UNIVERSITY OF CAMBRIDGE INTERNATIONAL EX
International General Certificate of Secondary Educati

CANDIDATE NAME

CENTRE NUMBER | | | | | |

CAN NUMBER

9707555724

ENVIRONMENTAL MANAGEMENT **0680/22**

Paper 2 **May/June 2013**

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.

Electronic calculators may be used.

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	

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1 **(a)** The table gives average income per head for the world's six i

average income per head by continent / US$	
Africa	690
Asia	2,200
Europe	12,100
Latin America	3,100
North America	26,900
Oceania	13,900

(i) Rank the six continents by average income per head from highest (1) to lowest (6).

1 ..... 4 .....

2 ..... 5 .....

3 ..... 6 ..... [1]

(ii) How big is the difference in average income per head (in US$) between the richest and poorest continents?

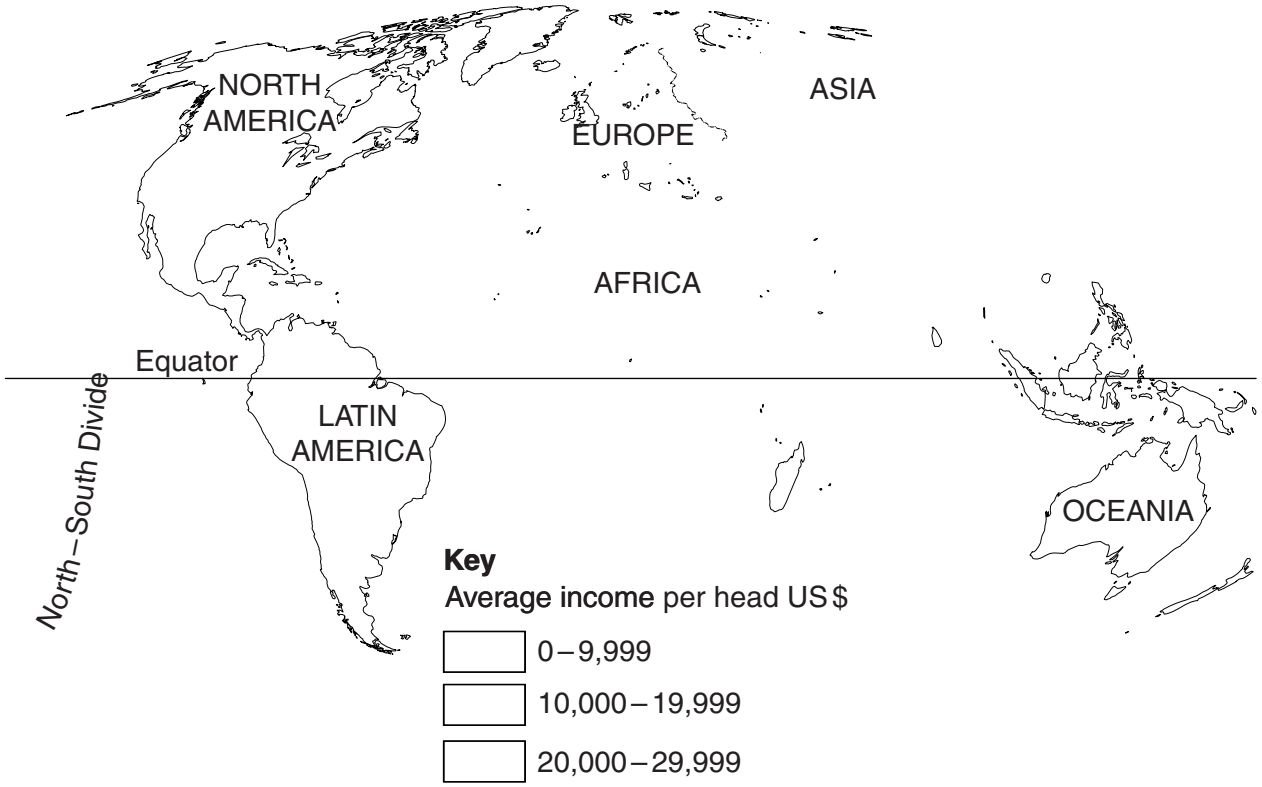
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TURN OVER FOR QUESTION 1 (a) (iii)

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(iii) Look at the world map of continents. The dividing line bet and developing South is also shown.



On the world map, plot the values shown in the table for each continent using denser shading or stronger colours for the high values. Complete the key to match the shading or colours on the map. [3]

(iv) Look at the map. How well does the dividing line split the world between the developed North and developing South?

Answer by

1 describing where the line seems to be a good fit,

.....

.....

2 describing where the line seems to be a less good fit,

.....

