



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

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**ENVIRONMENTAL MANAGEMENT**

**0680/11**

Paper 1

**October/November 2018**

**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.

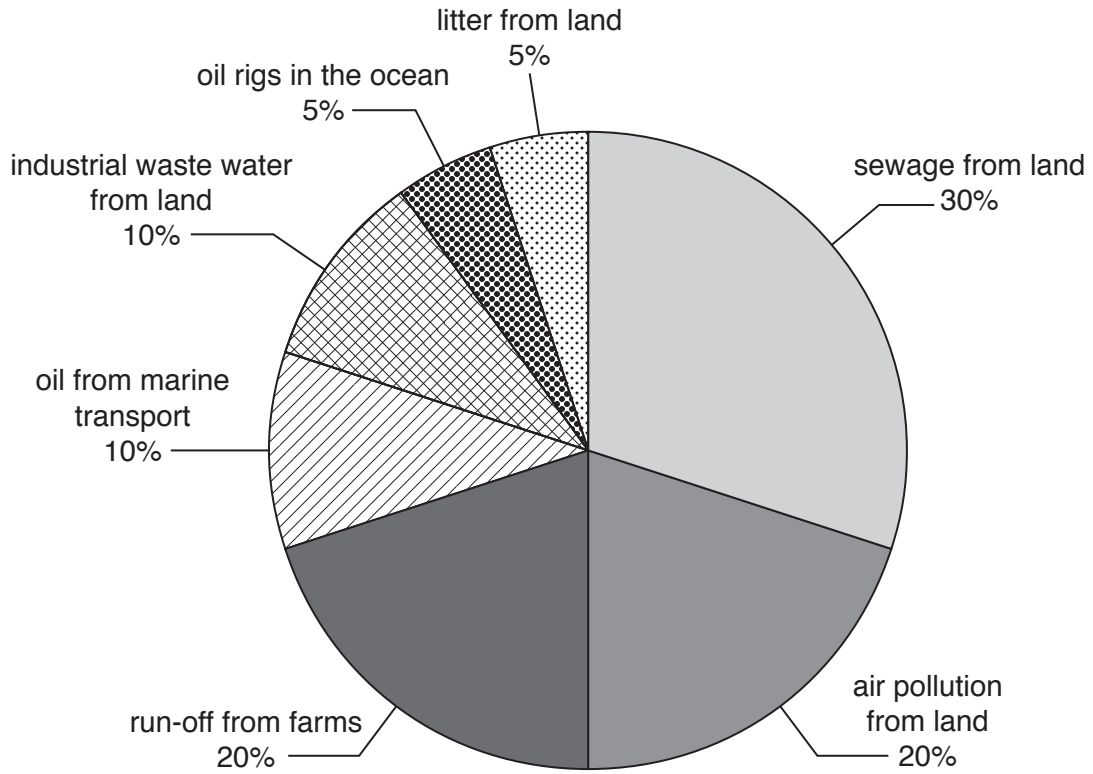
You may lose marks if you do not show your working or if you do not use appropriate units.

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 **14** printed pages and **2** blank pages.

1 The pie graph shows sources of marine pollution.



(a) (i) Calculate the percentage of marine pollution that comes from the land.

..... % [1]

(ii) Complete the table by matching **one** source of marine pollution from the pie graph with each type of pollution.

type of pollution	source of marine pollution
acid rain	.....
excess fertiliser	.....
pieces of plastic	.....
oil spill	.....

[2]

(b) (i) Describe **three** ways in which oil spills damage ecosystems.

1 .....

.....

2 .....

.....

3 .....

.....

[3]

(ii) Suggest strategies for dealing with oil spills.

.....

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.....

