

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International General Certificate of Secondary Education

**ENVIRONMENTAL MANAGEMENT**

Paper 1



**0680/01**

October/November 2006

**1 hour 30 minutes**

Candidates answer on the Question Paper.  
Additional Materials: Ruler

Candidate  
Name

Centre  
Number

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Candidate  
Number

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**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name on all the work you hand in.  
Write in dark blue or black pen.  
You may use a soft pencil for any diagrams, graphs or rough working.  
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

At the end of the examination, fasten all your work securely together.  
The number of marks is given in brackets [ ] at the end of each question or part question.

For Examiner's Use	
1	
2	
3	
4	
5	
6	
<b>Total</b>	

This document consists of **11** printed pages and **1** blank page.



1 Some Problems and Benefits of Ecotourism in Developing Countries

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One of the most important resources, that developing countries have, is the abundant wildlife that live in them. There is an increasing interest amongst wealthy people from developed countries to visit and see the wildlife. This trend brings some benefits, but also some problems.

(a) (i) A visitor to a tropical rainforest area was advised to wear a long sleeved shirt and long trousers when outside, mainly at night. Explain **one** reason for this advice being given.

.....  
.....  
.....[2]

(ii) If a visitor did **not** take this advice, explain **one** other way in which they might avoid problems.

.....  
.....[2]

(b) A recently opened National Park, next to the Manumbolo River in Madagascar, was being visited by a group of tourists from a developed country who camped on a site in the park. The problems included a fly infested pit latrine and poor access to a clean water supply.

(i) How could these problems have affected the tourists?

.....  
.....  
.....[2]

(ii) How could the Government and Park Authorities improve the conditions for the tourists here?

.....  
.....  
.....[2]

(iii) What benefits would the Park Authorities and the local people get from any improvements they made to this campsite?

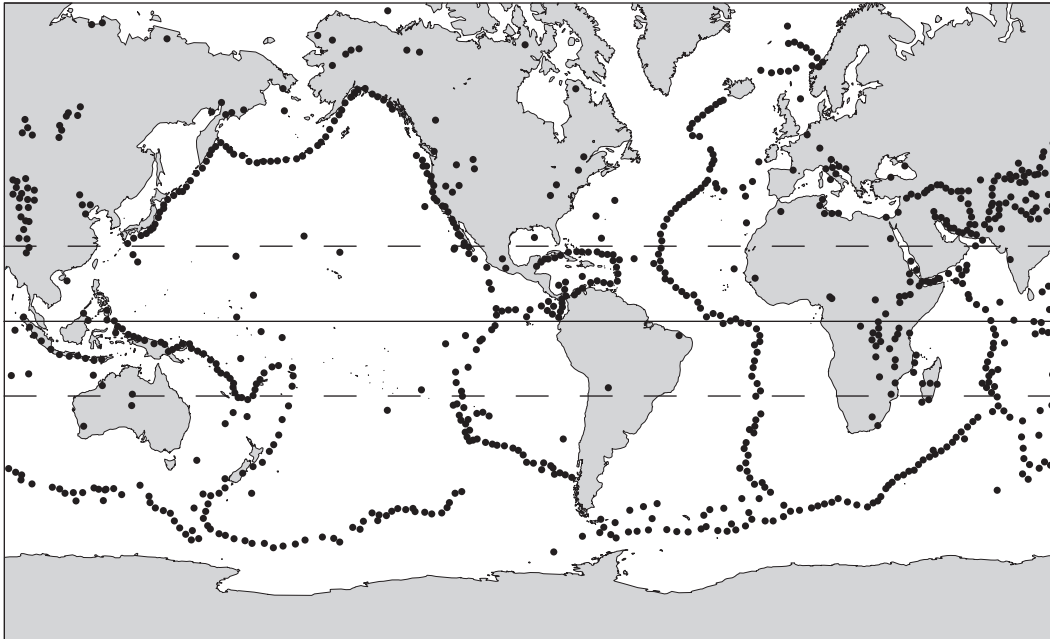
.....  
.....  
.....[2]

[Total : 10]

2 The map below shows the distribution of earthquake sites around the world.

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### World Earthquakes



Key:

• earthquake

(a) (i) Why are earthquakes found in some parts of the world and not others?

