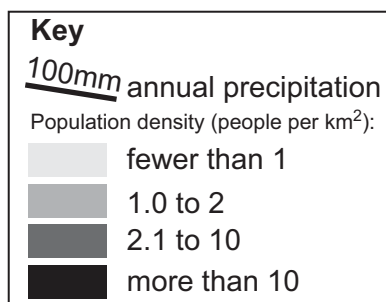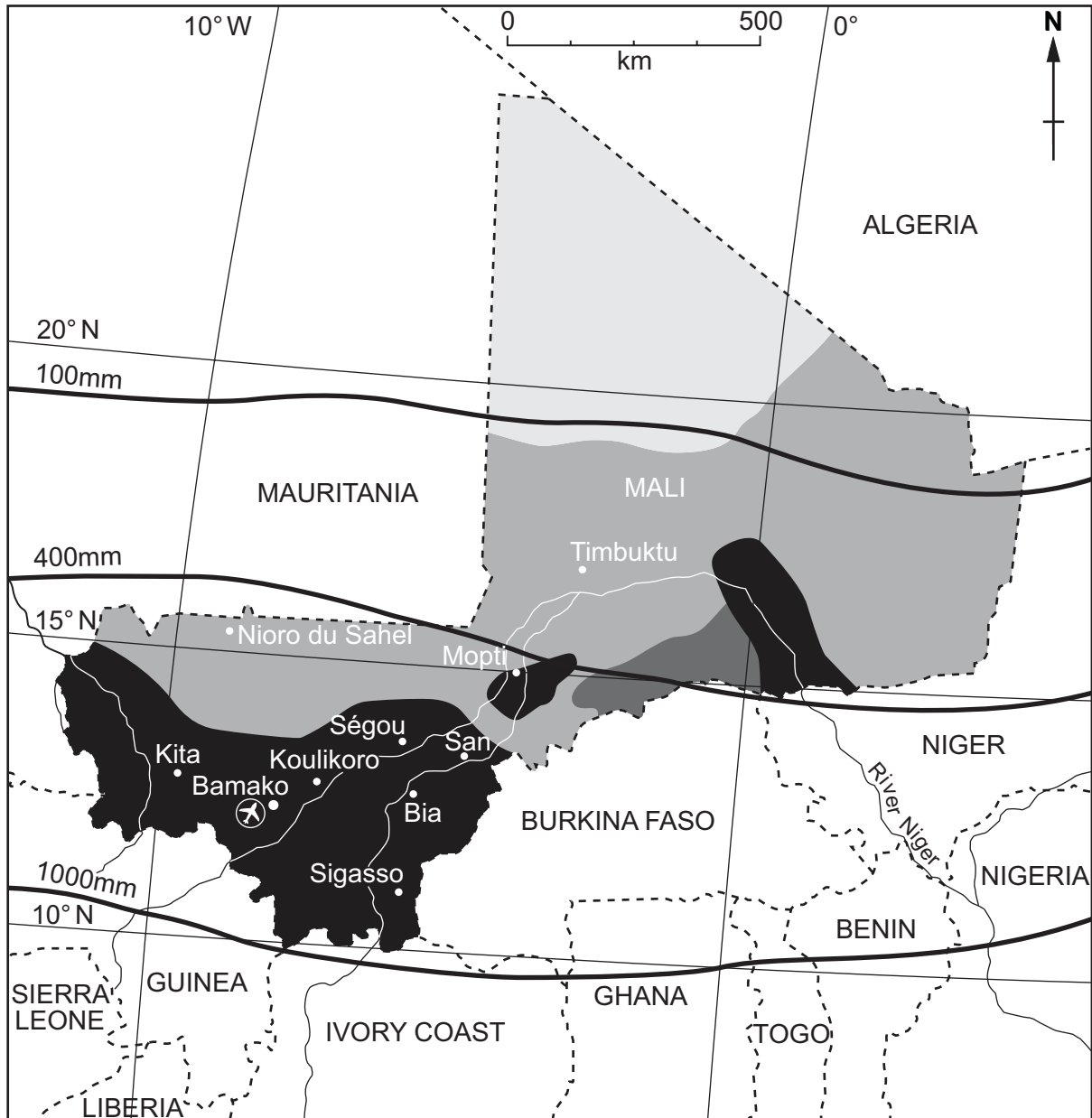
Location of Mali

Fig. 1
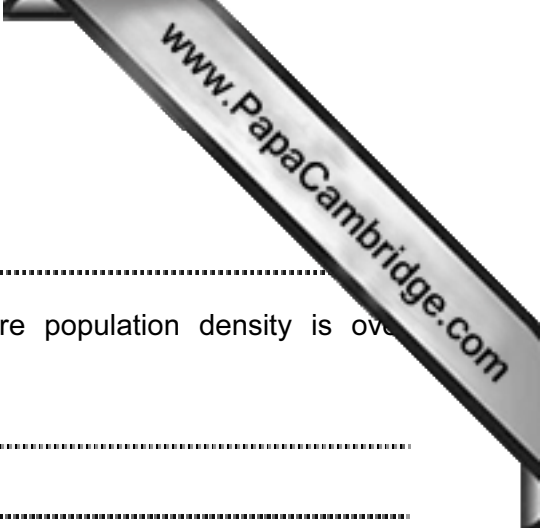
(i) Which part of Mali has the lowest population density?

....

(ii) Describe **two** features of the location of areas where population density is ove
10 people per square kilometre.

1 ....

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2 ....

.... [2]

(iii) Suggest reasons why the population of Mali is unevenly distributed.

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.... [3]

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

year	birth rate	death rate	net migration	life expect...
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.

