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Cambridge Assessment International Education

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GEOGRAPHY **0460/12**

Paper 1 Geographical Themes **October/November 2023**

1 hour 45 minutes

You must answer on the question paper.

You will need: Insert (enclosed) Ruler
Calculator
Protractor

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. Any blank pages are indicated.

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Section A

Answer **one** question from this section.

1 **(a)** Study Fig. 1.1, information about birth rates and death rates in Germany between 1950 and 2020 (Germany is an MEDC in Europe).

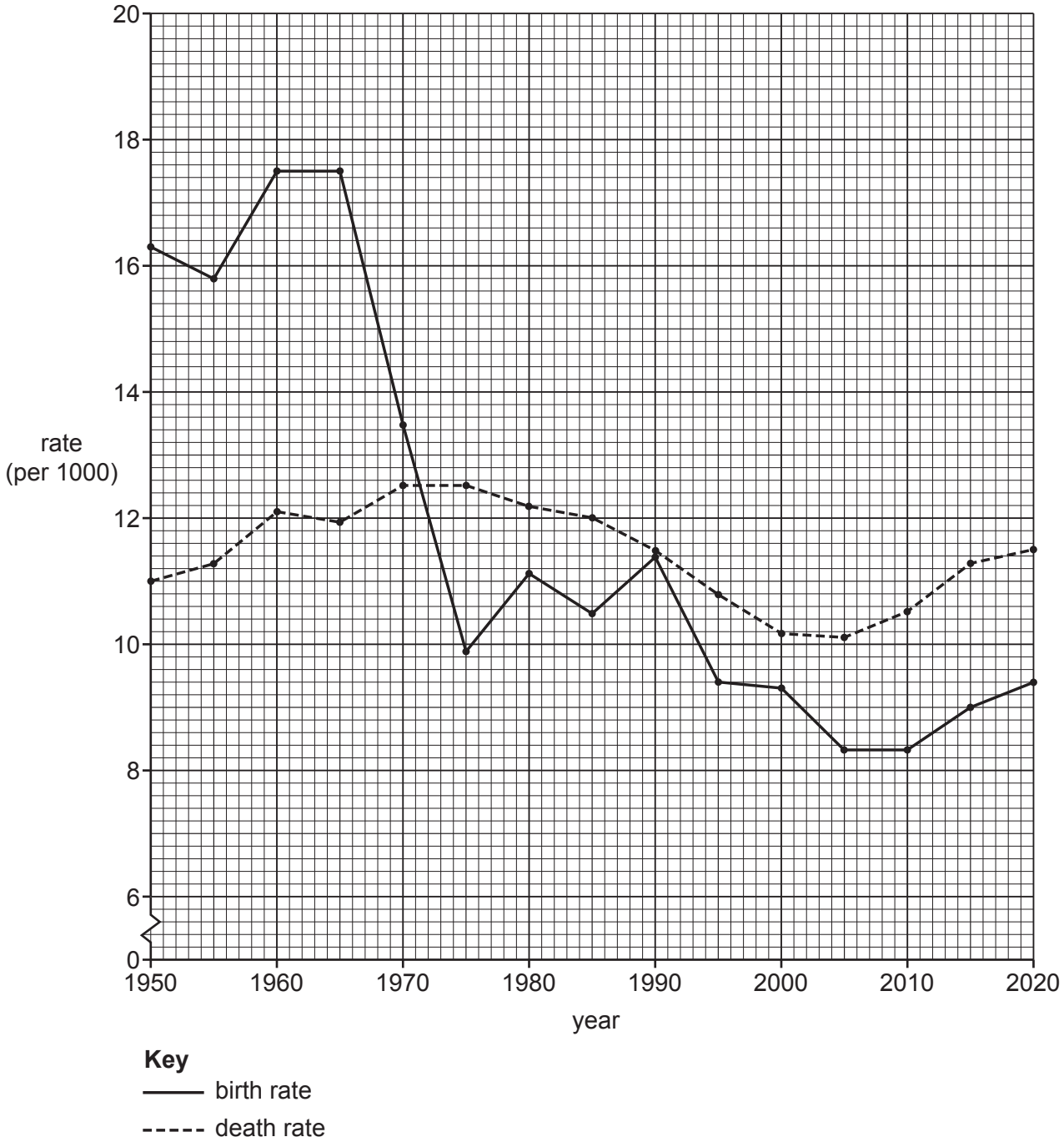

Fig. 1.1

(i) What was the death rate in Germany in 1950?

