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Cambridge IGCSE

Cambridge Assessment International Education
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

GEOGRAPHY **0460/23**

Paper 2 **May/June 2019**

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler
Plain paper
Calculator

1:50 000 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 an HB pencil for any diagrams or graphs.
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 **all** questions.

The Insert contains Figs. 4.1 and 4.2 for Question 4.
The Survey Map Extract and the Insert are **not** required by the Examiner.
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 syllabus is regulated for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **18** printed pages, **2** blank pages and **1** Insert.

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1 Study the map extract for Kristianstad, Sweden. The scale is 1:50 000.

Fig. 1.1 shows some of the features in the south of the map extract.

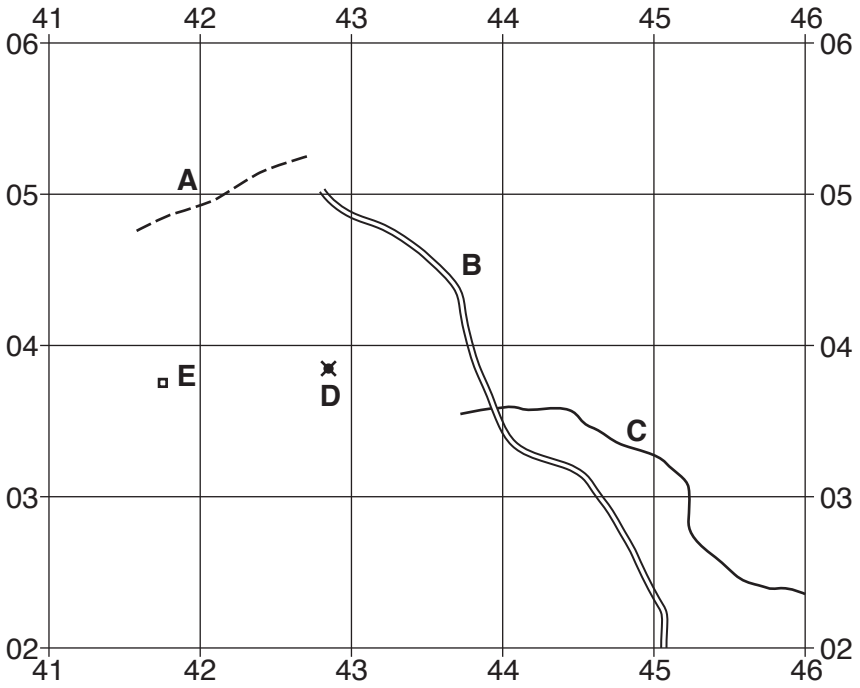

Fig. 1.1

(a) Using the map extract, identify the following features shown on Fig. 1.1:

(i) feature **A**

.....[1]

(ii) the type of road **B**

.....[1]

(iii) the width of the watercourse **C**

.....[1]

(iv) the feature at **D**

.....[1]

(v) the feature at **E**.

.....[1]

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(b) Fig. 1.2 shows three types of natural vegetation, **F**, **G** and **H**, in grid square 5007 in the east of the map extract.

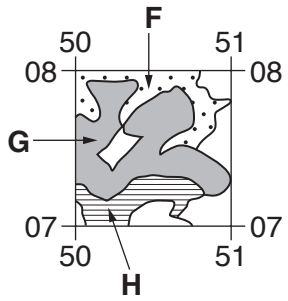

Fig. 1.2

Complete the table to identify the types of natural vegetation **F**, **G** and **H**, shown in Fig. 1.2.

Letter	Natural vegetation
F	.....
G	.....
H	.....

[3]

(c) **(i)** What is the grid reference of the centre of the triangulation point near Björkhäll in the south east of the map extract?

..... [1]

(ii) Identify the settlement pattern in the grid square in which Björkhäll is located.

.....

.....[1]

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(d) Fig. 1.3 shows the location of one of the industrial areas in Kristianstad.

