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GEOGRAPHY

0460/23

Paper 2 Geographical Skills

October/November 2020

1 hour 30 minutes

You must answer on the question paper.

You will need:

Insert (enclosed)	Plain paper
1:50 000 survey map (enclosed)	Protractor
Calculator	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 **20** pages. Blank pages are indicated.

1 Study the map extract for Taormina, Italy. The scale is 1:50 000.

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

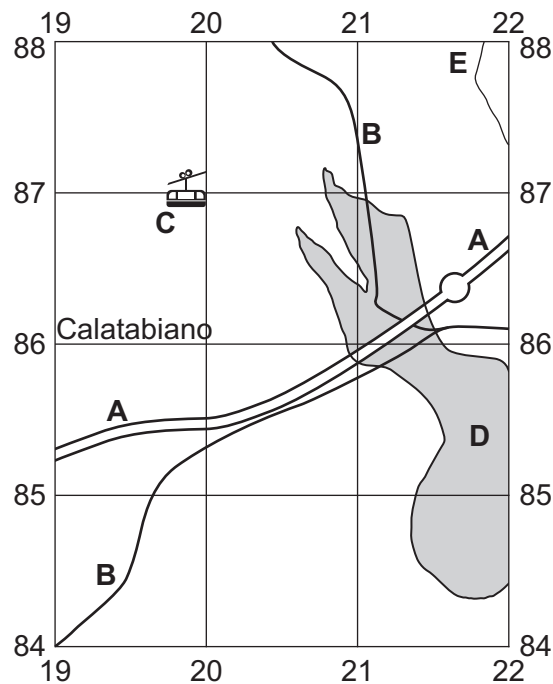


Fig. 1.1

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) feature **D**

..... [1]

- (v) the name of river **E**

..... [1]

- (b) Using the map key, identify **one** tourist activity available within 2 km of the main settlement of Taormina.

..... [1]

- (c) Fig. 1.2 is a cross section along northing 90, through the settlement of Gaggi, from 180900 to 220900.

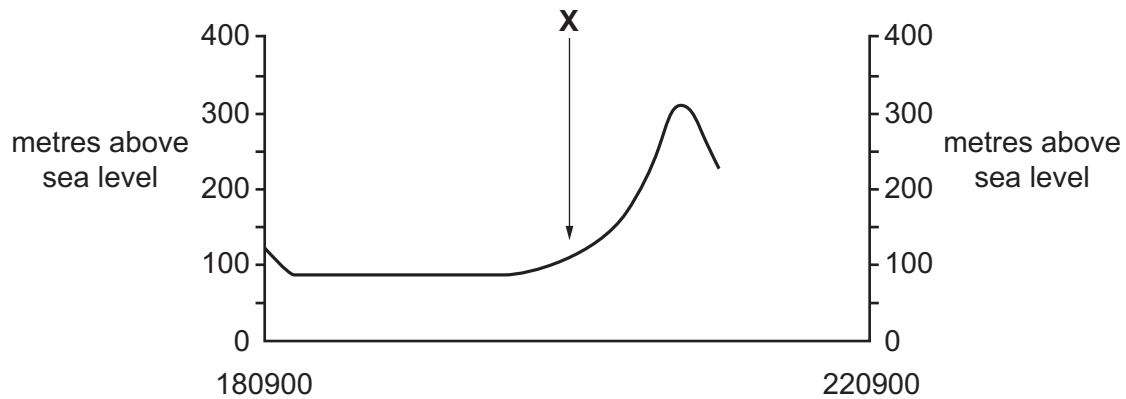


Fig. 1.2

- (i) Identify feature **X**.

.....

[1]

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

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

- (d) Find Capo Taormina, on the coast near the settlement of Taormina.

- (i) What is the distance along the coastline from the end of Capo Taormina to the south edge of the map? Tick **one** box below.

	Tick (✓)
5500 metres	
6500 metres	
7500 metres	
8500 metres	
9500 metres	

[1]

- (ii) What is the compass bearing **from** the end of Capo Taormina, **to** the coastline at the south edge of the map? Tick **one** box below.