..... per 1000 [1]

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(ii) What evidence in Fig. 1.1 suggests that:

– there was a decrease in the natural population growth rate in Germany between 1965 and 1970?

.....

.....

– natural population decline occurred in Germany between 1990 and 2000?

.....

..... [2]

(iii) Calculate the natural population growth rate in Germany in 1960.

You should show your calculations in the box below.

..... per 1000

[3]

(iv) Explain why birth rates are low in MEDCs such as Germany.

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(b) Study Fig. 1.2, information about the origins of migrants to Germany.

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Fig. 1.2

(i) **Complete Fig. 1.2** by plotting the following information about the origin of migrants to Germany:

Turkey = 13%
Poland = 8%
Syria = 7% [3]

(ii) Describe the problems which may be faced by international migrants when they arrive in Germany.

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(c) For an example you have studied, explain why international migration has taken place.

Migration from ..... to .....

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[Total: 25]

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2 **(a)** Study Fig. 2.1 (Insert), a photograph taken in Dhaka, Bangladesh (an LEDC in Asia).

(i) What type of settlement is shown at **X** in Fig. 2.1?

Circle **one** of the following.

dispersed settlement rural settlement squatter settlement [1]

(ii) Using evidence from Fig. 2.1, suggest **two** problems faced by people living in the settlement shown at **X**.

1 .....

.....

2 .....

..... [2]

(iii) In many urban areas there are inequalities. Suggest reasons for the inequalities which may exist between the people living in settlements **X** and **Y** in Fig. 2.1.

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..... [3]

(iv) Suggest **two** different types of pollution in the area shown in Fig. 2.1. For each type of pollution explain why it may occur.

type of pollution 1 .....

.....

explanation .....

.....

type of pollution 2 .....

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explanation .....

..... [4]

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(b) Study Fig. 2.2 (Insert), a photograph showing part of the metro in Kuala Lumpur, Malaysia (a country in Southeast Asia).

(i) Explain how a public transport system, such as the Kuala Lumpur Metro, reduces traffic congestion.

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(ii) Describe other strategies which can be used to reduce traffic congestion in urban areas.

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(c) For a named urban area you have studied, explain why the population is increasing due to rural-urban migration.

Name of urban area .....

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Section B

Answer **one** question from this section.

3 **(a)** Study Fig. 3.1, a map of the drainage basin of the Kalinadi River in India.

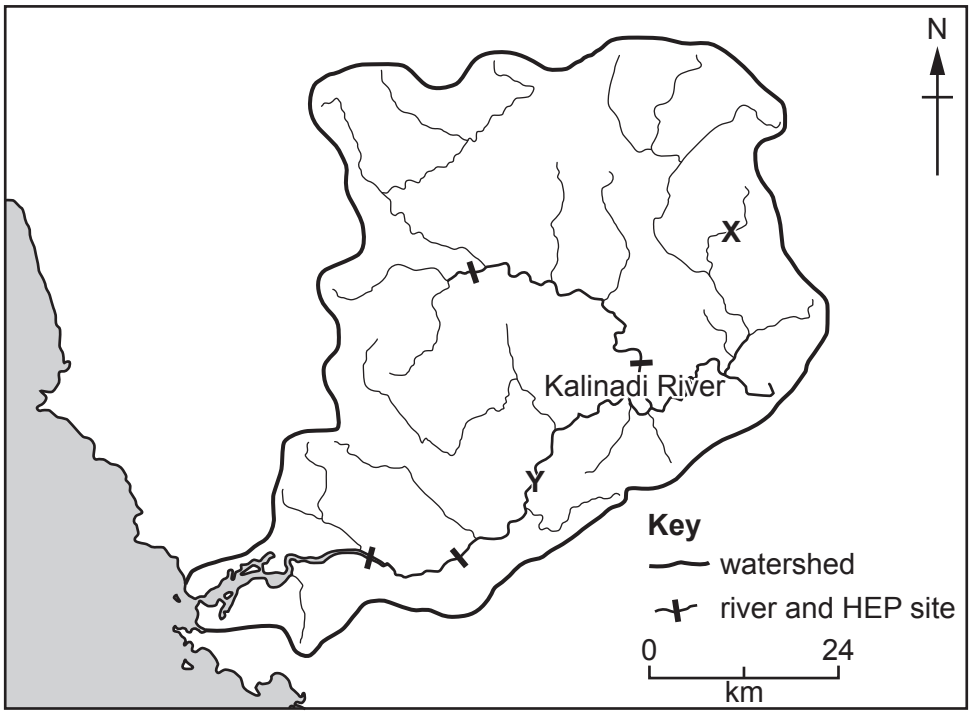

Fig. 3.1

(i) In what general direction does the river flow between **X** and **Y**?

