



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

CANDIDATE  
NAME

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CENTRE  
NUMBER

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**GEOGRAPHY**

**0460/13**

Paper 1

**May/June 2014**

**1 hour 45 minutes**

Candidates answer on the Question Paper.

Additional Materials:     Ruler  
   Calculator

**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name in the spaces provided.

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.**

Write your answer to each question in the space provided. If additional space is required, you should use the lined page at the end of this booklet. The question number(s) must be clearly shown.

Answer **three** questions.

The Insert contains Photographs A and B for Question 2, Fig. 4 for Question 3, Photograph C for Question 4, Photographs D and E for Question 5, and Photograph F for Question 6.

The Insert is **not** required by the Examiner.

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

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.

The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **25** printed pages, **3** blank pages and **1** Insert.

## QUESTION 1

- 1 (a) Study Fig. 1, which shows information about the population of Canada (an MEDC).

Between 1960 and 2006 the Canadian population increased from 18 million to 33 million. This increase took place even though the birth rate was low, as there was an average of 250,000 immigrants per year. In 2006, 19.8% of Canadians were born in another country. One third of all immigrants moved to the city of Toronto.

**Fig. 1**

- (i) Using Fig. 1, identify the main cause of the growth in Canada's population between 1960 and 2006.

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

- (ii) Give **two** attractions of large cities in MEDCs, such as Toronto, for immigrants.

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

- (iii) Suggest **three** reasons for the low birth rates in MEDCs such as Canada.

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

(b) Study Fig. 2, which shows information about the origin of migrants to Canada.

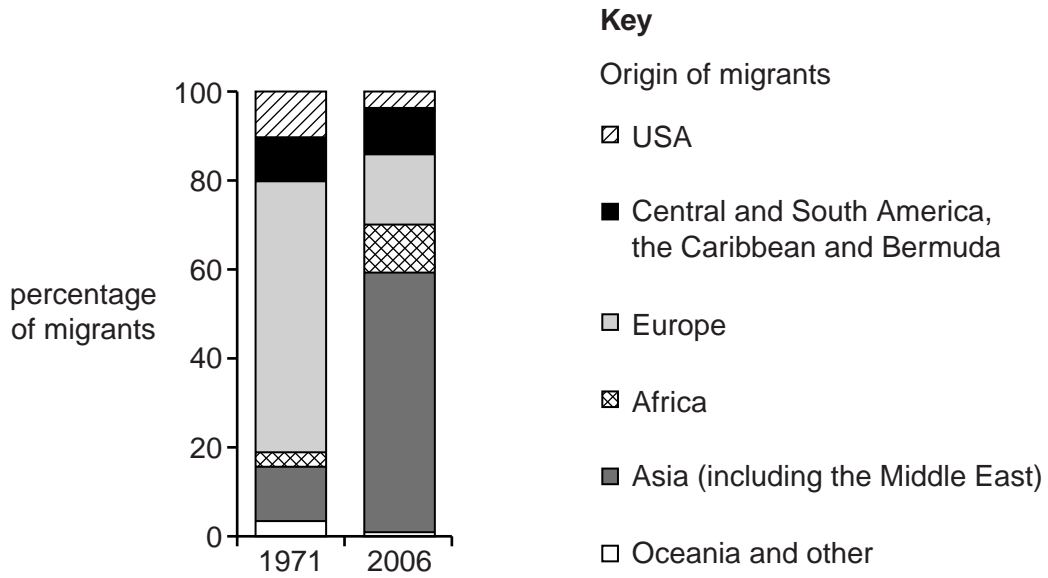


Fig. 2

(i) Describe the main differences in the origin of migrants to Canada in 1971 and 2006.

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(ii) Suggest ways in which Canada may have benefitted from receiving large numbers of migrants.

