



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

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GEOGRAPHY

0460/11

Paper 1

May/June 2010

1 hour 45 minutes

Additional Materials: Answer Booklet/Paper
Ruler

READ THESE INSTRUCTIONS FIRST

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

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.

Answer **three** questions.

Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.

The Insert contains Photographs A and B for Question 2, Photographs C and D for Question 3 and Photographs E, F and Fig. 8 for Question 5.

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

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

* 0 3 3 1 9 1 7 3 5 0 *

This document consists of **10** printed pages, **2** blank pages and **1** insert.



- 1 (a) Study Fig. 1, which shows information about the birth and death rates of Eritrea and Denmark (an MEDC).

Country	Birth Rate (per 1000 population)	Death Rate (per 1000 population)
Eritrea	38.6	18.5
Denmark	10.7	10.3

Fig. 1

- (i) Eritrea has a death rate of 18.5. What is meant by this? [1]
- (ii) Calculate the natural population growth rate of Denmark. You must show your calculations. [2]
- (iii) Explain why there are high death rates in LEDCs such as Eritrea. [3]
- (iv) Explain why there are low birth rates in MEDCs such as Denmark. [4]
- (b) Study Fig. 2, which shows a population pyramid for Eritrea.

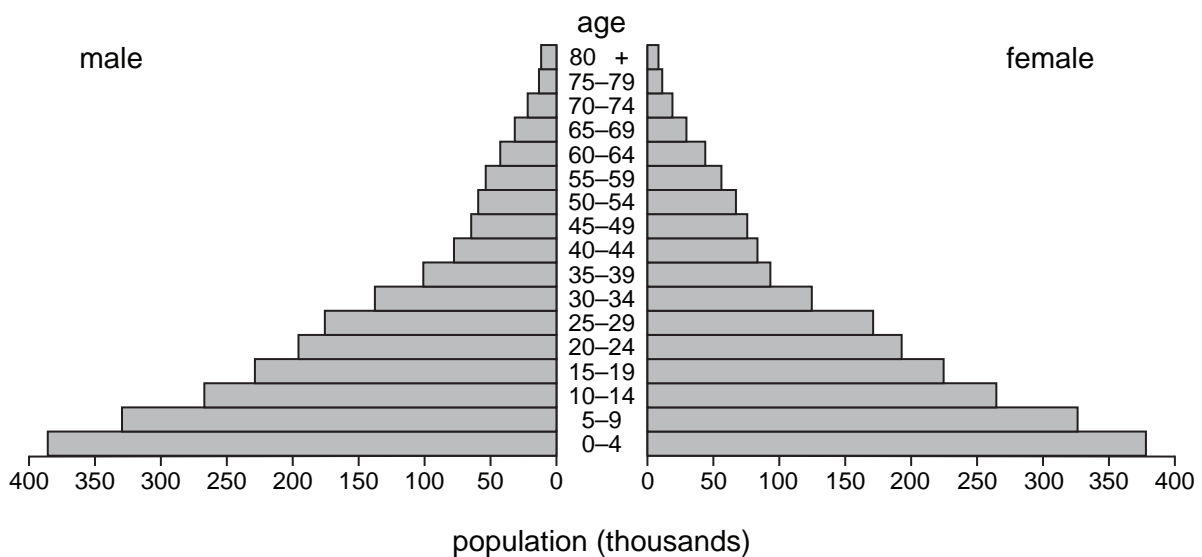


Fig. 2

- (i) Suggest **three** ways in which the population pyramid for Eritrea, an LEDC, is likely to be different from a population pyramid for an MEDC. [3]
- (ii) Describe the likely problems for an LEDC, such as Eritrea, of having so many young dependents. [5]
- (c) The size and structure of the population in a country may change as a result of HIV/AIDS.

For a country which you have studied, describe the impacts of HIV/AIDS on the population and economy. [7]

[Total: 25 marks]

- 2 (a) Study Photographs A and B (Insert), which were taken in the CBD of Bangalore in India (an LEDC).
- Identify **two** different types of vehicles shown in the photographs.
 - Identify **two** different services shown in the photographs, which are typical of a CBD. [2]
 - One method used to reduce traffic congestion in the CBD of Bangalore is a metro (underground railway). This is shown in Fig. 3.
Describe **three** other methods which can be used to reduce traffic congestion in the CBD of a city. [3]
 - Explain why it is important to reduce traffic congestion in urban areas. [4]
- (b) Study Fig. 3, which shows information about the Metro Rail, a public transport system due to be opened in 2011 in Bangalore.

