Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use	
Examiner's Initials	
Question	Mark
1	16
2	23
3	11
4	14
5	21
6	10
TOTAL	50/45

50

45.

AQA

General Certificate of Secondary Education
Higher Tier
Specimen Paper

Geography (Specification B)

40352H

Unit 2: Hostile World

H

Date: Time

For this paper you must have:
- the insert (enclosed)
- a ruler

You may use a calculator.

Time allowed
- 1 Hour

Instructions
- Use black ink or black ball-point pen.
- 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. Answers written in margins or on blank pages will not be marked.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information
- The maximum mark for this paper is 50.
- The marks for questions are shown in brackets.
- You will be marked on your ability to:
  - use an appropriate form and style of writing
  - organise relevant information clearly and coherently
  - use specialist vocabulary where appropriate.

SECTION A – LIVING WITH NATURAL HAZARDS

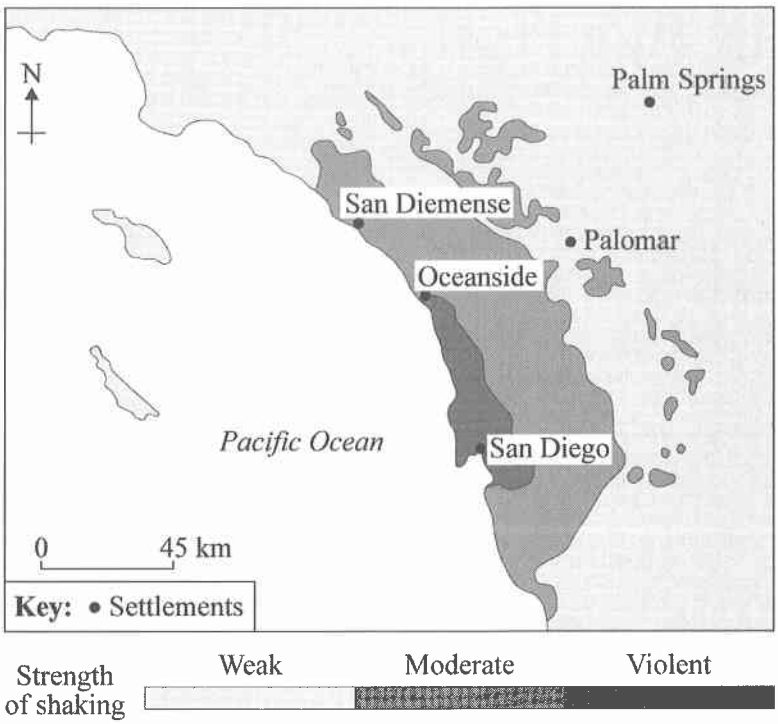
Answer **either** Section A **or** Section B.

1 Tectonic Hazards

Total for this question: 16 marks

1 Study **Figure 1**, which gives information about an earthquake in California (USA).

Figure 1



1 (a) Describe the pattern of earthquake shaking shown in Figure 1.

(The violent shaking is around San Diego next to the coast) (As you go inland towards Palm Springs the shaking gets less (weaker))

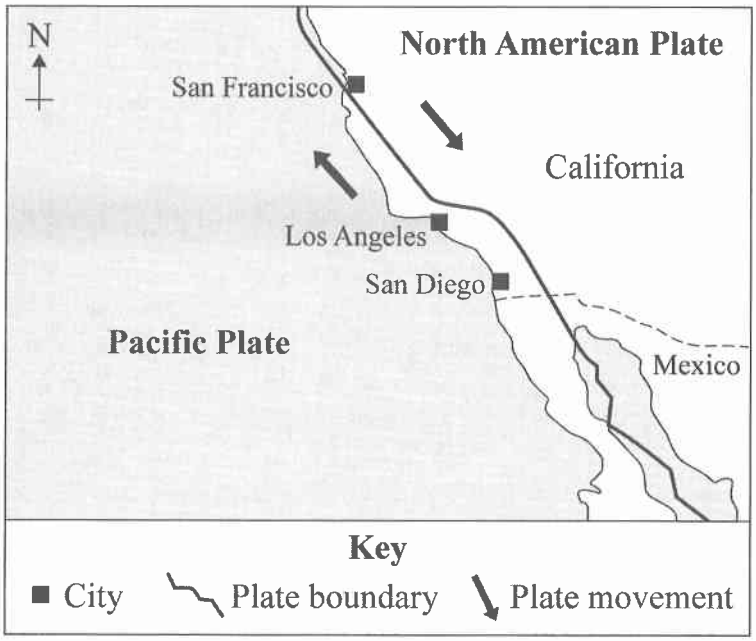
2

(2 marks)

Barcode

1 (b) Study **Figure 2**, a map of plate boundaries in North America.

Figure 2



Suggest the cause of the earthquake in California.