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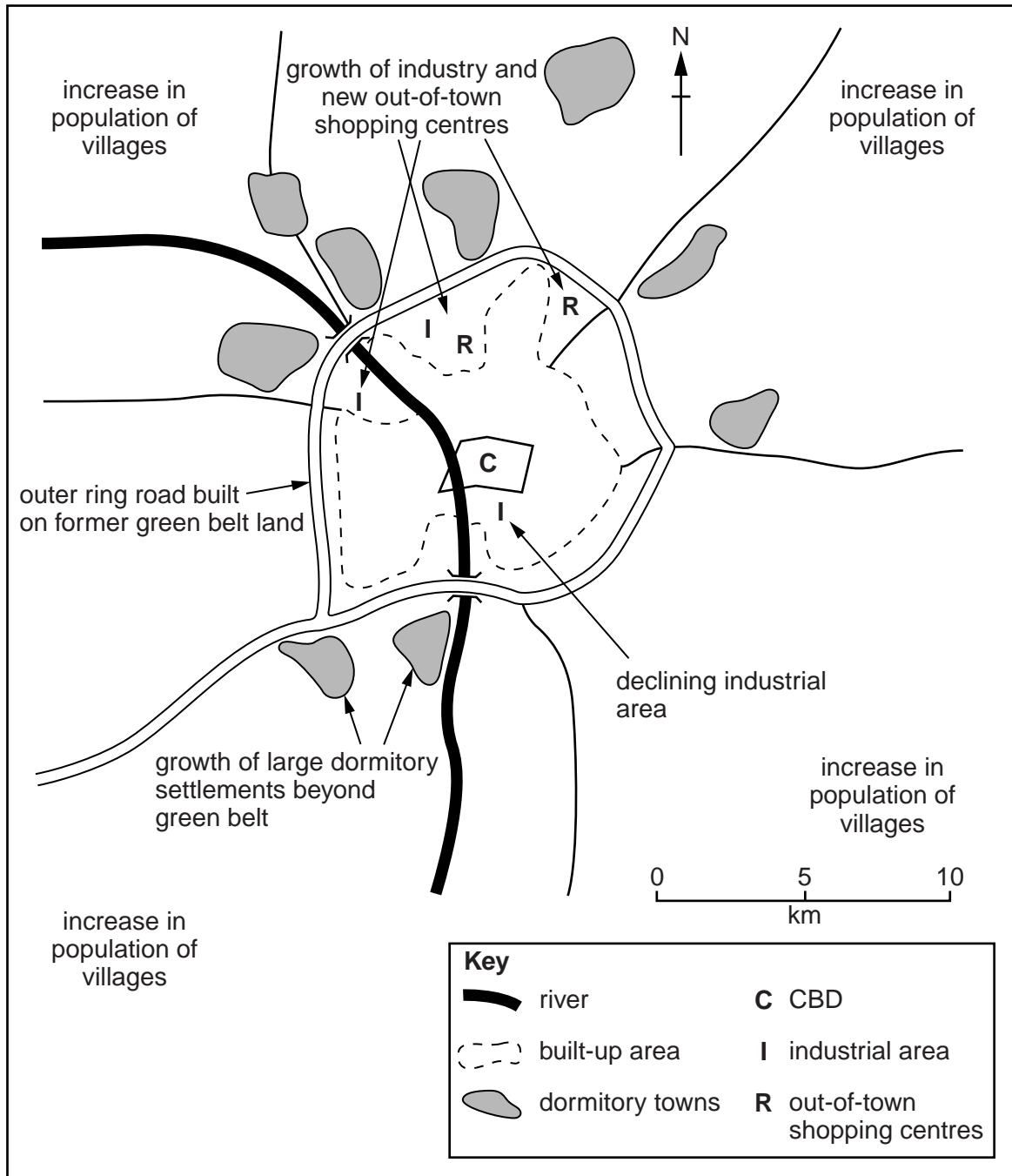
**(iii)** Explain the likely difficulties for migrants from Asia (including the Middle East) when living in Canada.

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**QUESTION 2**

2 (a) Study Fig. 3, a map showing a city in Europe where urban sprawl is taking place.



**Fig. 3**

(i) What is meant by *urban sprawl*?

.....

