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Cambridge Assessment International Education

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CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER			

6737376550

GEOGRAPHY **0460/23**

Paper 2 Geographical Skills **October/November 2022**

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 **16** pages. Any blank pages are indicated.

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1 Study the map extract for Saltcoats, Scotland. The scale is 1:25 000.

(a) Fig. 1.1 shows some of the features in the north of the map extract. Study Fig. 1.1 and the map extract to answer the questions below.

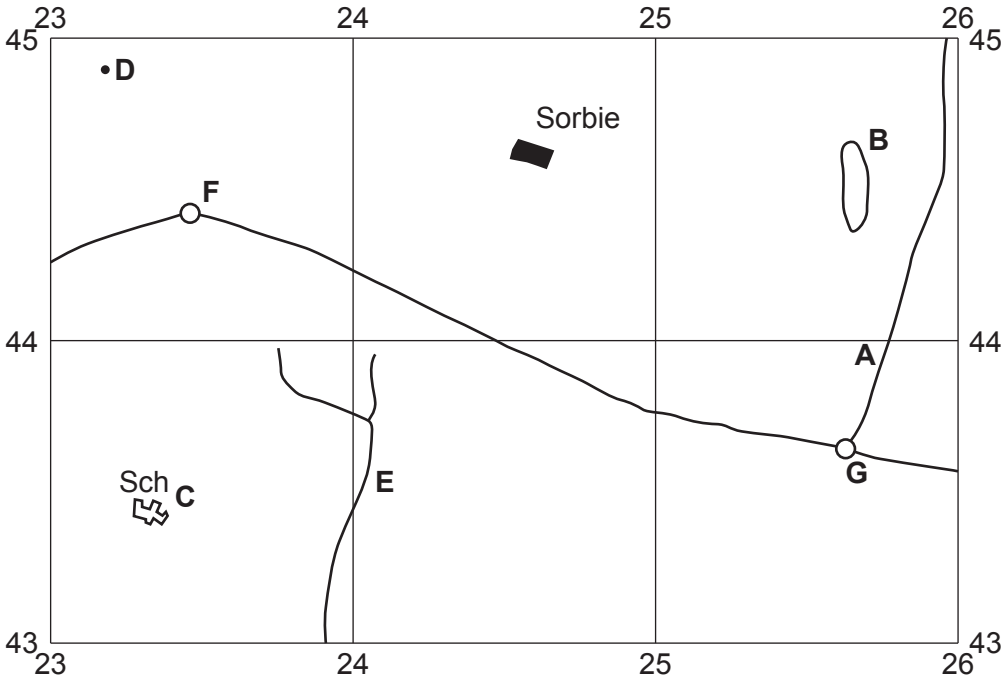

Fig. 1.1

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

(i) feature **A**

..... [1]

(ii) the land use at **B**

..... [1]

(iii) the feature at **C**

..... [1]

(iv) the height above sea level of the spot height (survey height) at **D**

..... metres [1]

(v) the name of the river at **E**.

..... [1]

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(b) Study Fig. 1.1 and the map extract.

(i) Using the map extract measure the distance between roundabouts **F** and **G** travelling on the main road (A78) shown on Fig. 1.1.

..... metres [1]

(ii) Measure the bearing **from** roundabout **F** to **G**.

..... degrees [1]

(iii) Using map evidence suggest reasons for the location of the small settlement of Sorbie (2444).

.....

.....

.....

.....

.....

..... [3]

(c) Fig. 1.2 is a cross-section along northing 445 from 230445 to 260445.

