



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International General Certificate of Secondary Education

CANDIDATE  
NAME

CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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**ENVIRONMENTAL MANAGEMENT**

**0680/22**

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.

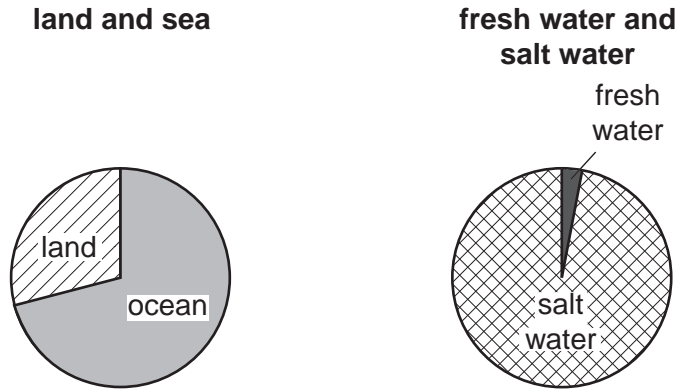
At the end of the examination, fasten all your work securely together.  
The number of marks is given in brackets [ ] at the end of each question or part question.

For Examiner's Use	
1	
2	
<b>Total</b>	

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



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



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.

.....

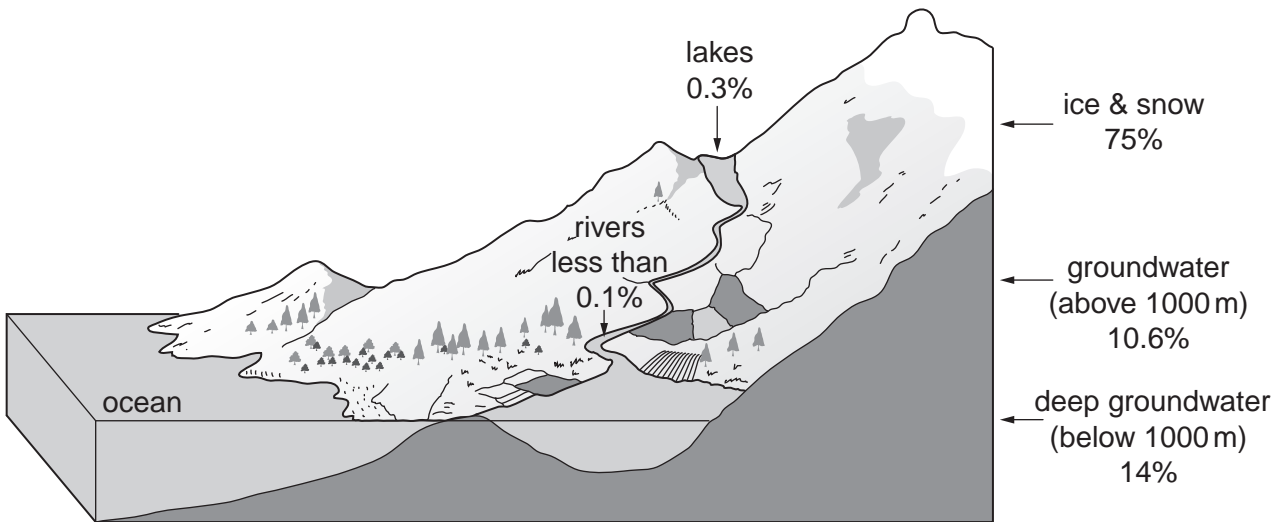
.....

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

.....

..... [2]

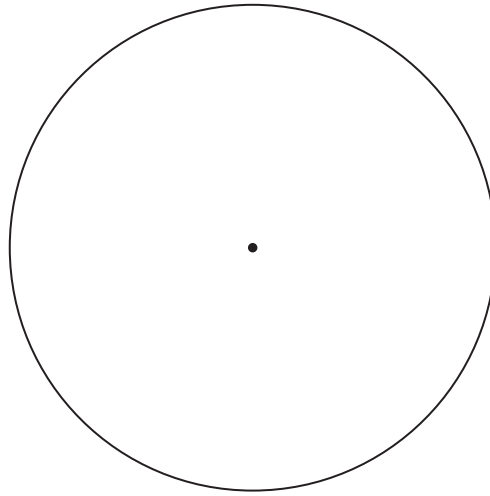
(b) The diagram gives information about fresh water stores on the Earth's surface.



