



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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CANDIDATE
NUMBER

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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.

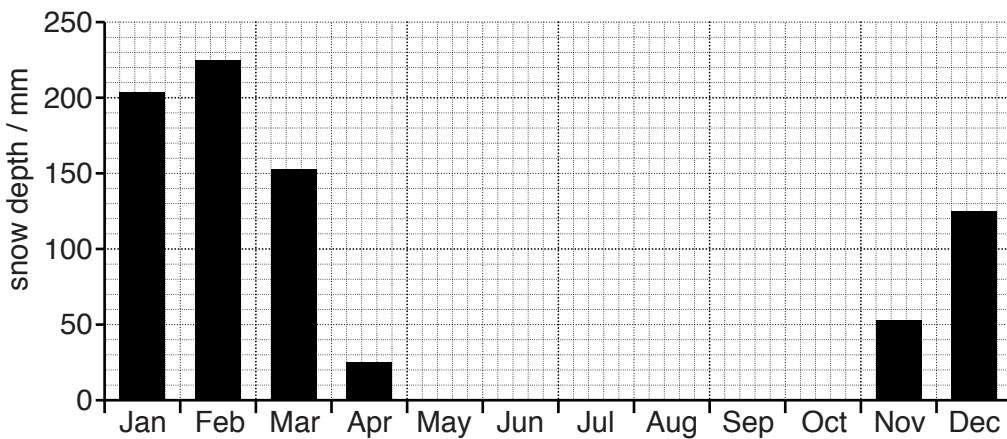
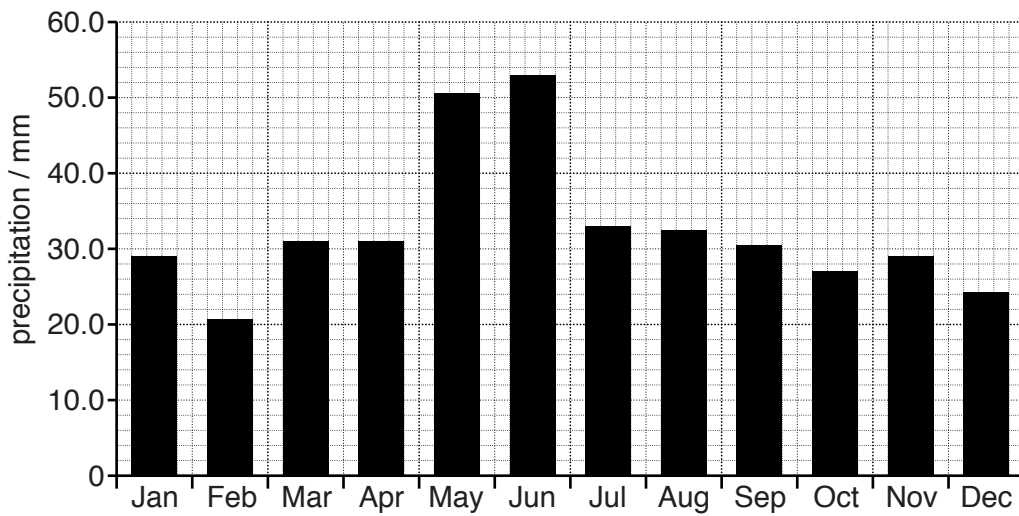
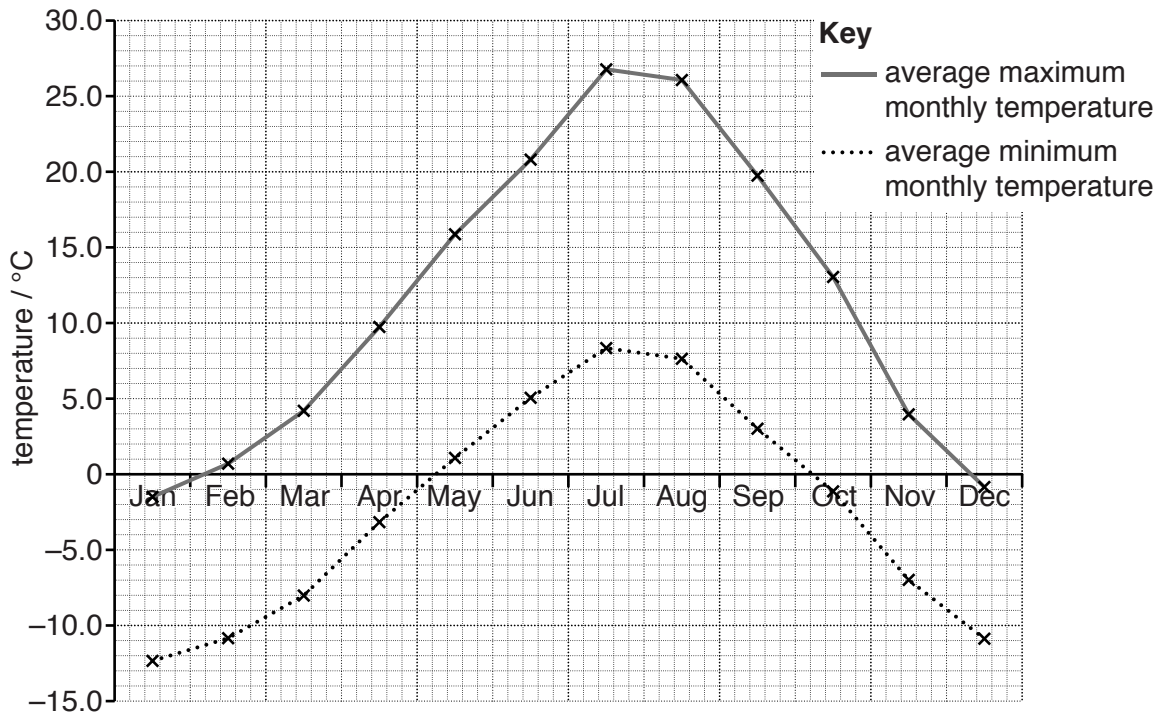
You may lose marks if you do not show your working or if you do not use appropriate units.