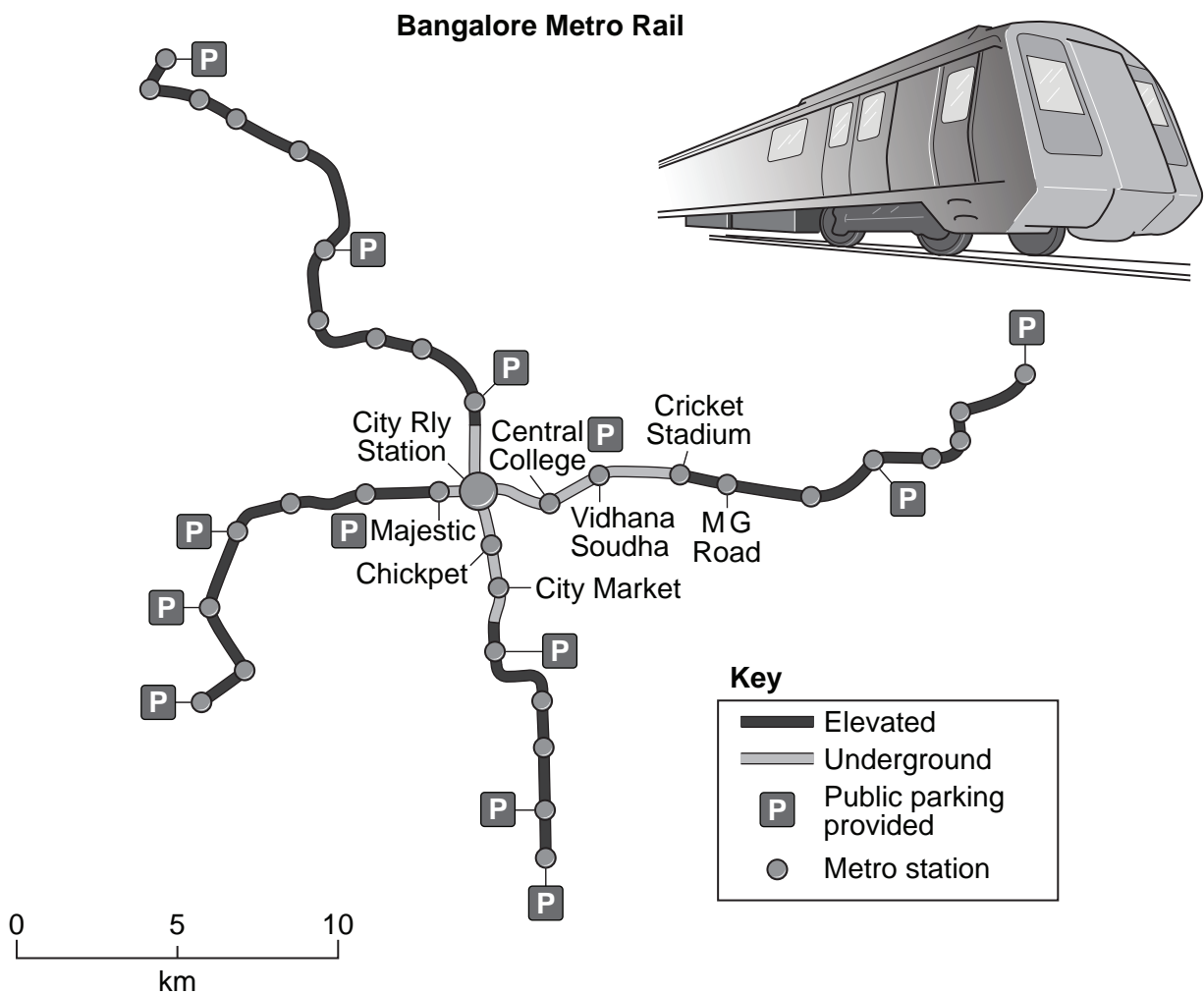


Fig. 3

- Suggest **three** ways in which the building of the Metro Rail will help reduce traffic congestion in Bangalore. [3]
- Explain why any attempts to reduce traffic congestion in urban areas are likely to create conflicts. [5]

(c) Another urban problem is the growth of squatter settlements.