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.... [3]

(ii) Explain why birth rates are still high in countries at a lower level of development such as Mali.

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.... [4]

(iii) Describe and suggest reasons for the changes in life expectancy in Mali between 1980 and 2005.

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.... [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.

International migration chosen **from** .... **to** ....

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.... [7]

[Total: 25 marks]

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

Key

motorway		'A' road	
motorway junction		urban area	
river		CBD	

Modern shopping centres:
● **1**   Meadowhall
● **2**   Crystal Peaks
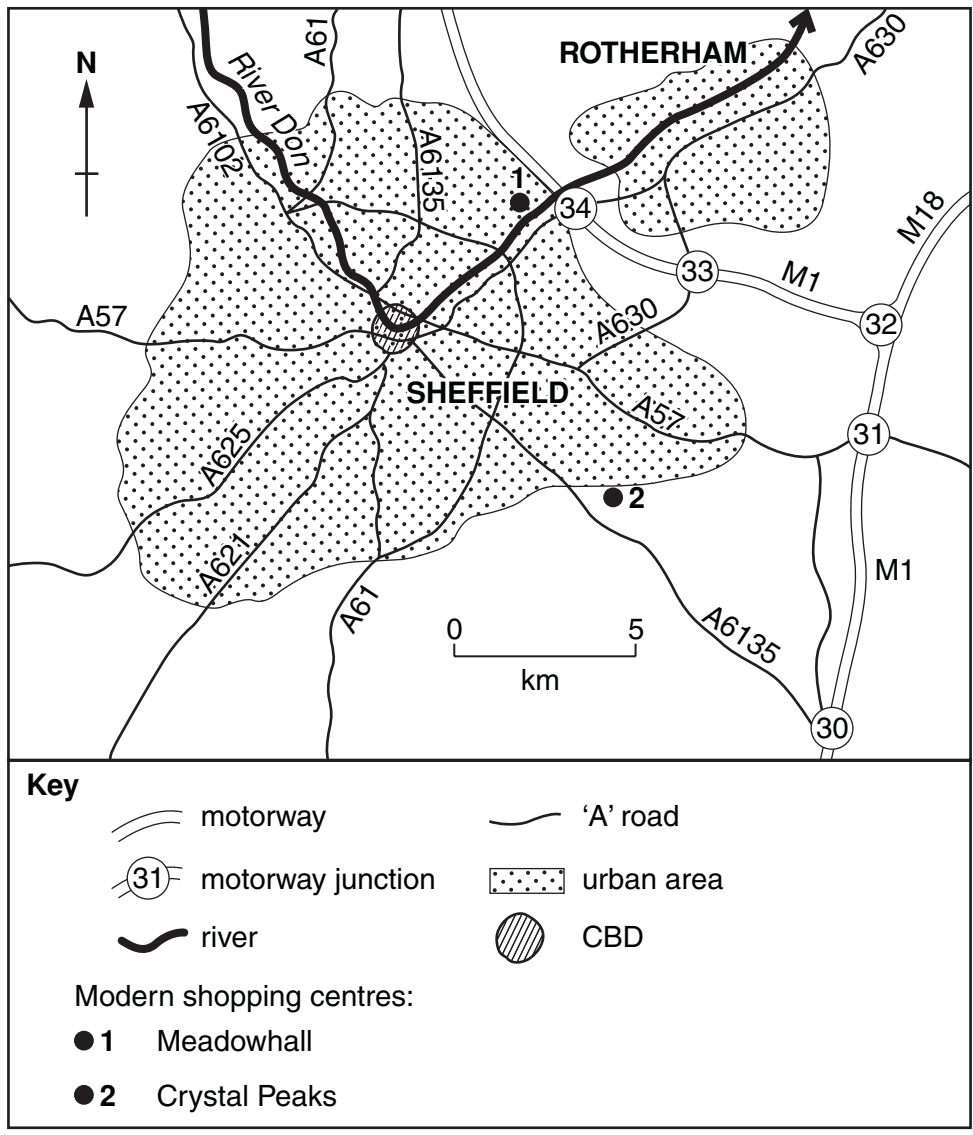
Fig. 3

(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.

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.... [2]
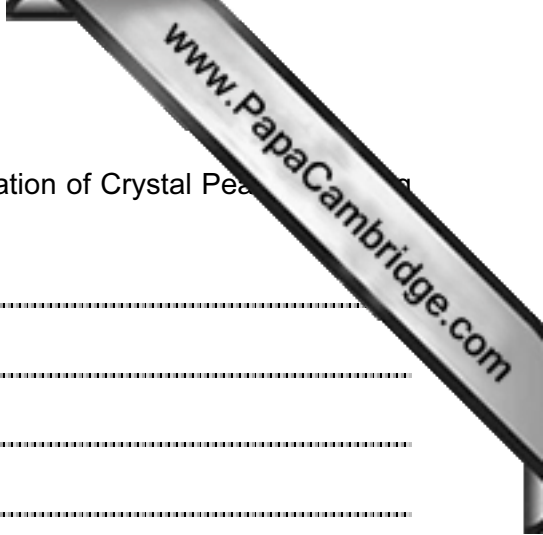
(iii) Use evidence from Fig. 3 to suggest reasons for the location of Crystal Pe........ centre.

