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GEOGRAPHY **0460/23**

Paper 2 Geographical Skills **October/November 2021**

1 hour 30 minutes

You must answer on the question paper.

You will need: Insert (enclosed)
1:25 000 survey map (enclosed)
Calculator
Plain paper
Protractor
Ruler

INSTRUCTIONS

- Answer **all** questions.
- 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 60.
- The number of marks for each question or part question is shown in brackets [ ].
- The insert contains additional resources referred to in the questions.

This document has **20** pages. Any blank pages are indicated.

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1 Study the map extract for St-Paul-de-Salers, France. The scale is 1:25 000.

(a) Fig. 1.1 shows some of the features around the settlement of St-Paul-de-Salers in the west of the map extract. Study Fig. 1.1 and the map extract, and answer the questions below.

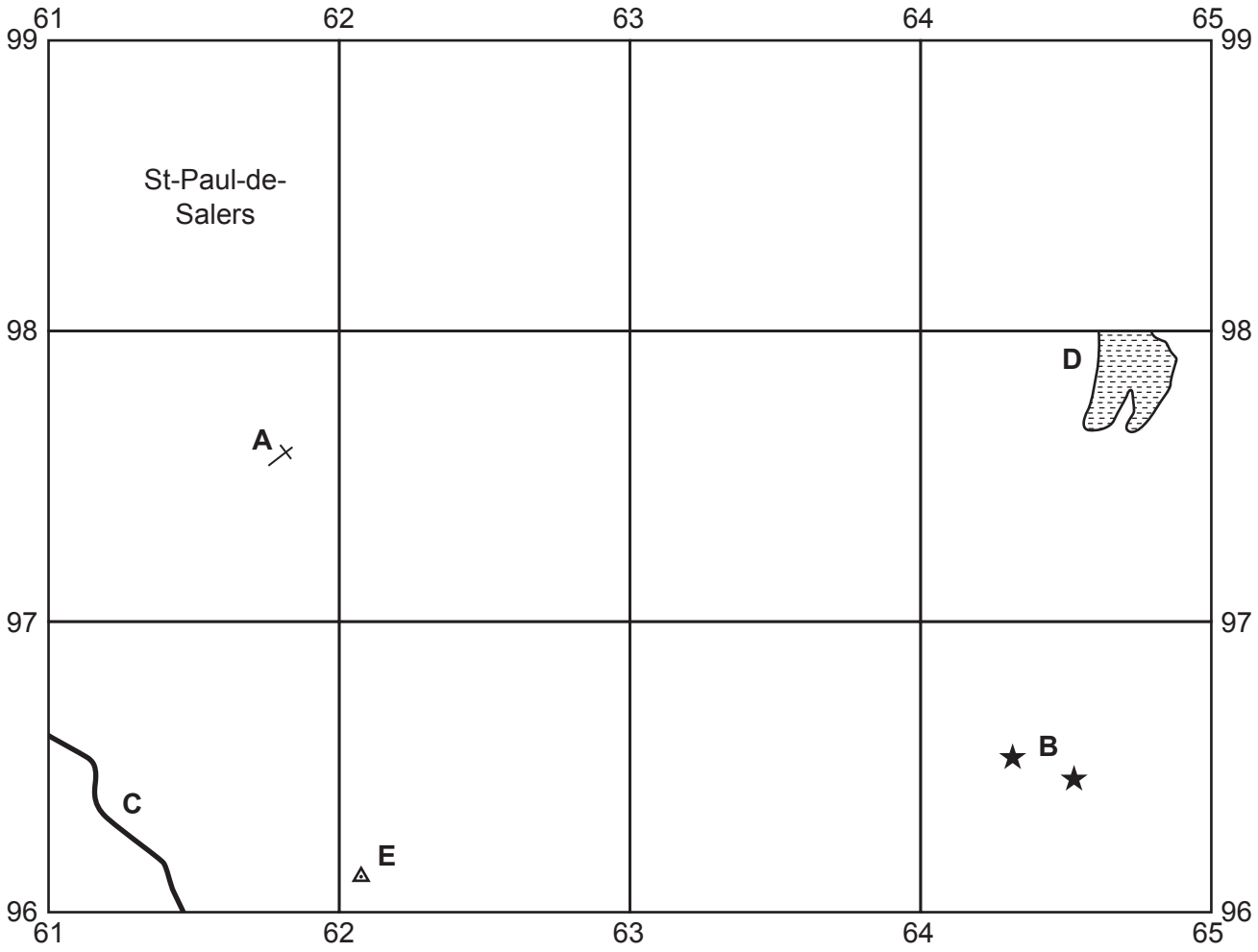


Fig. 1.1

Using the map extract, identify the following features shown in Fig. 1.1:

(i) feature **A**

..... [1]

(ii) features at **B**

..... [1]

(iii) feature **C**

..... [1]

(iv) the hazard at **D**

..... [1]

(v) the height above sea level of the triangulation station (trigonometric point) at **E**.

..... metres [1]

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(b) Fig. 1.2 is a cross-section along easting 65 from 650010 to 650980.

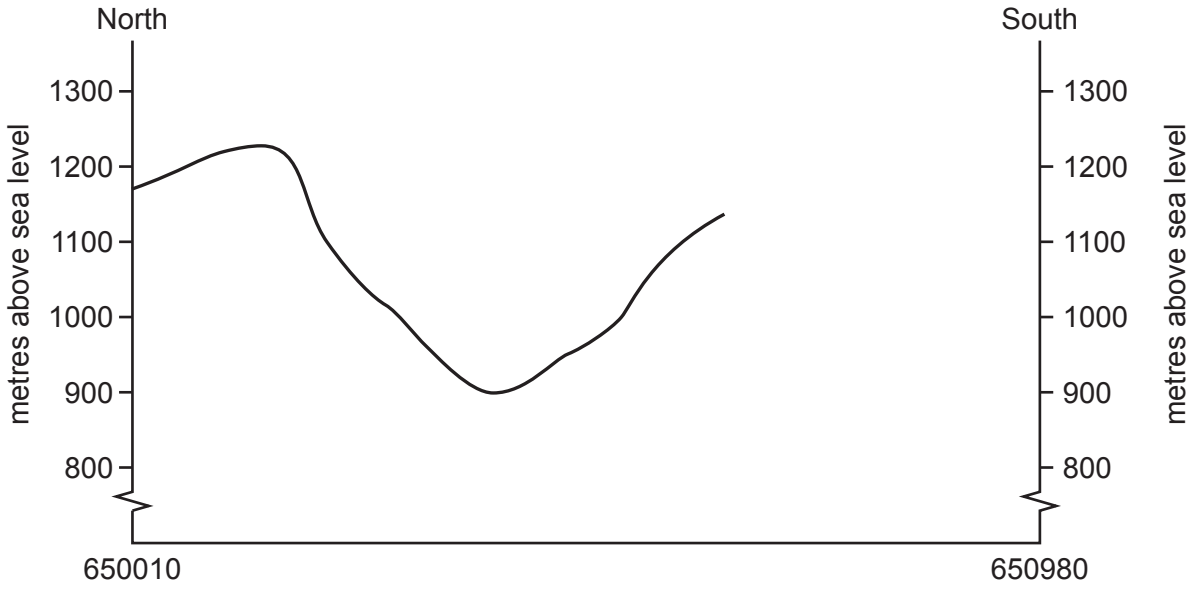


Fig. 1.2

(i) On Fig. 1.2, **use labelled arrows** to show the position of:

- the D680 road
- the river Maronne. [2]

(ii) The cross-section shown in Fig. 1.2 is incomplete. Using information from the map extract, draw a line on Fig. 1.2 to **complete the cross-section**. [2]

(c) Fig. 1.3 shows two areas, **A** and **B**, in the central part of the map extract. Study the two areas and answer the questions below.

