



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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GEOGRAPHY

0460/02

Paper 2

October/November 2008

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler
 Protractor
 Plain paper

1:25 000 Survey Map Extract is enclosed with this Question Paper.

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 a soft pencil for any diagrams, graphs or rough working.
Do not use staples, paper clips, highlighters, glue or correction fluid.
DO NOT WRITE IN ANY BARCODES.

Answer **all** questions.
The Insert contains Photograph A for Question 3.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

The Survey Map Extract and the Insert are **not** required by the Examiner.

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.

For Examiner's Use	
Q1	
Q2	
Q3	
Q4	
Q5	
Q6	
Total	

This document consists of **15** printed pages, **1** blank page and **1** Insert.



1 The map extract is for part of the island of Mauritius. The scale is 1:25 000.

(a) Fig. 1 shows the position of some features in the south east part of the map extract. Study the map extract and Fig. 1, and answer the questions on the opposite page.

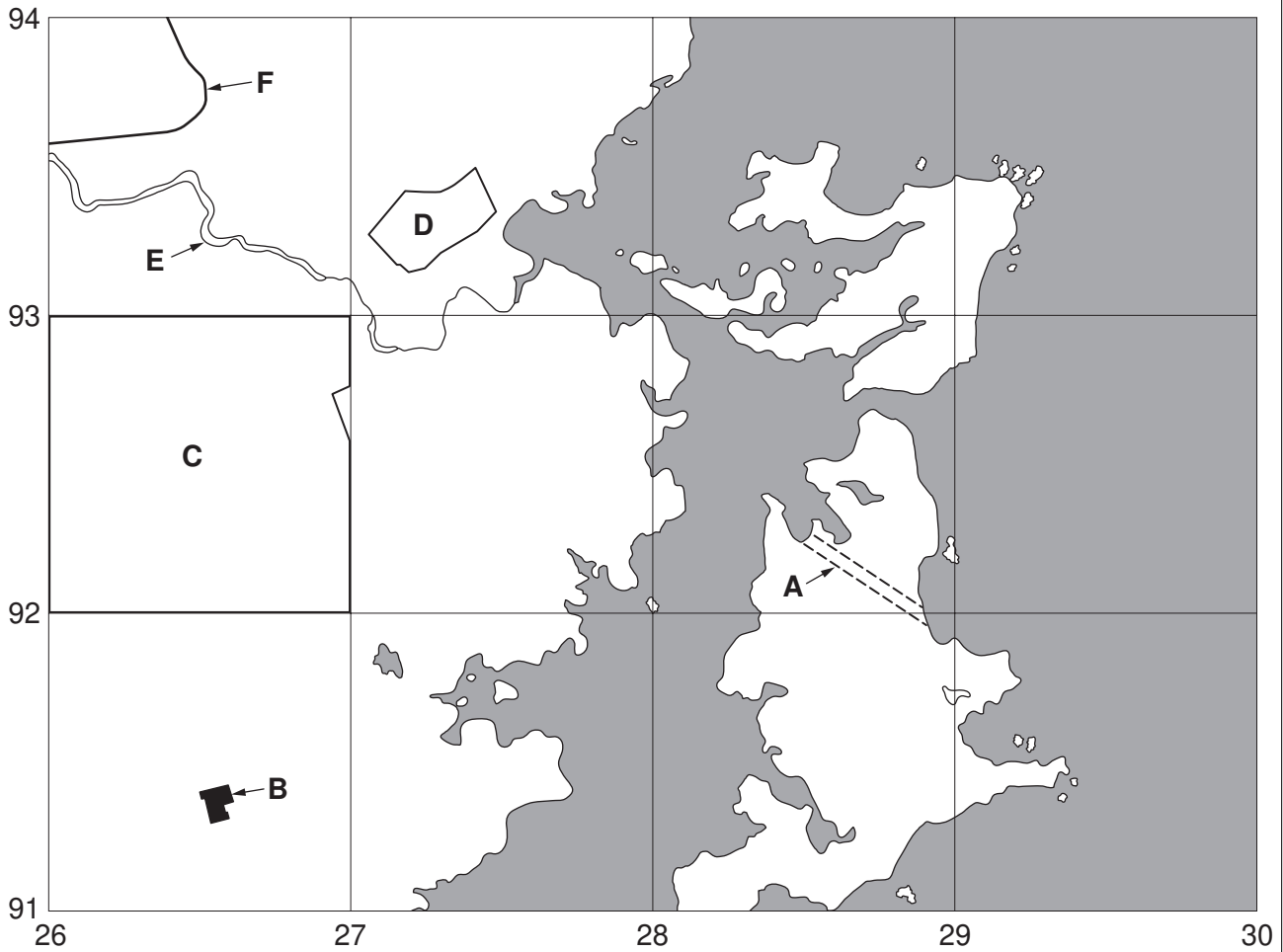


Fig. 1

Using the map extract, name the following features shown on Fig. 1:

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- (i) feature **A** (2892);
..... [1]
- (ii) feature **B** (2691);
..... [1]
- (iii) the plantation crop in area **C** (2692);
..... [1]
- (iv) the land-use in area **D** (2793);
..... [1]
- (v) river **E** (2693);
..... [1]
- (vi) the class of road at **F** (2693).
..... [1]

(b) Study the River Sèche from the western edge of the map (250933) to the sea (275931).

(i) In which general direction does the river flow? Circle the correct answer.

east to west

north east to south west

north to south

west to east

[1]

(ii) Describe the shape of the river's course.

..... [1]

(iii) Measure the distance along the river, from the western edge of the map (250933) to the Hatchery (275931). Give your answer in metres.

.....metres [1]

(c) Fig. 2 is a cross section drawn along northing 96 from the western edge of the map at 250960 to 290960.

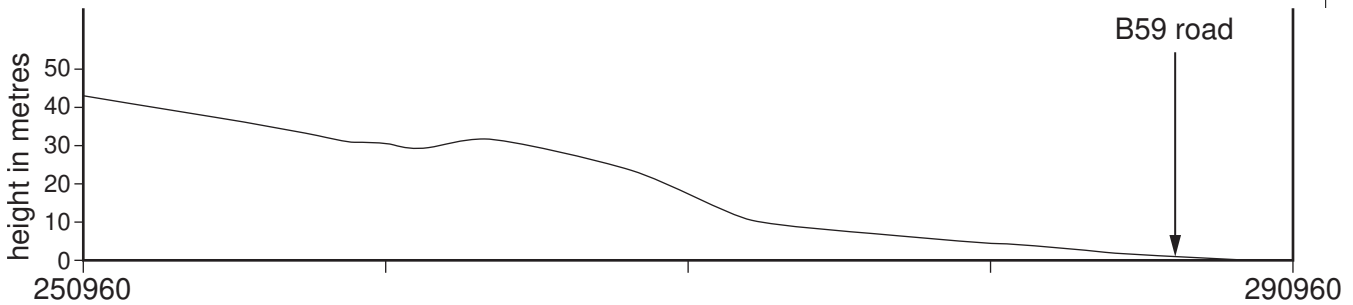


Fig. 2

On Fig. 2, using labelled arrows, mark the positions of:

(i) the old railway;

(ii) the B61 Quatre Cocos Road;

(iii) a hotel under construction.

