



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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ENVIRONMENTAL MANAGEMENT

0680/01

Paper 1

May/June 2007

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler

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.
DO **NOT** WRITE IN ANY BARCODES.

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 | |
| Total | |

This document consists of **13** printed pages and **3** blank pages.



1 Look at the photograph below of a pine forest, part of which has been cleared.

For
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Use



(a) (i) Name the process for the large scale clearance of trees.

.....[1]

(ii) Tree clearance as shown has a number of effects on the environment. Name and explain **one** such effect.

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

(iii) Name a gas which will be released into the atmosphere as branches of cleared trees breakdown or decay.

.....[1]

(b) (i) Describe **one** effect of global warming.

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

(ii) What can governments do to reduce global warming?

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

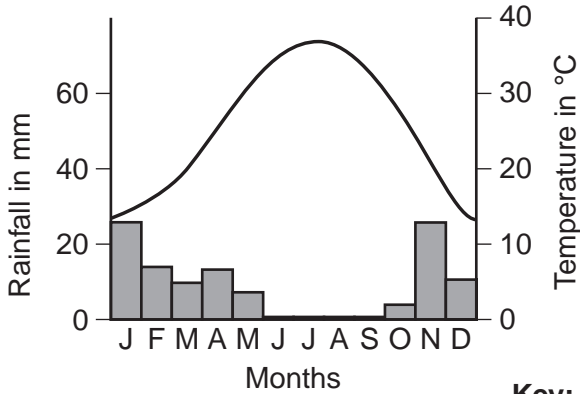
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For
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Use

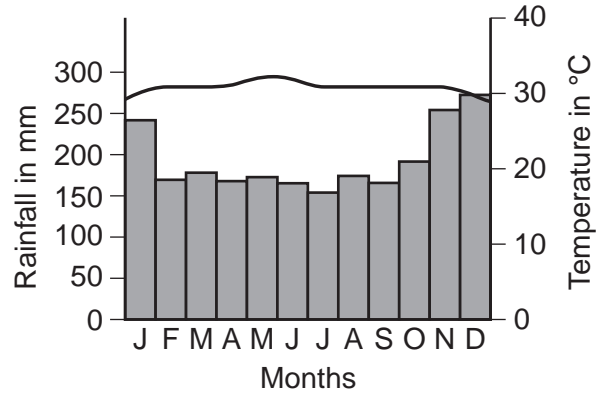
2 Look at the climate graphs below and then answer the questions.

For
Examiner's
Use

Climate A



Climate B



Key:
 rainfall
 — temperature

(a) (i) State which climate graph is for desert and which is for equatorial.

Desert

Equatorial

Give reasons for your answer.

.....

 [3]

(ii) State and explain **two** problems for farming caused by climate A.

.....

 [4]

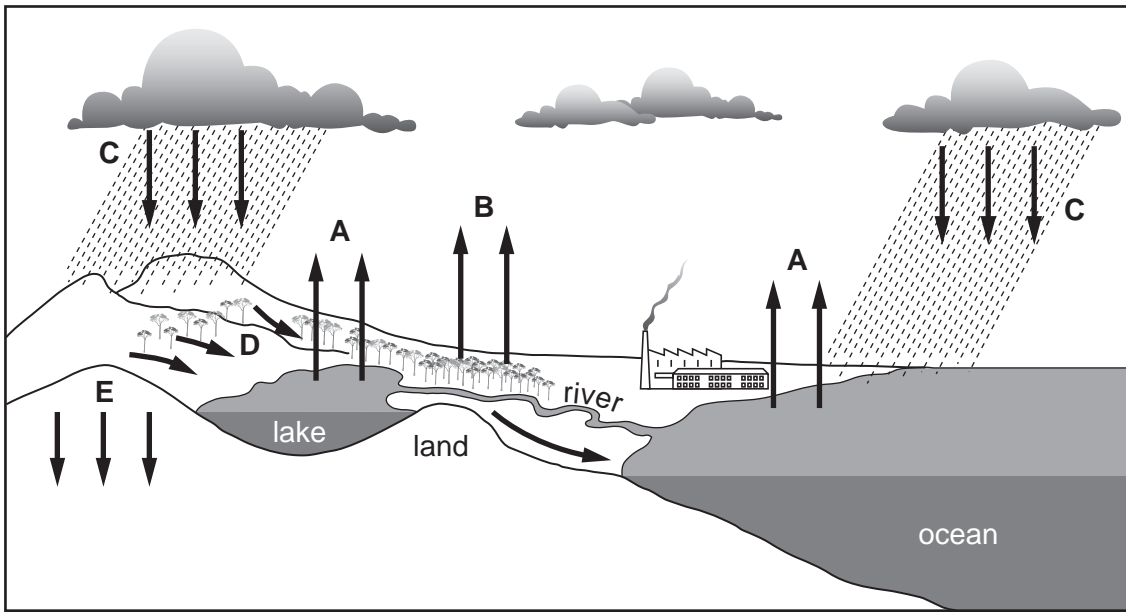
(b) Farmers also experience problems caused by pests and weeds. How can they control these?

