Cambridge IGCSE

Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME	
CENTRE NUMBER	
CANDIDATE NUMBER	

T80976019

ENVIRONMENTAL MANAGEMENT **0680/12**

Paper 1 **February/March 2017**

1 hour 30 minutes

Candidates answer on the Question Paper.

No Additional Materials are required.

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 an HB pencil for any diagrams or graphs.
Do not use staples, paper clips, glue or correction fluid.
DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions.

Electronic calculators may be used.
You may lose marks if you do not show your working or if you do not use appropriate units.

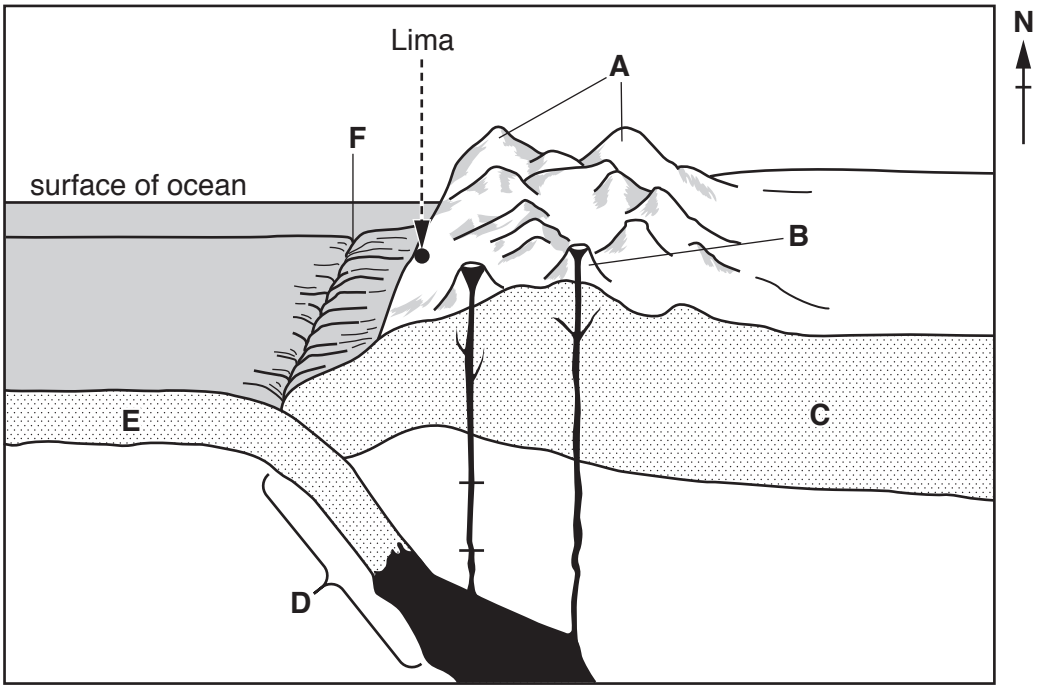
At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **14** printed pages and **2** blank pages.

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CAMBRIDGE International Examinations

1 The diagram shows a plate boundary.



(a) Complete the table using letters from the diagram. Use each letter only once.

feature	letter
continental plate	.....
mountains	.....
oceanic plate	.....
subduction zone	.....
trench	.....
volcano	.....

[3]

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(b) Describe what happens at the type of plate boundary in the diagram.

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..... [4]

(c) In September 2014 there was an earthquake with a magnitude of 4.9 in the mountains over 1000 kilometres east of Lima. Lima, the capital of Peru, is marked on the diagram.

Suggest **three** reasons why only eight people died in this earthquake.

1. .....

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2. .....

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3. .....

