



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE
NAME

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GEOGRAPHY

0460/22

Paper 2

May/June 2011

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler
 Protractor
 Plain paper

1:50 000 Survey Map Extract is enclosed with this question paper.

READ THESE INSTRUCTIONS FIRST

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.

DO NOT WRITE ON ANY BARCODES.

Answer **all** questions.

The Insert contains Photograph A for Question 4.

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.

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



1 Study the map extract which is for Great Riversdale Estates, Zimbabwe. The scale is 1:50 000.

(a) Fig. 1 shows some of the features in the north east part of the map extract. Study Fig. 1 and the map extract, and answer the questions below.

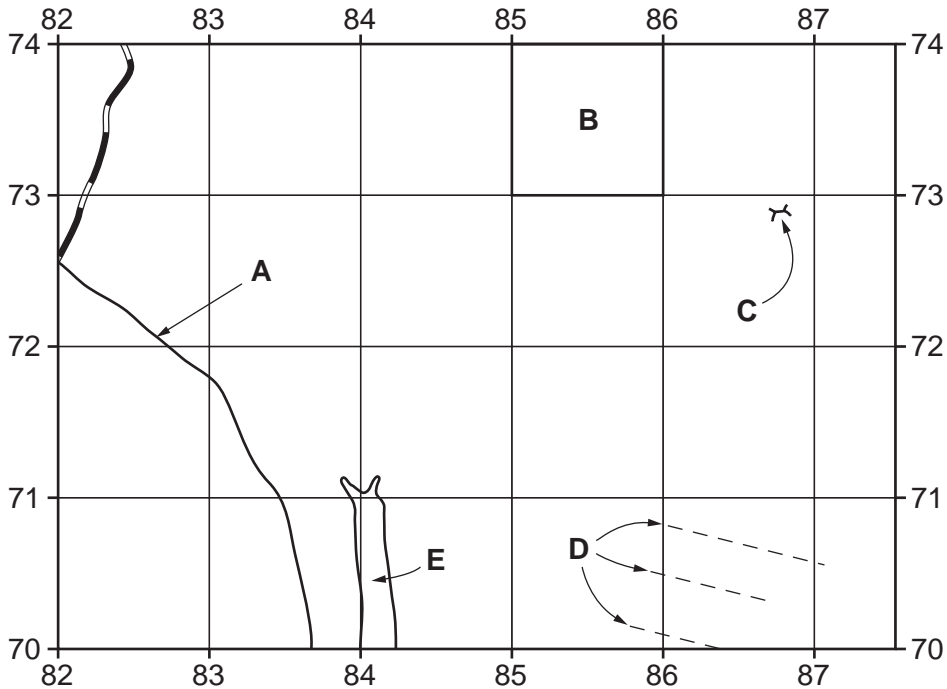


Fig. 1

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

- (i) the type of road at **A**;
 [1]
- (ii) the land use in area **B**;
 [1]
- (iii) feature **C**;
 [1]
- (iv) features **D**;
 [1]
- (v) the type of land in area **E**.
 [1]

(b) Study the area of orchard or plantation, shown by rows of small green squares, south east corner of the map extract.

(i) Which **one** of the following statements describes the relief of this area? Tick (✓) **one** correct answer in Table 1 below.

Table 1

Statement	Tick (✓)
steeply sloping	
a ridge	
gently sloping	
a spur	

[1]

(ii) What is the map evidence of water supplies for the orchard or plantation?

.....
..... [1]

(iii) What is the map evidence of power supplies to the orchard or plantation?

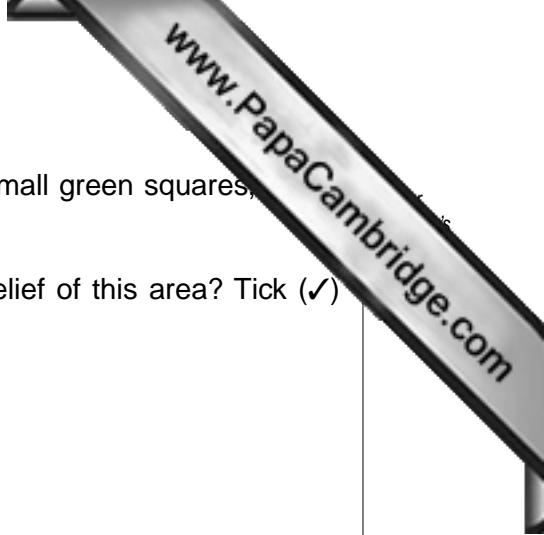
.....
..... [1]

(iv) What map evidence shows that housing is available for workers?

