Centre Number			Candidate Number		
Surname					
Other Names					
Candidate Signature					



General Certificate of Secondary Education Foundation Tier June 2010

40352F

# Geography (Specification B)

Paper 2: Hostile World

Thursday 17 June 2010 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 or Section B.
- 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.

For Examiner's Use				
Examiner's Initials				
Question	Mark			
1				
2				
3				
4				
5				
6				
TOTAL				

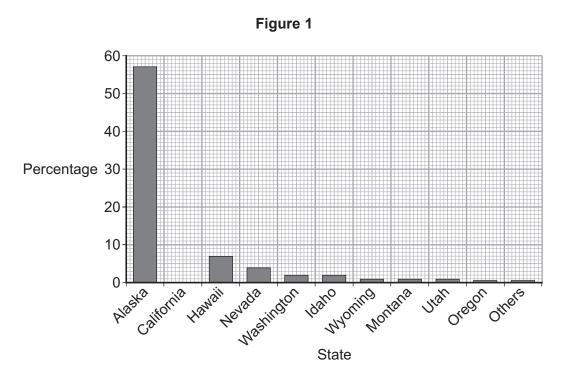
#### Section A - Living with Natural Hazards

Answer either Section A or Section B.

Use your case studies to support your answers where appropriate.

#### Total for this question: 19 marks

1 (a) Study **Figure 1**. **Figure 1** shows the percentage of earthquakes that occurred in states of the USA (1974–2008).



1 (a) (i) Complete Figure 1. Use the information below.

California = 24%

(1 mark)

1 (a) (ii) What percentage of the earthquakes occurred in Hawaii?

Circle the correct answer.

5%

**7**%

15%

(1 mark)



1 (b)	Study <b>Figure 2</b> , on the insert. <b>Figure 2</b> shows information about earthquakes and volcanic eruptions in Alaska, USA.					
1 (b) (i)	(b) (i) Using Figure 2, complete the paragraph below which describes the distribution earthquakes and volcanoes in Alaska.					
	Choose the <b>three</b> correct w	ords from the list below.				
	wide	northwest	islands			
	narrow	southwest	lakes			
	Many of the earthquakes a	nd volcanoes are found on and a	round the			
	in the	e of Alaska.	Most earthquakes and			
	volcanoes lie in a long belt, running from Anchorage out into t					
	Bering Sea.		(3 marks)			
1 (b) (ii)	Using Figure 2, give two e	ffects of the Alaskan volcanic eru	uptions.			
	1					
	2					
			(2 marks)			

Question 1 continues on the next page



1 (b) (iii)	Explain why either earthquakes or volcanic eruptions occur in Alaska.
	Use Figure 2 and your own knowledge.
	(5 marks)
	Extra space
1 (c)	Describe ways in which the damaging effects of <b>either</b> earthquakes <b>or</b> volcanic eruptions may be reduced.



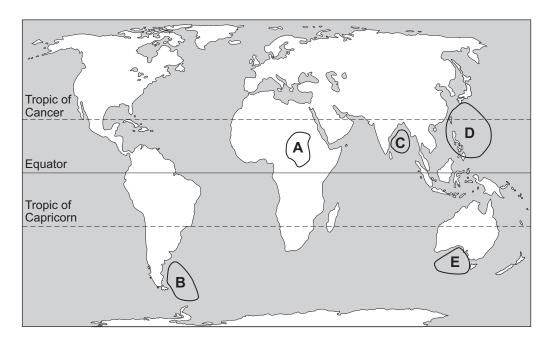
		(5 mark	s)
	Extra space		
4 (-1)	Donale continue to live in coope at sight from com-	4h musika s	
1 (d)	People continue to live in areas at risk from ear		
	Which <b>two</b> of the following statements help to e	explain this?	
	Tick the <b>two</b> correct boxes.		
	People cannot afford to move away.		
	People will have plenty of time to evacuate if an earthquake strikes.		
	Many buildings are designed to absorb shockwaves.		
	People believe that their lives are in danger.		
		(2 mark	s)
			[
	Turn over for the next qu	uestion	



# Total for this question: 19 marks

# 2 (a) Study Figure 3.

Figure 3



In which two areas (A, B, C, D and E) are tropical storms common?

