



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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CANDIDATE
NUMBER

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ENVIRONMENTAL MANAGEMENT

0680/02

Paper 2

May/June 2007

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.

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.

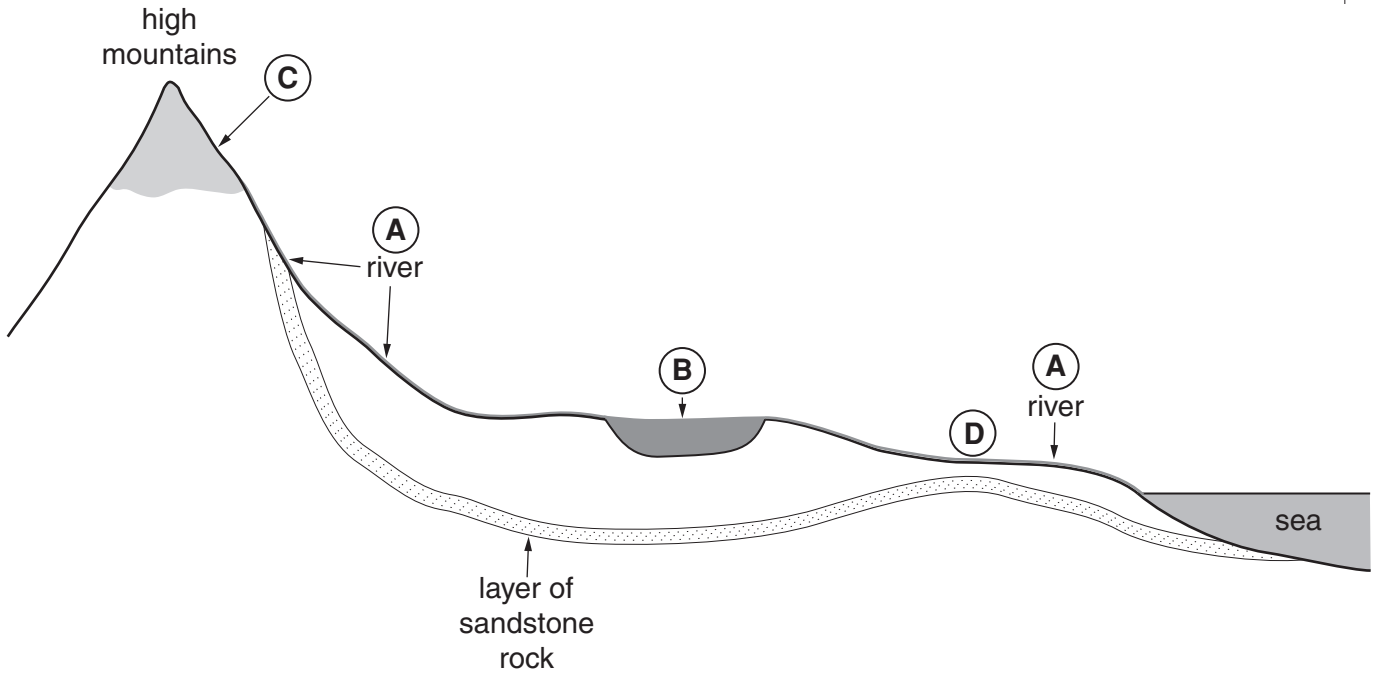
For Examiner's Use	
1	
2	
Total	

This document consists of **15** printed pages and **1** blank page.



1 (a) Look at the cross-section.

Section from the mountains to the sea



(i) Name the **two** stores of fresh water labelled **B** and **C** on the section.

B

C [2]

(ii) Why might it be possible for people to obtain fresh water, at point **D**, other than from the river?

.....
.....
.....

(iii) How could people obtain this water?

.....
.....
.....
.....

[3]

(iv) Choose **one** of the sources from **A–D** which is likely to have water that will be safe and clean for people to use. Explain your choice.

Letter

Explanation

.....

.....[2]

(v) Which one of the four sources is **least** likely to give clean water? Explain your choice.

Letter

Explanation

.....

.....

.....

.....[3]

(b) Dams are often built to hold back reservoirs for water supply.

(i) Give the name and location of a dam.

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(ii) Explain why the dam was built and what advantages it has brought to the local people.