.....
..... [1]

(v) How can the crops be transported away from the orchard or plantation? State the map evidence.

.....
..... [1]



(c) Find the point where the narrow tarred road crosses the railway in Jumbo Reserve.

(i) State the six figure grid reference of this point.

..... [1]

(ii) State the direction from the point in (c)(i) to Foyle Estate (8165).

..... [1]

(iii) Measure the compass bearing from the point in (c)(i) to where the railway meets the southern edge of the map. Tick **one** correct answer in Table 2 below.

Table 2

Answer	Tick (✓)
33°	
205°	
213°	
220°	

[1]

(d) The following table gives information about land use in the area of the map extract. Complete Table 3 below by adding **one** tick for each row.

Table 3

		Type of land		
		steep slopes	gentle slopes	next to rivers
Land use	cultivation			
	seasonal marsh			
	dense bush			

[3]

(e) Fig. 2 shows an area in the north west of the map extract.

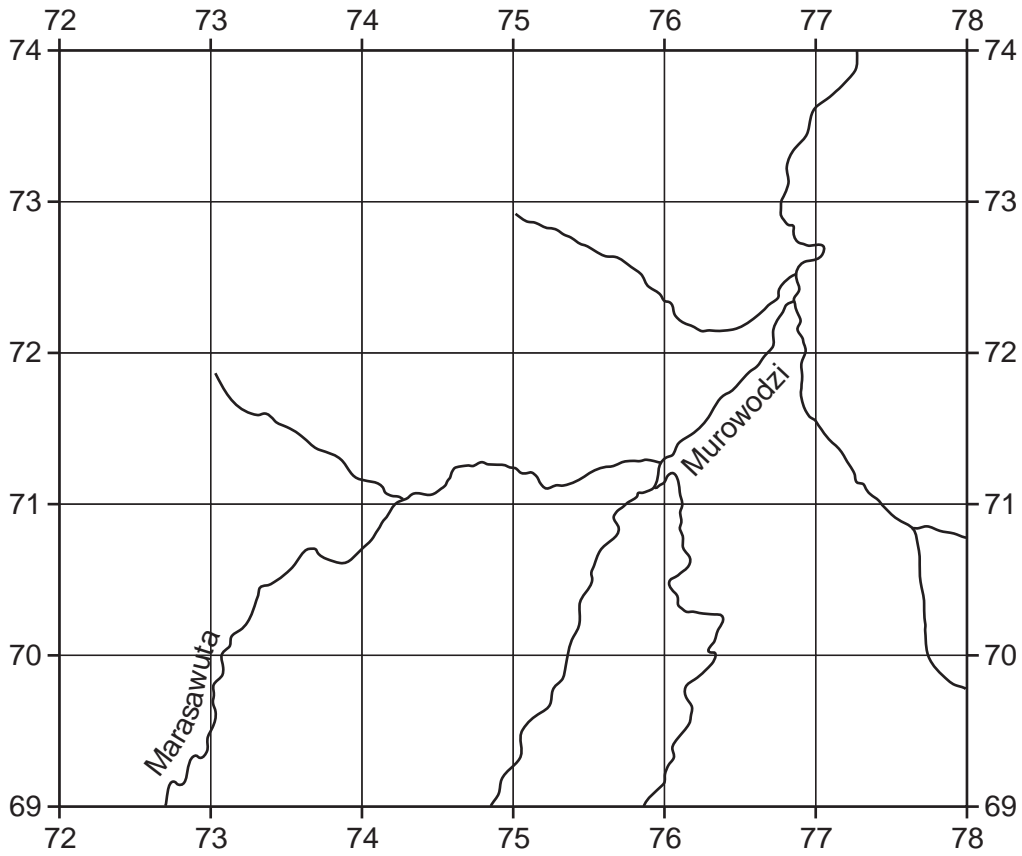


Fig. 2

Describe the drainage of this area.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [4]

[Total: 20 marks]