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.



3 Look at the newspaper report below.

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 km². 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.

(a) (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.

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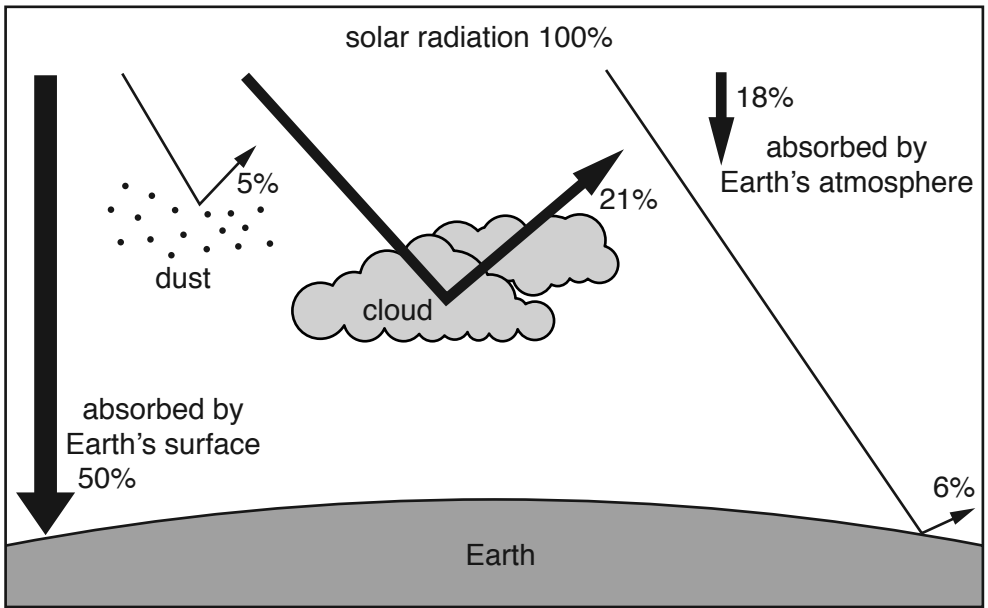
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.....[3]

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.

.....
[2]

