



CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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0460/21

May/June 2021

1 hour 30 minutes

Plain paper

Protractor

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. Any blank pages are indicated.

1 Study the map extract for Laveissière, France. The scale is 1:25 000.

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

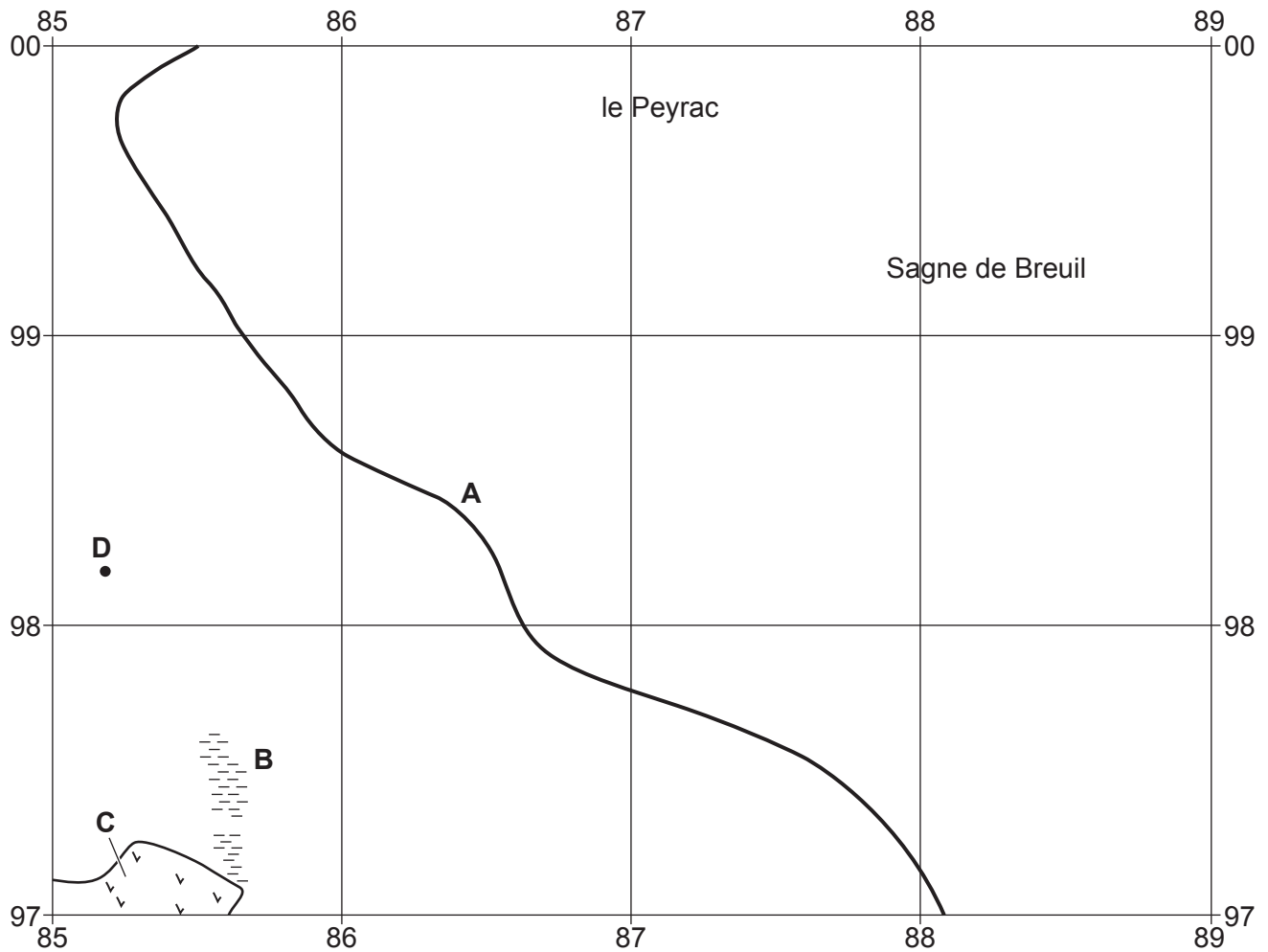


Fig. 1.1

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

(i) feature **A**

..... [1]

(ii) type of area at **B**

..... [1]

(iii) land use at **C**

..... [1]

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

..... metres [1]

- (b) A person travels along the road from the northern edge of the map to the junction with the D139 at la Chevade.

