



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

GEOGRAPHY

0460/13

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 Photograph A for Question 2, Photograph B for Question 3, Photograph C for Question 4 and Photograph D for Question 5.

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 **10** printed pages, **2** blank pages and **1** Insert.



- 1 (a) Study Fig. 1, a graph which shows average population density by continent.

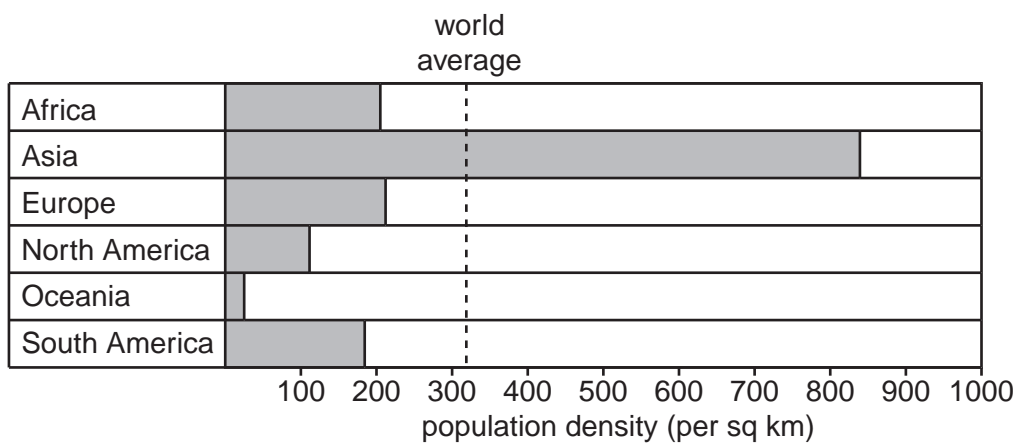


Fig. 1

- (i) Explain how the population density of an area is calculated. [1]
- (ii) Name a continent with a population density which is:
- A** below the world average,
- B** above the world average. [2]
- (iii) Explain why desert areas are sparsely populated. [3]
- (iv) Explain why some settlements have grown up in sparsely populated areas. [4]

(b) Study Figs. 2A, 2B and 2C which show information about Brazil.

