Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER			

5171997039

GEOGRAPHY **0460/12**

Paper 1 Geographical Themes **February/March 2022**

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 **28** pages.

© UCLES 2022

Section A

Answer **one** question from this section.

1 **(a)** Study Fig. 1.1, which shows information about the change in the population of selected cities in Australia (an MEDC) between 2017 and 2018 as a result of net migration and natural increase.

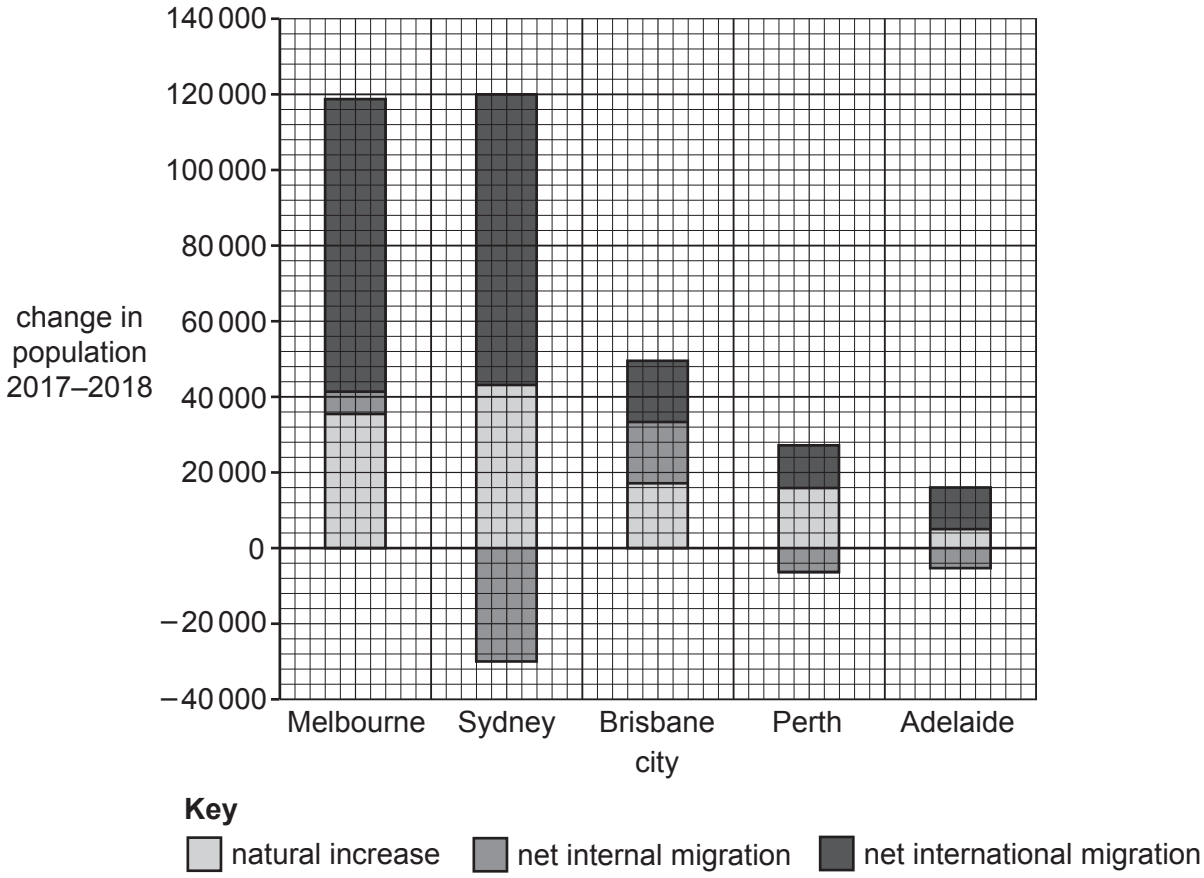


Fig. 1.1

(i) What is meant by *net migration*?

.....

..... [1]

(ii) Calculate the total population change of Sydney between 2017 and 2018. You should show your calculations in the box below.