- (i) How far do they travel? Circle your answer in the list below.

3250 m

3850 m

4150 m

4750 m

[1]

- (ii) In which compass direction does the person travel?

.....

[1]

- (c) Fig. 1.2 is a north to south cross-section along easting 860 from 860980 to 860950.

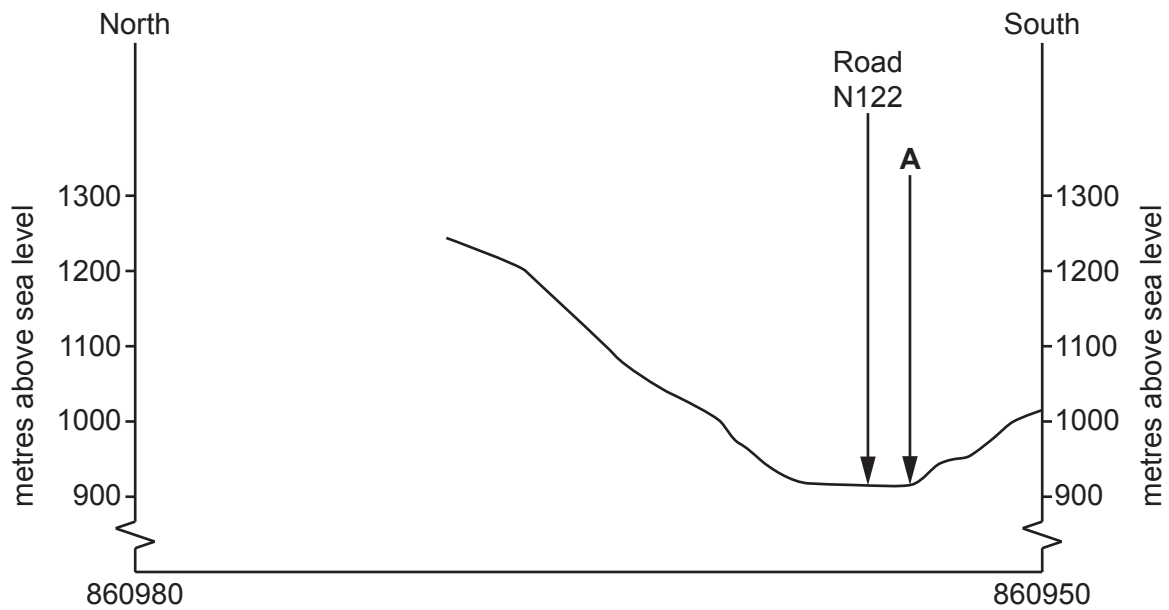


Fig. 1.2

- (i) Name the feature at **A**.

.....

[1]

- (ii) On Fig. 1.2, **use a labelled arrow** to show a position of the D139 road.

[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) Fig. 1.3 is an area in the north of the map extract.

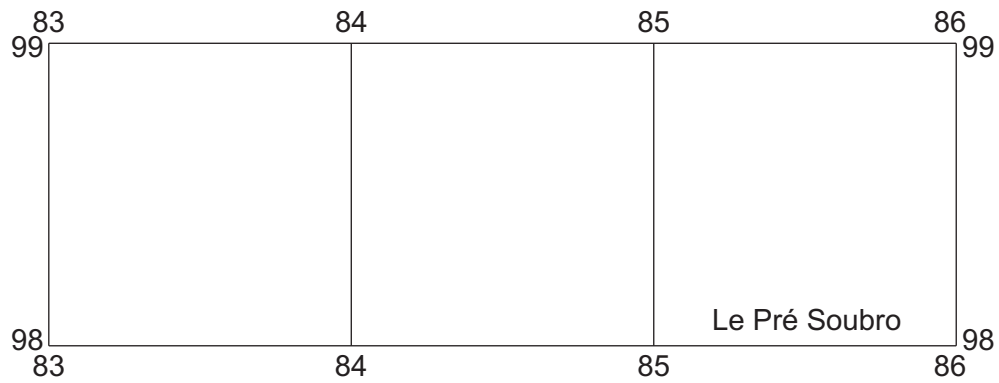


Fig. 1.3

Which **three** of the following statements describe the relief and drainage of the area shown on Fig. 1.3? Tick (✓) only three boxes below.

