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Cambridge Assessment International Education

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CANDIDATE NAME									
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2553630070

GEOGRAPHY **0460/22**

Paper 2 Geographical Skills **May/June 2024**

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.

Definitions
MEDCs – More Economically Developed Countries
LEDCs – Less Economically Developed Countries

This document has **20** pages. Any blank pages are indicated.

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1 Study the map extract for Toblach Dobbiaco, Italy. The scale is 1:25 000.

(a) Fig. 1.1 shows some of the features in the north-east of the map extract.

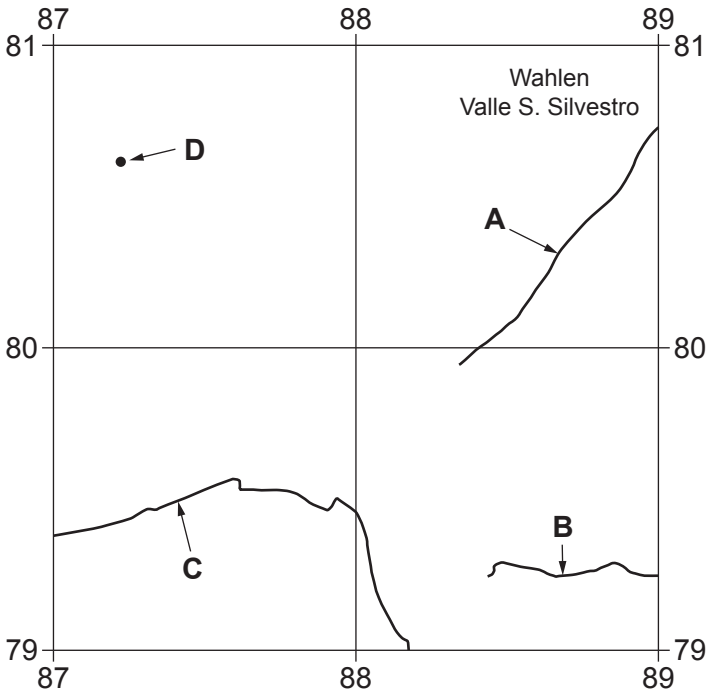


Fig. 1.1

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

(i) the name of river **A**

..... [1]

(ii) feature **B**

..... [1]

(iii) feature **C**

..... [1]

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

..... metres [1]

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(b) Fig. 1.2 shows an area in the west of the map at Graubőden. Fig. 1.3 shows an area in the east of the map at Toblacher Felder. Study both areas and answer the following questions.

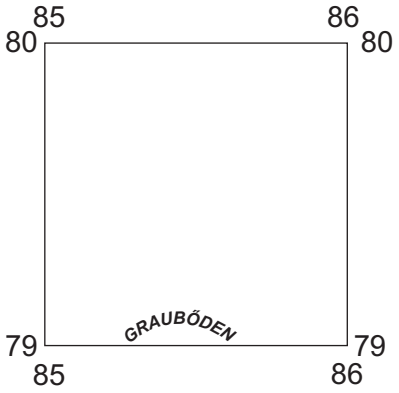


Fig. 1.2

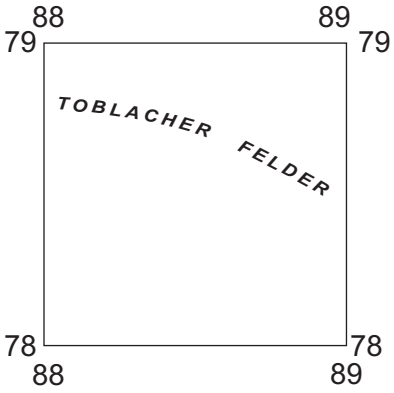


Fig. 1.3

The following table compares the features of both areas. Complete the table by putting ticks (✓) in the correct **five** boxes. Use only **one** tick for each row.

	area in Fig. 1.2 at Graubőden	**area in Fig. 1.3 at Toblacher Felder**	**both of these areas**	**neither of these areas**
parking				
camping				
main road				
mostly flat				
mostly gently sloping				

[5]

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(c) Find the railway which runs across the map from west to east.