..... [1]

(ii) Mark the following on Fig. 3.1:

– an **M** on the mouth of the Kalinadi River

– a **C** on a confluence. [2]

(iii) Suggest **three** likely differences between the river valleys at **X** and **Y**.

1 .....

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2 .....

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3 .....

..... [3]

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(iv) One benefit of living in the drainage basin of the Kalinadi River is that hydroelectric power (HEP) can be generated.
Suggest reasons why hydroelectric power can be generated at the sites shown in Fig. 3.1.

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(b) Study Fig. 3.2 (Insert), a photograph of a waterfall.

(i) Describe the features of the waterfall shown in Fig. 3.2.

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..... [3]

(ii) Suggest how the waterfall shown in Fig. 3.2 was formed.

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(c) Describe the main features of an oxbow lake and explain its formation.
You may use a labelled diagram or diagrams.

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4 **(a)** Study Fig. 4.1, a map showing two hot deserts in Mexico.

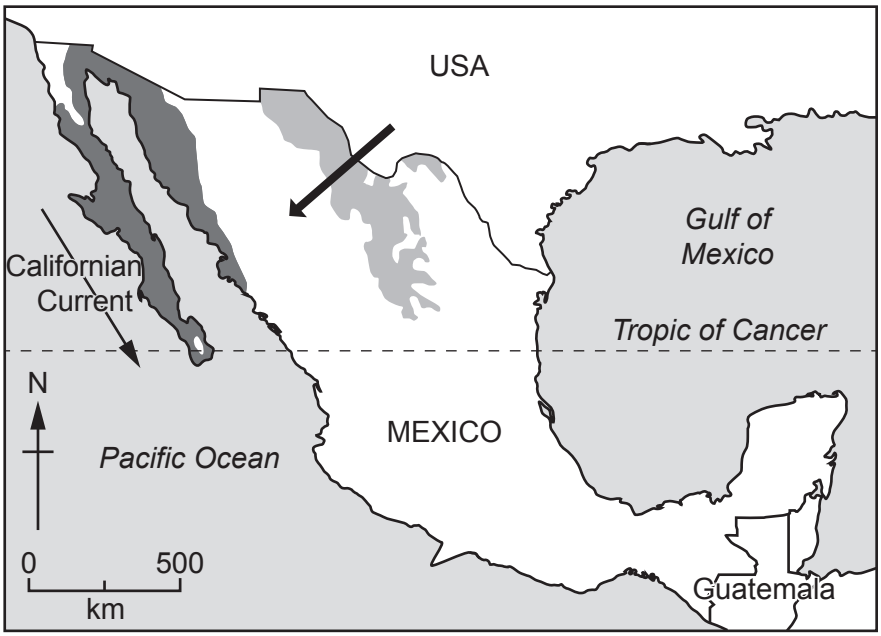

Fig. 4.1

(i) Tick (✓) **one** statement which best describes an area of hot desert.

	tick ✓
strong winds always cause sandstorms	
the annual rainfall is less than 250 mm	
the climate is the same all year round	
the landscape consists only of sand dunes	

[1]

(ii) State **one** difference and **one** similarity between the locations of the Sonoran Desert and the Chihuahuan Desert.

difference .....

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similarity .....

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(iii) Explain why there is a big difference in temperatures between day and night in deserts such as the Sonoran Desert and the Chihuahuan Desert.

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(iv) Using evidence from Fig. 4.1, explain why the Sonoran Desert and the Chihuahuan Desert do not receive much rainfall.

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(b) Study Fig. 4.2 (Insert), a photograph of vegetation growing in an area of hot desert.

(i) Using Fig. 4.2, identify **three** features of the vegetation shown which help it to survive in areas of low rainfall.

1 .....

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2 .....

