



# Cambridge IGCSE™

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## GEOGRAPHY

0460/12

Paper 1 Geographical Themes

February/March 2020

1 hour 45 minutes

You must answer on the question paper.

You will need: Insert (enclosed)  
Calculator  
Ruler

### INSTRUCTIONS

- Answer **three** questions in total, **one** from each section.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- If additional space is needed, you should use the lined pages at the end of this booklet; the question number or numbers must be clearly shown.

### INFORMATION

- The total mark for this paper is 75.
- The number of marks for each question or part question is shown in brackets [ ].
- The insert contains additional resources referred to in the questions.

Definitions

MEDCs – More Economically Developed Countries

LEDCs – Less Economically Developed Countries

This document has **32** pages. Blank pages are indicated.

**Section A**

Answer **one** question from this section.

1 (a) Study Fig. 1.1 (Insert), which shows information about population change in 2016.

(i) Which of the following is the formula used to calculate population change in a country?

Tick (✓) **one** answer in the table below:

	Tick (✓)
birth rate – death rate × 1000	
birth rate – death rate +/- net migration	
birth rate – death rate + immigration	
birth rate +/- net migration	

[1]

(ii) Put the following countries in rank order according to their annual average rate of population change.

Brazil                      Canada                      Ethiopia                      Mali

1<sup>st</sup> ..... Highest growth  
 2<sup>nd</sup> .....  
 3<sup>rd</sup> .....  
 4<sup>th</sup> ..... Lowest growth

[2]

(iii) Describe the distribution of countries with a **decrease** in population.

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

(iv) Suggest why some countries shown in Fig. 1.1 have experienced a **decrease** in population.

.....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 ..... [4]

(b) Study Fig. 1.2, which shows three factors which can reduce population growth.



Fig. 1.2

(i) Explain how each of the factors shown in Fig. 1.2 can reduce population growth.

Pensions .....  
 .....  
 .....

Equality for women .....  
 .....  
 .....

Improved health care .....  
 .....  
 ..... [3]

(ii) Describe **other** population policies which governments have used to reduce population growth rates.

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..... [5]



2 (a) Study Fig. 2.1, which shows information about two urban land use models based on MEDCs.