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

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                                                              LARGE

                              • Large
            Cities          railway station                 HIGH
                         • Indoor shopping                   ORDER
                              centre
                        • Theatres  • Museums                SPHERE
                        • Large sports stadium               OF INFLUENCE
                         • Department stores
                          • Specialist shops
                            • University
                             • Hospital

                     • Supermarkets  • Bus station
            Towns       • Banks  • Travel agents             MIDDLE
                     • Leisure centre  • Secondary school     ORDER

                   • Doctors' surgery  • General store/Post office   LOW
            Villages      • Church  • Primary school           ORDER
                                                             SMALL
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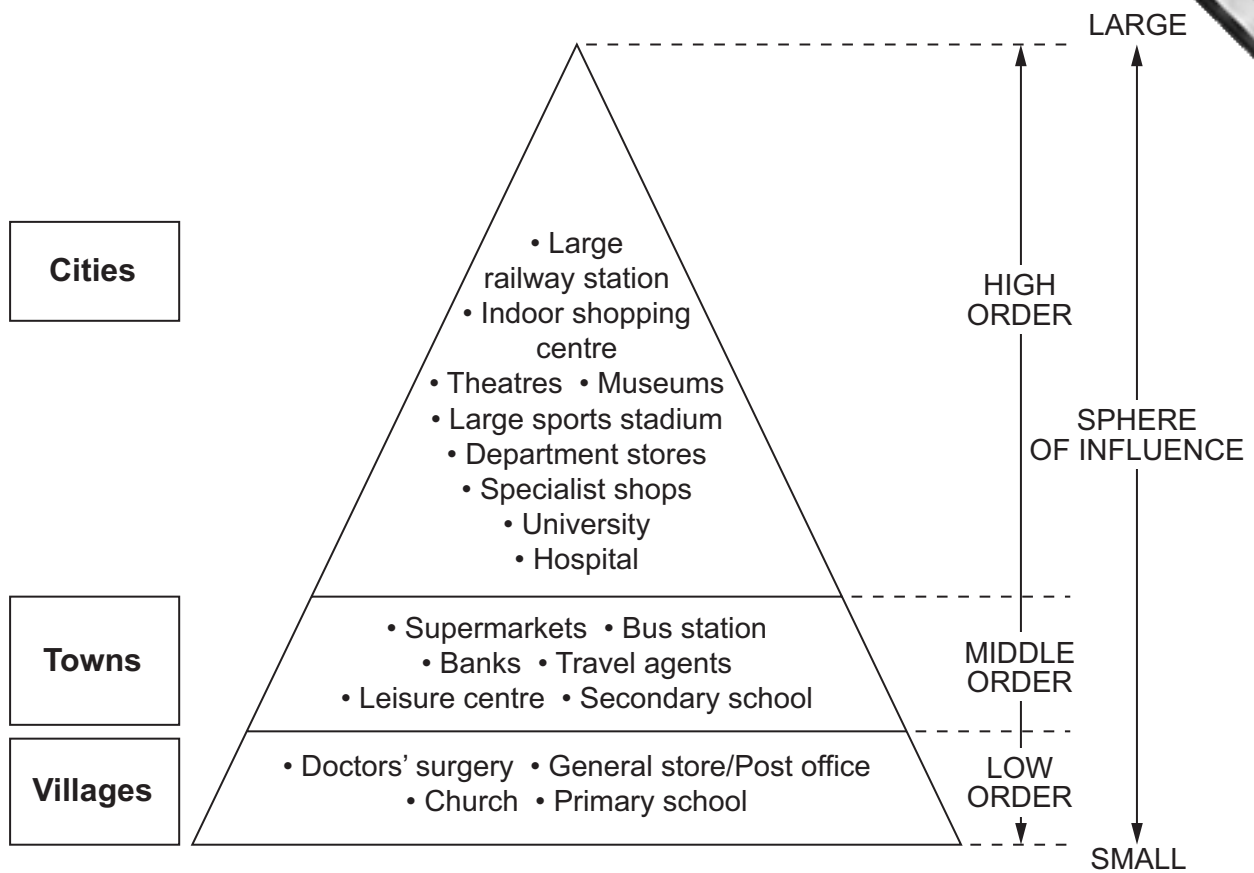
Fig. 4

(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.

A ....

....

B ....

....

C ....

.... [3]

(ii) Use the information in Fig. 4 to explain what is meant by *hierarchy of set......* *services*.

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[4]

(iii) Explain why people travel further for some shops and services than for others.

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[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.

Name of town or city ....

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.... [7]

[Total: 25 marks]

TURN OVER FOR QUESTION 3

Section B

Answer **one** question from this section.

