

Centre Number						Candidate Number				
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Other Names										
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For Examiner's Use	
Examiner's Initials	
Question	Mark
1	
2	
3	
4	
5	
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TOTAL	



General Certificate of Secondary Education  
Foundation Tier  
January 2012

# Geography (Specification B)

40352F

**F**

Unit 2 Hostile World

Tuesday 24 January 2012 1.30 pm to 2.30 pm

**For this paper you must have:**

- the insert (enclosed).
- You may use a calculator.

**Time allowed**

- 1 hour

**Instructions**

- Use black ink or black ball-point pen. You may use pencil for maps, diagrams and graphs.
- Fill in the boxes at the top of this page.
- Answer **either** Section A (Questions 1 to 3) **or** Section B (Questions 4 to 6).
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.
- Use your case studies to support your answers where appropriate.

**Information**

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 50.
- You are reminded of the need for good English and clear presentation in your answers. Where applicable, questions should be answered in continuous prose. Quality of Written Communication will be assessed in all answers.



J A N 1 2 4 0 3 5 2 F 0 1

Answer **either** Section A (Questions 1 to 3) **or** Section B (Questions 4 to 6).

### Section A – Living with Natural Hazards

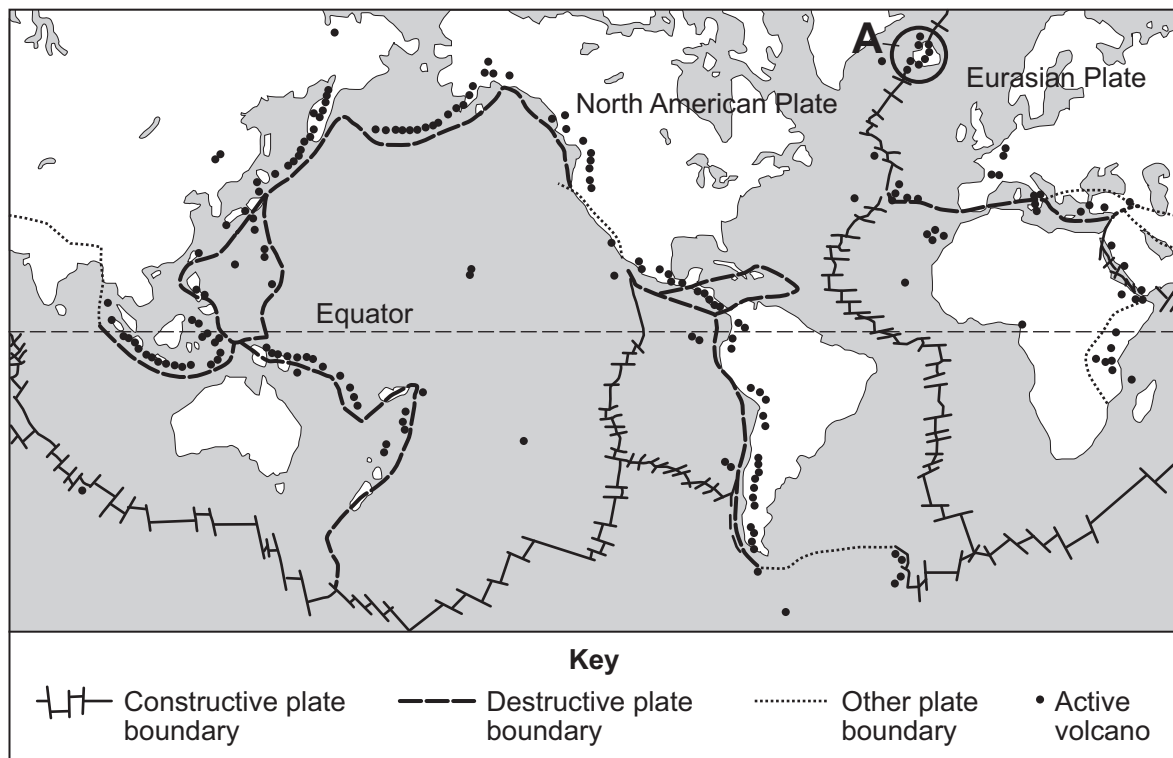
Use your case studies to support your answers where appropriate.

1

Total for this question: 19 marks

Study **Figure 1**. **Figure 1** shows the locations of plate boundaries and active volcanoes.