[2]

(iii) Suggest **three** different reasons why there is a large amount of international migration to cities such as Melbourne and Sydney.

1 .....

.....

2 .....

.....

3 .....

..... [3]

(iv) Many international migrants arrive in Australia from countries in Asia, such as China and Indonesia. Describe the problems which may be faced by these migrants when they arrive in Australian cities.

.....

.....

.....

.....

.....

.....

.....

..... [4]

(b) Study Fig. 1.2, which shows information about the population structure of Australia between 1951 and 2021.

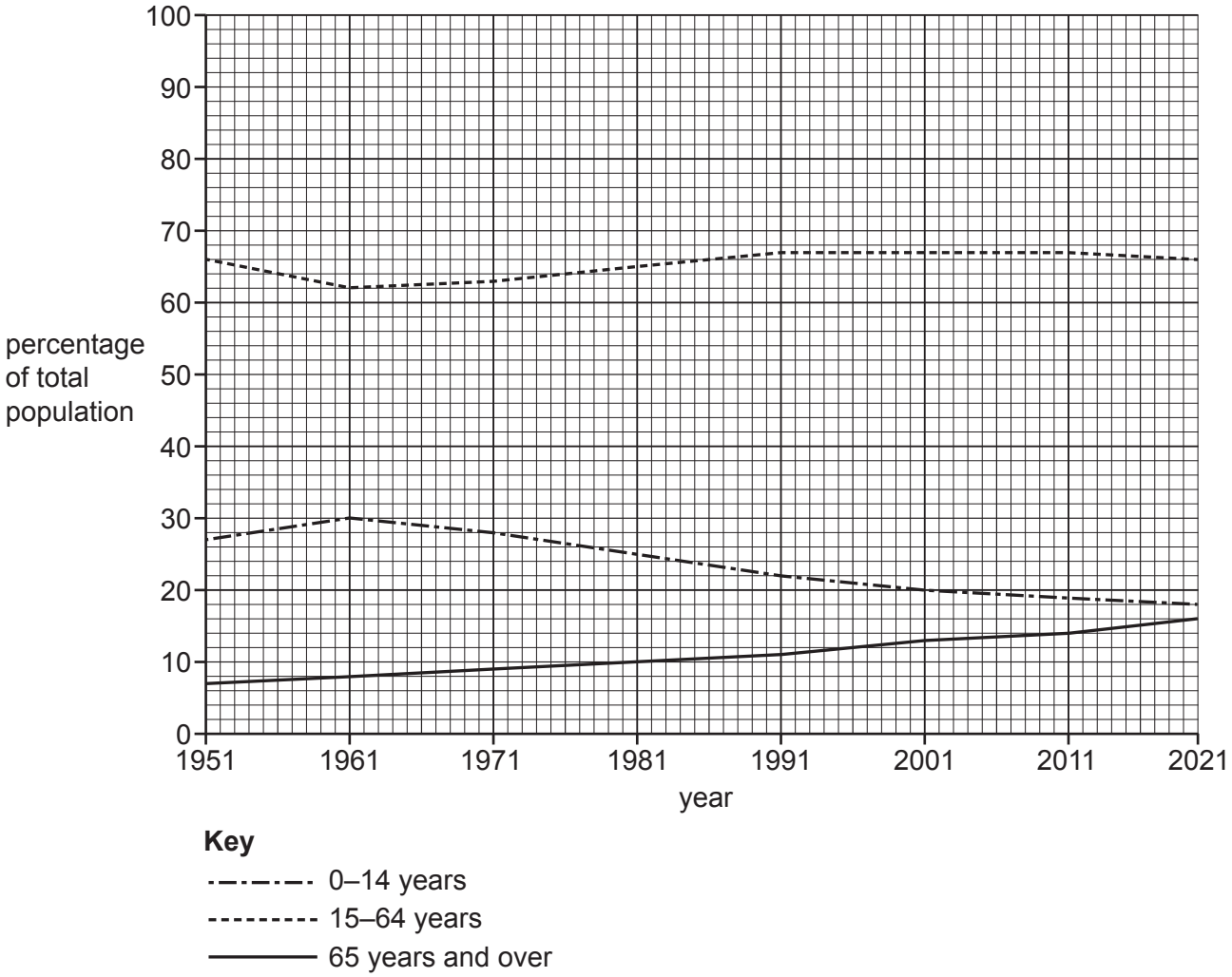


Fig. 1.2

(i) Describe the overall changes in Australia's population structure between 1951 and 2021. Do **not** use data in your answer.