Tick the **two** correct boxes.

Α	

(2 marks)

**2 (b)** Study **Figure 4**, on the insert. **Figure 4** shows the path of a tropical storm.

The statements below show the life cycle of a tropical storm.

The letters A, B, C and D on Figure 4 show four stages in that life cycle.

Write the correct letter next to **each** statement.

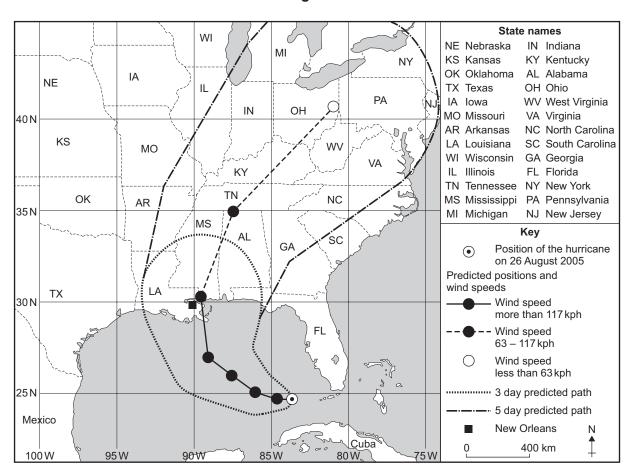
Statement	Letter
with sea surface temperatures over 27 °C, warm air rises and starts to spin	
thunderstorms begin to form	
when the tropical storm moves over land, it loses its source of energy and weakens	
when the tropical storm moves over the ocean, it picks up more warm moist air and it grows in size	

(3 marks)

Question 2 continues on the next page

**2 (c)** Study **Figure 5**, a map to show the predicted path of a tropical storm (Hurricane Katrina) in 2005.

Figure 5



2 (c) (i) Complete the sentences below.

Circle the correct answer in each set of brackets.

At 11 pm on 26 August 2005, the centre of Hurricane Katrina was to the

[ north / south / east ] of Cuba, at latitude [ 14 / 24 / 34 ] degrees north. The longitude was 83 degrees west. In the three days after 26 August, the centre of Hurricane Katrina could pass over [ Mississippi (MS) / Tennessee (TN) / Kansas (KS) ].

(3 marks)

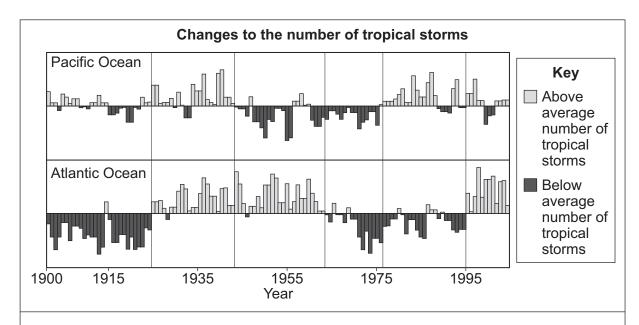


2 (c) (ii)	What is expected to happen to the wind strength when the tropical storm reach Ohio (OH)?				
		(1 mark)			
2 (c) (iii)	Do you think that the people living in Texas (TX) should evacuate their homes	?			
	Give a reason(s) for your answer.				
	Yes No				
2 (4)	Study Figure 6 same methods of propering for a trapical storm	(2 marks)			
2 (d)	Study <b>Figure 6</b> , some methods of preparing for a tropical storm. <b>Figure 6</b>				
	<ul> <li>Listen to the radio</li> <li>Protect your home</li> <li>Have a family action plan</li> <li>Get an emergency kit</li> </ul>				
	Suggest how <b>two</b> of these methods help people prepare for a tropical storm.				
	Chosen method				
	Chosen method				
		(2 marks)			
	Question 2 continues on the next page				



**2 (e)** Study **Figure 7**. **Figure 7** shows information about changes to the number of tropical storms.

Figure 7



#### The views of two scientists

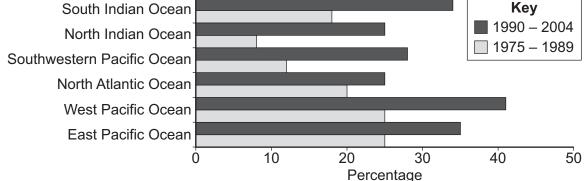


Computer models predict that in 70 years' time, there will be fewer tropical storms.