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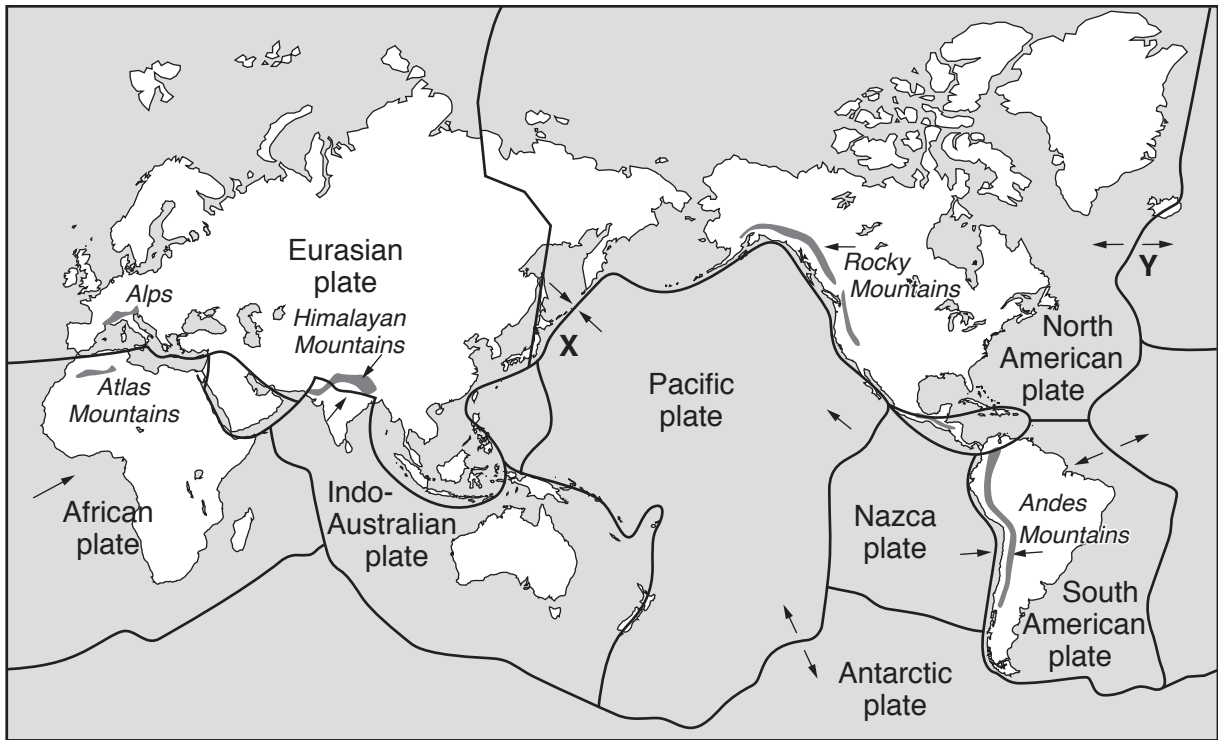
[3]

(c) Radioactive waste can be detected in oceans.




Name **one** source of this radioactive waste.

..... [1]

2 The map shows some plate boundaries and fold mountains.



**Key**

-  plate boundary
-  direction of plate movement
-  fold mountain

(a) (i) Name the fold mountains on the African plate.

.....[1]

(ii) Name the **two** plates that are forming the Himalayan Mountains.

1 .....

2 ..... [1]

(iii) State how the plate boundaries forming the Andes Mountains differ from those forming the Himalayan Mountains.

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

(iv) Describe how fold mountains are formed.

.....  
.....  
.....  
.....  
.....  
.....  
.....[3]

(b) Name the types of plate boundary at **X** and **Y** on the map.

