

Centre No.						Paper Reference	Surname	Initial(s)
Candidate No.					1	3	1	3
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Paper Reference(s)

1313/4H

Examiner's use only

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Team Leader's use only

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Edexcel GCSE**Geography B**

Paper 4H

Higher Tier

Monday 11 June 2007 – Afternoon

Time: 2 hours

Question Number	Leave Blank
A1	
A2	
B3	
B4	
C5	
C6	
Total	

Materials required for examination

Nil

Items included with question papersMap and Photograph Booklet
Ordnance Survey (OS) map extract**Instructions to Candidates**

In the boxes above, write your centre number, candidate number, your surname, initial(s) and signature.
Answer FOUR questions.

Answer BOTH questions in Section A.

Answer ONE question from Section B (EITHER B3 Water OR B4 Weather and Climate).

Answer ONE question from Section C (EITHER C5 Farming OR C6 Recreation and Tourism).

For Sections B and C, indicate which question you are answering by marking the box (☒). If you change your mind, put a line through the box (☒) and then indicate your new question with a cross (✗).
Do not return the insert(s) with the question paper.**Information for Candidates**

The marks for individual questions and the parts of questions are shown in round brackets: e.g. (2).

There are 6 questions in this question paper. The total mark for this paper is 100.

There are 28 pages in this question paper. Any blank pages are indicated.

The following abbreviations have been used throughout this paper:

LEDC Less Economically Developed Country**MEDC** More Economically Developed Country**EU** European Union**Advice to Candidates**

You will be assessed on your ability to organise and present information, ideas, descriptions and arguments clearly and logically, including your use of grammar, punctuation and spelling.

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SECTION A

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Answer BOTH questions in this section. Write your answers in the spaces provided.

Providing for Population Change

A1. (a) Study Map 1 in the Map and Photograph Booklet. It is a world map showing average annual population change 2000–2005.

(i) The sentences below describe some population changes shown on Map 1.

Complete the blanks in the sentences by choosing the three **correct** continents from the box.

Africa Asia Europe North America South America

The population of most countries in increased by 2% or more.

The population of most countries in increased by 1 to 1.9%.

The population of most countries in increased by less than 1%.

(3)

(ii) Describe how Russia's population changed.

Use data from Map 1 in your answer.

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(1)

(iii) Which countries had the highest rate of population increase, **LEDCs** or **MEDCs**?

.....

(1)



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blank

- (b) Study Figure 1 below. It gives information about the population of two countries in 2005.

	Country A	Country B
Birth Rate (per 1000)	12	40
Death Rate (per 1000)	9	18

Figure 1

- (i) What is the **natural increase** in Country B?

..... per 1000 (1)

- (ii) Which country is an **LEDC**, **A** or **B**?

..... (1)

- (iii) Use evidence from Figure 1 to explain your answer to (b) (ii).

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(2)



(c) Birth rates fall when there is:

- health care
- education for girls.

Choose **one** of these, and **explain why** it helps to lower the birth rate.

Tick (✓) your choice below.

	✓
Health care	
Education for girls	

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(3)



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- (d) Study Figure 2 below. It gives information about the world's population and use of energy resources.

