



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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ENVIRONMENTAL MANAGEMENT

0680/01

Paper 1

May/June 2009

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.

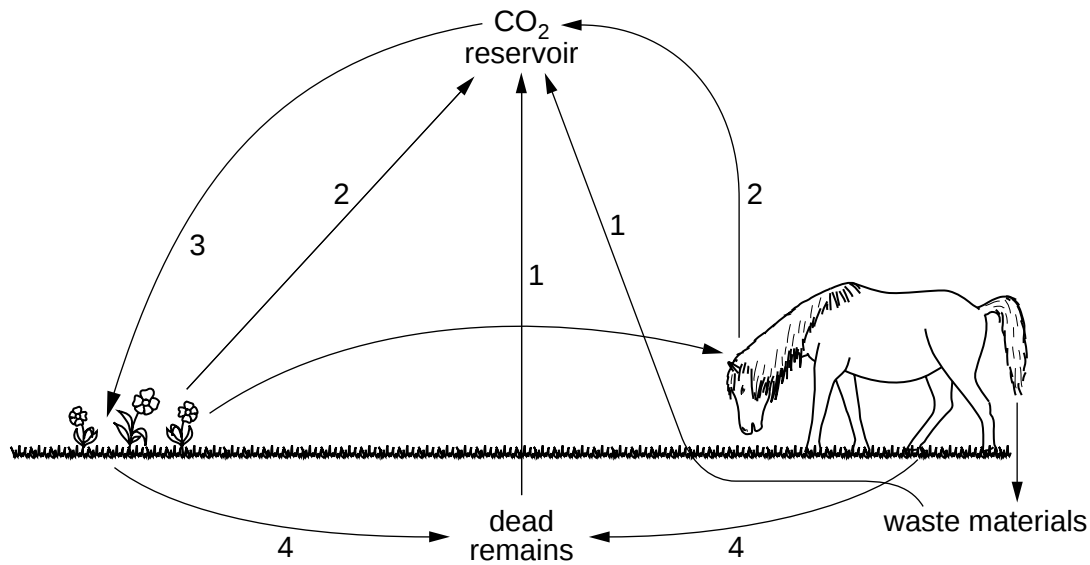
The number of marks is given in brackets [] at the end of each question or part question.

For Examiner's Use	
1	
2	
3	
4	
5	
6	
Total	

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



1 The diagram shows the carbon cycle.



(a) (i) Where, in the diagram, is the carbon dioxide reservoir for land plants?

..... [1]

(ii) Name the processes shown by 1, 2, 3 and 4.

1

2

3

4

[2]

(iii) Processes 1 and 2 show how carbon dioxide is returned into the reservoir. Process 3 shows it being removed. For thousands of years the loss and the gain have been in balance, but this is no longer true. Explain why.

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..... [3]

- (b) (i) Explain how this lack of balance between carbon dioxide loss and gain might lead to climate change.

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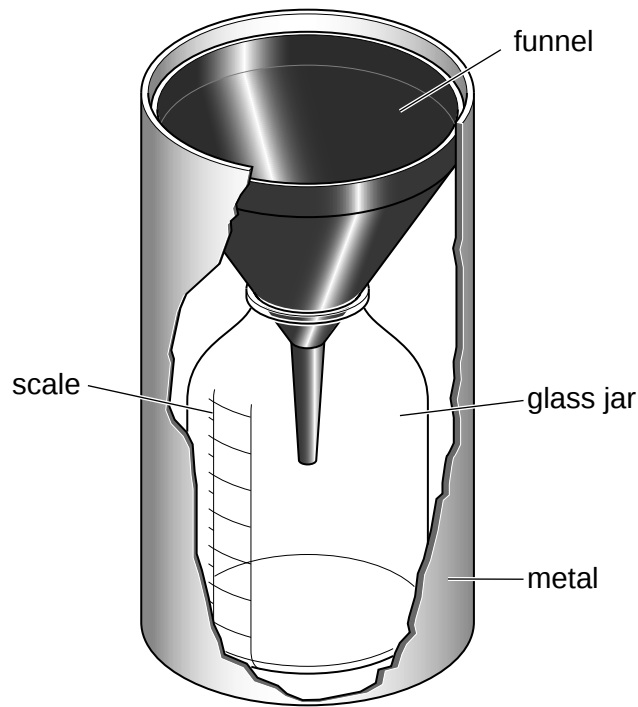
..... [3]

- (ii) State **one** way people might take action to reduce this problem of climate change.