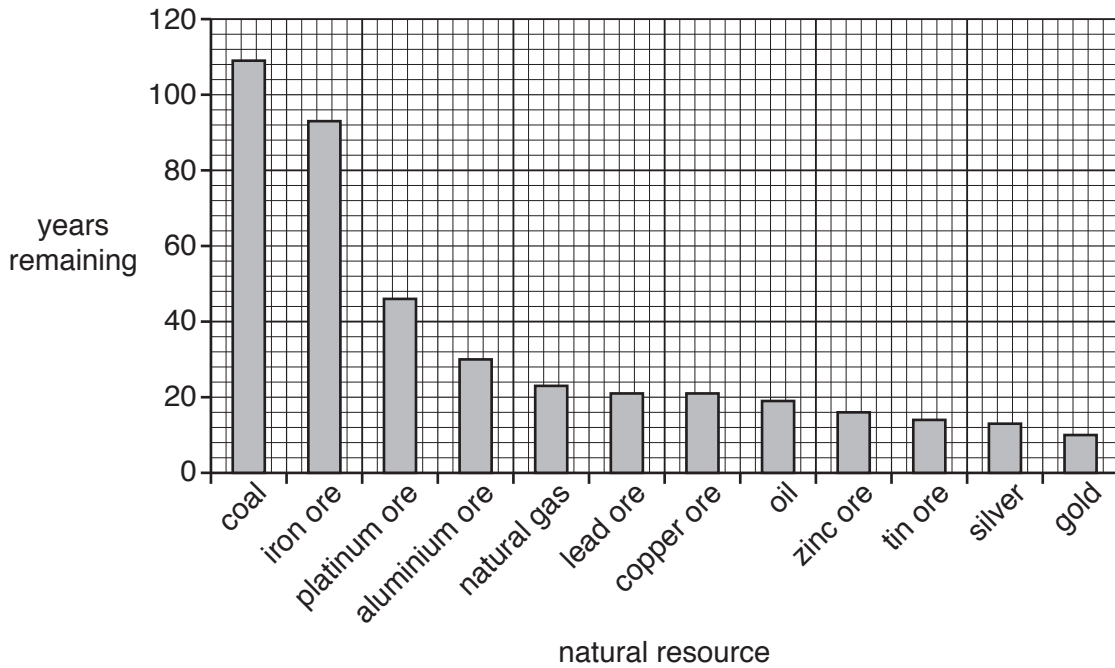
**X** .....  
**Y** ..... [1]

(c) Volcanic activity occurs on plate boundaries.

Suggest **three** ways volcanic activity can benefit people.

1.....  
.....  
2.....  
.....  
3.....  
..... [3]

3 The bar graph shows the number of years some natural resources were expected to last when this data was published in 1982.



(a) (i) Name **three** natural resources in the bar graph that are fossil fuels.

1 .....

2 .....

3 .....

[1]

(ii) Determine the number of years the bar graph shows that aluminium ore and tin ore were expected to last.

aluminium ore ..... years

tin ore ..... years

[1]

(iii) Name the ores in the bar graph that were expected to last the longest time and the shortest time.

longest time .....

shortest time .....

[1]