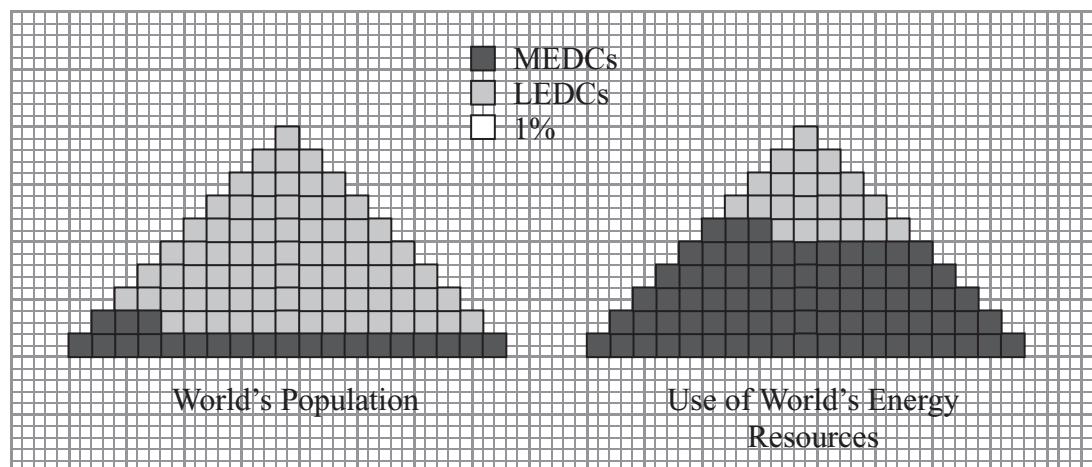


Figure 2

- (i) **Complete** the following sentence.

MEDCs have% of the world's population, but use% of its energy resources.

(2)

- (ii) **Explain** the difference in energy use between MEDCs and LEDCs.

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(2)



- (e) Study Figure 3 below. It shows when some of the world's resources will run out, as predicted in 1970.

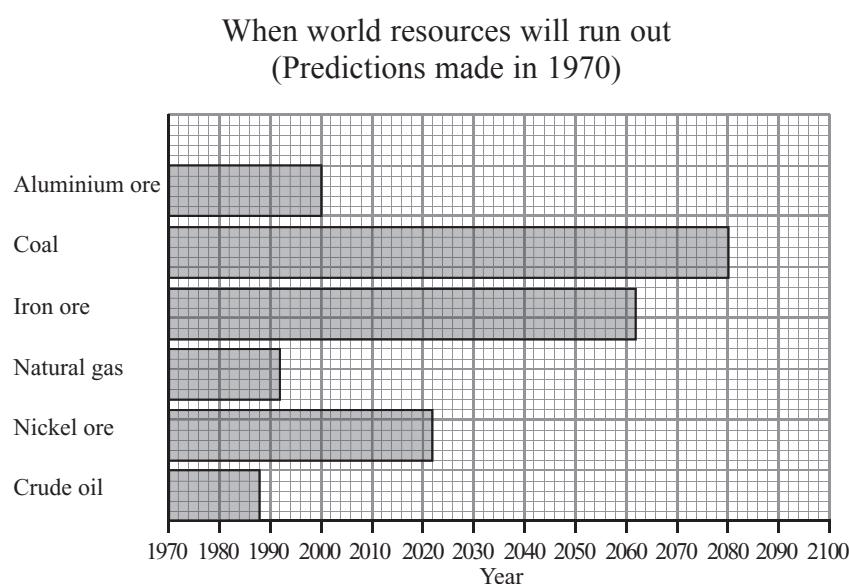


Figure 3

- (i) What does **resource** mean?

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(1)

- (ii) All the resources shown on Figure 3 will eventually run out.
Explain why.

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(1)

- (iii) When does Figure 3 suggest that **iron ore** will run out?

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(1)



- (iv) The predictions made in 1970 have not come true.
Aluminium ore, natural gas and crude oil have **not** run out yet.

Suggest **why** these resources have not run out yet.

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(3)

- (f) Choose a **small-scale** renewable energy project that you have studied in an **LEDC** (e.g. biogas, solar, wind, hydro-electricity).

Type of renewable energy Name of **LEDC**

- (i) Describe the **location** of the renewable energy project.
(You may draw a sketch map if you wish.)

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(ii) **Explain** the impact of this energy project on the environment.

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(8)