**Figure 1**



- 1 (a) (i) The following statements describe the distribution of active volcanoes. Which **two** statements are true? Tick the **two** correct boxes.

There are no active volcanoes south of the equator.

There are active volcanoes in the west of North America.

All active volcanoes are on plate boundaries.

There are active volcanoes near to destructive plate boundaries.

(2 marks)



**1 (a) (ii)** Explain why there are volcanic eruptions in the area shown as **A** on **Figure 1**.

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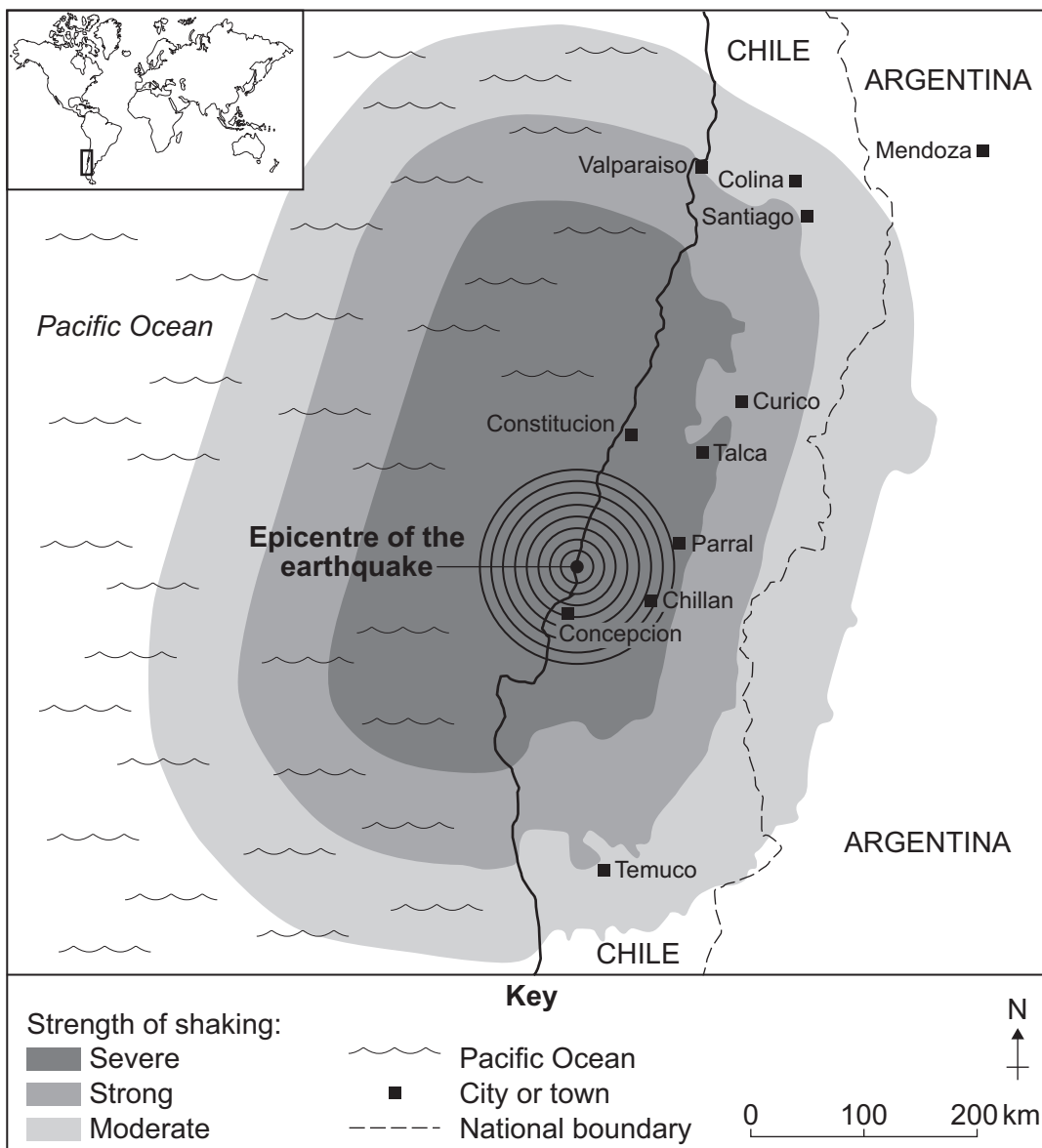
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1 (b) Study Figure 2. Figure 2 shows information about an earthquake in Chile (2010).