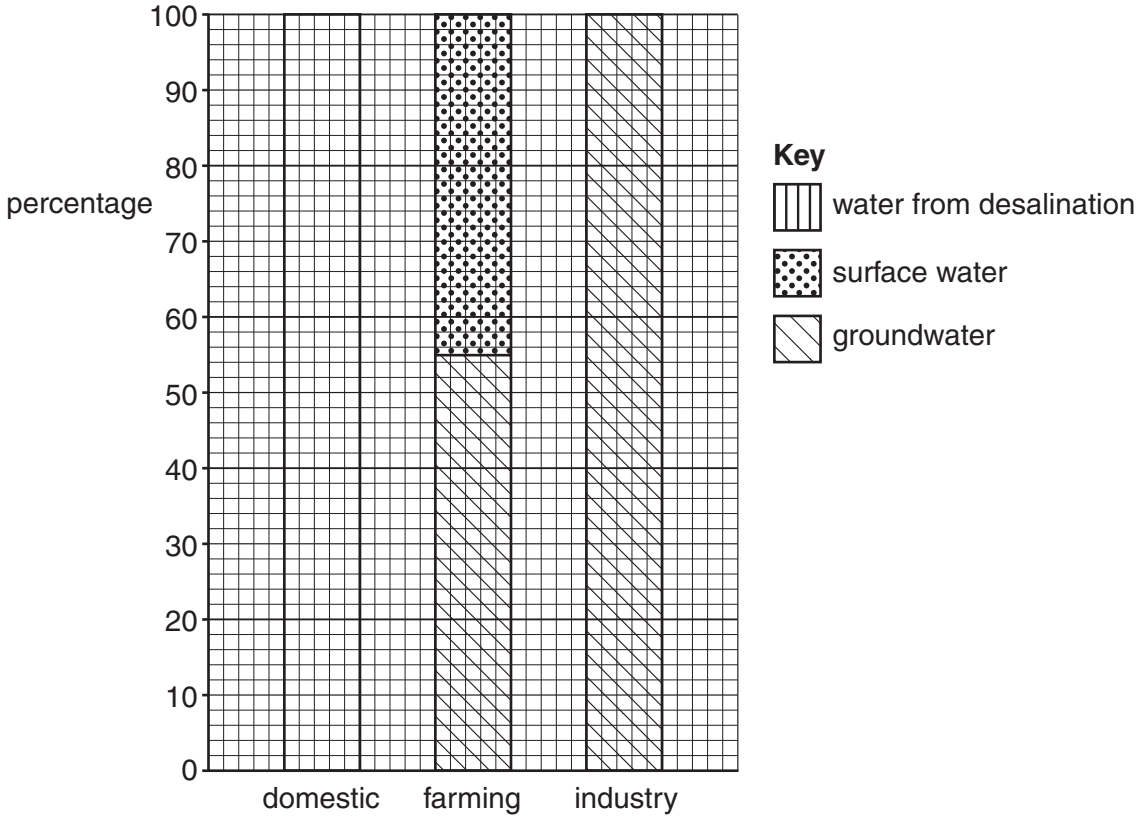
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[3]

2 The graph shows the sources of water used by a developed country.

(a) Complete the divided bar graph for domestic use using the following information and the key.

groundwater 20%
surface water 50%
water from desalination 30%



[3]

(b) Name **two** surface water stores.

.....

..... [1]

(c) Describe **one** method of extracting groundwater.

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..... [2]

(d) (i) State what is meant by the term *desalination*.

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..... [1]

(ii) Suggest reasons why very few countries use desalination to provide drinking water.

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..... [3]

3 The newspaper report is about an oil discovery under the Arctic Ocean.

OIL FOUND IN THE ARCTIC OCEAN

Oil has been found under the Arctic Ocean close to the Russian Arctic National Park. Over half of the national park is ocean. Tourists come to see the wildlife such as polar bears, reindeer, walruses and birds. Rare animals include the narwhal and the bowhead whale. There are also many rare plants.

The temperature in winter can reach minus 45°C. The ocean is covered in one metre thick ice for nine months of the year.

Scientists think that there could be more oil and gas under the Arctic Ocean.

(a) (i) Explain, using information in the report and your own knowledge, why searching for oil under the Arctic Ocean is difficult and expensive.

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..... [3]

(ii) Explain how the wildlife in the Russian Arctic National Park might be affected by oil spills.

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..... [4]

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(b) Describe **three** ways of reducing the impacts of oil spills.