	Tick (✓)
38°	
41°	
44°	
221°	
225°	

[1]

- (e) Fig. 1.3 shows two areas, **P** in the south of the map extract and **Q** in the north east of the map extract. Study the two areas and answer the questions below.

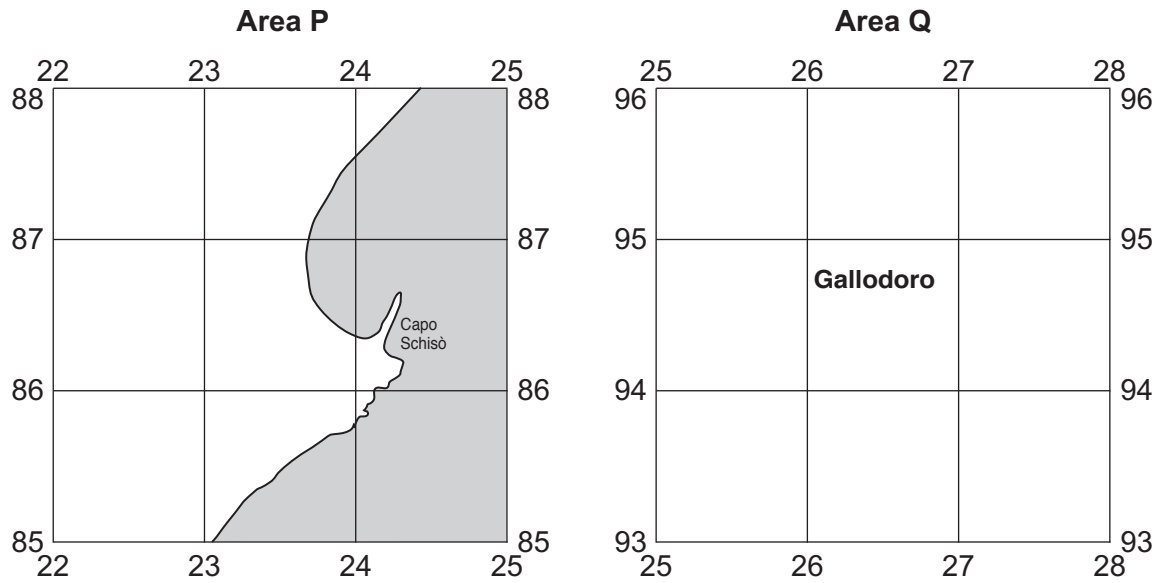


Fig. 1.3

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

	Area P	Area Q	Both these areas	Neither of these areas
flat land				
land over 500 m				
a national main road				
plateau				
a mountain bike route				

[5]

(f) Fig. 1.4 shows an area in the north west of the map extract.

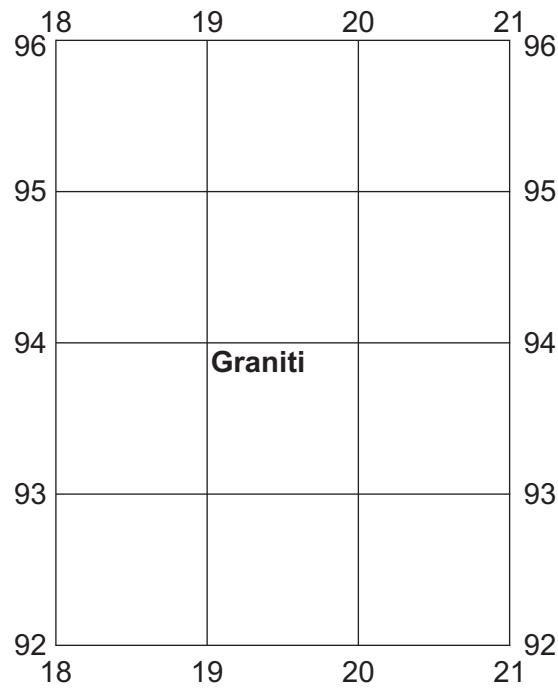


Fig. 1.4

Describe the relief of this area.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [4]

[Total: 20]

- 2 Fig. 2.1 shows one estimate of the population growth rates of the countries in the world.