Figure 2

The earthquake damaged 1.5 million houses and killed 500 people. Hundreds of other people are missing. In Concepcion a bridge collapsed into the river. Electricity, water and telephone lines have been cut and rescuers found it difficult to reach the city because of damage to roads. In Santiago a car park collapsed, crushing many cars. A chemical factory caught fire and hundreds of people have been evacuated. Santiago airport was damaged and it was closed for 72 hours. Ports were hit by a 15 metre tsunami, and boats and containers were destroyed. Containers, shops and petrol stations have been looted. The President of Chile said money that should have been used for development projects would now have to be used to rebuild houses, hospitals, schools and roads. Rebuilding will take years and will cost at least £20 billion, which is 20% of Chile's Gross Domestic Product (GDP).



1 (b) (i) What was the strength of shaking in Curico?

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(1 mark)

1 (b) (ii) Suggest why there was little earthquake damage in Mendoza.

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(1 mark)

1 (b) (iii) From **Figure 2**, give **two** examples of the effects of the earthquake on the people of Chile **and two** effects of the earthquake on the economy of Chile.

Complete the table below.

Effects on the people of Chile	Effects on the economy of Chile
1 .....	1 .....
.....	.....
2 .....	2 .....
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(4 marks)

Question 1 continues on the next page

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1 (c) (i) Describe **two** ways in which people try to make buildings earthquake proof.

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(4 marks)

1 (c) (ii) Making buildings earthquake proof is one way in which people can prepare for an earthquake.

Give **two other** ways.

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2 .....

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(2 marks)



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0 7

2

Total for this question: 14 marks

2 (a) Study **Figure 3**, on the insert. **Figure 3** is a map which shows the predicted path of a tropical storm (Hurricane Ike) in 2008.

2 (a) (i) Complete the sentence below.  
Circle the correct answer in **each** set of brackets.

At 10am on Thursday 11 September 2008, the centre of Hurricane Ike  
was at latitude [ 16 / 26 / 29 ] degrees north, to the  
[ north east / north west / south west ] of Cuba.

(2 marks)

2 (a) (ii) Do you think that people living in the state of Louisiana should evacuate their homes?

Give reasons for your decision.

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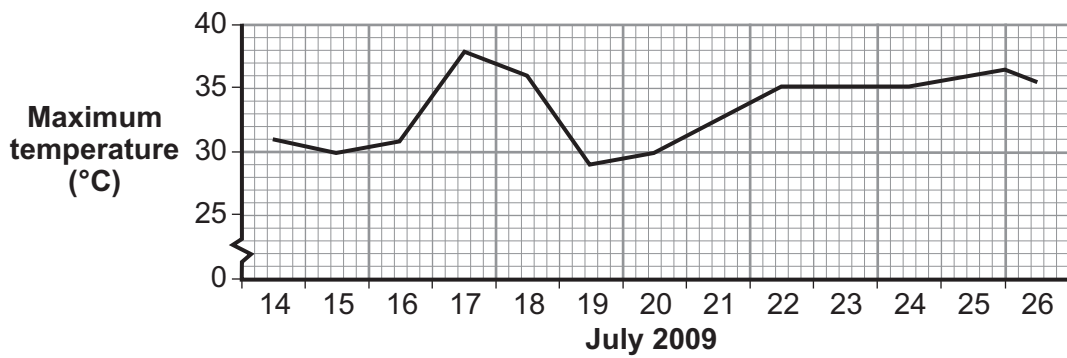
Total for this question: 17 marks

3 (a) Study **Figure 4**. **Figure 4** shows information about wildfires in southern Europe on 26 July 2009.

**Figure 4**

Figure 4 (a map showing the locations of wildfires in Southern Europe on 26 July 2009) has been removed due to third-party copyright constraints.

**Weather conditions in eastern Spain (July 2009)**



<b>Rainfall (mm)</b>	0	0	0	0	0	0	0	0	0	0	0	0	
<b>Wind gusts (kph)</b>	-	-	-	-	-	35	-	-	-	-	-	60	40
	14	15	16	17	18	19	20	21	22	23	24	25	26
	<b>July 2009</b>												





3 (b) Study **Figure 5**. **Figure 5** shows information about wildfires in Spain in July 2009.

