

SECTION A

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

A1. Planning for Change

- (a) In recent decades cities have grown rapidly.
Look at Figure 1 below. It shows the world's largest cities in 1970, 1985 and 2000.

The world's five largest cities and their population (millions)

1970			1985			2000		
Rank	City	Popula- tion	Rank	City	Popula- tion	Rank	City	Popula- tion
1	New York	16.5	1	Tokyo	23.0	1	Mexico City	25.8
2	Tokyo	13.4	2	Mexico City	18.7	2	Sao Paulo	24.0
3	London	10.5	3	New York	18.2	3	Tokyo	20.2
4	Shanghai	10.0	4	Sao Paulo	17.0	4	Calcutta	16.5
5	Mexico City	8.6	5	Shanghai	13.3	5	Bombay	16.0

Figure 1

- (i) Name one city which has always been in the top five cities in the world.

.....
(1)

- (ii) Read the sentences below. They describe changes in the population of the largest cities between 1970 and 2000.
Cross out the **wrong** numbers or words in each sentence.

The population of Sao Paulo grew by $\frac{7.0}{5.5}$ million between 1985 and 2000.

The population of Mexico City was $\frac{\text{three}}{\text{five}}$ times greater in 2000 than it was in 1970.

The total population of the five largest cities in 2000 was over $\frac{100}{110}$ million.

The population of $\frac{\text{New York}}{\text{Mexico City}}$ rose between 1970 and 1985, but fell again by 2000.

(4)



(b) **LEDC** cities have grown because of **natural increase** and **migration** into the cities.

(i) **Migration** into cities from the countryside occurs because of '**push and pull factors**'.

Some of these are shown in the table below.

Tick (✓) the correct box for each to show which are **push** factors and which are **pull** factors.

Factor	Push factor	Pull factor
Better education		
Paid employment		
Poor sanitation		
Health care facilities		
Lack of food		
Poor transport		

(4)

(ii) What are the possible problems which migrants may face in cities?

.....
.....
.....
.....

(2)



(c) Study Figure 2.
It is a fact-file about Cambridge.

- Cambridge has a population of over 110,000
- The population increased by nearly 22% between 1981 and 2001
- It is a market town and historic university city
- Between 1981 and 1991 the number of jobs increased by 9000
- Jobs in computing rose by 25% between 1993 and 1997
- Improved road and rail links to London have attracted new offices to Cambridge
- The old, narrow streets cause many traffic jams
- During the morning and evening rush hours, traffic movement in the city centre is the slowest in the country
- Congestion now occurs throughout the day

Figure 2

(i) Transport problems in Cambridge are increasing.
Why?
You should use information from Figure 2 in your answer.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(4)



Leave
blank

(ii) People living in Cambridge are affected by the increase in traffic.
Suggest how they are affected.

.....
.....
.....
.....
.....
.....
.....

(3)

(d) Many cities have transport problems.
Some of the methods of dealing with these problems are listed below:

- park and ride schemes
- congestion charging
- improving public transport
- cycle lanes
- restrictions on car use

Choose **one** of these methods.

Chosen method

(i) Explain how it works.

.....
.....
.....
.....

(2)

(ii) Give **two** benefits of this method.

1

2

(2)



Leave blank

(e) Transnational corporations (TNCs) affect the countries where they locate their factories.

Choose a TNC that you have studied.

Chosen TNC

Explain the advantages **and** the disadvantages the TNC has for the countries where it has factories.

Advantages

.....
.....
.....
.....
.....
.....
.....
.....
.....

Disadvantages

.....
.....
.....
.....
.....
.....
.....
.....
.....

(8)

(Total 30 marks)

QA1

--	--



A2. Coping with Environmental Change

(a) Look at the Ordnance Survey (OS) map of Bournemouth in southern England.

(i) What type of beach material is found on the coast in:

grid square 1191 ?

grid square 1790 ?

(2)

(ii) Apart from the beach, give **two** attractions for tourists in grid square 0890.

1

2

(2)

(b) Groynes are used to manage this coastline.

(i) Describe the appearance of a groyne.

.....

.....

(1)

(ii) How do groynes protect the coastline?

.....

.....

.....

.....

(2)



Leave
blank

(c) Groynes are a type of **hard** engineering. Soft engineering can also be used.

(i) Name **one** type of **soft** engineering used to manage a coastline.

..... (1)

(ii) Explain how this type of soft engineering works.

.....
.....
.....
..... (2)

(iii) State **one** disadvantage of soft engineering.