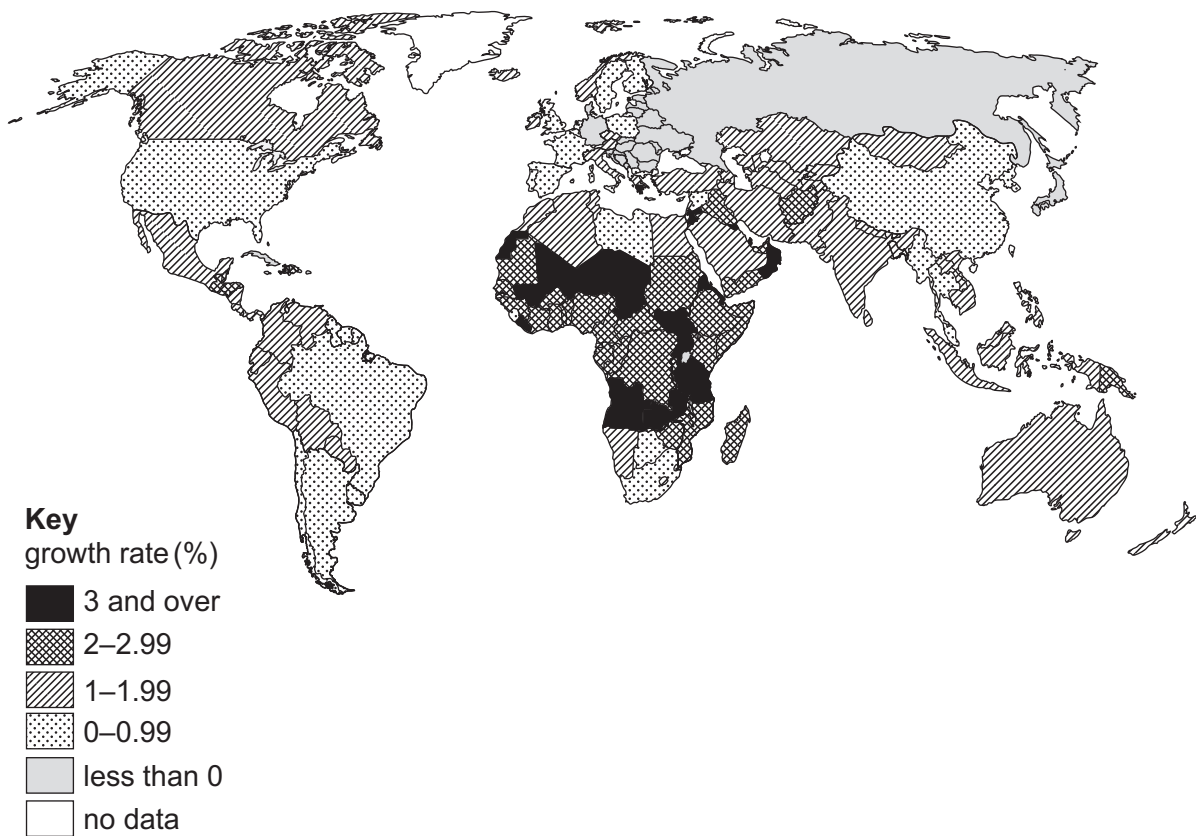


Fig. 2.1

- (a) (i) Some countries shown in Fig. 2.1 have growth rates of less than 0 (zero). How does this affect the total population of these countries?

..... [1]

- (ii) Using Fig. 2.1, describe the distribution of countries with growth rates of less than 0.

.....

.....

.....

..... [2]

- (b) Using Fig. 2.1, describe the distribution of population growth rates in Africa. Do not use figures in your answer.

.....

.....

.....

..... [2]

- (c) Table 2.1 gives information about the population change of two countries in 2018.

