UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER				

7123497709

ENVIRONMENTAL MANAGEMENT **0680/23**

Paper 2 **May/June 2010**

1 hour 45 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 **both** 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	
Total	

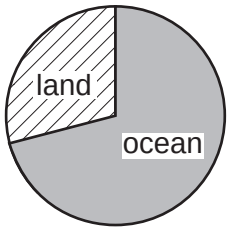
This document consists of **14** printed pages and **2** blank pages.

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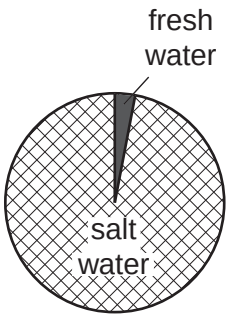
1 **(a)** Look at the pie graphs showing the distribution of water on the Earth's surface.

For Examiner's Use

land and sea



fresh water and salt water



Describe the evidence from the pie graphs for each of statements **A** and **B**.

A There is a lot more water than land on the Earth's surface.

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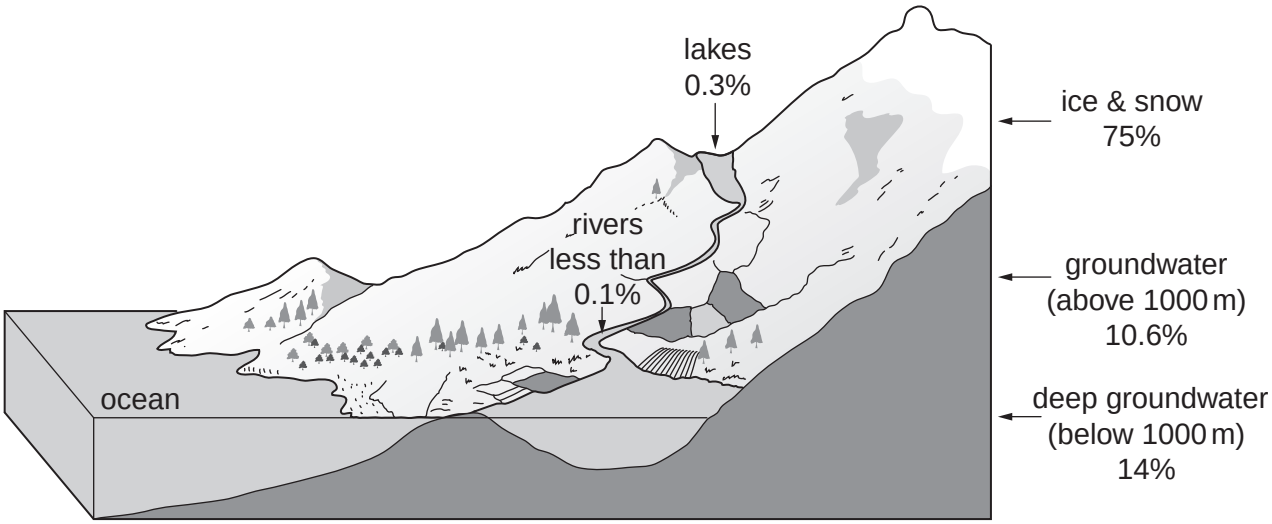
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B The amount of water available for human use is very small.

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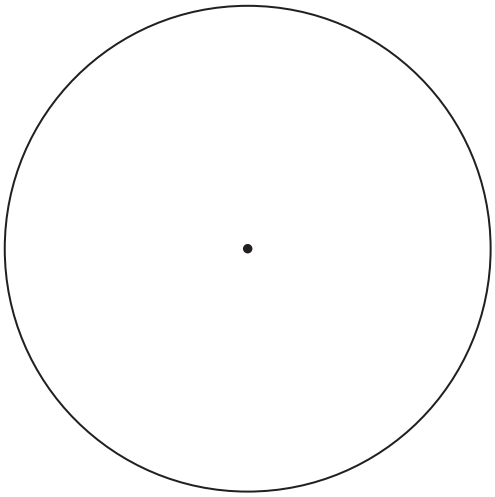
(b) The diagram gives information about fresh water stores on the Earth's surface.



(i) Show the percentages for ice and snow, total groundwater, and lakes and rivers on a pie graph.

For Examiner's Use

fresh water stores on the Earth's surface



[3]

(ii) Explain more fully why the amount of water available for human use is so small.