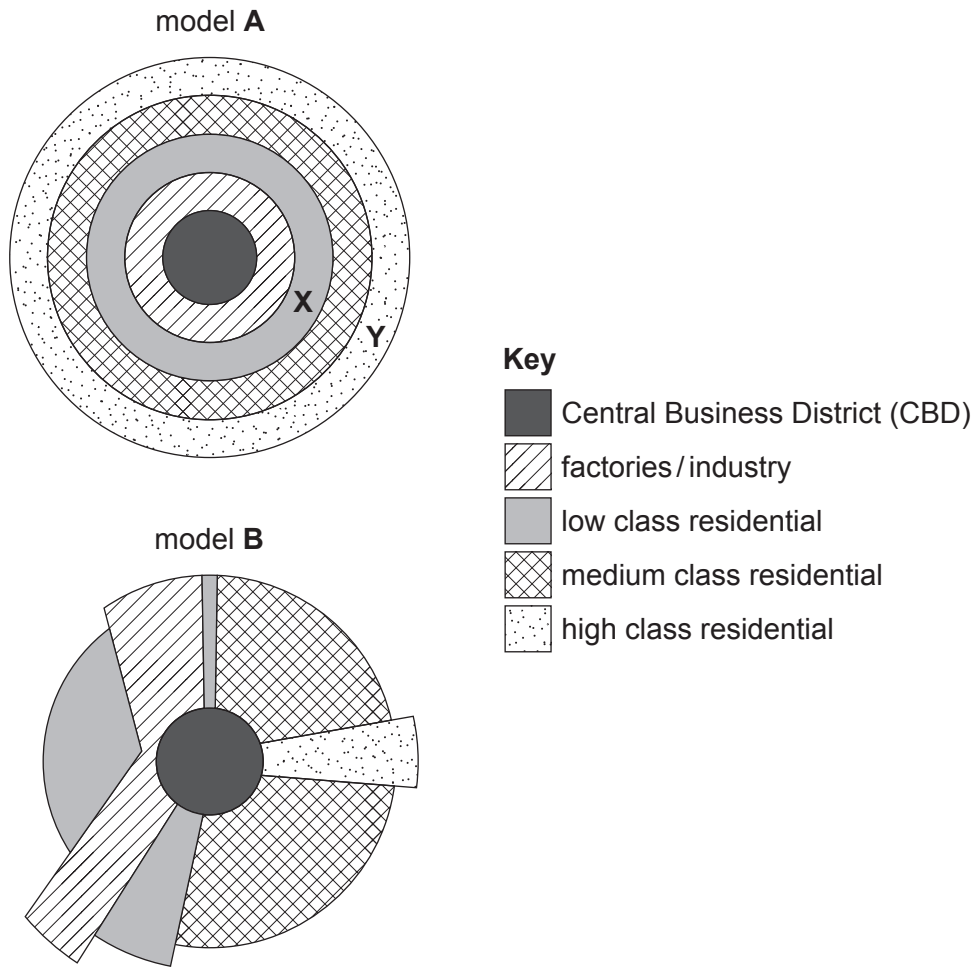


Fig. 2.1

(i) What is meant by the term *urban land use*?

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..... [1]

(ii) Identify **one** similarity and **one** difference between urban land use models **A** and **B**.

Similarity .....

.....

.....

Difference .....

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..... [2]

(iii) Suggest how the residential areas marked at **X** and **Y** in Fig. 2.1 are likely to differ from each other.

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..... [3]

(iv) Explain why redevelopment is taking place close to the CBD in many cities.

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..... [4]

(b) Study Fig. 2.2 (Insert), which is a photograph taken in Kiev, Ukraine (an MEDC in Eastern Europe).

(i) Identify **three** pieces of evidence which show that the area in Fig. 2.2 is part of the Central Business District (CBD).

1 .....  
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2 .....  
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3 .....  
..... [3]

(ii) Explain the causes of traffic congestion in the CBD of many large urban areas.

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.....  
.....  
.....  
..... [5]





**Section B**

Answer **one** question from this section.

3 (a) Study Figs. 3.1, 3.2 and 3.3 (Insert), which are photographs of different types of cloud.

(i) What units are used to measure the amount of cloud cover?

Circle **one** of the following:

degrees                      knots                      metres                      oktas                      [1]

(ii) Complete the table below by inserting the types of cloud shown in each of Figs. 3.1, 3.2 and 3.3.

Choose from the following cloud types:

cirrus                      cumulus                      stratus

	Cloud type
Fig. 3.1	
Fig. 3.2	
Fig. 3.3	

[2]

(iii) Choose one of Fig. 3.1, Fig. 3.2 or Fig. 3.3. Describe the **main characteristics** of the clouds shown in the photograph you have chosen.

Fig. ....

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..... [3]

(iv) Explain how cloud type and amount can be recorded over a period of two weeks.

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..... [4]

(b) Study Fig. 3.4, which shows data about temperature and relative humidity recorded at a weather station in Darwin, Australia over a period of 24 hours.