(i) What is the distance along the railway from the western edge of the map to Toblach Dobbiaco railway station (879783)? Give your answer in metres.

..... metres [1]

(ii) Measure the bearing **from** where the railway meets the western edge of the map **to** Toblach Dobbiaco railway station (879783).

..... degrees [1]

(iii) Give the six-figure grid reference of the place where main road 51 passes over the railway, 300 m west of the station.

..... [1]

(d) Fig. 1.4 is a cross-section along northing 76 from 860760 to 890760, through the Toblacher See / L. di Dobbiaco lake.

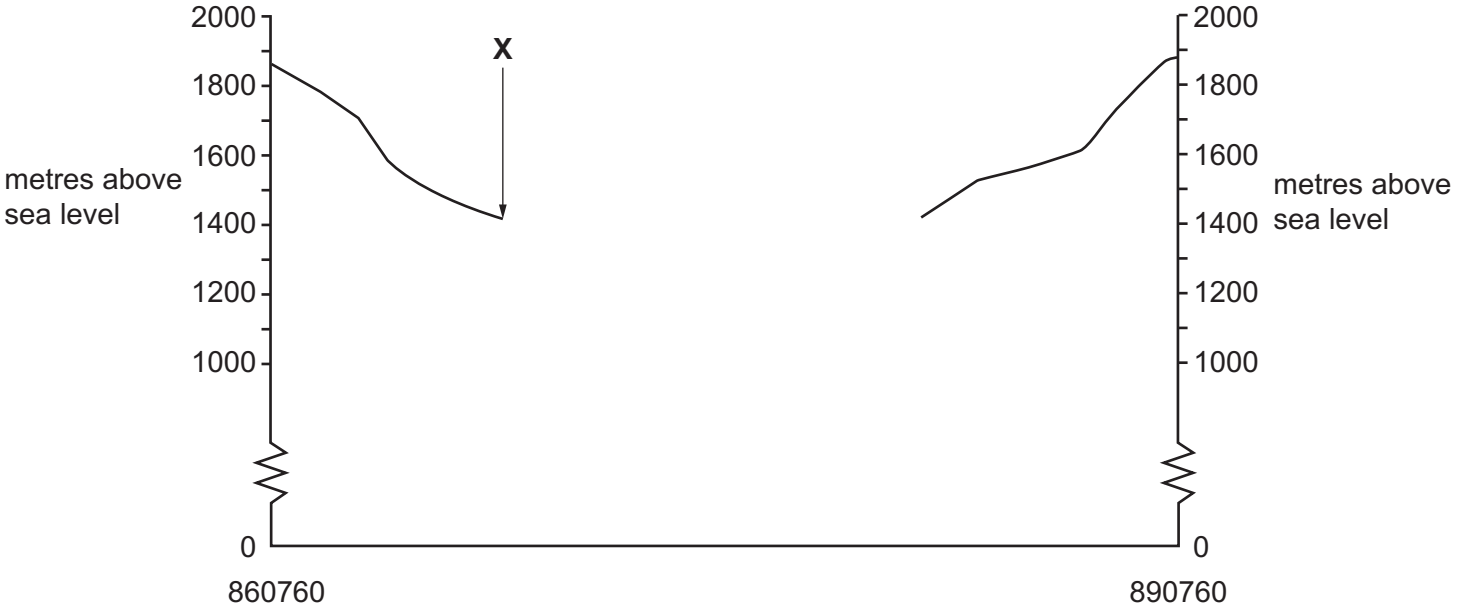


Fig. 1.4

(i) Identify the vegetation at **X**.

..... [1]

(ii) The cross-section shown in Fig. 1.4 is incomplete. Using information from the map extract, draw a line on Fig. 1.4 to **complete the cross-section**. Label the lake on your cross-section. [2]

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(e) Look at the main settlement at Toblach Dobbiaco (8779, 8879).