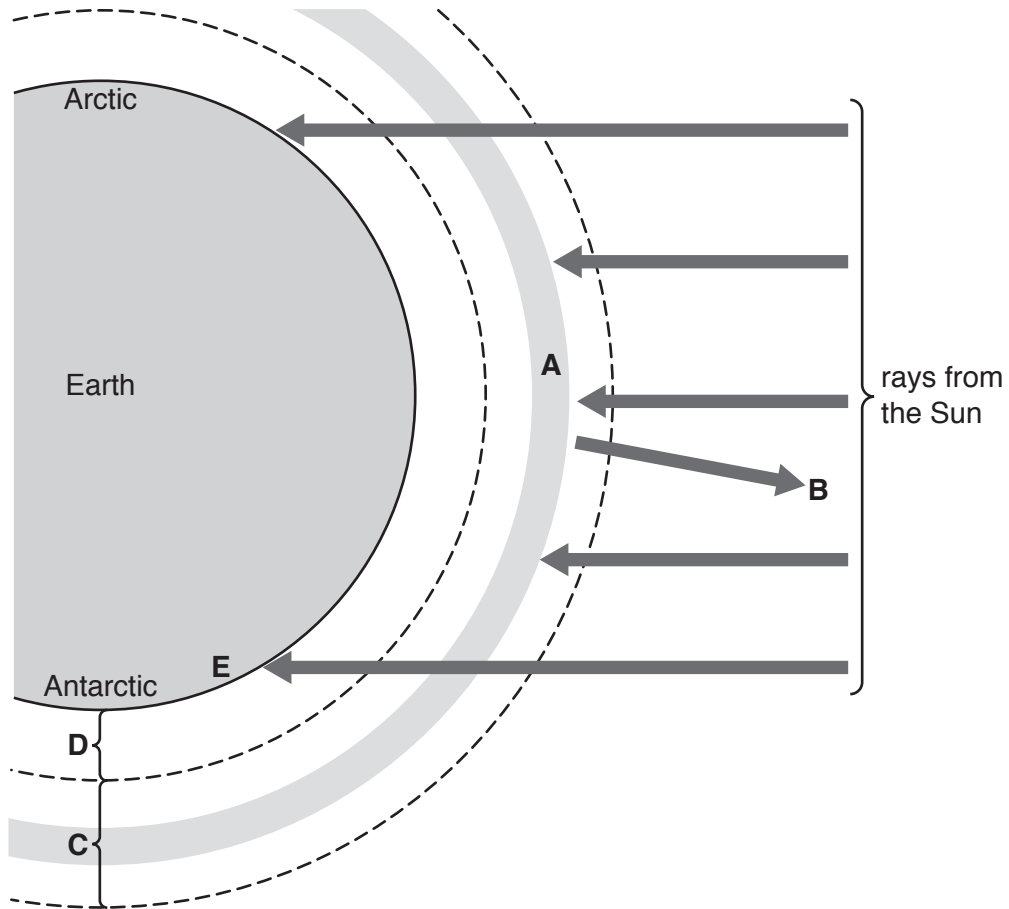
(iv) Give **one** reason why, in 2016, there were still deposits of all the natural resources shown in the bar graph.

.....

.....[1]



4 The diagram shows the atmosphere around the Earth.



(a) Complete the table using letters **A** to **E** from the diagram.

feature	letter
ozone layer	.....
stratosphere	.....
troposphere	.....
ultra-violet light reflected into space	.....
ultra-violet radiation reaching the Earth's surface	.....

[3]



(b) Describe how human activities have damaged the ozone layer.

.....  
.....  
.....  
.....  
.....  
.....  
.....[3]