[3]

2 Fig. 3 shows plates, plate margins and directions of plate movement.

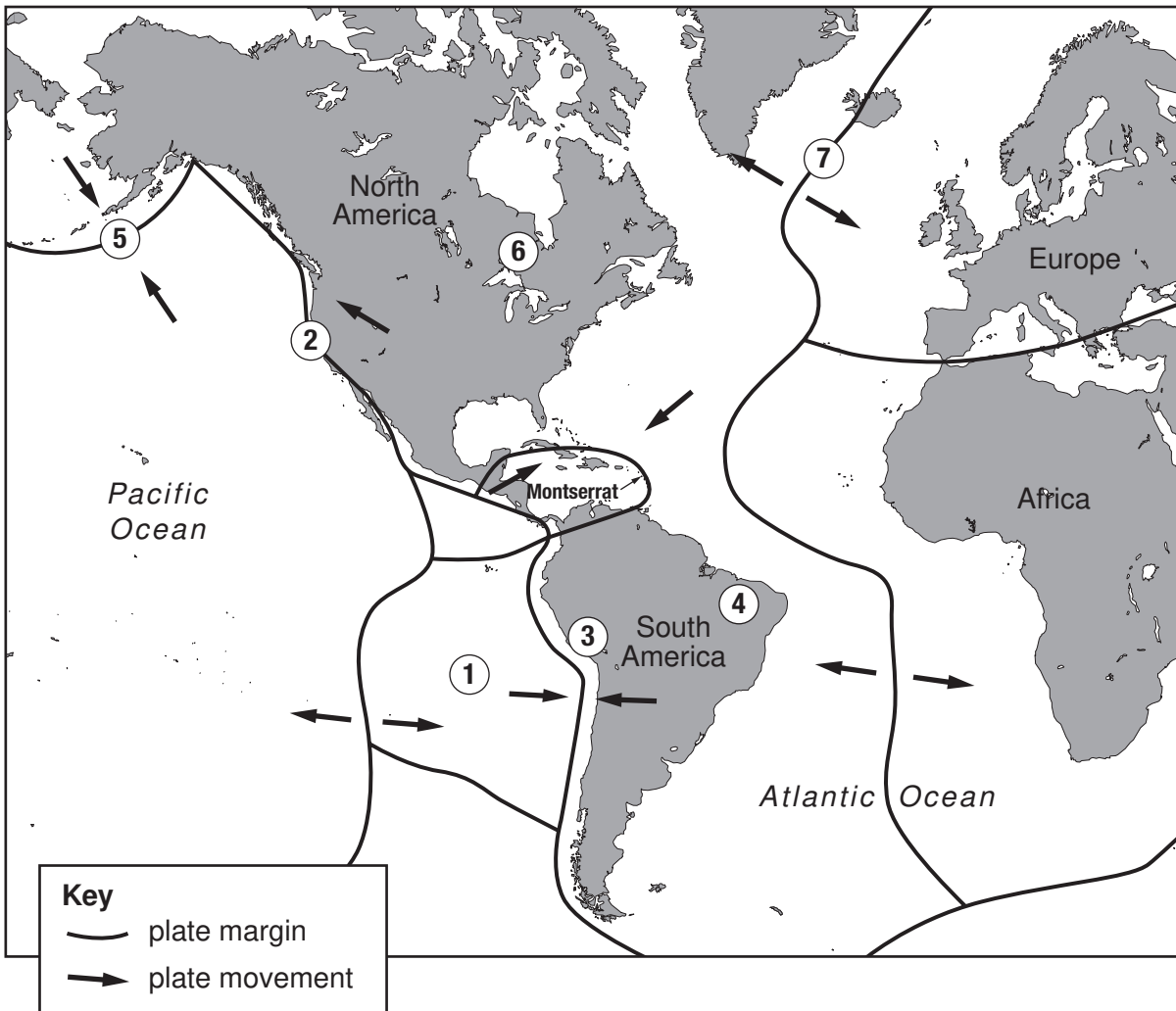


Fig. 3

(a) Seven places, 1 – 7, are marked on the map. For each question write **one** number in each box. You may use any of the numbers 1 – 7 once, more than once or not at all.

Which number on the map shows:

- (i) a place where plates are sliding past each other;
- (ii) a place where plates are moving towards each other;
- (iii) a place where sea floor spreading is happening;
- (iv) a fold mountain chain?

