UNIVERSITY OF CAMBRIDGE INTERNATIONAL EX
International General Certificate of Secondary Educati

CANDIDATE NAME

CENTRE NUMBER | | | | | |

CAN NUMBER

2432848895

ENVIRONMENTAL MANAGEMENT **0680/13**

Paper 1 **October/November 2013**

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.
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.

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

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

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1 Look at the photograph below.



(a) (i) Name the types of farming at **A** and **B**.

A ..... **B** ..... [1]

(ii) The farmers in the area on the photograph use chemicals, such as pesticides, to increase farm output.

Describe how the use of pesticides can increase output.

.....

.....

.....

..... [2]

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(iii) The stream, shown in the photograph, has becom dissolved in the run-off from the fields. Describe the e this could cause in the stream.

.....

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.....

.....

.....

.....

.....

..... [4]

(b) What are the advantages of genetic engineering to help improve the quantity and quality of food production?

quantity .....

.....

.....

quality .....

.....

..... [3]

[Total: 10]

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2 Read the newspaper report below.

15:30 hrs

Earthquakes hit Turkey

Two earthquakes near Van in Turkey have left 626 people more homeless.

The first earthquake on 23rd October led to the death of place at 13:41 hrs with a 7.2 magnitude. The epicentre was 16 km north east of Van. It injured 4,152 people and destroyed at least 11,232 buildings.

At 21:30 hrs on November 9th a 5.6 magnitude earthquake hit the area. The epicentre of this earthquake was 16 km south of Van. First reports indicate 22 dead, hundreds injured and damage to 25 buildings.

600,000 people have refused to return to their homes since November 9th. Some are staying with friends or relatives. Others are sleeping in tents outside their undamaged homes, although the ground is covered in snow and the temperature drops below freezing at night.

Scientists have reported over 2,500 aftershocks in the area since the October earthquake.

(a) (i) Using the information in the report complete the table below comparing the two earthquakes.

	Sunday 23rd October	**Wednesday 9th November**
local time	.....	.....
magnitude	.....	.....
number of people who died	.....	.....
number of buildings destroyed or damaged	.....	.....

[1]

(ii) What information in the report could explain why thousands of people have refused to return to their undamaged homes?

.....

..... [1]

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(iii) The United Nations immediately sent 4,000 tents, 50,00 mats to the Turkish Red Crescent.

Suggest two **other** items that were needed immediatel explain why each would be needed.

1 .....

.....

2 .....

.....
[2]

(b) All earthquakes have an *epicentre* and a *focus*. Explain the meaning of:

epicentre .....

.....

focus .....

..... [2]

(c) There are many earthquakes of large magnitude around the world every year.

Without reference to magnitude, describe and explain why some earthquakes are more damaging than others.

