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Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

GEOGRAPHY **0460/23**

Paper 2 **May/June 2016**

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler
Protractor
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 Photographs A and B for Question 2, Photographs C and D for Question 6.
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.

The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

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

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1 Study the map extract for Baslow, UK. The scale is 1: 50 000.

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

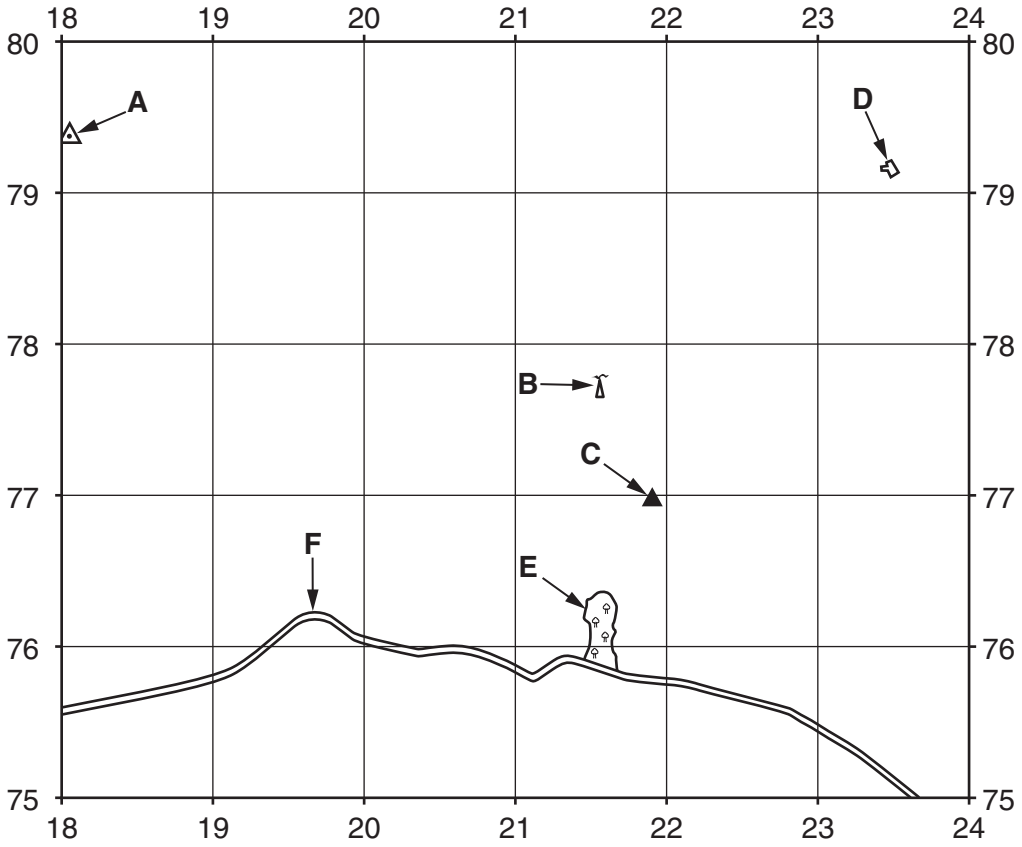


Fig. 1

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

(i) feature **A**;

.....[1]

(ii) feature **B**;

.....[1]

(iii) feature **C**;

.....[1]

(iv) the name of the building at **D**;

.....[1]

(v) the type of vegetation at **E**;

.....[1]

(vi) the type of road at **F**.

.....[1]

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(b) Fig. 2 is a cross section along northing 76 from 230760 to 280760. The position of a path has been shown by a labelled arrow.