.....

3 writing about how good the fit seems to be overall. .....

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.....[4]

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(b) The table shows measures of poverty and wealth for four Asi

	measures of poverty and wealth				
country	average income per head (US$)	birth rate (per 1000)	life expectancy (years)	peopl do	
China	3,270	13	74	6	
Japan	38,460	8	84	4	
Russia	11,830	11	69	240	96
South Korea	19,120	9	80	600	98

(i) Which one of the five measures is the best example of an economic factor?

.....[1]

(ii) Describe how access to safe (clean) water affects disease levels in a country.

.....

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.....[3]

(iii) Look back to the world map in **(a)(iii)** on page 4.
Russia and Japan are north of the North-South divide. China and South Korea are on the south side of the line.

How well do the differences in poverty and wealth between the four countries in the table support the position of the North-South line in Asia? Explain your answer.

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.....[4]

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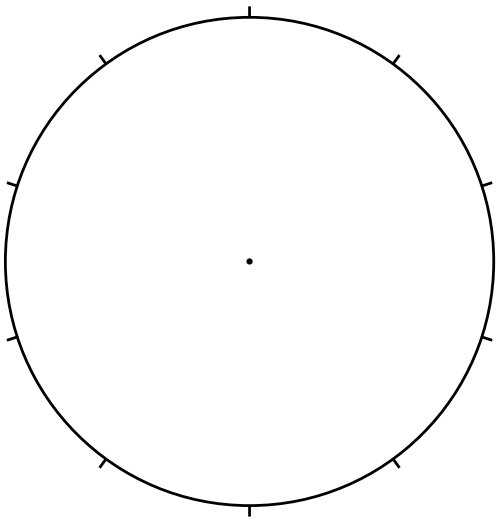
(c) Unfair world trade is one reason for world inequalities (la between developing and developed countries).

Most of the coffee that is traded in the world is grown in d tropics (in the South) and sold in developed countries in tem

The table shows how the price of a jar of coffee that sells for made up.

who takes the money when a jar of coffee is sold in t	
	percentage of sale price
coffee farmer in the tropics	10
shipping – controlled by transport companies based in developed countries	20
manufacturing – making the jars and roasting the beans in the USA	45
supermarket – selling the coffee	25

(i) Draw a pie graph in the circle below to show the percentages in the table.



Key

- coffee farmer
- shipping
- manufacturing
- supermarket

[2]

(ii) How does the pie graph show that world trade is not fair to developing countries?

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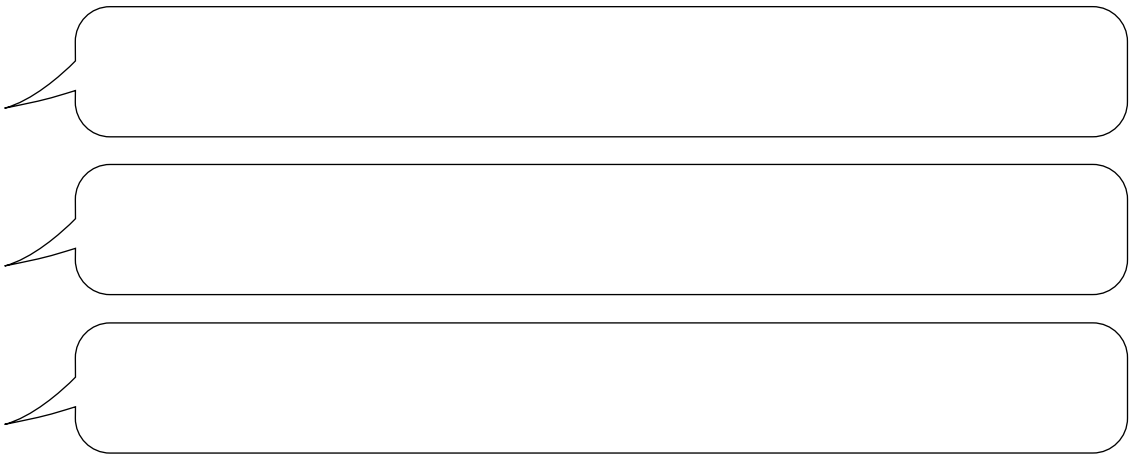
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(iii) The Fair Trade organisation was set up in the 1990s to countries a better deal when exporting their crops. The or guaranteed price, even when world prices fall. It also su in areas where the farmers live.

Read what banana farmers in the Dominican Republic s live in poor rural areas near the border with Haiti.

comments from banana farmers in the Dominican



What is the main advantage of Fair Trade for banana farmers in the Dominican Republic? Explain why it is a big advantage.

.....

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.....