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

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**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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.....[2]

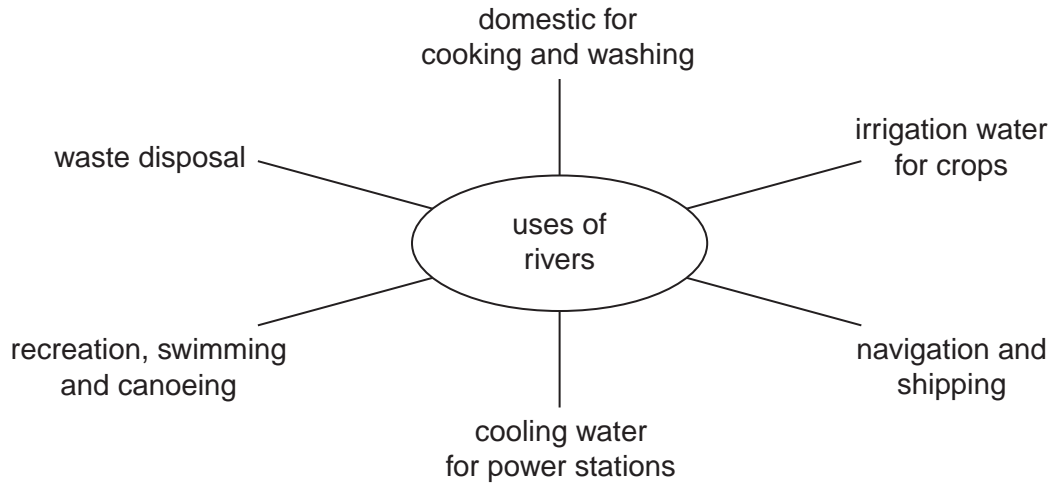
- (iv) State two advantages of using groundwater stores for water supply.

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



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

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

Use 1 .....

.....  
.....  
.....

Use 2 .....

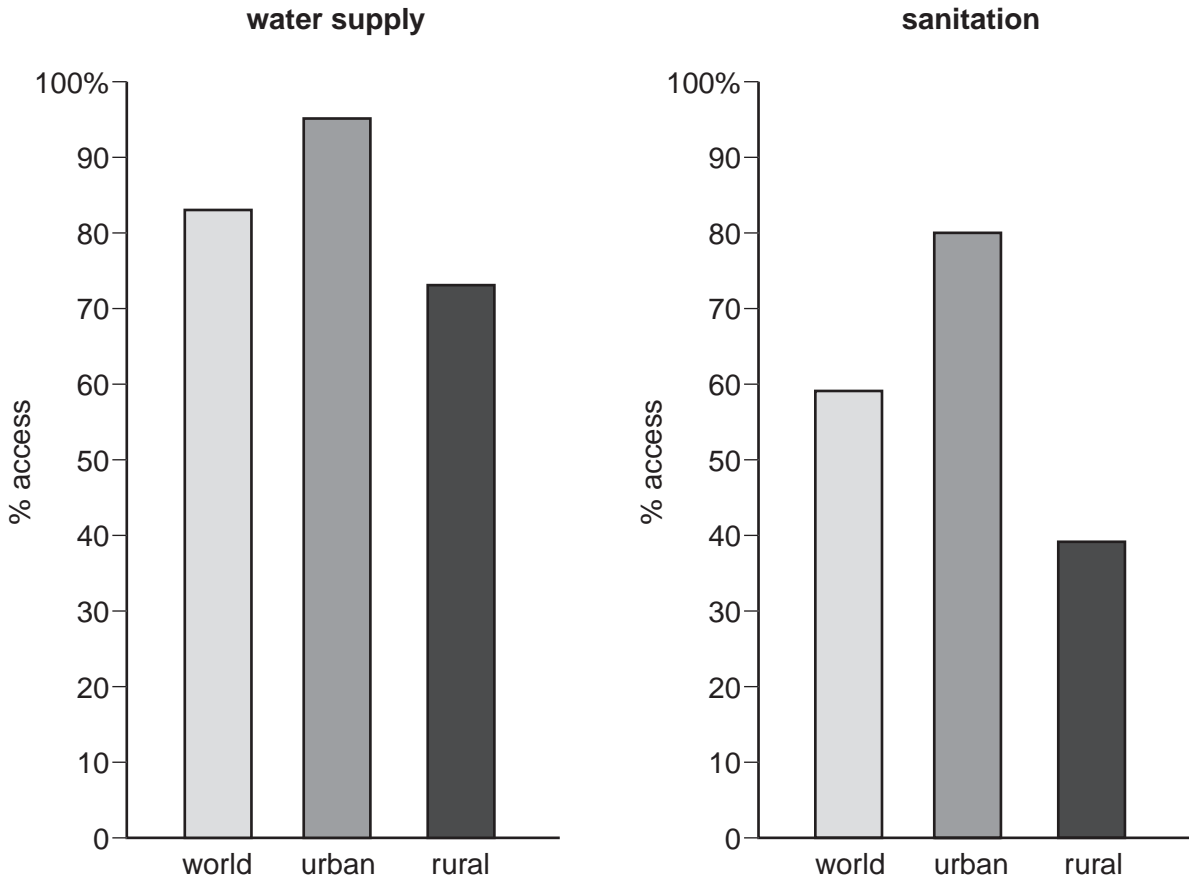
.....  
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.....[4]

(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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.....[3]

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

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

(i) less widely available than for water supply;

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

(ii) particularly poor in rural areas.