Name a city in an LEDC and describe what has been done to improve the quality of life for people who live in squatter settlements there.

[Total: 25 marks]

- 3 (a) Study Photographs C and D (Insert), which show part of a meander on a river. Photograph C shows a student carrying out fieldwork at the area marked **X** on Photograph C.
- What feature is labelled **X** in Photograph C?
 - Describe **two** characteristics of the materials which form the river bed and bank shown in Photograph D. [2]
 - Explain how the feature at **X** is formed. [3]
 - The river cliff at **Y** is formed by erosion. Name and explain **two** processes of river erosion. [4]
- (b) Study Fig. 4, which shows a river and its valley.

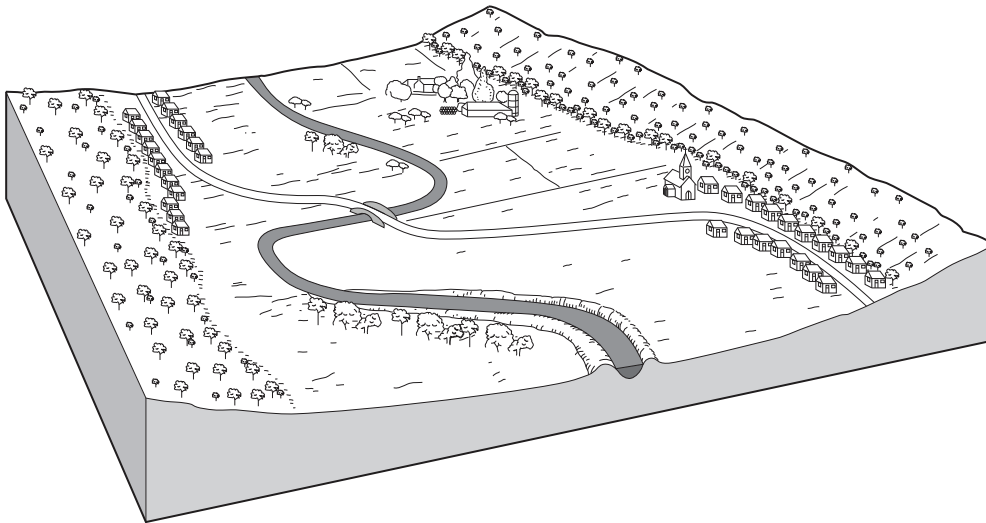


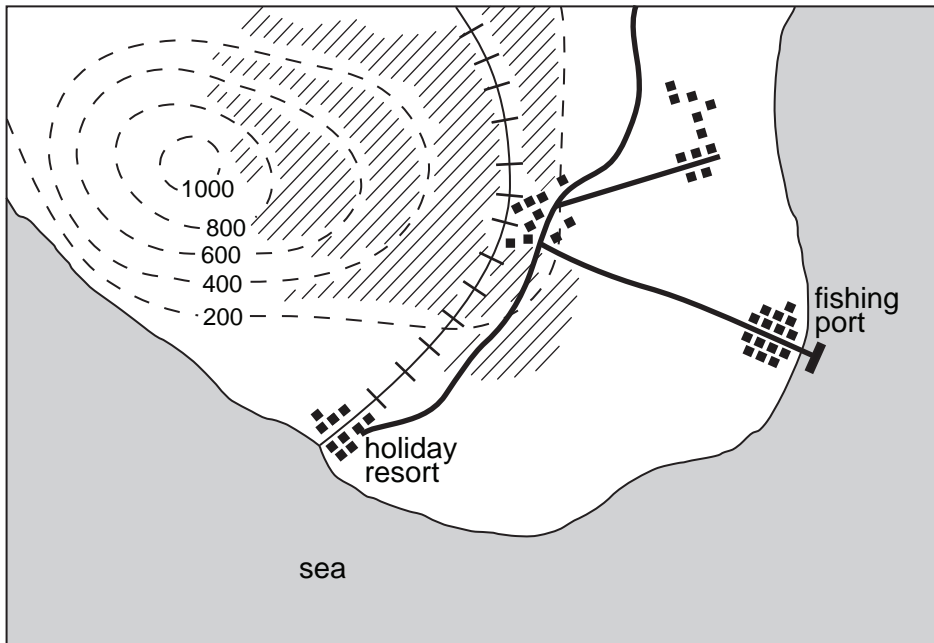
Fig. 4

- Describe the main natural features of the river and valley which are shown on Fig. 4. [3]
 - Describe the advantages and difficulties for people of living close to a river such as the one shown on Fig. 4. [5]
- (c) Explain how and why a delta has formed in a named area which you have studied. You should use a labelled diagram or diagrams in your answer. [7]