Table 2.1

	Growth rate (per 1000)	Birth rate (per 1000)	Death rate (per 1000)	Migration (per 1000)
Angola	35		9	0
Bolivia		22	6	–1

- (i) Calculate the birth rate of Angola.

..... per thousand [1]

- (ii) Calculate the growth rate of Bolivia. Show your working in the box below.

Answer per thousand

[2]

[Total: 8]

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3 Figs. 3.1 and 3.2 (Insert) show two rivers.

- (a)** For Figs. 3.1 and 3.2, name the process of river transport shown and describe the material being transported as the river's load.

Fig. 3.1

Process of transport

.....

River's load

.....

Fig. 3.2

Process of transport

.....

River's load

..... [4]

- (b)** Suggest which part of the river's course is shown in Fig. 3.2.

..... [1]

- (c)** Explain how meanders form on a river.

.....

.....

.....

.....

.....

.....

..... [3]

[Total: 8]

- 4 Fig. 4.1 gives information about the eruption of Mount Tambora.

The largest volcanic eruption in human history took place in 1815 at Tambora, a strato-volcano on Sumbawa Island in Indonesia. The eruption itself killed between 11 000 and 12 000 people, mainly by pyroclastic flows on the island. Parts of the island were buried in ash over 1.5 m deep. Ash clouds from the eruption affected the weather in Europe and North America, and the cool summer of 1816 resulted in crop failures and up to 70 000 more deaths due to starvation.

Fig. 4.1

- (a) Fig. 4.2 shows the depths of ash from the eruption in the area surrounding Tambora.

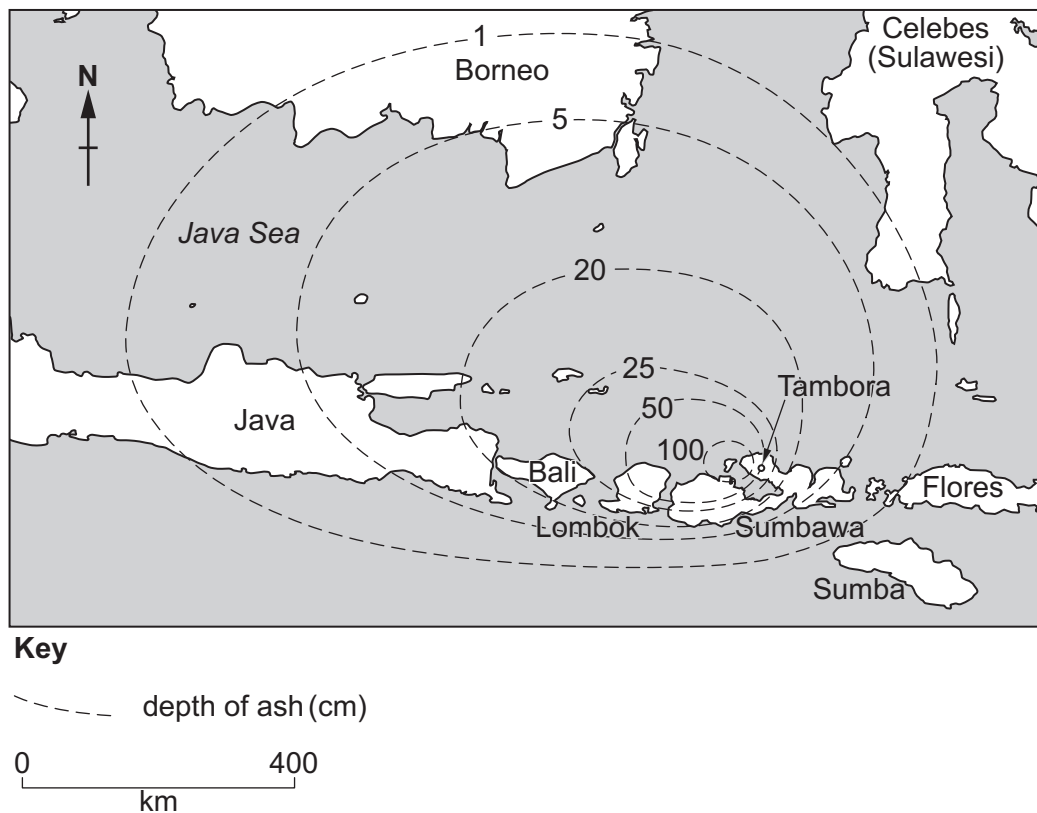


Fig. 4.2

- (i) How deep was the ash on the island of Bali?

