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Cambridge IGCSE

Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

4095076120

GEOGRAPHY **0460/12**

Paper 1 **May/June 2015**

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 Figs 2A and 2B for Question 1 and Photographs A, B and C for Question 3.
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 **26** printed pages, **2** blank pages and **1** Insert.

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QUESTION 1

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

Birth rate (2013) = 9.4 per 1000

Death rate (2013) = 11.5 per 1000

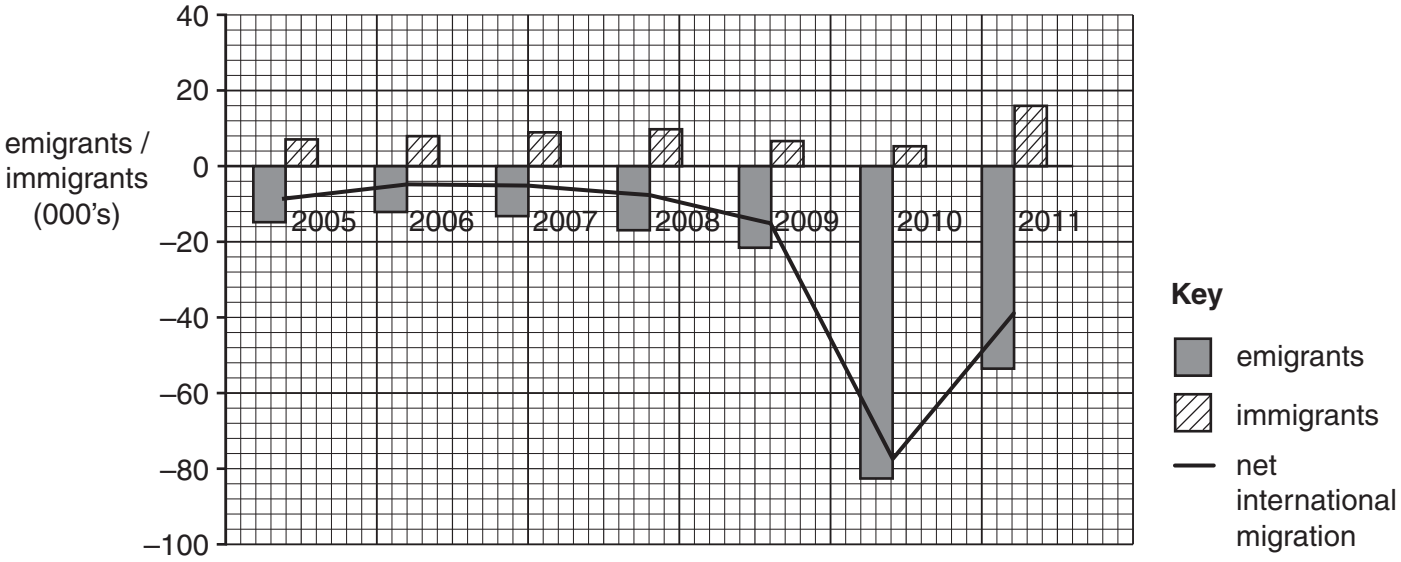

Fig. 1

(i) What is meant by *death rate = 11.5 per 1000*?

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.....[1]

(ii) Calculate the natural population growth rate of Lithuania in 2013.
You should show your calculations in the box below.

..... per 1000

[2]

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(iii) Describe the changes to Lithuania's net international migration between 2005 and 2011. You should refer to data from Fig. 1 in your answer.

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(iv) Suggest the possible impacts on Lithuania of a large amount of emigration.

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(b) Study Figs 2A and 2B (Insert), which show satellite images of Las Vegas in 1973 and 2000. Las Vegas is a city in the USA (an MEDC).

(i) Describe the changes in the shape and size of Las Vegas between 1973 and 2000.

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(ii) Describe the types of land use which occur at the edges of cities.

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(c) Name a country you have studied where **internal** migration has occurred.

Explain the reasons for this migration.

Name of country .....

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[Total: 25 marks]

END OF QUESTION 1

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QUESTION 2

2 **(a)** Study Fig. 3, a map showing the main land uses and transport routes in Toronto, Canada (an MEDC).