2 Table 4 gives information about employment in three countries.

Table 4

Country	Percentage of employment		
	primary industry	secondary industry	tertiary industry
Australia	4	21	75
Malaysia	13	36	51
Bangladesh	63	11	26

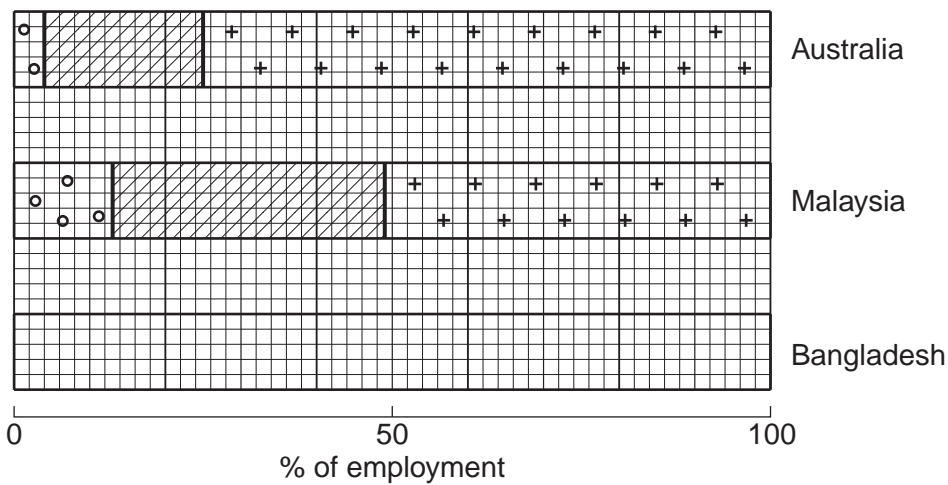
(a) State **one** example of a:

(i) primary industry; [1]

(ii) secondary industry; [1]

(iii) tertiary industry [1]

(b) Use information from Table 4 to complete Fig. 3 below. Use the key provided. [3]



Key
○ primary / secondary + tertiary

Fig. 3

- (c) As a country becomes more economically developed over time, the employment structure changes. Fig. 4 shows how this might occur.

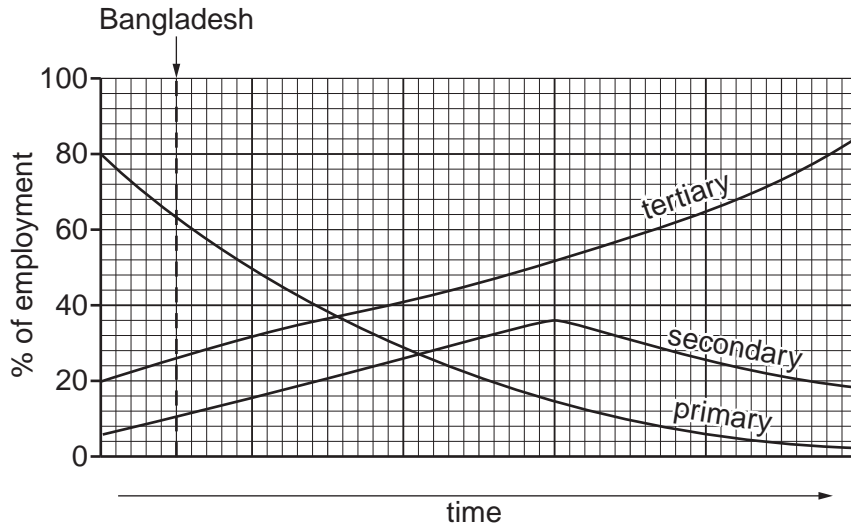


Fig. 4

Using information from Table 4, plot Australia (an MEDC) and Malaysia on Fig. 4. Bangladesh (an LEDC) has already been done for you.

[2]

[Total: 8 marks]

3 (a) Fig. 5 shows how the total population of the world has changed.