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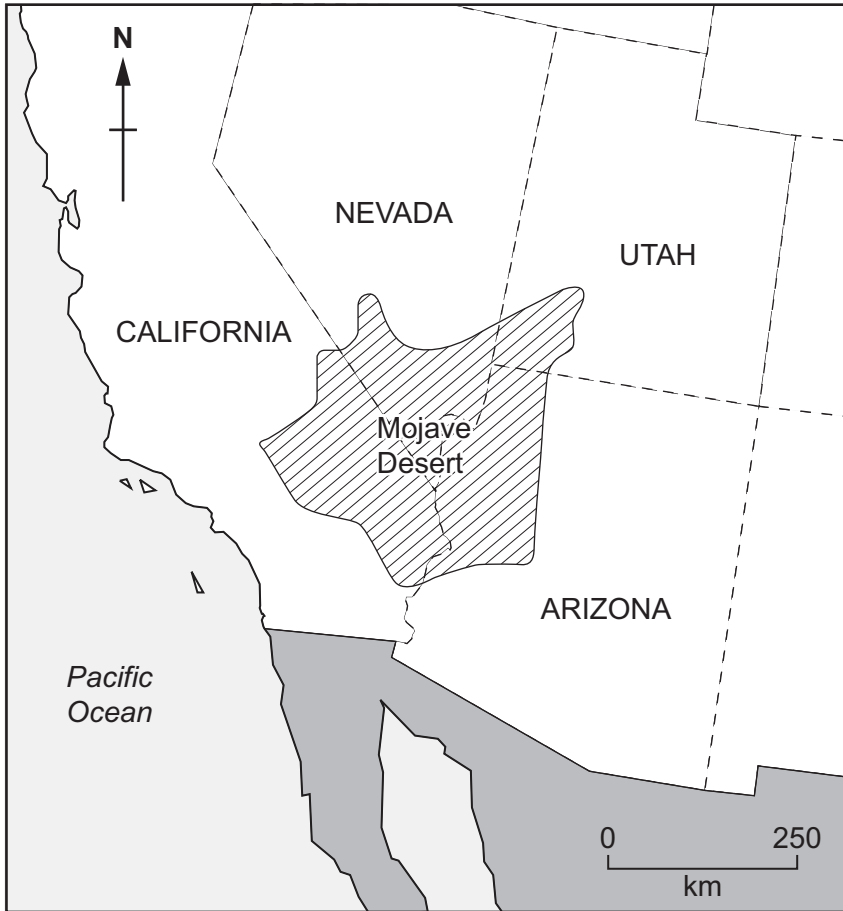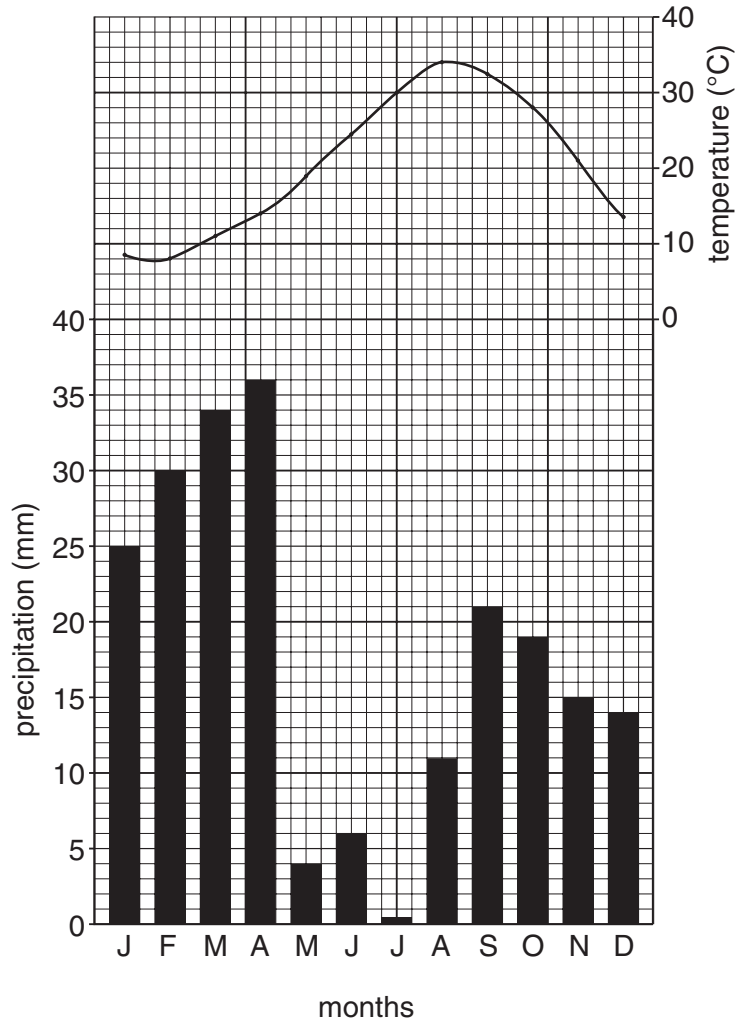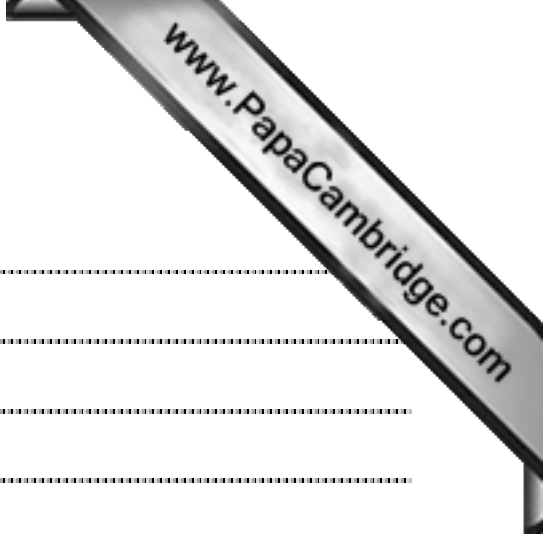

Fig. 5A

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.

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.... [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.

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.... [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.

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.... [3]

(ii) Explain the effects of climate on the natural vegetation in tropical desert areas.

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.... [5]

(c) Many areas of natural vegetation are at risk from deforestation. Name an area of tropical rainforest which you have studied and explain the causes and effects of deforestation.

Name of area of tropical rainforest ....