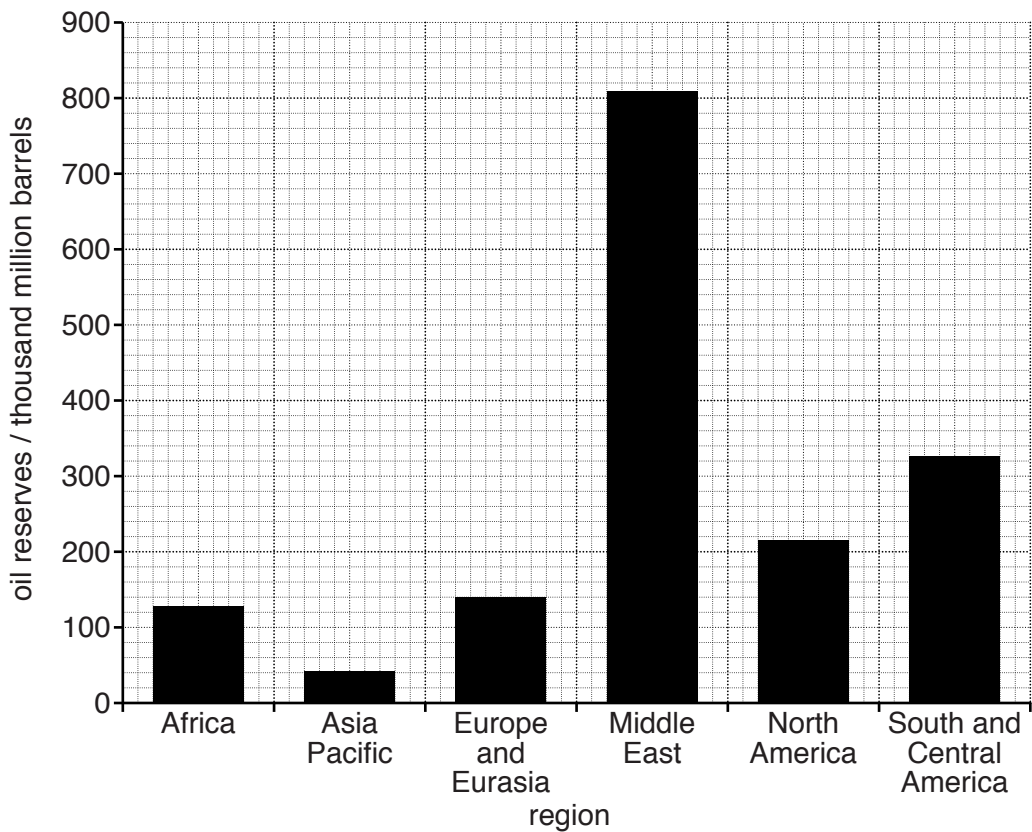
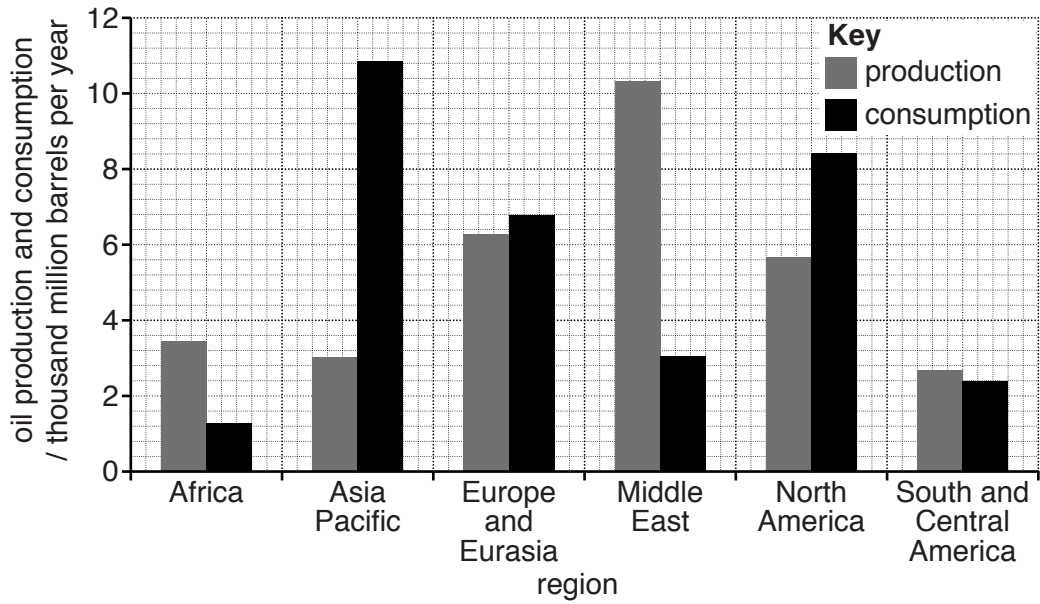
(c) (i) Global warming is the increase in temperature of the Earth's atmosphere. Describe and explain **two** problems caused by global warming.

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.....[4]

(ii) Explain why some people might view global warming as an advantage rather than a problem.

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

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.

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.....[3]

- (b) (i) State **two** ways in which crude oil is transported around the world.

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

- (ii) State and explain **two** environmental problems caused by the transport of oil around the world.

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.....[4]

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