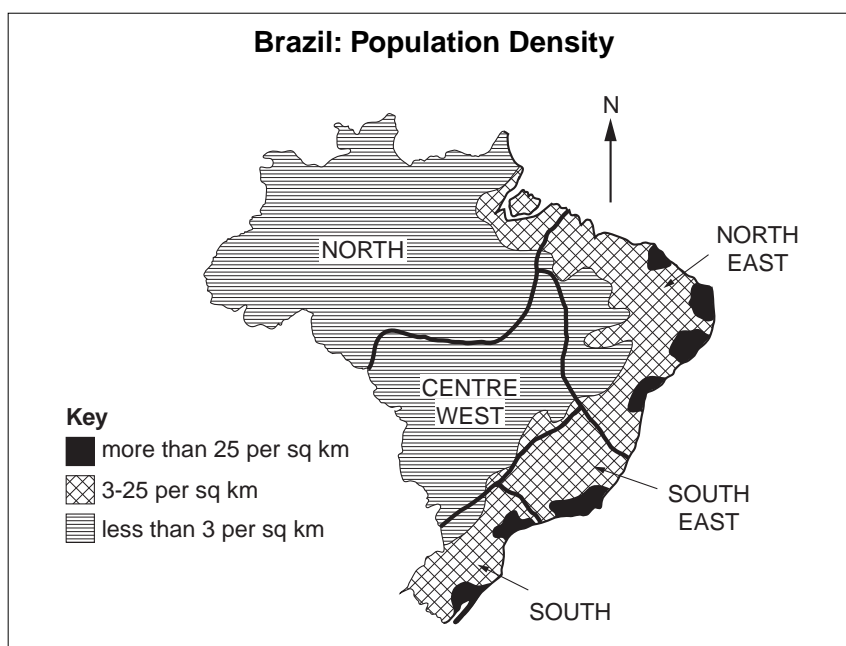


Fig. 2A

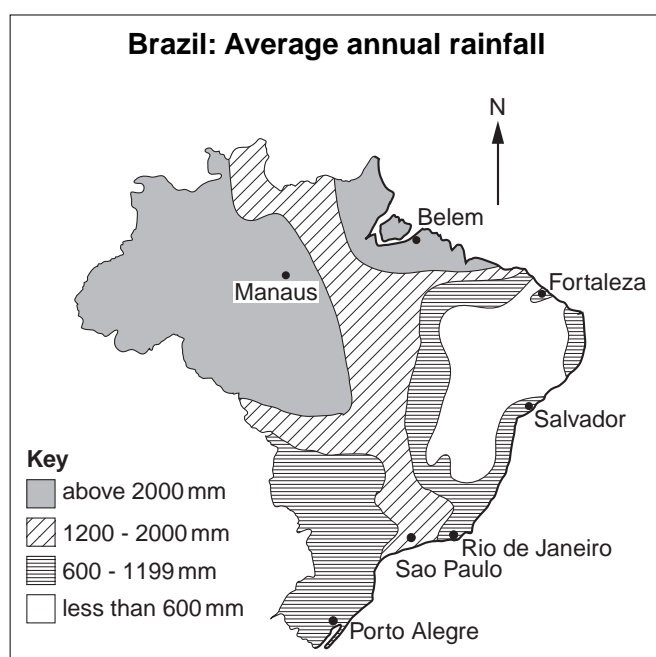


Fig. 2B

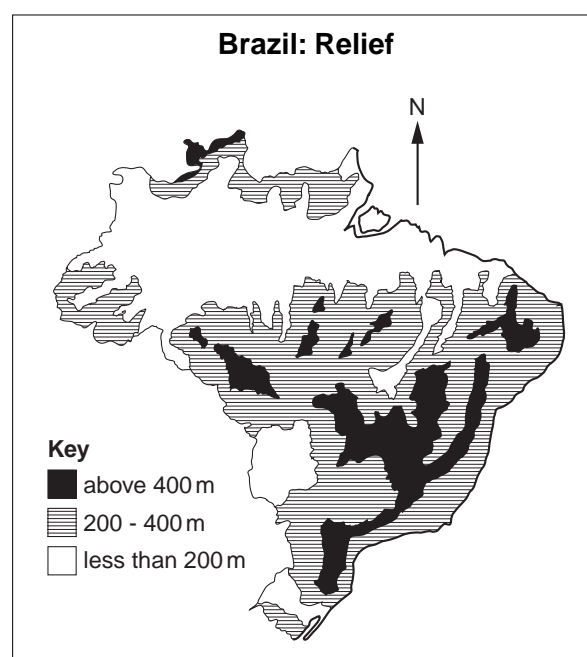


Fig. 2C

- (i) Describe the distribution of areas in Brazil where the population density is more than 25 per sq km. [3]
- (ii) With the help of Figs. 2B and 2C suggest reasons why the population of Brazil is unevenly distributed. [5]
- (c) For a country which you have studied, explain why the government is worried about its rapid population growth. [7]

[Total: 25 marks]

2 (a) Study Fig. 3, a map showing the population of the largest cities in India in 2008.