..... [1]

**(ii)** Using Fig. 3, describe the location of the areas where:

industry is declining;

.....  
.....

dormitory settlements are growing.

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..... [2]

**(iii)** Explain how the growth of out-of-town shopping centres may affect the CBD.

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..... [3]

**(iv)** Suggest reasons why industry is growing in some parts of the city shown in Fig. 3 but declining in others.

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..... [4]

**(b)** Study Photographs A and B (Insert), which show part of a CBD (Photograph A) and part of a suburban shopping centre (Photograph B).

**(i)** Using **only** evidence from Photographs A and B, identify **three** differences between the two shopping centres.

1 .....

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2 .....

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3 .....

..... [3]

**(ii)** Explain why services in a CBD have a larger sphere of influence than services in a suburban shopping centre.

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(c) For a named urban area you have studied, describe the attempts to reduce traffic congestion.

Name of urban area .....

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[7]

[Total: 25 marks]

**END OF QUESTION 2**

**QUESTION 3**

**3 (a)** Study Fig. 4 (Insert), a map of the area around Mount St. Helens, a volcano in the USA.

**(i)** What is the height of Mount St. Helens?

..... metres [1]

**(ii)** Identify **two** features which suggest that tourists visit Mount St. Helens.

1 .....

2 ..... [2]

**(iii)** Give **three** pieces of evidence from Fig. 4 that Mount St. Helens volcano has erupted.

1 .....

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2 .....

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3 .....

..... [3]

**(iv)** Mount St. Helens is on a destructive plate boundary. Explain why volcanoes erupt on destructive plate boundaries.

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(b) Study Fig. 5, which shows an ash cloud from the eruption of a volcano in Iceland in 2010.