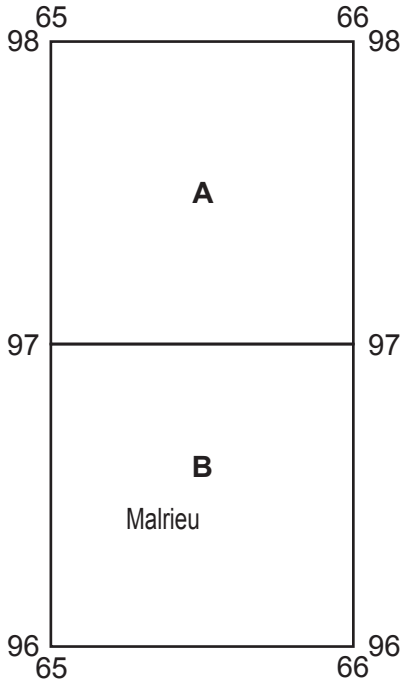


Fig. 1.3

The table below compares the features of the two areas. Complete the table by putting ticks in the correct **five** boxes. Use only one tick (✓) for each row.

feature	area A	area B	both of these areas	neither of these areas
river flowing from south to north				
steep slopes				
land above 1300 metres				
plateau				
south-facing slopes				

[5]

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(d) Look at the D37 road in the eastern area of the map that runs from the road junction in Col de Néronne (6700) to the refuge hut in Récusset (6898).

(i) What is the distance along the road from the cross roads in Col de Néronne to the refuge hut in Récusset?

..... metres [1]

(ii) Measure the bearing **from** the cross roads in Col de Néronne to the refuge hut in Récusset.

..... degrees [1]

(e) Look at the settlement at St-Paul-de-Salers (6198 and 6298) in the west of the map extract. Describe the site and suggest reasons for the growth of the settlement.

.....

.....

.....

.....

.....

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.....

..... [4]

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2 Fig. 2.1 shows a population pyramid for Pakistan for 1998 and a projected pyramid for 2025.

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Fig. 2.1

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(a) (i) What percentage of Pakistan's population were females aged 0–4 in 1998?

..... % [1]

(ii) **Complete the 2025 population pyramid** using the following figures:

Males
0–4 years: 3.1%
5–9 years: 3.4% [1]

(iii) Describe the main changes in the proportions of young dependents, working population and old dependents between 1998 and 2025.

young dependents .....

.....

working population .....

.....

old dependents .....

..... [3]

(b) Study Table 2.1, which shows information about the population of Pakistan in 1998.

Table 2.1

total population	130 580 000
males aged 65 years and above	1.7%
females aged 65 years and above	1.8%

(i) Calculate the total population aged 65 years and above in 1998.

..... thousands [1]

(ii) Suggest **one** benefit and **one** problem caused by the change in the proportion of old dependents in Pakistan.

Benefit .....

.....

.....

Problem .....

.....

..... [2]

[Total: 8]

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3 Study Fig. 3.1, which shows a sketch map of groynes along a coastline.