*For
Examiner's
Use*

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

[Total: 10]

3 The diagram below shows the main features of the water cycle.



(a) (i) Name the processes **A**, **B** and **C**.

A

B

C

[3]

(ii) The process **D** shows run-off. How and why will the run-off change if trees were cleared and a tourist resort built?

.....

.....

.....

.....

.....

.....[3]

- (b) (i) People use water for a variety of purposes. State **one** domestic and **one** industrial use of water, apart from drinking.

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

- (ii) Sometimes water supplies are adequate, but not safe. Describe **one** way in which the quality of water supplied to people might be improved.

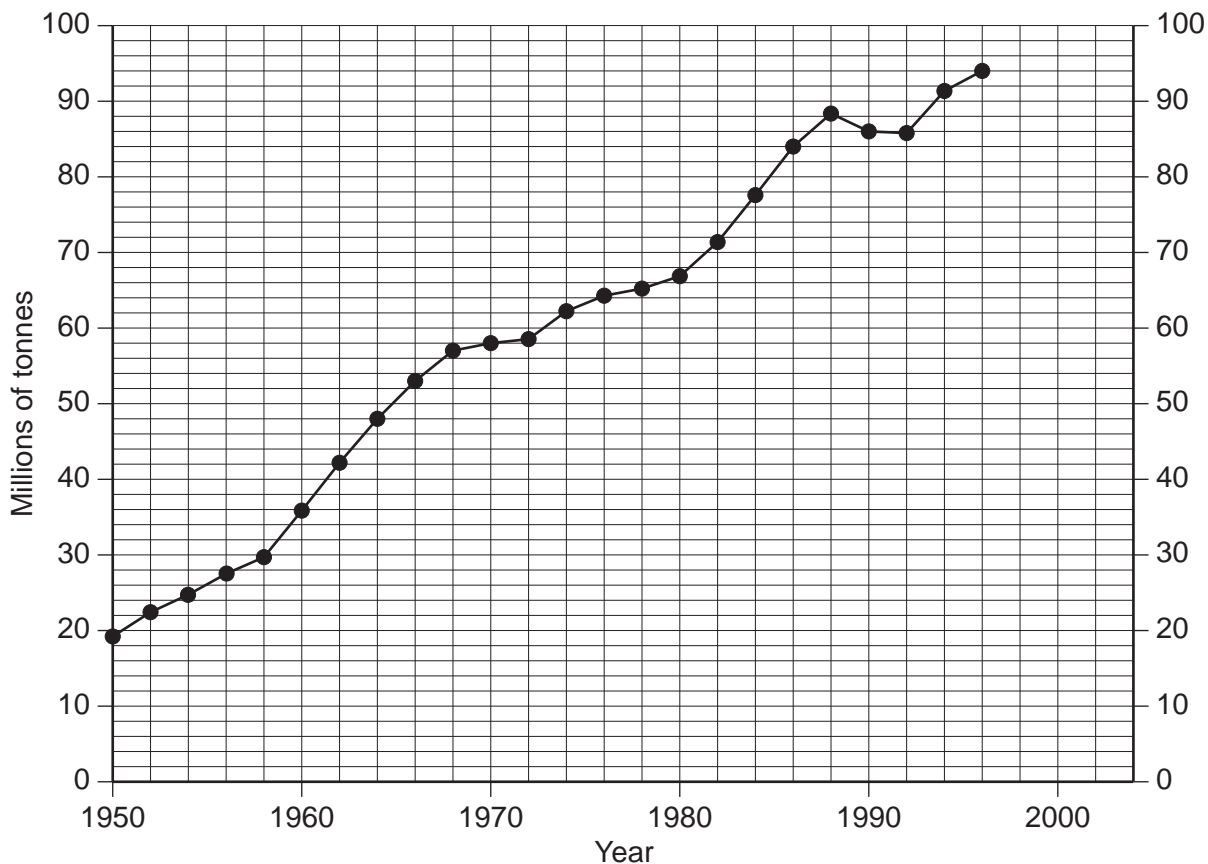
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.....
.....[2]

