



CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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0460/21

October/November 2022

1 hour 30 minutes

You must answer on the question paper.

You will need:

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

- 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.

- 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.

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

(a) Fig. 1.1 shows some of the features in the south-west of the map extract. Study Fig. 1.1 and the map extract and answer the questions below.

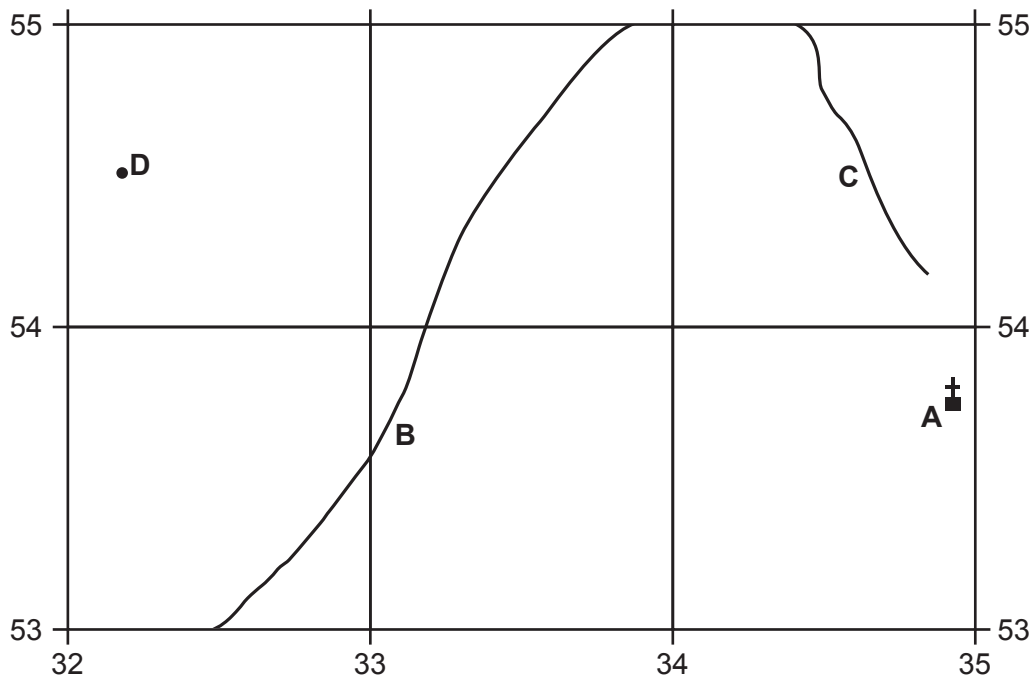


Fig. 1.1

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

(i) feature **A**

..... [1]

(ii) feature **B**

..... [1]

(iii) feature **C**

..... [1]

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

..... metres [1]

(b) Study the map extract and answer the questions that follow.

(i) Estimate the area of Kilbirnie Loch in the south of the map extract. Tick (✓) **one** box below.

	tick (✓)
1 km ²	
1.5 km ²	
2 km ²	
2.5 km ²	

[1]

(ii) Identify **three** tourist attractions shown on the map extract.

1

2

3 [3]

(c) Fig. 1.2 is a cross-section along northing 557 from 320557 to 350557.