	Tick (✓)
it is flat land	
it has south-facing slopes	
there are many rivers	
it is a mountainous area	
it has gentle slopes	
highest point is above 1400 metres	
there is a large lake	
there are seasonal rivers	

[3]

(e) Laveissière is a settlement in the south of the map extract.

(i) Describe the site of the settlement of Laveissière.

.....

.....

.....

.....

.....

.....

.....

..... [4]

(ii) Identify the services provided for tourists in the settlement of Laveissière.

.....

.....

.....

.....

.....

..... [3]

[Total: 20]

- 2 Fig. 2.1 shows the percentage of the population who were born outside the country, in the different regions of Italy in 2017.

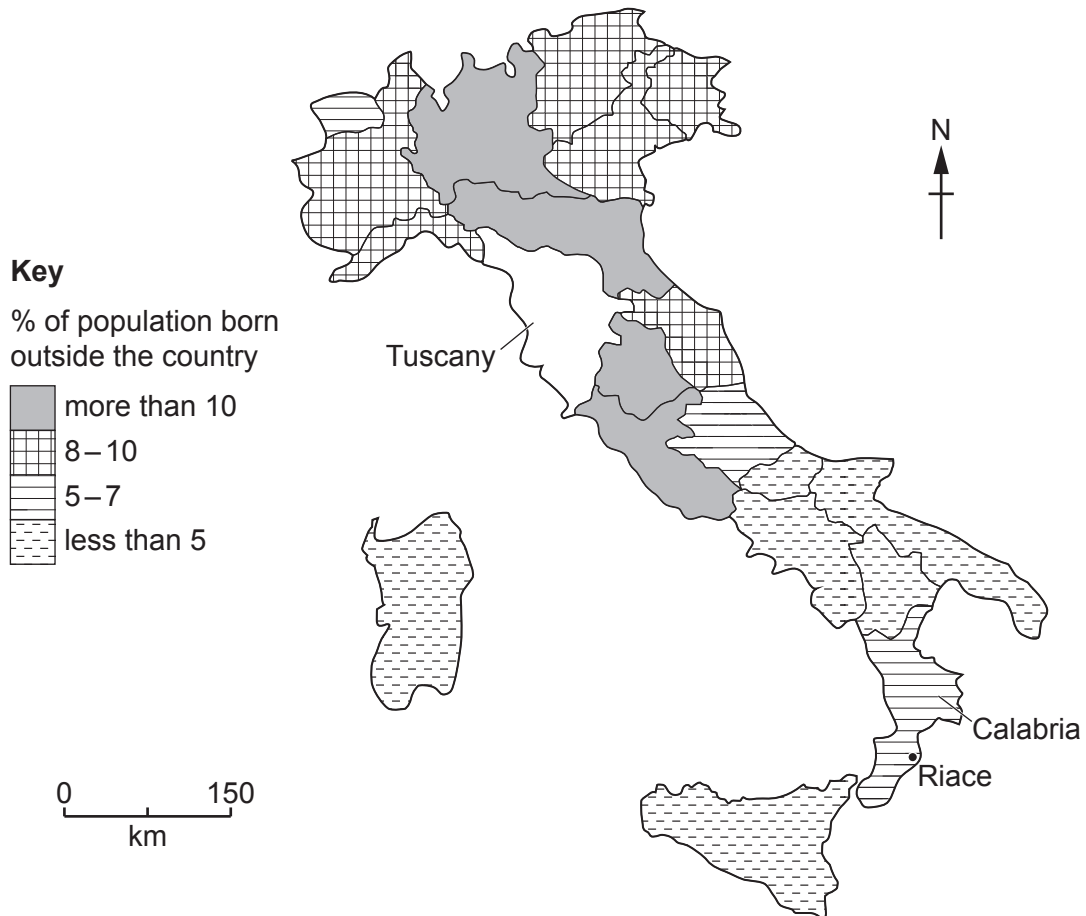


Fig. 2.1

- (a) (i) The percentage of the population in Tuscany who were born outside the country was 10.9%. **Complete Fig. 2.1 using the key provided.** [1]

- (ii) Describe the general pattern shown in Fig. 2.1. Do **not** use statistics in your answer.

.....

.....

.....

..... [2]

(b) Fig. 2.2 gives information about the town of Riace in the southern region of Calabria.