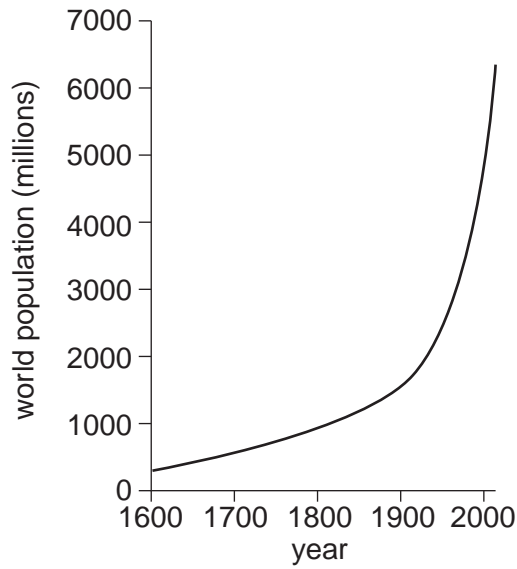


Fig. 5

Describe the changes shown by Fig. 5.

.....

.....

.....

..... [2]

(b) Fig. 6 (opposite) shows the percentage of the population over the age of 60 in six countries with large populations.

(i) Which country shown on Fig. 6:

had the largest percentage of over-60s in 2005;

will have the greatest increase in percentage of over-60s? [2]

(ii) Suggest **one** problem the changes shown on Fig. 6 will cause for the governments of the countries.

.....

.....

..... [1]

Percentage of the population over the age of 60

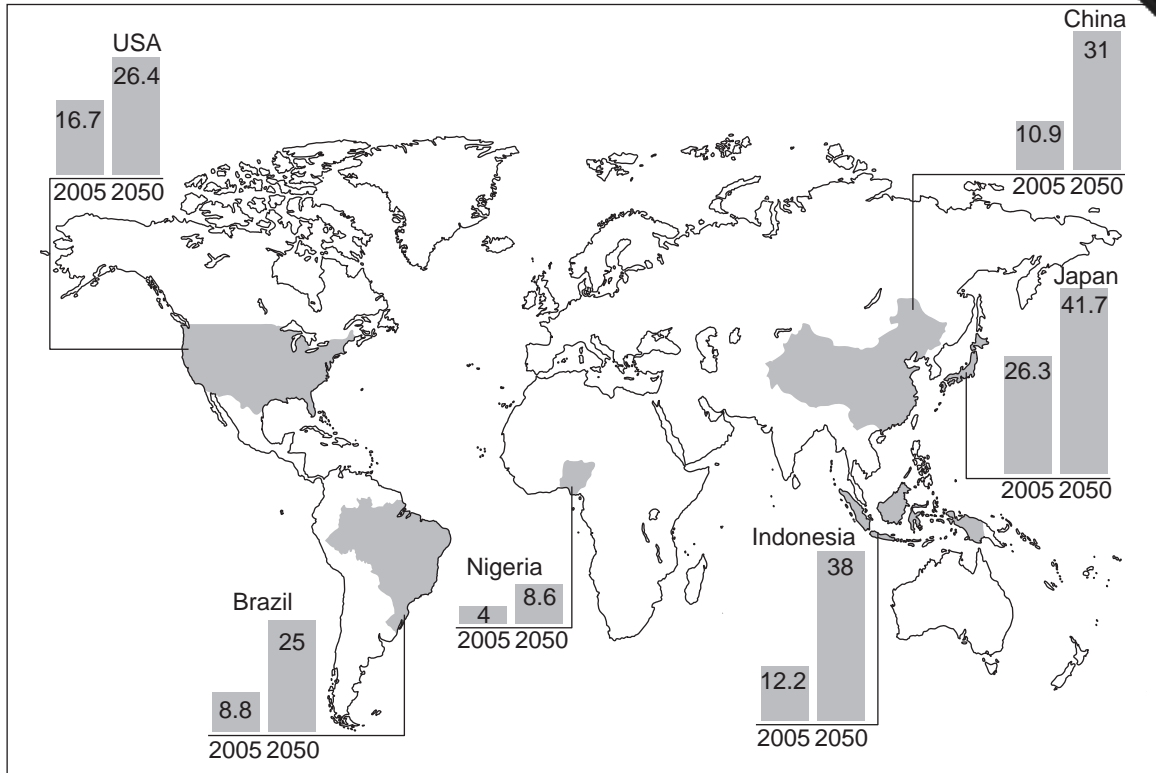


Fig. 6

(c) Fig. 7 shows the current population growth rate and life expectancy of the same countries.