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(iii) How can people obtain their water supply from groundwater stores? Describe **one** method.

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(iv) State two advantages of using groundwater stores for water supply.

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For Examiner's Use

(c) In many countries large dams have been built to increase natural stores in rivers and lakes.

(i) Name or state the location of an example of a large dam.

.....[1]

(ii) Describe its advantages and explain why it was built.

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(iii) Why are decisions to build large dams often controversial? Describe some of the economic, social and environmental factors which help to explain why some people object to the building of large dams.

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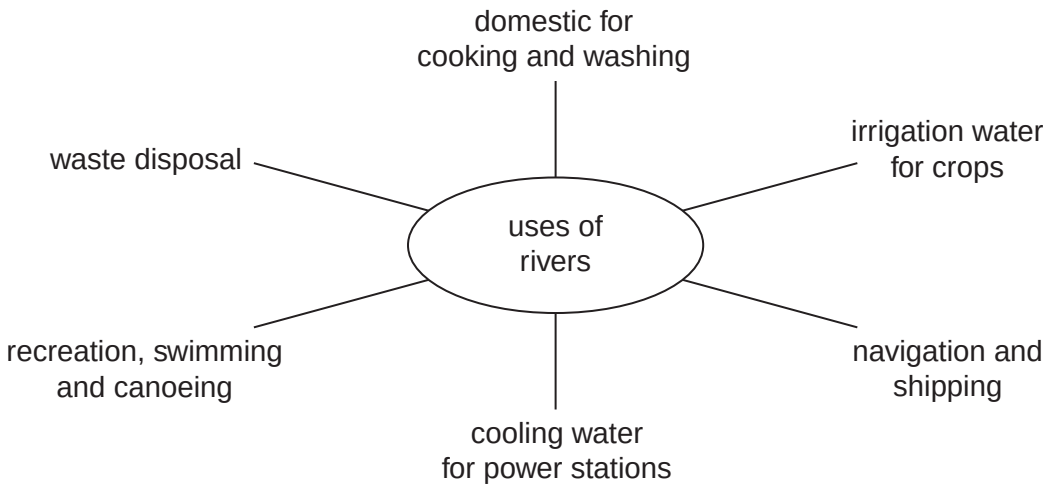
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(d) Look at the spider diagram showing some uses of rivers.

For Examiner's Use



(i) Which two uses are most likely to lead to pollution of river water? Explain why.

Use 1 .....

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Use 2 .....

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(ii) Conflicts of interest can arise between people using rivers for different purposes. Giving examples, explain some of these conflicts of interest.