(The North American plate is sliding past the L2
Pacific Plate along the San Andreas fault.) They
seem to be moving in opposite directions but one is moving
faster than the other. (Sometimes when they move they
get stuck and the pressure builds up under the ground.) L2
(When they suddenly move again, lots of shock waves
are sent out which causes an earthquake.) in L2
California, like the one they had in San Francisco. 4

(4 marks)

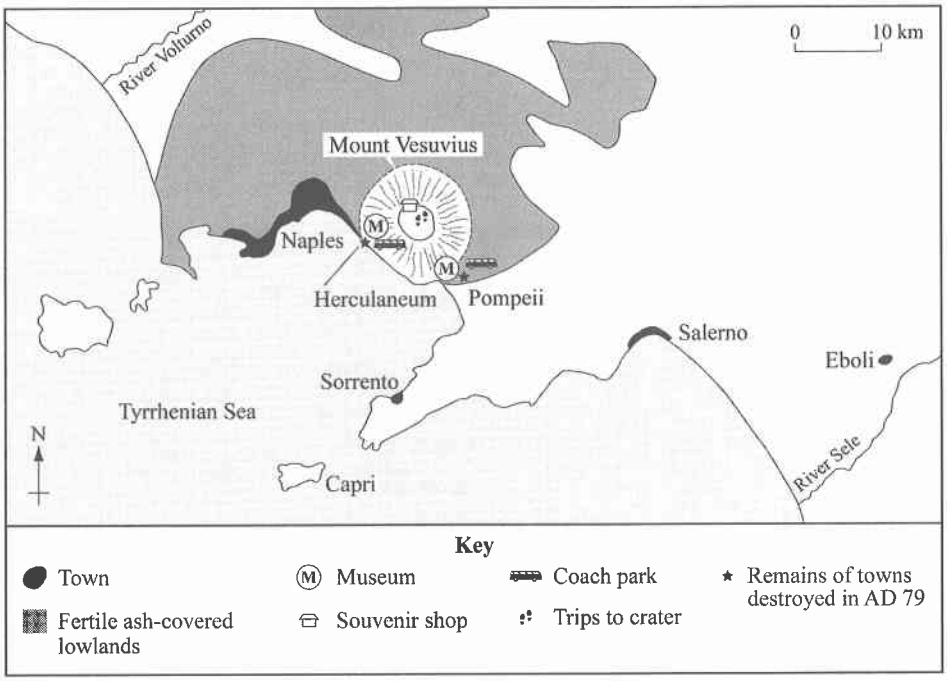
L2

Question 1 continues on the next page

Barcode

1 (c) Study **Figure 3**, which shows the area around Mount Vesuvius, a volcano in Italy.

Figure 3



Despite the risks, people continue to live close to Mount Vesuvius. With the help of **Figure 3**, suggest why.

People continue to live near volcanoes because of the benefits they get from them. (The lava that covers the land breaks down to form very fertile soil which is good for growing crops in, so they have plenty of food.) (The volcano is very spectacular and attracts many tourists who want to see it. Local people can earn money from this by being guides or coach drivers or taxi drivers.) (4 marks) 4

(Extra space) They can also sell souvenirs to tourists like T-shirts and postcards. The get cheap energy from under the ground as it is hot.

L2

Barcode

1 (d) Describe ways in which the damaging effects of **either** an earthquake **or** a volcanic eruption may be reduced.

Chosen hazard ..... Earthquake .....

People can plan and prepare for an earthquake (They can design buildings which are earthquake proof)[4] as they have a computer controlled counterweight in the roof to counter the shockwaves[L2]) (or they have base-isolators which move sideways with the building[L3]) (People can learn what to do if an earthquake strikes[4]). (They have regular drills or practice days) like the one in Japan on 1st September. People learn how to fasten heavy items of furniture down and to 'drop, cover and hold' to protect themselves.)[L3]

(6 marks)

(Extra space) ..... L3 .....