.....

..... [1]

- 2 The diagram shows an instrument used for measuring rainfall.



- (a) (i) Describe where you would place this instrument in order to obtain accurate measurements.

.....

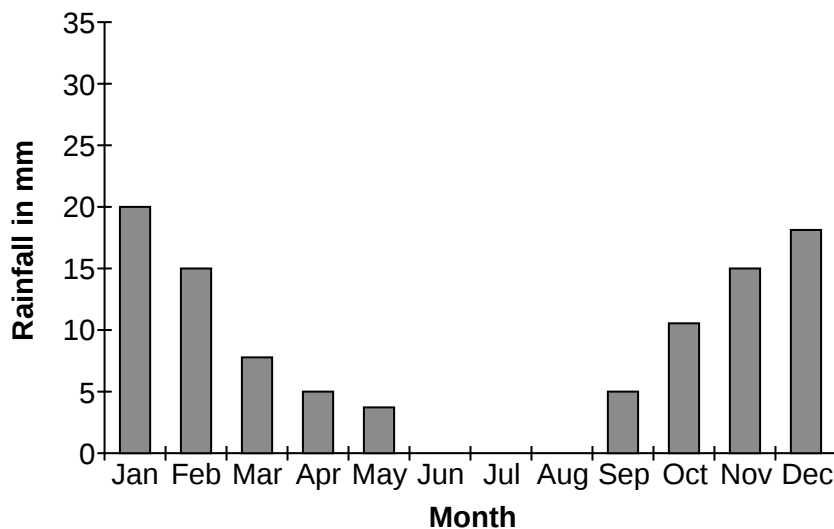
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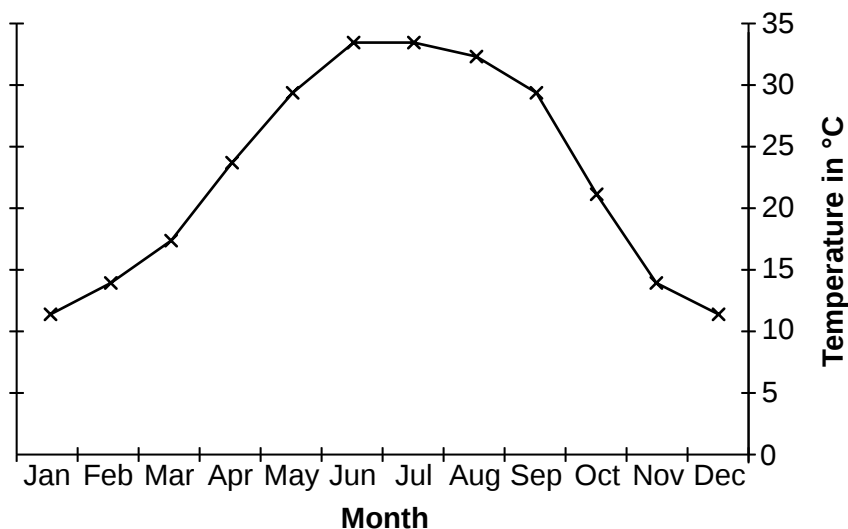
- (ii) Describe how a person would take accurate, daily readings.

.....

 [2]

The graphs shows the climate for a location in the Northern Hemisphere.





(b) (i) Describe the annual pattern of rainfall.

.....

 [2]

(ii) What would farmers need to do to grow good crops throughout the year in a climate such as this?

.....
 [1]

(iii) State **one** other way in which farmers might be able to increase crop yield.

.....
 [1]

(c) Describe another use for a crop other than food for people or feed for animals.

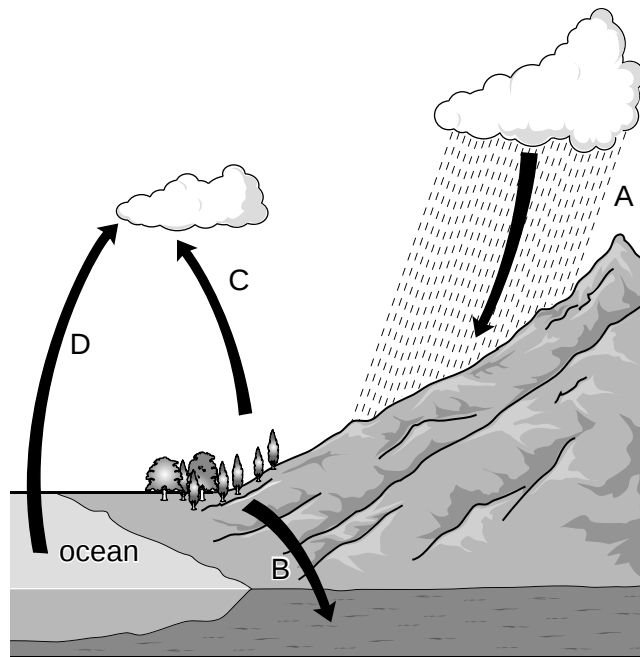
Name of crop

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 [2]