**Figure 5**

**Wildfires in Spain, July 2009**

When flames reached buildings on the outskirts of the town of Mojacar, 160 km to the south of Alicante, police ordered all 5000 people to be evacuated. They were taken to a nearby beach. The wildfires caused problems all along the coast and five firemen were killed. The emergency services were unable to deal with all of the wildfires. More wildfires started north of Alicante where more than 200 hectares of pines and olive trees burned out of control. There were also wildfires in Guadalajara province where a high-speed rail service from Madrid to Zaragoza was cancelled, affecting 3700 travellers.

Describe the effects of a wildfire on people **and** the environment.  
Use **Figure 5** and your own knowledge.

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**3 (c)** Suggest how the emergency services can help to reduce the damage caused by wildfires.

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(3 marks)

17

**End of Section A**

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Answer **either** Section A (Questions 1 to 3) **or** Section B (Questions 4 to 6).

**Section B – The Challenge of Extreme Environments**

Use your case studies to support your answers where appropriate.

**4**

**Total for this question: 18 marks**

**4 (a)** Study **Figure 6**, on the insert. **Figure 6** shows some areas of the world at risk from desertification.

**4 (a) (i)** Complete the sentences below.  
Circle the correct answer in **each** set of brackets.

There are areas with a very high risk of desertification in [ **5** / **6** / **7** ]

continents. Most areas with a very high risk of desertification are in

[ **Africa** / **Asia** / **Australasia** ]. Most of the areas at risk of desertification are

found to the north of [ **Europe** / **the Equator** / **the Pacific Ocean** ].

(3 marks)

**4 (a) (ii)** Name the line of latitude that passes through the Sahara Desert.

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(1 mark)

**4 (a) (iii)** Suggest why a hot desert was formed in the area shown as **X** on **Figure 6**.

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(2 marks)

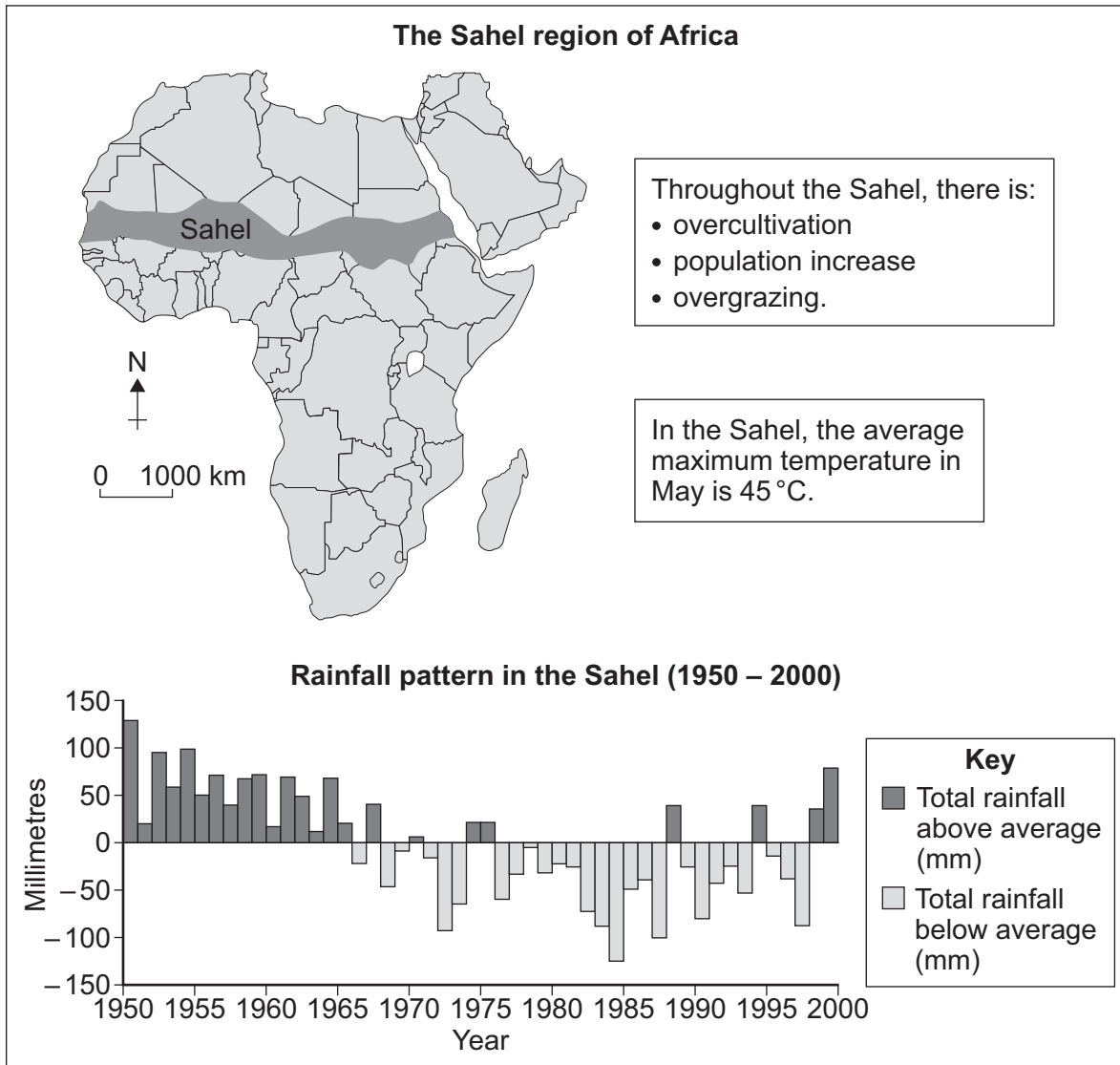
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4 (b) Study Figure 7. Figure 7 shows information about the Sahel region of Africa.