6

16/16

Turn over for the next question

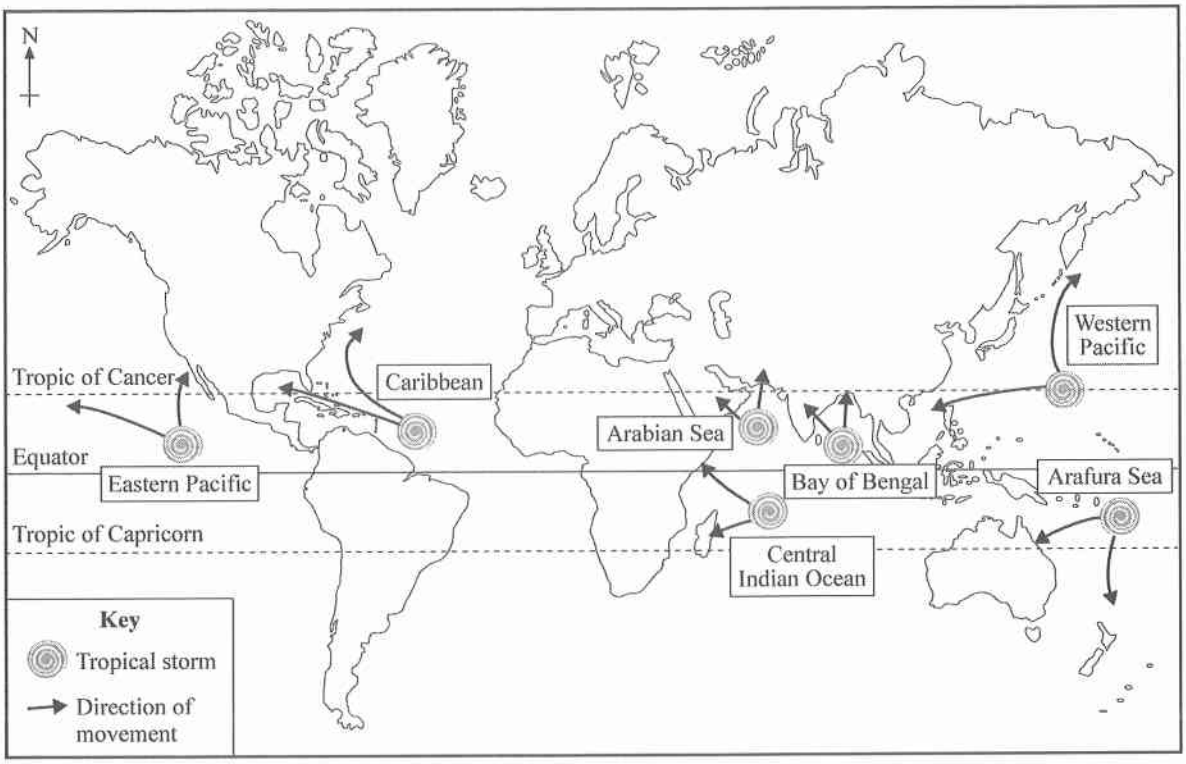
Barcode

2 Tropical Storms

Total for this question: 23 marks

2 Study **Figure 4**, which shows the world distribution of tropical storms.

Figure 4



2 (a) Describe the distribution of tropical storms.

They are found between the Tropic of Cancer and the Tropic of Capricorn, both and south of the equator where the warm oceans are found eg Indian Ocean, Caribbean (Atlantic)

2

(2 marks)

Barcode

2 (b) Study **Figure 5** on the insert, which shows the path taken by a tropical storm (Hurricane Ivan) in September 2004.

2 (b) (i) Complete the following table to show the direction and strength of Hurricane Ivan.

Date	Direction of Movement	Strength
September 4th	west ✓	Low ✓
September 10th	Northwest ✓	High ✓

4

(4 marks)

2 (b) (ii) Suggest reasons for the changes in strength of the tropical storm (Hurricane Ivan) between the 2nd and 15th September 2004.

(On 2nd September Hurrican Ivan was over a warm ocean ✓) (This gives it lots of energy as the wet air rises and as it starts to spiral a storm develops ✓) (As it travels over more warm ocean (2-14th September) it picks up more and more warm air and starts to spin faster and the wind increases ✓) (On 15th September it reached land and the wind drops as it no longer gets its energy from the ocean ✓)

4

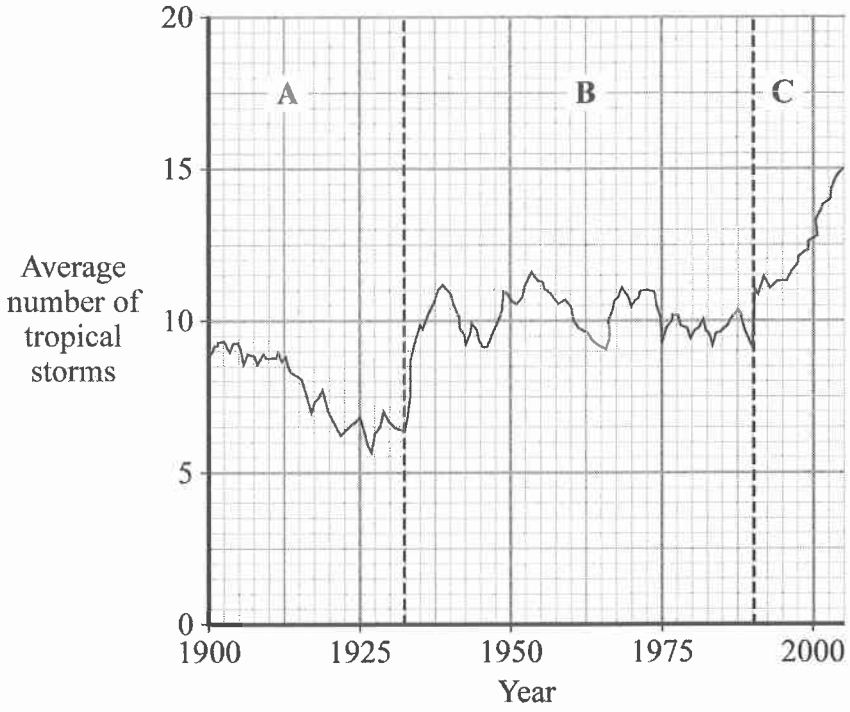
(4 marks)

Question 2 continues on the next page

Barcode

2 (c) Study **Figure 6**, which shows the average number of tropical storms in the Atlantic Ocean between 1900 and 2005.

Figure 6



2 (c) (i) Describe the changes to the average number of tropical storms in the Atlantic Ocean between 1900 and 2005.

(Between 1900 and 1925 there were less than 10 storms a year.) (After this it started to go up and then evened out with between 9-12 each year until 1990.) (After 1990 there were always more than 12, and it keeps going up to 15 a year.)

3

(3 marks)

Barcode

2 (c) (ii) Suggest reasons for your answer to (c)(i) above.

(Some people think that it is part of a natural cycle) (then the number of tropical storms increases and then starts to fall again). (This is because of things like El Nino in the Pacific when the water temperature changes) (Other people (including me) think it is because of global warming which is causing the climate to change and the oceans are getting warmer) This is causing more tropical storms and they are more powerful. 4 max

(4 marks)

Question 2 continues on the next page

Barcode

2 (d) Study **Figure 7**, which shows information on the USA and Myanmar (Burma).