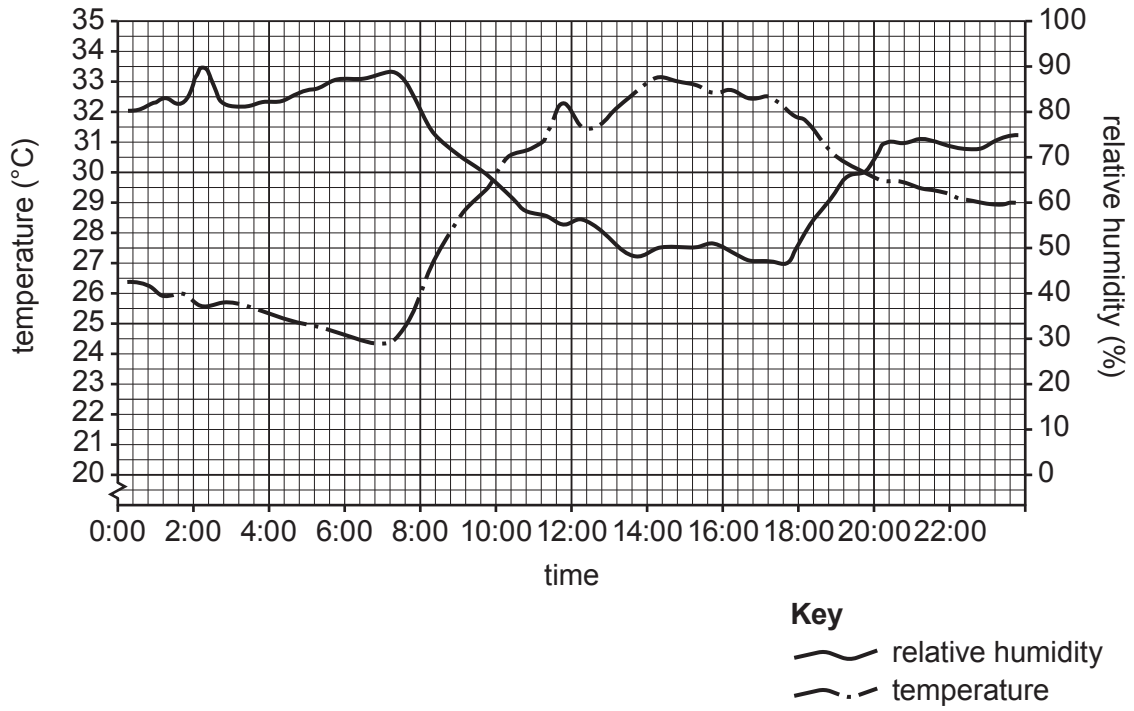


Fig. 3.4

(i) Explain how the relative humidity percentage can be obtained by using a wet-and-dry bulb thermometer (hygrometer).

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..... [3]

- (ii) Describe how the temperature and relative humidity changed over the period of 24 hours shown in Fig. 3.4. Do not use statistics in your answer.

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..... [5]



**TURN PAGE FOR QUESTION 4**

4 (a) Study Fig. 4.1, which is a map of the drainage basin of the Conestoga River in the USA.