Figure 7



4 (b) (i) What was the longest period of time when the total rainfall was below the average?

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 (1 mark)

4 (b) (ii) With the help of Figure 7, suggest how natural factors can cause desertification.

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(4 marks)

**4 (b) (iii)** With the help of **Figure 7**, suggest how **human** factors can cause desertification.

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(4 marks)

**4 (c)** Suggest how the risk of desertification can be reduced.

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(3 marks)

18

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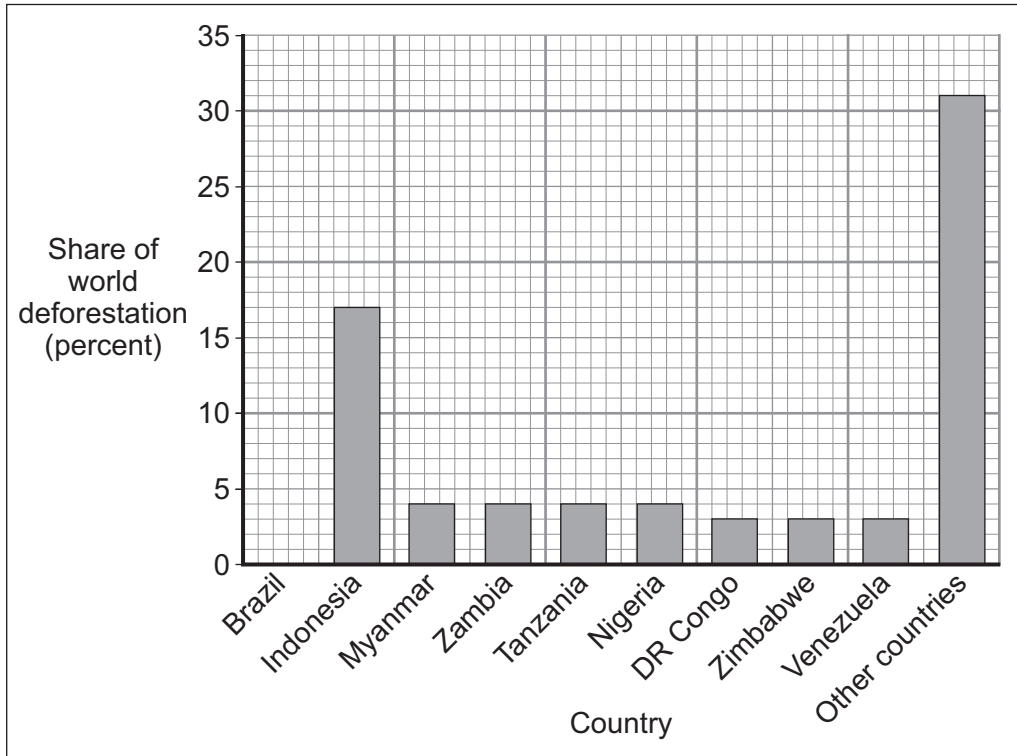


5

Total for this question: 14 marks

5 (a) Study **Figure 8**. **Figure 8** shows the share of world deforestation in countries with tropical rainforests (2000 to 2010).