(i) Which **one** of the following has helped the settlement to grow? Tick (✓) **one** box.

	tick (✓)
fishing	
north facing slopes	
motorway	
road junction	

[1]

(ii) Which **one** of the following has **not** helped the settlement to grow? Tick (✓) **one** box.

	tick (✓)
meeting of valleys	
mining	
south facing slopes	
tourism	

[1]

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(f) Study the area in the south-west of the map shown in Fig. 1.5.

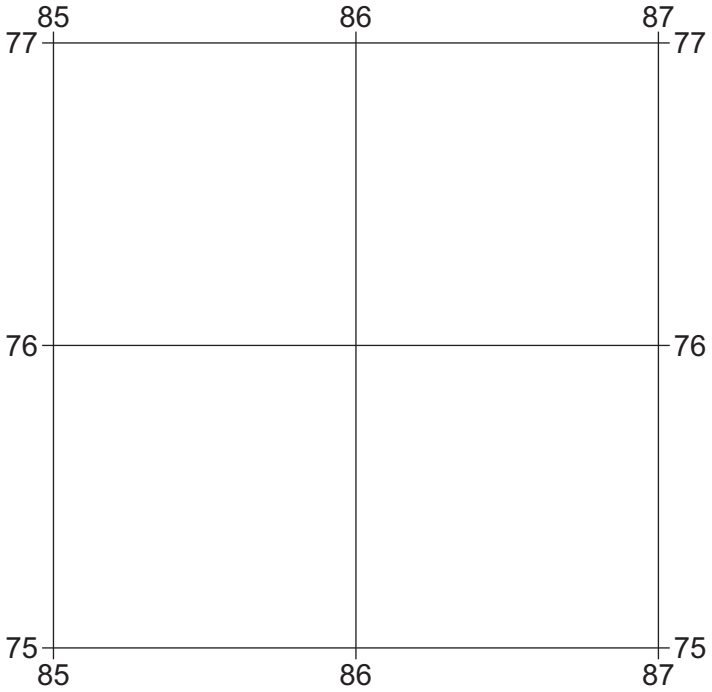


Fig. 1.5

Which **three** of the following statements describe the relief and drainage of the area shown in Fig. 1.5? Tick (✓) only **three** boxes.

	tick (✓)
Some land is over 2000 m.	
Most land is below 1000 m.	
There are cliffs and very steep slopes.	
There is a plateau.	
There is a flood plain.	
There are large rivers.	
There are small streams.	
There are meanders.	
There is a delta.	

[3]

[Total: 20]

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2 Fig. 2.1 shows the population density of provinces in The Netherlands, a country in Europe.