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

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

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.....[3]

**(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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.....[4]

[Total: 40]

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

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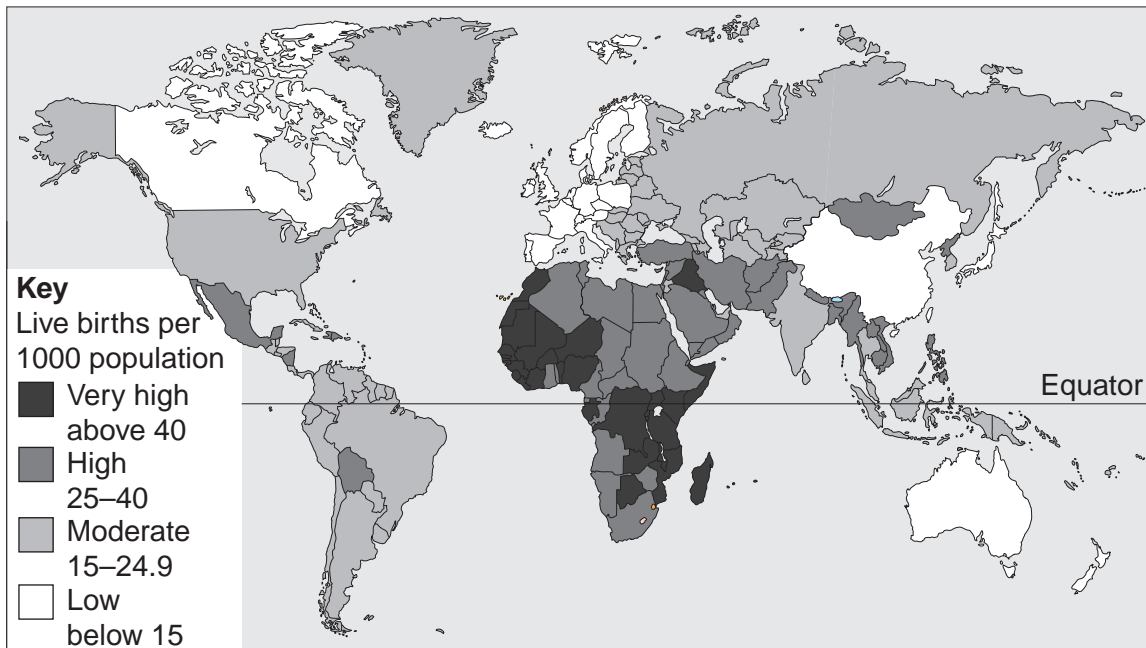
Country	Birth rate per 1000	Death rate per 1000	Population change per 1000
UK	11.0	10.2	+0.8
Germany	8.7	10.7	
China	14.5	7.1	
India	23.8	8.3	
Saudi Arabia	31.5	3.7	+27.8

[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]



