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## 0460/22

May/June 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 **20** pages. Any blank pages are indicated.

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

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

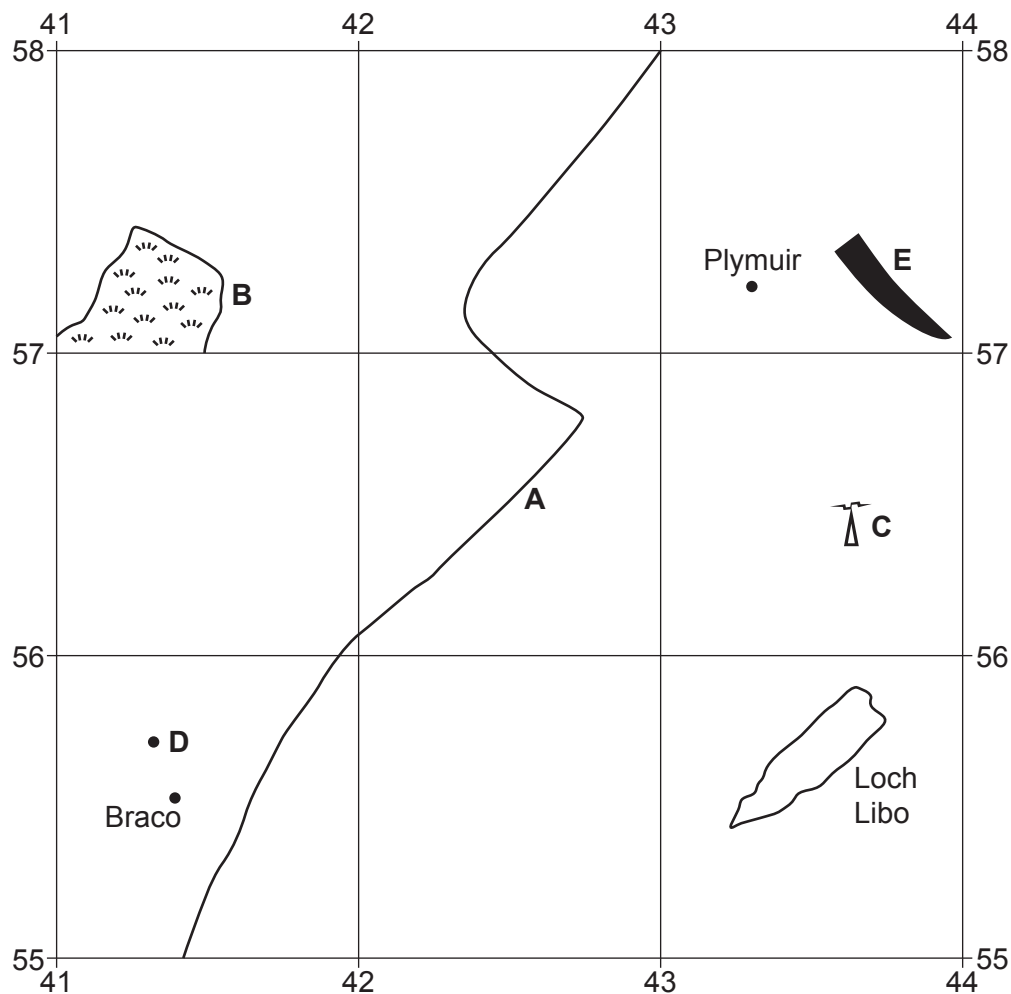


Fig. 1.1

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

(i) feature **A**

..... [1]

(ii) the vegetation at **B**

..... [1]

(iii) feature **C**

..... [1]

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

..... metres [1]

(v) the land use at **E**.

..... [1]

(b) Fig. 1.1 shows the location of Braco, Plymuir and Loch Libo.

- (i) Using the map extract measure the straight-line distance between Braco and Plymuir.

..... metres [1]

- (ii) Measure the bearing **from** Braco to Plymuir.