[4]

(b) The island of Montserrat is shown on Fig. 3. Read Fig. 4, an account of volcanic activity at Montserrat, and answer the questions which follow.

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Volcanic activity at Montserrat

On 18 July 1995 the Soufrière Hills volcano in the south of the island of Montserrat became active for the first time in 350 years. By April 1996 volcanic activity forced the evacuation of the capital, Plymouth, and most of the south of the island. On 27 June 1997 a pyroclastic flow led to the deaths of 19 people and, in the following months, destroyed the centre of Plymouth. A major eruption occurred on 12/13 June 2003, following the collapse of a lava dome. Dome growth was then renewed. In February 2006 dome collapse led to pyroclastic flows and ash clouds. On 20 May 2006 there was further dome collapse which caused heavy deposits of ash and mud in the inhabited areas in the south of the island.

Fig. 4

(i) Using information from Fig.4 only, name **two** volcanic hazards affecting Montserrat.

1

2 [1]

(ii) Using evidence from Fig. 3, suggest the causes of volcanic activity at Montserrat.

.....
.....
.....
.....
.....
.....
.....
..... [3]

[Total: 8 marks]

- 3 Table 2 shows the mean monthly temperatures and rainfall totals for an area with a tropical desert climate. Photograph A (Insert) shows the vegetation in the area.

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Table 2

	J	F	M	A	M	J	J	A	S	O	N	D
temperature (°C)	24	23	22	20	16	14	14	16	21	22	25	26
rainfall (mm)	40	42	40	30	8	12	2	–	2	10	18	22

- (a) (i) Use the information in Table 2 to complete Fig. 5, by adding the temperature and rainfall for October.

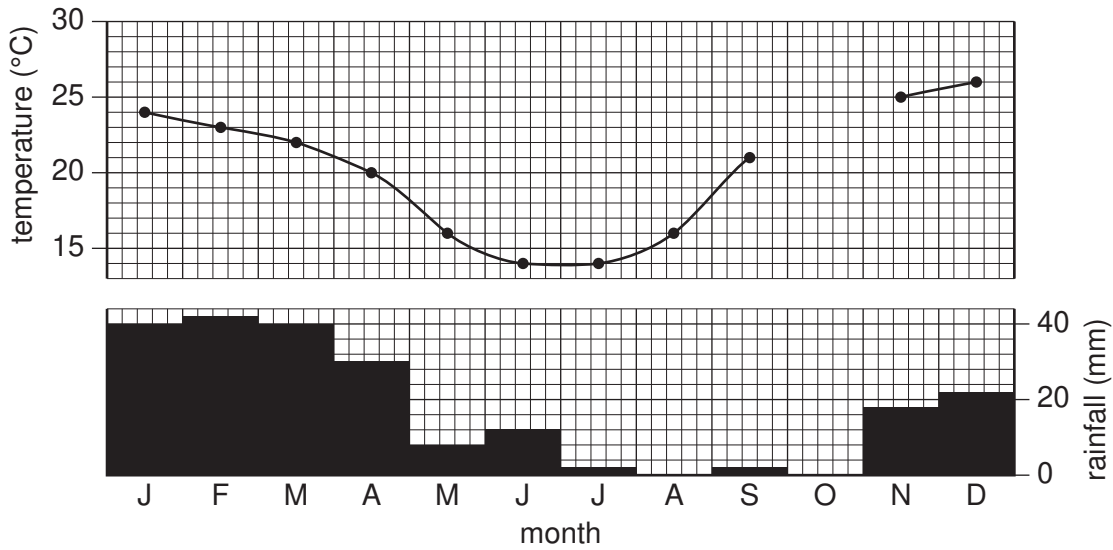


Fig. 5

[1]

- (ii) In which hemisphere is this area?

..... [1]

- (iii) Using the information in Table 2, calculate the annual temperature range.

.....°C [1]

- (iv) Using the information in Fig. 5, suggest why November and December are hotter than January and February.