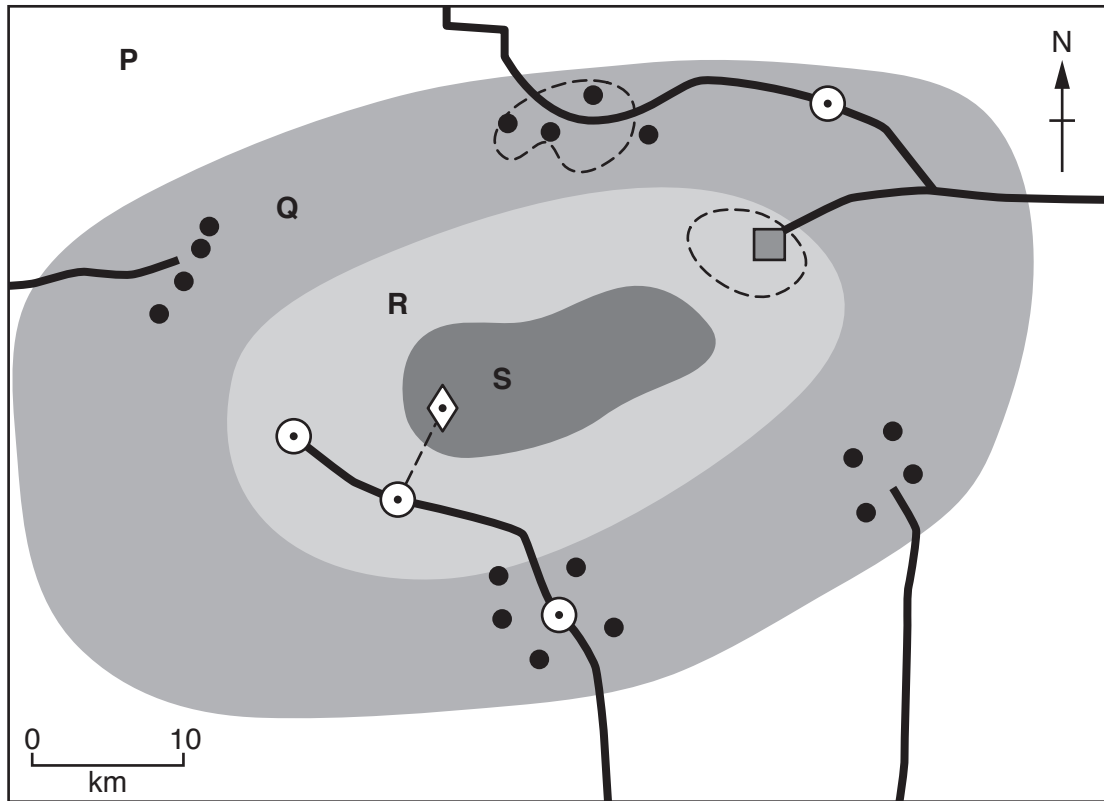
(c) Production of the chemicals that caused damage to the ozone layer was banned in 1987 by an international agreement.

Suggest why an international agreement was needed.  
.....  
.....[1]

(d) The depletion of the ozone layer is at its greatest over the Antarctic. Australia and Argentina are countries close to the Antarctic.

Suggest reasons why people living in Australia and Argentina are advised to keep their skin covered and wear a hat when out in the sun.  
.....  
.....  
.....  
.....  
.....  
.....  
.....[3]

5 The diagram shows the structure of a biosphere reserve. Four areas, **P**, **Q**, **R** and **S**, are labelled.



**Key**

- ◊ laboratory
- ⊙ education and training facility
- tourist facility
- road
- - - path
- village

(a) (i) Match letters **P, Q, R** and **S** on the diagram, with the descriptions in the boxes.

letter of area .....

Local people live in villages in the reserve. The local people work with conservation agencies to manage resources sustainably.

letter of area .....

The ecosystem is protected. Only scientists are allowed to enter.

letter of area .....

The ecosystem is managed. Education, training and tourist facilities are present.

letter of area .....

This land surrounds the biosphere reserve.

[2]

(ii) Determine the length of the path from the laboratory to the nearest education and training facility.

..... km [1]

(iii) Suggest ways the local people would benefit from the biosphere reserve.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....[4]

(b) Biosphere reserves are **one** strategy for conserving ecosystems.

Describe other strategies for conserving ecosystems.

.....

.....

.....