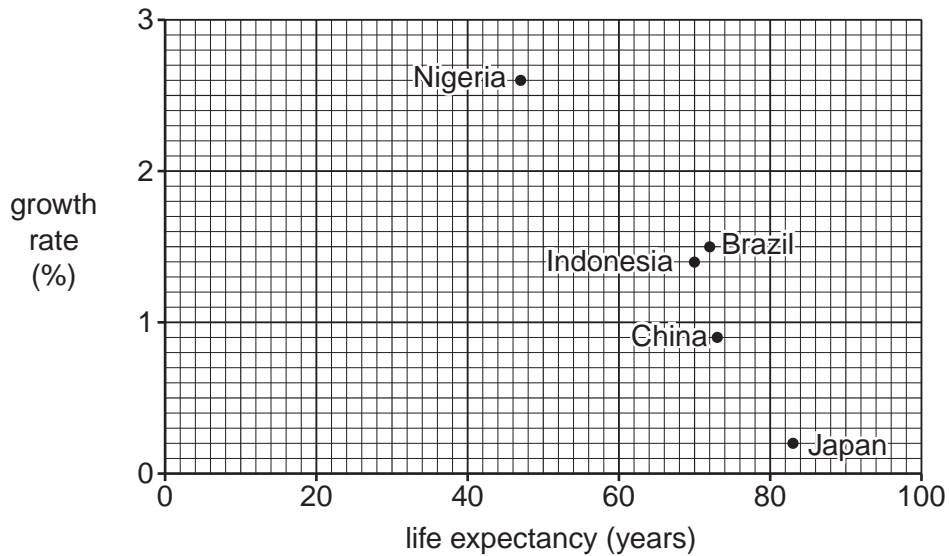


Fig. 7

(i) USA has a life expectancy of 78 and a population growth rate of 1%. Plot this information on Fig. 7. [1]

(ii) Describe the relationship, shown on Fig. 7, between life expectancy and growth rate.

..... [1]

(iii) State **one** other factor, apart from life expectancy, which affects population growth rate.

..... [1]

- 4 Photograph A (Insert), shows a river channel and the surrounding area. Fig. 8 shows a student's field sketch of the same area.