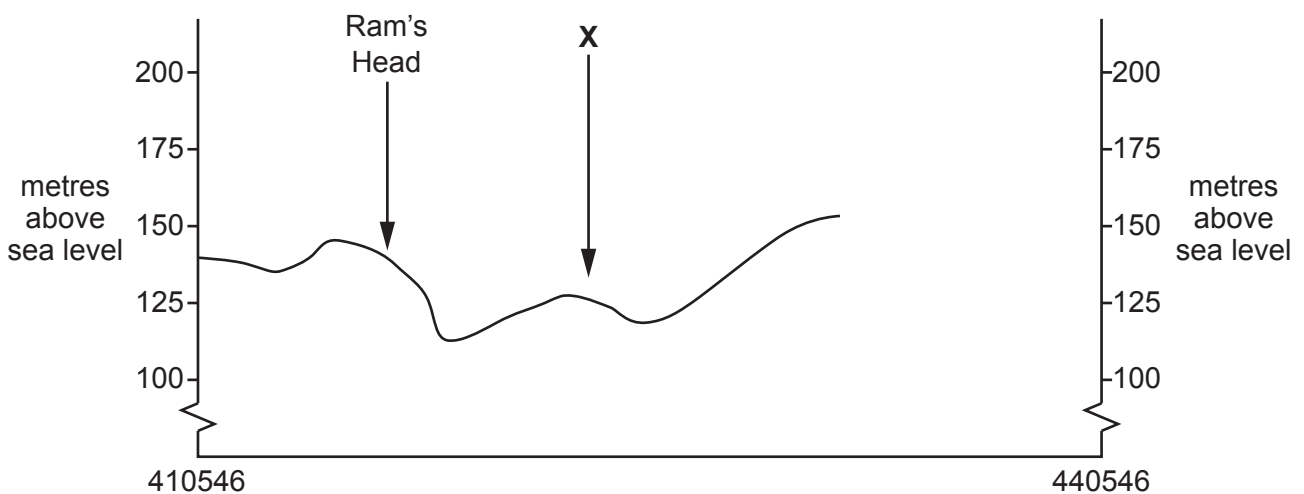
..... degrees [1]

- (iii) Estimate the area of Loch Libo. Tick (✓) **one** box below.

|                        | tick (✓) |
|------------------------|----------|
| 50 000 m <sup>2</sup>  |          |
| 100 000 m <sup>2</sup> |          |
| 150 000 m <sup>2</sup> |          |
| 200 000 m <sup>2</sup> |          |

[1]

(c) Fig. 1.2 is a cross-section along northing 546 from 410546 to 440546.



**Fig. 1.2**

- (i) Identify the land use at X.

..... [1]

- (ii) On Fig. 1.2, **use a labelled arrow** to show the position of the A736. [1]

- (iii) 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 relief of the land to the north of the main road (A736) on the map extract.

.....

.....

.....

.....

.....

.....

.....

..... [4]

(e) Describe the distribution of settlement to the south of the main road (A736) on the map extract.

.....

.....

.....

.....

.....

.....

.....

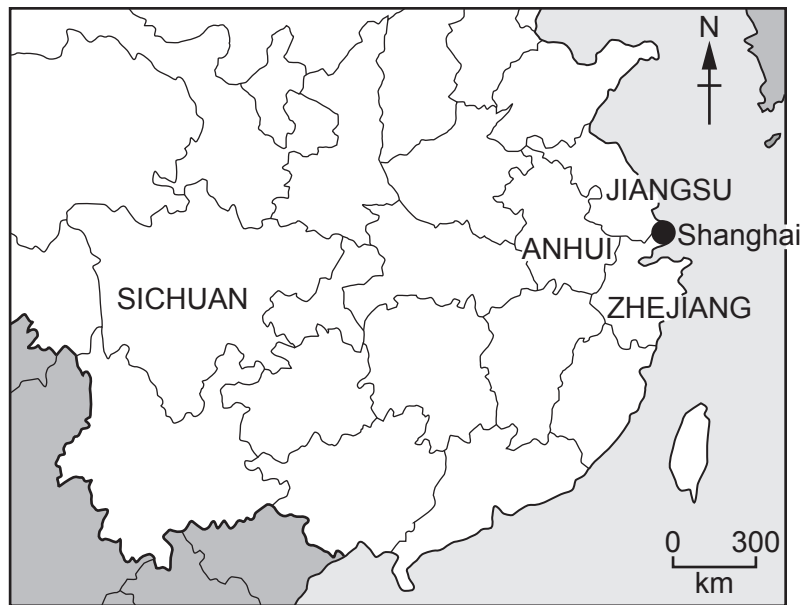
.....