The town of Riace saw its population decline from 2500 to 400 between 1945 and 1956, with many locals heading to northern Italy in search of jobs. It became a village of old people. The local council decided to invite migrants and refugees to live and work in the town. Since then migrants from more than 20 nations have arrived and set up businesses and their children go to the local school.

Fig. 2.2

- (i) Using Fig. 2.2, state how much the population of Riace declined between 1945 and 1956.

..... [1]

- (ii) Using Fig. 2.2, suggest **two** reasons why the population declined.

1

.....

2

..... [2]

- (iii) Using Fig. 2.2, identify **one** advantage of attracting migrants and refugees to Riace.

..... [1]

- (iv) Suggest **one** problem the arrival of the migrants might cause in the town.

.....

..... [1]

[Total: 8]

- 3 Shenzhen, China has undergone extensive urbanisation. Table 3.1 shows the changes in the area covered by different urban land uses from 2001–2005.

Table 3.1

land use (km ²)	year				
	2001	2002	2003	2004	2005
industrial	137	153	204	240	254
residential	136	143	174	169	184
roads	57	64	71	72	83

- (a) (i) Use the information in Table 3.1 to **complete Fig. 3.1**.

[2]

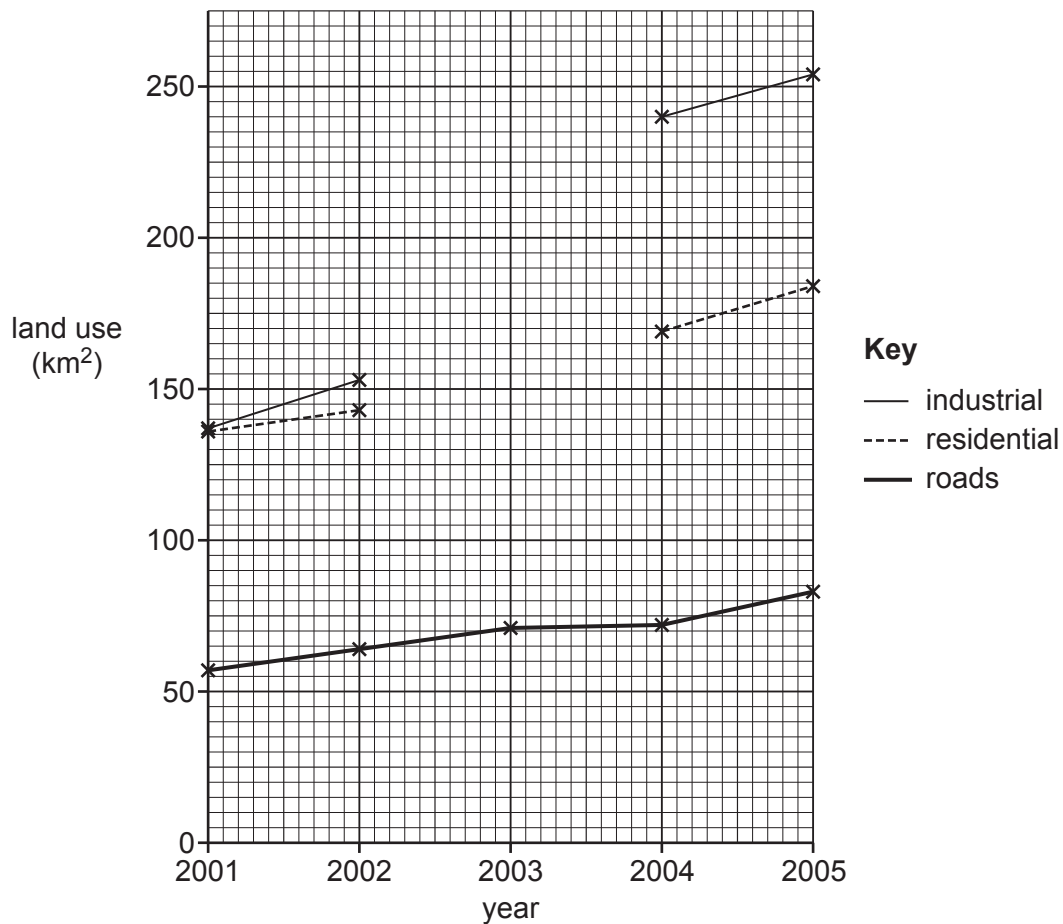


Fig. 3.1

- (ii) Using Table 3.1 and Fig. 3.1, state the land use that showed the largest increase between 2001 and 2005.