.....

.....

.....

.....

.....

..... [3]

(ii) Suggest ways in which an increasing proportion of old dependent population is likely to cause problems for a country.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [5]

(c) For a named country you have studied, describe the problems caused by overpopulation.

Name of country .....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [7]

[Total: 25]

© UCLES 2022

2 **(a)** Study Figs. 2.1, 2.2 and 2.3 (Insert), which are photographs of three services in different sized settlements.

(i) Which of the photographs shows a low-order service?
Circle **one** of the answers below.

Fig. 2.1 Fig. 2.2 Fig. 2.3 [1]

(ii) Put the three services shown in Figs. 2.1, 2.2 and 2.3 in rank order according to the size of their threshold population.

1st Fig. ..... largest

2nd Fig. .....

3rd Fig. ..... smallest [2]

(iii) Explain why high-order services have a large sphere of influence.

.....

.....

.....

.....

.....

..... [3]

(iv) Explain, using examples, what is meant by a *settlement hierarchy*.

.....

.....

.....

.....

.....

.....

.....

..... [4]

© UCLES 2022

(b) Study Fig. 2.4, which shows information about the population size and service provision in selected settlements in the Epping area, in the UK.

name of settlement	**Loughton**	**Chigwell**	**Theydon Bois**	**Roydon**	**Sewardstone**
population size	31 106	12 987	4062	2193	1118
primary school	yes	yes	yes	yes	no
secondary school	yes	yes	no	no	no
doctors' surgery	yes	yes	yes	yes	no
pharmacy	yes	yes	yes	yes	no
general store	yes	yes	yes	no	no
bank	yes	yes	no	no	no
place of worship	yes	yes	yes	yes	yes
fire station	yes	no	no	no	no

Fig. 2.4

(i) Using Fig. 2.4, describe the relationship between the population size and service provision in the Epping area. Refer to different settlements in your answer.

.....

.....

.....

.....

.....

..... [3]

(ii) Suggest reasons why there is a relationship between settlement size and the number of services provided in the Epping area.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [5]

(c) For a named urban area you have studied, describe the impacts of urban sprawl.

Name of urban area .....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [7]

[Total: 25]

TURN PAGE FOR QUESTION 3

Section B

Answer **one** question from this section.

3 **(a)** Study Fig. 3.1, which is a diagram showing information about the vegetation in an area of tropical rainforest.

Content removed due to copyright restrictions.

Fig. 3.1

(i) What is the maximum height of the rainforest shown in Fig. 3.1?

..... metres [1]

(ii) Name the layers of the rainforest labelled **A** and **B** in Fig. 3.1.

Choose from the following list.

canopy emergent shrub layer understory

A .....

B ..... [2]

(iii) Suggest reasons why some types of wildlife live above 25 metres but other types live below 5 metres in the rainforest shown in Fig. 3.1.

.....

.....

.....

.....

.....

..... [3]

(iv) Explain why some trees in the tropical rainforest have:

– buttress roots

.....

.....

.....

.....

– drip tip leaves.

.....

.....

.....

..... [4]

(b) Study Figs. 3.2 and 3.3 (Insert), which are maps showing Borneo in 1973 and 2015.

(i) Using Figs. 3.2 and 3.3 **only**, describe the distribution of the areas where deforestation took place in Borneo between 1973 and 2015.

.....

.....

.....

.....

.....

..... [3]

(ii) Suggest reasons why deforestation has taken place in areas of tropical rainforest such as Borneo.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [5]

(c) Describe the impacts of deforestation on the **global** natural environment. You should refer to named areas affected in different parts of the world.