[Total: 10]

4 The graph below shows the world fish catch from 1950.

For
Examiner's
Use

World Fish Catch (million tonnes)



(a) (i) Add the following data to the graph:

| Catch in | Millions of tonnes |
|----------|--------------------|
| 1998 | 87.7 |
| 2000 | 95.5 |
| 2002 | 93.2 |

[2]

(ii) Describe the changes shown by the complete graph.

.....

.....

.....

..... [3]

(b) One of the possible reasons for change in fish catches is marine pollution.

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(i) State **two** causes of marine pollution.

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

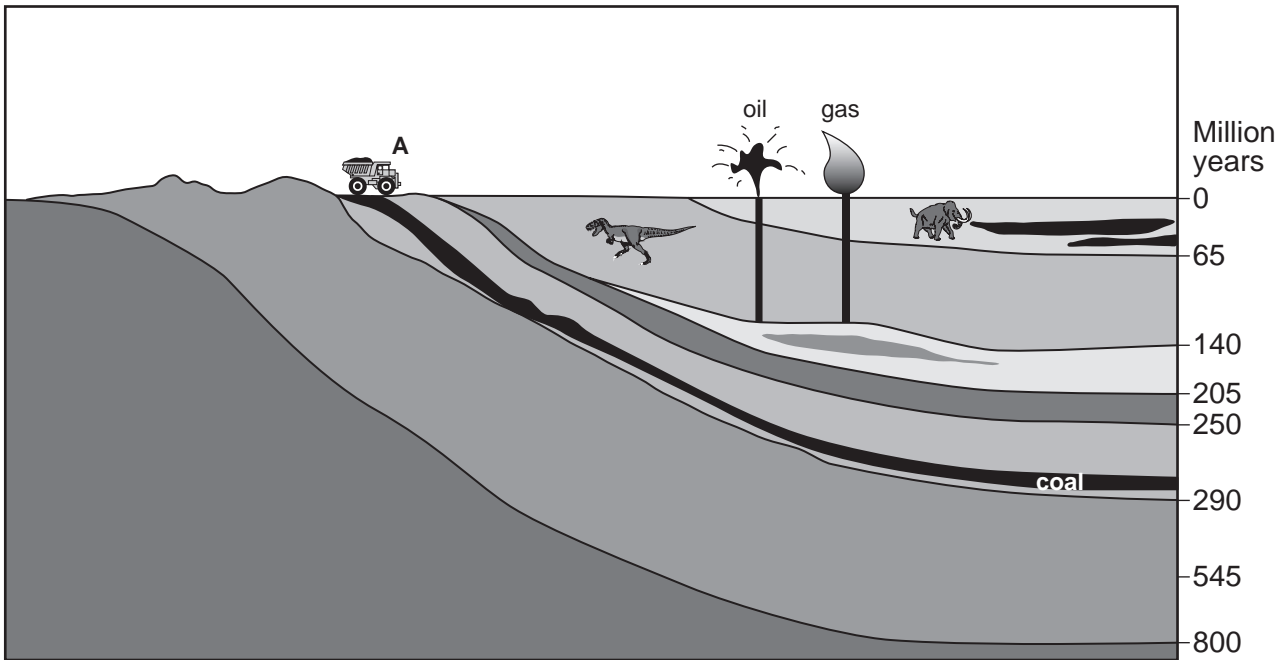
(ii) How might governments reduce the pollution problems you have named?

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

[Total: 10]

5 Look at the diagram showing layers of sedimentary rock in a coalfield area of South Australia.

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(a) (i) Name **one** sedimentary rock which can provide energy for industry.

.....[1]

(ii) How are sedimentary rocks formed?

.....