..... [1]

- (iii) Many new industries such as electronics have been located in the rural-urban fringe. Suggest reasons why they have located there.

.....

.....

.....

..... [2]

- (b) Study Fig. 3.2 (Insert), which is a photograph showing new residential development in Shenzhen. Using evidence from Fig. 3.2 **only**, describe **three** advantages of living there.

1

.....

2

.....

3

..... [3]

[Total: 8]

- 4 Study Fig. 4.1, which gives information about a research centre called the Lava Centre in Iceland.

The Lava Centre in Iceland opened in June 2017. It monitors more than 200 volcanoes, 30 of which are active. It closely monitors 'the big one', Katla, whose last large eruption was in 1918. When it last erupted it melted glaciers causing extensive flooding, with lava flows extending for 10 kilometres. One local woman has a jar of volcanic ash which was collected from her grandmother's roof in Reykjavik over 160 kilometres away.

Fig. 4.1

- (a) Use information from Fig. 4.1 to answer the following:

- (i) How long ago did Katla have a large eruption?

..... years

[1]

- (ii) Using Fig. 4.1 **only**, identify **two** hazards caused by the eruption of Katla.

1

.....

2

..... [2]

- (b) Suggest **two** ways that can be used to predict when a volcanic eruption is likely to occur.

1

.....

2

..... [2]

- (c) Study Fig. 4.2 (Insert), which gives information about Iceland and its volcanoes. Using Fig. 4.2, explain why Iceland has volcanic eruptions.

.....

.....

.....

.....

.....

..... [3]

[Total: 8]

5 Study Fig. 5.1 (Insert), which is a photograph of a meander in a river.

- (a) (i) Fig. 5.2 shows a cross-section of the river from **A** to **B** in Fig. 5.1. Look at labels (**V**, **W** and **X**) on Fig. 5.2 and answer the question below.

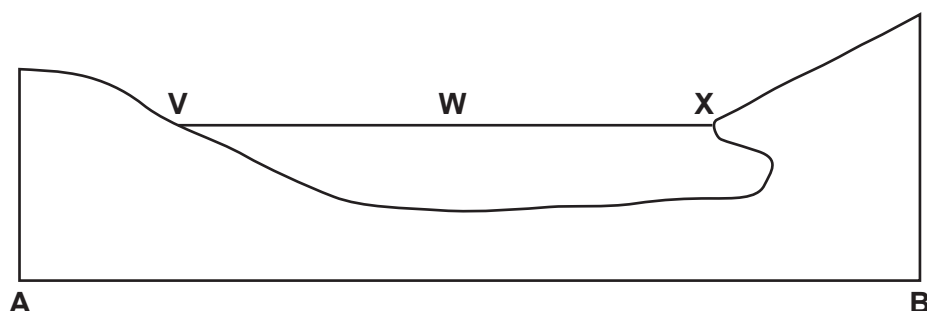


Fig. 5.2

Using Figs. 5.1 and 5.2, tick (✓) the correct answers in the box below. Place **one** tick (✓) on each row.

	V	W	X
area of deposition			
area of erosion			

[2]

- (ii) Using Fig. 5.1 (Insert), state **one** piece of evidence that erosion is occurring.

..... [1]

- (b) Which **two** of the following are likely to reduce river flooding? Tick (✓) **two** correct answers below.

	Tick (✓)
steep slopes	
gentle slopes	
heavy rainfall	
frozen ground	
tree planting	
deforestation	
urbanisation	

[2]

(c) Suggest **three** reasons why people live close to rivers.

- 1.....
.....
- 2.....
.....
- 3.....
..... [3]

[Total: 8]

6 Study Fig. 6.1 (Insert), which is a photograph of coffee bushes in Ecuador.

(a) Describe the coffee bushes shown in Fig. 6.1.

.....

.....

.....

.....

.....

..... [3]

(b) Many coffee plantations are using fertilisers and pesticides. Suggest **two** advantages of doing this.

Fertilisers

.....

Pesticides

..... [2]

(c) Suggest **three** ways in which this small-scale commercial farming benefits **local** people.

.....

.....

.....

.....

.....

.....

.....

..... [3]

[Total: 8]

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

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