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3 .....

..... [3]

(ii) Describe **other** methods which vegetation uses to survive in a hot desert.

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(c) For a named area you have studied, describe and explain the characteristics of an **equatorial climate**.

Name of area .....

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Section C

Answer **one** question from this section.

5 **(a)** Study Figs. 5.1 and 5.2 (Insert), maps showing the literacy rate for two different age groups.
Fig. 5.1 shows the literacy rate for people aged 15 to 24 years.
Fig. 5.2 shows the literacy rate for people aged over 65 years.

(i) In which **one** of the following countries was the literacy rate the same for people aged 15 to 24 and people aged over 65?

(Circle) your answer.

China India New Zealand Tanzania [1]

(ii) Put the following countries in rank order of their literacy rate for people aged **over 65**.

China India New Zealand Tanzania

1st ..... highest literacy rate

2nd .....

3rd .....

4th ..... lowest literacy rate [2]

(iii) Using Fig. 5.2, compare the literacy rates of people aged **over 65** in Africa and North America.

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(iv) Name **two** other development indicators. For each one explain how it shows the level of development of a country.

indicator 1 .....

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indicator 2 .....

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(b) Study Fig. 5.3, a triangular graph showing the employment structure of Bangladesh (an LEDC in Asia) in 1970 and 2020.

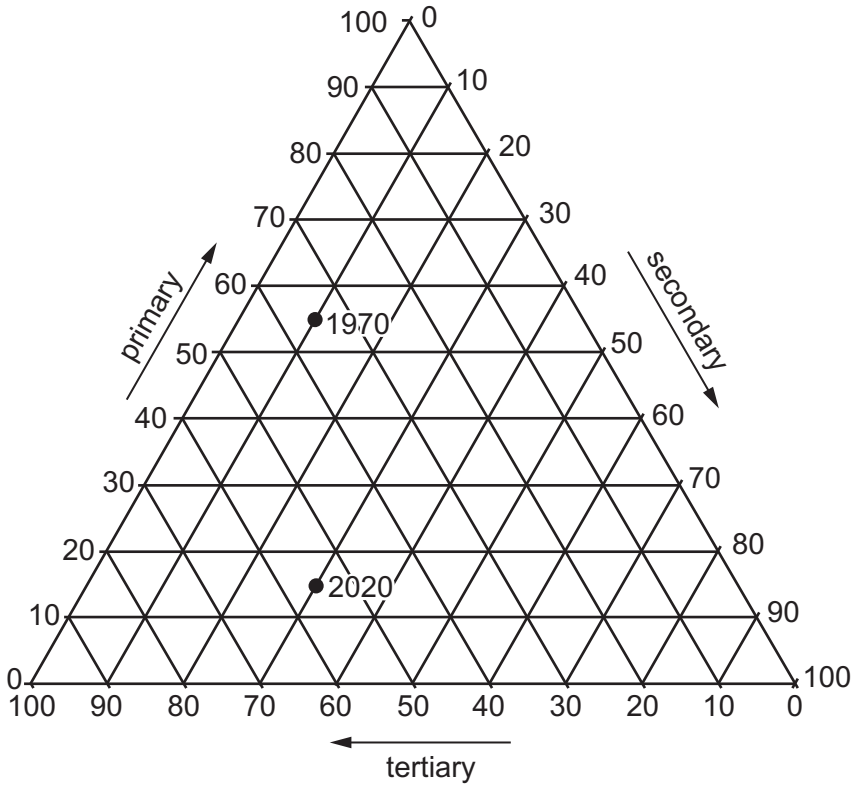

Fig. 5.3

(i) Using Fig. 5.3, compare the employment structure of Bangladesh in 1970 and 2020. Do **not** use statistics in your answer.

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(ii) Explain how changes in technology can result in changes in the employment structure of a country.

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(c) For a named transnational corporation you have studied, describe its characteristics and global links.

Name of transnational corporation .....

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6 **(a)** Study Fig. 6.1 (Insert), a map showing information about desertification in Africa.

(i) Which **one** of the following countries has the largest amount of land with a **very high risk** of desertification?

Circle your answer.

Botswana Chad Gabon Madagascar [1]

(ii) Using Fig. 6.1, describe the distribution of the areas at **very high risk** of desertification in Africa.

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..... [2]

(iii) Compare the risk of desertification in Angola and Nigeria.