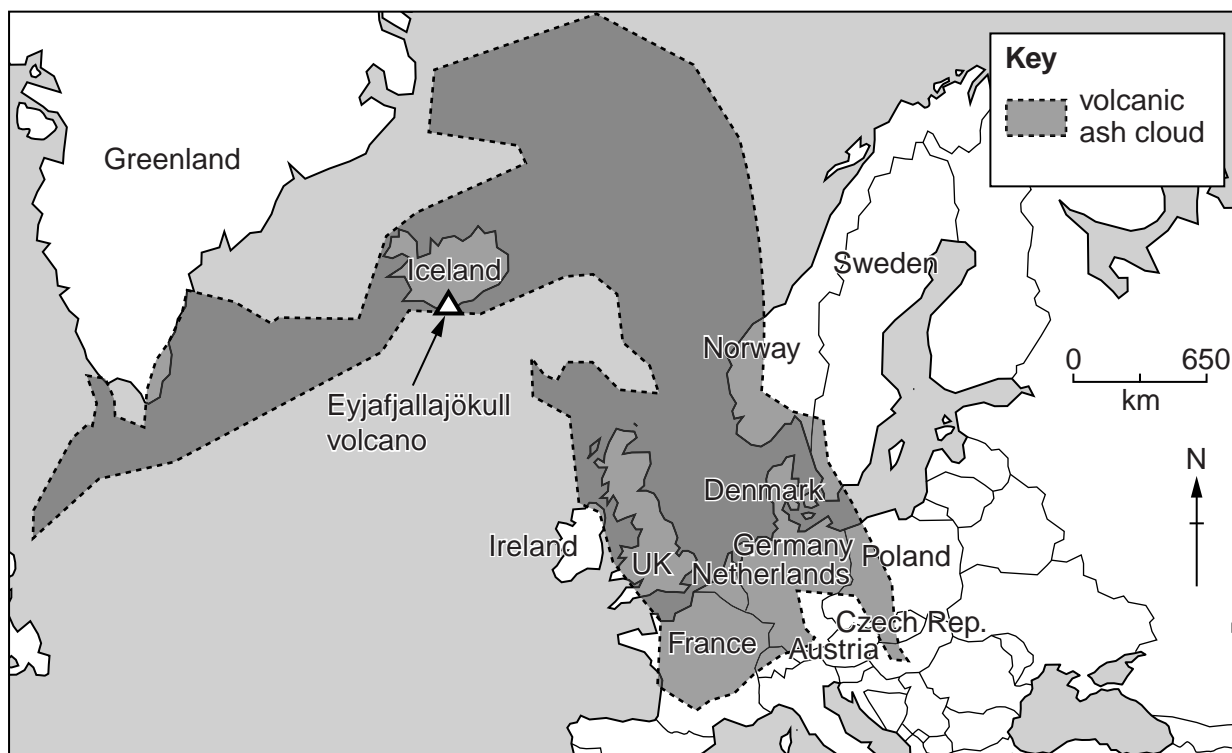


Fig. 5

(i) Describe the distribution of the area covered by the ash cloud.

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..... [3]

(ii) Explain how a volcanic eruption can damage the economy of a country.

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**QUESTION 4**

4 (a) Study Photograph C (Insert), which shows a river and its valley.

(i) Give **one** difference between the vegetation on the flood plain and the vegetation on the valley side.

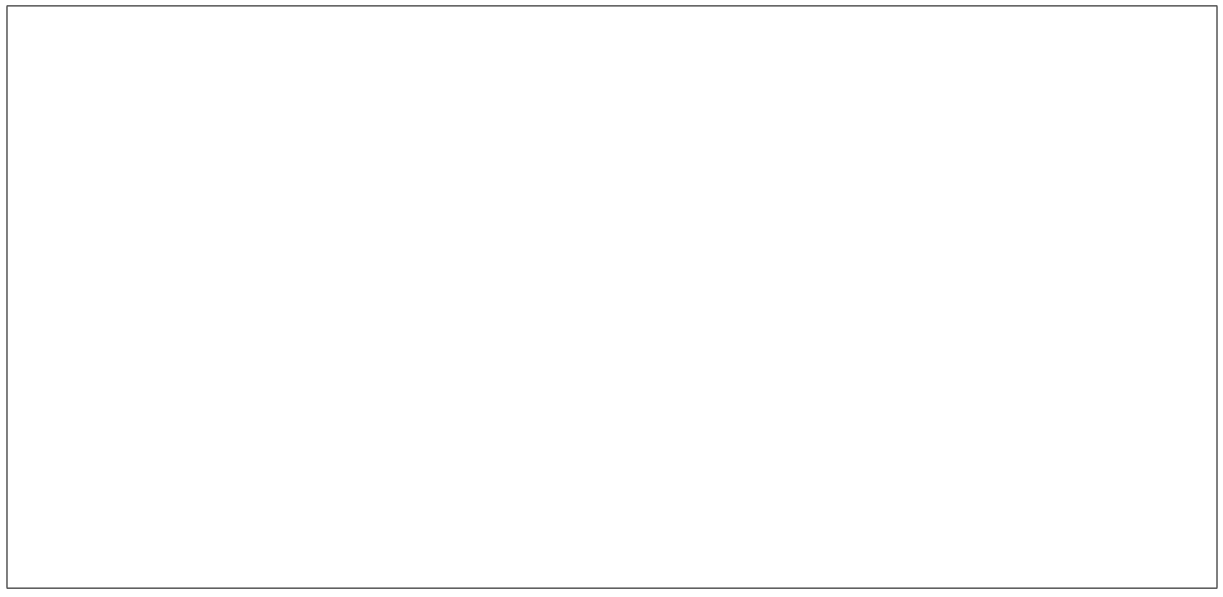
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..... [1]

(ii) Name **two** processes of river erosion which may take place in the area shown in Photograph C.

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

(iii) Draw and label a cross section along the line P–Q which is drawn on Photograph C to show:

- the likely differences in the depth of the channel;
- a slip off slope;
- a river cliff.



[3]

(iv) Explain how a meander might become an oxbow lake. You may use a diagram or series of diagrams.