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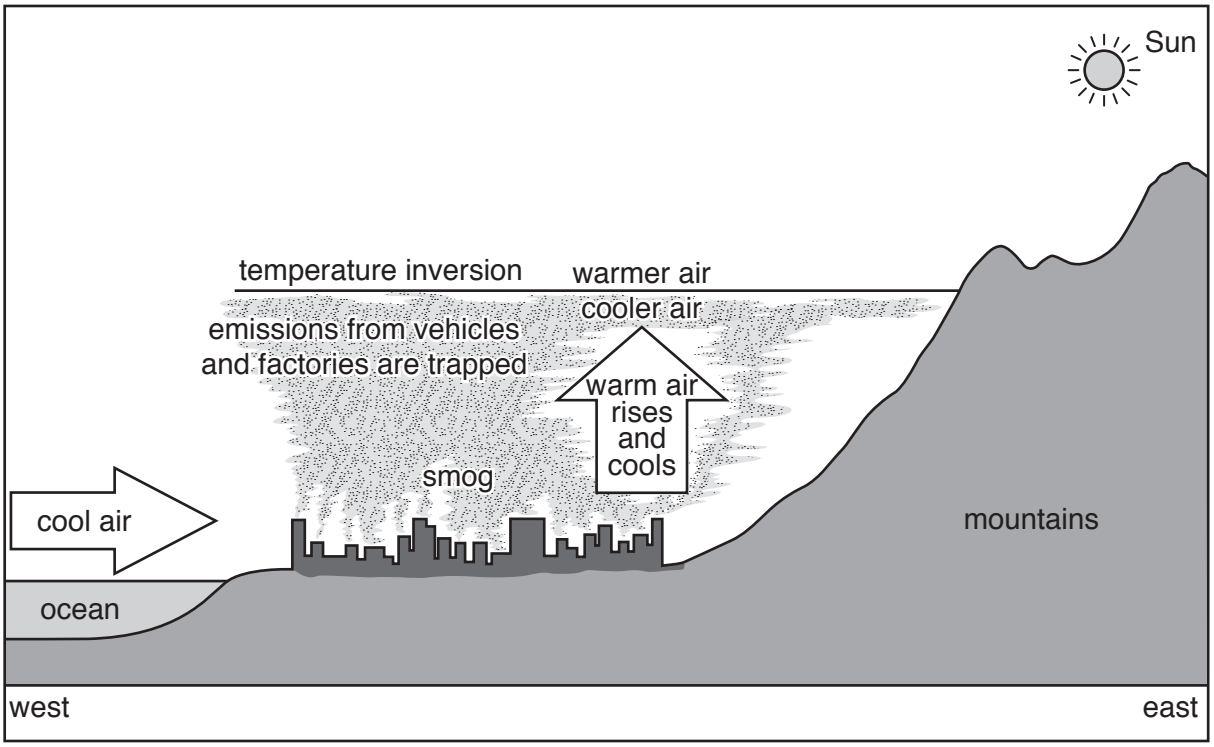
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4 The diagram shows a temperature inversion over a city.



(a) Use words and information from the diagram to complete the passage.

Winds bring ..... air from the ocean. The emissions from vehicles and ..... are prevented from rising by a temperature inversion. The emissions are ..... by ..... air at a higher level and react with light from the ..... to produce ..... . [3]

(b) **(i)** Explain how high levels of air pollution can affect the health of people living in cities.

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..... [3]

(ii) Describe ways of reducing air pollution in cities.