Records of tropical storms before 1900 are unreliable.





Do you agree with these	views? Tick the box	of your choice.	
Yes	No		
Give reasons for your de	ecision.		
Use <b>Figure 7</b> and your o	wn knowledge.		
			(6
Extra space			
, 			

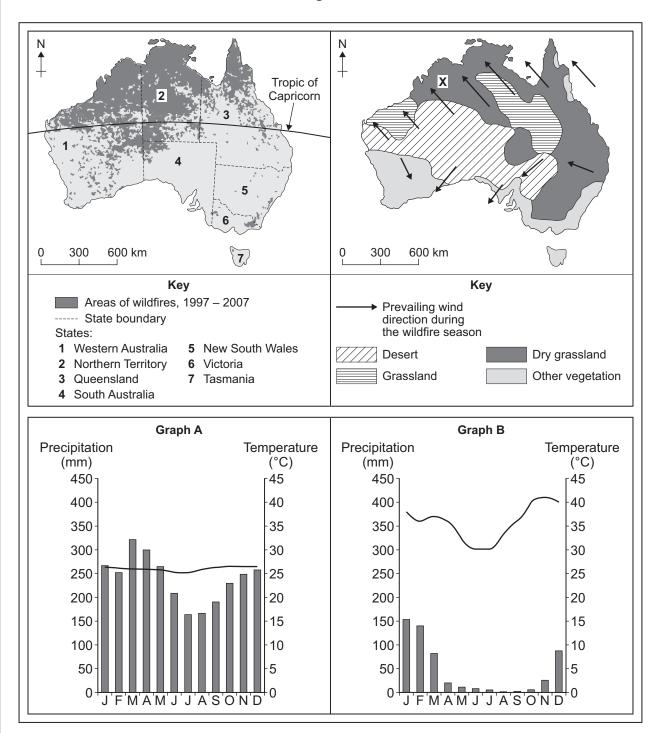
Turn over for the next question



#### Total for this question: 12 marks

3 (a) Study Figure 8, information about wildfires, vegetation and climate in Australia.

Figure 8





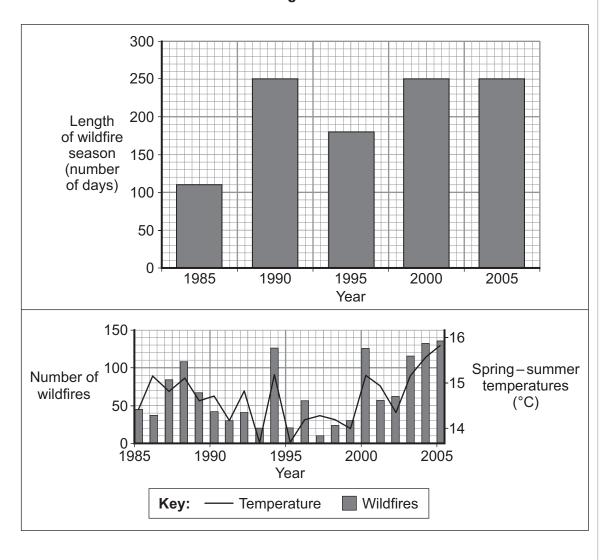
3 (a) (i)	Study Figure 8.	
	Which of the graphs (A or B) shows the climate at the place marked X on the	e map?
	Tick the correct box.	
	Graph A	
	Graph B	
		(1 mark)
3 (a) (ii)	Which of the following is a state in Australia where wildfires are common?	
	Tick the correct box.	
	South Australia	
	Northern Territory	
	Tasmania	(1 mark)
3 (a) (iii)	Use <b>Figure 8</b> to decide which <b>two</b> of the following statements are correct.	, ,
, , , ,	Tick the <b>two</b> correct boxes.	
	All areas of wildfires are above the Tropic of Capricorn.	
	Most wildfires occur in northern Australia.	
	Most wildfires occur in southern Australia.	
	Tasmania has few wildfires.	
		(2 marks)
	Question 3 continues on the next page	