.....
..... (1)



Leave blank

(d) Look at grid square 1790 on the OS map.

Environmentalists and **Bournemouth residents** may have different views on whether the coastline in this grid square should be protected.

Suggest why these two groups might be for or against coastal protection in this area. Use evidence from the OS map in your answer.

Environmentalists are Tick (✓) the appropriate box

For protection.	
Against protection.	

Reason

.....

.....

.....

.....

Bournemouth residents are Tick (✓) the appropriate box

For protection.	
Against protection.	

Reason

.....

.....

.....

.....

(4)



Leave blank

(e) Look at the area on the OS map in grid squares 1492 and 1592.

(i) What is the name of the river flowing through this area?

Tick (✓) the correct box.

Avon	
Stour	

(1)

(ii) Why might people living in these grid squares be at risk from river flooding?

.....
.....
.....
.....

(2)

(f) Look at grid square 0697.

There was serious flooding here in November 2002.

(i) State **two** possible effects of the flood for people living in this area.

1

.....

2

.....

(2)

(ii) Suggest what could be done in this area to reduce the risk of flooding.

.....
.....
.....
.....

(2)



Leave blank

(g) Volcanic eruptions and earthquakes are **tectonic hazards**.

Choose **either** a volcanic eruption you have studied

or an earthquake that you have studied.

Tick (✓) the type of hazard that you have chosen:

Volcanic eruption Earthquake

Name of example

Describe the effects of the hazard on the people living in the area.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

and

Explain how people coped after the event.

.....
.....
.....
.....
.....
.....
.....
.....
.....

(8)

(Total 30 marks)

QA2



SECTION B

**Answer EITHER Question B3 OR Question B4.
Write your answers in the spaces provided.
If you answer Question B3, put a cross in this box .**

B3. Use and Abuse of the Environment (Water)

- (a) Look at Figure 3 below.
It is a diagram of the water cycle showing some stores and transfers of water.

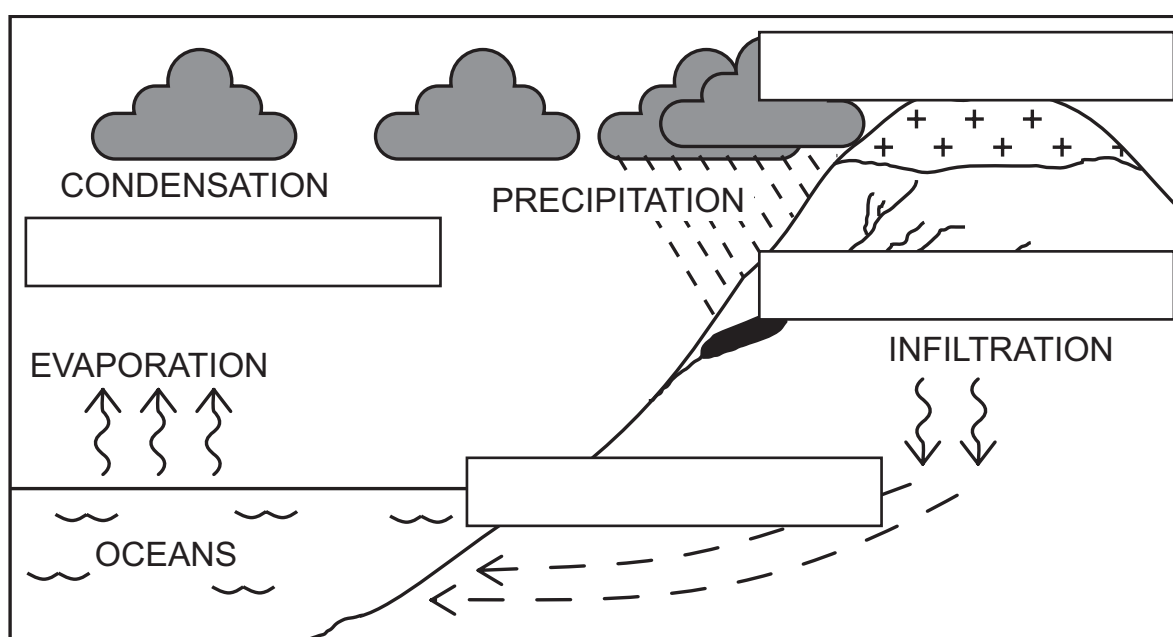


Figure 3

- (i) The four boxes show **stores** of fresh water.
Fill in the boxes correctly using the words below.

atmosphere lake ice cap groundwater (2)

- (ii) Which is the largest store of fresh water in the world?
Circle the correct answer.

atmosphere lakes ice caps groundwater (1)



Leave
blank

(b) Water supplies vary in different parts of the world. This is because rainfall **amounts** and **reliability** both vary.