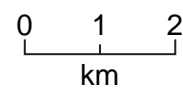
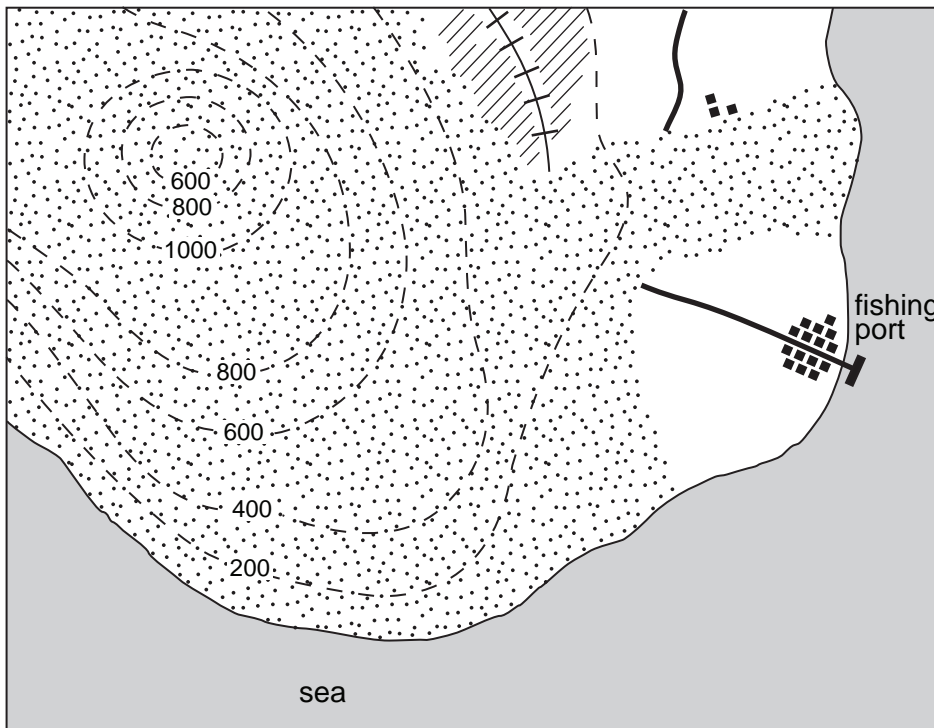
[Total: 25 marks]

4 (a) Study Fig. 5, which shows an area before and after a volcanic eruption.

Before the eruption



After the eruption



Key


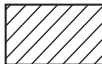

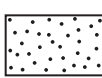

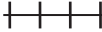
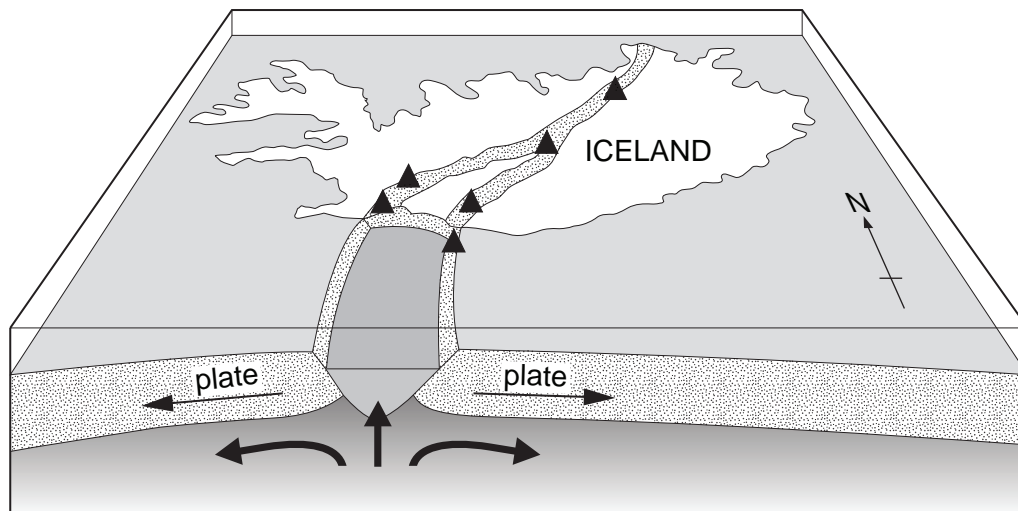
	roads		farmland
	buildings		volcanic ash and lava
	contour (metres)		railway line