QA1

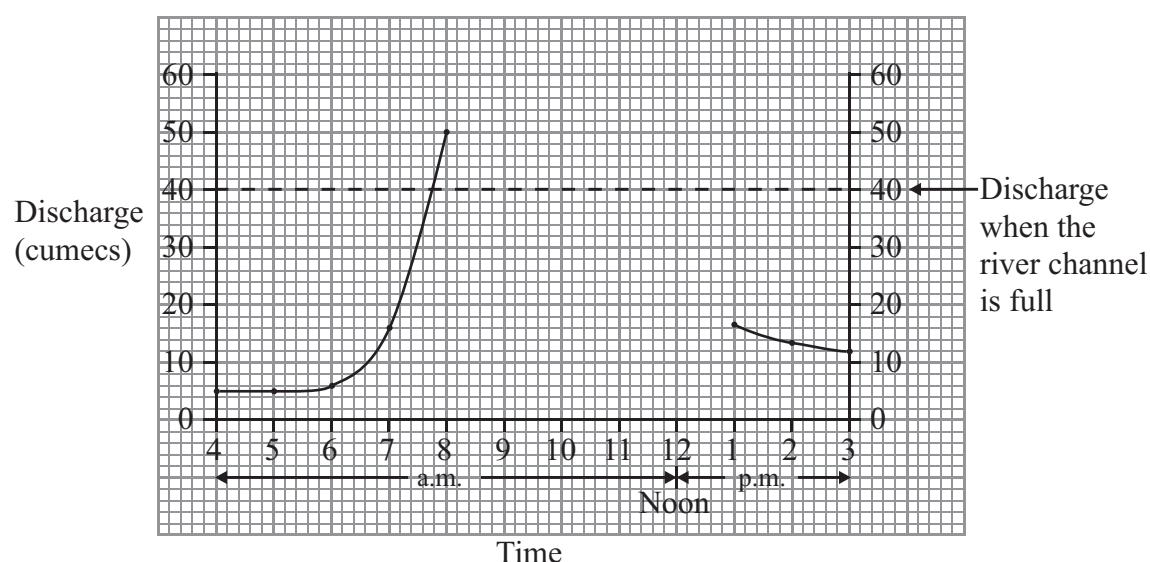
(Total 30 marks)



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Coping with Environmental Change

- A2.** (a) Study Figure 4 below. It is an incomplete graph for a river in Ireland in June 2005. It shows how the discharge (flow of water) in a river changed following heavy rain.



The storm (heavy rain) started at 5 a.m.
and lasted for 20 minutes.

Figure 4

- (i) Complete the graph, using data from the table below.

Time	9 a.m.	10 a.m.	11 a.m.	12 noon
Discharge (cumecs)	46	40	30	22

(3)

- (ii) What was the peak discharge?

..... cumecs.

(1)

- (b) (i) At what time did the river shown in Figure 4 start to flood?

.....

(1)

- (ii) Explain how you can tell this from Figure 4.

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(1)



- (c) Study Photographs A and B in the Resource Booklet. They were taken in Boscastle, Cornwall after a river flood in August 2004.

Describe and explain the flood damage shown in each photograph.

Photograph A

Description

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Explanation

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Photograph B

Description

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Explanation

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(4)

- (d) Study Diagram 1 in the Map and Photograph Booklet. It gives more information about the flood in Boscastle.

Explain in detail why the river flooded.

Use information from Diagram 1 to help you.

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(5)

- (e) Building levees and dams are two methods of reducing the risk of a river flooding.

Explain how each of these methods reduces the flood risk.

Building levees

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Building a dam

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(4)



(f) Study Figure 5 below. It shows the view of an environmentalist.

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Figure 5

(i) Suggest **why** he is against these methods of flood management.

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(2)

(ii) Suggest **one** method of flood management that he would prefer.

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(1)



<p>(g) Physical processes (e.g. erosion, weathering, mass movement, longshore drift) cause coastal management problems. Choose a coastal area you have studied where physical processes cause problems.</p> <p>Chosen coastal area</p> <p>(i) Describe the physical processes causing problems in your chosen area.</p> <p>.....</p> <p>(ii) Explain the coastal management methods that are being used to deal with these physical processes.</p> <p>.....</p>		<p>Leave blank</p>
<p>(8)</p> <p>(Total 30 marks)</p>		<p>QA2</p>
<p>TOTAL FOR SECTION A: 60 MARKS</p>		



SECTION B

Answer EITHER Question B3 OR Question B4.
Write your answers in the spaces provided.

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If you answer Question B3, put a cross in this box .

Use and Abuse of the Environment (Water)

- B3. (a)** Study the 1:50, 000 Ordnance Survey (OS) map extract of Penistone in northern England.

