

Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

CANDIDATE NAME				
CENTRE NUMBER		ANDIDATE UMBER		

7 9 7 2 0 8 4 0 5 8

ENVIRONMENTAL MANAGEMENT

0680/13

Paper 1

October/November 2015
1 hour 30 minutes

Candidates answer on the Question Paper.

No Additional Materials are required.

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 an HB pencil for any diagrams or graphs.

Do not use staples, paper clips, 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.

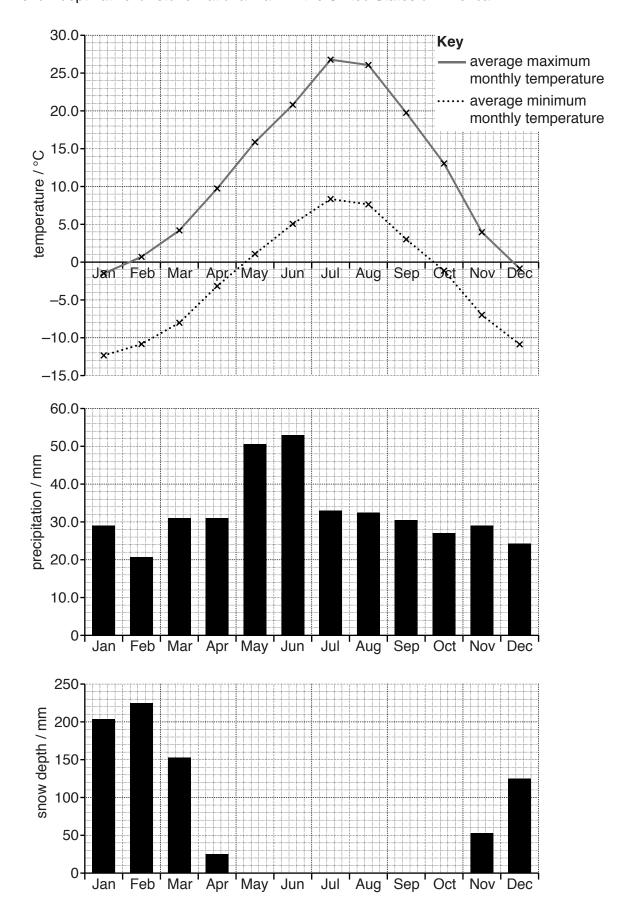
At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [] at the end of each question or part question.

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

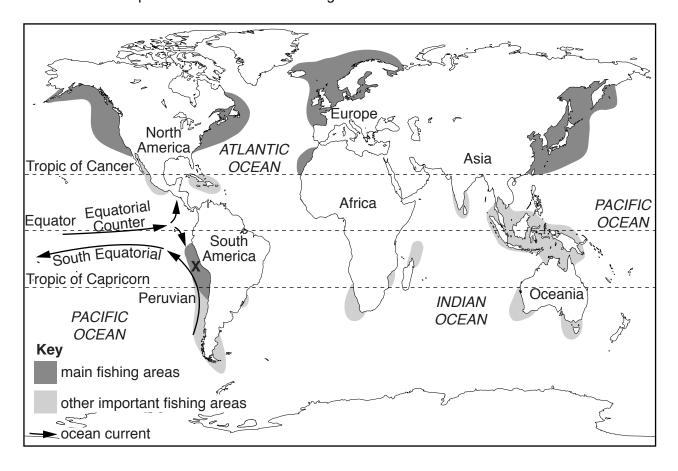


1 The graphs below show average maximum and minimum monthly temperatures, precipitation and snow depth at Yellowstone National Park in the United States of America.



(a)	Use information from the graphs to complete the passage.
	In Yellowstone National Park there is snow on the ground for months
	of the year. The temperature stays below freezing in the months of
	and with a maximum
	temperature of Summers are wet, with most rain falling in
(b)	The mountain slopes in Yellowstone National Park are covered by taiga vegetation (coniferous trees).
	Describe and explain how coniferous trees are adapted to the climate shown on the graphs.
	[4]
(c)	National Parks are set up to conserve the biodiversity of ecosystems.
	Describe two other strategies for conserving the biodiversity of ecosystems.
	হো

2 Look at the map below of world ocean fishing areas.



(a) (i)	Describe the location of the main ocean fishing areas shown on the map.
	[2
(ii)	In some years area X on the map is a very productive fishing area. In other years, very few fish are caught. Explain how ocean currents cause these changes.
	ΓΛ

(D)	fish left to reproduce. This is called overfishing.	ougn
	Explain two causes of overfishing.	
		[1]

3 Look at the newspaper report below.

(a)

11.00 6 March 2013

Europe's highest active volcano erupts

Mount Etna, on the island of Sicily, erupted last night throwing ash and lava high into the sky. Mount Etna has been erupting periodically for over 3500 years. In 2008, an eruption continued for 417 days and there were more than 200 earthquakes.