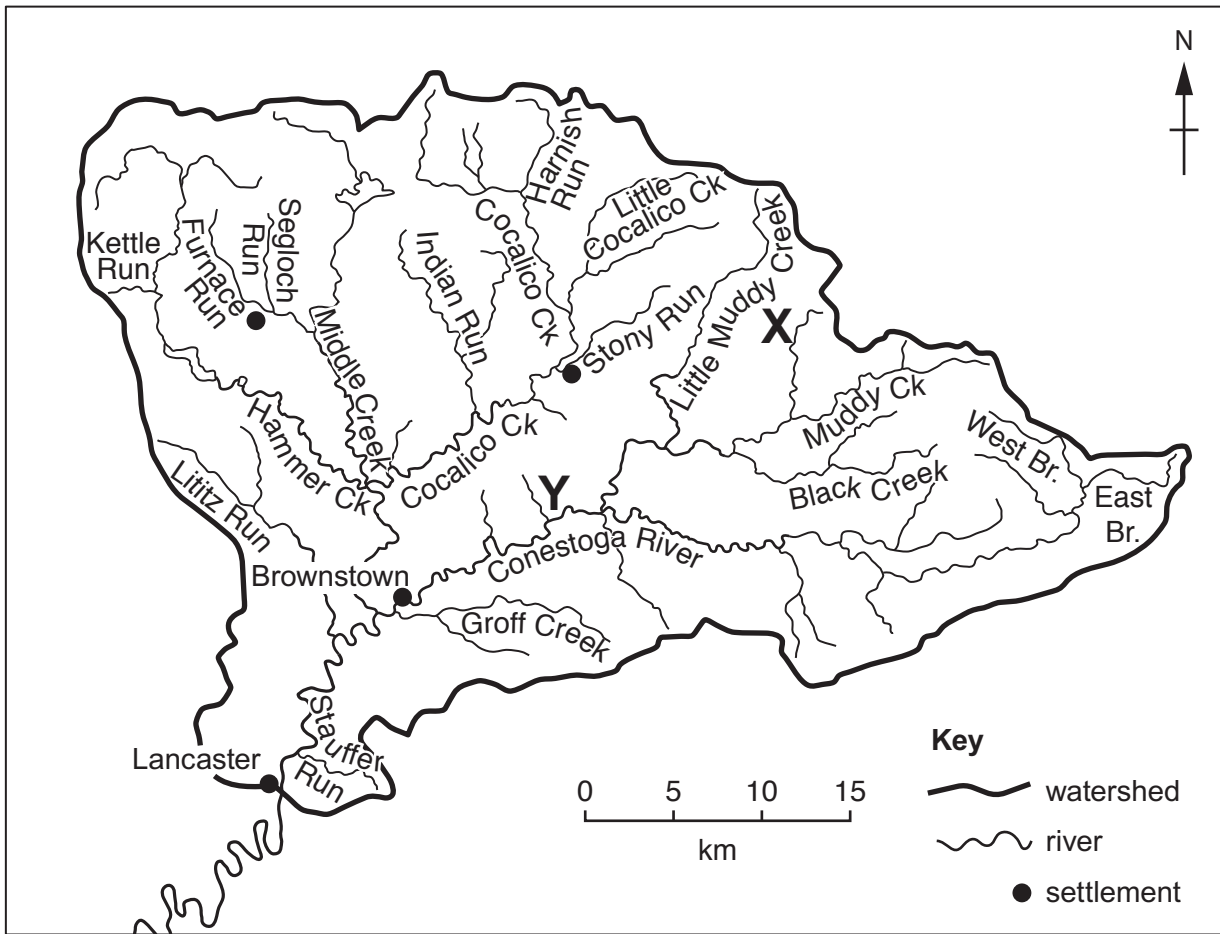


Fig. 4.1

(i) What is meant by the term *watershed*?

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..... [1]

(ii) In Fig. 4.1:

- draw an arrow to show the direction of flow of the Conestoga River
- mark an 'S' on the source of a river.

[2]



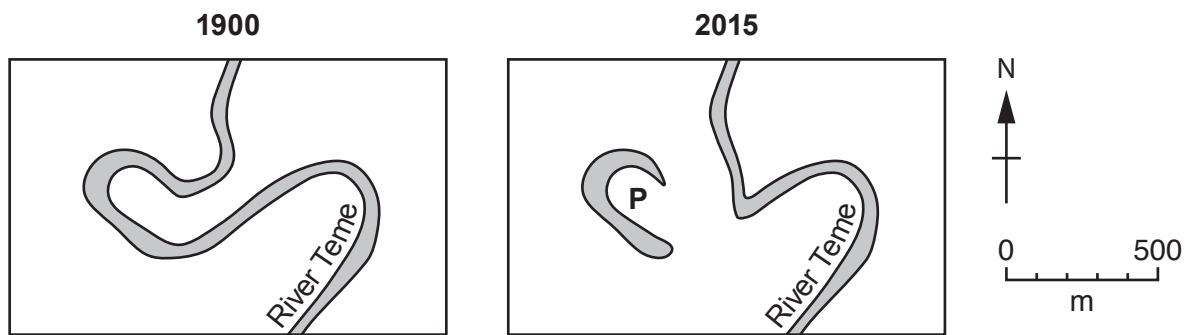
(iii) Describe the likely differences between the cross sections of the river valleys at **X** and **Y**.

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

(iv) Suggest **two** benefits and **two** problems of living close to the river between Lancaster and Brownstown.

Benefit 1 .....  
.....  
.....  
Benefit 2 .....  
.....  
.....  
Problem 1 .....  
.....  
.....  
Problem 2 .....  
.....  
..... [4]

(b) Study Fig. 4.2, which shows two maps of the same part of the River Teme in 1900 and 2015.



**Fig. 4.2**

(i) Using the map of the course of the River Teme in 2015 in Fig. 4.2, describe the main features of the lake marked P.

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..... [3]

(ii) Explain why the course of the River Teme shown in Fig. 4.2 has changed over time.

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..... [5]

(c) Describe the main features of a delta and explain its formation.  
You may use a labelled diagram.