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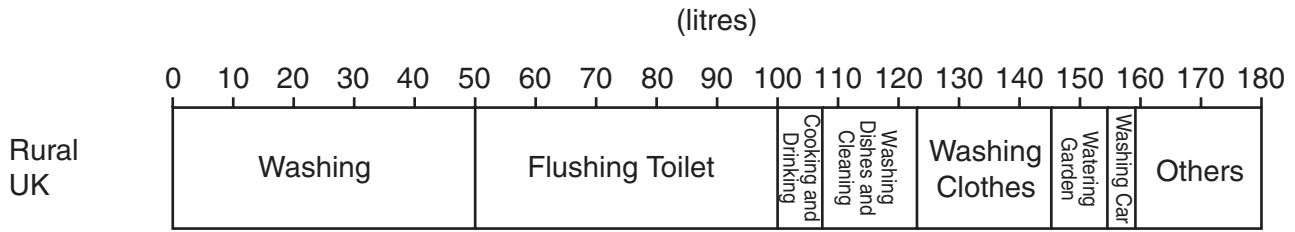
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.....[5]

(c) The divided bar graphs show average amounts of water used, by a family each day, in rural areas of the UK and Bangladesh. They also show how the water is used.

Average daily water use and uses by a family in rural areas of the UK and Bangladesh

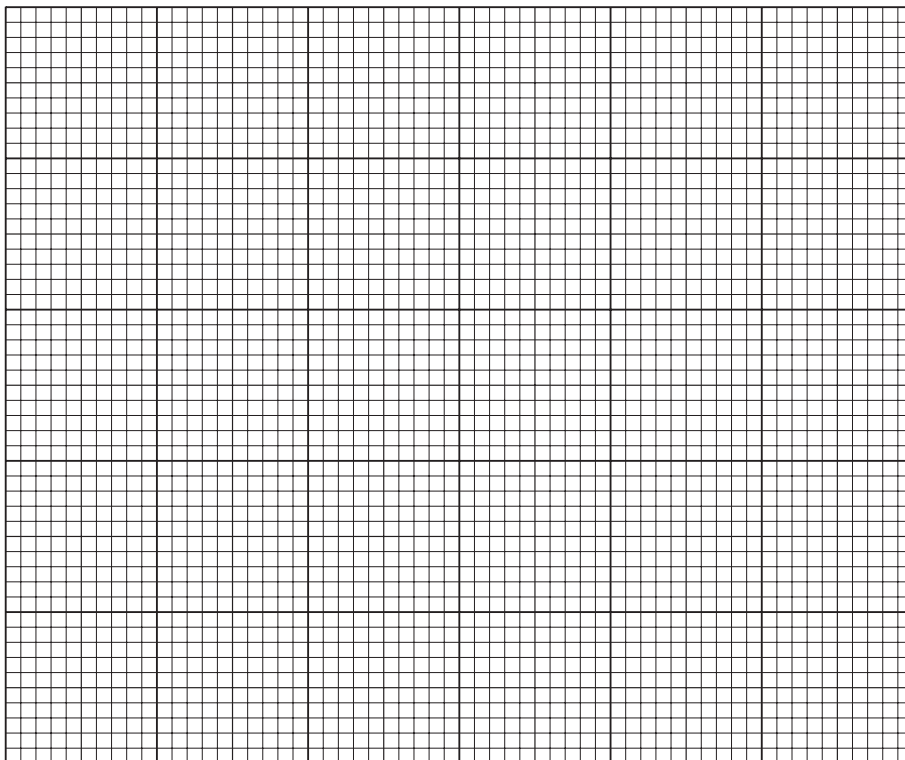


- (i) How many more litres of water are used by a family in the UK than in Bangladesh?
.....[1]
- (ii) How many times greater is the amount used by a family in the UK?
.....[1]
- (iii) For which one of the uses named in the graphs is the daily consumption of water almost the same in the UK and Bangladesh?
.....[1]
- (iv) Suggest a reason for this.
.....
.....[1]
- (v) The UK is a developed country. Bangladesh is a developing country. Explain why there are differences in use of water between countries with different levels of economic development.
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....[4]

- (d) There are large differences in access to safe water supplies between urban and rural areas in many developing countries in Africa. Two examples are shown in the table.