3 Study the diagram below of the water cycle.

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(a) (i) Name the processes

A

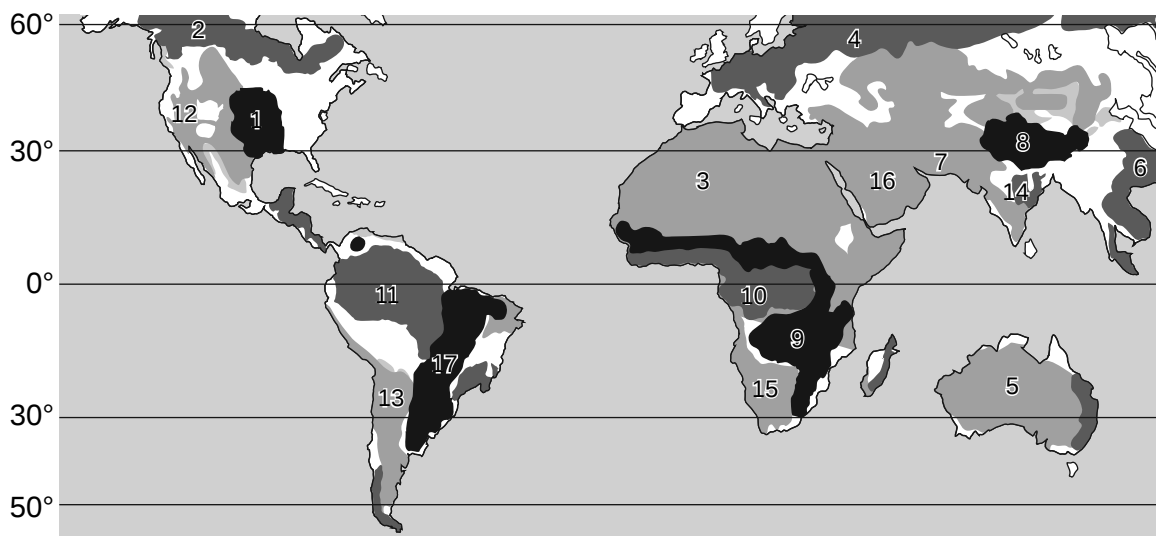
B

C

D

[3]

(ii) Study the map below and list the numbers of **four** areas with low precipitation.



.....

.....

.....

.....

[2]

- (b) Even in areas of high precipitation, water may not be of good quality for human use. Two problems are *pollution* and *water related diseases*.

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- (i) Name **one** water pollutant and state **one** way it affects humans.

.....

.....

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..... [2]

- (ii) Name **one** water related disease.

..... [1]

- (iii) How might the water related disease you have named be controlled?

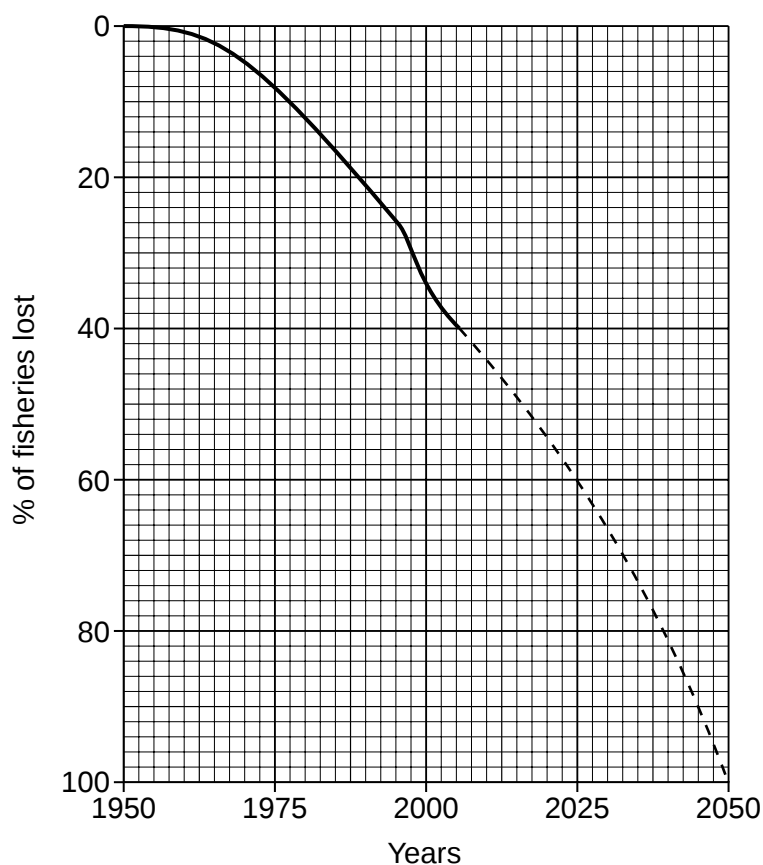
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4 Study the graph below of world losses of fisheries.