3 (a) (iv)	With the help of <b>Figure 8</b> , suggest why place <b>X</b> is at risk from wildfires.
	(4 marks)

**3 (b)** Study **Figure 9**, information about wildfires in western USA.

Figure 9





3 (b) (i)	What was the length of the wil	dfire season in 2005?		
	Circle the correct answer.			
	150 days	200 days	250 days	(1 mark)
3 (b) (ii)	Suggest the connection betwe wildfires.	en spring-summer tempe	ratures and the numb	er of
				(1 mark)
3 (c)	The cost of damage from wildf	îres is increasing.		
	Give <b>two</b> reasons why.			
	1			
	2			
				(2 marks)

12

**End of Section A** 



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

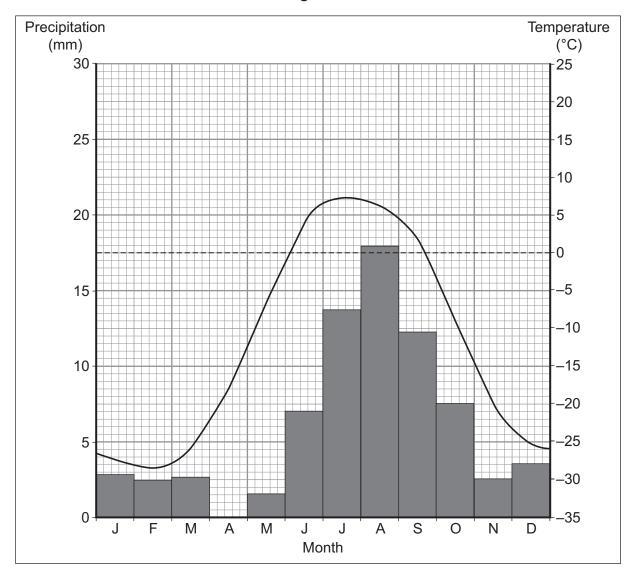
Answer either Section A or Section B.

Use your case studies to support your answers where appropriate.

# Total for this question: 19 marks

4 (a) Study Figure 10, a climate graph for Prudhoe Bay in Alaska.

Figure 10





4 (a) (i) Complete Figure 10. Use the information below.

April precipitation = 2.5 mm

(1 mark)

**4 (a) (ii)** What was the average temperature in March? Circle the correct answer.

-26°C 0°C 6°C

(1 mark)

Question 4 continues on the next page



4 (b)	Study <b>Figure 11</b> , on the insert, which shows information about Alaska.							
4 (b) (i)	The paragraph below gives information about the oil industry in Alaska.							
	Complete the paragraph by choosing the <b>three</b> correct words from the list.							
		tanker	Anch	orage	S	outh		
		pipeline	Prudh	noe Bay	n	orth		
	The main	oil fields are in	the area clos	se to		The	oil is	
	transporte	ed by		to Valdez, wl	hich lies	1242 kilom	etres to	
	the							
								(3 marks)
4 (b) (ii)		the effects of th			ole and th	e environn	nent of Al	aska.
	Use <b>Figu</b> i	re 11 and your	own knowled	ge.				
					•••••			
					•••••			
					•••••			
					•••••			
								(5 marks)
	Extra spa	ce						



4 (c)	Study Figure 12 on the insert.	
	Give <b>two</b> threats to the environment of Antarctica.	
	1	
	2	
		(2 marks)
4 (d)	Which <b>two</b> of the following statements are reasons why people should protect environment such as Antarctica?	t a cold
	Tick the <b>two</b> correct boxes.	
	Very few people live in Antarctica.	
	Antarctica is valuable for scientific research.	
	Antarctica contains few species of land animals.	
	Antarctica is the last great wilderness left on	
	earth.	(2 marks)
	Question 4 continues on the next page	