.....

 [1]

- 4 (a) Table 3 shows numbers of international migrants given permission to stay in the United Kingdom and their reasons for moving. Fig. 6 shows this information in graphical form.

Table 3

year	Reasons for moving			
	family reasons	asylum	economic reasons	other reasons
	example: to join family	example: to escape war	example: to get a job	example:
1999	42 000	38 000	16 000	2 000
2001	57 000	29 000	15 000	6 000
2003	66 000	20 000	33 000	21 000

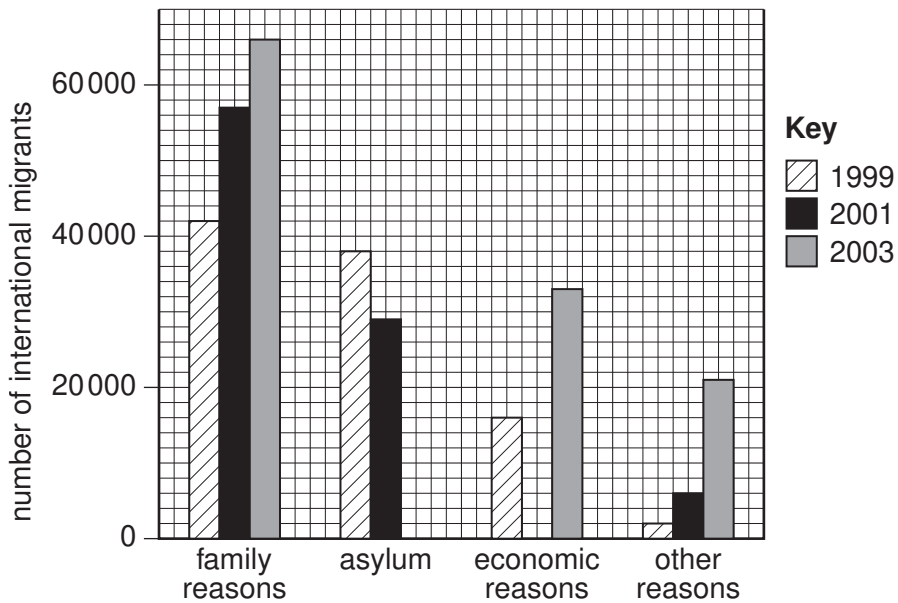


Fig. 6

- (i) Use the information in Table 3 to complete Fig. 6. Use the key provided. [2]

- (ii) Describe the changes in the numbers moving for asylum and economic reasons.

.....

.....

.....

..... [2]

- (iii) Complete Table 3 by adding an example of **one** other reason for migration. [1]

(b) Fig. 7 is a divided bar graph showing the origin of migrant workers in the United Kingdom in 2003.

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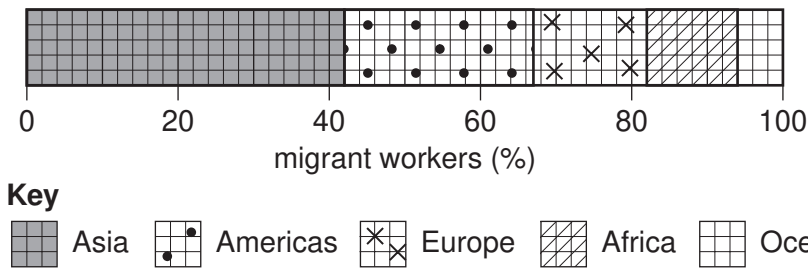