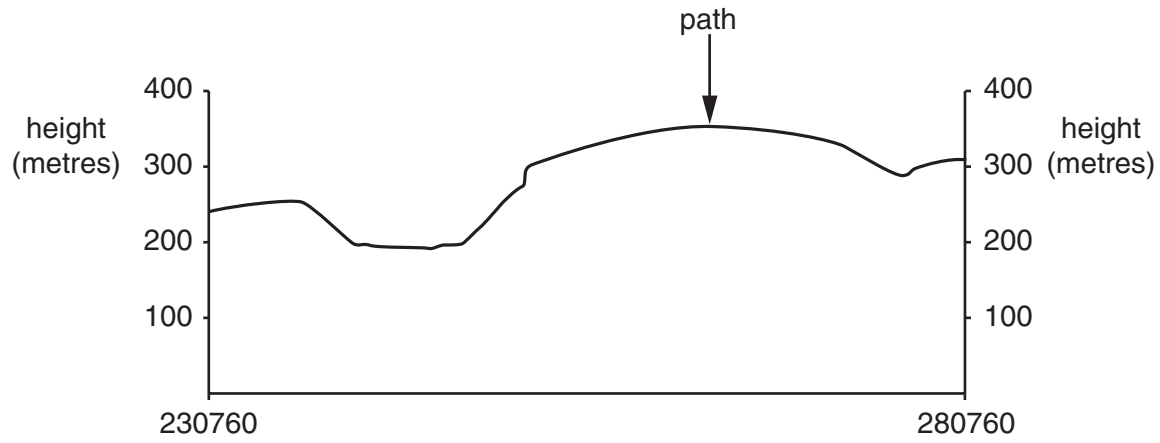


Fig. 2

On Fig. 2 mark with a labelled arrow the positions of:

(i) a main road; [1]

(ii) a District Boundary; [1]

(iii) the River Derwent. [1]

(c) State **two** features in the village of Eyam that are shown in the key to the map as Tourist Information.

1 .....

2 .....[2]

(d) Find the railway between 239800 and 290797 in the north east of the map extract. Name **two** artificial features created along the railway to keep it as level as possible.

..... and .....[2]

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(e) **(i)** Measure the distance along the B6465 road from the southern edge of the map to the road junction at Wardlow Mires. Give your answer in metres.

..... metres [1]

(ii) State the bearing from the road junction at Wardlow Mires to the B6465 road at the southern edge of the map.

..... degrees [1]

(iii) State the six-figure grid reference of the road junction at Wardlow Mires.

.....[1]

(f) Look at the area shown on Fig. 3.

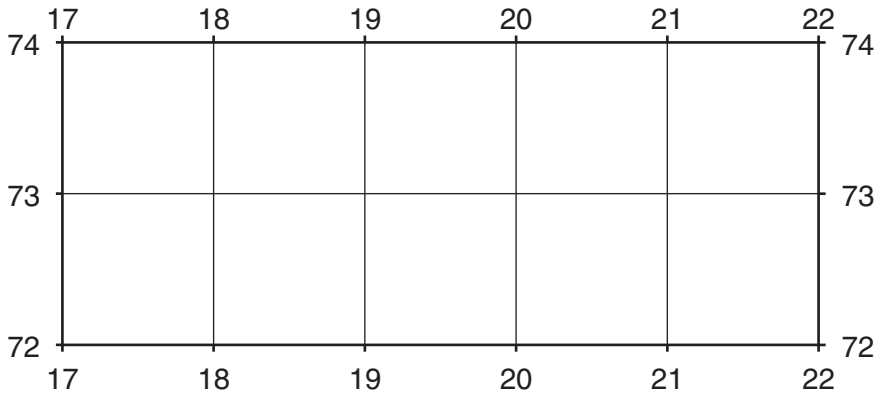


Fig. 3

Describe the relief and drainage of the area shown in Fig. 3.

relief .....

.....

.....

.....

.....

.....

drainage .....

.....

.....

.....

.....

.....[4]

[Total: 20 marks]

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2 **(a)** Study Photograph A (Insert), which shows a bush growing in sandy soil in a hot desert. Describe and explain how the features of the bush shown in the photograph help it to survive.

.....

.....

.....

.....

.....

.....

.....

.....[4]

(b) Study Photograph B (Insert), which shows vegetation growing on a sand dune in a hot desert.