Figure 7

Indicator	Myanmar	USA
Birth rate (per 1000)	17	14
Death rate (per 1000)	9	8
GDP (per person)	US$ 1 900	US$ 46 000
Life expectancy (years)	62	78
Literacy rate (per cent)	90	99
Employment structure (per cent)	Primary 54 Secondary 10 Tertiary 36	Primary 2 Secondary 20 Tertiary 78
Internet users (per cent)	0.6	68
Mobile phone users	0.4	77

With the help of **Figure 7** explain why the people of the USA may be better prepared for a tropical storm than the people of Myanmar.

The figures show that Myanmar is a much poorer country than the USA. The GDP is much lower and this shows that they cannot afford to put money into protecting people from tropical storms. They can't afford to build houses which can withstand high winds and tidal waves as they have to spend all their money on things like hospitals and doctors to reduce the effects they should be tracking the storms with satellites and weather stations but they don't have money for these. There aren't as many people on the internet in Myanmar so they won't be able to go onto websites which will

(6 marks)

Barcode

(Extra space) ..warn them if a tropical storm will hit the area in which they live) L2 and ... whether or not they should evacuate) L3 (They will also not get advice from the internet on how to prepare their house for a tropical storm) L4 and as nearly anybody has a mobile phone they won't be able to contact friends and relatives if a storm comes) L2

L3.

6.

23/23

Turn over for the next question

3 Wildfires **Total for this question: 11 marks**

3 (a) Give **two** ways in which local people and the authorities might respond to a wildfire.

1 They will send out helicopters with big buckets of water and drop it on the wild fire. ✓

2 They will clear away trees and branches to make a fire break. ✓

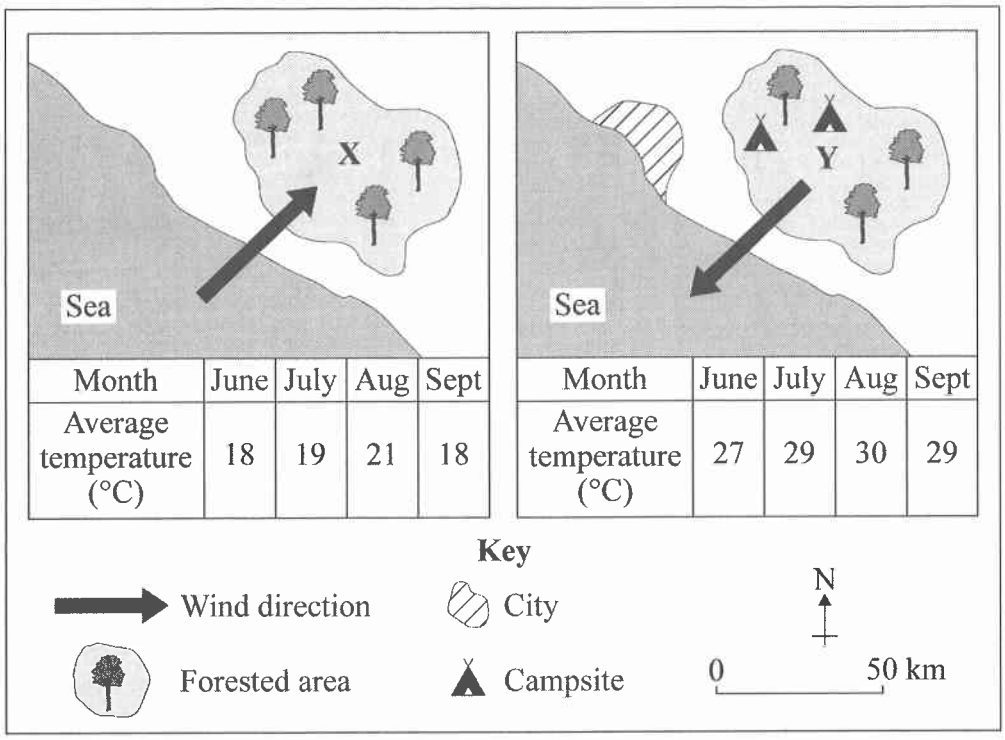
2

(2 marks)

Barcode

3 (b) Study **Figure 8**, which shows two forested areas and information about summer temperatures in each.

Figure 8



Month	June	July	Aug	Sept
Average temperature (°C)	18	19	21	18

Month	June	July	Aug	Sept
Average temperature (°C)	27	29	30	29

"Unlike earthquakes, volcanoes and tropical storms, wildfires are mainly caused by the actions of people."
Do you agree with this statement? Tick the box of your choice.

Yes	✓	No	

Give reasons for your decision (you may use any of the resources to help you answer this question).

(Although some wildfires do start naturally when lightning strikes a tree or grass and sets it on fire) L1 (a lot are caused by people either on purpose or by accident) L1 The fires that spread across parts of Australia in 2009 were started deliberately by an arsonist L2 They were helped however, by

Barcode

Some natural causes as it had been very hot and dry weather so they spread very quickly and got out of control. (L3) (Some wildfires in 2007 in California in the USA were started deliberately by children) (L1) (but the biggest was an accident because a powerline fell down because of the strong Santa Ana winds that were blowing) (L2) this caused a fire and because the Santa Ana winds are dry winds they made the fire spread very quickly and became a massive wildfire which got out of control. (L3) (Other accidents happen when people have campfires and don't put them out properly) (L1) more and more people are going camping in the wilderness so more wildfires could start. (L1) it is mostly down to people but there are some natural features which help.