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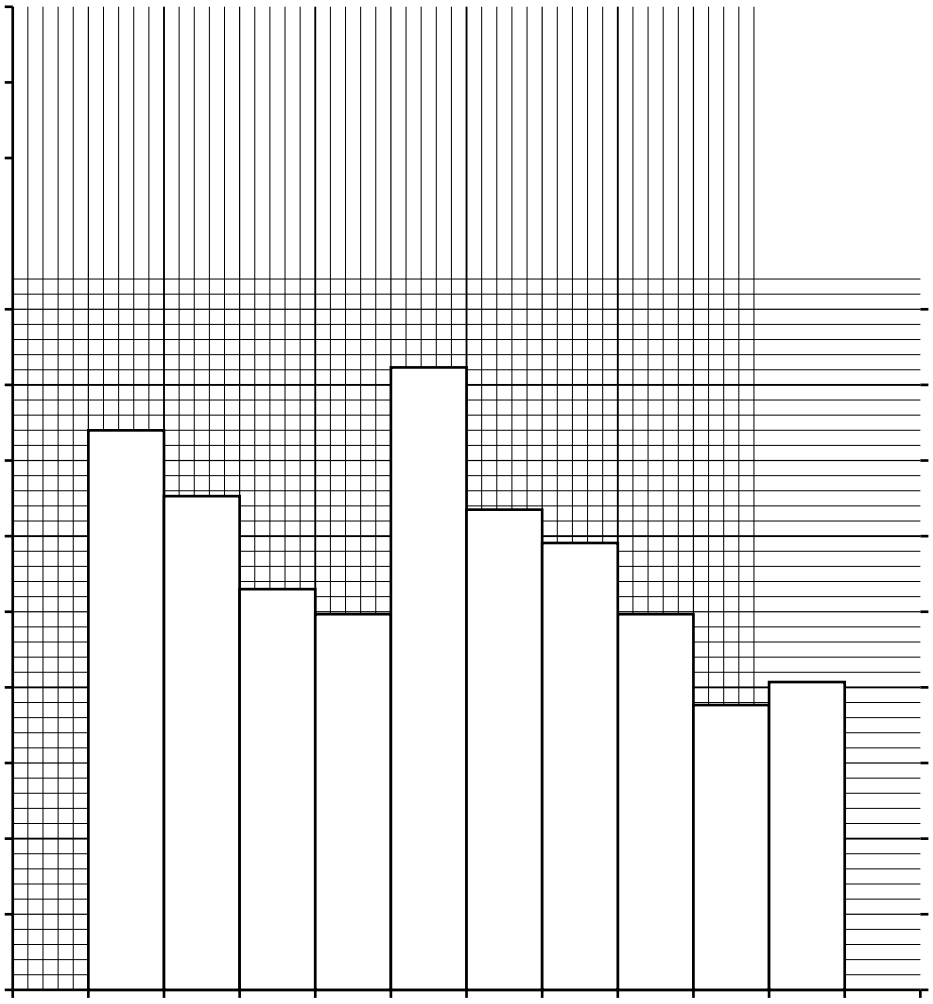
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..... [4]

[Total: 10]

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3 Look at the climate graph for a weather station in the Amazon Ba



(a) (i) Complete the rainfall graph using these figures.

January 413 mm December 330 mm [2]

(ii) Calculate the annual temperature range at this weather station.

answer ..... [1]

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(b) The main vegetation in this area is tropical rainforest. Describ
rainforest vegetation is adapted to the climate.

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..... [4]

(c) Explain how deforestation causes soil erosion in tropical rainforests.

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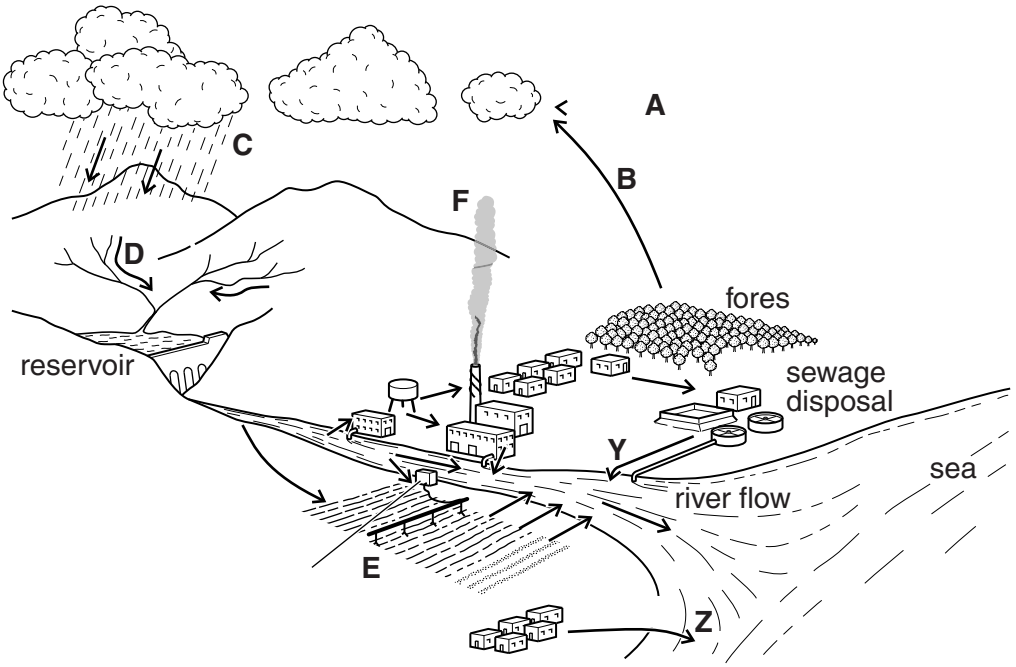
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[Total: 10]