.....  
.....[1]

(ii) Describe the distribution of earthquakes around the world.

.....  
.....  
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.....[2]

**(b) (i)** Explain why some earthquakes have a greater impact than others. You may use the following terms in your answer:

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- Richter Scale
- population density
- buildings
- rural

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..... [4]

**(ii)** How can National Governments and International Aid Agencies reduce the impact of an earthquake?

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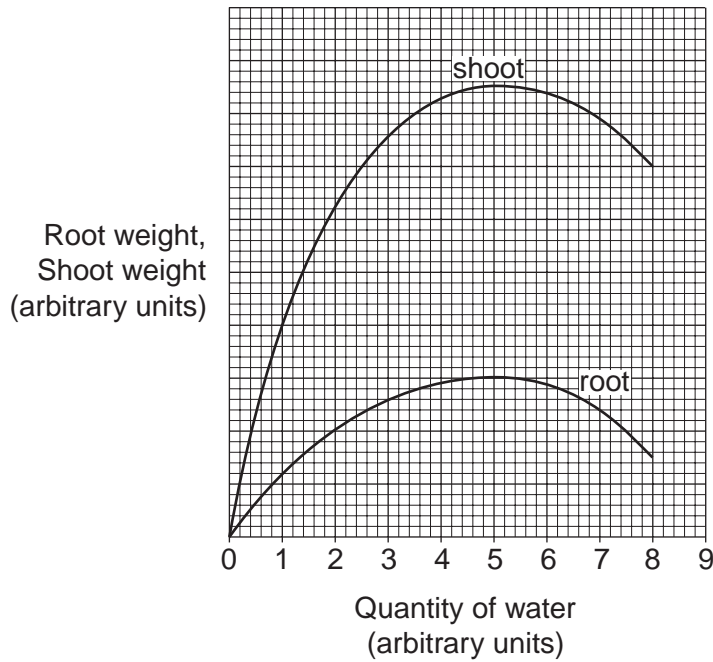
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..... [3]

[Total : 10]

- 3 The graph shows the effect of increasing the water supply to a crop on the growth of its roots and its shoots.

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(a) (i) At what quantity of water did shoots grow best?  
.....[1]

(ii) At what quantity of water did roots grow best?  
.....[1]

(b) (i) In addition to water, farmers could use chemicals on their crops to improve plant growth and crop yield.

Name one type of chemical used to

kill pests

.....

improve the soil

.....[2]

(ii) Choose **one** of the chemical types you have named above and describe the problems that its overuse might cause to the environment.

.....

.....

.....

.....[3]

(iii) Another way of killing pests that does not use chemicals is called biological control. Explain what is meant by this term.

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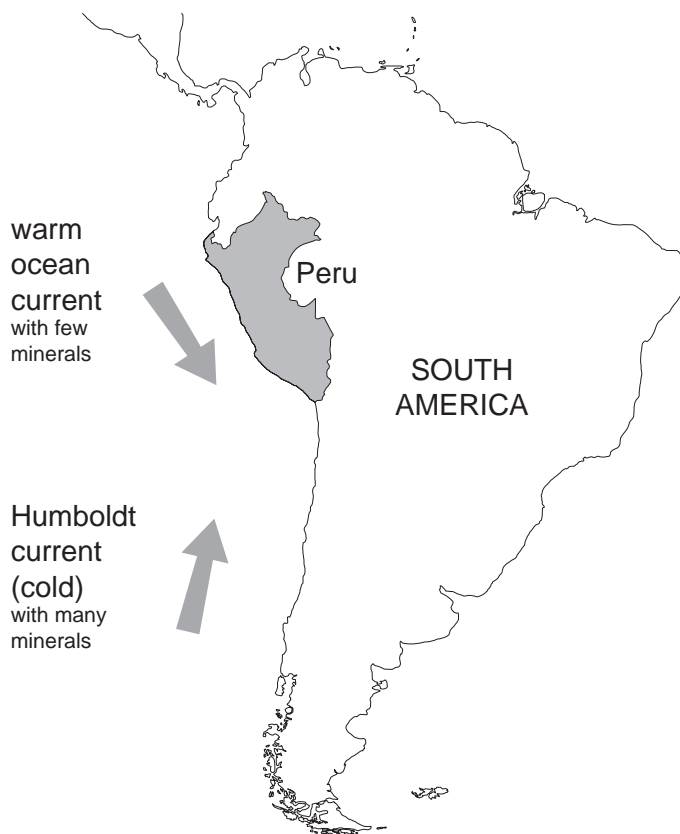
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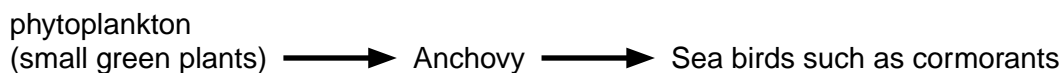
[Total : 10]