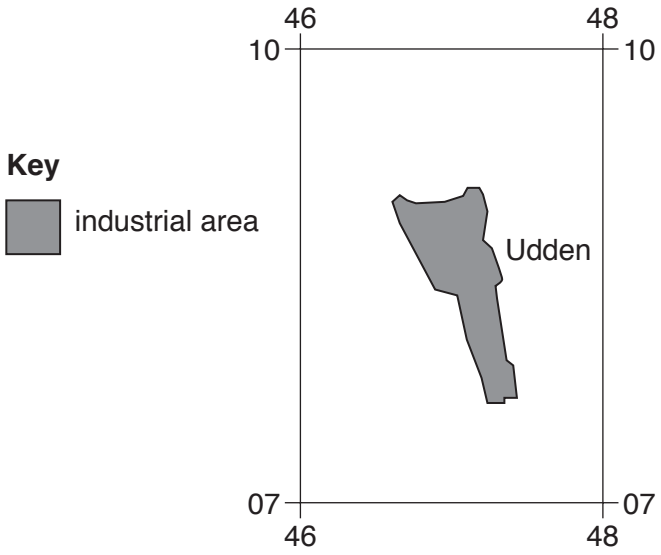

Fig. 1.3

Describe the advantages for industry of the location of this industrial area.

.....

.....

.....

.....

.....

.....

.....

.....[4]

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(e) Which **three** of the statements about Kristianstad are correct? Tick **three** correct statements below.

	Tick (✓)
high-rise buildings are found only in the town centre	
it is a village	
it is between 5 and 10 metres above sea level	
sport and leisure are important functions of the settlement	
the CBD is on the east side of the river Helge å	
there are areas of forest within the town	

[3]

(f) Fig. 1.4 shows an area in the north west part of the map extract, divided into two parts, **K** and **L**.

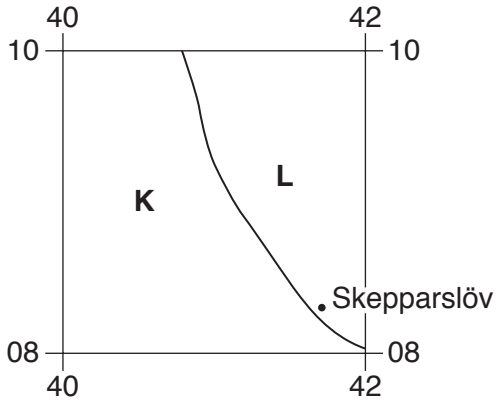

Fig. 1.4

Give **two** differences between the **relief** of areas **K** and **L**.

1 .....

.....

2 .....

.....[2]

(g) What is the name of the small settlement which is 1200 metres from, and on a bearing of 90° from, the small settlement Stensborg in grid square 4004?

.....[1]

[Total: 20]

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2 Fig. 2.1 shows Russia's natural population growth rate and birth and death rates between 1990 and 2015.