Fig. 7

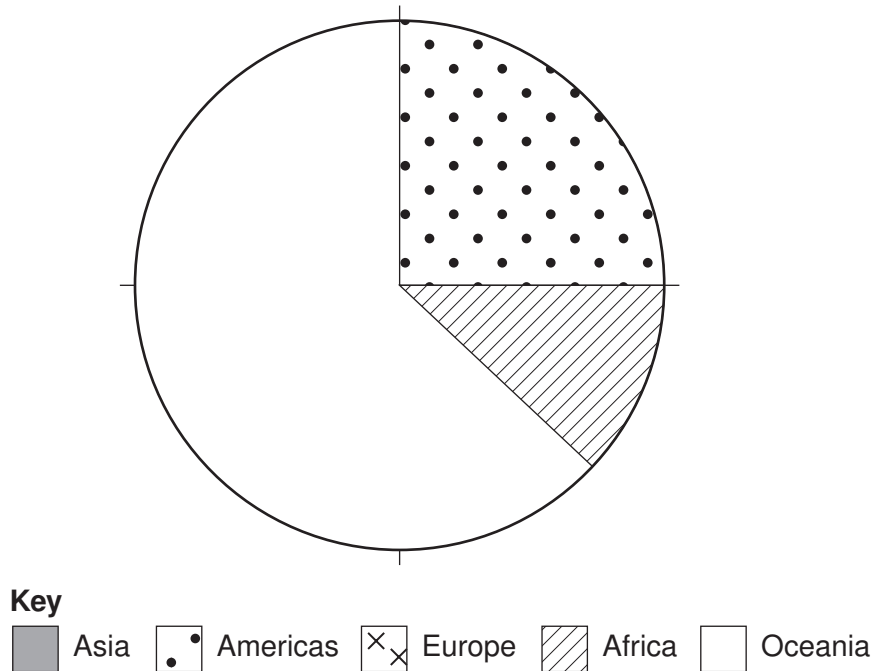
(i) Using information in Fig. 7, complete Table 4.

Table 4

	Asia	Americas	Europe	Africa	Oceania
Percentage of migrants	42		15		6

[1]

(ii) Use the information in Fig. 7 to complete Fig. 8. Use the key provided.



[2]

Fig. 8

[Total: 8 marks]

- 5 Table 5 shows the levels of air pollutants in named cities in MEDCs and LEDCs.

Table 5

Cities in more economically developed countries (MEDCs)

	Pollutant					
	sulphur dioxide	particles	lead	carbon monoxide	nitrogen oxides	ozone
London	□	□	□	●	□	□
New York	□	□	□	●	□	●
Los Angeles	□	●	□	●	●	■

Cities in less economically developed countries (LEDCs)

	Pollutant					
	sulphur dioxide	particles	lead	carbon monoxide	nitrogen oxides	ozone
Mexico City	■	■	●	■	●	■
Beijing	■	■	□	○	□	●
Seoul	■	■	□	□	□	□

Key

Levels of pollutants

■ serious ● high □ moderate ○ low

- (a) Of the cities in Table 5, which is:

(i) the most polluted city;.....

(ii) the least polluted city? [2]

- (b) (i) Which **two** pollutants reach the highest levels in the cities in MEDCs?

1 2

- (ii) Which **two** pollutants reach the highest levels in the cities in LEDCs?

1 2 [2]

(c) Table 6 shows the percentages of pollutants produced by vehicles in the cities.

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Table 6

Pollutant	sulphur dioxide	particles	lead	carbon monoxide	nitrogen oxides	ozone
Percentage produced by vehicles	4	14 – 50	1	70 – 90	more than 50	not produced directly

Which **two** pollutants have the highest percentages?

1 2 [1]

(d) Using Tables 5 and 6, name the MEDC city with the most pollution from vehicles.

..... [1]

(e) Suggest **two** means of reducing air pollution in cities.

1

.....

.....

2

.....

..... [2]

[Total: 8 marks]

6 Fig. 9 below is a map of a rural area in Lesotho, southern Africa. Fig. 10 is a cross section between points X and Y on the map. Study the map and the cross section and answer the questions which follow.