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[Total: 25 marks]

4 **(a)** Study Fig. 6, a map showing the drainage basin of the River Lee in the south of t
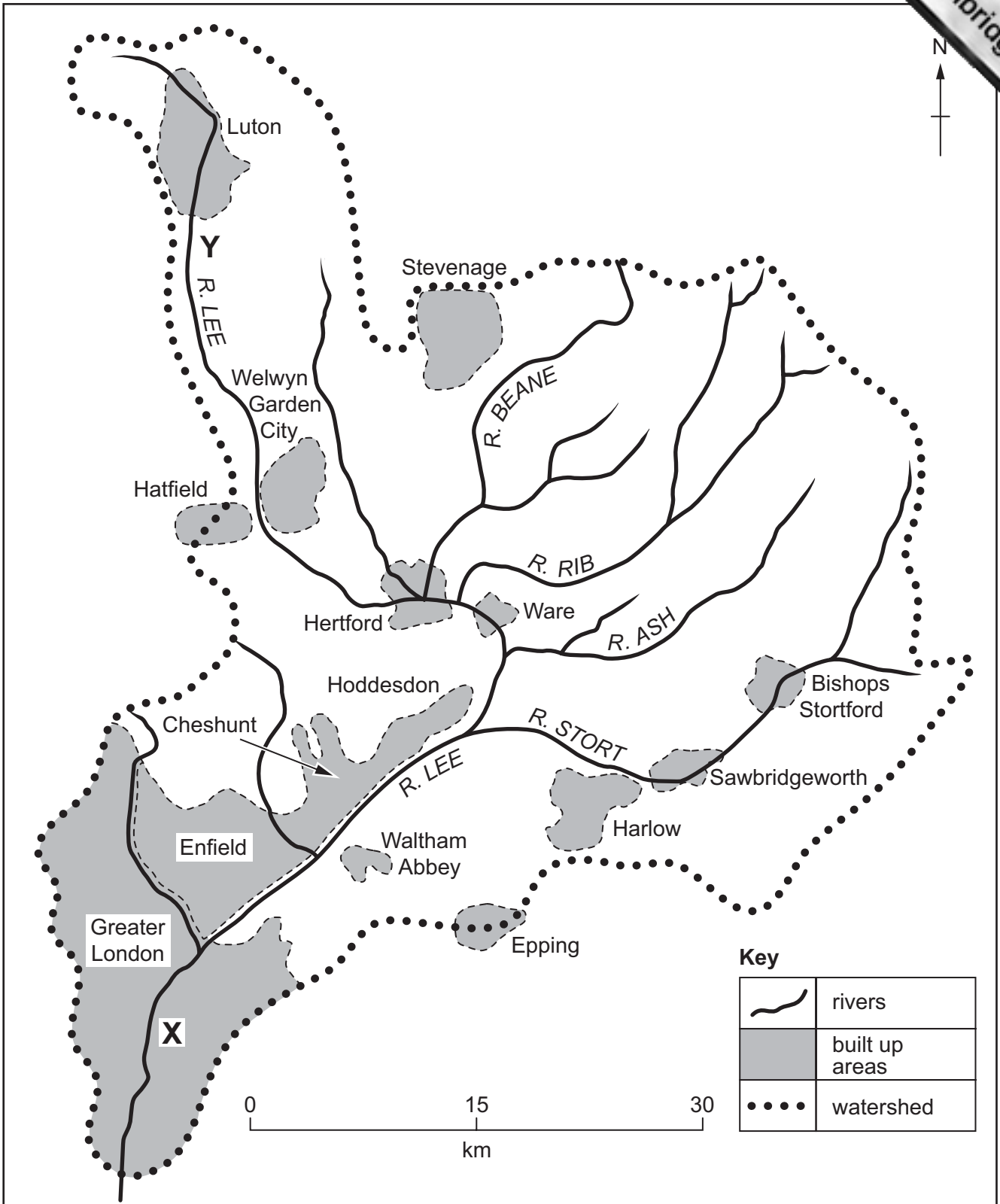
Fig. 6
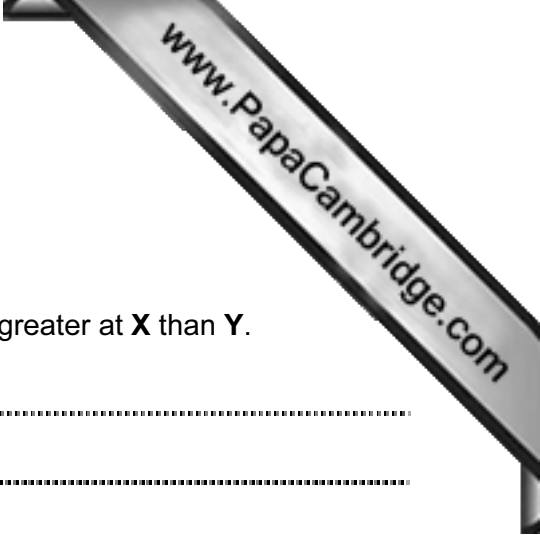
(i) Name a tributary of the River Lee.

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(ii) Give **two** reasons why the amount of water in the river is greater at **X** than **Y**.

1 ....

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2 ....

.... [2]

(iii) Suggest **three** likely differences between the shape of the river **valley** at **X** and at **Y**.

1 ....

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2 ....

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3 ....

.... [3]

(iv) Explain how the River Lee might bring both benefits and problems for people who live in Hertford.