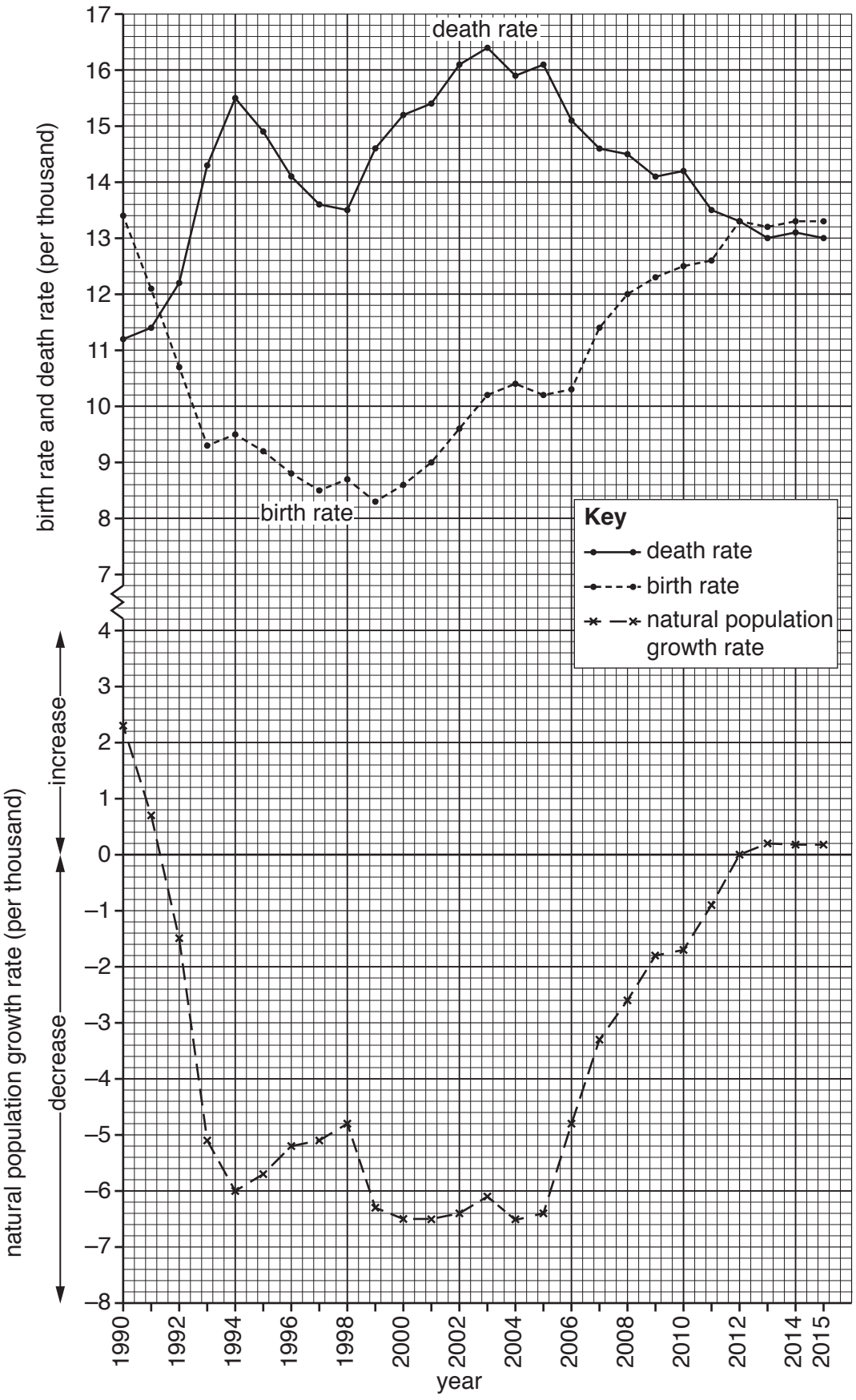

Fig. 2.1

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(a) Use Fig. 2.1 to answer the questions that follow.

(i) What was the highest death rate during the period 1990 and 2015?

..... per 1000. [1]

(ii) Which year had the lowest birth rate? .....[1]

(iii) Identify a year in which Russia had zero natural population growth.

.....[1]

(iv) Explain why there was zero natural population growth in the year you have identified in **(a)(iii)**.

.....

.....[1]

(v) Tick the statement which describes how the changes between 1994 and 2005 would have affected Russia's population total.

Between 1994 and 2005 ...	Tick (✓)
... the population total decreased	
... the population total increased	
... the population total stayed the same	

[1]

(vi) State evidence from Fig. 2.1 to explain your answer to **(a)(v)**.

.....

.....[1]

(vii) Tick the statement which describes the change in Russia's population total since 2013.

Since 2013 ...	Tick (✓)
... the population total decreased	
... the population total increased	
... the population total stayed the same	

[1]

(b) State the other factor, **not** shown on Fig. 2.1, which can change a country's population total.

.....[1]

[Total: 8]

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3 Figs. 3.1, 3.2 and 3.3 show information about a river and its valley in a country with intense rainstorms. The dam was built to control the flow of the river to reduce flooding.