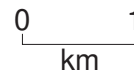
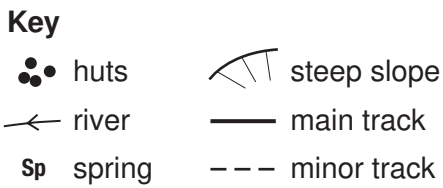
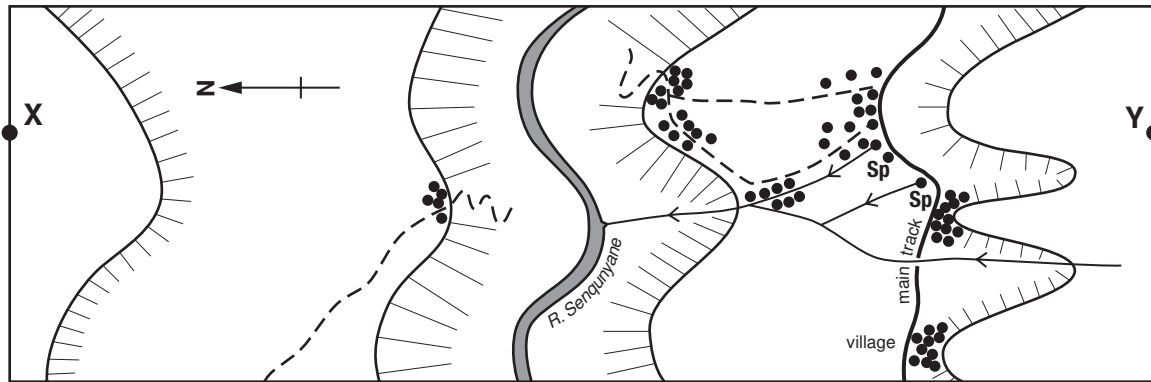


Fig. 9

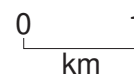
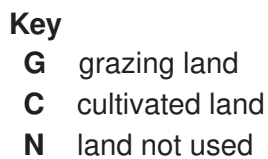
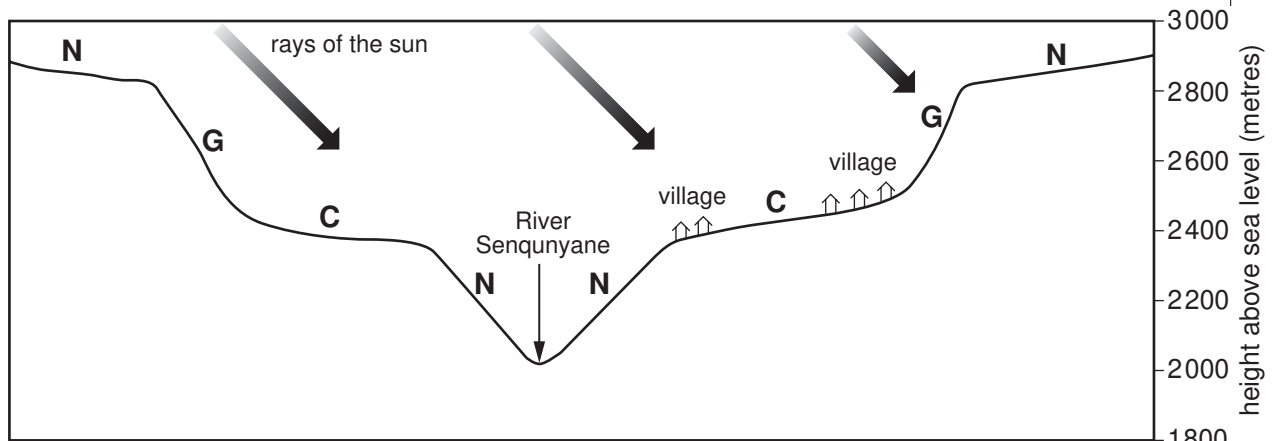


Fig. 10

(a) Estimate the difference in height between the River Senqunyane and the highest point in the area.

..... [1]

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Question 3 Photograph A D. A. Kelly © UCLES.

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