Fig. 5

- (i) What is an *active volcano*? [1]
- (ii) Using only evidence from Fig. 5, explain how the volcanic eruption changed the features of the area shown. [3]
- (iii) Using only evidence from Fig. 5, describe **three** likely problems which the volcanic eruption may have caused for people living in the area. [3]
- (iv) Describe what can be done to protect people from volcanic eruptions. [4]

(b) Study Fig. 6, which shows information about volcanoes in Iceland.



Key

- ▲ major volcano
- ↪ convection currents

Fig. 6

- (i) Using evidence from Fig. 6, explain why there are volcanoes in Iceland. [3]
- (ii) Suggest how volcanoes are likely to benefit the people who live in countries such as Iceland. [5]
- (c) Tropical storms are another type of natural hazard.

Explain why the effects of tropical storms of the same strength are likely to be greater in an LEDC than an MEDC. Refer to examples which you have studied. [7]

[Total: 25 marks]

- 5 (a) Study Fig. 7, which shows the amount of money spent by tourists visiting North Carolina along with Photographs E and F (Insert) which were taken in North Carolina. North Carolina is a state in the USA.

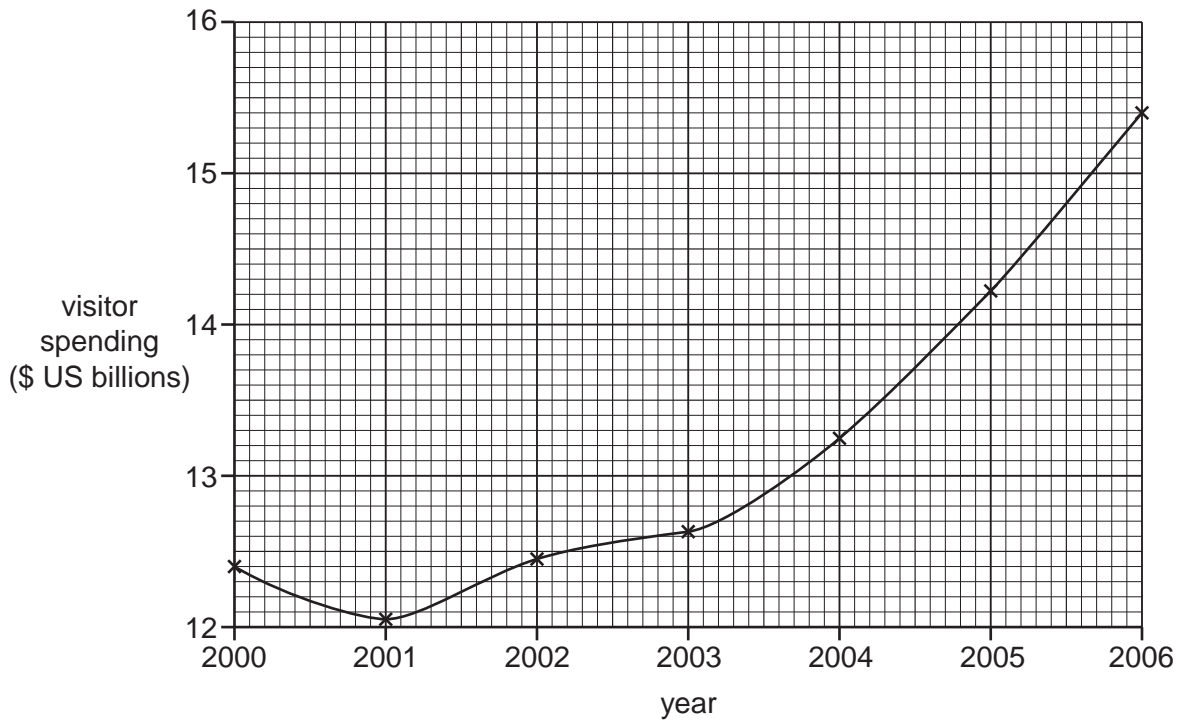


Fig. 7

- (i) What was the total amount of money spent by tourists visiting North Carolina in 2000? [1]
- (ii) Compare the amount of money spent by tourists visiting North Carolina in 2000 and 2006. Support your answer with data from Fig. 7. [2]