.....[2]

(iv) State one way in which other people who are **not** banana farmers and who live in rural areas in the Dominican Republic also benefit from Fair Trade? Explain how it improves their quality of life.

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.....[2]

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(v) Suggest why some big companies are not interested in

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.....

(d) Aid from rich to poor countries is another way of trying to o between rich developed and poor developing countries.

Three types of aid are

G governmental (bi-lateral) aid
N non-governmental aid (NGO)
F food aid

Fill in the table below by

(i) giving the letter for the type of aid from the list (**G**, **N** or **F**) which best fits the uses **A**, **B** and **C** (use each type of aid only once);

(ii) stating whether the aid is long-term or short-term;

(iii) suggesting whether the aid is sustainable or unsustainable.

use	**(i)** type of aid, **G**, **N** or **F**	**(ii)** long-term or short-term	**(iii)** sustainable or unsustainable
A helps people recover from a natural hazard	.....	.....	.....
B supports community projects for water supply	.....	.....	.....
C allows large scale projects such as large dams	.....	.....	.....

[3]

(iv) In **(d)(iii)** you suggested whether large projects such as dams (**C**) were sustainable or unsustainable. Explain your answer.

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.....

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.....[2]

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(v) State two advantages and two disadvantages of aid fo that are receiving the aid.

advantages .....

.....

.....

disadvantages .....

.....

.....[4]

(e) A third way to reduce the wealth gap between the developing and developed countries is to find new sources of income for developing countries. One of these is tourism.

(i) Name a developing country or an area within a developing country which attracts many tourist visitors from other countries.

.....

(ii) Explain why it attracts tourists and how tourism is being managed for a sustainable future.

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.....[5]

[Total: 40 marks]

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QUESTION 2 BEGINS ON PAGE 11

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2 **(a)** A natural hazard is a short-term event that is a threat to life a

list of natural hazards

cyclone **drought** **earthquake** **flood**

(i) Re-arrange this list of natural hazards to show which tectonic.

climatic

....

....

....

[1]

(ii) In the box below a short, precise definition has been given for drought. Do the same for the other four natural hazards.

natural hazard	definition
cyclone	....
drought	dry period, longer and more severe than ..... normally expected .....
earthquake	....
flood	....
volcano	....

[5]

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(iii) Predicting when an area is going to be affected by one more easily done for some than for others.

Choose **one** of the five natural hazards, the occurrence be predictable by people affected. Describe how such pr

Choice .....

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.....[3]

(iv) Choose **one** other natural hazard which is much less easy to predict. Explain why it is more difficult or impossible for people to predict when they are going to be affected.

Choice .....

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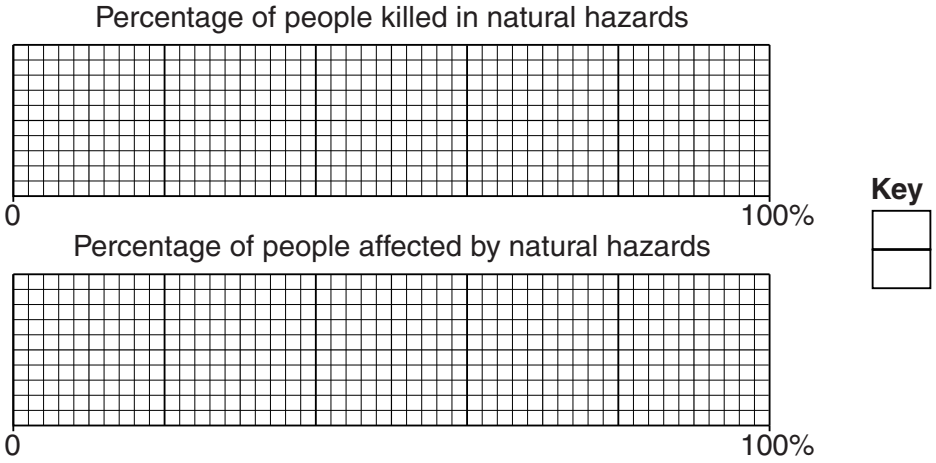
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.....[2]

(b) (i) It is estimated that;

- 90% of the people killed in natural hazards live in developing countries,
- 98% of the people affected by natural hazards live in developing countries.

Show these percentages by completing two divided bar graphs. Also complete the key for developing and developed countries.



[2]

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(ii) Poor preparation is one reason why the effects of natu
developing countries.

Three methods of preparation for natural hazards are l
the name of a natural hazard for which the method st
three different natural hazards.

method of preparation	n
build shelters away from the coastline stocked with emergency supplies of food and drinking water	.....
train emergency rescue teams, with sniffer dogs, and have heavy lifting equipment ready for use	.....
government controlled store of staple foodstuffs such as wheat and corn, enough to last at least 3–6 months	.....