4 (e)	People can have damaging effects on cold environments.					
Describe ways in which the damaging effects may be reduced.						
	(5 marks)					
	Extra space					

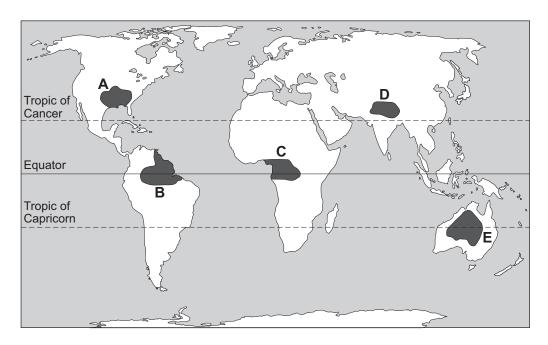
19



# Total for this question: 19 marks

# 5 (a) Study Figure 13.

Figure 13



In which two areas (A, B, C, D and E) are tropical rainforests found?

Tick the **two** correct boxes.

Α	
В	
С	
D	
E	

(2 marks)

Question 5 continues on the next page



5 (b) Study **Figure 14** which shows the daily pattern of weather in an area of tropical rainforest.

Figure 14

B

C

C

The statements below show the daily pattern of weather in an area of tropical rainforest.

Write the correct letter (A, B, C or D) next to each statement.

Statement	Letter
Towering black clouds form. Thunderstorms bring heavy rainfall.	
At 9 am, temperatures are as high as 25 °C. The air near the ground heats up.	
More and more hot air rises and cools. It condenses and forms thick cloud.	
The sun is directly overhead and temperatures are over 30 °C. The hot air rises in convection currents.	

(3 marks)



5 (c)	Study <b>Figure 15</b> , on the insert, information about deforestation in Borneo, an island in south east Asia.				
5 (c) (i)	Complete the sentences below.				
	Circle the correct answer in each set of brackets.				
	In 1950 [ all / none / most ] of Borneo was covered with tropical rainforest.				
	By 1985 most of the [ north coast / east coast / central region ] had been deforested. (2 marks)				
5 (c) (ii)	What percentage of Borneo had been deforested by 2005?				
	<b>%</b> (1 mark)				
5 (c) (iii)	What is expected to happen to the amount of tropical rainforest in Borneo by 2020?				
	(1 mark)				
5 (c) (iv)	Deforestation has taken place on the steep slopes to the north of the area shown as <b>X</b> on <b>Figure 15</b> .				
	Suggest how this deforestation might affect area X.				
	(2 marks)				
	Question 5 continues on the next page				