- (iii) Suggest **three** different ways in which people who live in areas such as North Carolina might benefit from tourists visiting the state. [3]
- (iv) Use evidence from Photographs E and F (Insert) to explain why the areas shown are attractive to tourists. [4]
- (b) Study Fig. 8 (Insert), which shows areas where wind power could be generated in North Carolina.
- (i) Describe the location of the areas shown in Fig. 8 which are most likely to be excellent for generating wind power. [3]
- (ii) Explain the advantages and disadvantages of generating wind power, rather than using fossil fuels. [5]
- (c) Human activities may cause water and air pollution.

Choose an example which you have studied of **either** water pollution **or** air pollution. Describe the causes of this pollution and its effects on people and the environment. [7]

[Total: 25 marks]

- 6 (a) Study Fig. 9, which shows the percentage use of water in different parts of the world.

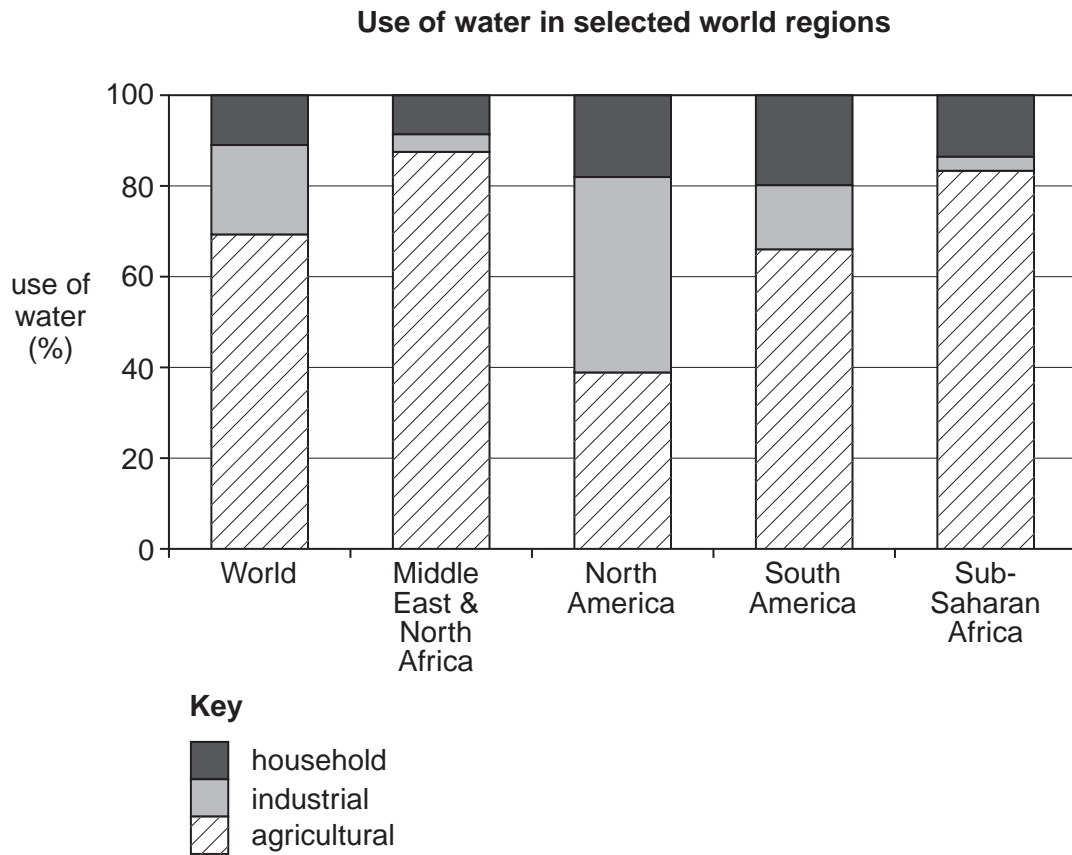


Fig. 9

- (i) What is meant by *agricultural* use of water? [1]
- (ii) State **two** differences between the percentage use of water in North America and Sub-Saharan Africa. [2]
- (iii) Suggest reasons for the variation in the percentage use of water in North America and Sub-Saharan Africa. [3]
- (iv) The total amount of water used for agriculture in the world is increasing. Suggest reasons for this. [4]

(b) Study Fig. 10, which shows information about access to safe drinking water.