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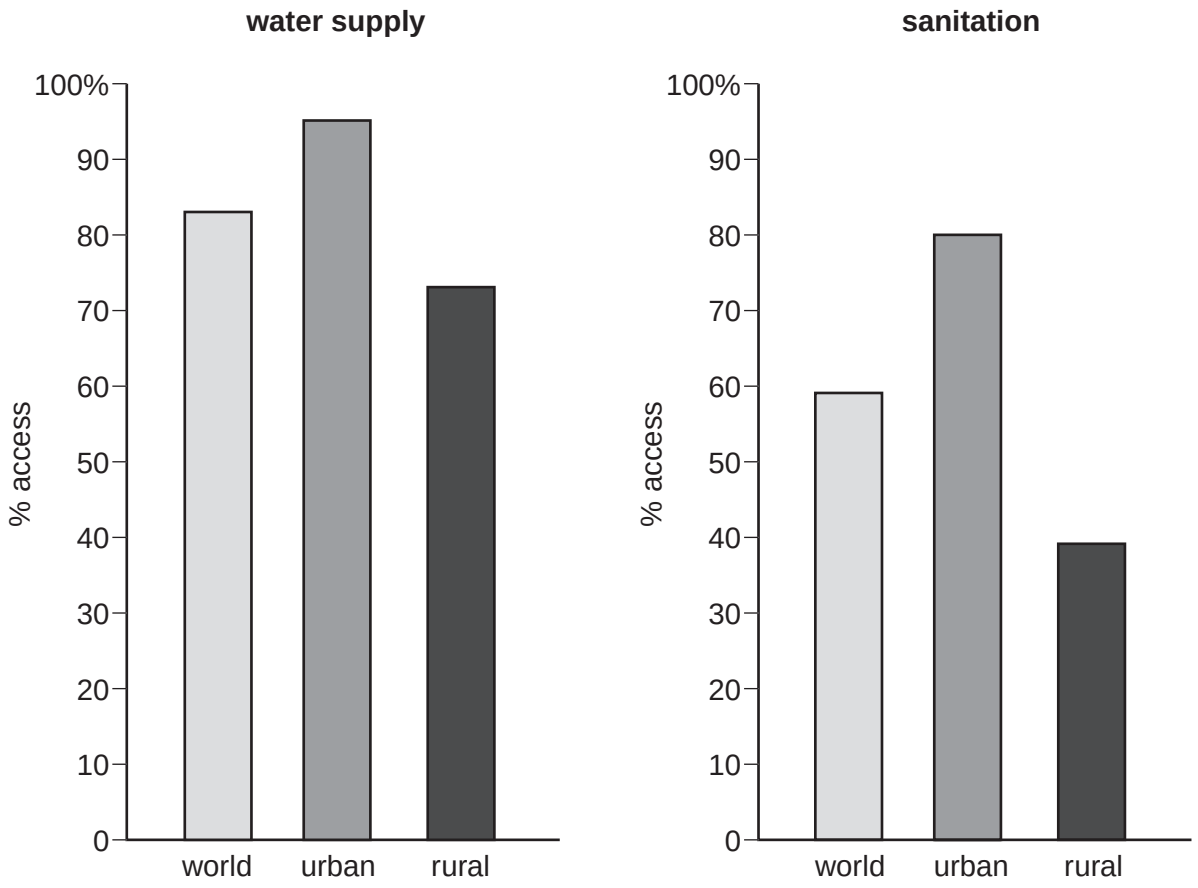
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(e) Look at the graphs showing access to water supply and sanitation.

For Examiner's Use



Use values from the graphs to describe how they show that access to sanitation is

(i) less widely available than for water supply;

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.....[2]

(ii) particularly poor in rural areas.

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(iii) Give reasons why access to water supply and sanitation is much poorer in rural than in urban areas.

For Examiner's Use

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(f) Costs from lack of safe water supply and sanitation

1.6 million children a year die from diarrhoea	economic loss of the time taken in fetching water every day

Explain why

(i) children are most at risk from water-related diseases;

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(ii) economic costs result from people having to walk long distances to fetch water.

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[Total: 40]

For Examiner's Use

2 **(a)** **(i)** Complete the table of birth and death rates and population change for selected countries from Europe and Asia.

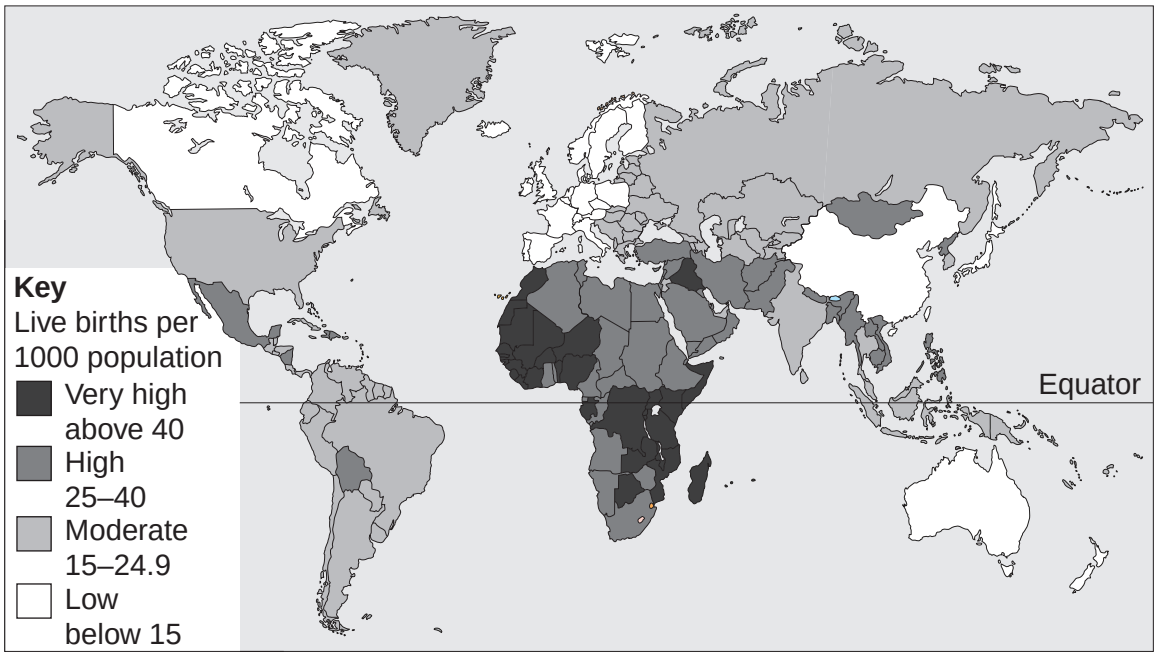
Country	Birth rate per 1000	Death rate per 1000	Population change per 1000
UK	11.0	10.2	+0.8
Germany	8.7	10.7	
China	14.5	7.1	
India	23.8	8.3	
Saudi Arabia	31.5	3.7	+27.8