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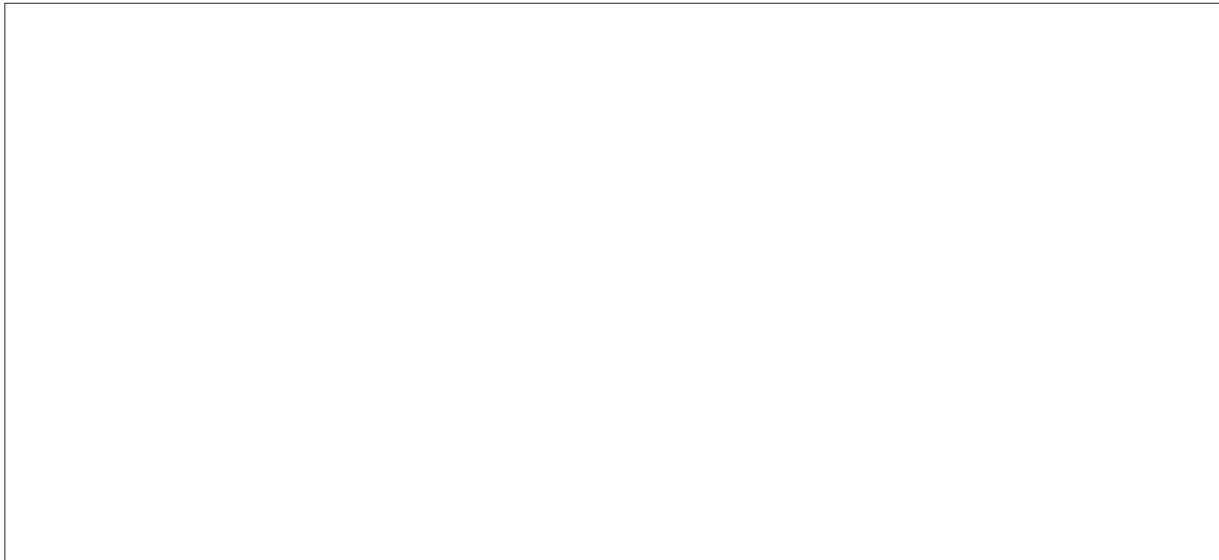
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[7]

[Total: 25]

**Section C**

Answer **one** question from this section.

5 (a) Study Fig. 5.1 (Insert), which is a map of Sri Lanka (an LEDC in Asia).

(i) What is the main physical attraction for tourists in the south west of Sri Lanka?

..... [1]

(ii) Using Fig. 5.1 **only**, state **two** different pieces of evidence that conservation is taking place.

1 .....

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2 .....

..... [2]

(iii) Describe the location of the international airport shown in Fig. 5.1.

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..... [3]

(iv) Suggest how the infrastructures of LEDCs such as Sri Lanka have been developed as a result of tourism.