**5 (d)** Study **Figure 16**, some methods of reducing problems in the tropical rainforest environment.

# Figure 16

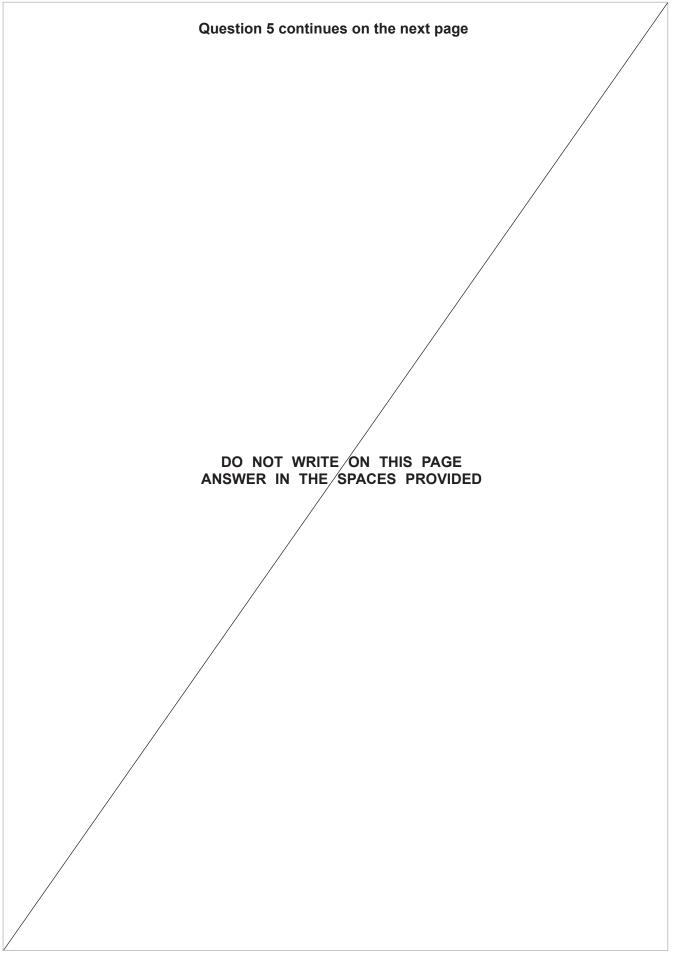
- Reforestation
- Conservation schemes
- Ecotourism
- Ethical shopping

Choose two of the methods shown in Figure 16.

For each method, suggest **one** way it might help to reduce problems in the tropical rainforest environment.

hosen method	
hosen method	
(2	marks)

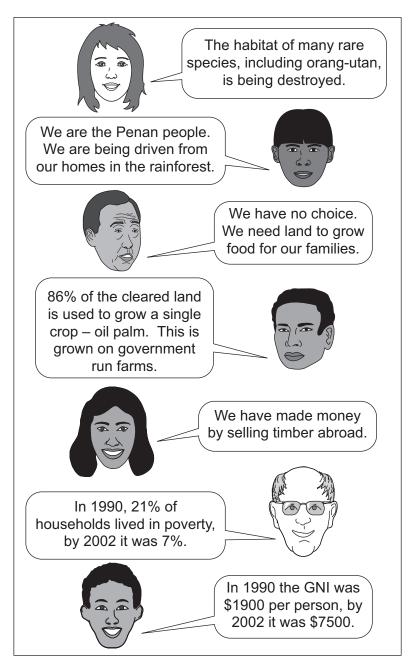






**5 (e)** Study **Figure 17** which shows information about deforestation and development in a region of Borneo.

Figure 17





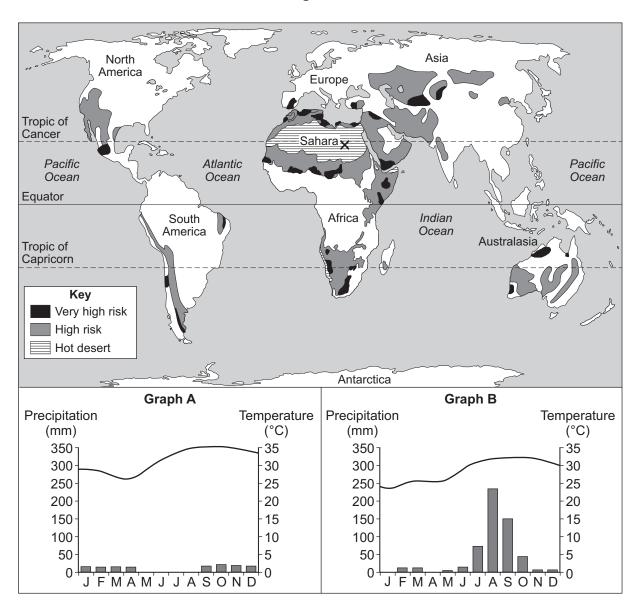
'Tropica	Il rainforest environments should be protected at any cost.'	
Do you	agree with this view? Tick the box of your choice.	
Yes	No No	
Give rea	asons for your decision.	
Use Fig	gure 17 and your own knowledge.	
		(6
Extra sp	oace	



#### Total for this question: 12 marks

6 (a) Study Figure 18 which shows some areas of the world at risk from desertification.