4 The map below shows the warm ocean current during an El Nino event. This causes a rise in sea temperature along the coast of Peru.

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El Nino has a dramatic effect on the fishery off the coast of Peru. This Peruvian fishery is the biggest fishery in the world in the years when El Nino does not occur. The following diagram shows the food chain for anchovy:



**(a)** Explain why El Nino causes a serious decline of the Peruvian fishery.

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[4]

**(b)** El Nino is a natural event. Other threats to world fish stocks, such as oil spills, are caused by humans.

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**(i)** Explain the effect that oil spills have on coastal fisheries.

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.....[4]

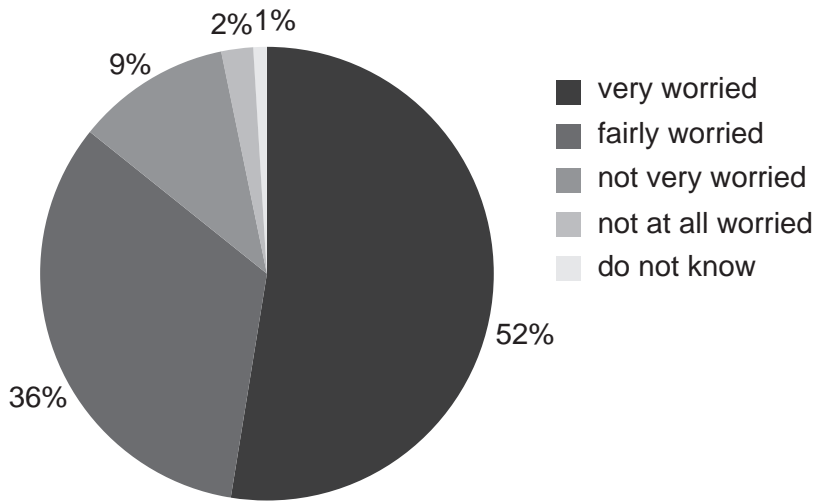
**(ii)** How can the effects of an oil spill be reduced?

.....  
.....  
.....  
.....[2]

[Total : 10]



5 The following pie chart shows the results of a survey in a large city on how worried people were about traffic exhaust fumes.



(a) What is the total percentage of people, who were interviewed, said they were 'fairly' worried and said they were 'very' worried about this issue?

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.....  
.....  
..... [2]