(i) Describe the problems for vegetation of growing on a sand dune.

.....

.....

.....

.....[2]

(ii) Describe the vegetation in the valley in the background of the photograph.

.....

.....

.....

.....[2]

[Total: 8 marks]

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3 Study Fig. 4, which shows variations in population density in Pakistan, and Fig. 5, which shows the height of the land in Pakistan.

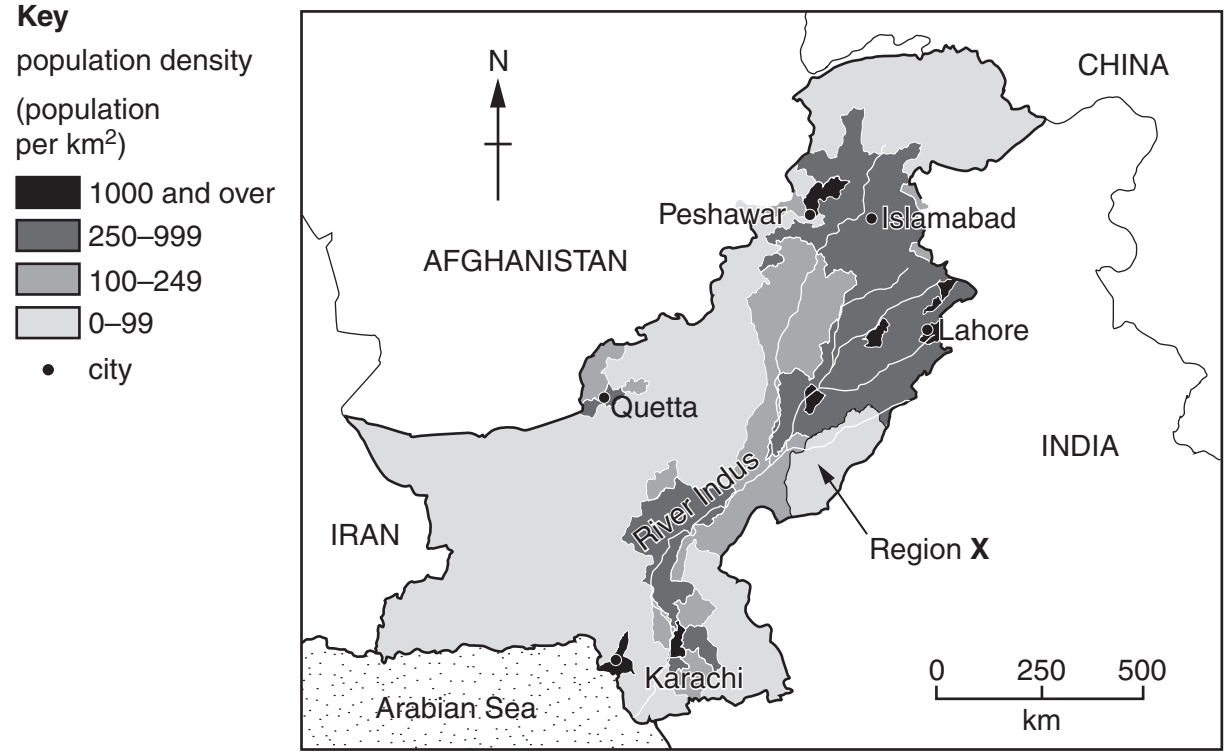


Fig. 4

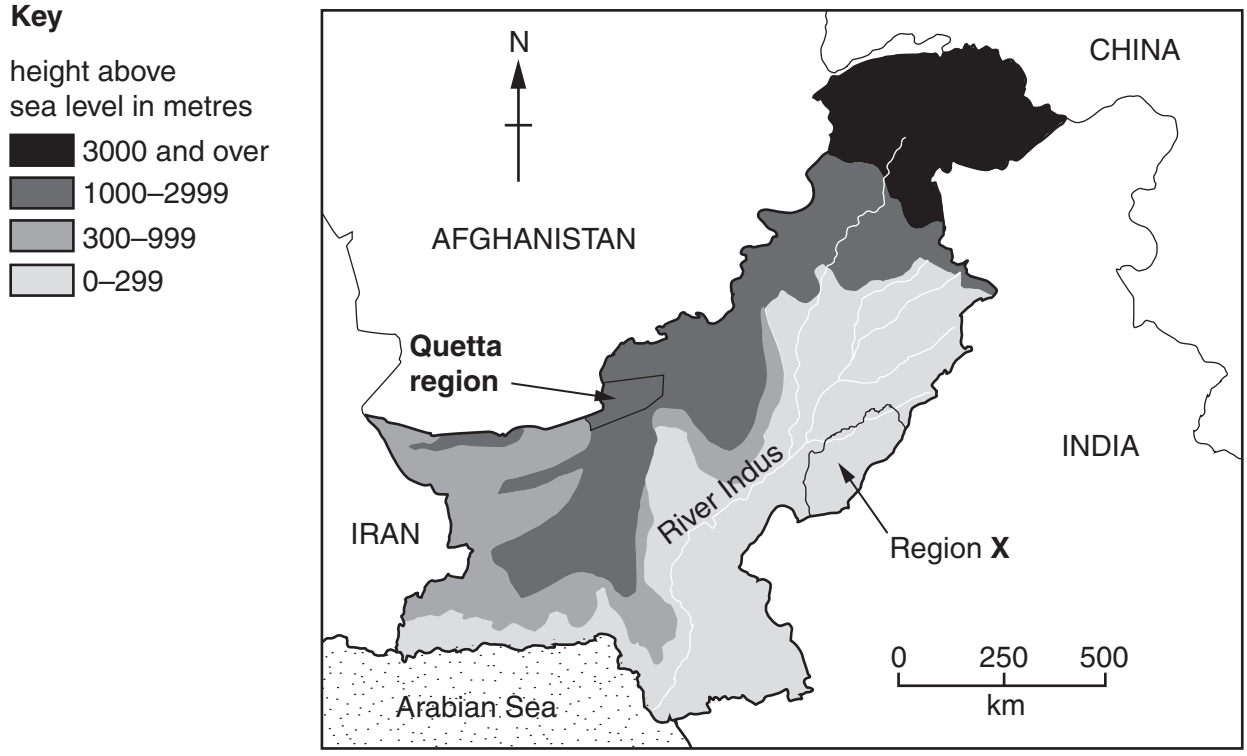


Fig. 5

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(a) Using Fig. 4, give the compass direction to describe the side of the River Indus where most of the population of Pakistan live.

..... [1]

(b) Using Figs. 4 and 5, describe the population densities and height of the land along the coast of the Arabian Sea.

.....

.....

.....

.....

.....

.....[3]

(c) Using Figs. 4 and 5, describe the general relationship between population density and height of land in Pakistan. Use figures to support your answer.

.....

.....

.....

.....[2]

(d) The table below names two regions shown on Fig. 5. Complete the table to show why these two regions do not fit the general pattern of population distribution in Pakistan.

Region	Why the population does not fit the general pattern
Quetta region	…… ……
Region **X**	…… ……

[2]

[Total: 8 marks]

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4 **(a)** Study Figs. 6 and 7, which give information about the Galapagos Islands in the Pacific Ocean. Use both Figs. 6 and 7 to answer the questions that follow.