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(a) (i) What percentage of world fisheries was lost by 2000?

..... [1]

(ii) What will the expected percentage loss be by 2025?

..... [1]

(iii) State and explain **two** reasons for the loss of fisheries since 1950.

.....

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..... [4]

- (b) (i) Fish is an important source of food for humans, so more effort needs to be put into sustainable fishing.
State **two** strategies for sustainable fishing.

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..... [2]

- (ii) Suggest **two** reasons why these strategies are not always successful.

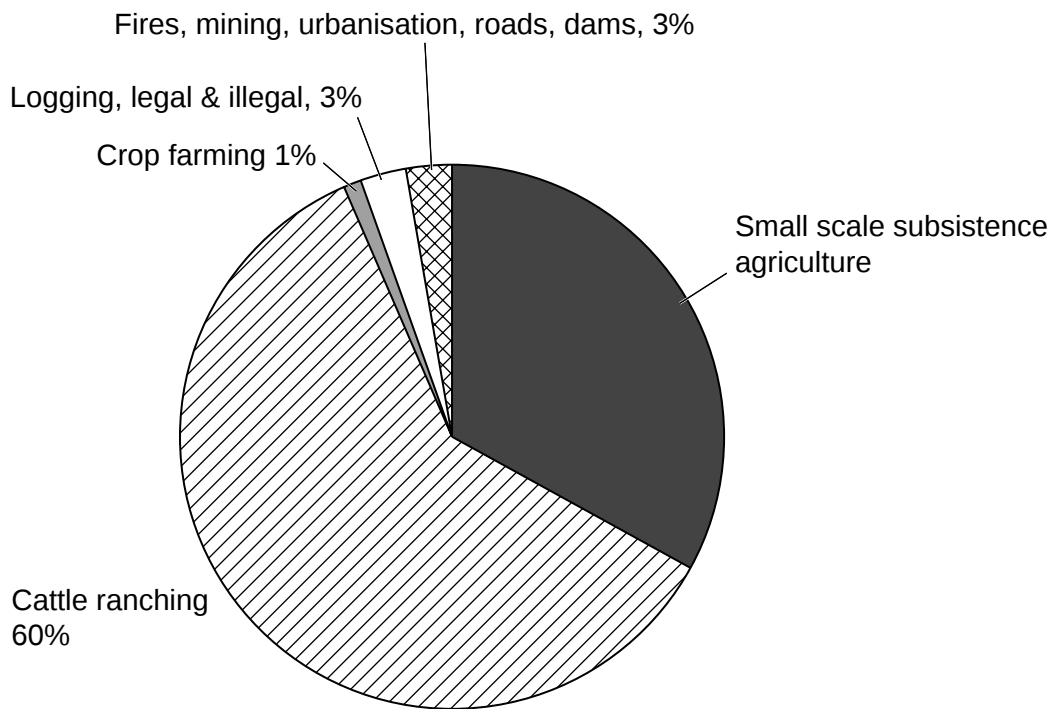
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..... [2]

- 5 The diagram shows the main causes of deforestation in the Amazon Rainforest.



- (a) (i) Calculate the percentage of deforestation in the Amazon caused by small scale subsistence agriculture (Show your working).

[2]

- (ii) What is meant by 'subsistence agriculture'?

.....

.....

.....

..... [2]

- (b) (i) Other than the loss of habitat and soil erosion, how else might cattle ranching affect the environment? Explain your answer.