[3]

(ii) How is Germany different from the other countries in the table?

.....[1]

(b) **World distribution of birth rates**



(i) Name the continent with the largest number of countries with very high birth rates above 40 per 1000.

.....[1]

(ii) In which continent are there the most countries with birth rates below 15 per 1000?

.....[1]

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(iii) Describe the distribution of countries with high and very high birth rates above 25 per 1000.

For Examiner's Use

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(iv) Give reasons why some countries have very low birth rates, below 15 per 1000.

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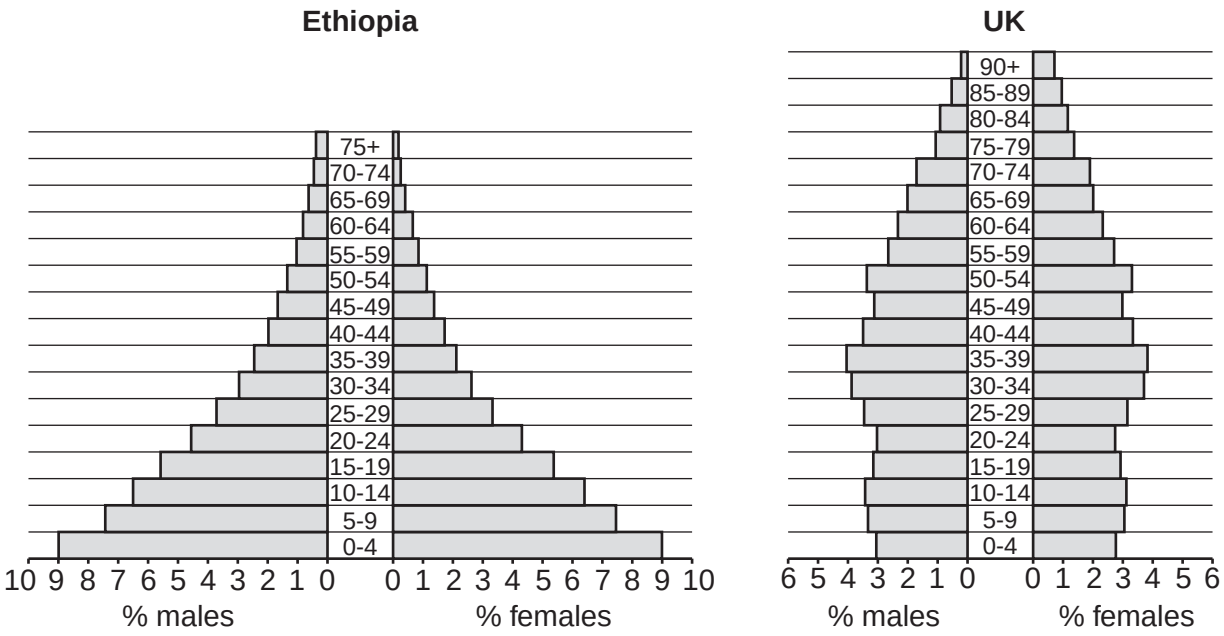
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(c) Look at the pyramids showing population structure for Ethiopia and the UK.

For Examiner's Use



(i) On each pyramid, shade in the age group with the highest total percentage of population. [1]

(ii) What is the approximate total percentage of population in Ethiopia below the age of 15?

