

Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

| CANDIDATE NAME | | | | | |
|-------------------|--|--|---------------------|--|--|
| CENTRE NUMBER | | | CANDIDATE NUMBER | | |

5 9 9 7 6 9 4 3 8 3

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.

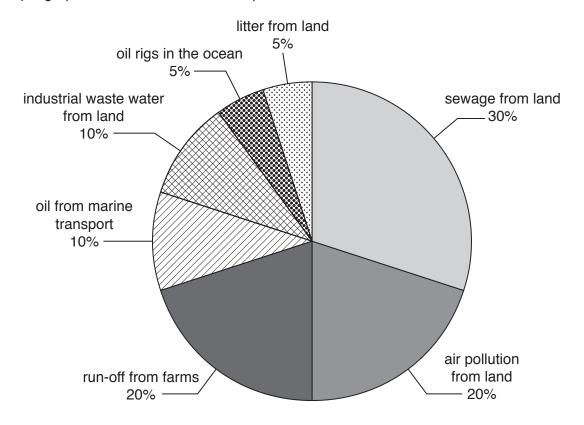
You may lose marks if you do not show your working or if you do not use appropriate units.

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.



1 The pie graph shows sources of marine pollution.



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

| 0/_ | [1] |
|--------|-----|
| /0 | נין |

(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 | |

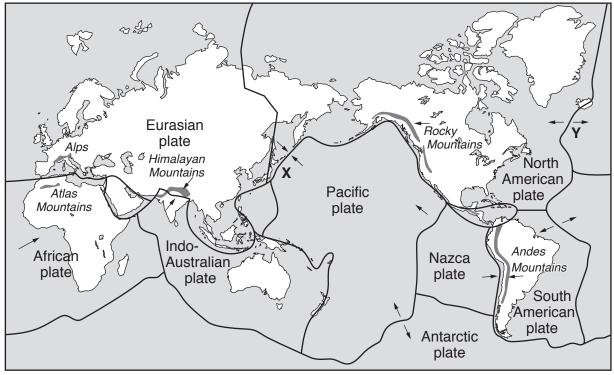
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[2]

| (b) | (i) | Describe three ways in which oil spills damage ecosystems. | |
|-----|------|--|-------|
| | | 1 | |
| | | | |
| | | 2 | |
| | | | |
| | | 3 | |
| | | | 3 |
| | (ii) | Suggest strategies for dealing with oil spills. | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | [| 3 |
| (c) | Rac | dioactive waste can be detected in oceans. | |
| | Nar | ne one source of this radioactive waste. | |
| | | [| 1 |

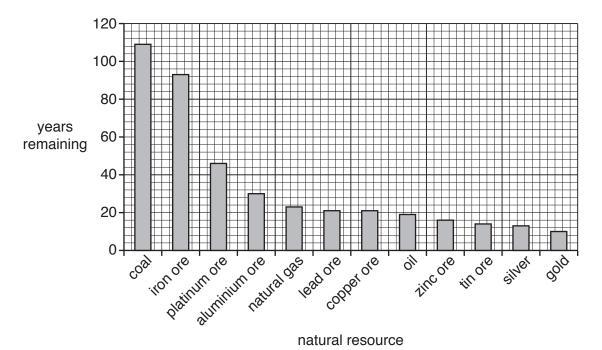
2 The map shows some plate boundaries and fold mountains.



| | Antarctic plate |
|---------|---|
| Key | |
| pl | ate boundary |
| → di | irection of plate movement |
| fo | old 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. |
| | |
| | ra |

| | (iv) | Describe how fold mountains are formed. | |
|-----|----------|---|---------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | [3] |
| (b) | Nar | ne the types of plate boundary at X and Y on the map. | |
| | X | | |
| | Υ | | [1] |
| (c) | Vol | canic activity occurs on plate boundaries. | |
| | Sug | gest 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.



Name **three** natural resources in the bar graph that are fossil fuels.

Give one reason why, in 2016, there were still deposits of all the natural resources shown

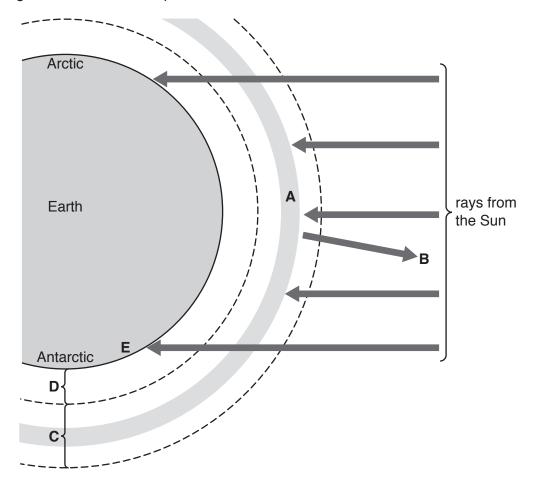
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in the bar graph.