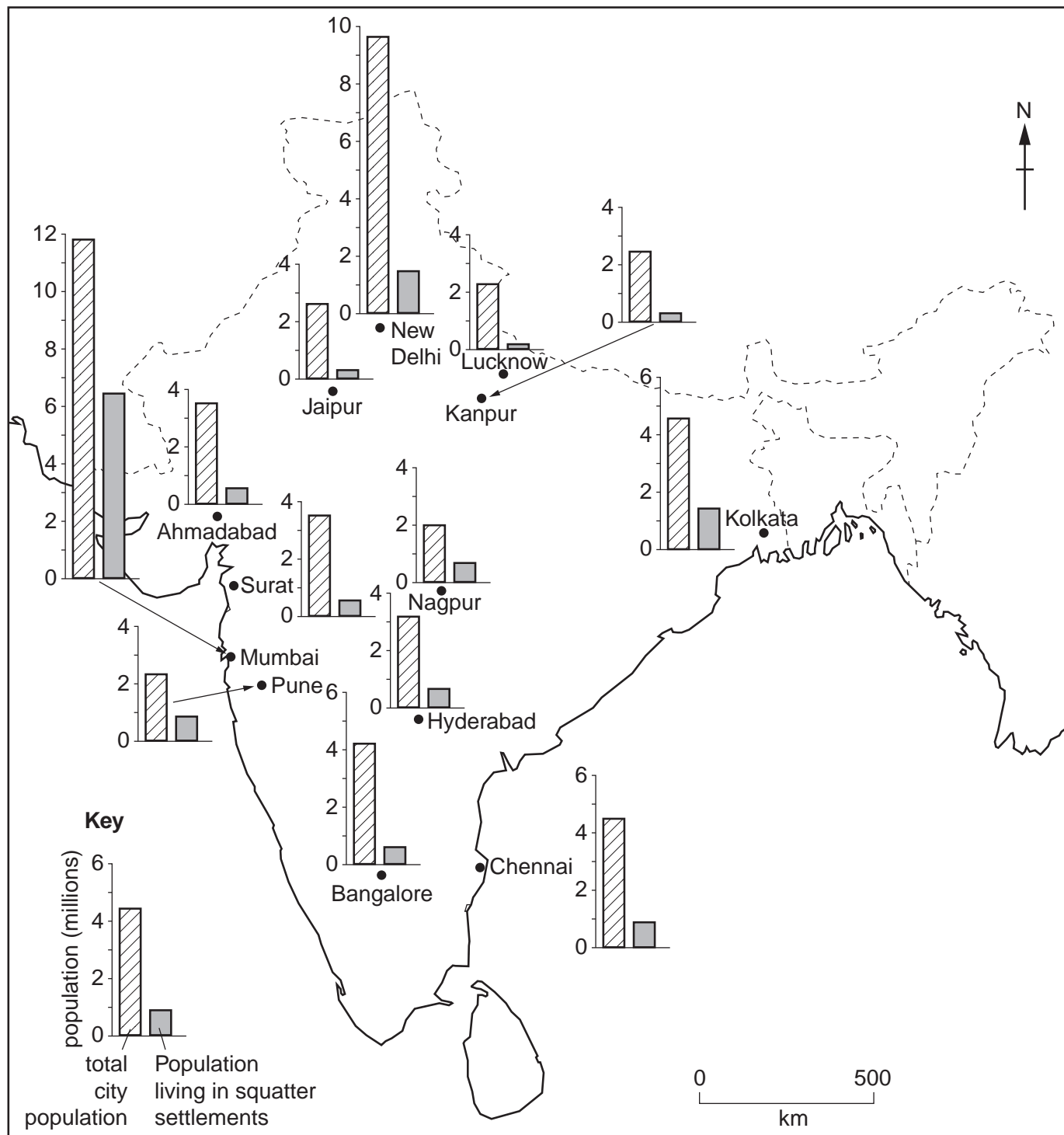


Fig. 3

- (i) What was the total population of Mumbai in 2008? [1]
- (ii) Rank the following cities in order of the number of people living in squatter settlements. Rank from largest to smallest. [2]
- | | | | |
|-----------|---------|--------|-----------|
| Bangalore | Lucknow | Mumbai | New Delhi |
|-----------|---------|--------|-----------|
- (iii) Give **three** reasons why so many people live in squatter settlements in cities in LEDCs. [3]

- (b) Study Photograph A (Insert), along with Fig. 4, which gives information about three plans being considered by the authorities of the city shown in the photograph to reduce the number of squatter settlements.

Plan 1	Provide low cost housing with basic amenities and services on the edge of the city.
Plan 2	Employ more police to remove people from squatter settlements, and teams of council workers to clear the land.
Plan 3	Give yearly grants to farmers in the countryside so they can buy machines, fertilizers and irrigation pumps.

Fig. 4

- (i) Give **three** examples of basic amenities and services which could be provided as part of Plan 1. [3]
- (ii) Explain why many residents of the city will not agree with Plan 2. [4]
- (iii) Explain why Plan 3 is likely to be a more sustainable solution to the problems caused by rapid urban growth in LEDCs. [5]
- (c) Choose an example of rural to urban migration in an LEDC which you have studied. Name the areas between which people moved and explain why many people migrated. You should refer both to pull and to push factors. [7]

[Total: 25 marks]

3 (a) Study Fig. 5, which is a cross section of a cliff and beach.