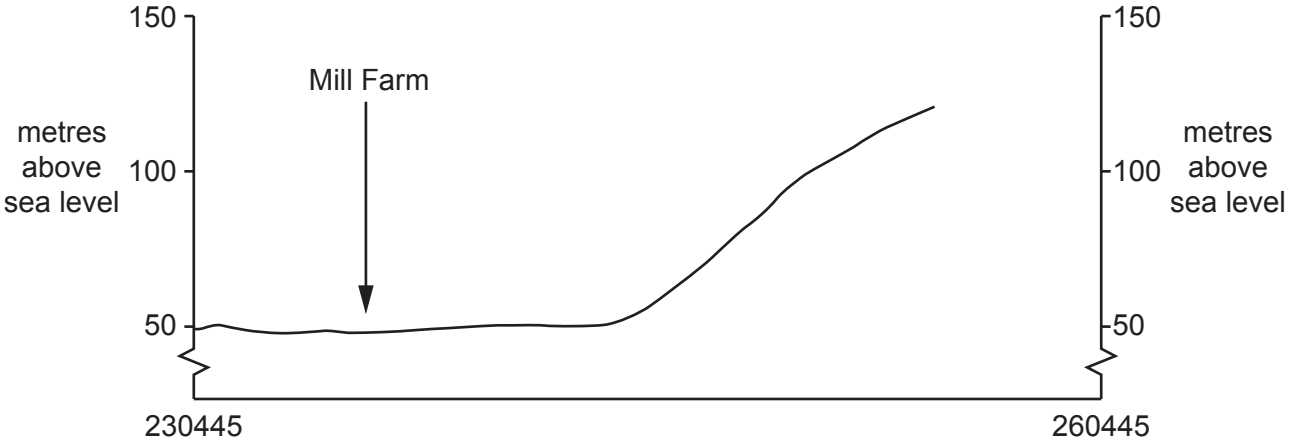

Fig. 1.2

(i) On Fig. 1.2, **use a labelled arrow** to show the position of Sorbie Road. [1]

(ii) The cross-section shown on Fig. 1.2 is incomplete. Using information from the map extract, draw a line on Fig. 1.2 to **complete the cross-section**. [1]

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(d) (i) Identify **three** human features of the coastline shown on the map extract.

1 .....

2 .....

3 ..... [3]

(ii) Describe the physical features of the coastline shown on the map extract.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [5]

[Total: 20]

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2 Fig. 2.1 (Insert) is a photograph showing the city of Rio de Janeiro in Brazil, an LEDC.

(a) (i) Using the figures below, calculate the population density for the city of Rio de Janeiro

Total population = 6 565 317

Total area = 1221 km^2.

..... per km^2 [1]

(ii) Give evidence from Fig. 2.1 that suggests that the city has a high density of population.

.....

.....

.....

..... [2]

(iii) Give evidence from Fig. 2.1 that suggests that physical factors are limiting the growth of the city.

.....

.....

.....

.....

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.....

.....

..... [3]

(b) Suggest **two** different ways in which traffic congestion affects the city's population.

1 .....

.....

2 .....

..... [2]

[Total: 8]