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

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Examiner's  
Use*

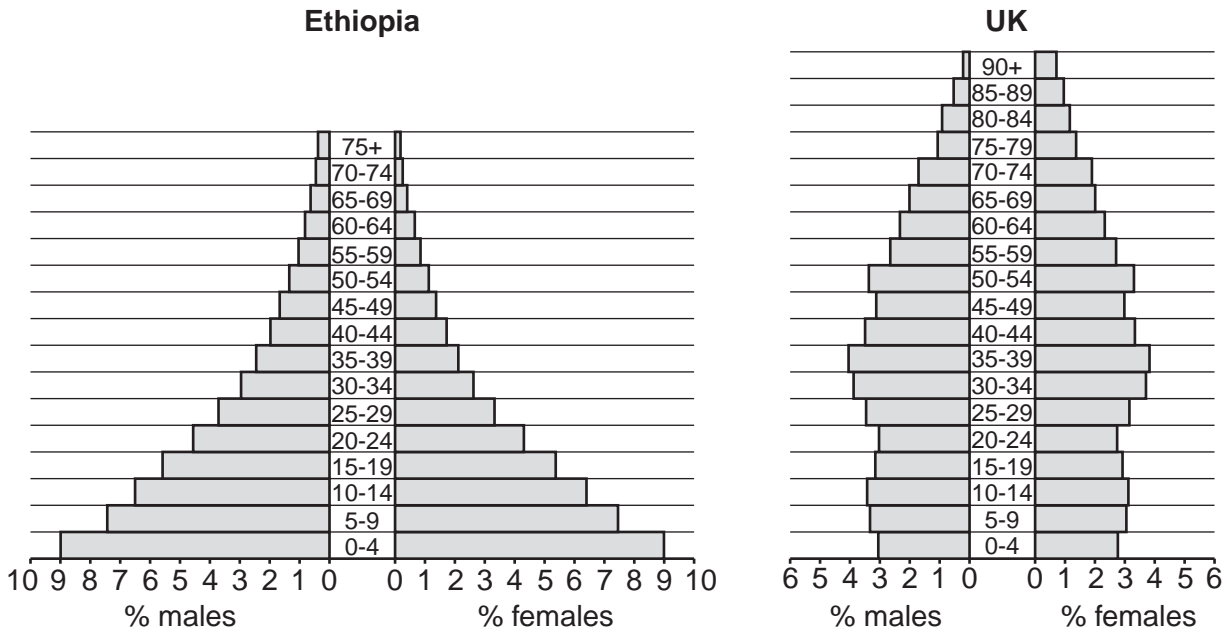
.....  
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**(iv)** Give reasons why some countries have very low birth rates, below 15 per 1000.

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

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(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]

.....[1]

(iii) What is the approximate total percentage of population aged 65 and above in the UK? Circle one answer. [1]

6.5                      9.5                      12                      16                      [1]

(iv) State two differences in shape between the population pyramids for Ethiopia and the UK. [2]

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

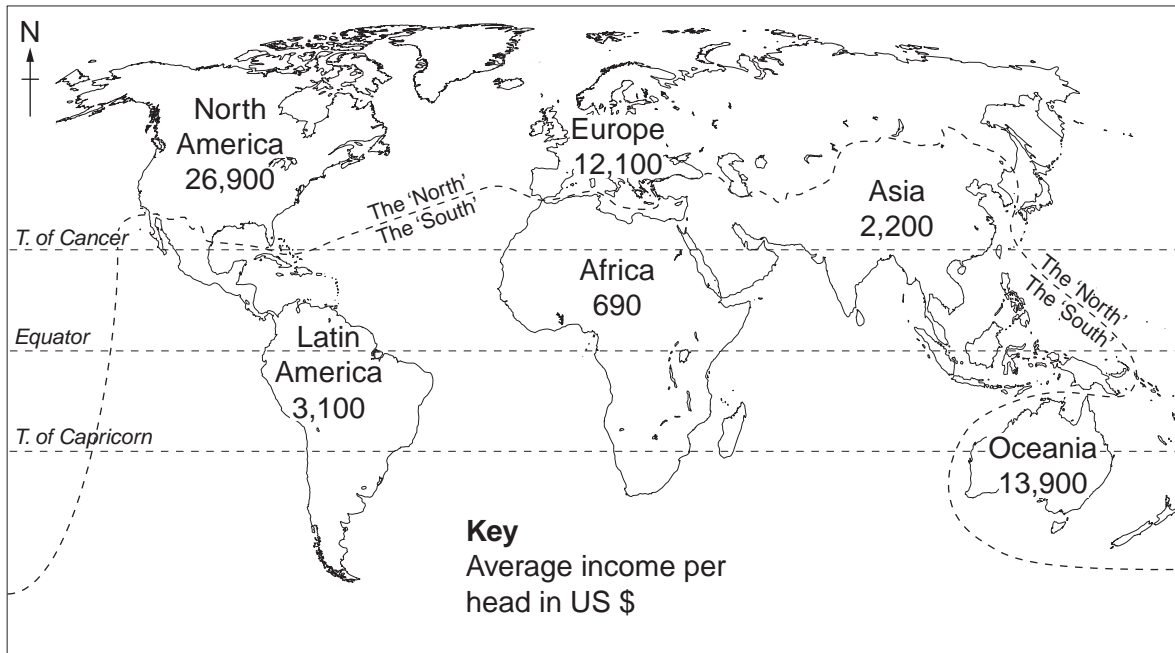
(v) The UK has an ageing population. State the evidence for this from its population pyramid. [2]

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



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

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(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?

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



(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.

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

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

(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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.....[4]

(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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.....[2]

[Total: 40]

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