% of people with access to safe water supplies		
Country	Urban areas	Rural areas
Kenya	70	50
Nigeria	85	40

- (i) On the graph paper below, draw a bar graph to show these percentages. Complete your graph with a key.



[4]

- (ii) Give reasons why there are differences in access to safe water supplies between urban and rural areas in many developing countries.

.....

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.....[3]

(e) Look at the cartoon about a rural area in Africa.

Walking four hours to fetch water



(i) What does it suggest about the views of some people in the area to change and development?

.....

.....

.....

..... [2]

(ii) Explain how sinking a new well can reduce disease, increase economic output and improve the quality of life for everyone in rural areas in developing countries, especially for the women and children.

.....

 [5]

(iii) Why is outside help from charities such as Water Aid often needed?

.....

 [3]

[Total: 40]

2 (a) Look at the two plate boundaries shown in Diagrams A and B.

Diagram A

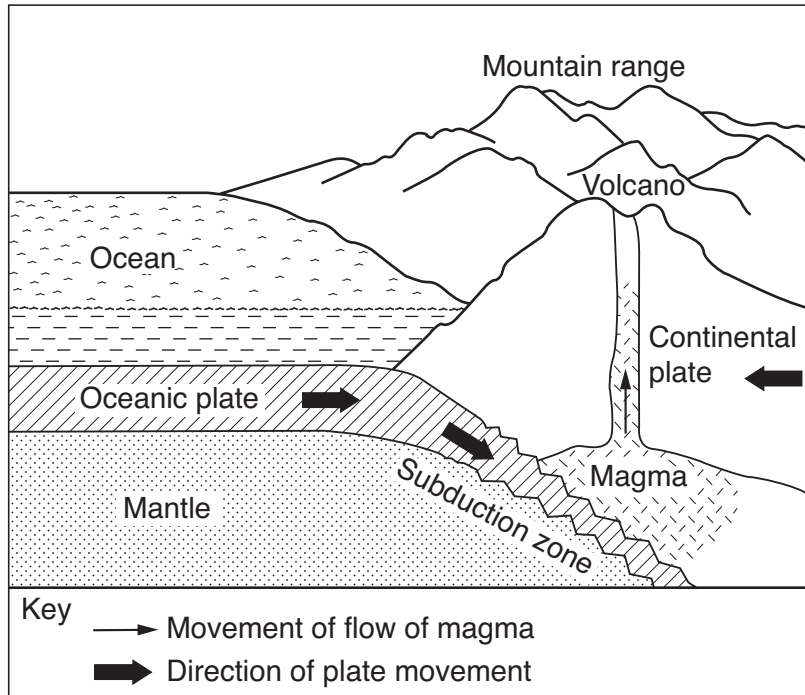
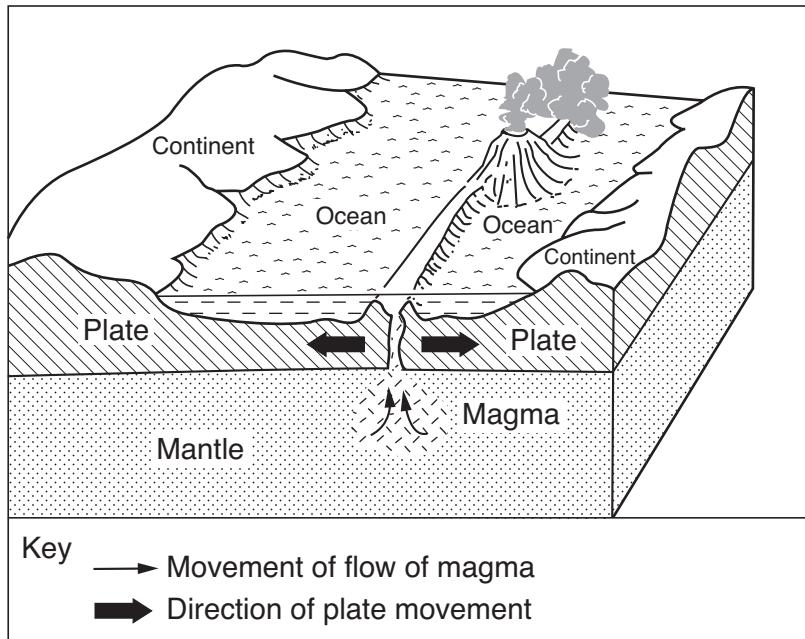


Diagram B



(i) Describe what is happening to the two plates in A and the two plates in B.