.....

.....

.....

4 **(a)** Study Fig. 4.1 (Insert), which is a photograph of part of a river.

(i) Identify the river landform labelled **X** in Fig. 4.1.

..... [1]

(ii) Describe **two** features of the landform labelled **X** in Fig. 4.1.

1 .....

.....

2 .....

..... [2]

(iii) Explain how the landform labelled **X** in Fig. 4.1 was formed.

.....

.....

.....

.....

.....

..... [3]

(iv) Give **two** advantages and **two** disadvantages of living close to a river such as the one shown in Fig. 4.1.

Advantage 1 .....

.....

Advantage 2 .....

.....

Disadvantage 1 .....

.....

Disadvantage 2 .....

..... [4]

© UCLES 2022

(b) Study Fig. 4.2, which is a map of the delta of the River Orinoco in Venezuela.

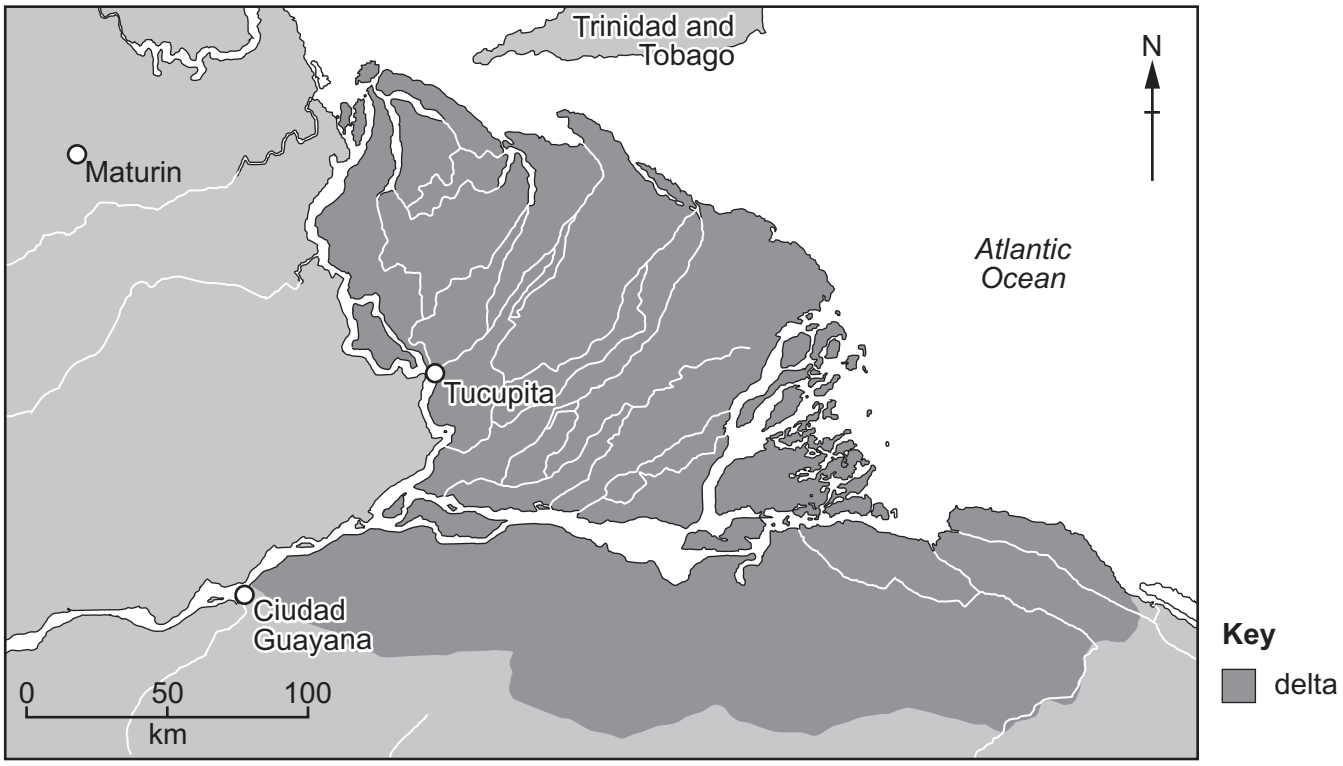


Fig. 4.2

(i) Using Fig. 4.2 **only**, describe the characteristics of the delta of the River Orinoco.