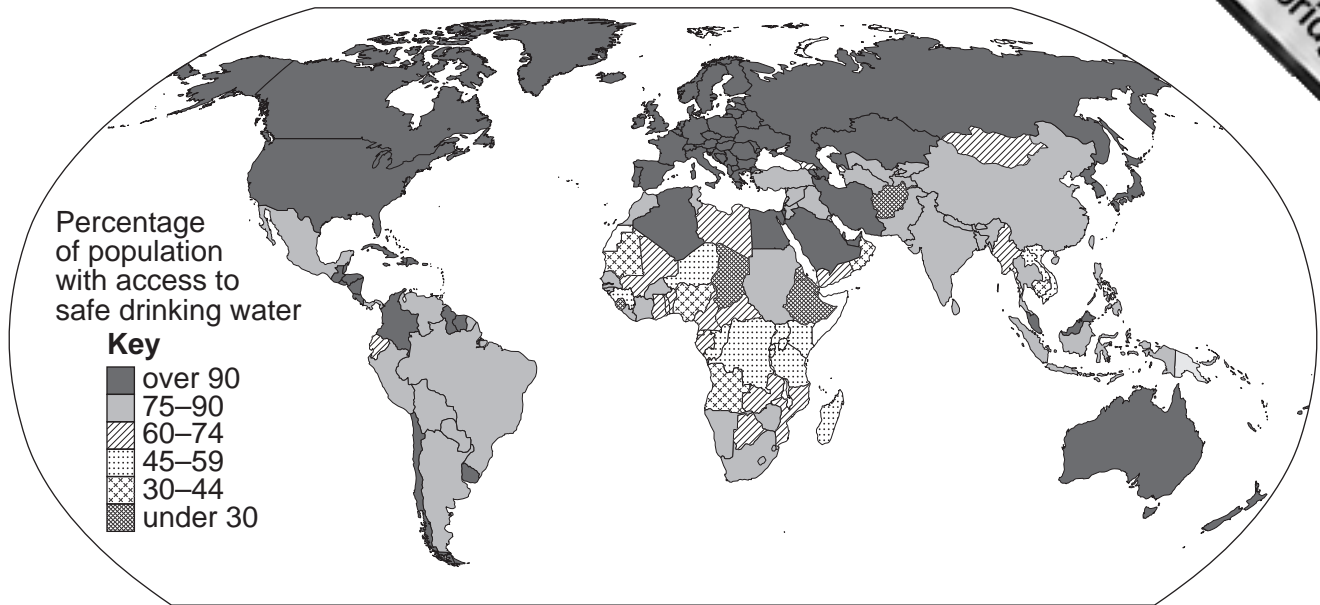


Fig. 10

- (i) Describe the distribution of areas where less than 60% of the population has access to safe drinking water. [3]
- (ii) Many areas have a shortage of water supplies. Describe the likely impacts of a water shortage on the people and development of an area. [5]
- (c) Describe how people can be provided with a reliable supply of safe drinking water. You should refer to an area or country which you have studied. [7]

[Total: 25 marks]

Copyright Acknowledgements:

Question 2 Figure 3	© http://discoverbangalore.com/images/Bangmetro.gif .
Question 2 Photograph A	© S J Sibley © UCLES.
Question 2 Photograph B	© S J Sibley © UCLES.
Question 3 Photograph C	© http://stacey.peak-media.co.uk/Wales2003/Severnmeander/2031-04230055 .
Question 3 Photograph D	© S J Sibley © UCLES.
Question 5 Figure 8	© http://www.eere.energy.gov/windandhydro/windpoweringamerica/image .
Question 5 Photograph E	© S J Sibley © UCLES.
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