A

.....

B

..... [2]

(ii) The source of the magma is different in the two diagrams. Where has the magma come from in **A** and **B**?

A

.....

B

..... [3]

(iii) Why are volcanoes formed at plate boundaries?

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..... [2]

(iv) State **one** difference between volcanoes along these two types of plate boundary.

.....

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..... [2]

(v) Some volcanic eruptions result in great loss of life; in others, no one is killed. Give reasons for the large difference in numbers of people killed.

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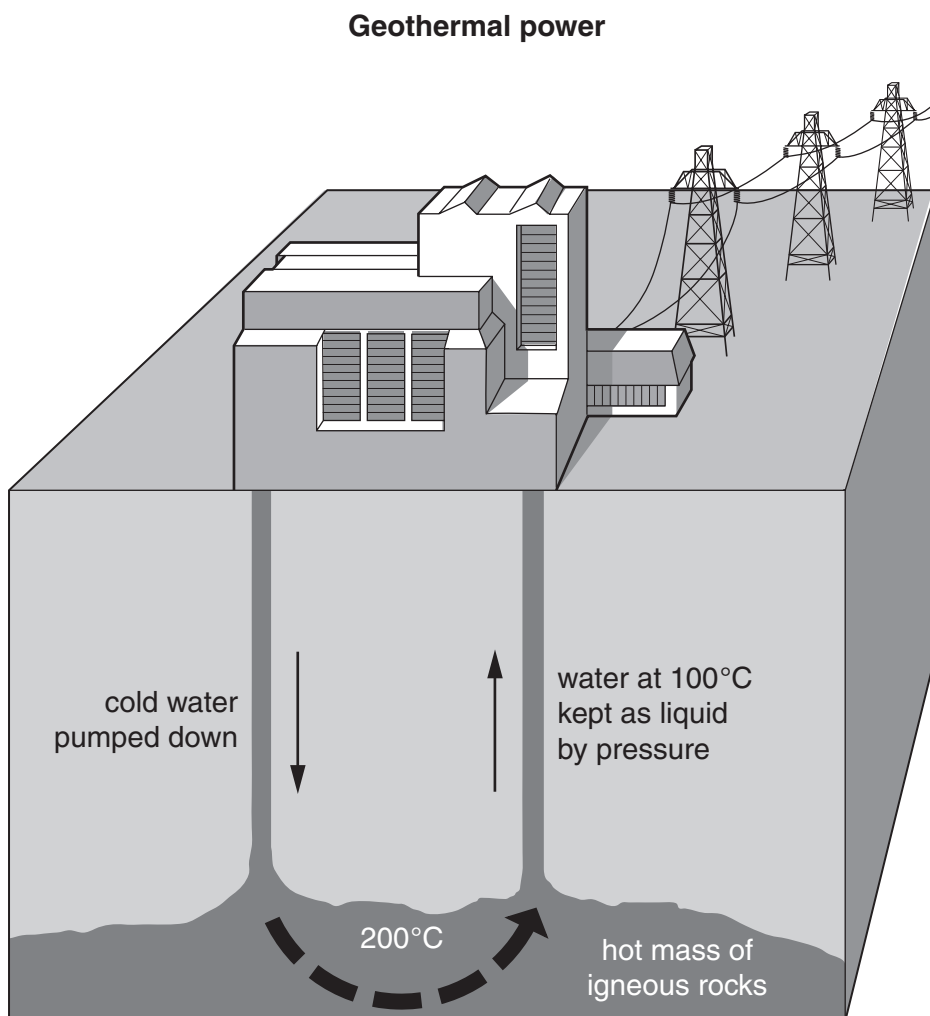
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..... [4]

- (b) In some countries electricity is made from geothermal power. Look at the diagram of the geothermal power station.



- (i) How is the electricity produced?

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.....

- (ii) Why are areas of active volcanic activity needed for its production?