(iv)

| (b) | Some natural resources are mined by the opencast (open-pit) method of mining. |
|-----|--|
| | Describe the opencast (open-pit) method of mining. |
| | |
| | |
| | |
| | |
| | |
| | [3] |
| (c) | Some people think that wind power is a viable alternative to energy produced from fossi fuels. |
| | Suggest disadvantages of wind power as a source of energy. |
| | |
| | |
| | |
| | |
| | |
| | [3] |

4 The diagram shows the atmosphere around the Earth.



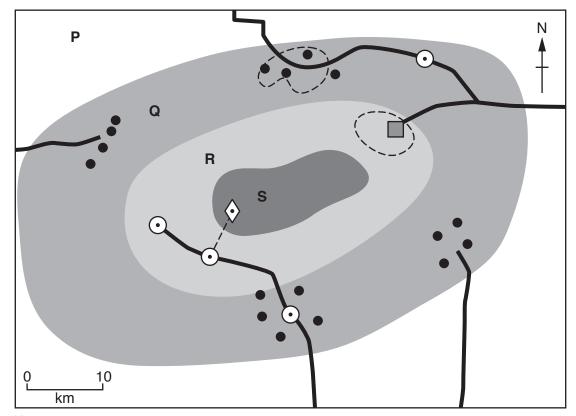
(a) Complete the table using letters A to E from the diagram.

| 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) | M | atch letters P, Q | , R an | d S on the diag | gram, with t | he de | scriptions in the I | ooxes. |
|-----|-------|----|--|---------------|---|---------------------------|--------------------|--|--------|
| | | | | rese | letter of are al people live in rve. The local p rervation agenc | villages in eople work | with | | |
| | | | | | urces sustainat | | | | |
| | | | letter of The ecosystem scientists are a | ı is pro | otected. Only | The ecos | system n, trair | rea is managed. ning and tourist esent. | |
| | | | | | letter of are This land surr biosphere res | ounds the | | | [2] |
| | (ii) | | etermine the leng | gth of | the path from th | ne laborator | ry to th | e nearest educa | |
| | | | | | | | | | km [1] |
| | (iii) | S: | uggest ways the | local | people would b | enefit from | the bi | osphere reserve | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
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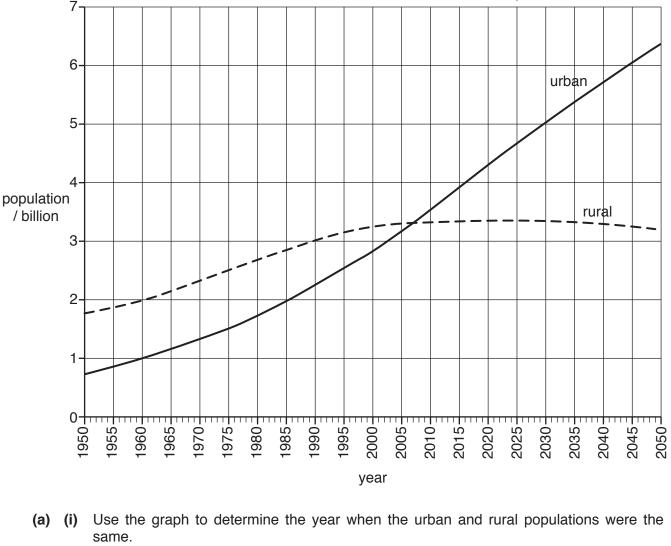
| (b) | Biosphere reserves are one strategy for conserving ecosystems. | |
|-----|---|-----|
| | Describe other strategies for conserving ecosystems. | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | [0] |

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

actual

predicted

[2]



| -, | (-) | same. |
|----|------|--|
| | | [1] |
| | (ii) | Describe the trends in urban and rural populations between 1950 and 2050 shown on the graph. |
| | | urban population |
| | | rural population |
| | | |

| (b) Migration can cause urban population to change. | | ration can cause urban population to change. | |
|---|------|--|--|
| | (i) | State what is meant by the term <i>migration</i> . | |
| | | [1] | |
| | (ii) | Suggest one reason, other than migration, why urban populations change. | |
| | | [1] | |
| (c) | | escribe two problems caused by the rapid growth of urban populations in developing countries. | |
| | | | |
| | | | |
| | | [2] | |
| (d) | Sug | suggest strategies that can be used to limit population growth. | |
| | | | |
| | | | |
| | | | |
| | | [3] | |
| | | | |

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