Find Ingbirchworth Reservoir in grid squares 2105 and 2106.

- (i) Complete the blanks in the following sentences.

Ingbirchworth Reservoir is located on land that is about metres high.

The boundary of a National Park is km away to the south-west of the reservoir.

(2)

- (ii) The area in grid squares 2105 and 2106 is a good location for a reservoir.

Explain why. Use map evidence.

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(4)



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- (b) Some people objected to the building of Ingbirchworth Reservoir.
Suggest why.

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(3)

- (c) Ingbirchworth Reservoir supplies drinking water to nearby villages and towns.
The company that owns Ingbirchworth Reservoir recently discovered farm pesticides
(chemicals) in the water.

- (i) Suggest how the pesticides got into the water.

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(1)

- (ii) Pesticides in the water are a problem for the company.

Explain why.

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(2)

- (iii) Suggest how the problem could be **prevented** in the future.

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(2)



M 2 5 6 7 1 R A 0 1 5 2 8

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Turn over

<p>(d) The demand for water is increasing in many LEDCs and MEDCs.</p> <p>(i) Using your own knowledge, explain why.</p> <p>.....</p> <p>(ii) Briefly comment on the problems that increasing demand may cause.</p> <p>.....</p>	<p>(6)</p> <p>(Total 20 marks)</p>
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If you answer Question B4, put a cross in this box

Use and Abuse of the Environment (Weather and Climate)

- B4.** (a) People can use weather and climate to provide energy. One example is energy from the sun.

Study Figure 6. It shows the climate of Kuwait, a country in Asia.

	Months											
	J	F	M	A	M	J	J	A	S	O	N	D
Average rainfall (mm)	23	23	28	5	0	0	0	0	0	3	15	28
Average temperature (°C)	13	14	18	24	29	32	35	35	32	28	20	15

Average annual rainfall: 125mm

Average annual temperature: 25°C

Figure 6

- (i) Using evidence from Figure 6, describe the **summer** in Kuwait.

Tick (✓) the correct answer.

	✓
Cool and dry	
Cool and wet	
Hot and dry	
Hot and wet	

(1)

- (ii) Kuwait has a good climate for harnessing the energy of the sun.

Explain why. Use evidence from Figure 6.

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(3)



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- (b) Study the 1:50,000 Ordnance Survey (OS) map of Penistone in northern England.

Find the grid squares 2004 and 2104. A wind farm is shown by the symbols .

A wind farm has turbines that use the power of the wind to make electricity.

- (i) **Complete the blanks** in the following sentences.

The wind farm is located on land that is about metres high.

The boundary of a National Park is km to the south-west of the wind farm.

(2)

- (ii) The area in grid squares 2004 and 2104 is a good **location** for a wind farm.

Explain why.

Use map evidence.

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(4)



- (c) Find the town of Penistone in grid squares 2402 and 2403.

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blank

Some students investigated Penistone's urban climate on a calm January day.
They measured the air temperature at several places at 2 pm.
Two of their results are given in the table below.

Site	Grid Reference	Temperature
X	247032	9°C
Y	243034	7°C

Suggest why the temperatures at these two sites were different. Use map evidence.

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(4)



<p>(d) Many people say global warming is happening and is caused by human activity.</p> <p>(i) Using your own knowledge, describe the evidence for global warming.</p> <p>.....</p> <p>(ii) Briefly comment on the reliability of the evidence.</p> <p>.....</p>	<p>Leave blank</p> <p>(6)</p> <p>(Total 20 marks)</p> <p>TOTAL FOR SECTION B: 20 MARKS</p>
<p>QB4</p>	



SECTION C

Answer EITHER Question C5 OR Question C6.
Write your answers in the spaces provided.

If you answer Question C5, put a cross in this box

Use and Abuse of the Environment (Farming)

- C5. (a) Study Figure 7 below. It is an article about deforestation in the Brazilian rainforest.

More deforestation in the Brazilian rainforest

The Brazilian rainforest plays a major role in the world's climate, and has enormous biodiversity. Its plants can provide cures for many human diseases.

Recent satellite images show a big increase in deforestation in Brazil. In 2004 26,000 square kilometres of forest were cleared, the second largest amount ever recorded in one year.