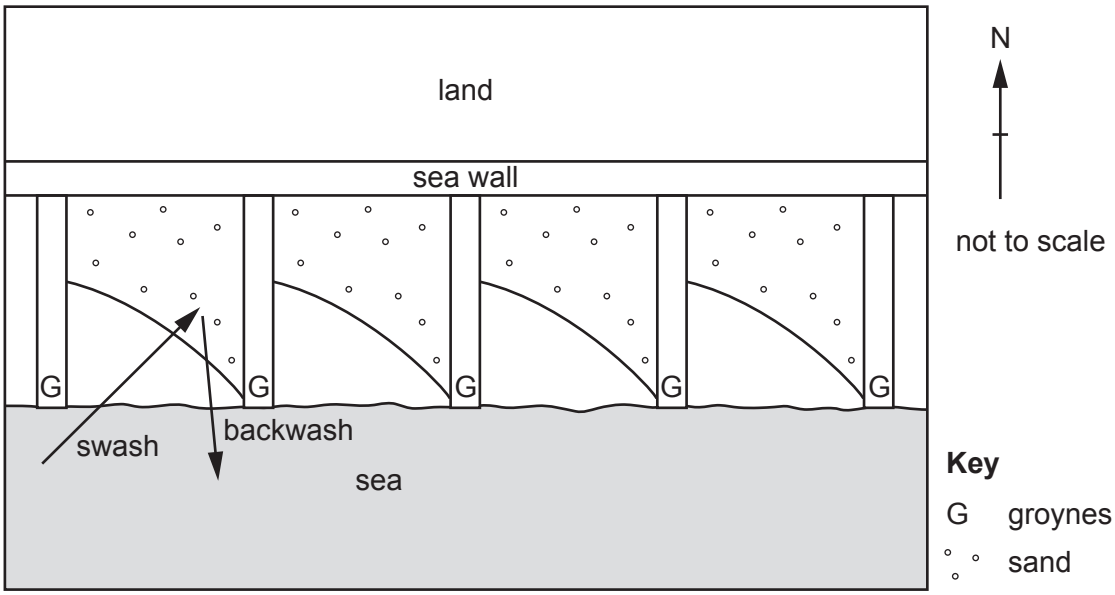


Fig. 3.1

(a) (i) Suggest why the groynes have been built along this area of coastline.

.....

..... [1]

(ii) What direction is the prevailing wind blowing from? Circle **one** correct answer below.

north-east south south-west north

[1]

(iii) What direction is sand moving along the coast?

..... [1]

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(b) Further along the coast, the coastline is being severely eroded. Table 3.1 shows how far a hotel is from a cliff edge overlooking the sea between 1989 and 2019.

Table 3.1

year	distance from cliff edge in metres
1989	94
1999	89
2009	80
2019	74

(i) How many metres of coast have been eroded between 1989 and 2019?

..... metres [1]

(ii) What was the average rate of erosion per year between 1989 and 2019?

..... metres per year [1]

(iii) What type of graph could be used to show the information in Table 3.1?

..... [1]

(iv) A sea wall has been planned to protect the coastline and hotel. Suggest **two** reasons why some people might disagree with this development.

1 .....

.....

2 .....

..... [2]

[Total: 8]

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4 Study Figs. 4.1, 4.2 and 4.3, which show climate information about Manaus, Brazil.