..... [4]

[Total: 20]

**TURN PAGE FOR QUESTION 2**

- 2 Many migrants travel to Shanghai, China each year. Fig. 2.1 shows the four main provinces migrants travelled from to reach Shanghai between 1985 and 1995.



Number of migrants to Shanghai

| years   | provinces |         |         |          |
|---------|-----------|---------|---------|----------|
|         | Anhui     | Jiangsu | Sichuan | Zhejiang |
| 1985–90 | 39 000    | 103 800 | 20 000  | 51 800   |
| 1990–95 | 106 900   | 111 500 | 37 300  | 638 000  |

Fig. 2.1

- (a) (i) Suggest **two** different ways in which the data in Fig. 2.1 could be shown on the map.

- 1 .....
- .....
- 2 .....
- ..... [2]

- (ii) Describe the main patterns of migration shown on Fig. 2.1. Do **not** use statistics in your answer.

- .....
- .....
- .....
- .....
- .....
- ..... [3]

- (b) Using Fig. 2.1 **only**, suggest why there are **not** many migrants travelling from regions such as Sichuan.

.....

.....

..... [1]

- (c) Suggest **two economic** problems caused by the large number of migrants arriving in Shanghai.

1 .....

.....

2 .....

..... [2]

[Total: 8]

- 3 (a) Study Fig. 3.1, which shows how the age structures of countries change as they develop.

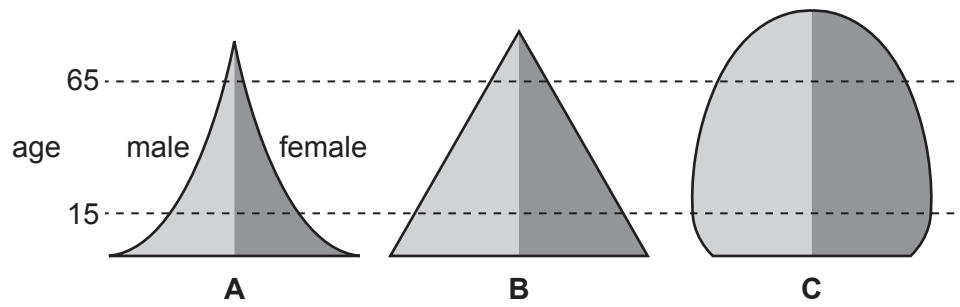


Fig. 3.1

Identify which population pyramid shows the following features. Tick (✓) **one** box for each statement below.

|                                          | A | B | C |
|------------------------------------------|---|---|---|
| lowest life expectancy                   |   |   |   |
| high birth rate and high death rate      |   |   |   |
| ageing population                        |   |   |   |
| high birth rate and declining death rate |   |   |   |
| highest population growth                |   |   |   |

[3]

- (b) Study Fig. 3.2, which shows the change in the percentage of the population that is aged 65 years or above for countries of different incomes.