Cattle ranchers, logging companies and especially soya bean farmers were responsible. The Brazilian government gives incentives to increase soya bean production, and Brazil is now the world's second largest producer of this profitable crop. European countries and China import most of it.

30% of land cleared by logging companies in Brazil is left empty afterwards. If soya beans were planted on this land in future, then more rainforest trees would be saved.

Figure 7

- (i) What does **deforestation** mean?

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(1)

- (ii) Explain why a lot of soya beans are now being grown in Brazil.
Use evidence from Figure 7.

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(1)



(iii) Environmentalists say Brazil should preserve more of its rainforest.

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blank

Suggest **why**.
Use evidence from **Figure 7 only**.

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(2)

(b) Study Photograph C in the Map and Photograph Booklet. It shows an area in India where deforestation has taken place.

(i) Describe the vegetation (plant life) in the **background** of the photograph.

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(2)

(ii) Describe the **relief** of the land in the **foreground** of the photograph.

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(1)

(iii) This relief was caused by **erosion**.

Which agent of erosion probably caused it?

Circle the **correct** answer.

wind running water temperature changes ice

(1)



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- (c) (i) The erosion in Photograph C happened soon after the area had been deforested.
Explain how deforestation leads on to erosion.

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(3)

- (ii) The erosion in Photograph C caused problems for local farmers.
Suggest some of the problems **for farmers**.

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(3)



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Turn over

<p>(d) Some farmers in EU countries use methods that can damage the environment. These methods include burning stubble and using chemicals.</p> <p>(i) Explain how some farming methods damage the environment. You may refer to a named EU region if you wish.</p> <p>.....</p> <p>(ii) Explain why farmers use these methods.</p> <p>.....</p>	Leave blank (6) (Total 20 marks)
QC5 	



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If you answer Question C6, put a cross in this box .

Use and Abuse of the Environment (Recreation and Tourism)

C6 (a) Study Figure 8. It is a fact-file about a planned tourist resort in India.

Tourist resort for the Sundarbans

The Sundarbans on the coast of India are marshy mangrove forests. They provide a home for wild animals including monkeys, crocodiles and endangered species such as tigers and dolphins. The interior of the Sundarbans has been made into a conservation area. Everyone must have a permit to enter this area.

People from nearby villages make a living by fishing or collecting wood and honey from the forests.

A company wants to build a tourist resort in the Sundarbans.
The plan for the new resort includes:

- Seven luxury hotels for 1500 tourists
- Electricity from solar power plants
- Creation of beaches
- Restaurants, casino, golf course, craft museum
- Sun bathing, scuba diving
- Wildlife-observation from raised walkways in the forest
- Construction of new waterways
- Speedboat trips to the interior of the Sundarbans
- A tiger breeding centre.

Figure 8

(i) What does **conservation** mean?

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(1)

(ii) People must have a permit to enter the conservation area of the Sundarbans.

Suggest **why** the Indian Government made this law.
Use evidence from Figure 8.

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(1)



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- (b) (i) The company planning the tourist resort say it would be an **eco-tourism** scheme.

What evidence in Figure 8 supports the company's point of view?

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(2)

- (ii) Many **environmentalist** groups are still **against** the planned tourist resort.
Suggest why they are against it.

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(3)



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- (c) Study Photograph D in the Map and Photograph Booklet. It shows people fishing in the Sundarbans.

- (i) Describe the vegetation (plant life).

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(2)

- (ii) Describe the fishing boat.

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(2)

- (iii) Local fishing people will be affected if the tourist resort described in Figure 8 is built.

Suggest how.

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(3)



(d) There are often land use conflicts in **National Parks** in EU countries.

Leave
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- (i) Describe the conflicts there may be between different groups of people (e.g. farmers, tourists, villagers) that use the land in a National Park.
You may refer to a named EU National Park if you wish.

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- (ii) Describe how planners can try to solve these conflicts.

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(6)

(Total 20 marks)

QC6

TOTAL FOR SECTION C: 20 MARKS
TOTAL FOR PAPER: 100 MARKS

END