Figure 18





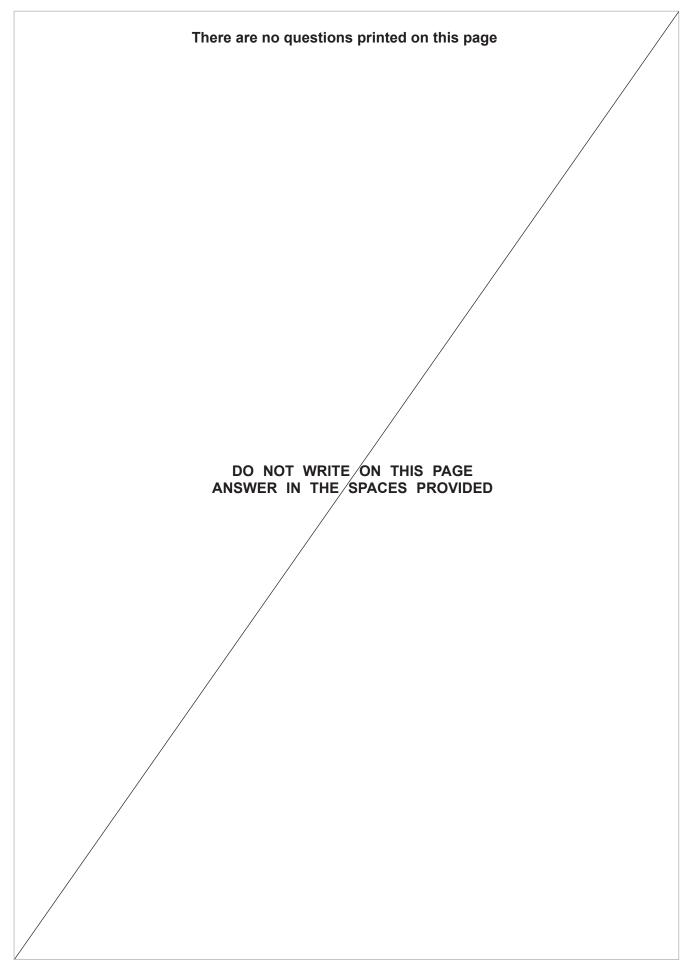
6 (a) (i)	Which of the graphs in Figure 18 (A or B) shows the climate at the place shown as X?				
	Tick the correct box.				
	Graph A Graph B	(1 mark)			
6 (a) (ii)	Which continent has the greatest area with a very high risk of desertification?				
		(1 mark)			
6 (a) (iii)	Use <b>Figure 18</b> to decide which <b>two</b> of the following statements are correct.				
	Tick the <b>two</b> correct boxes.				
	There are no areas in Europe with a very high risk of desertification.				
	Many areas with a very high risk of desertification are between the Tropics.				
	There are no areas in South America with a high risk of desertification.				
	Many areas on the fringe of the Sahara desert have a very high risk of desertification.	(0 ( )			
		(2 marks)			
	Question 6 continues on the next page				





6	(b)	Study <b>Figure 19</b> , on the insert, which shows information about desertification in Africa.					
6	(b) (i)	What percentage of dryland used for agriculture has been affected by desertification?					
		Circle the correct ans	wer.				
			73%	75%	80%	(1 mark)	
•	(I-) (!!)	0		- 41 - 11 - 11 - 11 - 11 - 11 - 11 - 11		(1 mark)	
ь	(II) (II)	Suggest the connection	on between popul	ation density and d	esertification.		
						•••••	
						(1 mark)	
6	(b) (iii)	Many places in Africa	have a very high	risk of desertificati	on.		
		Suggest <b>two</b> reasons	why.				
		Use <b>Figure 19</b> to help	o you.				
		1					
		2					
_						(4 marks)	
6	(c)	Suggest <b>two</b> changes	s in climate that m	ay increase the ris	k of desertification.		
		1					
		2					
						(2 marks)	

**END OF QUESTIONS** 





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