[2]

(iii) Fuels which are obtained from the dead bodies of ancient organisms are called fossil fuels. There are three fossil fuels shown in the diagram, state the age of the rock in which each fuel is found.

| Fuel Name | Age of rock |
|-----------|-------------------------|
| | million years |
| | million years |
| | million years [2] |

(b) (i) The coalmine at point **A** is an opencast one. State **two** ways in which people living nearby might be affected by opencast mining.

*For
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Use*

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

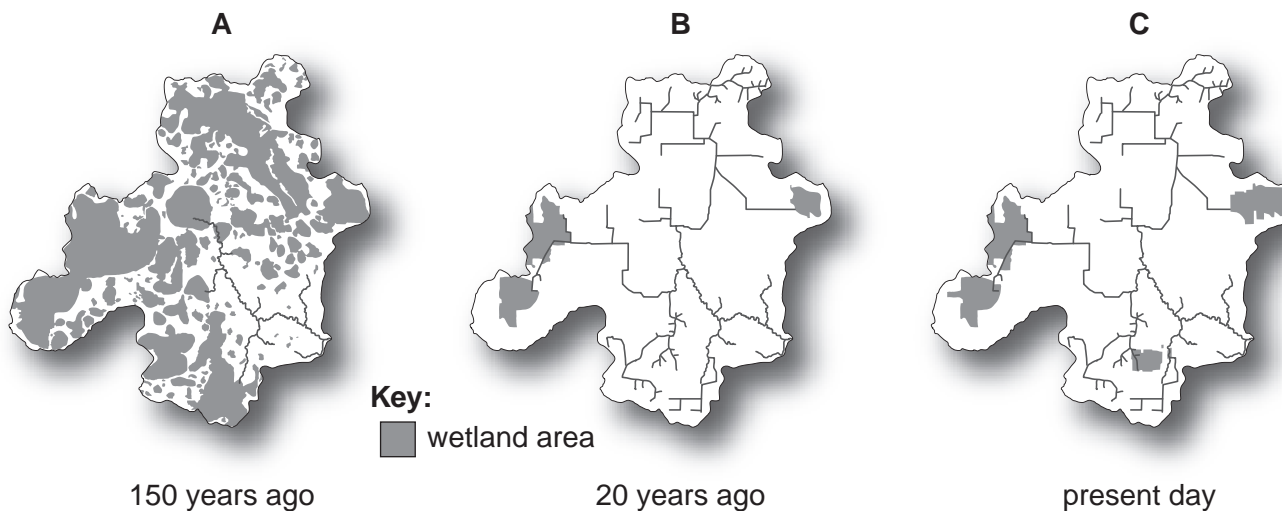
(ii) Describe how damage to the environment might be repaired when the opencast mine has stopped working.

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

[Total: 10]

6 The diagrams below show the amount of wetland in Minnesota (USA) at three different times.

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(a) (i) Describe the changes in the total area of wetland over this time between **A** and **B** and between **B** and **C**.

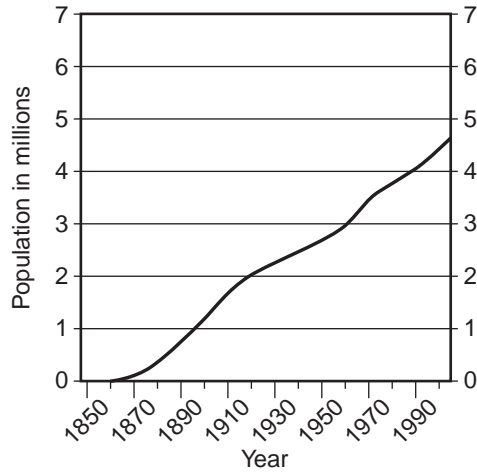
.....
.....
..... [2]

(ii) Suggest how wildlife in the area might have been affected by the changes you have described between **A** and **B**.

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

(b) The graph below shows how the human population of Minnesota has changed since 1850.

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Use



(i) Using the graph, the information in part (a), and your own knowledge, suggest why the changes in wetlands have occurred.

.....

.....

.....

.....

.....

.....

..... [3]

(ii) State **one** disadvantage and **one** advantage of making an area of wetland in Minnesota into a wildlife reserve.

.....

.....

..... [2]

[Total: 10]

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Copyright Acknowledgements:

Question 1 G. Skinner © UCLES.
Question 4 © http://www.earth-policy.org/Indicators/Fish/Fish_data.htm#table1

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