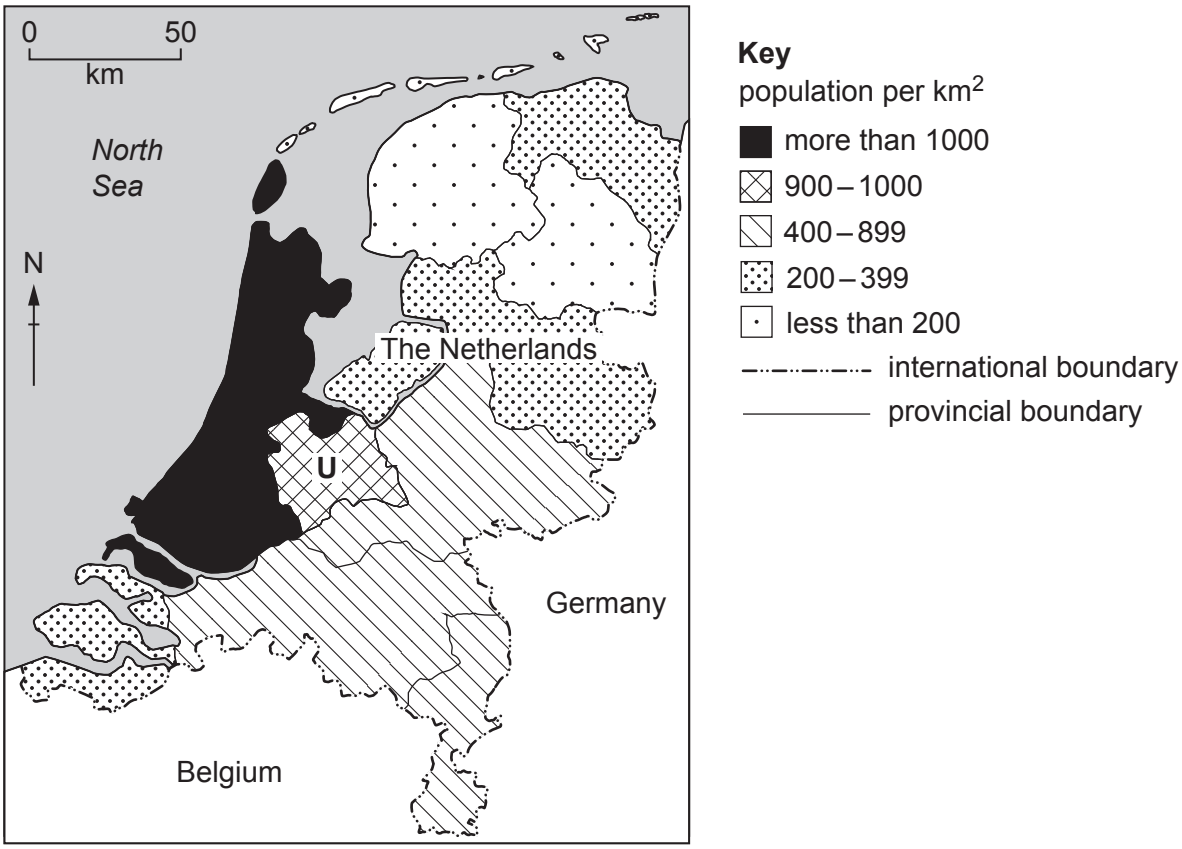


Fig. 2.1

(a) (i) State the population density of Utrecht province, shown by **U** in Fig. 2.1.

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

(ii) Describe the population distribution of The Netherlands shown in Fig. 2.1.
Do **not** use statistics in your answer.

.....

.....

.....

.....

.....

..... [3]

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(b) Fig. 2.2 is a simplified relief map of The Netherlands.