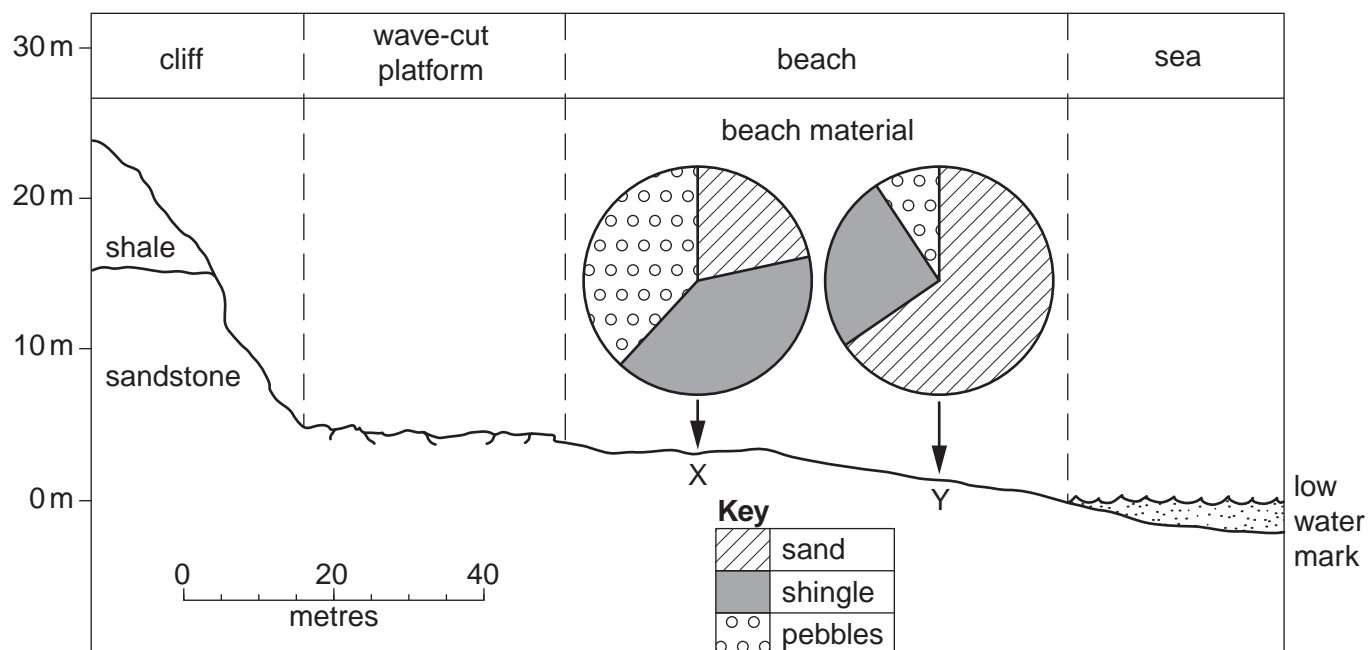


Fig. 5

- (i) What is the width, in metres, of the wave-cut platform as labelled on Fig. 5? [1]
- (ii) Describe the main features of a wave cut platform. [2]
- (iii) State **three** differences between the beach material at X and Y. [3]
- (iv) Explain how longshore drift can move material along a beach. [4]
- (b) Study Photograph B (Insert), which shows an area of coastline.
- (i) Identify **three** coastal landforms shown in Photograph B. [3]
- (ii) Explain the formation of **two** of the coastal landforms which you have identified in (b)(i). [5]
- (c) For an area you have studied, describe the benefits and problems of living near the coast. [7]

[Total: 25 marks]

- 4 (a) Study Fig. 6, which shows the global distribution of areas with tropical rainforest and tropical desert climates.