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.... [4]

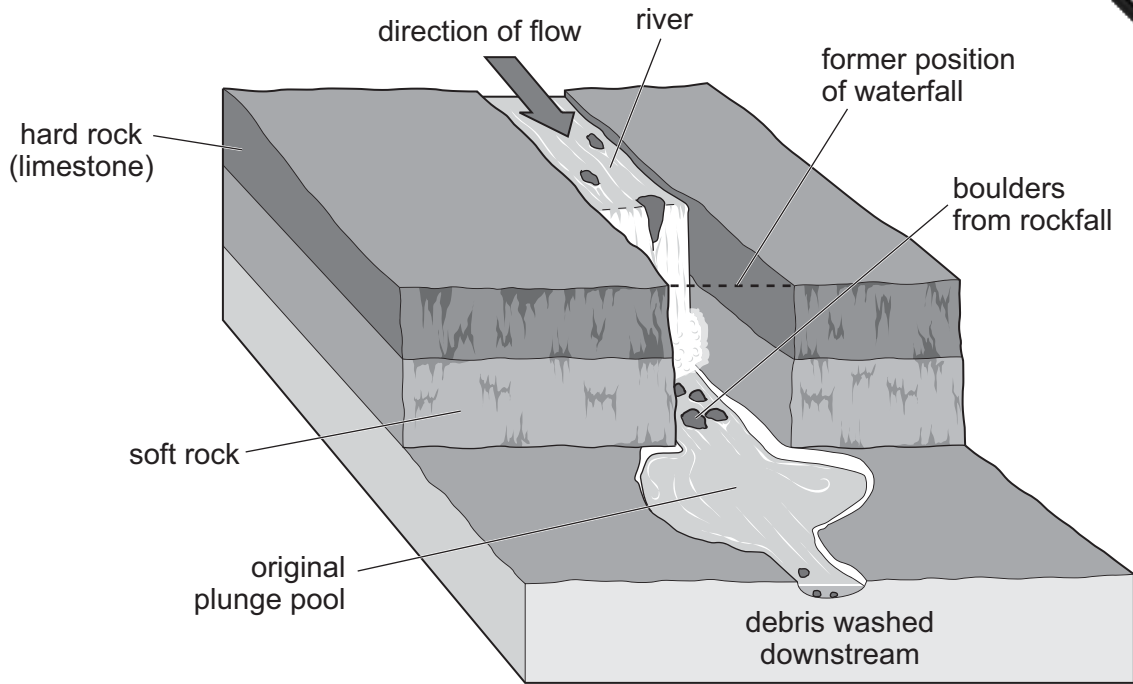**(b)** Study Fig. 7, a diagram showing a waterfall and gorge.

Fig. 7

(i) The river is eroding by hydraulic action, corrasion (abrasion) and corrosion.
Define each of these terms.

Hydraulic action ....

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Corrasion (abrasion) ....

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Corrosion ....

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.... [3]

(ii) Explain how the waterfall and gorge shown in Fig. 7 have been formed.

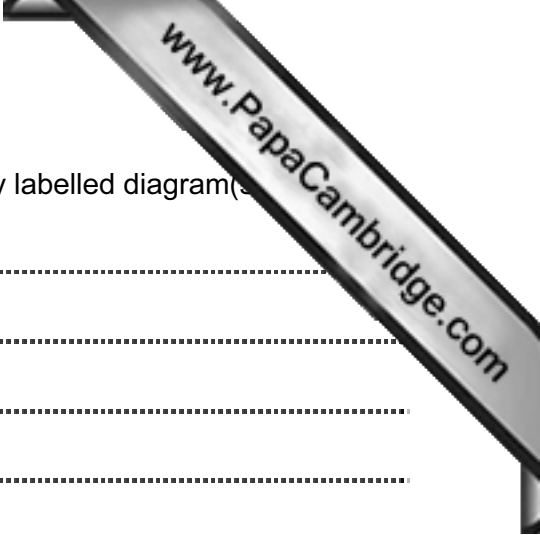..

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(c) Explain how an oxbow lake is formed. You should include fully labelled diagram(s).

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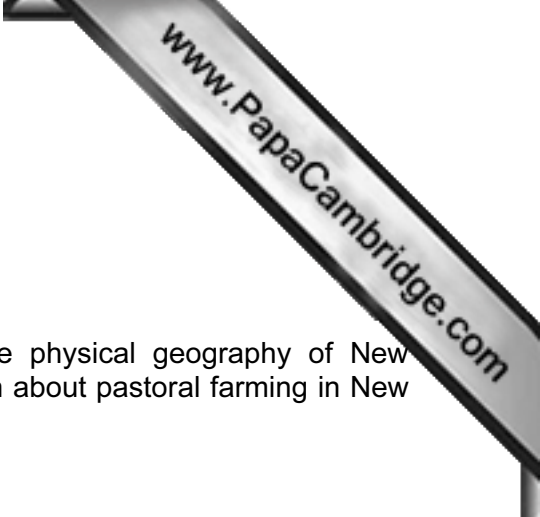
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[7]
[Total: 25 marks]

Section C

Answer **one** question from this section.

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 in New Zealand.

   (i) What is meant by *pastoral farming*?

   .... [1]

   (ii) Using Fig. 8B (Insert), identify a region:

   A   where more dairy cattle are kept per square kilometre than beef cattle;

   .... [1]

   B   which is one of the most important sheep farming regions in New Zealand.

   .... [1]

   (iii) Use evidence from Fig. 8B (Insert) to identify differences in farming between Taranaki and Hawke's Bay.

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   .... [3]

   (iv) Suggest reasons why more cattle are kept on North Island than on South Island.