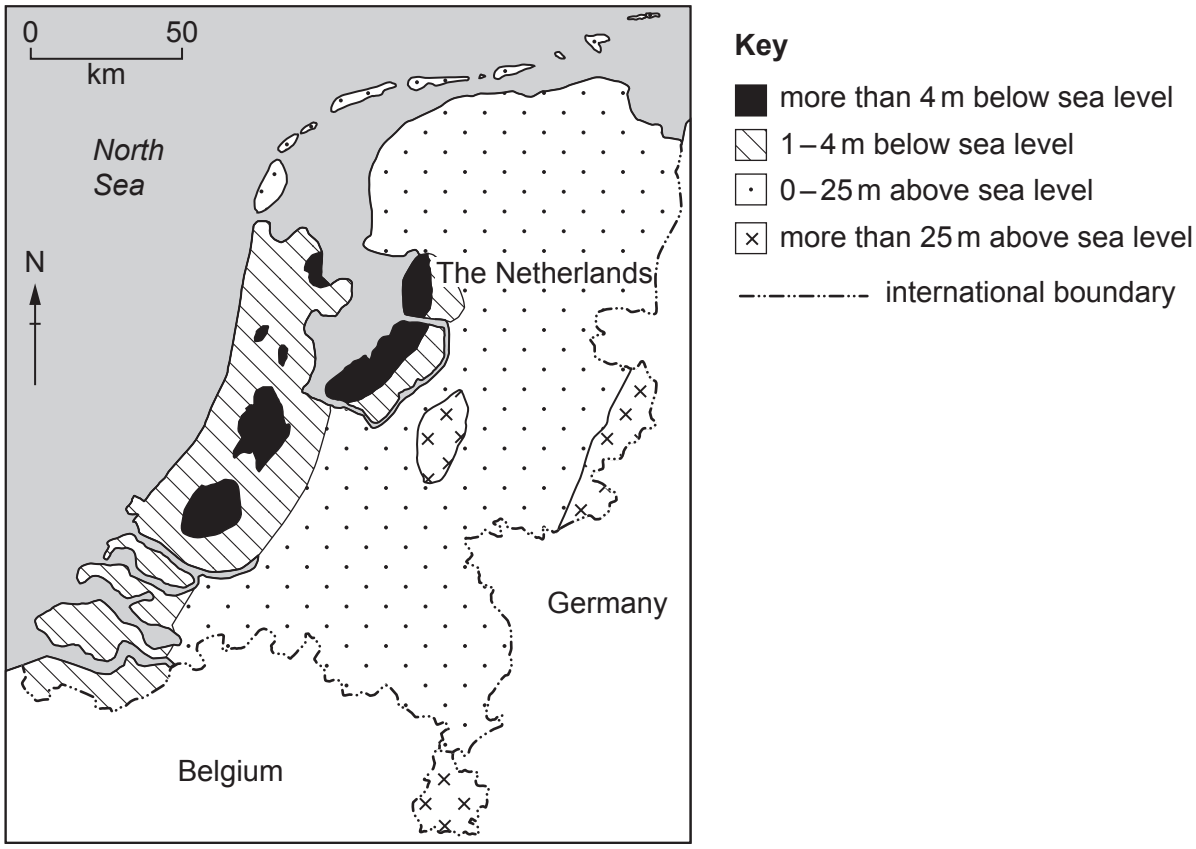


Fig. 2.2

Describe the relationship between population density shown in Fig. 2.1 and relief shown in Fig. 2.2.

.....

.....

.....

.....

.....

..... [3]

(c) Study the area with a population density of over 1000 per km^2 shown in Fig. 2.1. Suggest **one** reason for this high population density.

.....

..... [1]

[Total: 8]

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[Turn over

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3 Study Figs. 3.1 and 3.2 (Insert), which show settlements in two rural areas.

(a) Identify the type of settlement pattern shown in each photograph.

Fig. 3.1

.....

Fig. 3.2

.....

[2]

(b) Describe the houses shown in Fig. 3.1.

.....

.....

.....

.....

.....

.....

.....

..... [4]

(c) Using Figs. 3.1 and 3.2, give evidence which suggests that farming is taking place in areas of steep relief.

.....

.....

.....

..... [2]

[Total: 8]

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4 Fig. 4.1 shows two different volcanoes, **A** and **B**.