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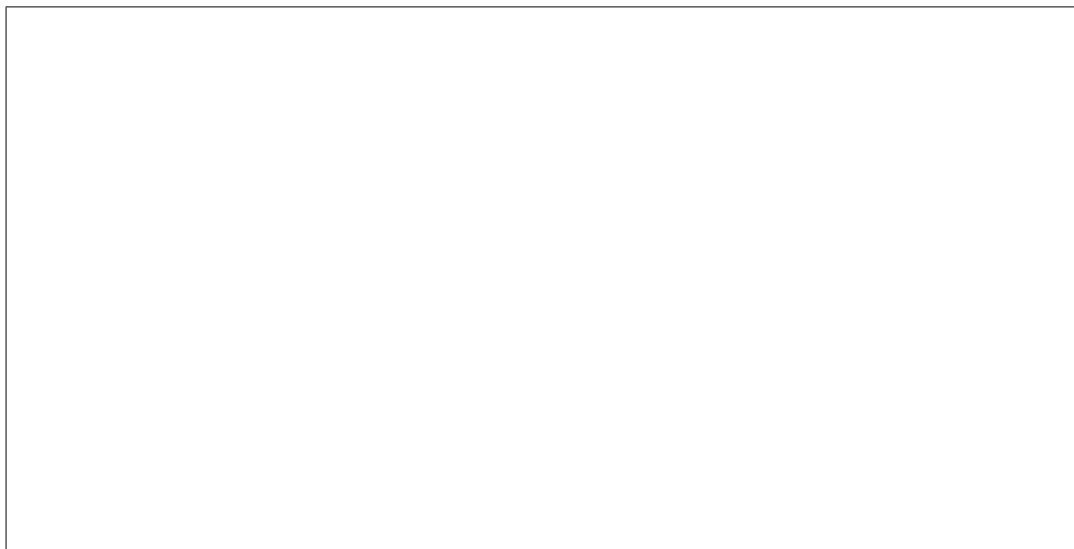
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[4]

(b) Study Figs 6A and 6B, maps of two deltas.

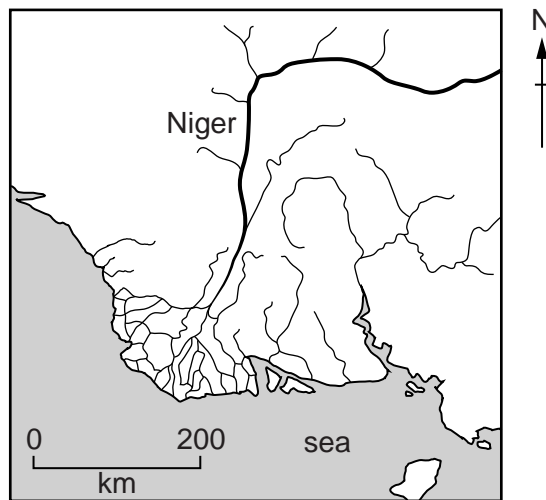


Fig. 6A

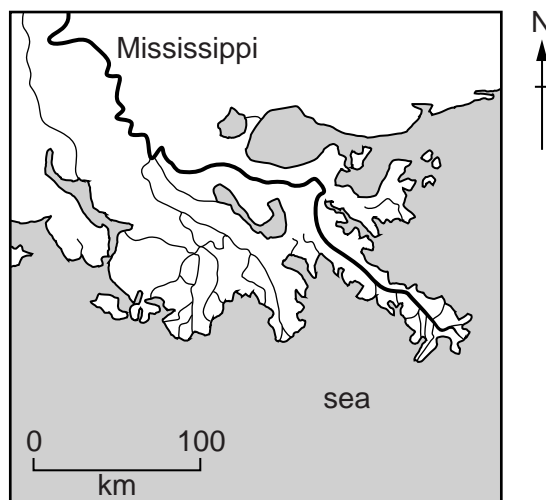


Fig. 6B

(i) Using **only** evidence from Figs 6A and 6B, compare the deltas of the Niger and Mississippi.

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[3]



(ii) Explain how a river delta is formed.