(i) What is meant by rainfall **reliability**?

.....
.....
.....

(1)

(ii) The following table is about rainfall amounts and reliability in Britain, in desert regions and in equatorial regions.

Complete the table using the six statements given below.

Low rainfall

High rainfall

Moderate rainfall

Low reliability

High reliability

Moderate reliability

Region	Rainfall amount	Rainfall reliability
Britain		
Desert regions		
Equatorial regions		

(3)



(c) Look at Figure 4 below.

The pictures show four different uses of water.

Write the correct label in each box from the list below.

Agriculture

Industry

Domestic

Leisure

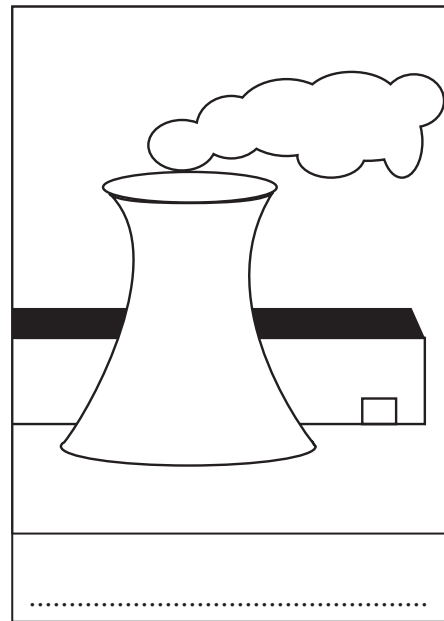
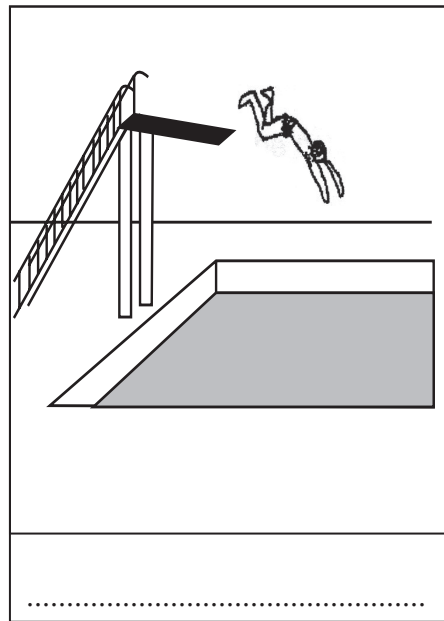
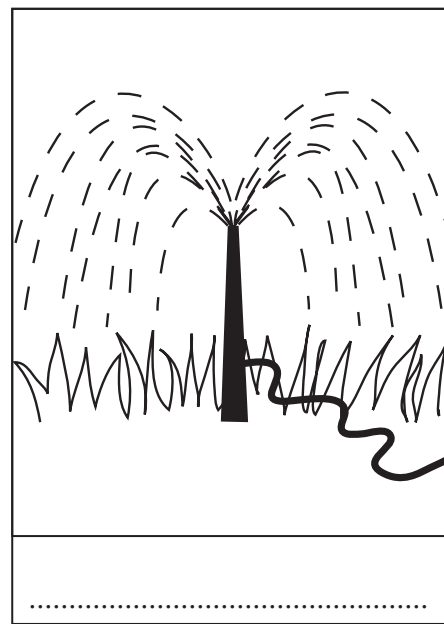


Figure 4

(2)

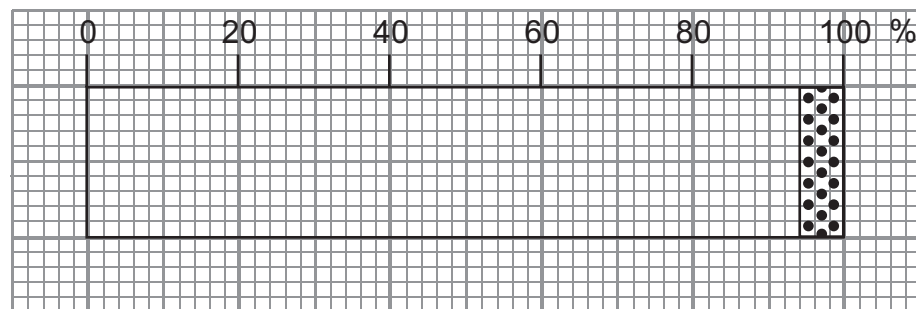


- (d) Look at Figure 5 below.
It is a table showing percentage water use in an **MEDC** country.