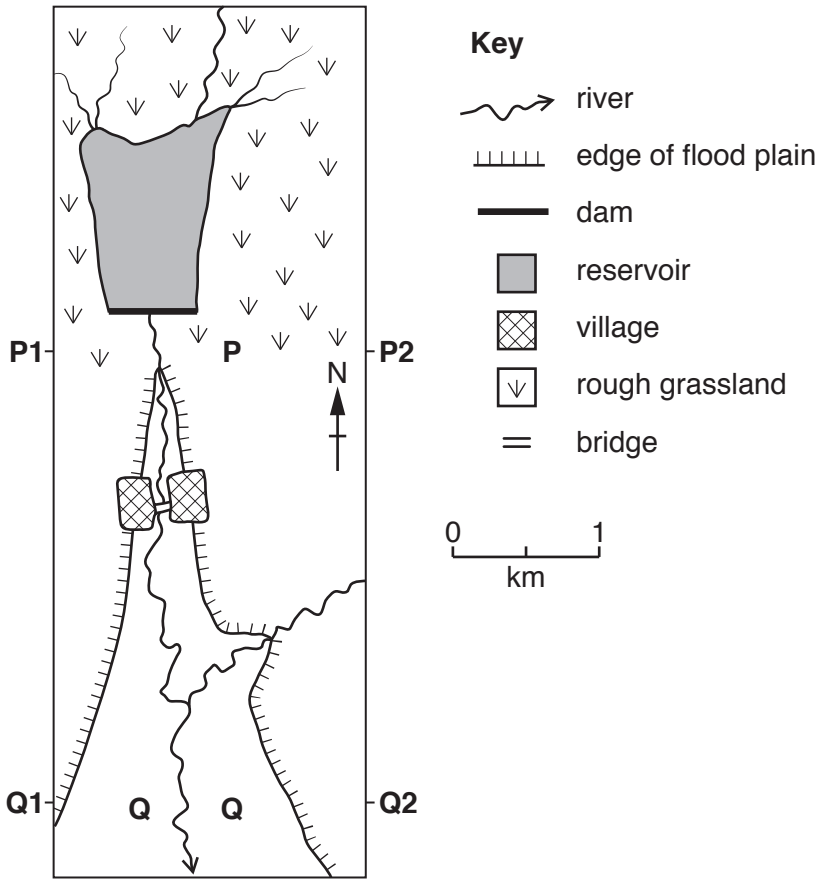


Fig. 3.1

cross section of the valley at **P**

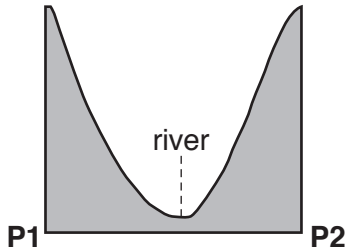


Fig. 3.2

cross section of the valley at **Q**

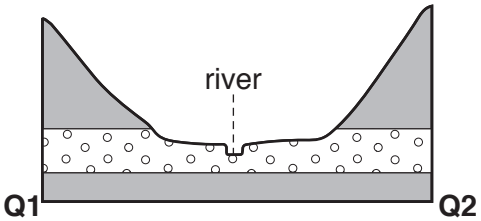
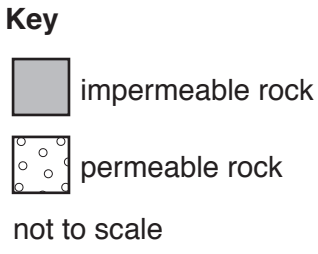


Fig. 3.3



(a) (i) Explain why the cross sectional shape of the valley at **P**, shown in Fig. 3.2, causes a rapid rise in the river level after rain.

.....

.....[1]

(ii) Circle below the river process which will decrease as river flow increases.

deposition erosion transportation [1]

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(iii) Use Fig. 3.1 to explain why there is more water in the river at **Q** than near the village.

.....

.....[1]

(b) (i) The river is allowed to flood the valley floor in area **Q**. Explain why this helps to reduce floods further downstream.

.....

.....[1]

(ii) Using Figs. 3.1 and 3.3, explain why area **Q** is a good location to allow flooding to occur.

.....

.....

.....

.....[2]

(c) Some people living in the village argued that the dam shown in Fig. 3.1 should not be built.

Give **two** disadvantages of a dam to support their opinion.

1 .....

.....

2 .....

.....[2]

[Total: 8]

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4 Figs. 4.1 and 4.2 (Insert) show different hot desert environments.

(a) (i) Describe the natural vegetation in Fig. 4.1.

.....

.....

.....

.....

.....

.....[3]

(ii) State **two** difficulties for plants growing on the type of ground surface shown in Fig. 4.1.

1 .....

.....

2 .....

.....[2]

(b) Describe ways in which the ecosystem in Fig. 4.2 is different from that in Fig. 4.1.

.....

.....

.....

.....

.....

.....[3]

[Total: 8]

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TURN PAGE FOR QUESTION 5

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5 **(a)** Table 5.1 gives information about Farm **R**, a farm in Canada and Farm **S**, a farm in South Africa.

Table 5.1

Farm feature	Farm **R** – an extensive farm	Farm **S** – an intensive farm
size of farm (ha)	600	20
average field size (ha)	100	0.3
land use	wheat, with some oats and barley	vegetables and some maize
total yield (tonnes per year)	1800	800
yield (tonnes per hectare)	3	40
labourers	4	34
other inputs	planting machines combine harvesters pesticide and fertiliser sprayers improved seeds	1000 kg of fertiliser per hectare sprinkler irrigation hand tools

(i) Using information from Table 5.1 **only**, explain why machines are used on Farm **R**.

.....

.....

.....

.....[2]

(ii) Circle below the type of farming that Farms **R** and **S** are both examples of.

arable mixed pastoral subsistence [1]

(iii) Explain why the owner of Farm **S** uses the 'other inputs' listed.

fertiliser .....

.....

irrigation .....

.....

hand tools .....