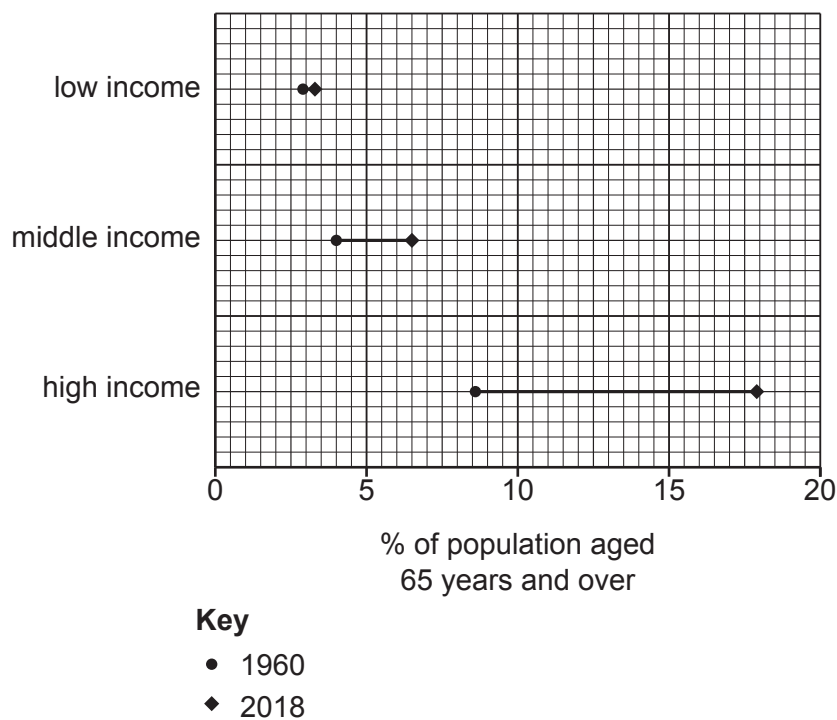


Fig. 3.2

- (i) By how much did the percentage of population aged 65 years and over in middle-income countries increase between 1960 and 2018?

..... % [1]

- (ii) Describe the relationship between income and percentage of the population aged 65 years and over.

.....

.....

.....

..... [2]

- (c) Give **two** reasons why many high-income countries have an ageing population.

1 .....

.....

2 .....

..... [2]

[Total: 8]

- 4 (a) Study Fig. 4.1, which is a newspaper article describing natural hazards on the island of Hawaii.

Kilauea, one of the world's most active volcanoes, has been constantly erupting for 35 years. Lava flows have covered more than 38 square kilometres. The eruption on the 5 May 2018 caused a series of earthquakes, which reached a magnitude of 6.9. Steam and lava came out of large cracks in the ground. The police force asked hundreds of residents to move to the two evacuation centres. A local resident who has lived there for 35 years said, 'It's just part of life here. I've got lava tunnels on my property which drain lava from the volcano.'

**Fig. 4.1**

- (i) Using Fig. 4.1, identify what caused the **earthquakes**.

..... [1]

- (ii) Using Fig. 4.1 **only**, identify **three** reasons why people still live in this area.

1 .....

.....

2 .....

.....

3 .....

..... [3]

- (b) Fig. 4.2 shows how long it would take a tsunami (large wave caused by an earthquake) to reach the nearby islands.

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**Fig. 4.2**

- (i) Describe the location of the earthquake's epicentre.

.....  
 ..... [2]

- (ii) How long would it take the tsunami to reach the island of Kauai?

..... minutes [1]

- (iii) On Fig. 4.2, **complete the line** for 15 minutes. [1]

[Total: 8]

- 5 (a) Figs. 5.1 and 5.2 (Insert) are photographs which show two different tourist locations in Thailand.

Describe the attractions for tourists shown in Figs. 5.1 and 5.2.

Fig. 5.1 .....

.....

.....

.....

.....

Fig. 5.2 .....

.....

.....

.....

..... [5]

- (b) Suggest **two** reasons why the local population would welcome tourists.

1 .....

.....

2 .....

..... [2]

- (c) Suggest **one** problem caused by tourists.