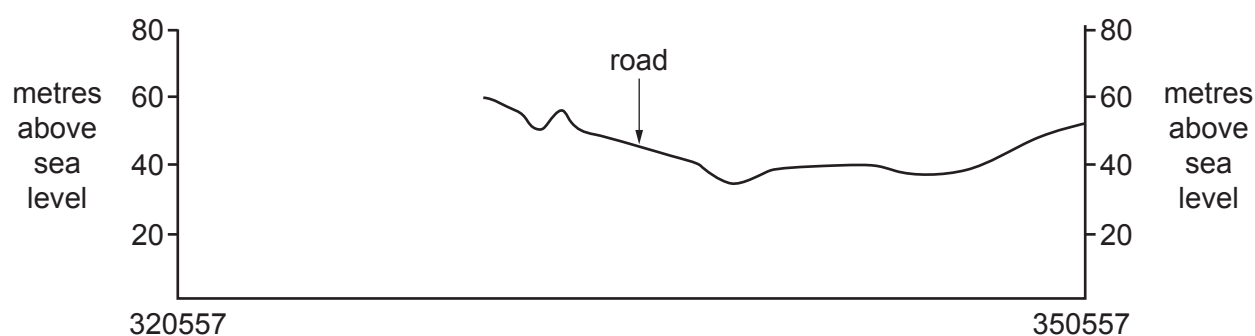


Fig. 1.2

(i) On Fig. 1.2, **use a labelled arrow** to show the position of the A760. [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**. [2]

(d) Describe the distribution of settlement to the west of the A760 main road.

.....

.....

.....

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.....

.....

.....

..... [5]

(e) Describe the site of the settlement of Beith.

.....

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.....

.....

.....

.....

.....

.....

..... [4]

[Total: 20]

TURN PAGE FOR QUESTION 2

2 Fig. 2.1 (Insert) shows global population density.

(a) Describe the distribution of densely populated areas and sparsely populated areas.

Densely populated areas

.....

.....

.....

.....

Sparsely populated areas

.....

.....

.....

..... [4]

- (b) One of the factors which affects population distribution is an area's suitability for agriculture. Fig. 2.2 shows the global percentage of areas which are suitable and unsuitable for agriculture.