Agriculture	Industry	Domestic	Leisure
4	43	47	6

Figure 5

- (i) Use the data in Figure 5 to complete the divided bar chart below.
Use the Key. One has been done for you.



Key			
			
Agriculture	Industry	Domestic	Leisure

(3)

- (ii) Water use in this **MEDC** is increasing.

Suggest why.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

(3)



Leave blank

(e) Rivers and lakes may be polluted by human activity.

Name a lake or river you have studied which has been polluted.

Name of lake or river

Describe the causes of the pollution.

.....
.....
.....
.....
.....
.....
.....
.....

and

Explain how people dealt with, or are going to deal with, this pollution.

.....
.....
.....
.....
.....
.....
.....

(5)

QB3

(Total 20 marks)

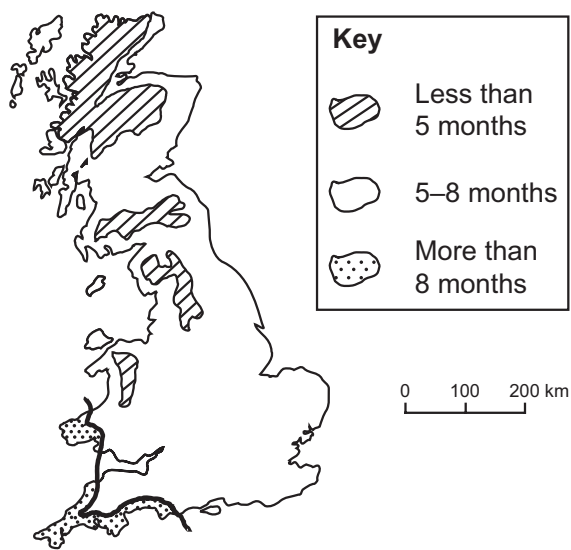


If you answer Question B4, put a cross in this box ☒.

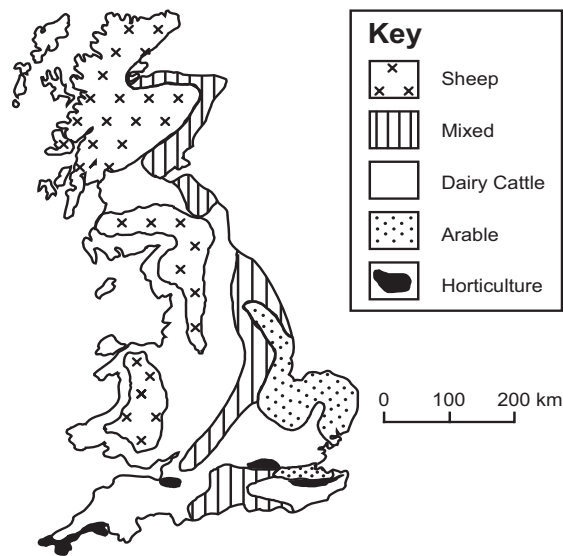
B4. Use and Abuse of the Environment (Weather and Climate)

(a) Look at Figure 6. It is a map showing the length of the growing season in Britain.

Also look at Figure 7. It is a map showing farming types in Britain.



Length of growing season
Figure 6



Type of farming
Figure 7

(i) What is meant by the term **growing season**?

.....
.....
.....
.....

(2)

(ii) Figure 7 shows that sheep farming occurs in north-west Scotland.

Explain why. Use Figure 6 to help you.

.....
.....
.....
.....

(2)



(iii) Figure 7 shows that the south-west of England is important for horticulture (growing vegetables and flowers).

Explain why. Use Figure 6 to help you.

.....

.....

.....

.....