[3]

(iii) Explain why more people are killed in natural hazards in developing countries than in developed countries. Refer to at least **two** different reasons in your answer.

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.....[4]

(iv) Despite the human costs, millions of people in the world continue to live in areas affected by natural hazards. State **three** reasons for this.

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.....[3]

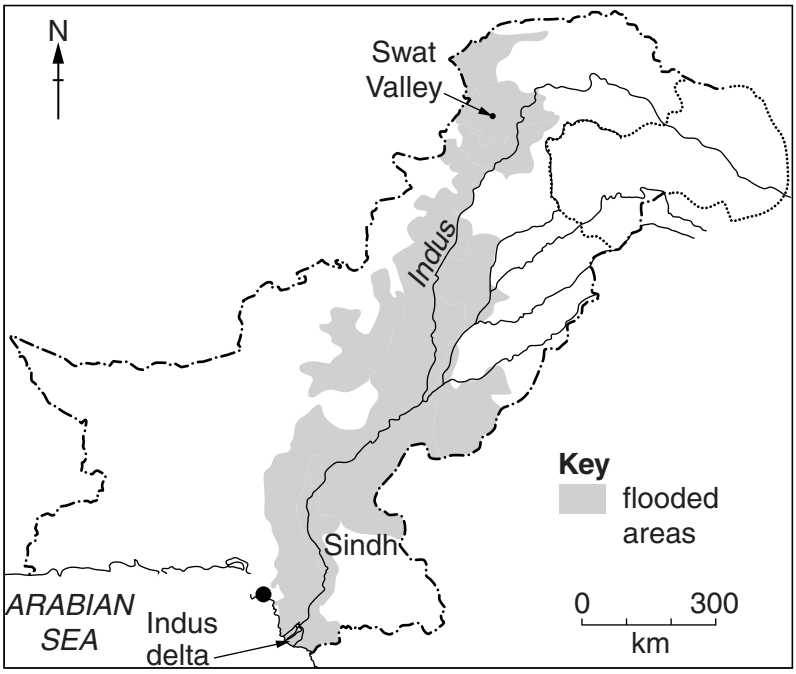
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(c) The monsoon rains in Pakistan in summer 2010 were much than normal. They caused the worst flooding seen in Pakista

The heaviest rains fell in the mountains of the north. Floods and continued to sweep south for more than 1000 km.

Look at the map and information box about the effects of the

flooded areas in Pakistan (early August 2010)



(i) The great flood of 2010 in Pakistan was described as a '1 in 100 year event'. Why?

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.....[1]

(ii) Describe what the map shows about the distribution of flooded areas in Pakistan in August 2010.

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.....[3]

(iii) Why were desert areas in the south such as Sindh, where rainfall was lower, still affected by the flooding?

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.....[1]

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(iv) Suggest reasons why the number of lives lost in the floo
the number of people affected by the floods.

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(d) Read the report below. It gives more information about the effects on Pakistan of the floods in 2010.

Nobody in the flooded villages had food. People were hungry. Transport links with other places were broken. The government was ill-equipped to respond to the size of the disaster. Aid relief from outside was slow to reach Pakistan. The shortage of clean fresh water supplies meant an increased risk of diseases such as cholera.

Farmers who could go back to their land after flood waters went down were shocked by what they found. Their green fields of healthy summer crops had disappeared. They had been replaced by barren areas of mud with scattered stones, tree trunks and anything else that the strong flows of flood water could move. Where could they start?

The Pakistani poor were the worst hit. Without shelter, food, animals, seeds and tools, people used to surviving on US$2 per day faced weeks without income, because they could not grow or sell anything. Many with little before the flood were left with nothing after it, worsening the rural poverty trap. Villages lost roads, bridges, clinics, schools, clean water and power supplies.

For future years, floods leave layers of silt on the land, renewing soil fertility. The record rains of 2010 will have helped to fill underground water stores, which have been going down for years. But will poor farmers still be in their villages to reap the benefits?

(i) State one short-term effect, and one likely long-term effect, of the 2010 flood waters on cropland in Pakistan.

short-term effect .....

.....

long-term effect .....

.....[2]

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(ii) How good are the chances of Pakistani farmers and v
poverty cycle in future years in the rural areas of Pakista
as fully as you can.

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.....[4]

(e) Some natural hazards, such as earthquakes, often have more serious effects in urban than in rural areas.
Other natural hazards, such as drought, often have greater effects in rural than in urban areas.

Explain why the effects of different natural hazards vary between urban and rural areas.

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[Total: 40 marks]

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