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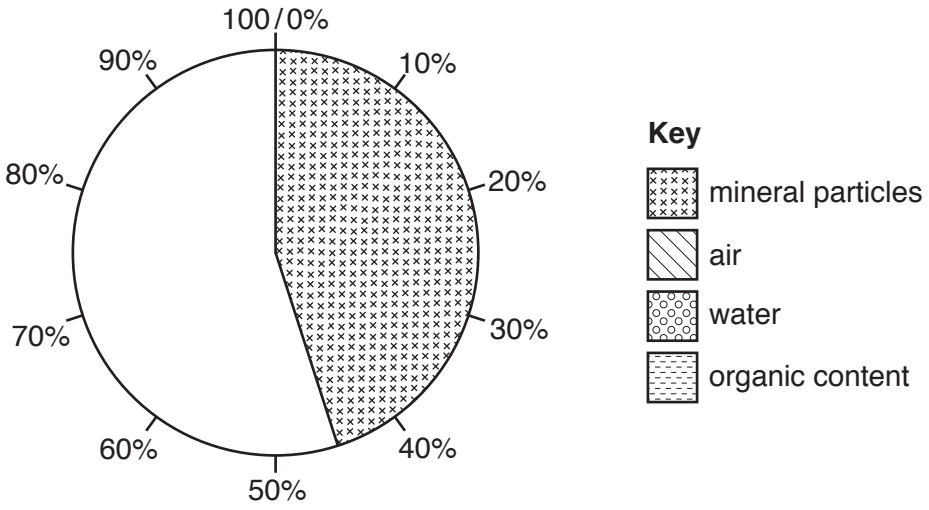
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5 The table and pie graph show the composition of a soil.

(a) (i) Use the information in the table and the key to complete the pie graph.

soil component	percentage
mineral particles	45
air	25
water	25
organic content	5



[2]

(ii) State **two** examples of the organic component found in soil.

.....

..... [2]

(iii) State **one** source of mineral particles in soil.

..... [1]

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(b) (i) Suggest why planting trees conserves soil.

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..... [3]

(ii) Describe **one** other strategy for conserving soil.

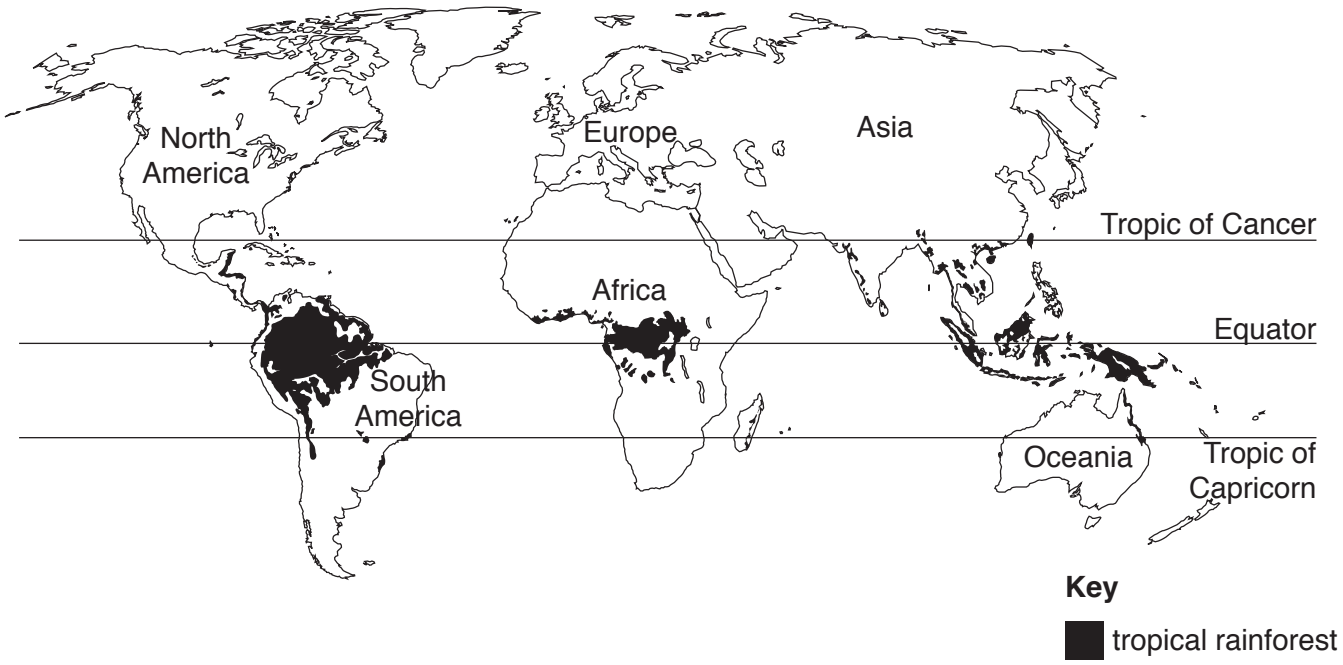
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6 The map shows the distribution of tropical rainforest.