..... cm

[1]

- (ii) Suggest the likely wind direction when the eruption occurred.

.....

[1]

- (iii) Suggest how the ash clouds made temperatures lower in Europe and North America.

.....

..... [1]

(b) Fig. 4.3 shows the area of the island of Sumbawa which was affected by pyroclastic flows.

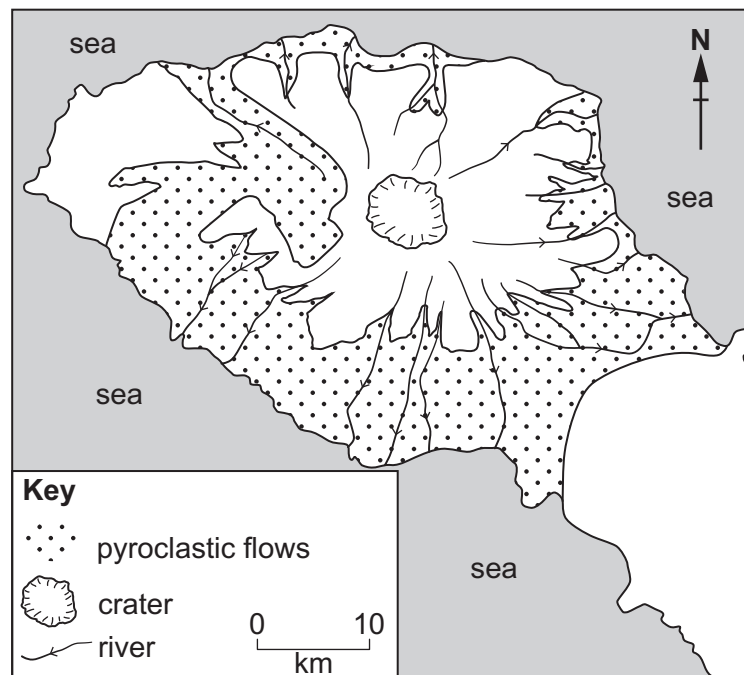


Fig. 4.3

Describe the distribution of pyroclastic flows shown in Fig. 4.3.

.....

.....

.....

..... [2]

(c) Describe the features of a strato-volcano. Do not write about its eruptions.

.....

.....

.....

.....

.....

..... [3]

[Total: 8]

5 Figs. 5.1 and 5.2 (Insert) show agricultural systems in different parts of the world.

- (a) Describe the agricultural systems by completing the table below. Put ticks in the correct **four** boxes. Use only **one** tick (✓) for each row.

	Fig. 5.1	Fig. 5.2	Both photographs	Neither photograph
subsistence				
commercial				
arable				
pastoral				

[4]

- (b) Give evidence from Fig. 5.1 which shows that this is an intensive agricultural system.

.....

.....

.....

..... [2]

- (c) Identify **one physical** input and **one human** input of the agricultural system which can be seen in Fig. 5.2.

Physical input

.....

Human input

.....

[2]

[Total: 8]