L3

(9 marks)

(Extra space)

9

H
11

END OF SECTION A

Barcode

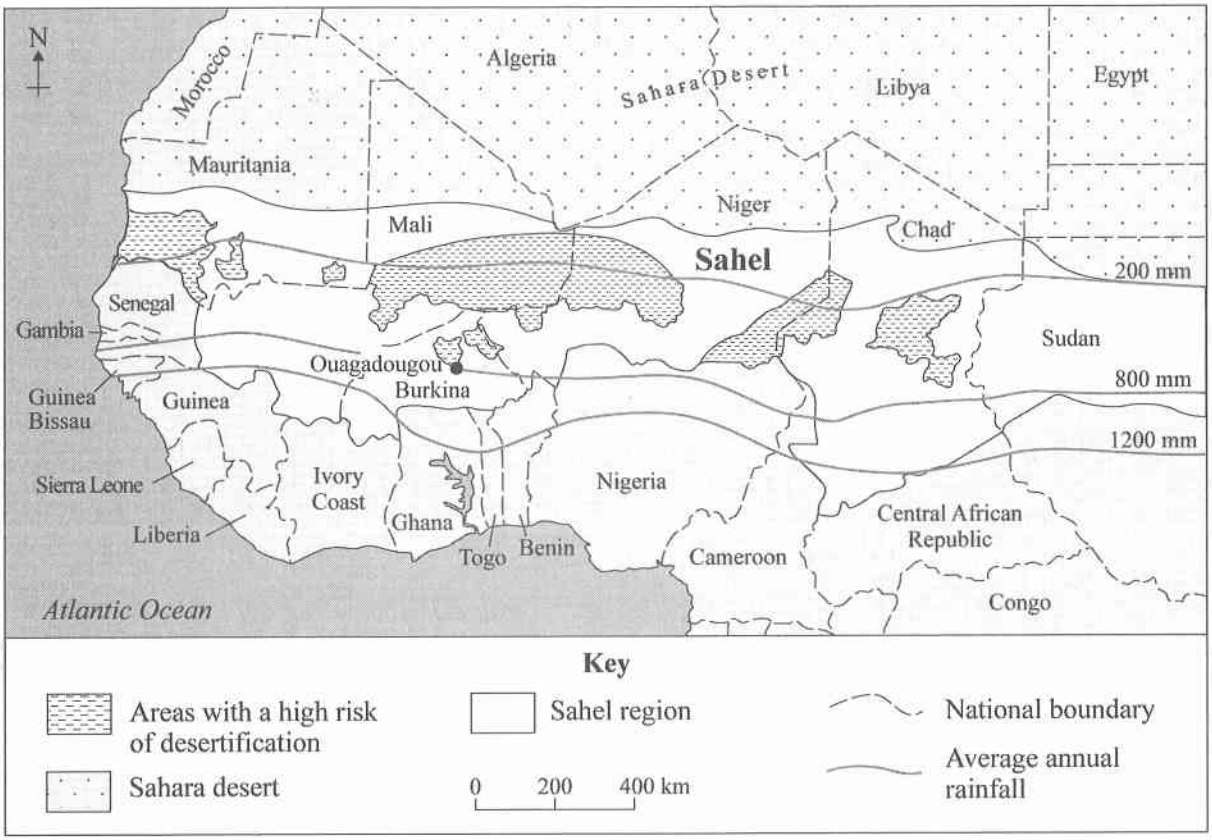
SECTION B – THE CHALLENGE OF EXTREME ENVIRONMENTS

Answer **either** Section A **or** Section B.

4 The Hot Desert Environment **Total for this question: 16 marks**

4 (a) Study **Figure 9**, a map of the Sahel region of Africa.

Figure 9



4 (a) (i) Using evidence from **Figure 9**, suggest why the risk of desertification increases as you go north from Ouagadougou.

(The average rainfall decreases) (from 800 mm a year down to 200 m a years)

2

(2 marks)

4 (a) (ii) Describe the effects that global climate change may have on an area such as the Sahel.

(Due to global warming temperatures are increasing in some parts of the world L1) (there is also less rainfall) L1 This means that plants will not be able to grow L2) and the soil will be eroded and it will turn into desert) L2 max. People who live in the Sahel will not be able to grow enough food L2

4

(4 marks)

4 (b) Suggest why too many people living in an area such as the Sahel can lead to desertification. Use an example(s) from an area you have studied.

(If there are too many people they will have to grow more food to stay alive) L1 (They will also have to keep more animals for things like meat and milk) L1 This will give them enough food. L1

2

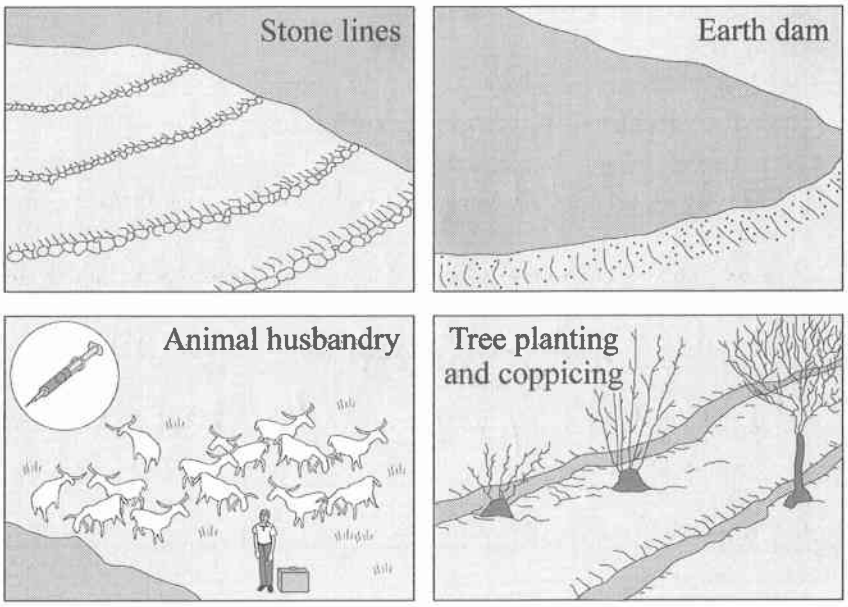
(4 marks)

(Extra space) .....