.....[3]

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(b) Farm **R** is extensive because it is a large farm in comparison with its small number of labourers.

Use Table 5.1 to compare **two** farm features of Farm **S** to show that it is an **intensive** farm.

.....

.....[2]

[Total: 8]

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6 **(a)** Figs. 6.1 and 6.2 show the human and livestock populations of Kenya from 1995 to 2015.

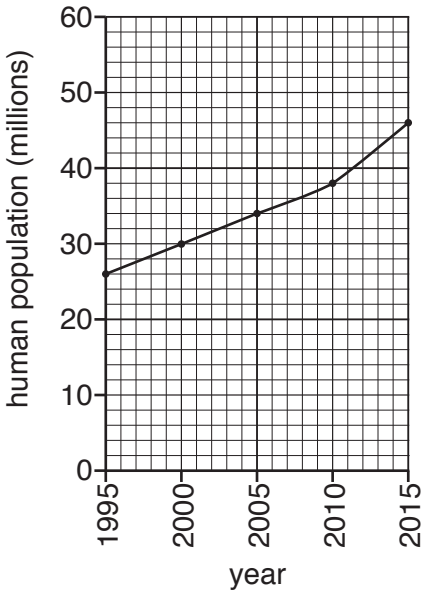

Fig. 6.1

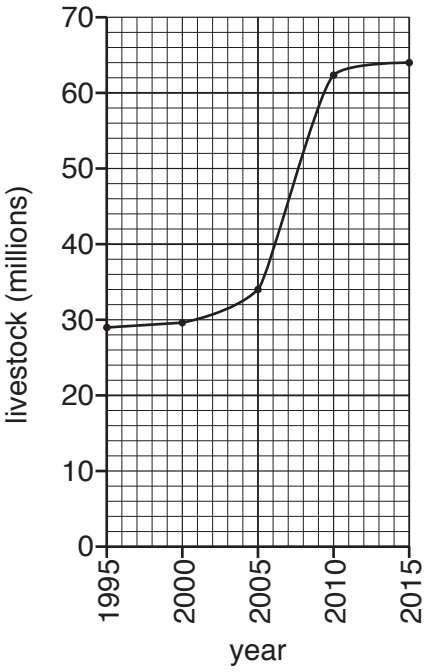

Fig. 6.2

Describe **two** differences between the growth of the human and livestock populations in Kenya between 1995 and 2015.

1 .....

.....

2 .....

.....[2]

(b) Fig. 6.3 shows the natural vegetation of Kenya.

The annual rainfall decreases from more than 2000 mm in the south west to 250 mm in the north east of the country and large areas of it are affected by desertification.

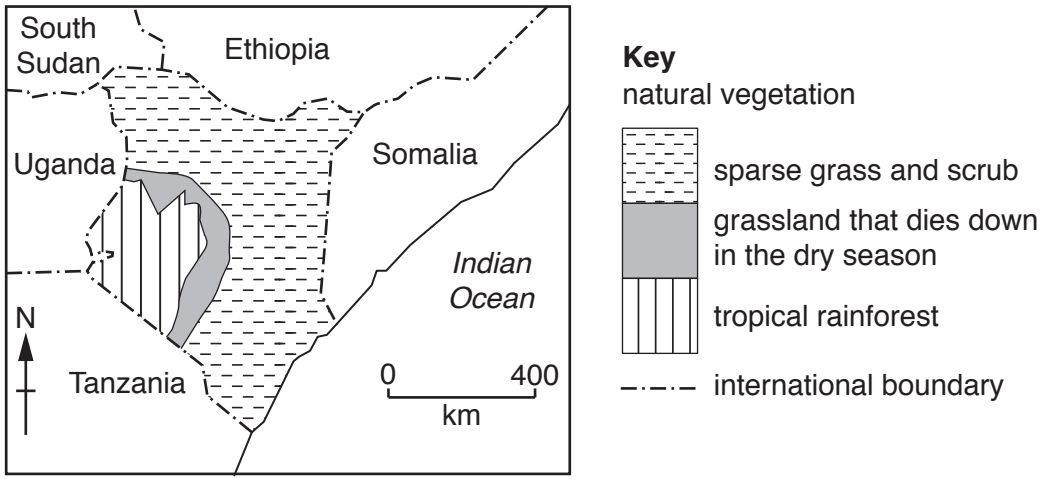

Fig. 6.3

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(i) Use Fig. 6.3 to explain why increasing livestock numbers are not sustainable in Kenya.

.....