TURN PAGE FOR QUESTION 6

6 Fig. 6.1 shows an industrial zone in the city of Manchester, UK.

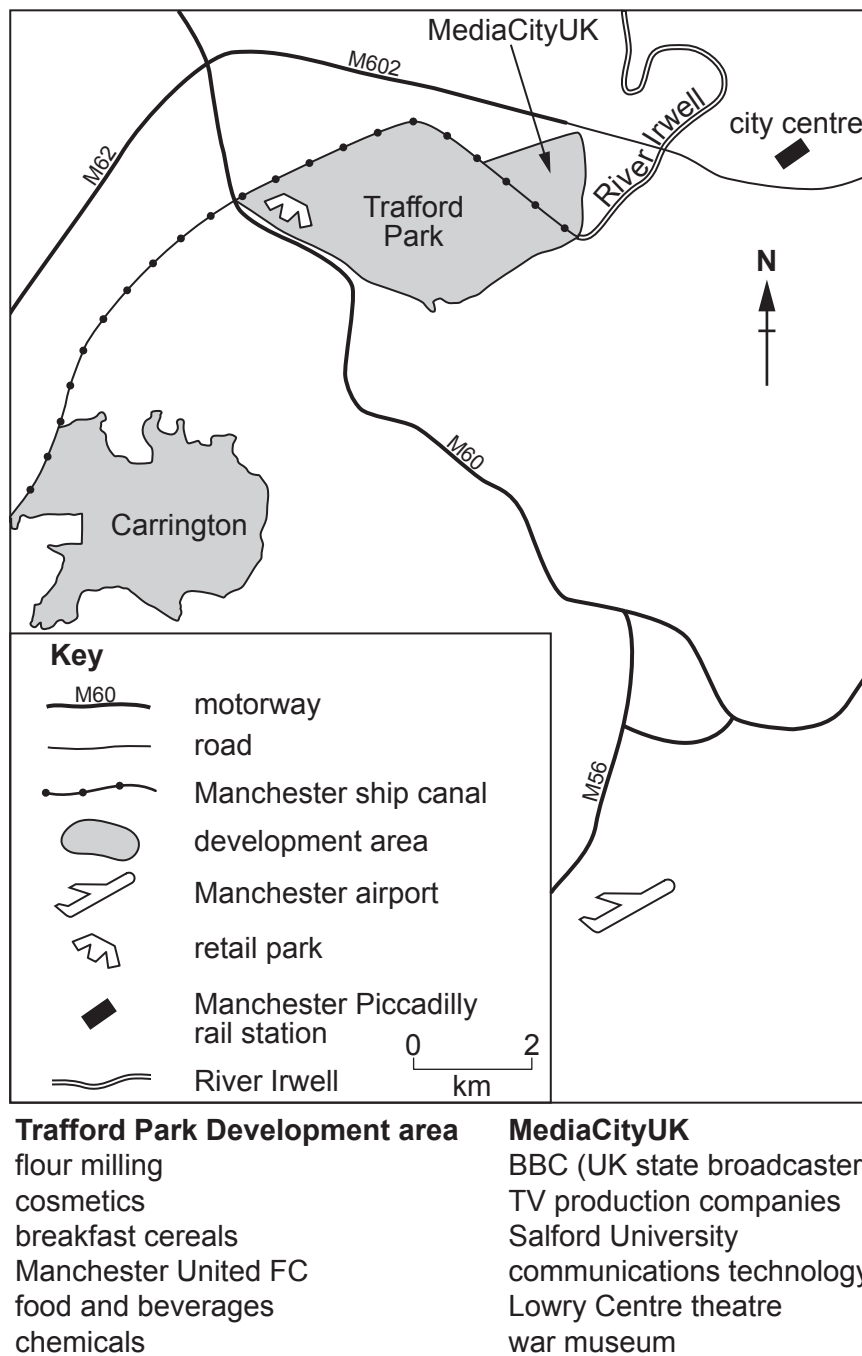


Fig. 6.1

(a) Using Fig. 6.1, identify an example of each of the following types of industry in the area:

(i) secondary industry

.....

[1]

(ii) tertiary or quaternary industry

.....

[1]

- (b) The local council wishes to encourage further development in the area. Fig. 6.2 shows part of its marketing material.

TRAFFORD – A FANTASTIC LOCATION FOR GROWTH	
Over 120 000 businesses within a 30 minute drive	Direct motorway access
Population of 2 million people in the local area	2 hours to London by rail from Manchester Piccadilly
The largest inland freight terminal in North West England	Manchester airport has direct flights to 200 destinations
Linked to the sea by canal	

Fig. 6.2

Using Figs. 6.1 and 6.2, explain the advantages of this area for industrial development.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [6]

[Total: 8]

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