Key

0.7 age of island in millions of years

△ main volcanic cone

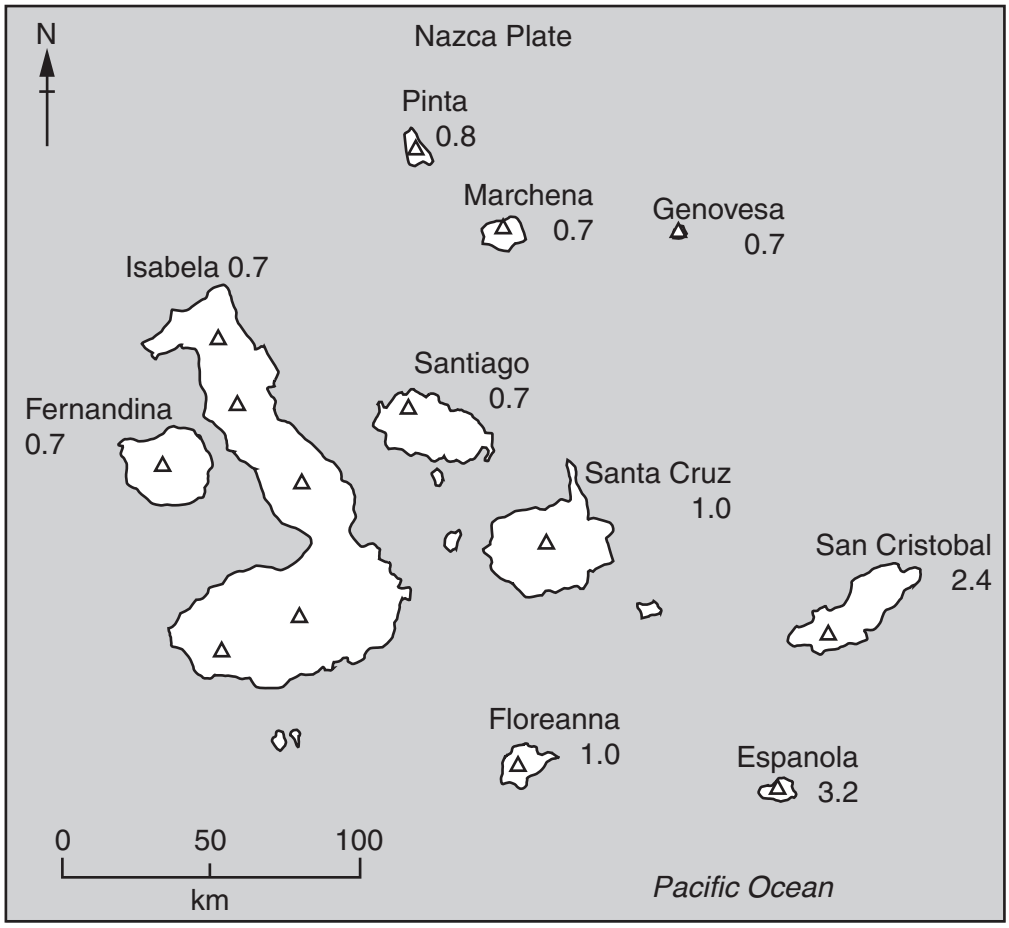


Fig. 6

The Galapagos Islands are volcanic islands on the Nazca Plate but are situated far from the plate boundary. They formed at a place where magma rose to the surface. Volcanoes formed at the part of the plate that was moving over the rising magma at the time.

Fig. 7

(i) Name the **two** oldest islands in the Galapagos group.

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

(ii) Describe the location in the group of islands of the two oldest islands.

.....[1]

(iii) Use Fig. 6 (opposite) to identify **two** ways in which Isabela is different from the other islands.

1 .....

2 .....[2]

(b) Fig. 8 shows how three of the volcanoes were formed in turn, as the Nazca Plate moved over the rising magma.