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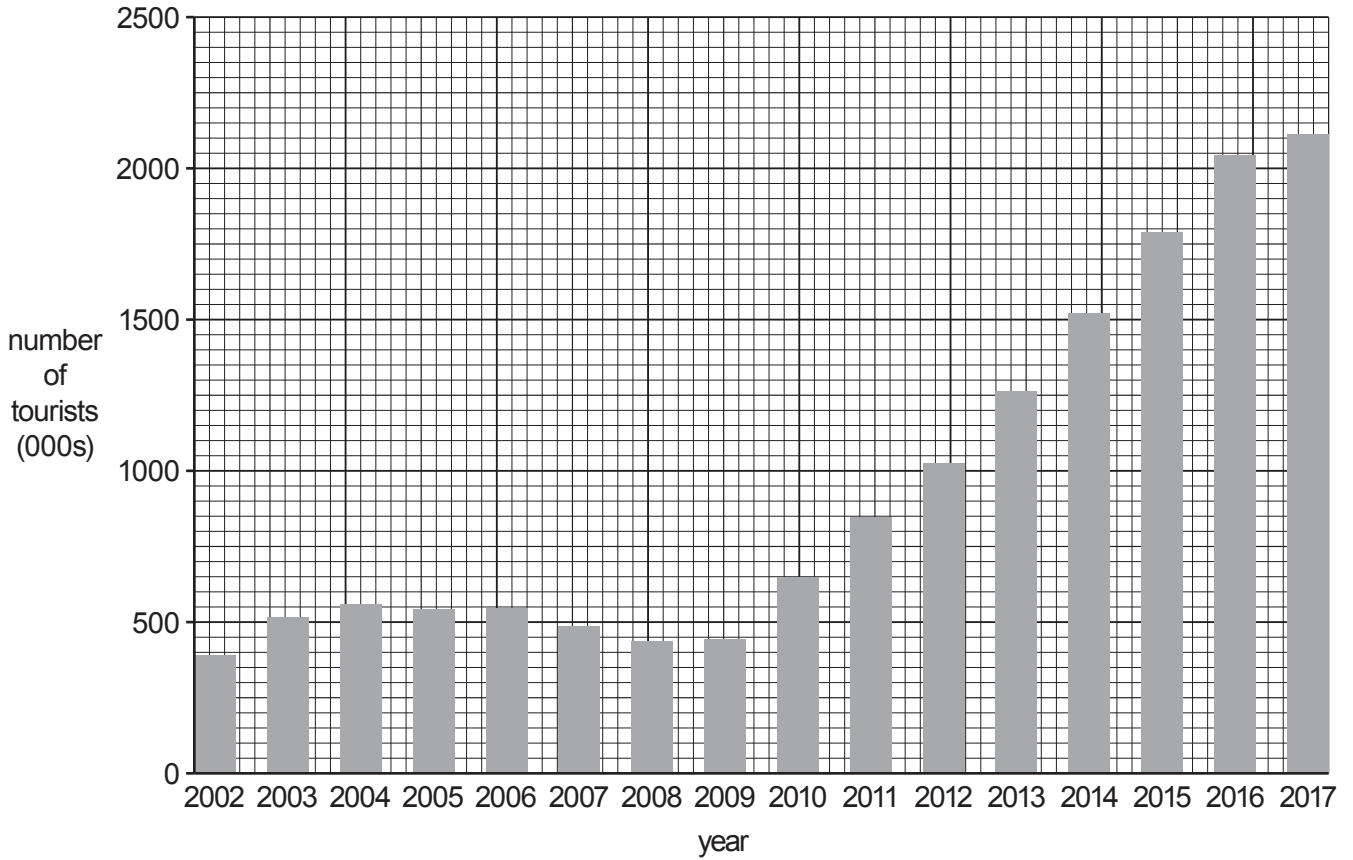
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..... [4]

(b) Study Fig. 5.2, which shows information about the number of tourists visiting Sri Lanka between 2002 and 2017.



**Fig. 5.2**

(i) Using Fig. 5.2, describe the changes in the numbers of tourists visiting Sri Lanka. Do not use statistics in your answer.

between 2002 and 2009 .....

.....

between 2009 and 2016 .....

.....

between 2016 and 2017 .....

..... [3]

- (ii) Explain why the number of tourists visiting a destination varies over time. You should refer to both annual and seasonal variations.

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..... [5]



6 (a) Study Fig. 6.1, which shows land use on a farm in East Yorkshire, UK in 1974 and 2014.