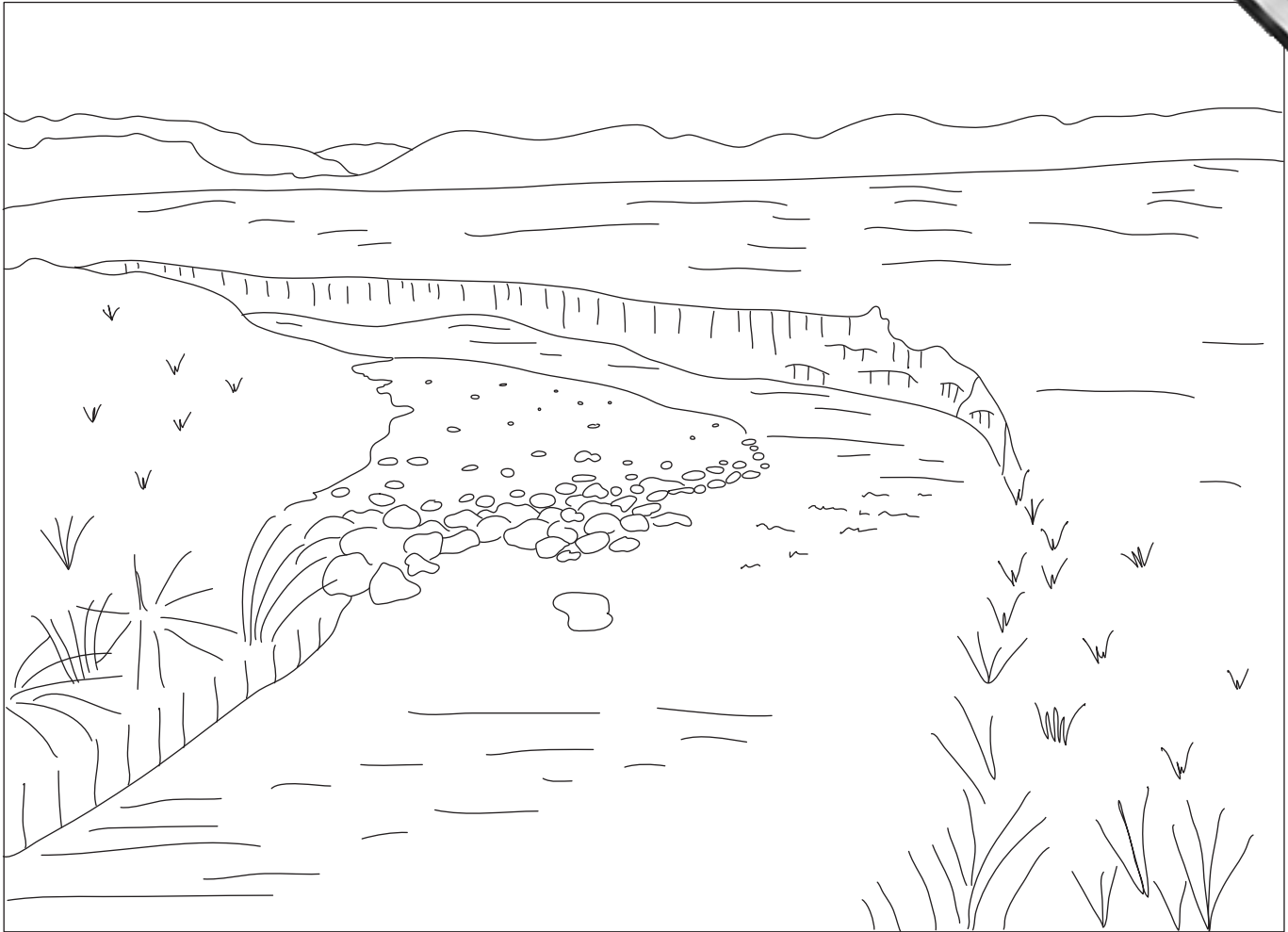


Fig. 8

- (a) (i) On Fig. 8, use the correct letter to show the position of:
- a place in the channel where erosion occurs (E);
 - a place in the channel where deposition occurs (D);
 - the flood plain (F).
- (ii) On Fig. 8, sketch a likely future position of the channel.

[3]

[1]

- (b) The student investigated the processes of river transport. The paragraph below is a copy of the student's field notes.

Using Photograph A, complete the paragraph using **four** of the following words:

muddy

boulders

slower

solution

faster

sand

clear

traction

"The material on the river bed (the bed load) can easily be seen. This material is mostly The process which transported this material is most likely to have been The water in the river is, so I think suspension is not taking place today. The material on the bed of the river does not seem to be being transported downstream today. I think it could have been moved when there was more water in the river and the water was flowing"

[4]

[Total: 8 marks]