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[Turn over

3 Fig. 3.1 shows information about migration in the nine provinces of South Africa.

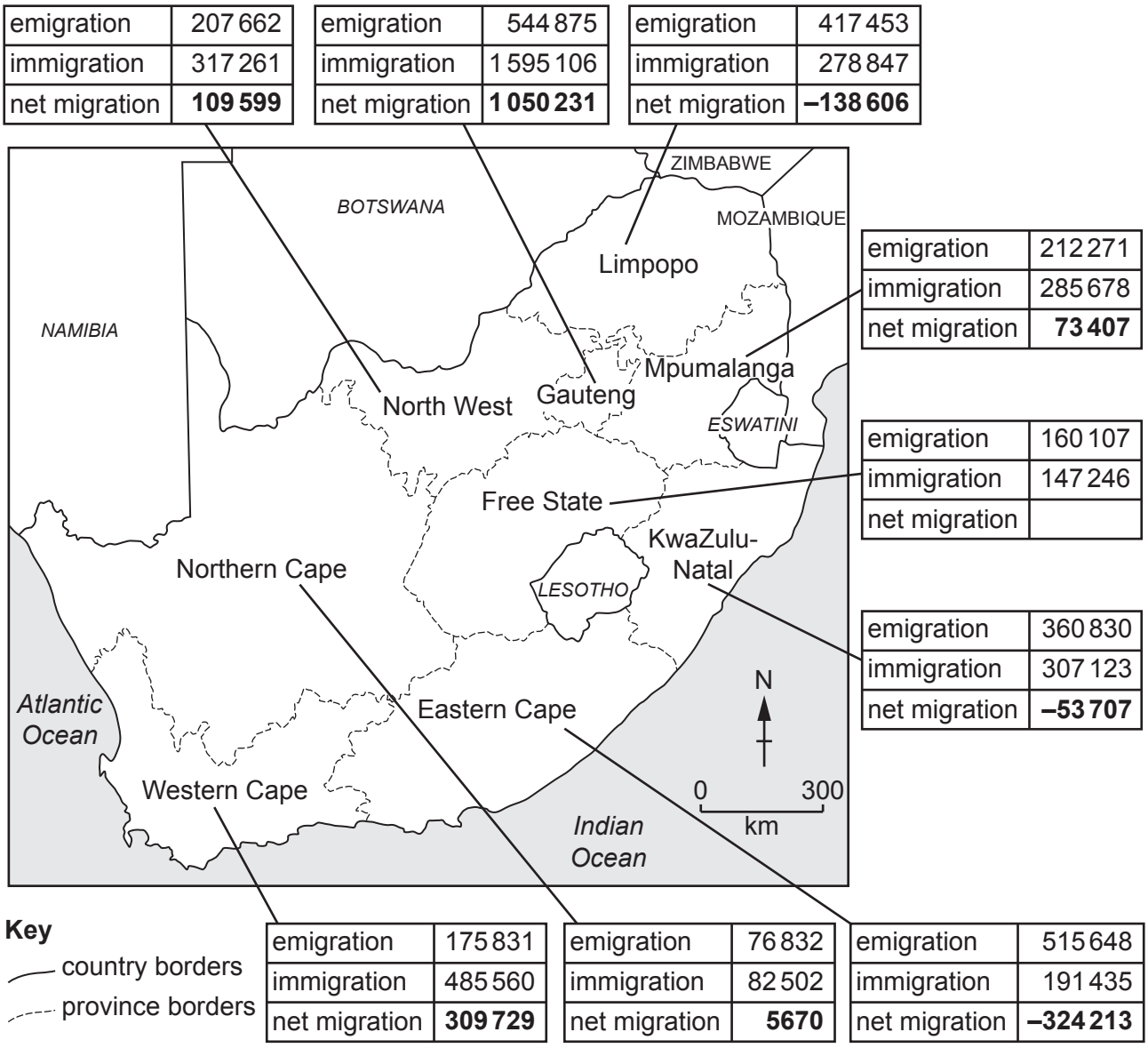

Fig. 3.1

(a) (i) Using Fig. 3.1, calculate the net migration of Free State province.

..... [1]

(ii) Put the following states in order of their net migration gain.

Gauteng Northern Cape North West Western Cape

..... highest

.....

.....

..... lowest [2]

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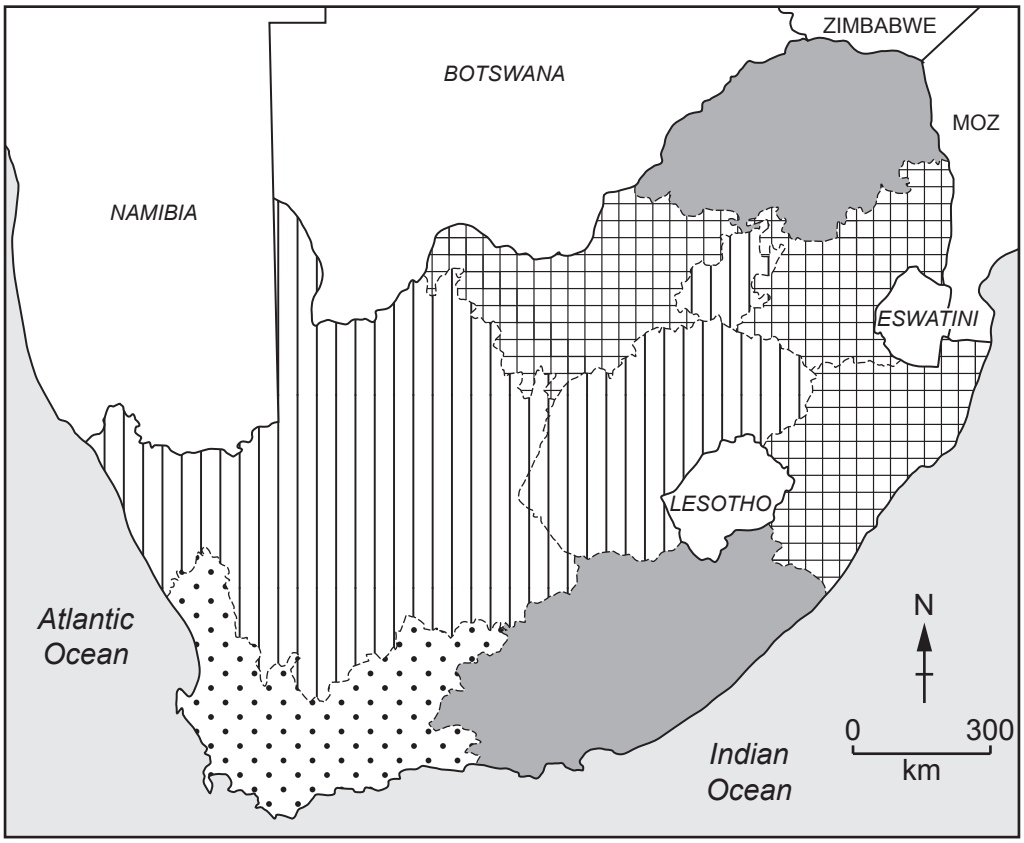
(b) Fig. 3.2 shows information about poverty in the South African provinces.



Key

percentage of households in poverty

more than 11

7.1–11

3.1–7

3 or less

MOZ Mozambique

Fig. 3.2

Migrants move from the poorest areas to the richest areas. Using Figs. 3.1 and 3.2, describe how far this is true for the **two poorest** provinces (more than 11% of households in poverty).

.....

.....

.....

.....

.....