Mount Etna is 3329 metres high and covers an area of $1190 \, \text{km}^2$. Over one million people live in towns and villages on the slopes of the volcano, where there are many vineyards and orchards.

Aeroplanes sometimes have to alter their routes to avoid flying through ash clouds to reach Catania airport at the foot of the volcano.

(i)	State how many people live on the slopes of Mount Etna.
	[1]
(ii)	Using the information in the newspaper report and your own knowledge, explain why so many people live on the slopes of Mount Etna.
	[3]

(b)	Describe strategies for managing the impacts of volcanic activity.
	[4]
(c)	The newspaper report states there were 200 earthquakes in 2008. Suggest reasons why no people died as a result of these 200 earthquakes.
	[2]

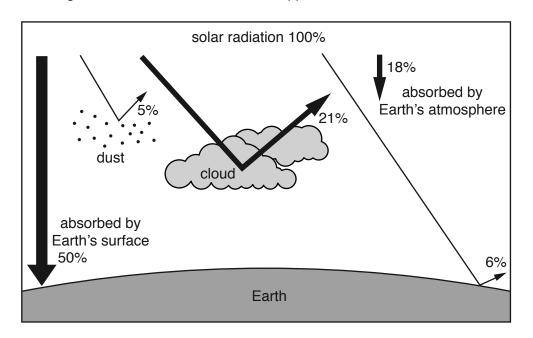
4 Some of the reasons why people are moving to Lagos, a large city in Nigeria, from rural areas are shown below.

В

		jobs in factories	(government housing)	
		C drought few doc	tors little investment by government G more educational opportunities	
		tribal unrest wages	above average most houses have electricity	
(a)	(i)	State the name given to the moven	nent of people to live in a different place.	[1]
	(ii)	Give the letters of three push and		[1]
	()	push factors	pull factors	
		1	1	
		2	2	
		3	3	[2]
(b)	(i)	Describe and explain how the grow	th of cities increases air pollution.	
				[3]

(ii)	Suggest and explain two strategies for managing the problem of informal settleme such as shanty towns.			
		1		

5 Look at the diagram below, which shows what happens to solar radiation.



(a) (i) Complete the table below.

solar radiation	percentage
reflected by clouds	
reflected by dust	
reflected by the surface of the Earth	

[1]

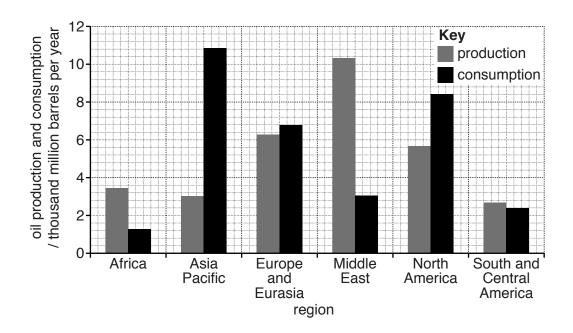
(ii) Calculate the percentage of solar radiation that the diagram shows never reaches the Earth's surface.

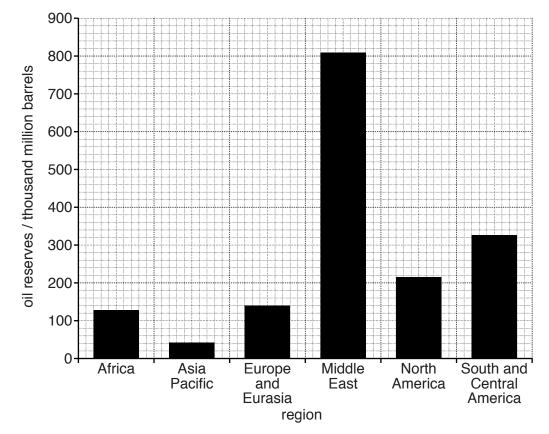
Space for working.

	% [1]
b)	State two factors that cause temperatures to vary from place to place on the Earth's surface.
	[0]

(c)	(i)	Global warming is the increase in temperature of the Earth's atmosphere. Describe and explain two problems caused by global warming.
		[4]
	(ii)	Explain why some people might view global warming as an advantage rather than a problem.
		[6]

6 Look at the bar graphs below, which show the reserves, production and consumption of oil in 2012.





(a) (i) State the region that produced the most oil in 2012.

.....[1]

(ii)	Calculate the difference between production and consumption in the Middle East in 2012. Space for working.
	thousand million barrels/year [1]
(iii)	Use the information in the two graphs to explain why imports of oil by countries in the Asia Pacific region are likely to remain high in the future.
	[3]
(b) (i)	State two ways in which crude oil is transported around the world.
(ii)	State and explain two environmental problems caused by the transport of oil around the
	world.
	[4]

BLANK PAGE

BLANK PAGE

© UCLES 2015 0680/13/O/N/15

BLANK PAGE

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cie.org.uk after the live examination series.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.

© UCLES 2015 0680/13/O/N/15