.....

.....

.....

.....

.....

..... [3]

(ii) Explain how a delta is formed.

.....

.....

.....

.....

.....

.....

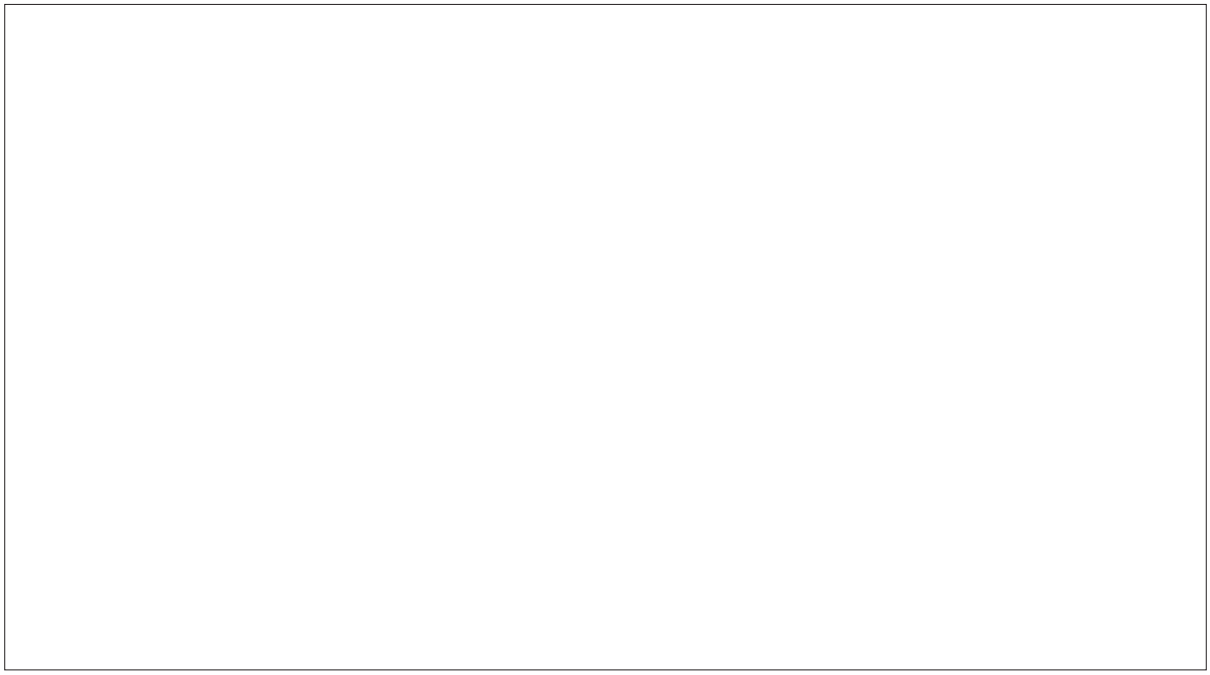
.....

.....

.....

..... [5]

(c) Draw a labelled diagram to show the features of a waterfall.
Explain how a waterfall is formed.



.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [7]

[Total: 25]

Section C

Answer **one** question from this section.

5 **(a)** Study Fig. 5.1 (Insert), which is a photograph of an area in Bangladesh (an LEDC) where subsistence farming takes place.

(i) Define *subsistence* farming.

.....

..... [1]

(ii) Describe the relief of the area shown in Fig. 5.1.

.....

.....

.....

..... [2]

(iii) Suggest how the relief of the area shown in Fig. 5.1 is likely to influence agricultural land use.

.....

.....

.....

.....

.....