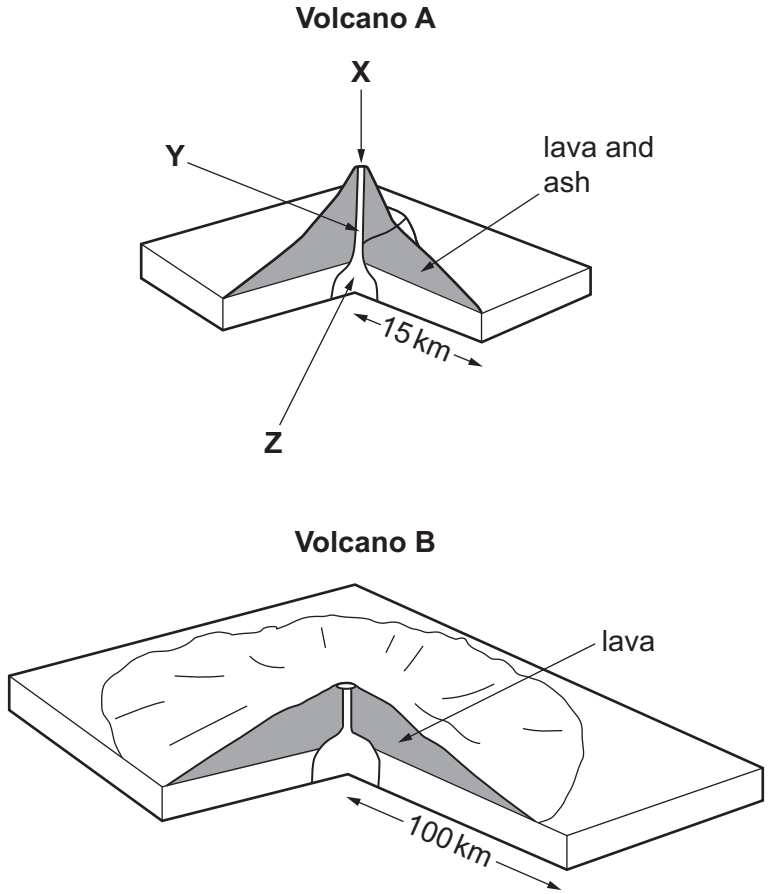


Fig. 4.1

(a) Identify features **X**, **Y** and **Z** shown on Volcano **A**.

X .....

Y .....

Z .....

[3]

(b) State what types of volcano **A** and **B** are.

Volcano **A**

.....

Volcano **B**

.....

[2]

(c) Explain why volcanoes such as **A** are considered more hazardous to human life than volcanoes such as **B**.

.....

.....

.....

.....

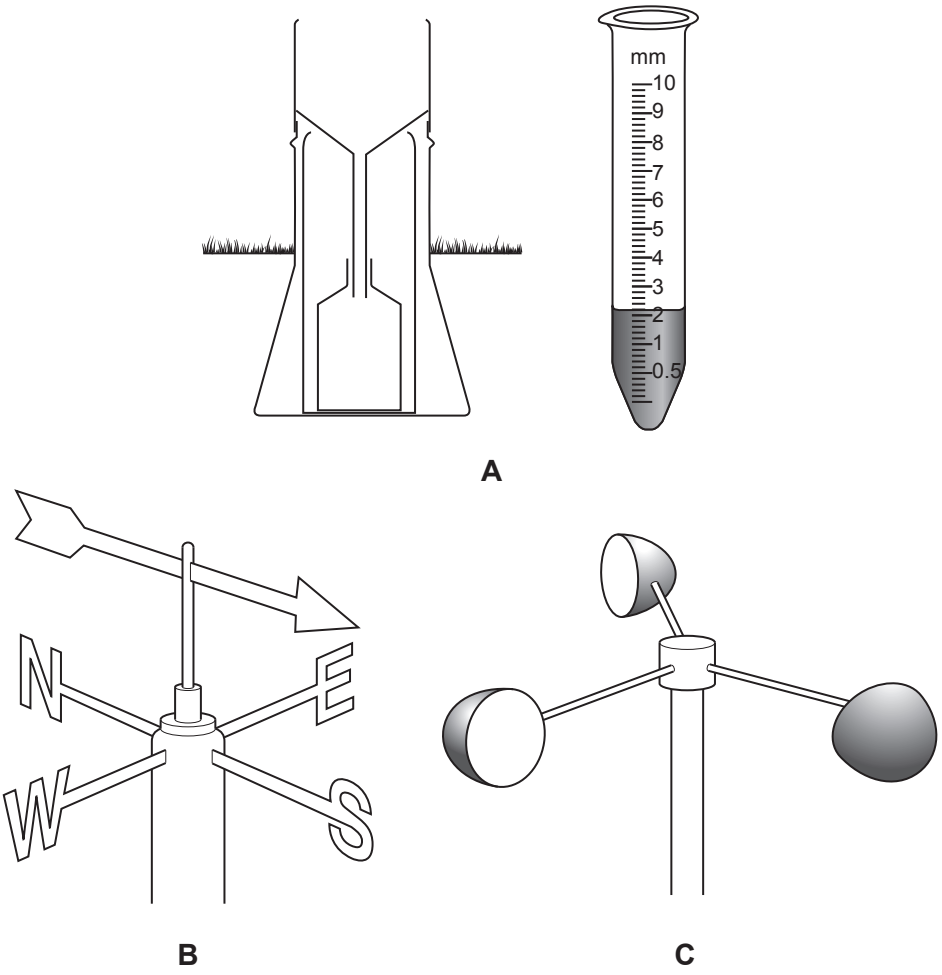
.....