.....[1]

(ii) In the dry season herders move their livestock in search of water and pasture. Explain how their movement damages the environment.

.....

.....[1]

(c) Fig. 6.4 shows processes that cause desertification.

Write in the empty boxes in Fig. 6.4 **two** ways in which growth in human and livestock populations cause desertification.

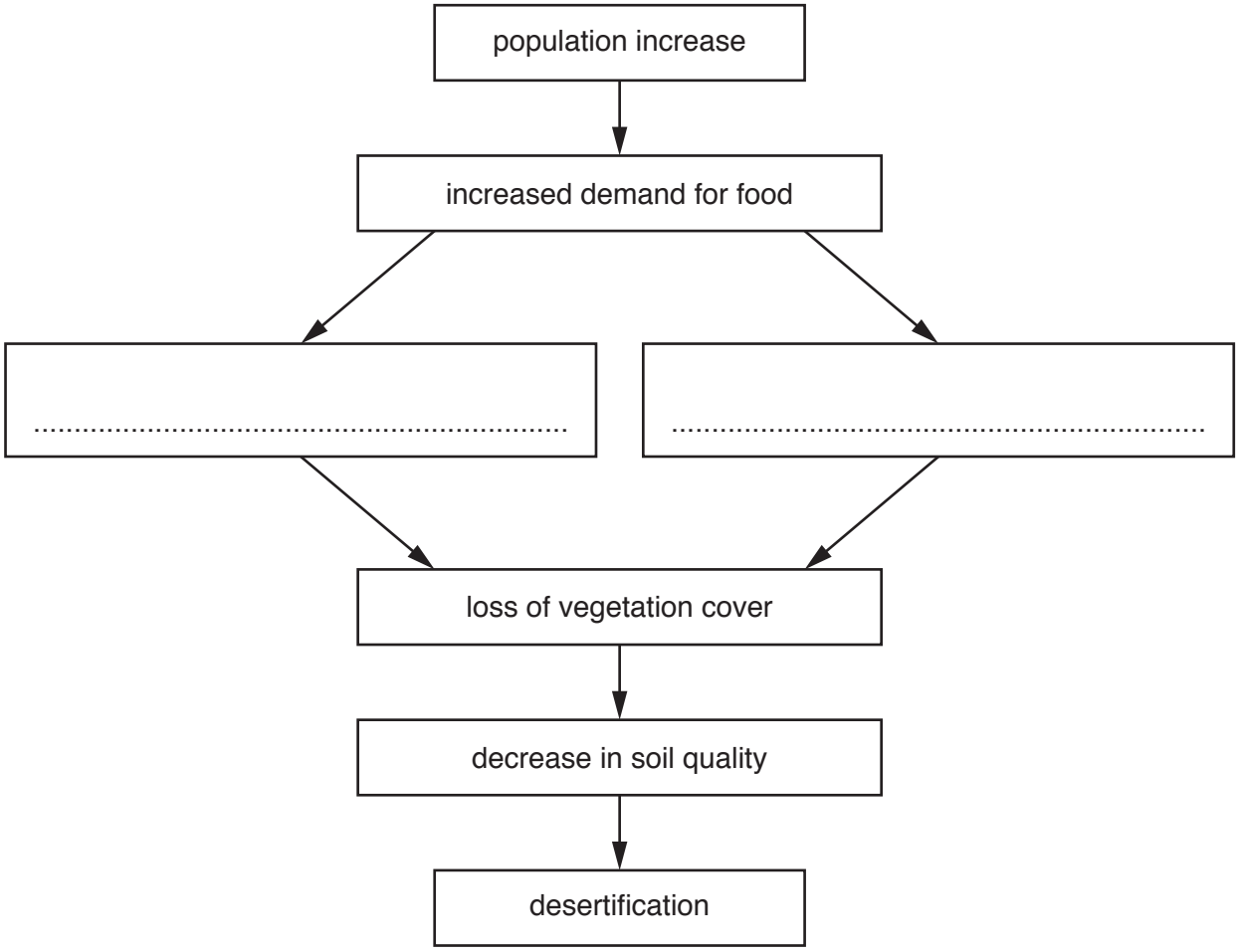

Fig. 6.4

[2]

(d) Give **one** problem of the following ways of reducing desertification.

(i) Reduce the number of livestock.

.....

.....[1]

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(ii) Use oil or gas in stoves instead of wood or charcoal.

.....

.....[1]

[Total: 8]

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Additional Pages

If you use the following lined pages to complete the answer(s) to any question(s), the question number(s) must be clearly shown.

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