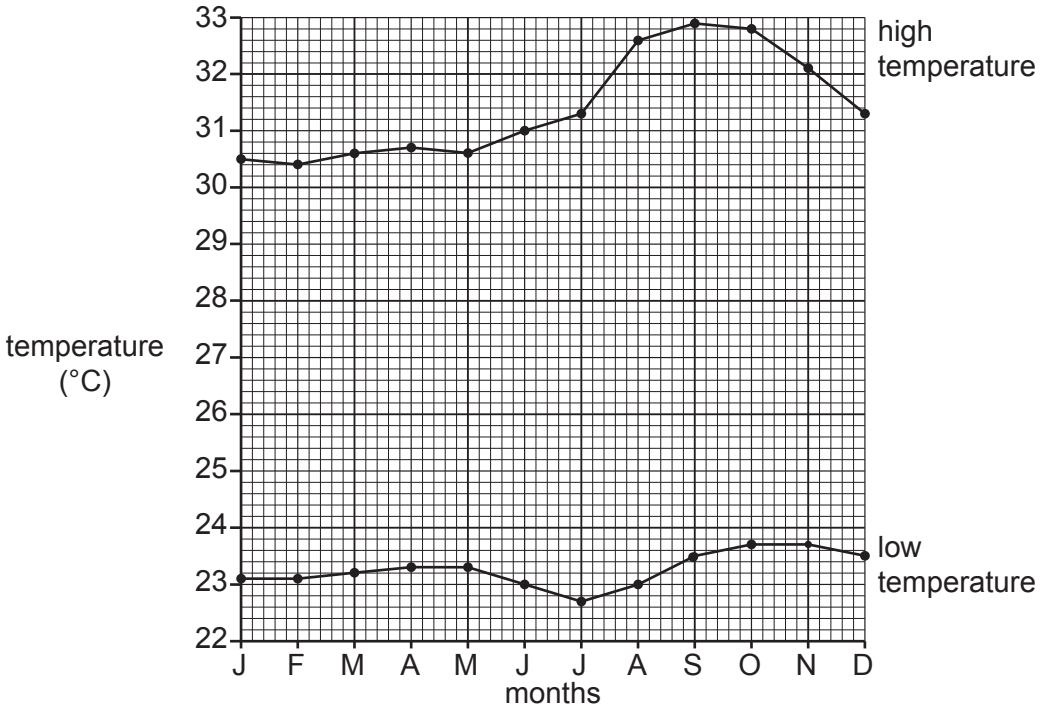


Fig. 4.1

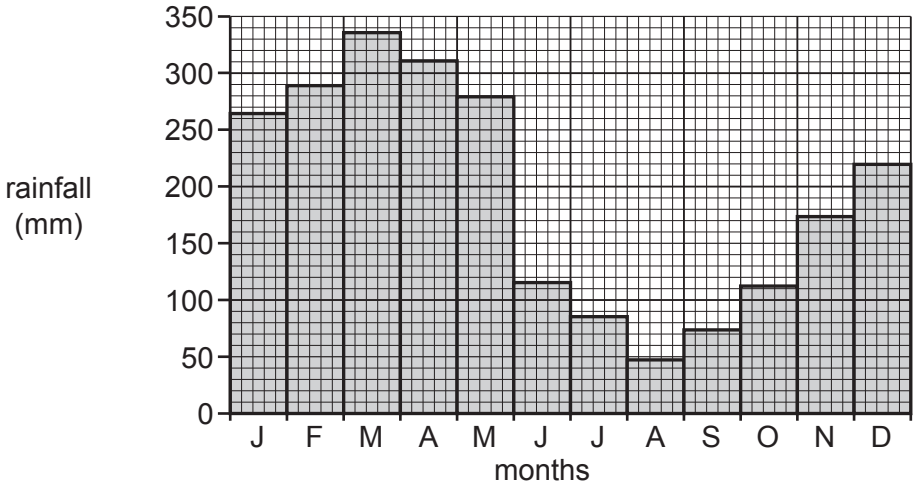


Fig. 4.2

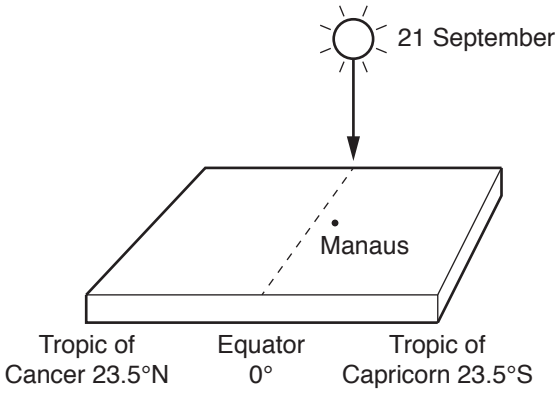


Fig. 4.3

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(a) Using Figs. 4.1, 4.2 and 4.3 **only**, answer the following questions.

(i) Calculate the temperature range in June in Manaus.

..... °C [1]

(ii) Estimate the total annual rainfall in Manaus. Circle **one** answer below.

1300 mm 1800 mm 2300 mm 2800 mm

[1]

(iii) Explain why humidity is always high in equatorial areas such as Manaus.

.....

.....

..... [2]

(iv) Using Fig. 4.3, explain why September has a high temperature in Manaus.

.....

..... [1]

(b) (i) '*Manaus only has one season.*'

How far do you agree with this statement?

.....

.....

.....

..... [2]

(ii) What type of rainfall occurs in equatorial regions such as Manaus?

..... [1]

[Total: 8]

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5 Study Figs. 5.1 and 5.2 (Insert), which show two different types of farming in England. Describe the types of farming shown, including the human and natural inputs of each farming type.

Farming in Fig. 5.1 .....

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Farming in Fig. 5.2 .....

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..... [8]

[Total: 8]

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TURN PAGE FOR QUESTION 6

6 The United Nations Global Assessment Report (2019) showed that many species of plants and animals are under threat. Study Table 6.1 and Fig. 6.1, which show some of the results of their research.