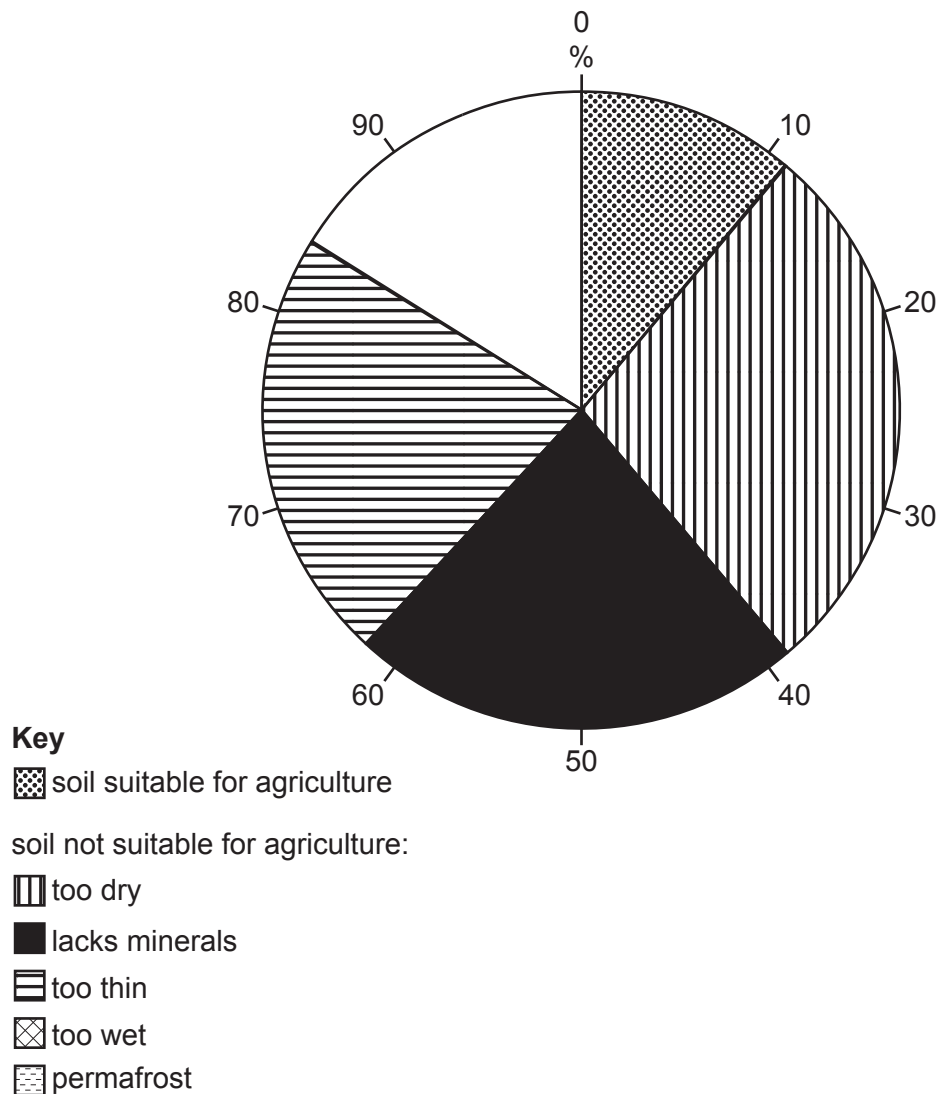


Fig. 2.2

- (i) **Complete Fig. 2.2** using the information below:

too wet 10%
permafrost 6%

[2]

- (ii) Using Fig. 2.2 **only**, describe how soil affects the world's agriculture. Do **not** use statistics in your answer.

.....

.....

.....

..... [2]

[Total: 8]

- 3 Fig. 3.1 shows the main sources of two air pollutants, carbon monoxide and nitrogen oxides, in Hong Kong in 2015.

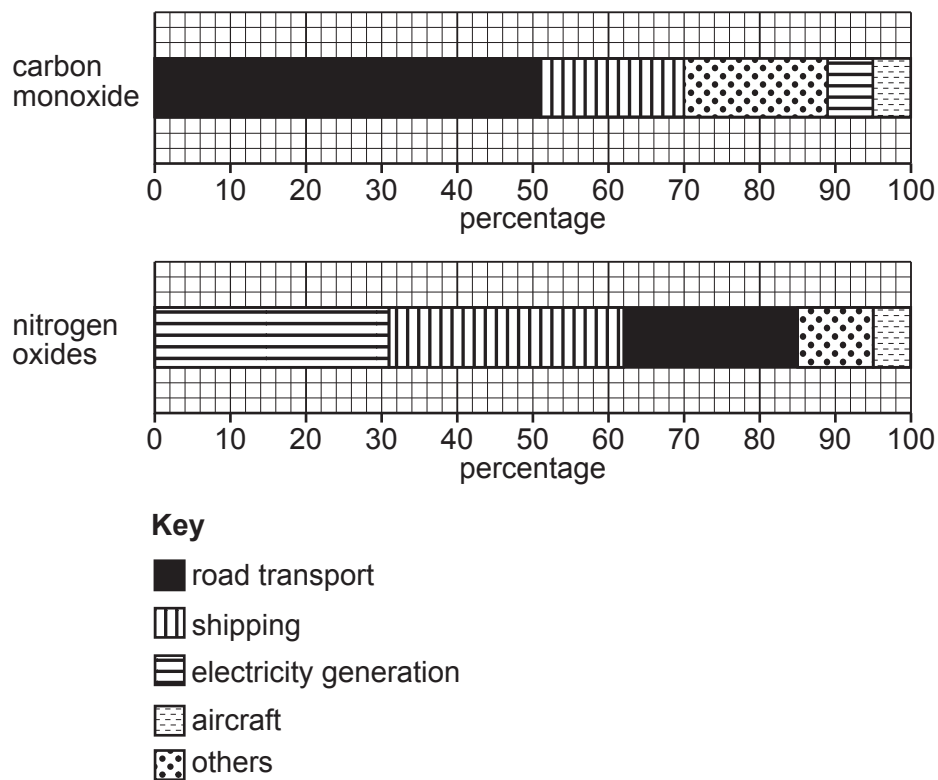


Fig. 3.1

- (a) Using Fig. 3.1, compare the differences between the sources of the two air pollutants. Do **not** use statistics in your answer.

.....

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.....

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.....

.....