**Figure 8**



5 (a) (i) Complete **Figure 8**.  
Use the information below.

**Brazil = 27%**

(1 mark)

5 (a) (ii) What percentage of world deforestation took place in the Democratic Republic of Congo (DR Congo) between 2000 and 2010?

..... per cent

(1 mark)



5 (b) Study **Figure 9**. **Figure 9** shows information about the Democratic Republic of Congo.

**Figure 9**

Gross National Income (US \$ per person per year)	110
Population involved in subsistence farming (%)	70
Population growth rate (% per year)	2.6
Value of timber and wood exports (US \$ million per year)	1155
New roads built since 1976 for removing timber (km)	52 000

The rate of deforestation in the Democratic Republic of Congo has increased. With the help of **Figure 9**, suggest reasons for this increase.

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**5 (c)** Give **two** effects of deforestation.

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(2 marks)

**5 (d)** Study **Figure 10**, on the insert. **Figure 10** shows a management scheme in an area of tropical rainforest.

Do you think that the scheme in **Figure 10** is a good way of managing a tropical rainforest environment?

Give reasons for your decision.

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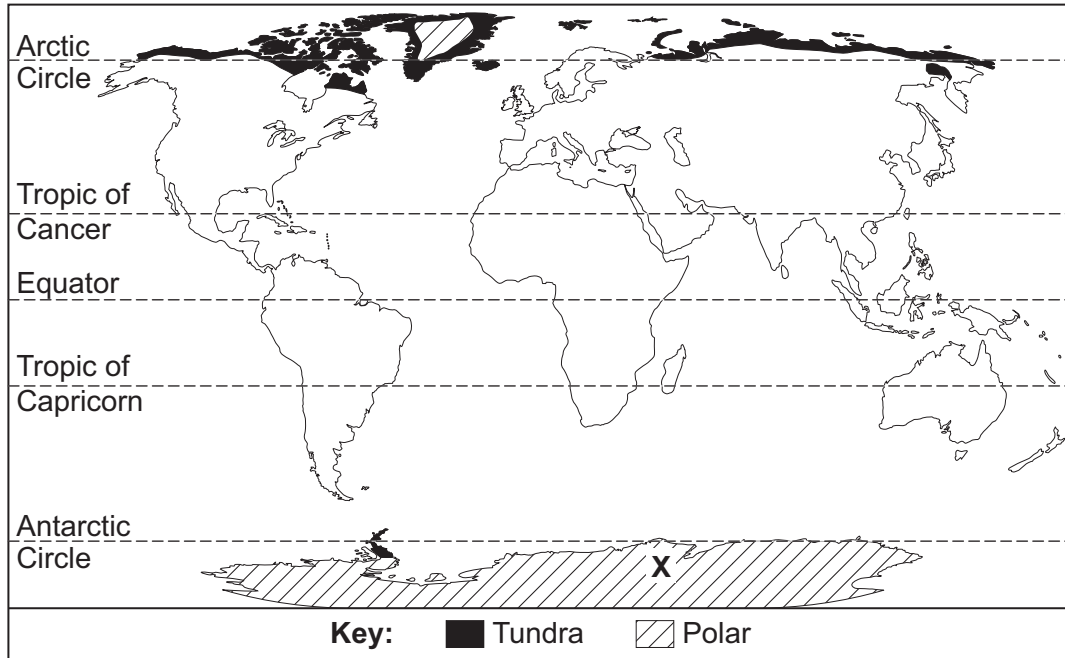


6

Total for this question: 18 marks

6 (a) Study Figure 11. Figure 11 shows a map of cold environments.

Figure 11



6 (a) (i) The following statements describe the distribution of cold environments.  
Which **two** statements are true?  
Tick the **two** correct boxes.

There are no areas of tundra south of the equator.

Areas of tundra are found on the edges of land masses.

All of the polar areas are found above the Arctic Circle  
and below the Antarctic Circle.

All polar areas are found north of the equator.

(2 marks)



**6 (a) (ii)** Explain why the place shown as **X** on **Figure 11** has a cold environment.

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**6 (b)** Study **Figure 12**. **Figure 12** shows information about human activity in Antarctica.