4 (c) Study **Figure 10**, some methods of reducing desertification.

Figure 10

Barcode



Suggest how **one** of the methods shown in **Figure 10**, reduces the problem of desertification and why it is suitable for a country with a low level of economic development.

They use stone line in Burkina. The reason the use them is that they are an (example of appropriate technology L1) This means that they meet the needs of local people as they use local materials which do not cost much money L2) (and it is easy to repair L3) (The stones trap rainwater which is flowing over the ground L1) (This reduces surface run-off L2) and therefore stops the water washing the soil away into the rivers L3) (they can continue to grow plants and it will not be a desert.

L3

(6 marks)

6

14/16

Barcode

5 The Tropical Rainforest Environment — Total for this question: 23 marks

5 (a) Study **Figure 11**, on the insert, a map of climate in different parts of the world. Describe the distribution of tropical rainforests.

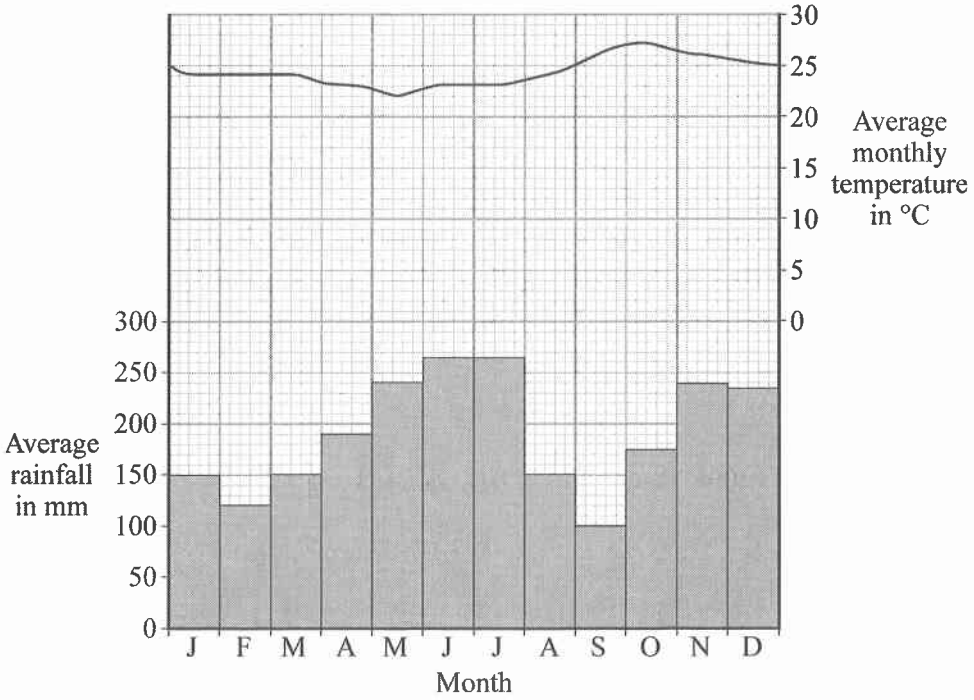
(The areas of tropical rainforest are found around the equator) and (extend a few degrees north and south of it) in places like Brazil and Congo...

2

(2 marks)

5 (b) Study **Figure 12**, a climate graph for an area of tropical rainforest in Amazonia, Brazil.

Figure 12



Describe the nature of the climate shown in **Figure 12**. Suggest how it leads to the growth of tropical rainforest.

(The climate in the tropical rainforest is hot all through the year) (It is always over 20°C and gets as hot as 27°C or more on average) This means that each

Barcode

dery (L3) if the water is evaporated by the heat causing daily convectional storms because of this the rainfall is also high all years round. (L3) (It is like a sort of greenhouse which is hot and wet and the plants grow very quickly (L1) and they grow all year round. There is a constant growing season and the trees and plants are evergreen (L2). The vegetation is very lush, green and very thick (luxuriant) it is a dense jungle (rainforest) (L3). Once a plant dies, there is always another growing to replace it because of the ideal growing conditions

(Extra space)

(6 marks) 6

L3

Question 5 continues on the next page

Barcode

5 (c) Study **Figure 13**, which shows deforestation in Amazonia, Brazil.

Figure 13

The outline map which shows deforestation in Amazonia has been removed because of third party copyright restrictions. Please refer to the printed paper.

What does **Figure 13** tell us about levels of deforestation in Amazonia?

(It tells us that it is not the same everywhere. Some areas in the east are very high levels) max but in the west hardly any areas are deforested.