.....[1]

(iii) What is the approximate total percentage of population aged 65 and above in the UK? Circle one answer.

6.5 9.5 12 16 [1]

(iv) State two differences in shape between the population pyramids for Ethiopia and the UK.

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(v) The UK has an ageing population. State the evidence for this from its population pyramid.

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(vi) Some countries like Ethiopia have a young population; others like the UK have an ageing population. Their population problems are different.

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Explain how and why their problems are different.

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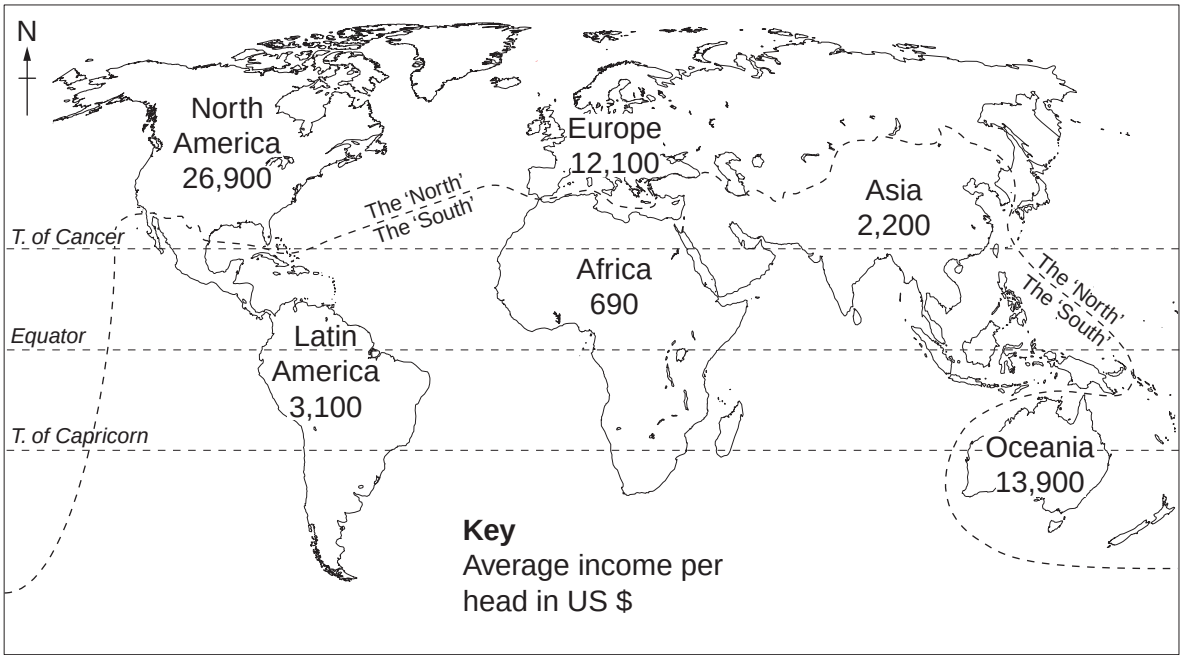
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(d) Look at the world map which shows the course of the dividing line between the rich North and poor South.

For Examiner's Use



(i) Rank the six continents by income per head from highest to lowest. State whether each continent is mainly developed or developing.

	Continent	**Developed or Developing**
1	.....	.....
2	.....	.....
3	.....	.....
4	.....	.....
5	.....	.....
6	.....	..... [2]

(ii) Why does the North-South dividing line not continue running west to east all the way across the world?

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(iii) How well does the line split the world between a rich North and a poor South? Answer as fully as you can describing where the fit is good and not so good.

For Examiner's Use

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(iv) Look back to the map showing the world distribution of birth rates in part **(b)**. How well would the North-South dividing line separate countries with high and low birth rates?

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(e) Two strategies for reducing the wealth gap between rich and poor countries:

- Improved trade such as Fair Trade
- Non-governmental aid organisations (NGOs) from rich countries.

For Examiner's Use

(i) How is Fair Trade different from other trade?

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(ii) Explain some of the advantages and disadvantages of aid for helping poor countries and reducing the wealth gap between them and rich countries.

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(iii) In your view, which of the two strategies is better for reducing the wealth gap between rich and poor countries in the long term? Explain your choice.

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[Total: 40]

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