..... [3]

(iv) Explain why many farmers in LEDCs are subsistence farmers.

.....

.....

.....

.....

.....

.....

.....

..... [4]

(b) Study Fig. 5.2, which is a graph showing exports of wheat from the USA and the European Union between 2004 and 2018.

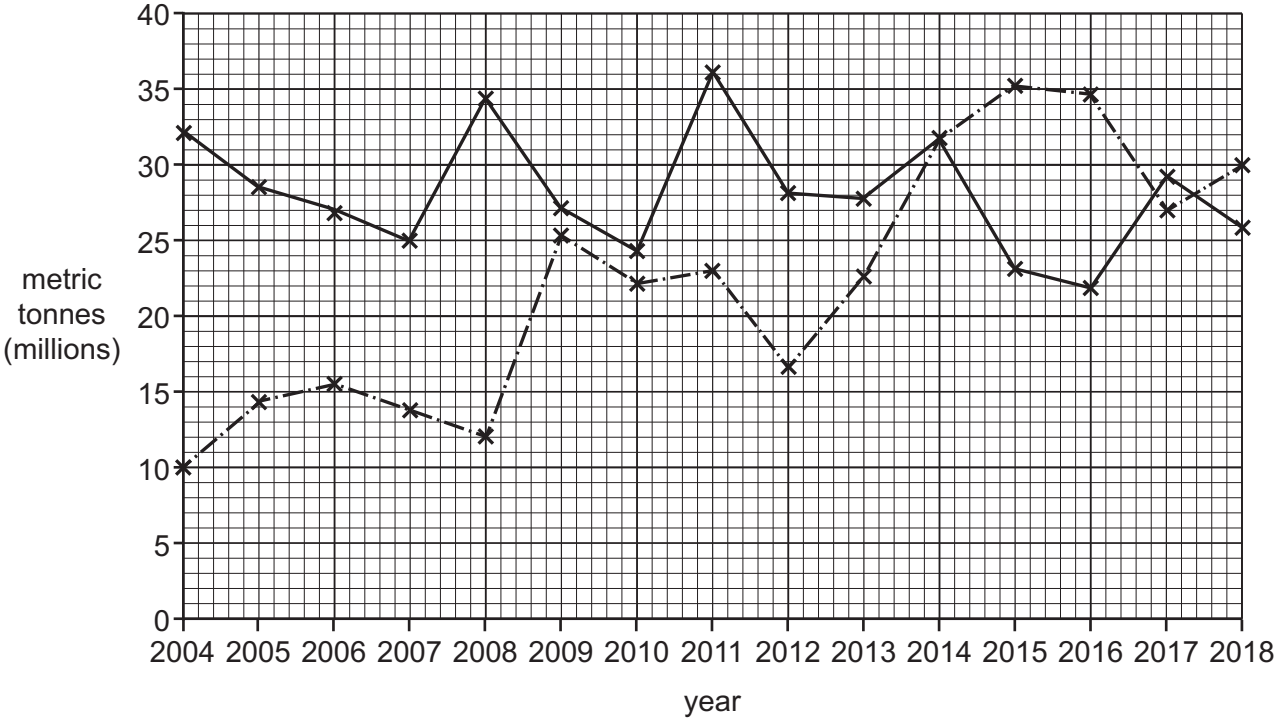


Fig. 5.2

(i) Compare the exports of wheat from the European Union and the USA between 2004 and 2018. Do **not** use statistics in your answer.

.....

.....

.....

.....

.....

.....

..... [3]

(ii) Explain why the production of crops, such as wheat, varies from year to year.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [5]

(c) For a named country or area you have studied, describe the impacts of food shortages.

Name of country or area .....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [7]

[Total: 25]

6 **(a)** Study Fig. 6.1 (Insert), which is a photograph of a manufacturing industry.

(i) Define *manufacturing* industry.

.....

..... [1]

(ii) Describe **two** features of the manufacturing industry shown in Fig. 6.1.

1 .....

.....

2 .....