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(iv) Suggest likely problems that desertification will cause for people who live in countries such as Angola and Nigeria.

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(b) Study Fig. 6.2, information about the emission of greenhouse gases in the world between 2000 and 2020.

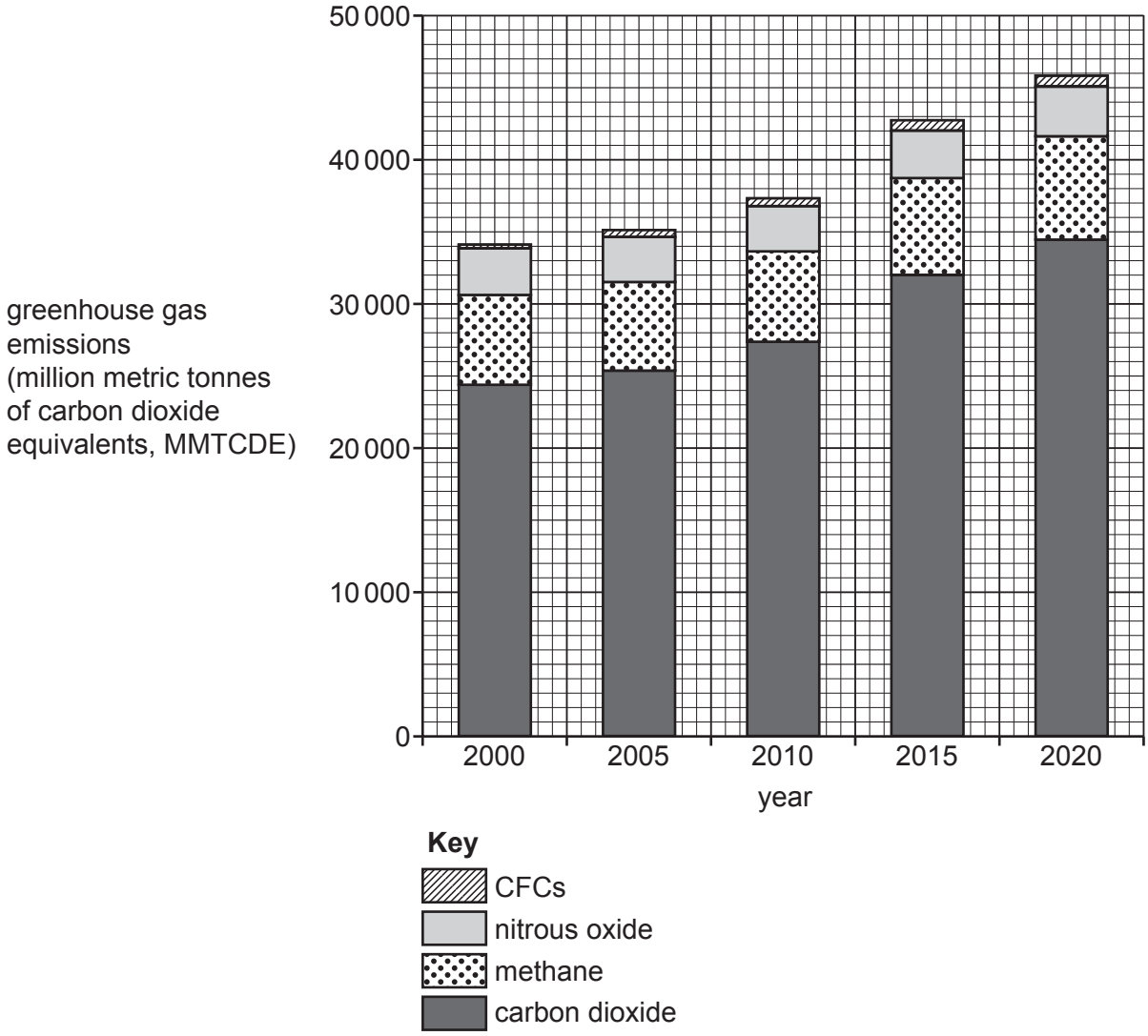

Fig. 6.2

(i) Describe the changes in the emissions of greenhouse gases between 2000 and 2020. You should use statistics to support your answer.

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(ii) Explain why global warming occurs.

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(c) Describe the **impacts** of global warming. You should refer to different named places.

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Additional pages

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