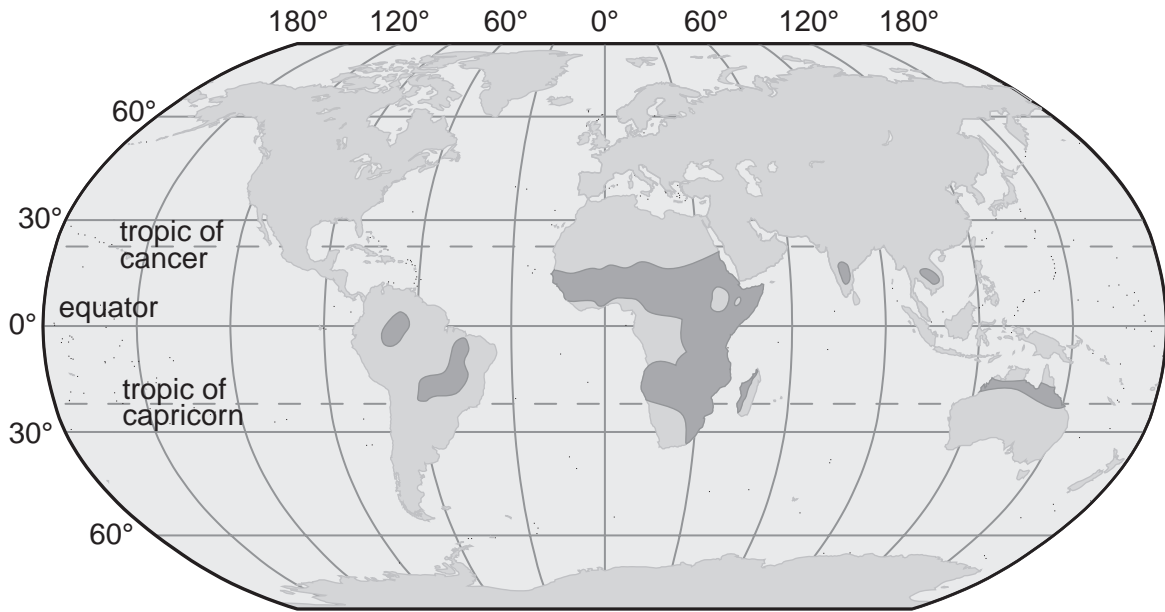
(b) (i) Explain why people might be worried about traffic exhaust fumes.

.....  
.....  
.....  
.....  
.....  
..... [4]

(ii) How could the problems caused by traffic exhaust fumes be reduced?

.....  
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..... [4]

6 Distribution of Savannah Vegetation



■ principal regions where savannah is the natural vegetation

(a) (i) Describe where savannah vegetation is located.

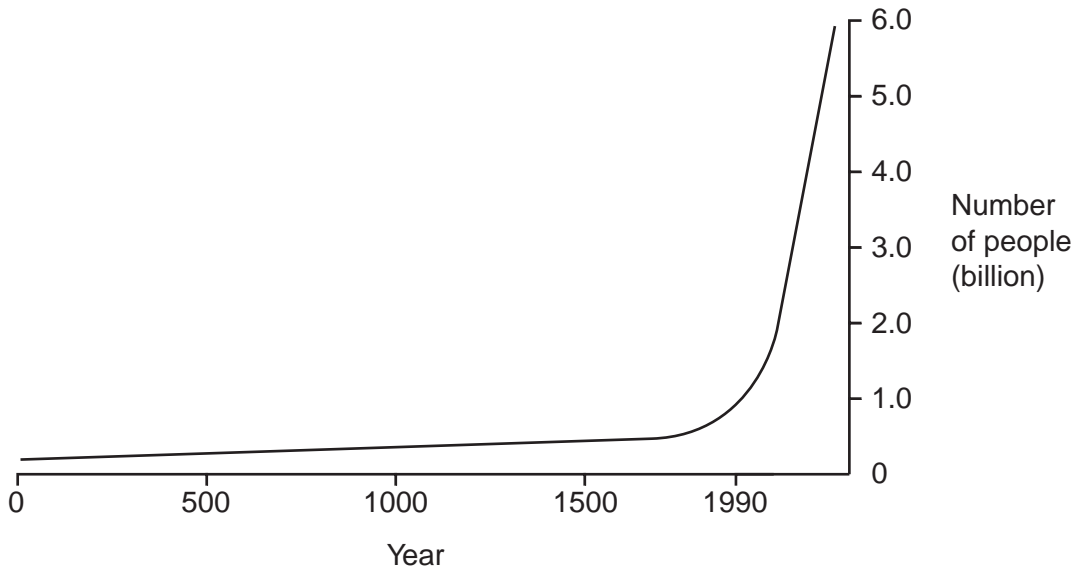
.....  
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.....[2]

(ii) Two common uses of land in savannah are nomadic pastoralism and tourism. Choose **one** of these uses and describe the main environmental problems it might lead to.

.....  
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.....[3]

Pressure on the land is caused by both what is done and the number of people involved. The graph below shows how the world population has grown over the last 2000 years.

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(b) (i) Describe **one** reason for the sudden change around 1650.

.....  
.....  
..... [2]

(ii) The rapid rate of growth since 1900 is causing problems. How can governments act to reduce population growth rate?

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.....  
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.....  
..... [3]

[Total : 10]

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