..... [3]

- (b) One of the main sources of carbon monoxide emissions is traffic congestion. Using Fig. 3.2 (Insert), explain the attempts to reduce traffic congestion in this part of Hong Kong.

.....

.....

.....

.....

.....

..... [3]

(c) Suggest **two** reasons why it is difficult to reduce the number of people using cars on the road.

1

.....

2

..... [2]

[Total: 8]

- 4 Fig. 4.1 shows the average annual number of volcanic eruptions reported in the world between 1890 and 2010.

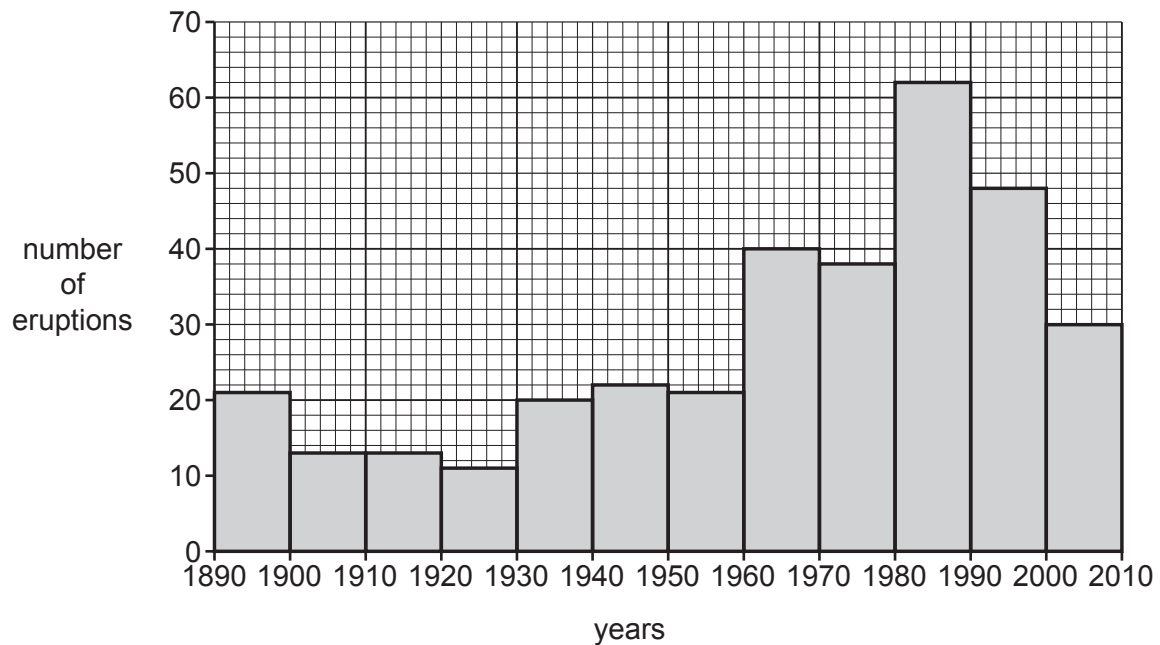


Fig. 4.1

- (a) Many people think that the number of volcanic eruptions is increasing. To what extent is this true? You should use statistics from Fig. 4.1 in your answer.

.....

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.....

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..... [4]

(b) State **four** reasons why many people live near volcanoes.

- 1
-
- 2
-
- 3
-
- 4
- [4]

[Total: 8]