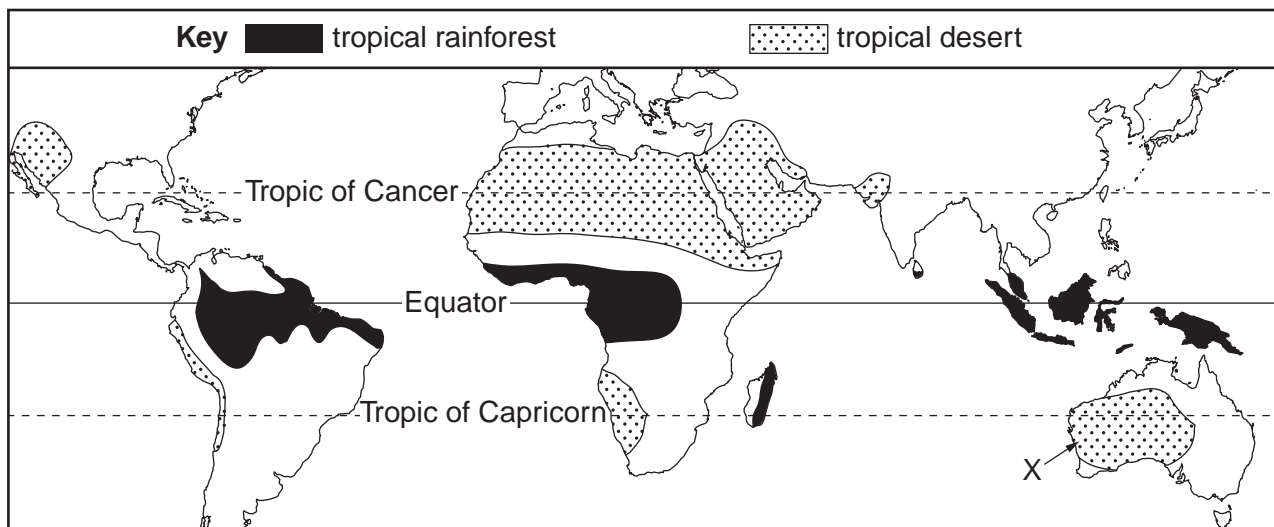


Fig. 6

- (i) What is the difference between weather and climate? [1]
- (ii) Identify **one** similarity and **one** difference between the distribution of areas with tropical rainforest and tropical desert climates. [2]
- (iii) Explain why the tropical desert at X has low rainfall. [3]
- (iv) Describe the main features of the natural vegetation in tropical rainforests. [4]
- (b) Study Photograph C (Insert), which shows deforestation of an area of tropical rainforest in Indonesia.
- (i) Give **three** different reasons why rainforests are being cleared. [3]
- (ii) Suggest the likely effects of deforestation on the **local** natural environment. [5]
- (c) For an area of tropical desert which you have studied, describe and explain the characteristics of its natural vegetation. [7]

[Total: 25 marks]

- 5 (a) Study Fig. 7, which shows information about coal.

Fig. 7

- (i) Name the country with the largest production of coal. [1]
 - (ii) Name the **two** countries with the largest reserves of coal. [2]
 - (iii) Describe the main changes in the price of coal between 1998 and 2008. You should include dates and figures in your answer. [3]
 - (iv) Over 70% of Poland's energy is obtained from coal. Suggest likely problems for Poland of relying on coal as a source of energy. [4]
- (b) Study Photograph D, which shows a coal-fired (thermal) power station.
- (i) Suggest **three** different factors which would have influenced the location of the power station shown in Photograph D. [3]
 - (ii) Explain why coal-fired power stations may contribute to global warming. [5]
- (c) For a country or area which you have studied, describe the problems for people and the **local** environment caused by using wood and charcoal as sources of energy. [7]

[Total: 25 marks]

6 (a) Study Fig. 8, a map showing pollution of a river in an MEDC.