(2)

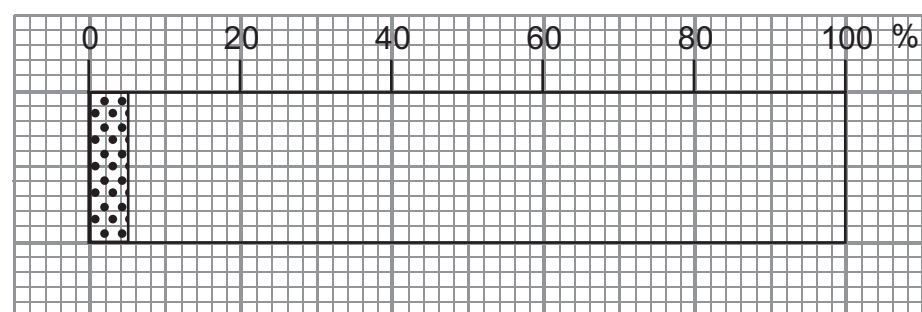
(b) Look at Figure 8 below.

It is a table showing the gases which are thought to contribute to global warming.

Gas	Percentage contribution
Nitrous oxide	5
Methane	10
CFCs	13
Carbon dioxide	72

Figure 8

(i) Use the data in Figure 8 to complete the divided bar chart below. Use the key. One has been done for you.



Key			
Nitrous oxide	Methane	CFCs	Carbon dioxide

(3)



(ii) Look at Figure 9 below.

The pictures show important sources of the different greenhouse gases.

Write the correct gas in each box from the list below.

Nitrous oxide

Methane

CFCs

Carbon dioxide

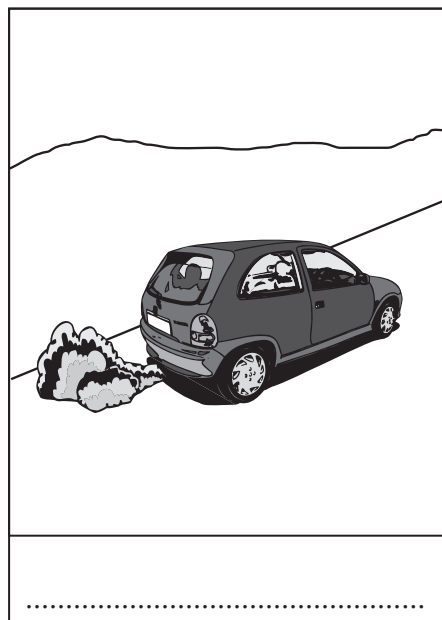
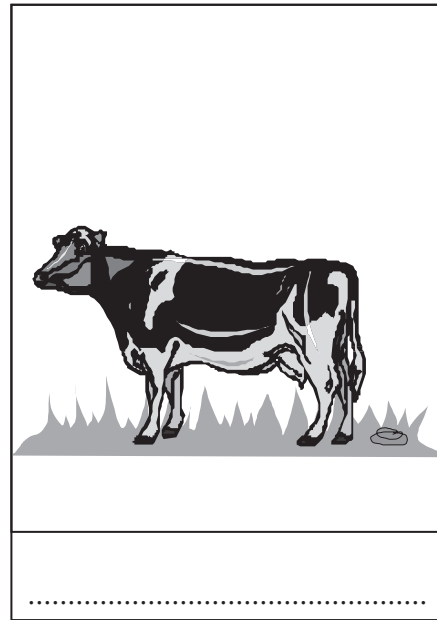
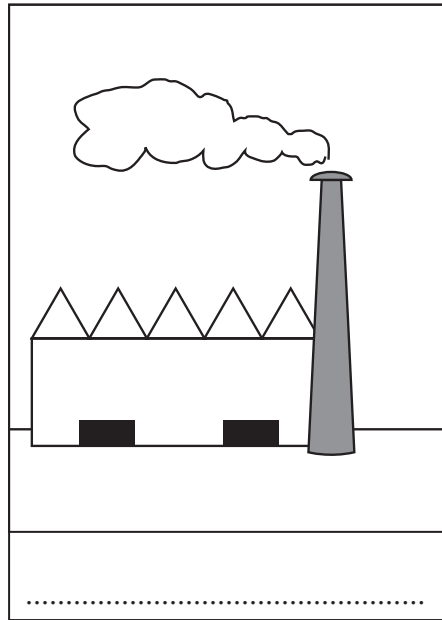


Figure 9

(2)



Leave
blank

(iii) The effects of global warming may be good or bad.

Explain **one** possible good effect of global warming, and **one** possible bad effect of global warming.

Good effect

.....

.....

.....

.....

.....

Bad effect

.....

.....

.....

.....

.....

(4)



Leave
blank

(c) People may unintentionally change weather and climate.

Choose **either**
acid rain
or
an urban micro-climate.