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(c) For a named area you have studied, describe the problems caused by river flooding.

Area studied .....

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[Total: 25 marks]

**END OF QUESTION 4**

QUESTION 5

5 (a) Study Fig. 7, a block diagram of part of the Grand Canyon National Park in the USA.

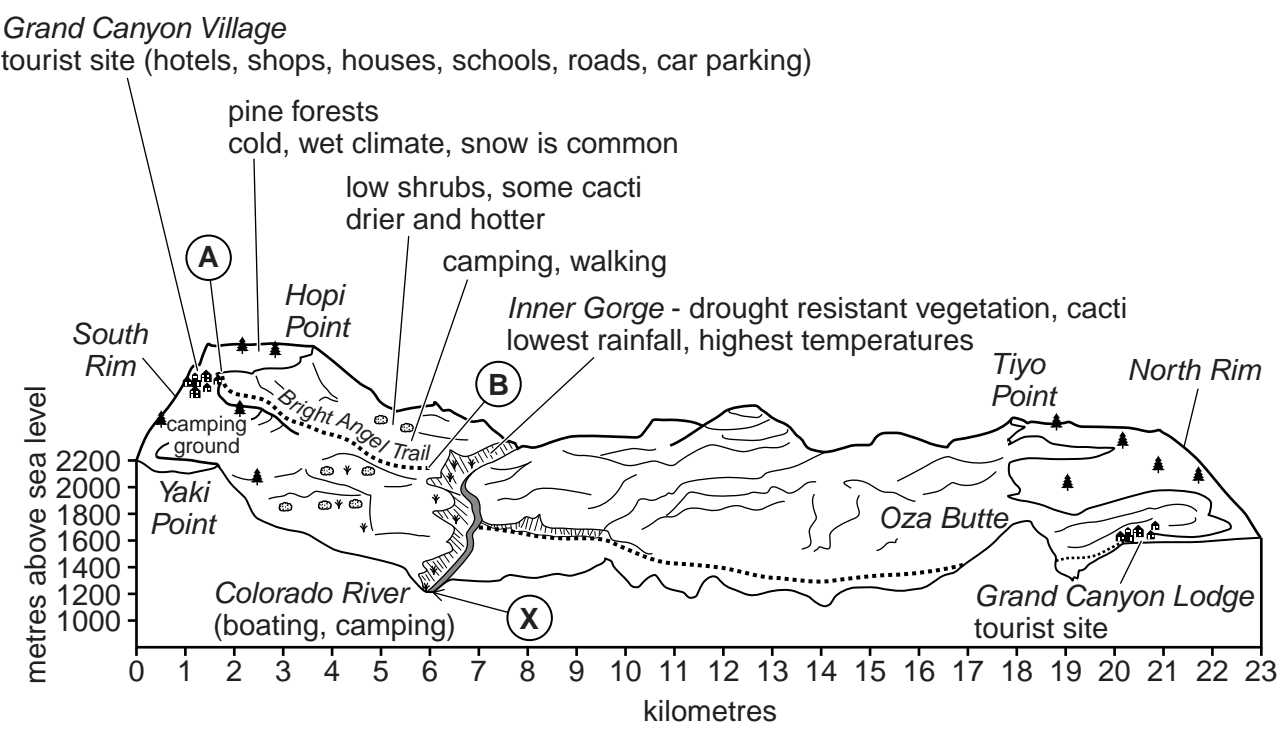


Fig. 7

- (i) What is the height above sea level of the Colorado River at point X?  
..... metres [1]
- (ii) Describe how the types of vegetation will change along Bright Angel Trail between points A and B on Fig. 7.  
..... [2]
- (iii) Suggest reasons for the changes in vegetation which you have described in (ii).  
..... [3]

**(b)** Study Photographs D and E (Insert) along with Fig. 7, which show the Grand Canyon National Park.

**(i)** Describe **three** features of the area shown in Photographs D and E.

1 .....

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2 .....

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3 .....