Table 6.1

species	nearing extinction	endangered	safe at present
birds	9%	13%	78%
mammals	5%	22%	73%
coniferous trees	18%	33%	49%

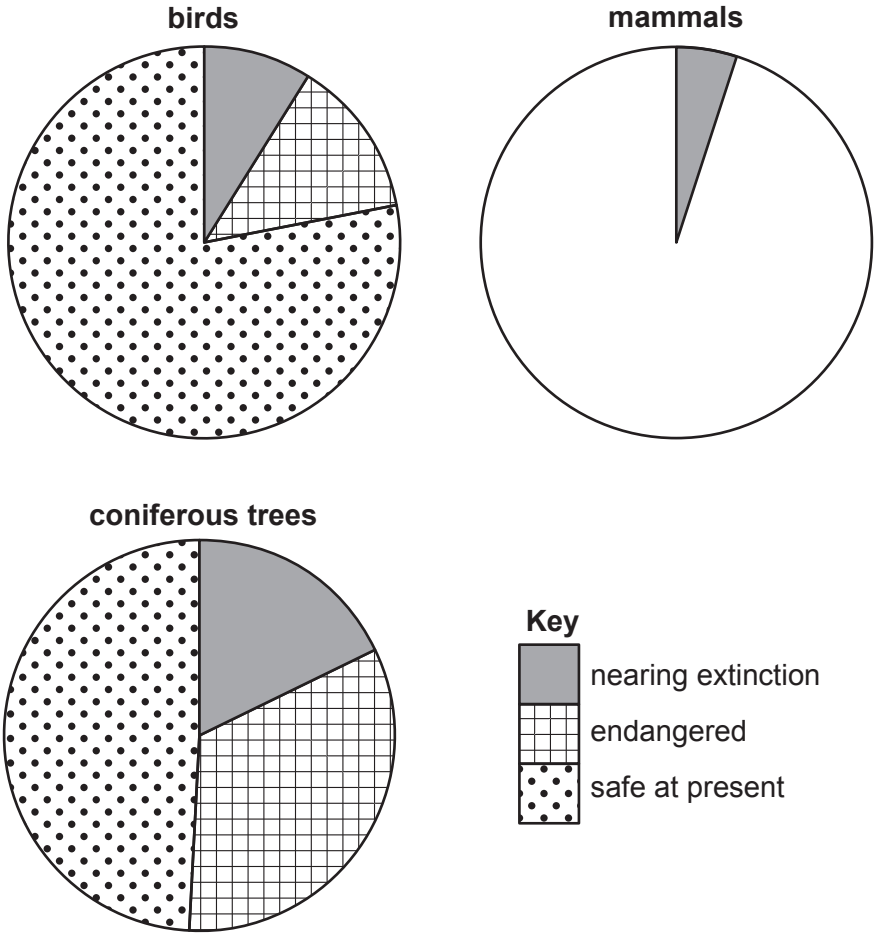


Fig. 6.1

(a) (i) Use the information in Table 6.1 to **complete the pie chart** (Fig. 6.1) for mammals. [1]

(ii) Using Fig. 6.1, compare the level of threat to birds and coniferous trees. Do **not** use statistics in your answer.

.....

.....

.....

..... [2]

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(b) Fig. 6.2 is a newspaper article about the impact of global warming.

A crisis that we cannot ignore.

The impact we are now having was first seen with the extinction of the dodo in 1681. The increase in human population has been a key factor as it reduces the habitat for animals and plants. However, this reduction in habitats could be slowed down if we used existing resources better. Air and water pollution are also significant, whilst in the oceans, overfishing and plastic pollution have had a big impact. Global warming will make these factors much worse.

Fig. 6.2

Use Fig. 6.2 to answer the following questions.

(i) In which year did the dodo become extinct?

..... [1]

(ii) Global warming is a major factor in the extinction of species. Identify **one other** cause of the extinction of species.

..... [1]

(c) Explain how global warming may make the 'extinction crisis' much worse in the future.

.....

.....

.....

.....

.....

..... [3]

[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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