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   .... [4]

(b) Study Fig. 9, which shows the location of meat processing factories in New Zeala

Key

● main cities
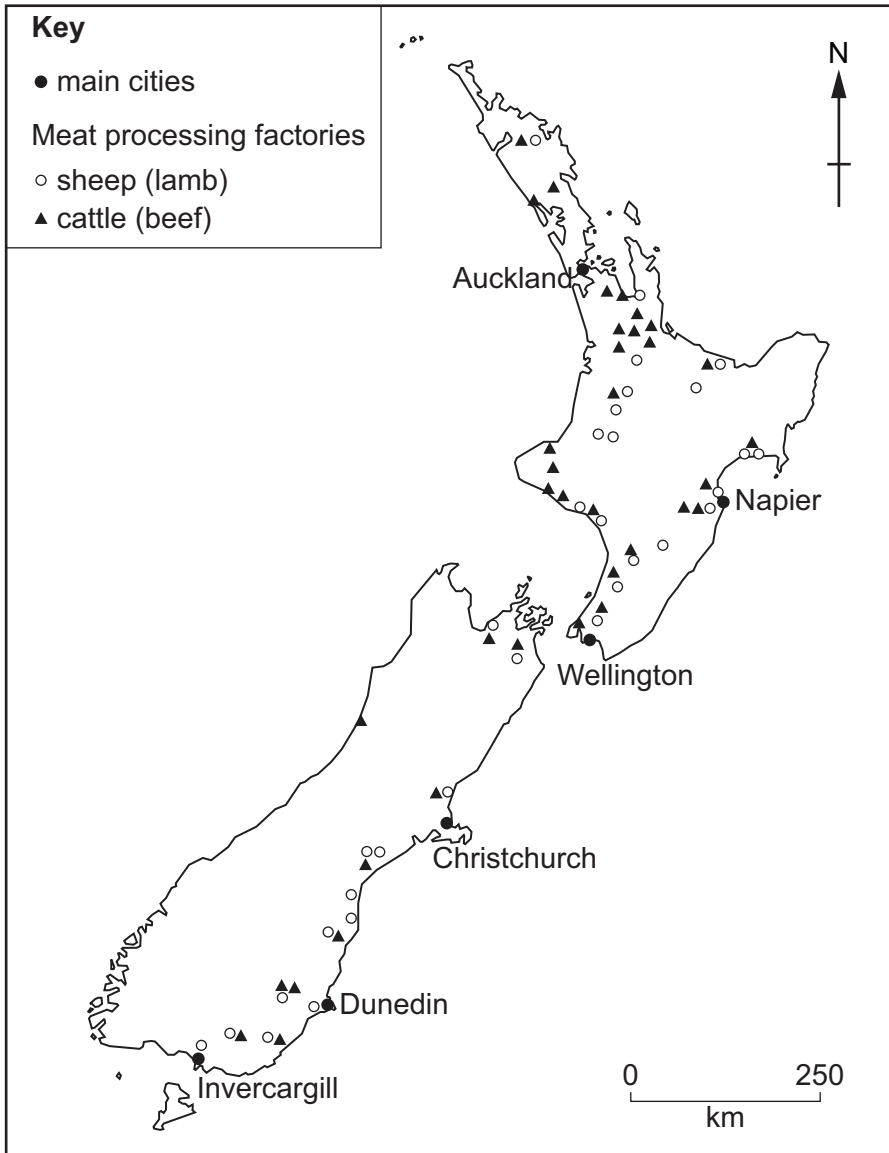
Meat processing factories
○ sheep (lamb)
▲ cattle (beef)

N

Auckland

Napier

Wellington

Christchurch

Dunedin

Invercargill

0   250
     km

Fig. 9

(i) Describe the distribution of meat processing factories in New Zealand.

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.... [3]

(ii) Suggest reasons for the distribution of meat processing factories in New Zea

[5]

(c) Economic development may cause problems for the natural environment.

For an area you have studied explain how the environment is at risk from ec
development.

Name of area ....

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[Total: 25 marks]