..... [3]

**(ii)** Suggest possible impacts of tourism on the natural environment of the Grand Canyon National Park.

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**(iii)** Explain how creating a National Park helps to maintain, conserve or improve the quality of the natural environment.

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- (c) For a named area you have studied, describe the benefits and problems of tourism for local people.

Name of area .....

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..... [7]

[Total: 25 marks]

**END OF QUESTION 5**

## QUESTION 6

- 6 (a) Study Fig. 8, an article about the pollution of Versova Beach in Mumbai, India (an LEDC).

## VERSOVA BEACH RAISES A STINK

### 1 kilometre stretch of beach turns into dumpyard with sewer lines opening onto it

<p>A one kilometre stretch of the Versova beach is now covered in rubbish because of dumping of garbage and debris, and encroachment by the fishermen's community. Also drainage and sewer pipes from houses open on to this stretch of beach.</p> <p>"This beach, which</p>	<p>was once beautiful, has become a garbage beach. Piles of garbage and waste are thrown here. You can smell the beach from kilometres away," complained Gautam Popat, who lives near the beach.</p> <p>The Versova beach, an extension of the Juhu beach that is busy with</p>	<p>people, has been the choice of those who prefer some calm. But the pollution is driving the crowds away.</p> <p>"Plastic bags, rotten food and even construction debris are thrown here," said resident Deepak Sahani.</p> <p>The Brihanmumbai Municipal Corporation</p>	<p>(BMC) has announced plans to clean up the beach.</p> <p>Officials confessed that the clean-up operation was unlikely to be successful due to opposition from local fishermen.</p>
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**Fig. 8**

- (i) What is meant by *pollution*?

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 ..... [1]

- (ii) Using Fig. 8, describe **two** different ways in which Versova Beach is polluted.

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

- (iii) Suggest **three** impacts of the pollution of Versova Beach on people.

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

(iv) Explain how pollution of beaches, such as Versova Beach, can affect the natural environment.

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..... [4]

(b) Study Photograph F (Insert), which shows homes of fishermen on Versova Beach.

(i) Describe **three** features of the homes shown in Photograph F.

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

(ii) The local authority is considering ways of cleaning up Versova Beach. Study the following three methods.

<p><u>Method A</u> Move the fishermen's community and demolish their houses.</p> <p><u>Method B</u> Organise regular cleaning of the beach by teams of local authority workers.</p> <p><u>Method C</u> Legalise the fishermen's community, as long as they agree to keep the beach clean.</p>
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Which method do you think will be the most sustainable? Explain your answer.

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*Copyright Acknowledgements:*

Question 1 Fig. 1	© <a href="http://option.canada.pagesperso-orange.fr/immigration_multi.htm">http://option.canada.pagesperso-orange.fr/immigration_multi.htm</a>
Question 1 Fig. 2	© <a href="http://www12.statcan.ca/census-recensement/2006/as-sa/97-557/figures/c2-eng.cfm">http://www12.statcan.ca/census-recensement/2006/as-sa/97-557/figures/c2-eng.cfm</a>
Photographs A–F	S. Sibley © UCLES.
Question 2 Fig. 3	© GCSE Geography; Unit 4 Topic 5; National Extension College.
Question 3 Fig. 4	© <a href="http://www.fs.fed.us/pnw/mtsthelens/maps/">http://www.fs.fed.us/pnw/mtsthelens/maps/</a>
Question 3 Fig. 5	Adapted from: © <a href="http://news.bbc.co.uk/1/hi/8685913.stm">http://news.bbc.co.uk/1/hi/8685913.stm</a>
Question 4 Figs. 6A and 6B	© Jane Ferretti and Brian Greasley; <i>GCSE Geography Exam Revision Notes</i> ; p. 20; Phillip Allan Updates; 2001; ISBN 0860034410.
Question 6 Fig. 8	© <a href="http://www.dnaindia.com/mumbai/1605867/report-versova-beach-raises-a-stink">http://www.dnaindia.com/mumbai/1605867/report-versova-beach-raises-a-stink</a>

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