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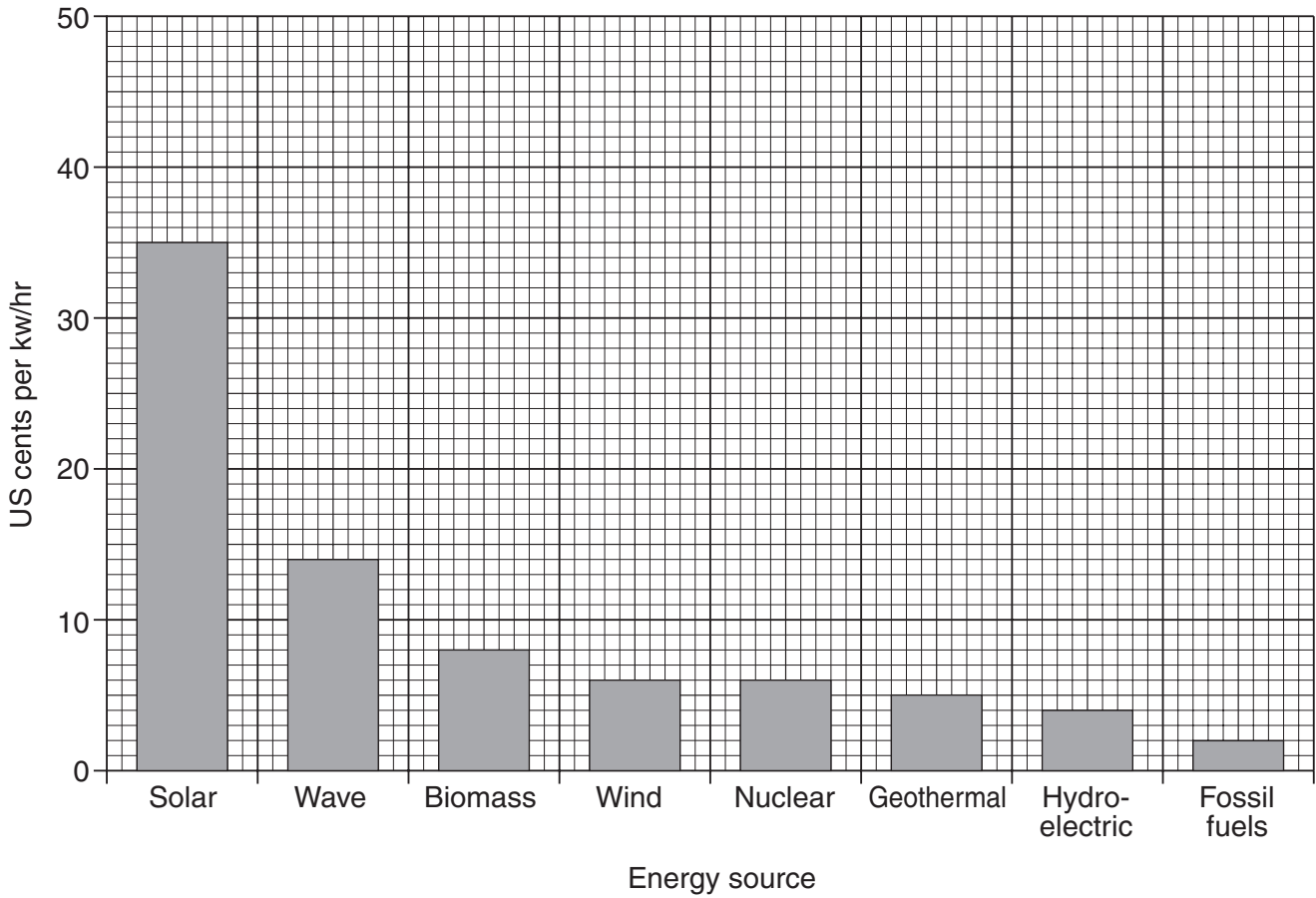
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[4]

- (c) The graph shows average costs of producing electricity from different energy sources in 2003.

Costs of producing electricity (2003)



- (i) Describe what the graph shows about the cost of producing geothermal electricity compared with electricity from other energy sources.

.....