TURN OVER FOR QUESTION 6

6 **(a)** Study Fig. 10, a scatter graph which shows the relationship between G_____ _ _ _ _ percentage of population with access to safe water in ten countries.
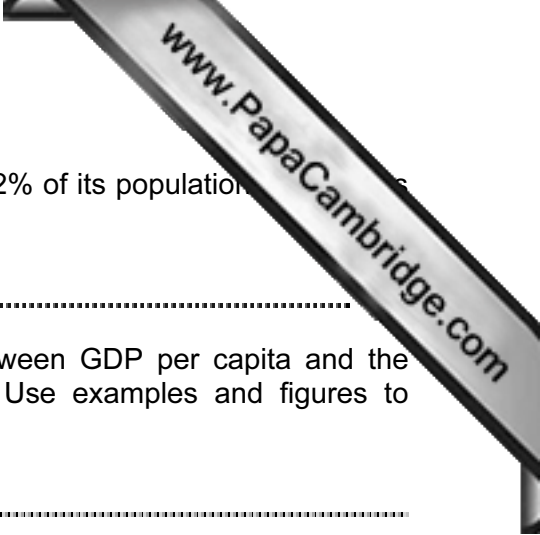
GDP is an indicator of the wealth of a country.
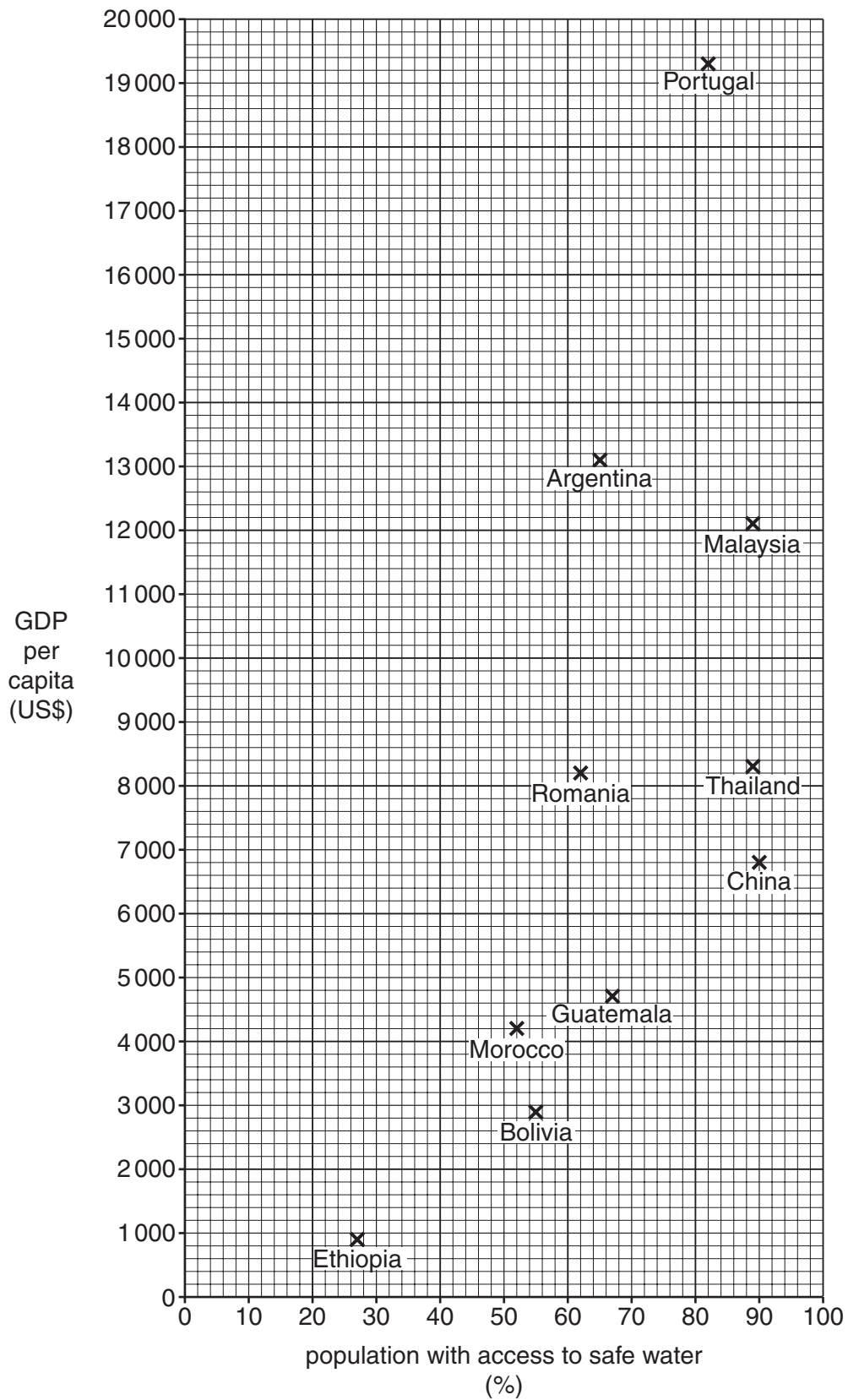
Fig. 10

(i) Which country has a GDP per capita of US$8 200 and 62% of its population has access to safe water?

....

(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.

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.... [2]

(iii) Suggest **three** reasons why there is better access to reliable supplies of safe water in some countries than there is in others.

1 ....

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2 ....

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3 ....

.... [3]

(iv) Explain how providing reliable supplies of clean water in countries at lower levels of development improves the quality of life of the people.
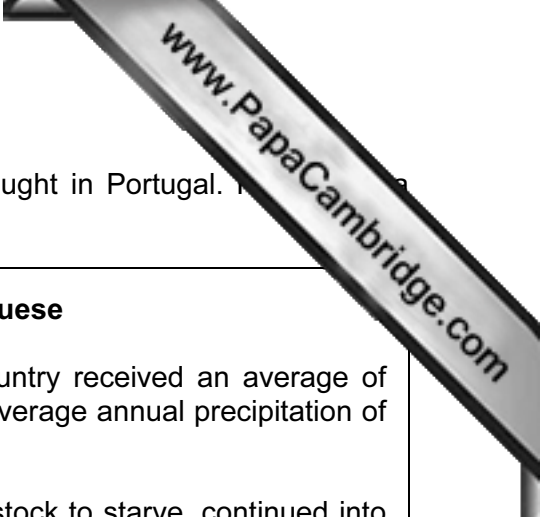
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.... [4]

(b) Study Fig. 11, which is an article from a website about drought in Portugal. country at a high level of development 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.

1 ....

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2 ....

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3 ....

.... [3]
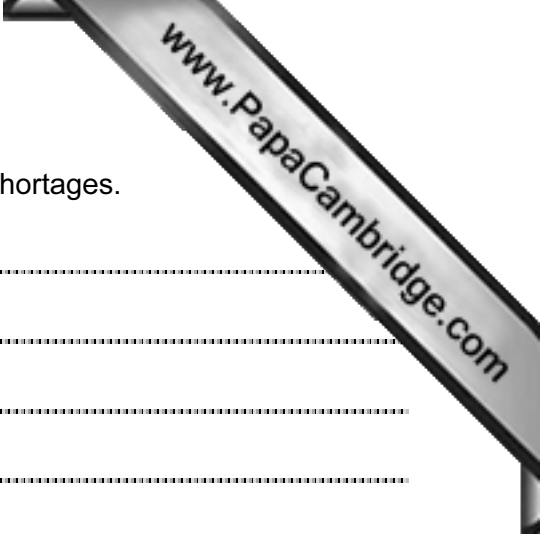
(ii) Describe methods which could be used to reduce water shortages.

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.... [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 deta... area's physical and human attractions.

Name of area ....

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[Total: 25 marks]