(a) Describe the distribution of tropical rainforest shown on the map.

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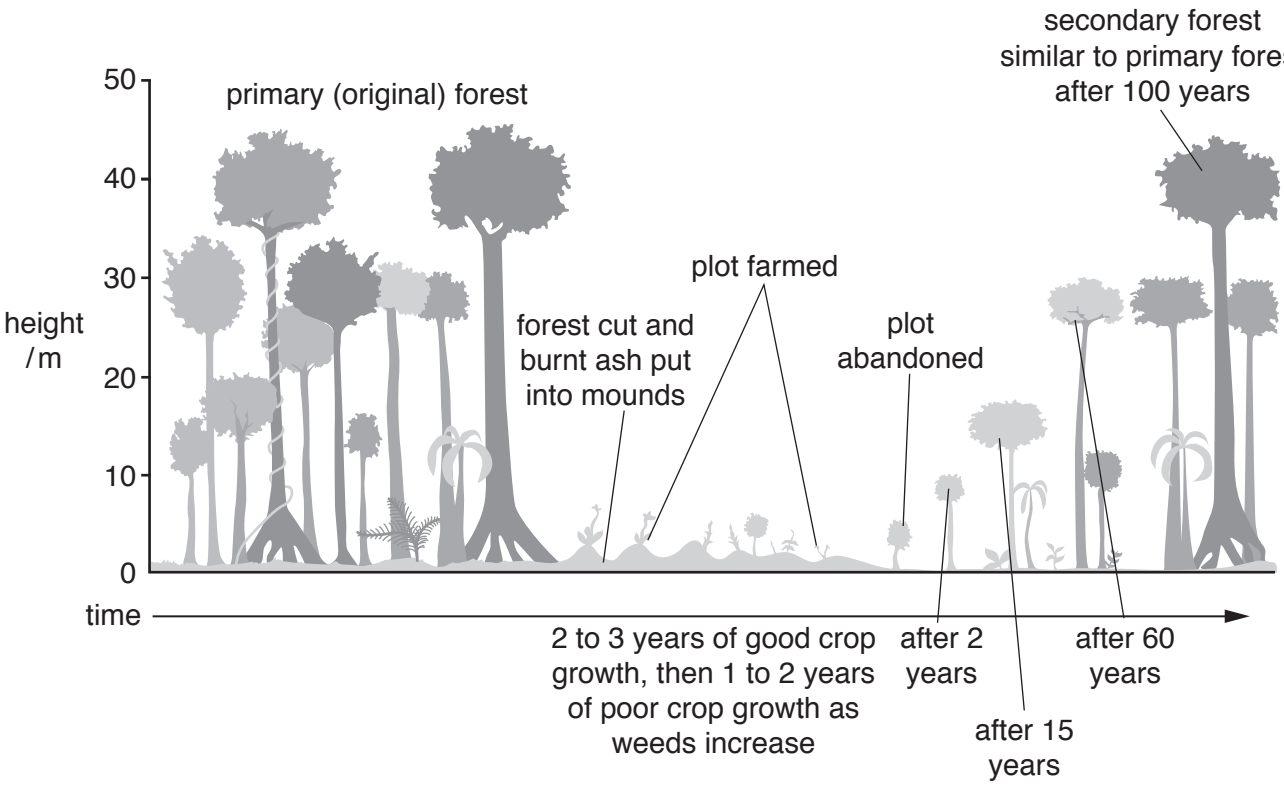
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(b) The diagram shows what happens when an area of tropical rainforest is used for shifting cultivation. Shifting cultivation is a type of subsistence farming.



Suggest **two** advantages and **two** disadvantages of shifting cultivation in tropical rainforests.

advantages

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disadvantages

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[4]

(c) In the last 50 years people have destroyed half of the world's tropical rainforests.

Suggest strategies to conserve tropical rainforests.

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..... [3]

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