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4 The diagram shows the water cycle and some ways in which wate



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

A .....

B .....

C .....

D .....

[2]

(ii) Explain what is happening at **E**.

.....

.....

.....

.....[2]

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(b) (i) Explain how substance **F** might interact with substanc buildings in the town.

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.....[4]

(ii) Suggest **two** differences between the water entering the sea at **Y** and that entering at **Z**.

.....

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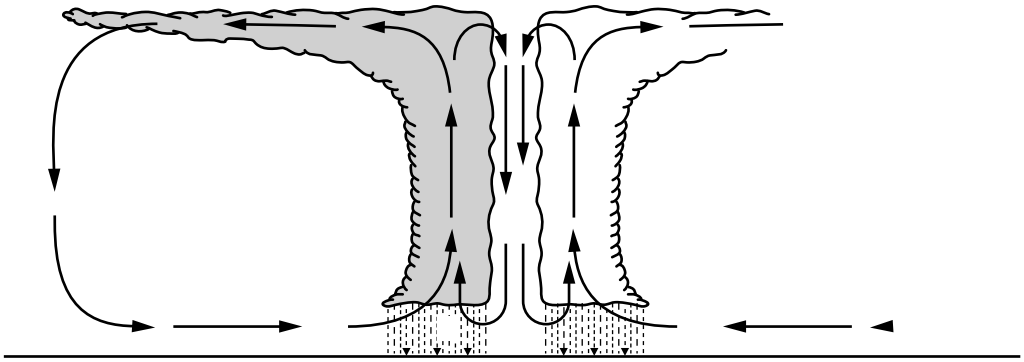
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[Total: 10]

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5 Study the diagram below showing a cyclone.



(a) Match the letters in the diagram to the labels below.

ocean water heated above 26 °C .....

eye .....

warm moist air .....

strong winds up to 300 km / hr .....

torrential rain ..... [3]

(b) **(i)** Describe how cyclones affect coastal communities in developing countries.

.....

.....

.....

.....

.....

.....

.....

..... [4]

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(ii) Suggest strategies to reduce the impact of cyclones on

.....

.....