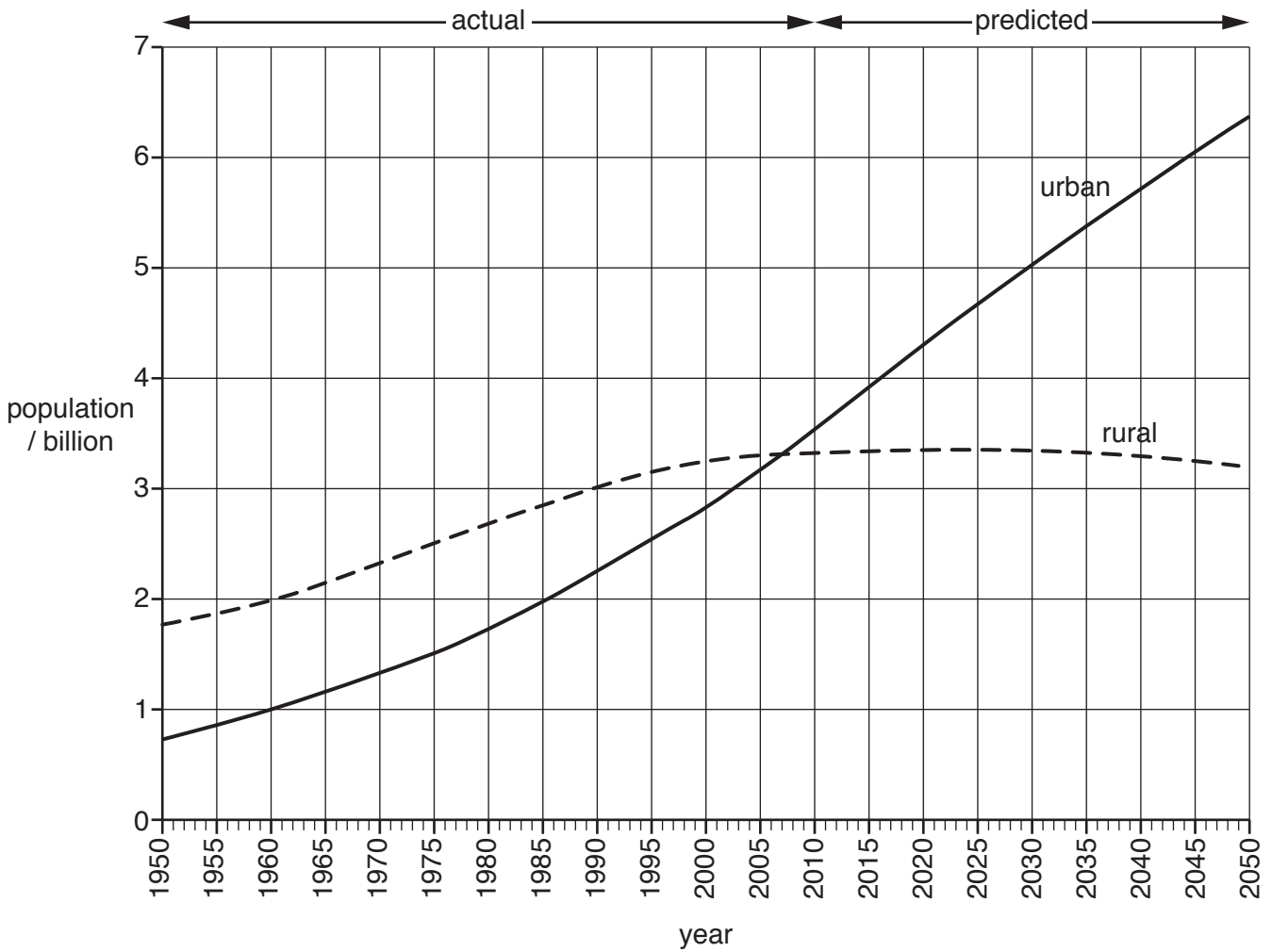
.....

.....

.....

.....[3]

6 The graph shows the urban and rural populations of the world between 1950 and 2050. The population figures after 2010 are predictions.



(a) (i) Use the graph to determine the year when the urban and rural populations were the same.

.....[1]

(ii) Describe the trends in urban and rural populations between 1950 and 2050 shown on the graph.

urban population .....

.....

rural population .....

.....

[2]

(b) Migration can cause urban population to change.

(i) State what is meant by the term *migration*.

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

(ii) Suggest **one** reason, other than migration, why urban populations change.

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

(c) Describe **two** problems caused by the rapid growth of urban populations in developing countries.

1.....  
.....  
2.....  
.....  
[2]

(d) Suggest strategies that can be used to limit population growth.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....[3]



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