Tick (✓) your choice: Acid rain Urban micro-climate

EITHER Acid rain

Name the location of your chosen study

Describe how human activities cause acid rain.

.....
.....
.....
.....
.....
.....
.....

and

Explain the main effects of acid rain.

.....
.....
.....
.....
.....
.....
.....

(5)



Leave
blank

OR An urban micro-climate

Name the location of your chosen study.

Describe the main characteristics of the urban micro-climate.

.....
.....
.....
.....
.....
.....
.....
.....

and

Explain how human activities cause the urban micro-climate.

.....
.....
.....
.....
.....
.....
.....

(5)

QB4

(Total 20 marks)



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 .

C5. Use and Abuse of the Environment (Farming)

(a) Study photographs A and B in the Photograph Booklet.
They show two contrasting areas of farmland in Britain.

(i) Using evidence from the photographs, state **three** differences between the two areas of farmland.

1

.....

2

.....

3

.....

(3)

(ii) The sentences below give information about farming activities.
Cross out the **wrong** word(s) in each sentence.

Farmers adding water to crops is known as irrigation .
~~precipitation~~

A farm system growing only crops is known as arable farming.
~~mixed~~

Farming without the use of chemicals is called agribusiness .
~~organic farming~~

(3)



(b) The farm in Photograph A uses modern farming methods.

Explain how the following modern farming methods can affect the **environment**.

Hedgerow removal

.....

.....

.....

Using chemical fertilisers

.....

.....

.....

(4)

(c) Genetically modified (GM) crops are now being grown.

What are genetically modified crops?

.....

.....

(1)

(d) There are conflicting opinions about whether GM crops are good or bad.

Four possible effects of GM crops are shown in the table below.

Tick (✓) the correct box to show which are **good** effects and which are **bad** effects.

	Good effects	Bad effects
They produce high yields		
They can reduce the variety of insects		
They reduce the need for chemicals		
They can affect crops in other fields		

(4)



Leave
blank

(e) Fragile environments are at risk from farming activities.

Choose **either** an area of desertification in an **LEDC** which you have studied
or an area of deforestation in an **LEDC** which you have studied.

Name of **LEDC** area:

Tick (✓) your choice: Desertification Deforestation

Describe the location of your chosen area.
You may draw a sketch map if you wish.

.....
.....
.....
.....
.....
.....
.....
.....
.....

and

Explain what can be done to reduce the damage caused by farming in your chosen area.

.....
.....
.....
.....
.....
.....
.....

(5)

QC5

(Total 20 marks)



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

C6. Use and Abuse of the Environment (Recreation and Tourism)

(a) Look at Photograph C in the Photograph Booklet.
It shows the area around the town of Keswick in the Lake District.

(i) This area is popular for recreation and tourism. Give **two** pieces of evidence from the photograph to suggest why.

1

.....

2

.....

(2)

(ii) Suggest **two** recreational activities which visitors might carry out in this area.

1

2

(2)

(b) The sentences below give information about tourism.

Cross out the **wrong** word(s) in each sentence.

People now have more holidays because they have $\frac{\text{more}}{\text{less}}$ income.

Better roads and transport mean that national parks are now $\frac{\text{more accessible}}{\text{less popular}}$.

People visit national parks more often because they want to become $\frac{\text{healthier}}{\text{richer}}$.

(3)



(c) Keswick is a tourist **honeypot**.

(i) What is meant by tourist **honeypot**?

.....
.....

(1)

(ii) Four possible effects of tourism in Keswick are given in the table below.

Tick (✓) the correct box to show which are **good** effects and which are **bad** effects.

	Good effects	Bad effects
Tourists spend money in the town		
Local journeys take longer		
There are fewer jobs in winter		
There are more leisure facilities		

(4)

(d) Increased numbers of tourists can damage **environments** like the one shown in Photograph C.

Explain how tourism can damage the environment.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

(3)



Leave blank

(e) **LEDCs** have developed eco-tourism to make tourism more sustainable.

Choose an **LEDC** area you have studied where eco-tourism has been developed.

Chosen **LEDC** area

Describe the location of your chosen **LEDC** area.
You may draw a sketch map if you wish.

.....
.....
.....
.....
.....
.....
.....
.....
.....

and

Explain how eco-tourism has affected the **environment/wildlife** in your chosen **LEDC** area.

.....
.....
.....
.....
.....
.....

(5)

QC6

(Total 20 marks)

TOTAL FOR PAPER: 100 MARKS

END