..... [3]

[Total: 8]

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5 **(a)** Fig. 5.1 shows three instruments, **A**, **B** and **C**, kept at a weather station.



not drawn to scale

Fig. 5.1

(i) Name the types of instruments shown in Fig. 5.1.

A .....

B .....

C .....

[3]

(ii) Give the readings shown on instruments **A** and **B**.

A .....

B .....

[2]

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(b) Study Table 5.1, which shows the weather forecast for five days at a tourist resort in a mountainous area.

Table 5.1

	day of the week				
	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
maximum temperature (°C)	14	22	17	17	19
minimum temperature (°C)	9	8	12	12	9
rainfall (mm)	15	0	22	8	0
cloud cover (oktas)	5	0	7	6	0
wind speed (km / h)	8	49	10	15	12

(i) Calculate the average daily rainfall forecast for the five days shown.

..... mm [1]

(ii) Calculate the daily (diurnal) temperature range forecast for Monday.

..... °C [1]

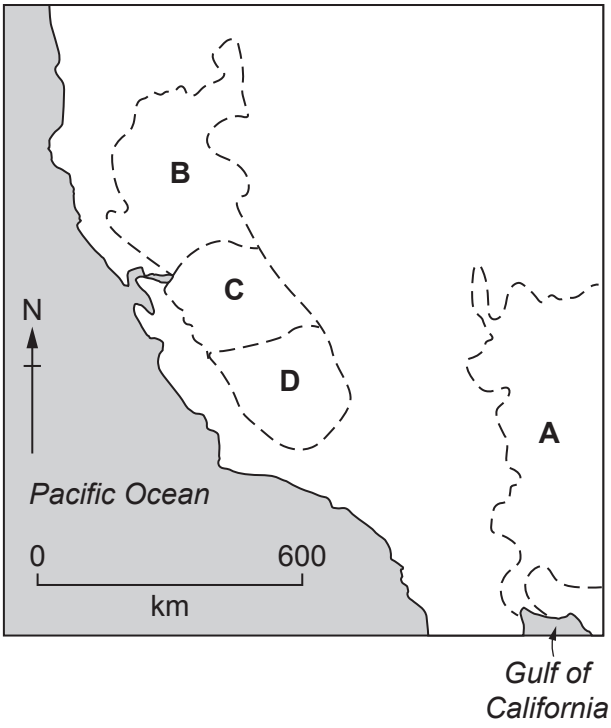
(iii) Some people are planning to climb a mountain in the area. Suggest which day of the week would be best for their climb.

..... [1]

[Total: 8]

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6 **(a)** Fig. 6.1 shows information about four drainage basins which provide most of the water supply for the state of California, USA.



	drainage basin	volume of annual precipitation (km^3)	volume of annual runoff (river flow) (km^3)
A	Colorado	5.3	0.25
B	Sacramento	64.6	27.6
C	San Joaquin	26.9	9.7
D	Tulare	17.1	4.1

Fig. 6.1

(i) Which **one** of the four drainage basins has:

the largest annual precipitation

.....

the smallest volume of annual runoff?

.....

[2]

(ii) Using information from Fig. 6.1, decide which **one** of the following statements is true. Tick (✓) **one** box.

	tick (✓)
Irrigation will be most needed in the north.	
Surface water supply will be used most in the east.	
Irrigation will be most needed in the south.	
Groundwater will be used most in the north.	