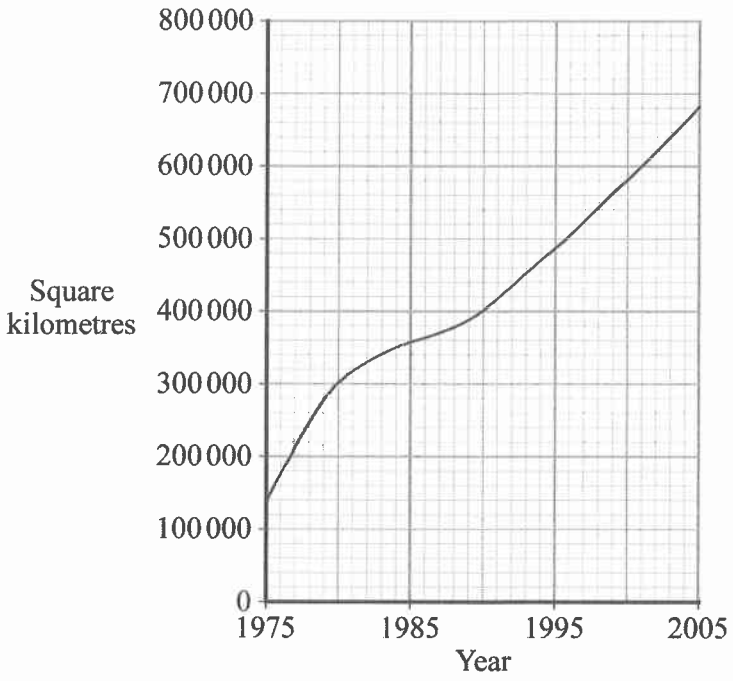
2

(2 marks)

Barcode

5 (d) Study **Figure 14**, a graph to show deforestation rates in Amazonia (1975 to 2005).

Figure 14



5 (d) (i) Describe the changes to the amount of tropical rainforest in Amazonia between 1975 and 2005.

As the rate of deforestation increased the amount of rainforest reduced. ✓

1

(2 marks)

5 (d) (ii) Suggest **two** reasons for your answer to (d) (i) above.

1. They chop trees down to make money from selling the wood. ✓

2. Trees are chopped down when they mine for gold and the metals.

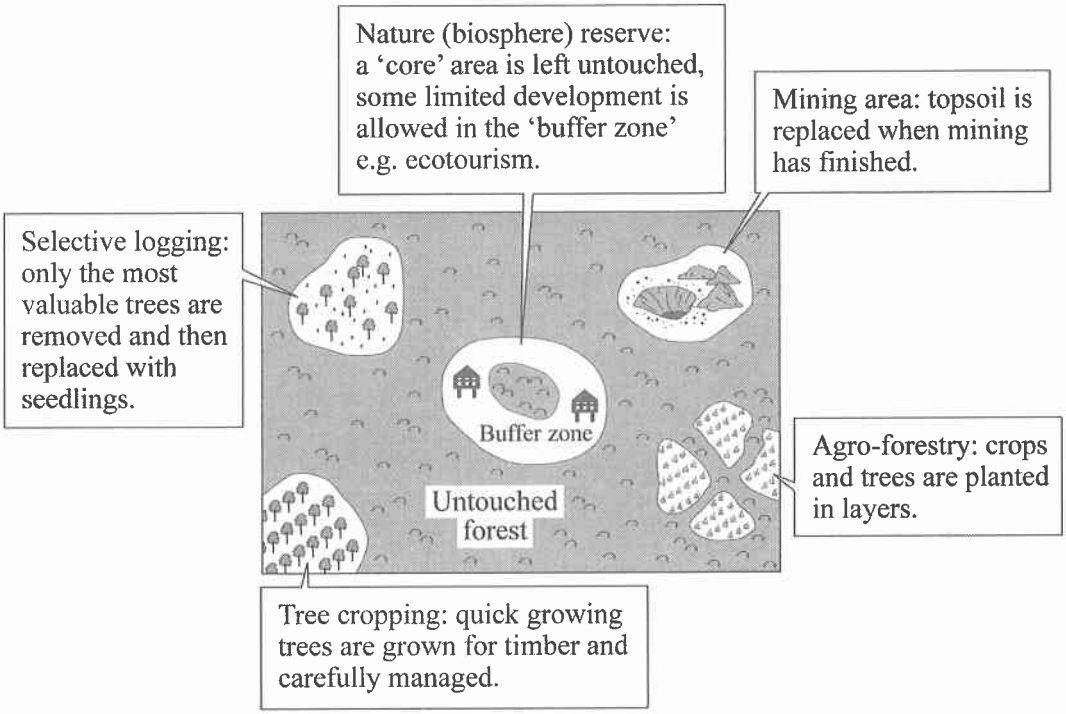
2

(2 marks)

Barcode

5 (e) Study **Figure 15**, methods of reducing damage to the tropical rainforest environment.

Figure 15



With the help of **Figure 15**, explain how damage to the tropical rainforest environment might be reduced. Use an example(s) from an area that you have studied.

They should not cut down all the trees they should only take the ones that they want to sell (and leave the others in the ground. They should then replace the trees they have taken) (They should encourage ecotourism (in lodges as part of a biosphere reserve. This is a protected area which tourists will want to visit as it is undamaged. They can then use the forest to make money instead of removing it to make money) Tourists will become more aware of why the forest

Barcode

needs to be saved.

C3 *(6 marks)*

5

5 (f) Give **three** reasons why it is important to conserve areas of tropical rainforest.