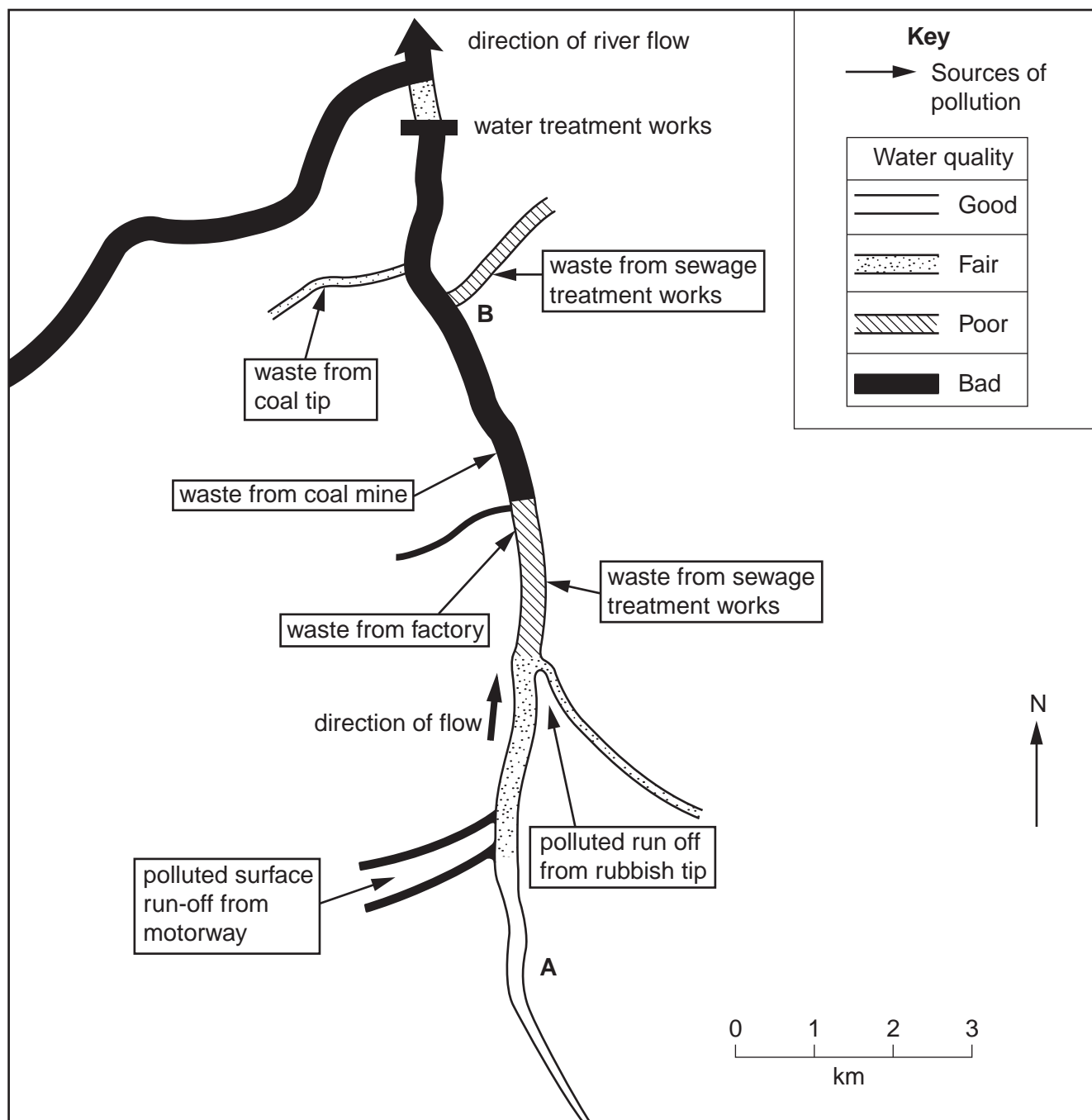


Fig. 8

- (i) Describe how the water quality changes along the river between points A and B. [1]
- (ii) Using information from Fig. 8, give **two** reasons for the change which you have described in (a)(i). [2]
- (iii) Explain why, in many countries, waste is released into rivers. [3]
- (iv) River pollution is a threat to the environment. Explain what could be done to reduce this threat and improve the quality of water in rivers. [4]

- (b) Study Fig. 9 which shows newspaper extracts about three proposed new developments on an island in the Atlantic Ocean.

<p>Extract 1</p> <p>NEW NORTH-SOUTH MOTORWAY PLANNED</p> <p>Plans have been submitted to build a motorway across the mountains, through the valley of the White River</p>
<p>Extract 2</p> <p>PLANS ANNOUNCED TO BUILD NEW FISH PROCESSING FACTORY</p> <p>A multi-national company plans to clear woodland and scrub to build a factory to process and can locally caught sardines</p>
<p>Extract 3</p> <p>LUXURY RESORT AND GOLF COURSE PROPOSED FOR SUMMER BAY</p> <p>Plans have been submitted to build a resort and golf course on the sand dunes</p>

Fig. 9

- (i) Choose one of the proposed new developments and write down the number of the extract which you have chosen.
Explain **three** different ways in which the development could damage the local natural environment. [3]
- (ii) Suggest what should be done to ensure that your chosen development is sustainable. [5]
- (c) People can benefit when economic activities take place. Such activities include:
- transport,
 - tourism,
 - manufacturing industry.

Name an area which you have studied and describe an economic activity which takes place. Explain how the activity benefits local people. [7]

[Total: 25 marks]

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Question 5 Figure 7 © <http://leisureguy.files.wordpress.com/2008/01/peak-coal.jpg>
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