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..... [2]

- (ii) State **one** way of reducing the effects of logging on the environment.

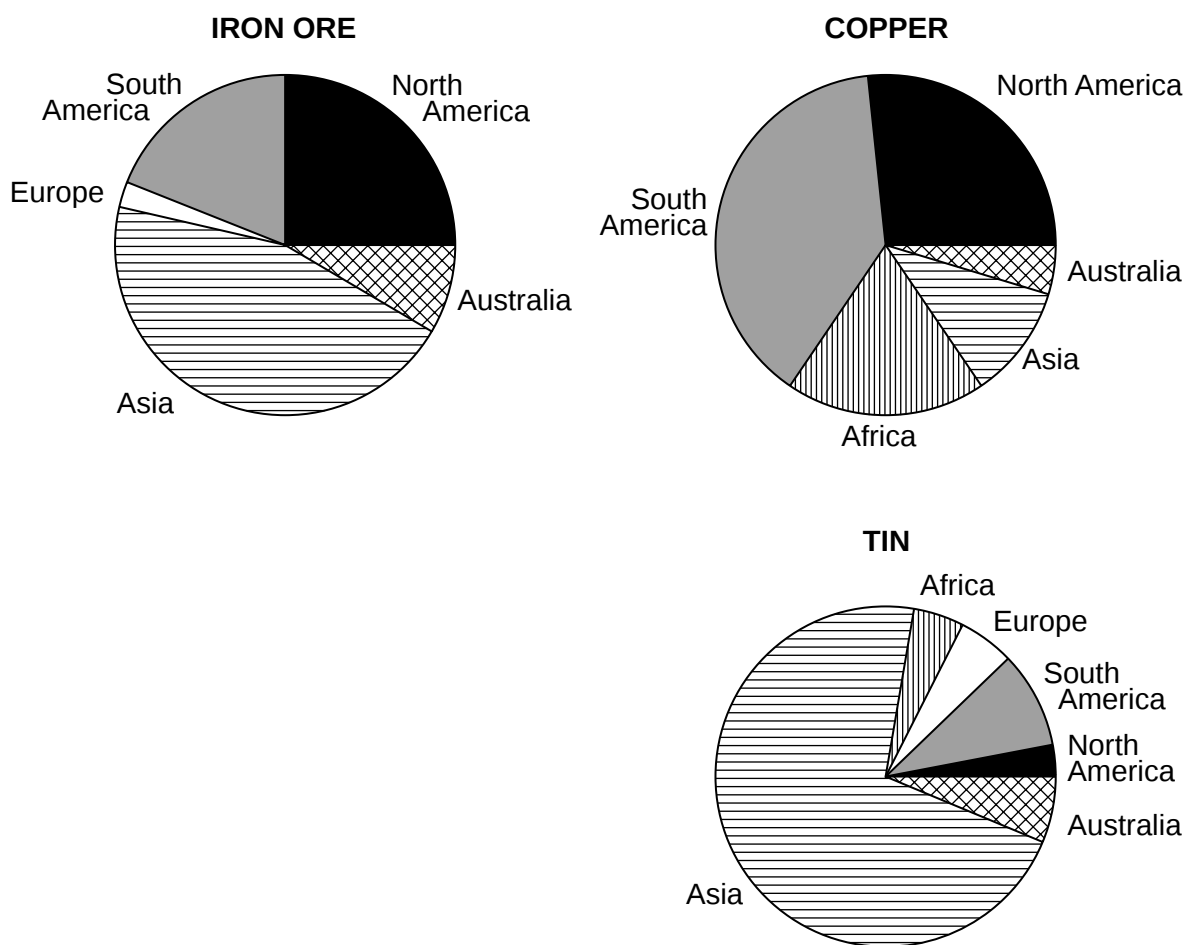
..... [1]

- (iii) Describe how logging in Tropical Rainforest could be reduced.

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

- 6 Study the following diagrams showing the world distribution of deposits of iron ore, copper and tin.

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- (a) (i) Which continent has the largest deposit of:

iron ore

copper

tin

[3]

- (ii) All the above minerals are described as metallic minerals, name **one** non-metallic mineral and give one of its uses.

.....

.....

..... [2]

(b) Deep and open cast mining can have negative impacts on the miners and the environment. State **one** negative impact of

(i) deep mining on miners

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

(ii) open cast mining on the environment

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

(c) Describe ways of improving the environment when opencast mining has stopped.

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..... [3]

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