5 Fig. 5.1 shows a climate graph for an equatorial area.

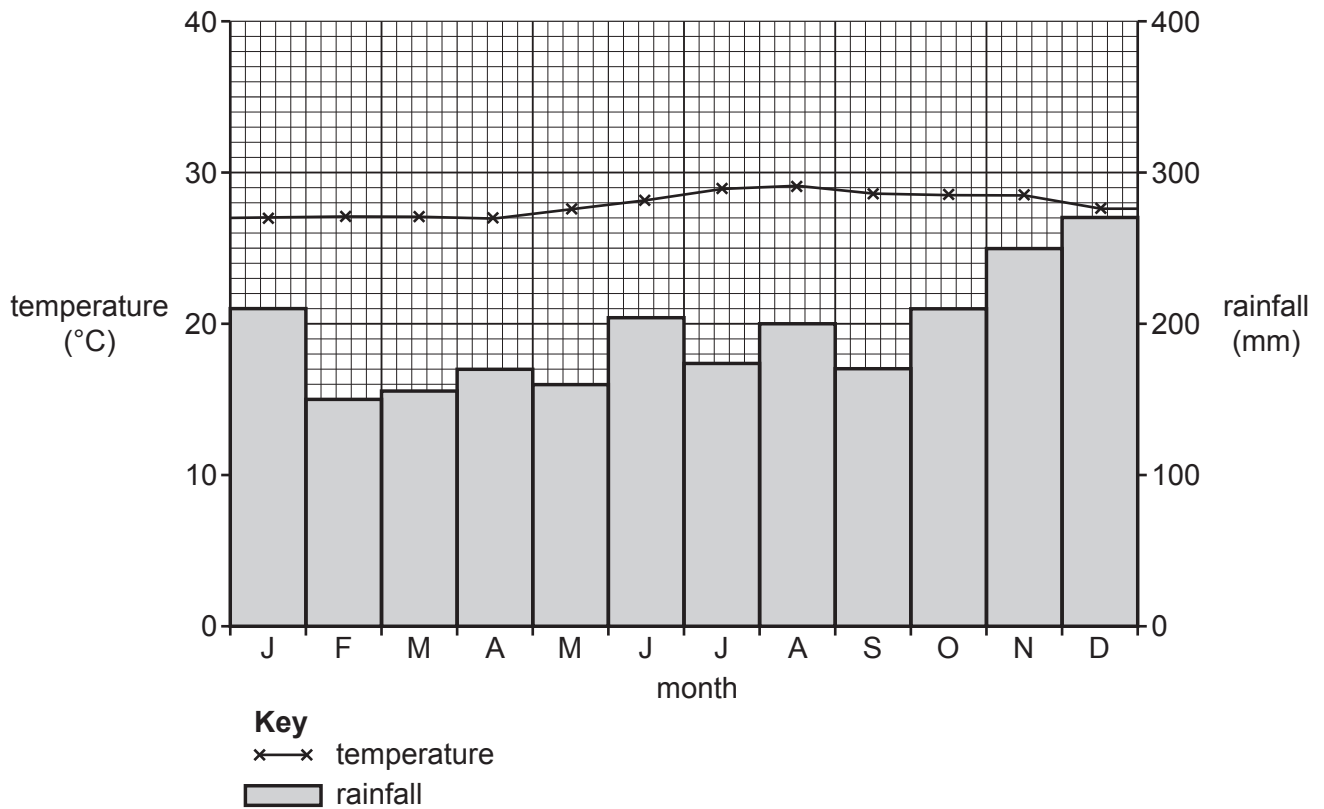


Fig. 5.1

(a) Using Fig. 5.1, describe the main features of an equatorial climate.

.....

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..... [4]

(b) Fig. 5.2 shows the nutrient cycle of a tropical rainforest as a systems diagram.