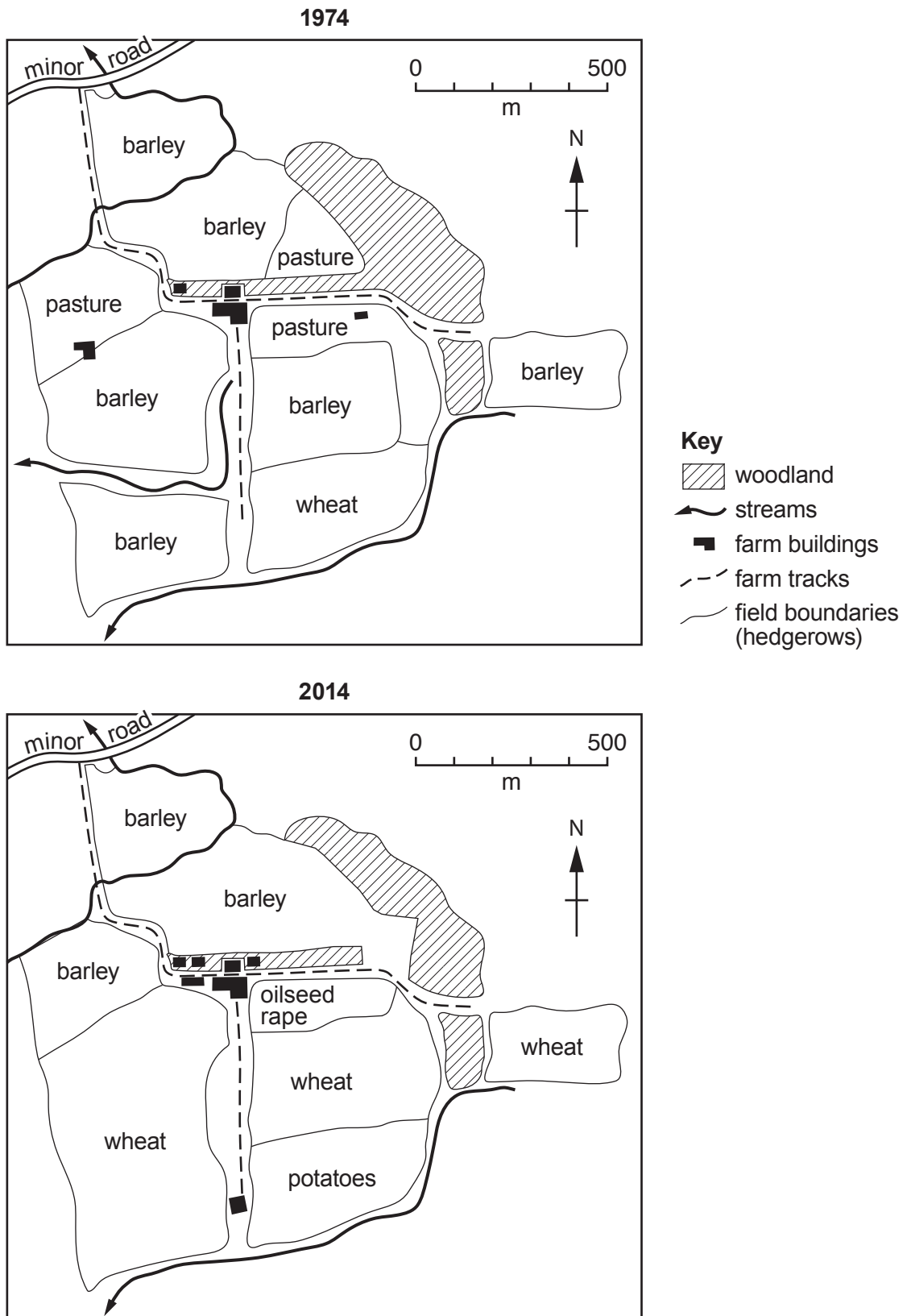


Fig. 6.1

(i) Name **one** crop which was grown in 2014 but not in 1974.

..... [1]



(ii) Using Fig. 6.1 identify:

- the crop grown 200 metres north of the largest farm building in 1974

.....

- the crop grown 300 metres south west of the largest farm building in 2014.

..... [2]

(iii) What evidence in Fig. 6.1 suggests that:

- the demand for barley decreased between 1974 and 2014?

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.....

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- the farmer grazed animals in 1974 but not in 2014?

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- the price of wheat increased between 1974 and 2014?

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..... [3]

(iv) Using evidence from Fig. 6.1 **only**, explain how the farmer has increased the area of land used for farming.

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..... [4]

(b) Study Fig. 6.2, which shows information about a farm in the Netherlands.

The farm is fairly small, only 90 hectares in size, and is situated on fertile land which was reclaimed from the sea about 80 years ago. The land is flat, below sea level in places, and has to be constantly drained by ditches which surround the fields. The farmer specialises in growing flowers in greenhouses using large amounts of fertilisers and pesticides. Large amounts of wheat, potatoes and sugar beet are also grown in the fields. Using greenhouses helps the farmer to harvest flowers out of season, when prices are high in the shops, and grow unusual expensive varieties. Although the farm is highly mechanised there are two full-time workers and part-time workers are employed during planting and harvesting times.

**Fig. 6.2**

(i) Which terms describe the farm in Fig. 6.2?

Tick (✓) **three** of the following:

	Tick (✓)
arable	
commercial	
extensive	
intensive	
mixed	
pastoral	
plantation	
subsistence	

[3]

(ii) Complete the table below to show **four** inputs, **two** processes and **four** outputs of the farm shown in Fig. 6.2.

INPUTS	PROCESSES	OUTPUTS
.....		.....
.....	.....	.....
.....	.....	.....
.....		.....

[5]





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