5 Figs 9A and 9B show the climate at two places in Africa. Fig. 10 (below) shows locations, X, Y and Z.

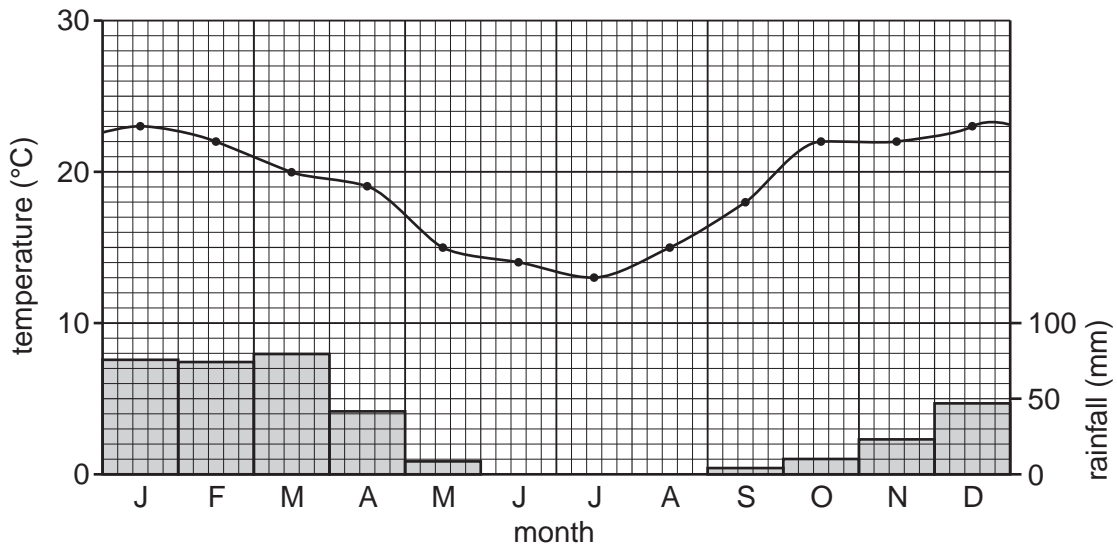


Fig. 9A

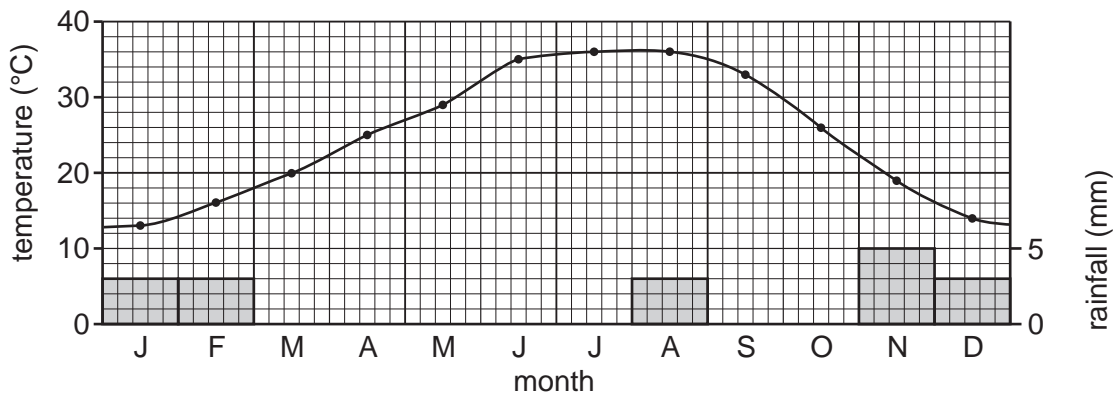
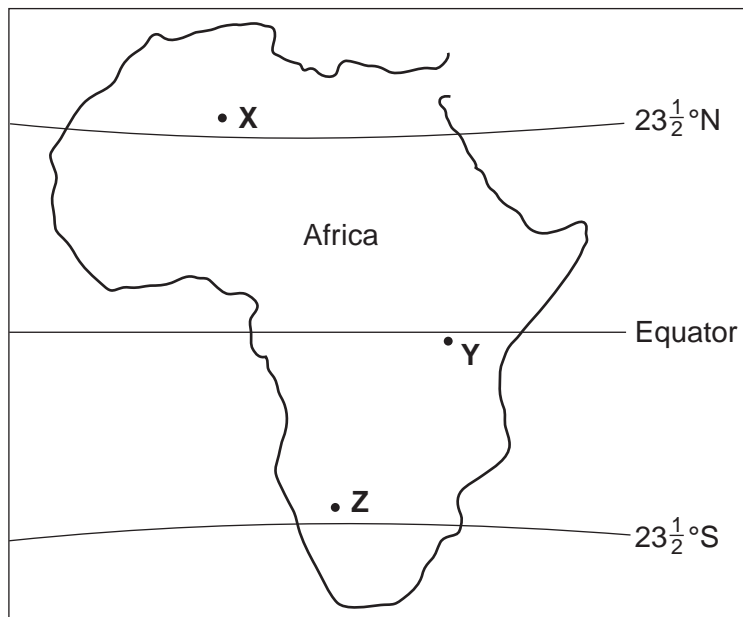


Fig. 9B



- (a) Figs 9A and 9B show the climate at two of the three locations shown on Fig. 9C. For each climate, state which is the correct location, either X, Y or Z.

Fig.9A

Fig. 9B

[2]

- (b) (i) Describe the temperature and rainfall shown on Fig. 9A. There is no need to use statistics in your answer.

.....
.....
.....
.....
.....
.....
.....
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.....
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.....
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.....

[4]

- (ii) Give **two** reasons for the low rainfall total shown on Fig. 9B.

1

.....

2

.....