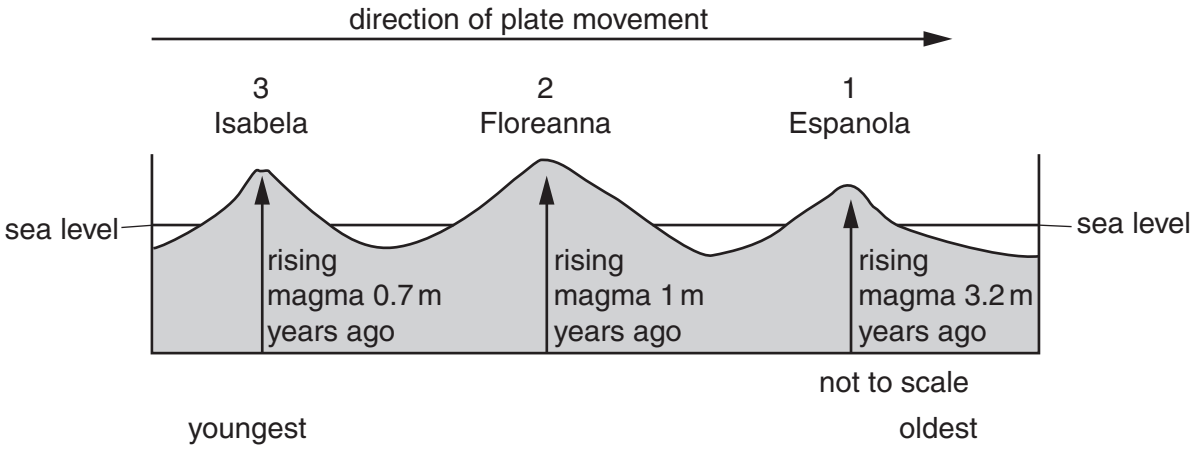


Fig. 8

(i) Use Fig. 6 (opposite) to complete the table below to show three **other** volcanic islands that show the same sequence.

Order of island formation	Name of island
1 oldest	1 .....
2	2 Santa Cruz
3 youngest	3 .....

[2]

(ii) Use all the information to tick the general direction in which the Nazca Plate moved over the rising magma.

Direction of movement	Tick (✓)
north east to south west	
north west to south east	
south east to north west	
south west to north east	

[1]

(iii) Explain why the volcano on Espanola is extinct.

.....

.....[1]

[Total: 8 marks]

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5 **(a)** Study Fig. 9 and Table 1, which give information about tourism on the Galapagos Islands.

Although the Galapagos Islands are 1000 kilometres off the coast of South America, their unique wildlife attracts visitors from all over the world. Travel between and around the islands is usually only possible by boat. Some tourist boats have a restaurant and sleeping accommodation.

The Ministry of Tourism calculated how much the tourists spent. The results are shown in Table 1 below.

Fig. 9

Table 1

Spending by tourists	Percentage of the total spending
before arrival in the islands	64
travelling around the islands by boat	30
on services in ports on the islands	6

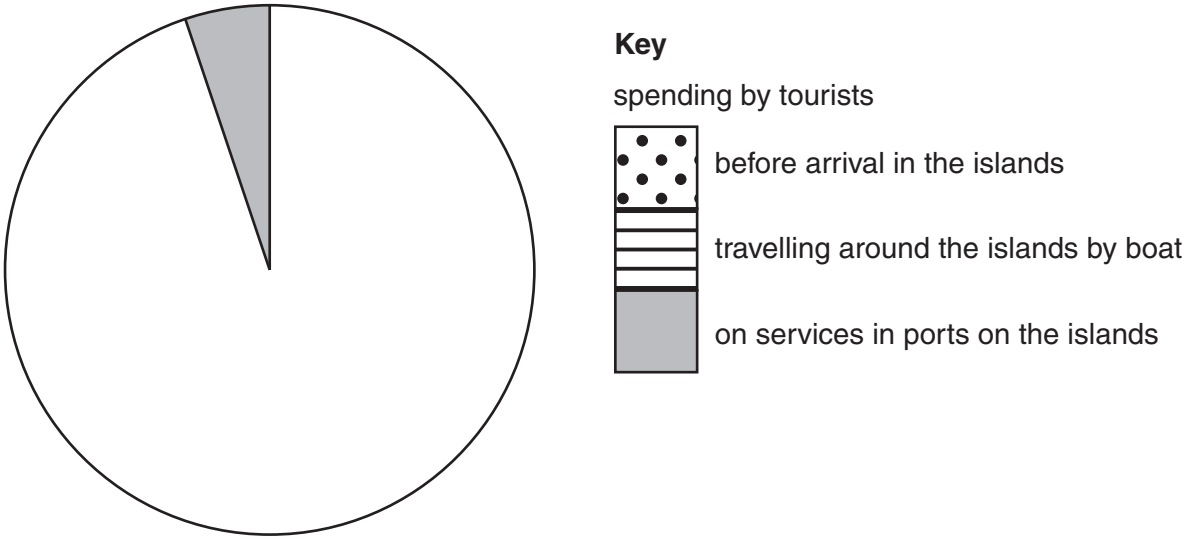


Fig. 10

Use the information in Table 1 to complete Fig. 10. Use the key provided. [2]