[1]

(b) Fig. 6.2 shows the water use and population of California.

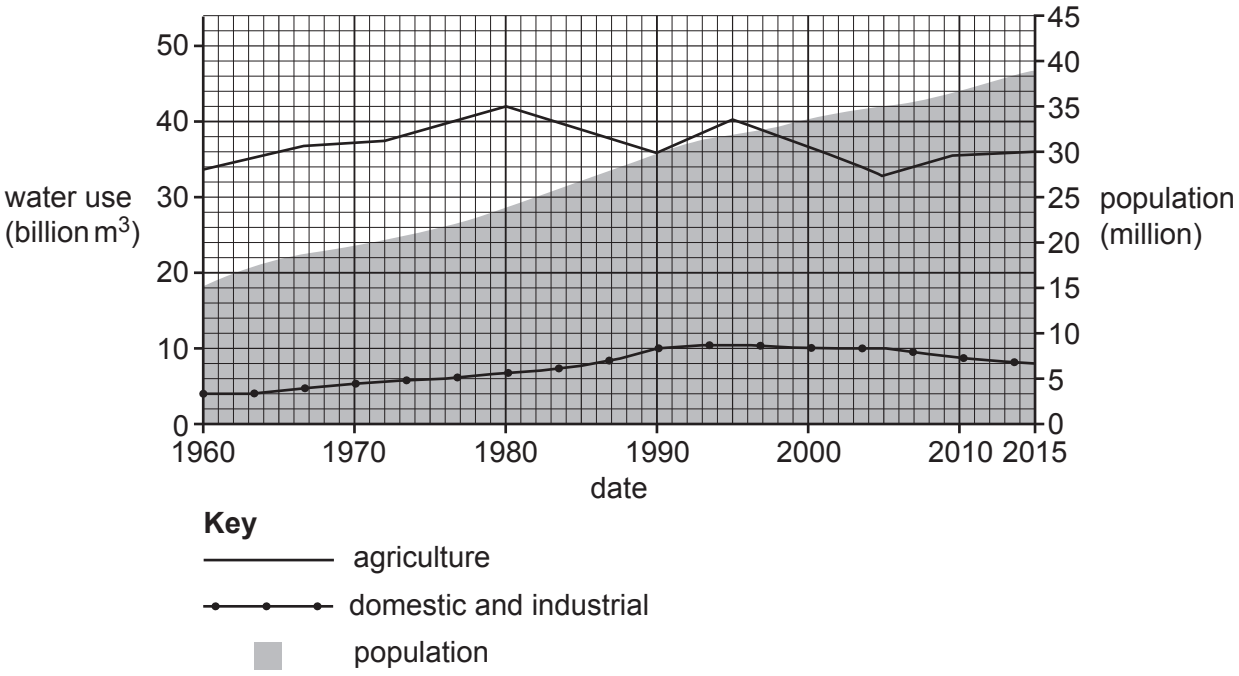


Fig. 6.2

(i) What was the population of California in 1990?

..... million [1]

(ii) How much water was used for agriculture in 1980?

..... billion m^3 [1]

(c) Fig. 6.3 provides more information about water supply in California.

> About 30% of California's water supply comes from groundwater and the rest from surface water. Some groundwater is poor quality, and the cost of pumping is high. Landowners have the right to pump as much water as they want to.
>
> The authorities in some parts of California are thinking about desalination as a way to provide water. It is not affected by periods of drought, but it is expensive. Water re-use is becoming more common and recycled water is used for irrigation, toilets, and industry.

Fig. 6.3

Using Fig. 6.3, suggest which **one** of the following statements is true. Tick (✓) **one** box.

	tick (✓)
Cost will be a problem if desalinated water is used for agriculture.	
Groundwater is the main source used in California.	
Recycled water is of high quality.	
Surface water is not important to California.	

[1]

(d) Suggest **two** possible environmental impacts of uncontrolled pumping of groundwater for use in irrigation.

1 .....

.....

2 .....

.....

[2]

[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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