..... [2]

(iii) From the list below circle **three** inputs of the manufacturing industry shown in Fig. 6.1.

energy	finished products	fumes
labour	transporting	processing
profit	raw materials	selling

[3]

(iv) Explain why transport links are an important factor when the location is being chosen for a factory.

.....

.....

.....

.....

.....

.....

.....

.....

..... [4]

(b) Study Fig. 6.2, which shows information about the sources of three types of air pollution in Europe.

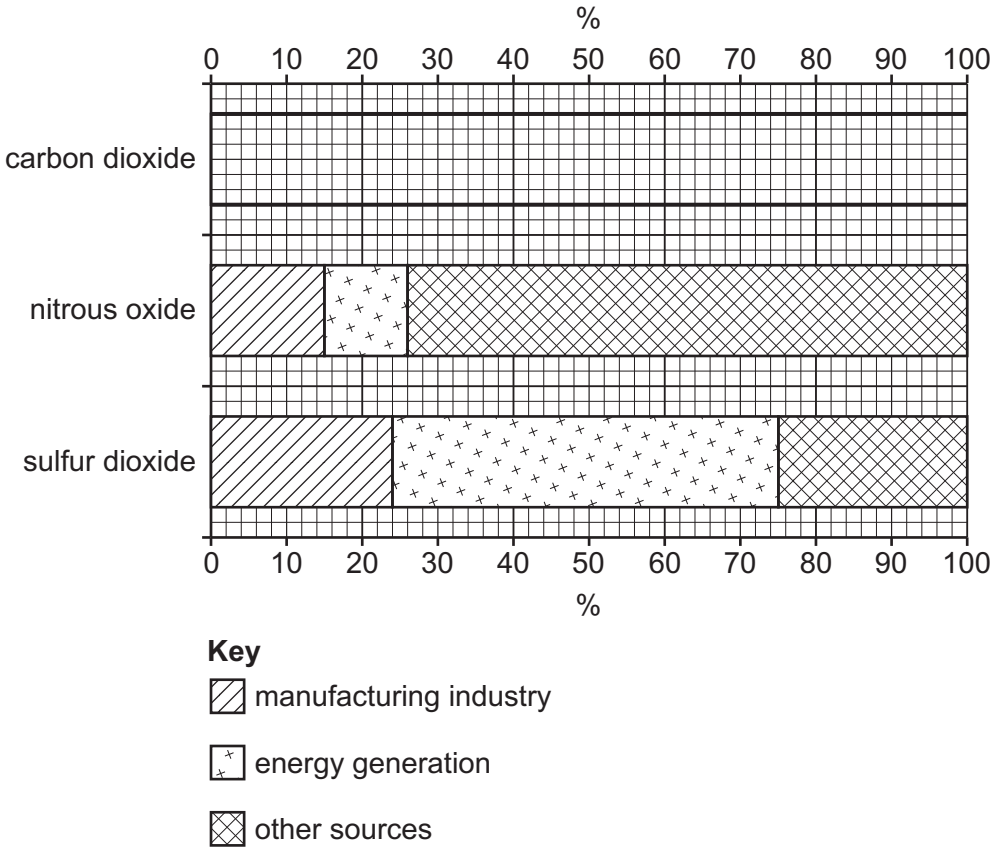


Fig. 6.2

(i) **Complete** Fig. 6.2 by shading the bar for carbon dioxide using the following information:

20% manufacturing industry, 32% energy generation, 48% other sources. [3]

(ii) Describe the impacts of manufacturing industry on the **local** natural environment.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [5]

(c) For a named area you have studied, explain how an economic activity is managed sustainably.

Name of area .....

Economic activity .....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [7]

[Total: 25]

Additional pages

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

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

© UCLES 2022

The boundaries and names shown, the designations used and the presentation of material on any maps contained in this question paper/insert do not imply official endorsement or acceptance by Cambridge Assessment International Education concerning the legal status of any country, territory, or area or any of its authorities, or of the delimitation of its frontiers or boundaries.

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of Cambridge Assessment. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which is a department of the University of Cambridge.

© UCLES 2022