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(b) Local people should benefit from tourism as much as possible.

Suggest **one** way in which local inhabitants could be employed in each of the following:

(i) boat trips around the islands;

.....

.....[1]

(ii) services in the ports.

.....

.....[1]

(c) **(i)** Explain why tourism can be harmful in a National Park, such as the Galapagos Islands.

.....

.....

.....

.....[2]

(ii) Explain how tourism is managed carefully in some areas.

.....

.....

.....

.....[2]

[Total: 8 marks]

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6 **(a)** Study the information in Fig. 11 and Photographs C and D (Insert), which show two methods used to reduce problems on some farms.

problems on some farms include:
- frost damage
- infertile soils
- pests and diseases
- shortage of rainfall
- soil erosion
- soil exhaustion

Fig. 11

(i) Explain why the land shown in the background of Photograph C is unsuitable for farming.

.....

.....

.....

.....[2]

(ii) Describe the farming method shown in Photograph C and identify which **one** of the problems listed in Fig. 11 is reduced by using it.

.....

.....

.....

.....[2]

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(b) Farmers in Photograph D have used the machine shown in Fig. 12.

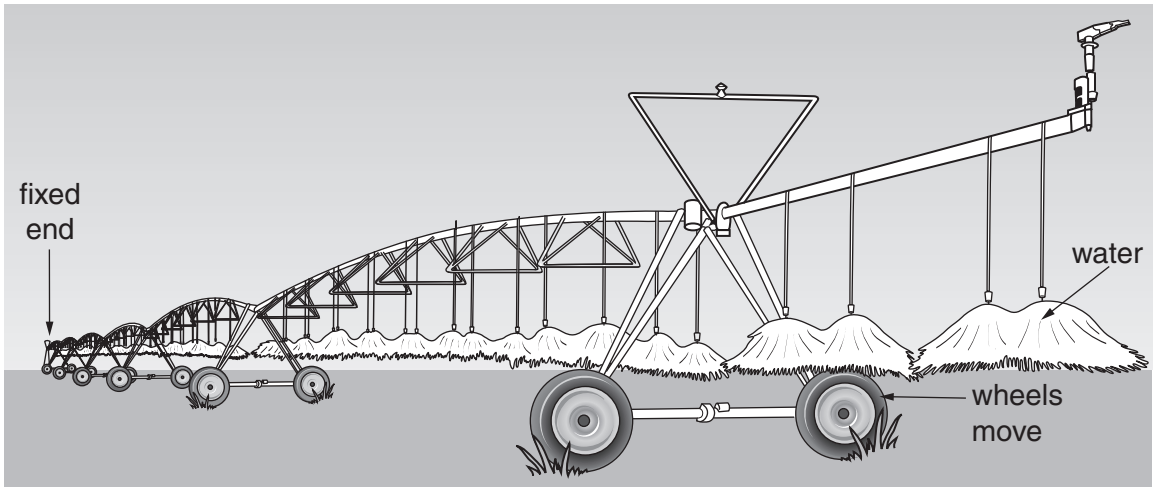


Fig. 12

(i) State the problem, listed in Fig. 11, which is reduced by the use of the machine shown in Fig. 12.

.....[1]

(ii) Describe how the machine shown in Fig. 12 works.

.....

.....

.....

.....[2]

(iii) State the evidence shown in Photograph D that the farmer has used the type of machine shown in Fig. 12.

.....

.....[1]

[Total: 8 marks]

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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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