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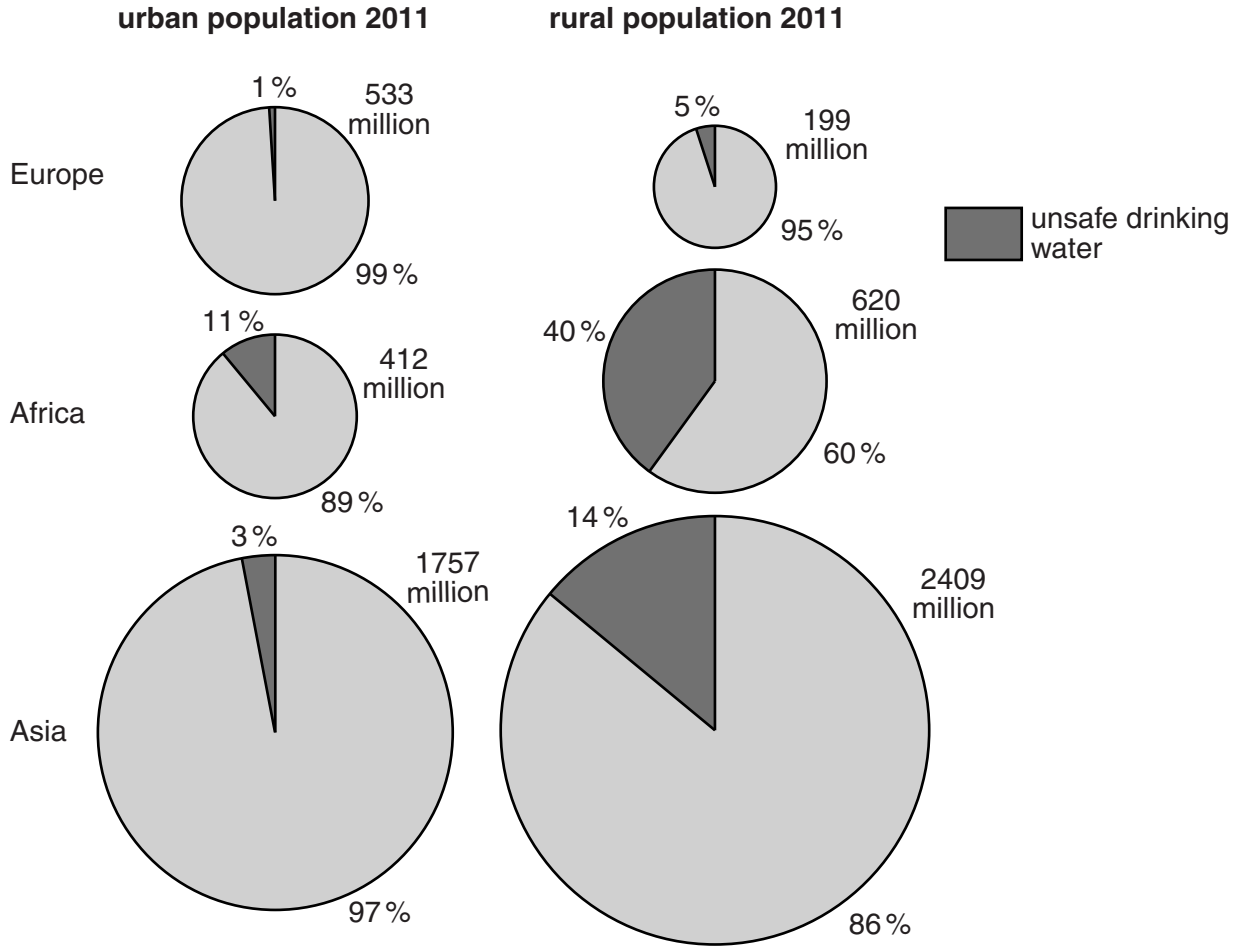
..... [3]

[Total: 10]

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6 The pie graphs below show the **percentages** of the population that have access to safe and unsafe water in urban and rural area

The area of each pie graph shows the population of urban and rur



(a) The table shows the **number** of people in Europe, Africa and Asia who have access to **unsafe** water, in urban and rural areas and in total.

	number of people who only have access to **unsafe** water / millions		
	urban	rural	total
Europe	5	.....	.....
Africa	45	248	293
Asia	53	337	390

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(i) Complete the table by calculating the number of peop water in rural Europe and the total number of such peopl

Show your working.

[2]

(ii) Explain what the pie graphs and table show about the percentage and number of people who only have access to **unsafe** water in Africa and in Asia.

.....

.....

.....

.....

.....

..... [3]

(b) (i) Malaria is a disease which affects many people around the world. Explain how malaria is associated with water.

.....

.....

.....

..... [2]

(ii) Describe and explain two strategies that could be used to control malaria.

1 .....

.....

.....

2 .....

.....

..... [3]

[Total: 10]

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