..... [3]

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(c) Gauteng is one of the richer provinces, however it has some of the worst housing conditions in South Africa. Using Figs. 3.1 and 3.2, suggest what causes this.

.....

.....

.....

.....

..... [2]

[Total: 8]

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4 **(a)** Fig. 4.1 (Insert) shows an aerial photograph of Ubinas volcano, Peru.

(i) What type of volcano is this? Tick (✓) **two** boxes below.

	tick (✓)
shield volcano	
strato-volcano	
active	
extinct	

[2]

(ii) Describe the volcano shown in Fig. 4.1.

.....

.....

.....

.....

.....

.....

..... [3]

(b) Describe **three different** ways to reduce the impact of a volcanic eruption on people.

1 .....

.....

2 .....

.....

3 .....

..... [3]

[Total: 8]

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5 Fig. 5.1 (Insert) shows two types of renewable energy in California, USA.

(a) Identify the **two** energy sources shown in Fig. 5.1.

1 .....

2 ..... [2]

(b) Suggest **three different** reasons why some countries do not choose the energy sources shown in Fig. 5.1 to meet their future energy demands.

1 .....

.....

2 .....

.....

3 .....

..... [3]

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(c) Fig. 5.2 shows the percentage of electricity generated by oil in countries of different incomes.

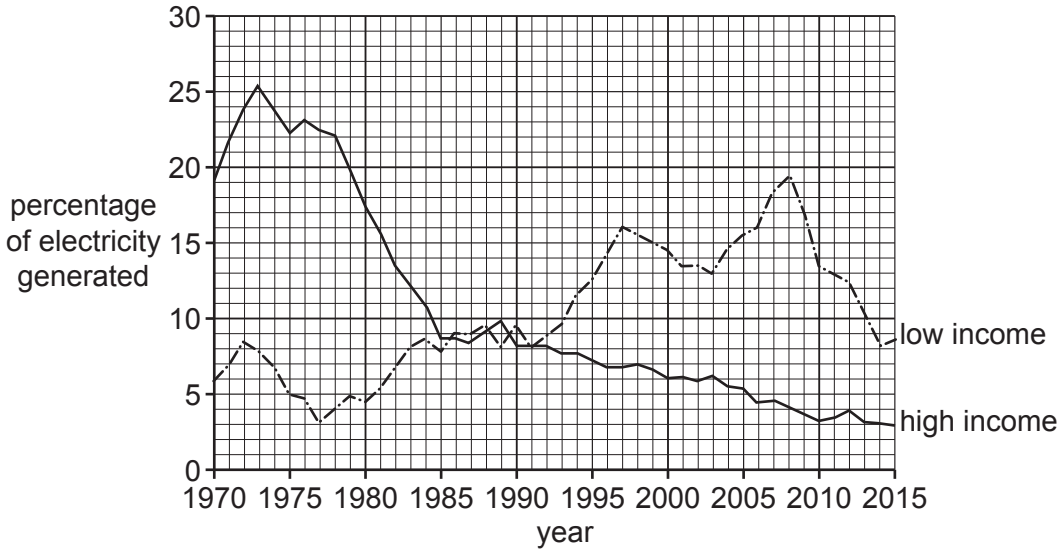

Fig. 5.2

Using Fig. 5.2, compare the overall trends for high- and low-income countries. Tick (✓) **three** correct answers in the table below, which describe the trends shown in Fig. 5.2.

	tick (✓)
both fell then rose	
both rose then stayed at the same level	
both have shown fluctuations in use	
both have shown an overall decrease	
both have shown an overall increase	
from 1995 both have shown an overall decrease in percentage use	
from 1995 both have shown an overall increase in percentage use	
the highest percentage use has been in high-income countries	
the highest percentage use has been in low-income countries	

[3]

[Total: 8]

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6 **(a)** Figs. 6.1 and 6.2 show information about tourism in Iceland.

> The Icelandic government wants a better approach to the sustainable development of tourism. In 2010 Iceland had less than 500 000 tourists but by 2017 it had reached 2 200 000, with most arriving in July and August. Tourist attractions include volcanoes, glaciers and whale watching. The capital city, Reykjavík and surrounding area receive most of the tourists.

Fig. 6.1



Key

✈ international airport

Fig. 6.2

(i) What is meant by *sustainable development*?

.....

.....

.....

..... [2]

(ii) Using Fig. 6.1, identify **one** tourist attraction in Iceland.

..... [1]

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(iii) Describe the change in the number of tourists between 2010 and 2017.

.....

..... [2]

(b) Suggest **three** solutions that Iceland's government could use to reduce the number of tourists in the area around Reykjavík.

1 .....

.....

2 .....

.....

3 .....

..... [3]

[Total: 8]

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Additional pages

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

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