 [3]

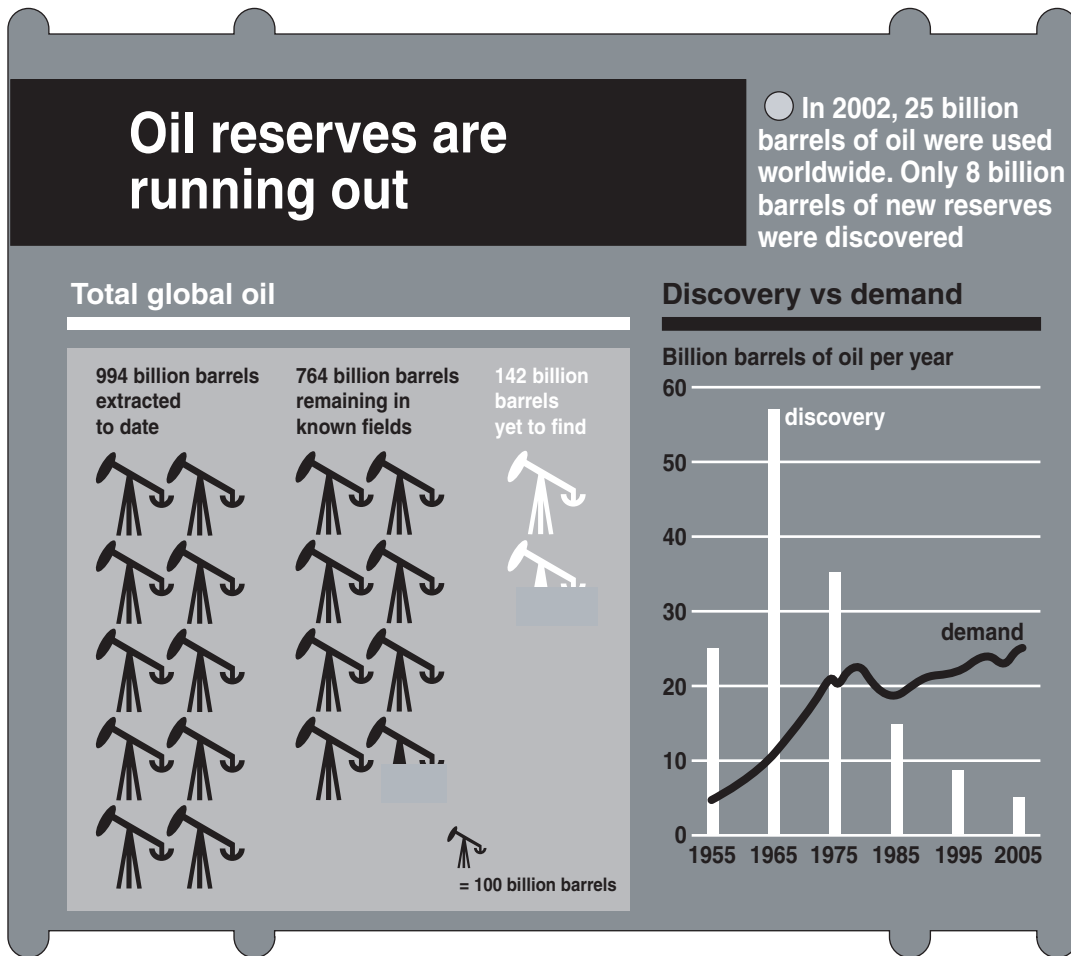
- (ii) Explain how likely it is that geothermal power will be used more in the future as an alternative to fossil fuels.

.....

 [2]

(d) Look at the information below about world supply and demand for oil.

Oil reserves are running out



(i) Describe what happened to the demand for oil between 1955 and 2005.

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[3]

(ii) Quote values and information which support the following statements.

1 Oil reserves are running out.

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.....

2 The present use of oil is not sustainable.

.....
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.....[4]

(iii) What is likely to happen to the demand for oil after 2005? Explain your answer.

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.....[3]

(e) **A** One person's view of nuclear energy

"Future shortages of electricity can only be avoided by building new nuclear stations. It is a clean source, capable of producing large amounts of energy."

B Another person's view of nuclear energy.

"I strongly object to any increase in nuclear energy. It is just too dangerous."

(i) Explain why some people hold the view about nuclear energy stated in **A**.

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.....[3]

(ii) State the different arguments which supporters of view **B** could use.

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.....[3]

(iii) What is your view on nuclear power? How strong are the different arguments put forward in part (ii)?

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..... [2]

[Total: 40]

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