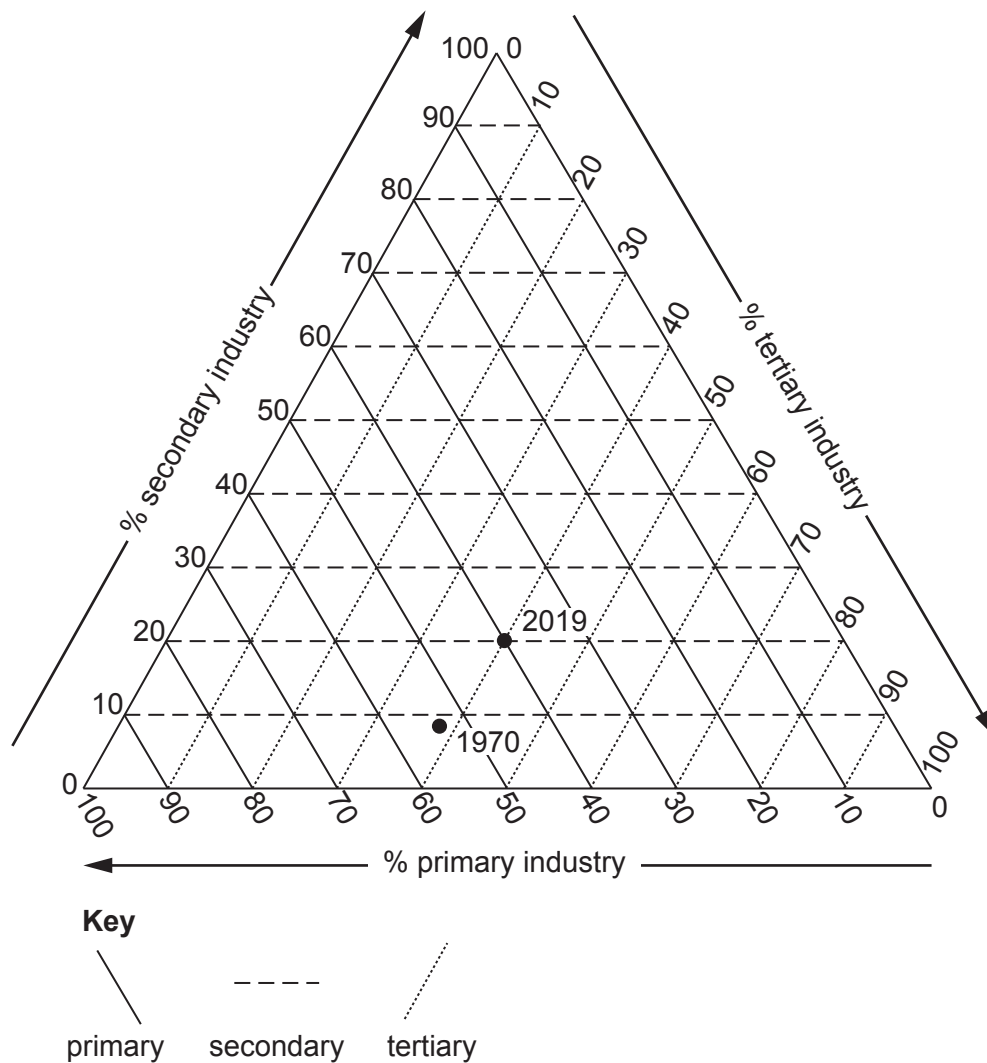
.....

..... [1]

[Total: 8]

**TURN PAGE FOR QUESTION 6**

- 6 (a) Fig. 6.1 shows how the employment structure of Bangladesh (an LEDC) has changed over time.



**Fig. 6.1**

- (i) What percentage of Bangladesh's employment was in:

primary industry in 1970

..... %

[1]

tertiary industry in 2019?

..... %

[1]

- (ii) Suggest another type of graph that could be used to show the information in Fig. 6.1.

..... [1]

(b) How has the percentage in secondary industry changed? Tick (✓) **one** box below.

|                 | tick (✓) |
|-----------------|----------|
| stayed the same |          |
| decreased       |          |
| increased       |          |

[1]

(c) Suggest **two** reasons why the number of people working in agriculture has declined in countries such as Bangladesh.

1 .....

.....

2 .....

..... [2]

(d) Less agricultural employment can lead to rural-urban migration. Suggest **two** ways in which rural-urban migration may affect the population structure in the rural areas.

1 .....

.....

2 .....

..... [2]

[Total: 8]

[illegible]





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