**Figure 12**

Until recently, Antarctica was untouched by tourism. Now there is congestion at landing sites as thousands of people, in large cruise ships, visit the continent and increase pollution of the sea and the land. The number of tourist landing sites has increased and the large number of tourists upsets the breeding patterns of seals, penguins and sea birds. Tourist activities are spreading inland; skiing and ice walks, which damage plants and animals, are becoming more popular. The noise from daily helicopter flights disturbs penguin colonies.

The number of scientific bases in Antarctica is increasing. These help us to understand the fragile Antarctic ecosystems and how we can protect them. Antarctic research also helps us to discover how our world works and how we can reduce the effects of global warming. Scientific bases have caused damage in the past, as waste and equipment were left on the ice when no longer needed. There are fears that the road that has been built to the South Pole by the USA will also lead to damage on the continent. However, some people think that the road will help to prevent the damage caused by daily flights to the South Pole.

Figure 12 (a graph showing the number of visitors to Antarctica from 1980 to 2010) has been removed due to third-party copyright constraints.





6 (b) (i) Give **two** changes to the number of visitors to Antarctica between 1980 and 2010.

1 .....

2 .....

(2 marks)

6 (b) (ii) From **Figure 12**, give **two** problems and **two** benefits for Antarctica caused by human activity.

Complete the table below.

Problems for Antarctica	Benefits for Antarctica
1 .....	1 .....
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2 .....	2 .....
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(4 marks)

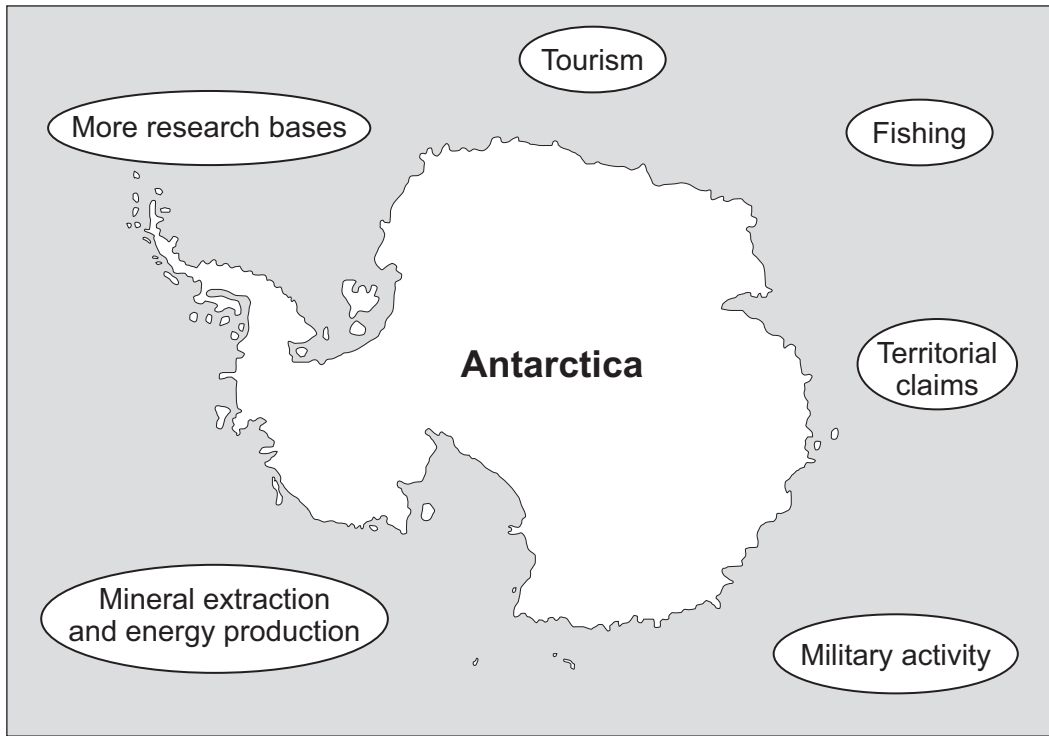
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6 (c) Study **Figure 13**. **Figure 13** identifies some issues in Antarctica.

**Figure 13**



Describe how international agreements help to protect cold environments.  
Use **Figure 13** and your own knowledge.

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18

**END OF QUESTIONS**



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graphs: wunderground.com  
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