

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		

7123497700

ENVIRONMENTAL MANAGEMENT

0680/23

1 hour 45 minutes

Paper 2 May/June 2010

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.

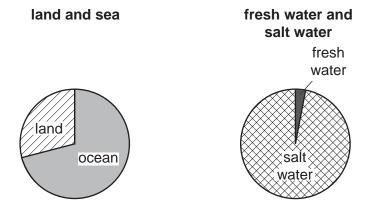
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1				
2				
Total				

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.

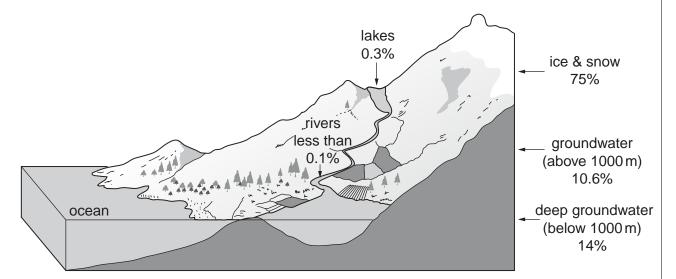
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Describe the evidence from the pie graphs for each of statements **A** and **B**.

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

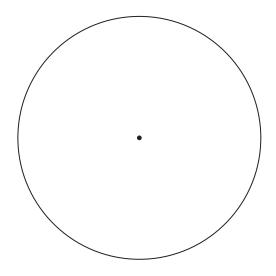
(b) The diagram gives information about fresh water stores on the Earth's surface.



(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.
	[3]
(iii)	How can people obtain their water supply from groundwater stores? Describe one method.
	[2]
(iv)	State two advantages of using groundwater stores for water supply.
	[2]

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(c)	In n lake	nany countries large dams have been built to increase natural stores in rivers and es.
	(i)	Name or state the location of an example of a large dam.
		[1]
	(ii)	Describe its advantages and explain why it was built.
		[A1
		[4]
	(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.

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

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	domestic for cooking and washing	
waste disposal		irrigation water for crops
	uses of rivers	
recreation, swimming and canoeing		navigation and shipping
	cooling water for power stations	

(i)	Which two uses are most likely to lead to pollution of river water? Explain why.
	Use 1
	Use 2
	[4]
(ii)	Conflicts of interest can arise between people using rivers for different purposes.
	Giving examples, explain some of these conflicts of interest.
	Giving examples, explain some of these conflicts of interest.

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

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water supply						sanitation				
10	00%7				10	00%7				
	90-					90-				
	80-					80-				
	70-				70-					
S	60-		σ	60-						
% access	50-				% access	50-				
%	40-				%	40-				
	30-					30-				
	20-					20-				
	10-					10-				
	0	world	urban	rural	_	0	world	urban	rural	
	Us	e values fro	m the grap	ohs to des	cribe how th	ey sho	w that ac	cess to sa	nitation is	6
	(i)	less widel	y available	e than for v	water supply	' ;				
										[2]
	(ii)	particularl	y poor in ı	ural areas	S .					

(i	ii)	Give reasons why access to water than in urban areas.	supply and sanitation is much poorer in ru	I ral Fo Exami Us
				[3]
(f)		Costs from lack of safe water	er supply and sanitation	
		6 million children a year die om diarrhoea	economic loss of the time taken in fetching water every day	
	Ехр (i)	lain why children are most at risk from water-	related diseases:	
,	(')	Similare in a contact at not norm water	Totaloa alocasco,	
(ii)	economic costs result from people h	aving to walk long distances to fetch water.	
				[4]
			[Total: 4	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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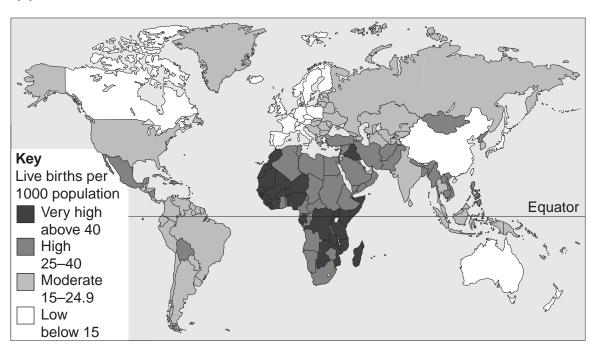
Country	Birth rate per 1000	Death rate per 1000	Population change per 1000
UK	11.0	10.2	+0.8
Germany	8.7	10.7	
China	14.5	7.1	
India	23.8	8.3	
Saudi Arabia	31.5	3.7	+27.8

[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.	For Examiner's Use
	[3]	
(iv)	Give reasons why some countries have very low birth rates, below 15 per 1000.	
	[N]	

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

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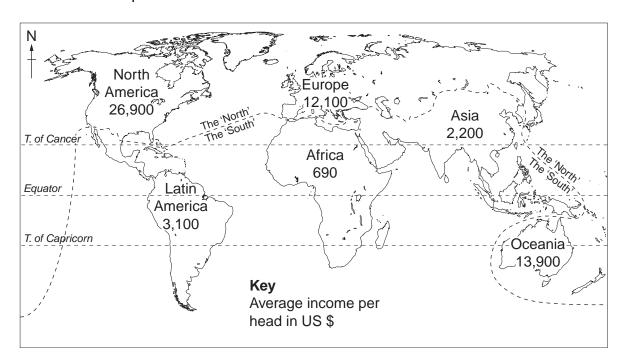
	Ethiopi	a		UK	
				90+	
				85-89 80-84	
	75+			75-79	
	70-74 65-69			70-74 65-69	1
	60-64	1		60-64	
	55-59	4		55-59 50-54	
	50-54 45-49			45-49	
	40-44			40-44	
	35-39 30-34			35-39 30-34	
	25-29			25-29	
	20-24 15-19			20-24 15-19	
	10-14		<u> </u>	10-14	
	5-9			5-9	
10 9 8 7 6	5 4 3 2 1 0 0	1 2 3 4 5 6 7 8	9 10 6 5	4 3 2 1 0 0 1	2 3 4 5 6
	males	% females			females
70	maioo	70 101110100		70 maioo 70	Torridico
(i)	On each pyramid population.	, shade in the ag	e group with t	he highest total pe	rcentage of [1]
(ii)	What is the approof 15?	ximate total perce	ntage of popul	ation in Ethiopia be	low the age
					[1]
(iii)	What is the approunce UK? Circle one ar		ntage of popul	ation aged 65 and a	bove in the
	6.5	9.5	12	16	[1]
(iv)	State two different the UK.	ces in shape betw	een the popul	ation pyramids for E	thiopia and
					[2]
(v)	The UK has an a pyramid.	geing population.	State the evide	ence for this from its	population
					[2]

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/1)	ageing population. Their population problems are different.	
	Explain how and why their problems are different.	
	[N]	

(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 way across the world?	not continue running west to east all the
		[1]

(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
	[3]	
(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?	
	[2]	

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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.
	(i)	How is Fair Trade different from other trade?
		[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.
		[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.
		[2]
		[Total: 40]

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