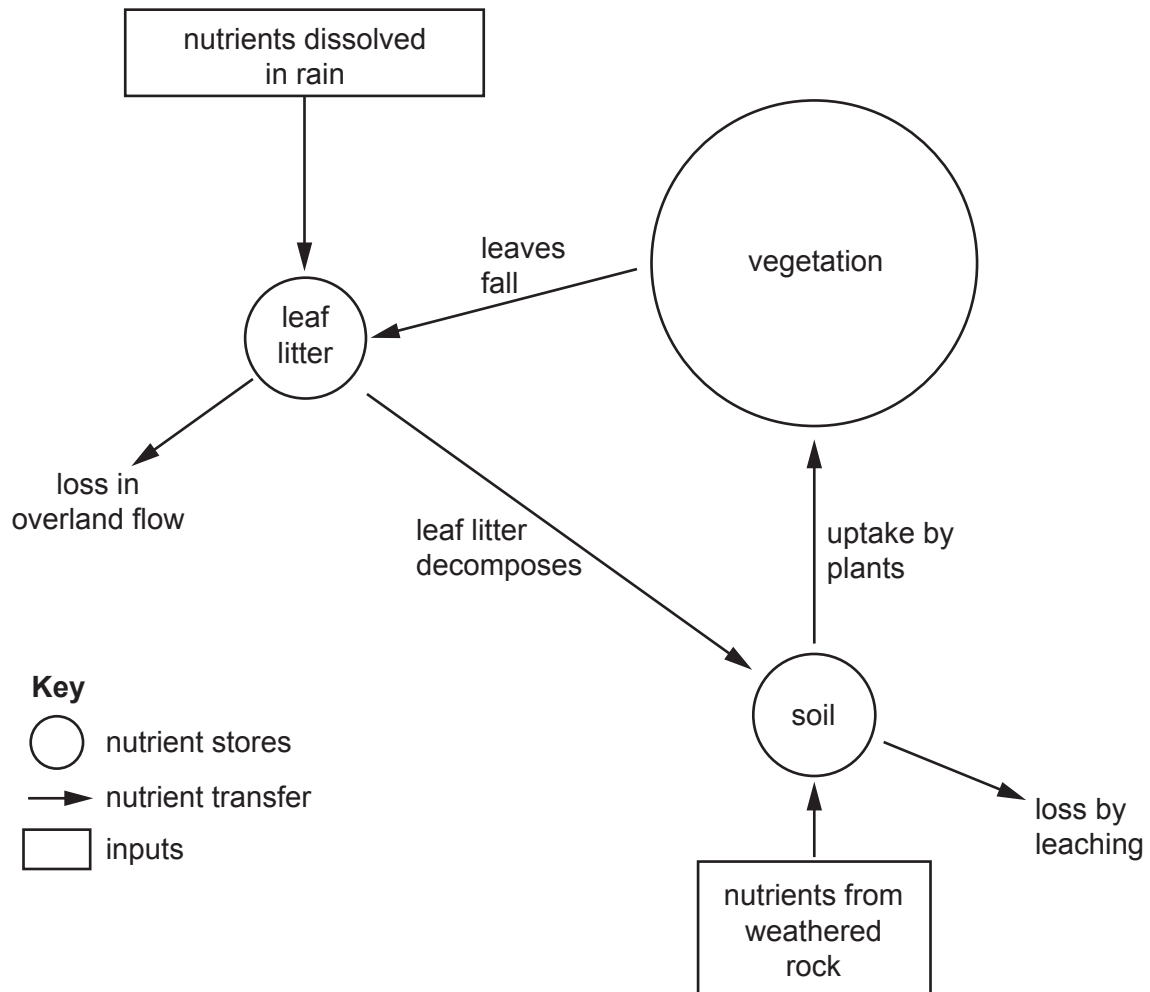


Fig. 5.2

(i) Which is the largest nutrient store in Fig. 5.2?

..... [1]

(ii) Identify **one** way in which nutrients enter the system.

..... [1]

(c) How does vegetation reduce overland flow and soil erosion?

overland flow

.....

soil erosion

..... [2]

[Total: 8]

6 Fig. 6.1 (Insert) shows a farm in Indonesia.

(a) Which one of the following terms describes the farm in Fig. 6.1? Tick (✓) **one** box below.

	tick (✓)
extensive	
pastoral	
mechanised	
intensive	

[1]

(b) Describe the features of the agriculture shown in Fig. 6.1 (Insert).

.....

.....

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.....

.....

..... [4]

(c) Describe the economic and political problems which cause food shortages.

.....

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.....

.....

.....

.....

..... [3]

[Total: 8]

This image shows a full page of a worksheet designed for handwriting practice. It features approximately 20 horizontal dashed lines spaced evenly across the page, providing a guide for letter height and placement. The background is plain white, and there are no other markings or text present.

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