1 It contains many rare species of animals. ✓

2 They may contain plants which could cure AIDS. ✓

3. Local people's way of life and culture need to be protected. ✓

(3 marks)

3

21/23

Turn over for the next question

then they would not be able to do these and we may be in danger of finding out information which could affect our future) L2 But even the scientists can pollute the environment if they are not careful with waste. The bases must be small and carefully managed and all waste removed) (Tourists should not be allowed to visit in large numbers as the ice in these might cause an iceberg which a ship (cruise) could hit and leak oil into the sea.) L2 This would affect the whole ecosystem and the food chain affecting more

(9 marks)

just L3

(Extra space) species of whales and seals and penguins) L3 So development should not be allowed any more in Antarctica on a big scale. The number of tourist has to be kept low and carefully managed

8

10/11

L3

END OF QUESTIONS

Barcode

There are no questions printed on this page

Barcode

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Question 1	Figure 3	T W RANDLE, *Geographical Studies in Western Europe,* Pearson Education
Question 2	Figure 5	University of Wisconsin – CIMSS TC Group
Question 2	Figure 6	New Scientist
Question 2	Figure 7	CIA *The World Factbook*
Question 5	Figure 11	Keith Flinders, David Gardner, Greg Hart, Nic Howes, John Belfield, John Pallister and Brian Smith, *A New Introduction to Geography for OCR Syllabus A,* Hodder Murray, 2001, © 2001, Keith Flinders, David Gardner, Greg Hart, Nic Howes, John Belfield, John Pallister and Brian Smith. Reproduced by permission of John Murray (Publishers) Ltd.

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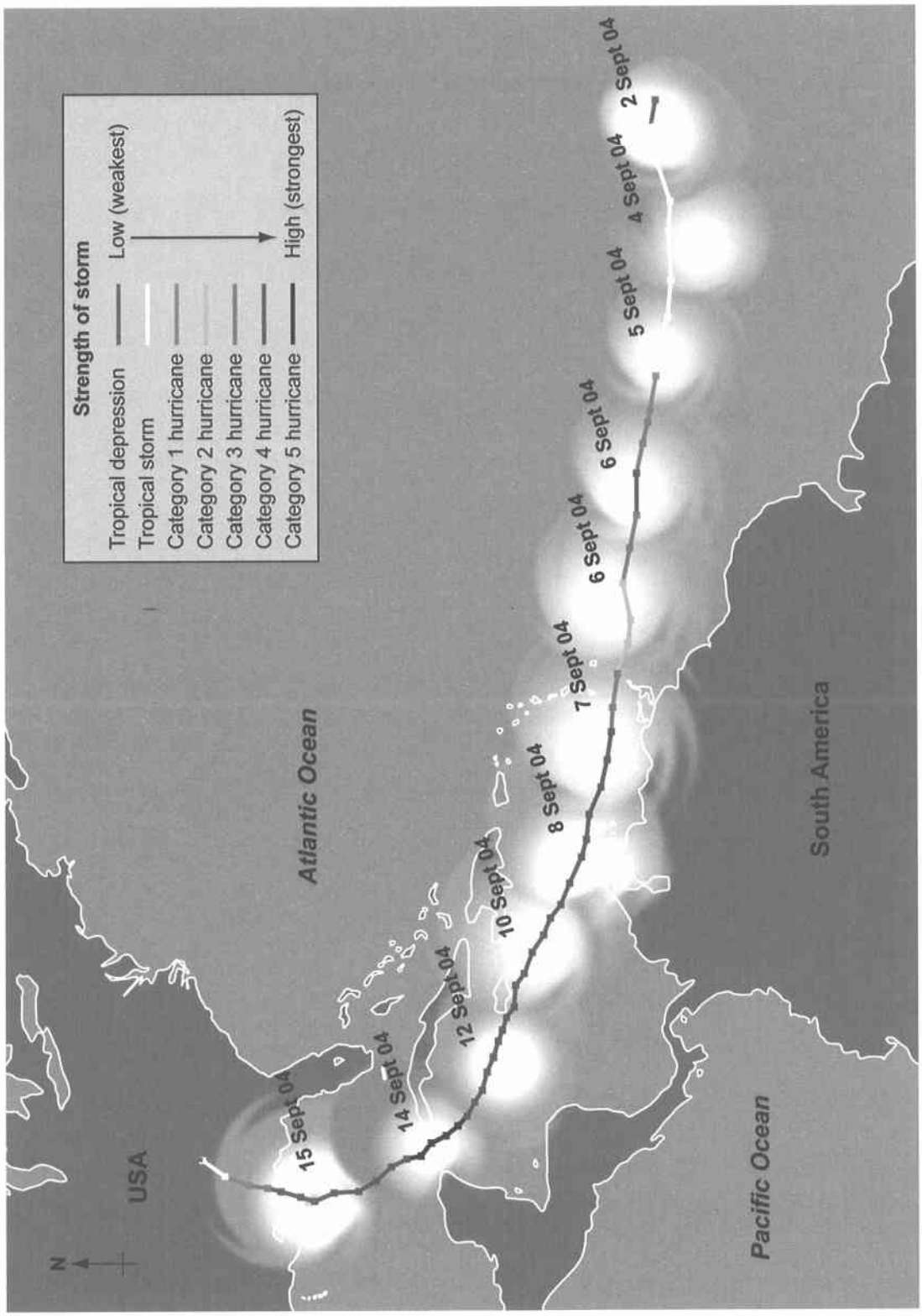
General Certificate of Secondary Education
Specimen Paper

Geography (Specification B)

Unit 2/F & 2/H Hostile World

Insert

For use with Question 2
Foundation Tier – Figure 5
Higher Tier – Figure 5



For use with Questions 4 and 5

Foundation Tier – Figure 12

Higher Tier – Figure 11