[2]

[Total: 8 marks]

6 Fig. 11 is a map showing a town and the route of a proposed new road.

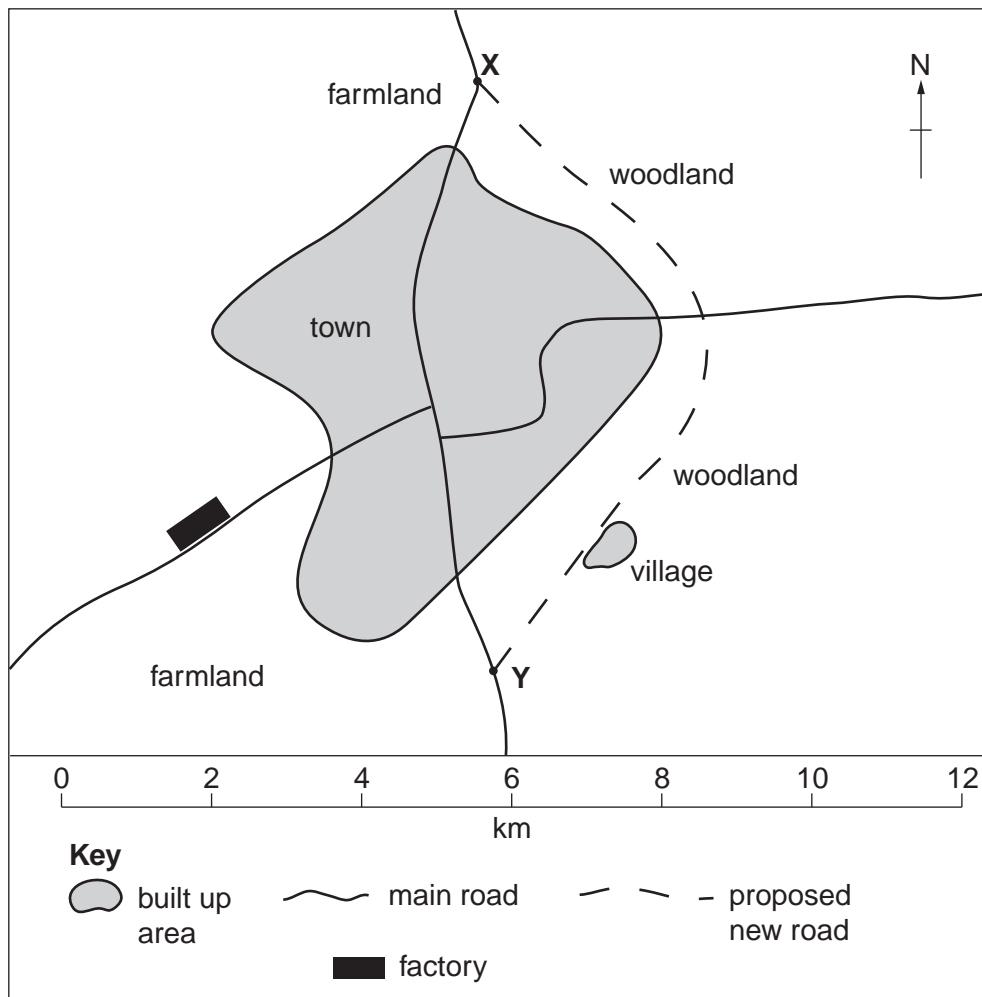


Fig. 11

Table 5 compares the main road through the town with the proposed new road.

Table 5

	main road through the town	new road
distance from X to Y	8 km	
average speed of vehicles between X and Y	32 km/hour	100 km/hour
average journey time between X and Y	15 minutes	



(a) Use information in Fig. 11 to complete Table 5.

(b) Using Fig. 11 and Table 5, suggest **one** reason why each of the following people either for or against the proposed new road.

(i) Long distance lorry driver – *For* ✓

Reason
.....
..... [1]

(ii) Resident of village – *Against* ✗

Reason
.....
..... [1]

(iii) Town resident – *For* ✓

Reason
.....
..... [1]

(iv) Owner of shop in CBD – *Against* ✗

Reason
.....
..... [1]

(v) Manager of factory – *Against* ✗

Reason
.....
..... [1]

(vi) Environmental action group – *Against* ✗

Reason
.....
..... [1]

[Total: 8 marks]

Copyright Acknowledgements:

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Question 3 Figure 7	© The Observer; 8 March 2009.
Photograph A	D A Kelly © UCLES.

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