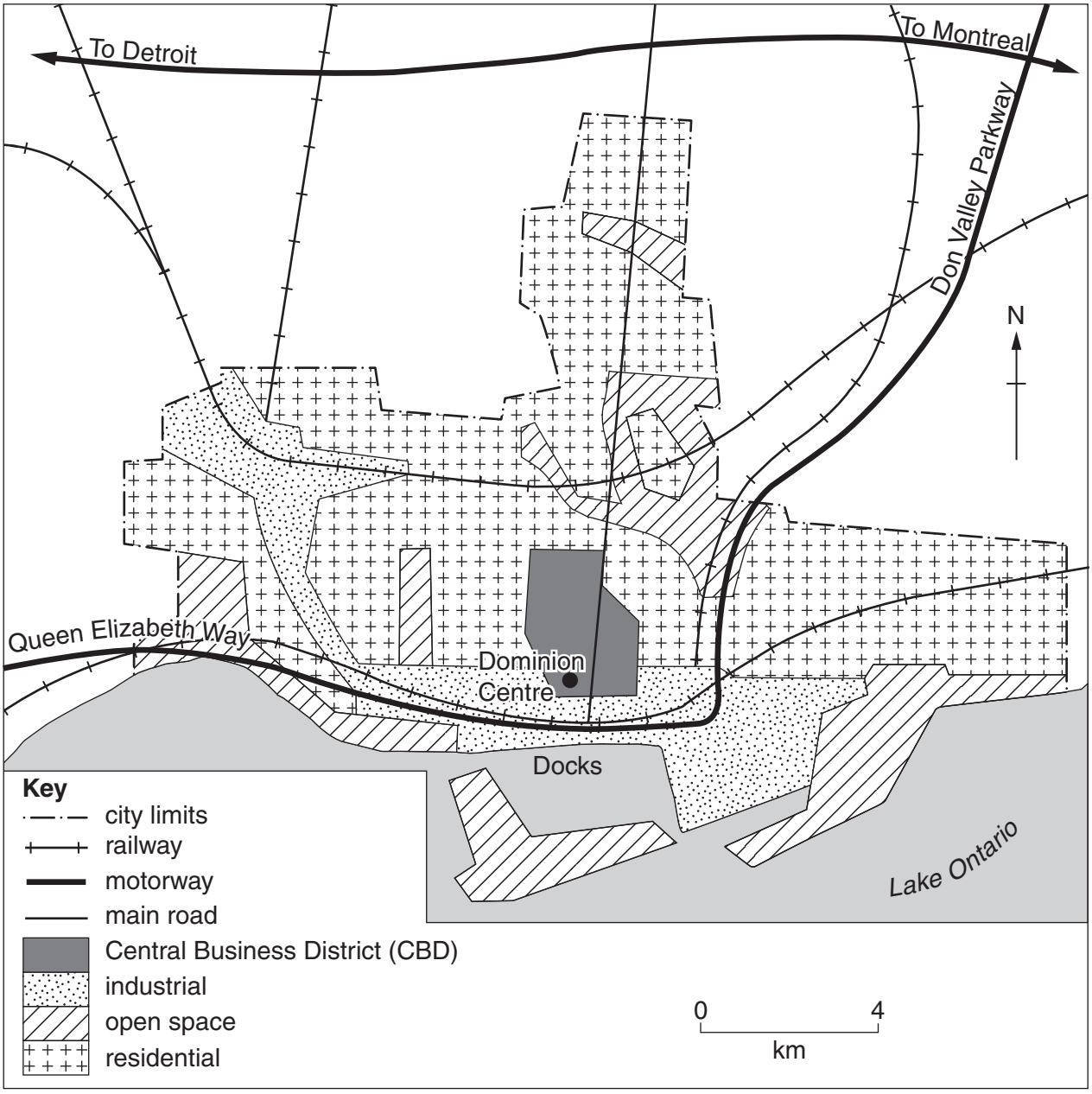

Fig. 3

(i) Estimate the area of the CBD of Toronto.
Circle the correct answer below.

1 km^2 4 km^2 7 km^2 14 km^2 [1]

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(ii) Suggest reasons why there are many high rise buildings in the CBD of Toronto.

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.....[2]

(iii) What evidence in Fig. 3 suggests that the location of the industrial zones in Toronto has been influenced by transport?

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(iv) Compare the pattern of urban land use in cities in LEDCs and MEDCs.

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(b) Study Fig. 4, which shows information about the percentage of the population using different types of transport in cities in Canada and China.

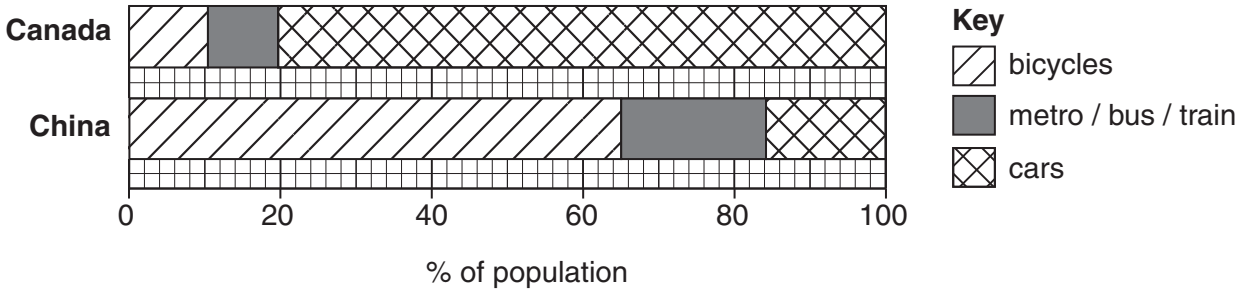

Fig. 4

(i) Identify **three** differences between types of transport used in cities in Canada and China.

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(ii) Describe the problems caused by traffic congestion in urban areas.

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(c) For a named urban area, describe and explain the attempts which have been made to solve traffic problems.

Name of urban area .....

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[Total: 25 marks]

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QUESTION 3

3 (a) Study Photographs A, B and C (Insert), which show the results of different types of weathering.

(i) What is meant by *weathering*?

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.....[1]

(ii) Match the three types of weathering listed with the Photographs A, B and C by completing the table below.

Type of weathering	Photograph
Biological	
Exfoliation	
Freeze-thaw	

[2]

(iii) Explain how rocks are weathered by exfoliation.

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(iv) Explain how freeze-thaw weathering occurs.

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(b) Study Fig. 5, which shows information about weathering.

FACTORS CONTROLLING RATES OF WEATHERING			
	slow	Weathering rate →	fast
ROCK TYPE			
Rate of solution	Slow	Moderate	High
Rock structure	No lines of weakness	Some lines of weakness	Many lines of weakness
SOIL			
Thickness of soil layer	None (bare rock)	Thin to moderate	Thick
CLIMATE			
Rainfall	Low	Moderate	High
Temperature	Cold	Temperate	Hot

Fig. 5

(i) Using Fig. 5 **only**, describe how rock type and soil cover influence the rate of weathering.

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(ii) Describe and explain how climate influences the rate of weathering.

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(c) Describe and explain the distribution of fold mountains.
You should refer to named examples.

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[Total: 25 marks]

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QUESTION 4

4 (a) Study Fig. 6, which shows tropical rainforest vegetation.

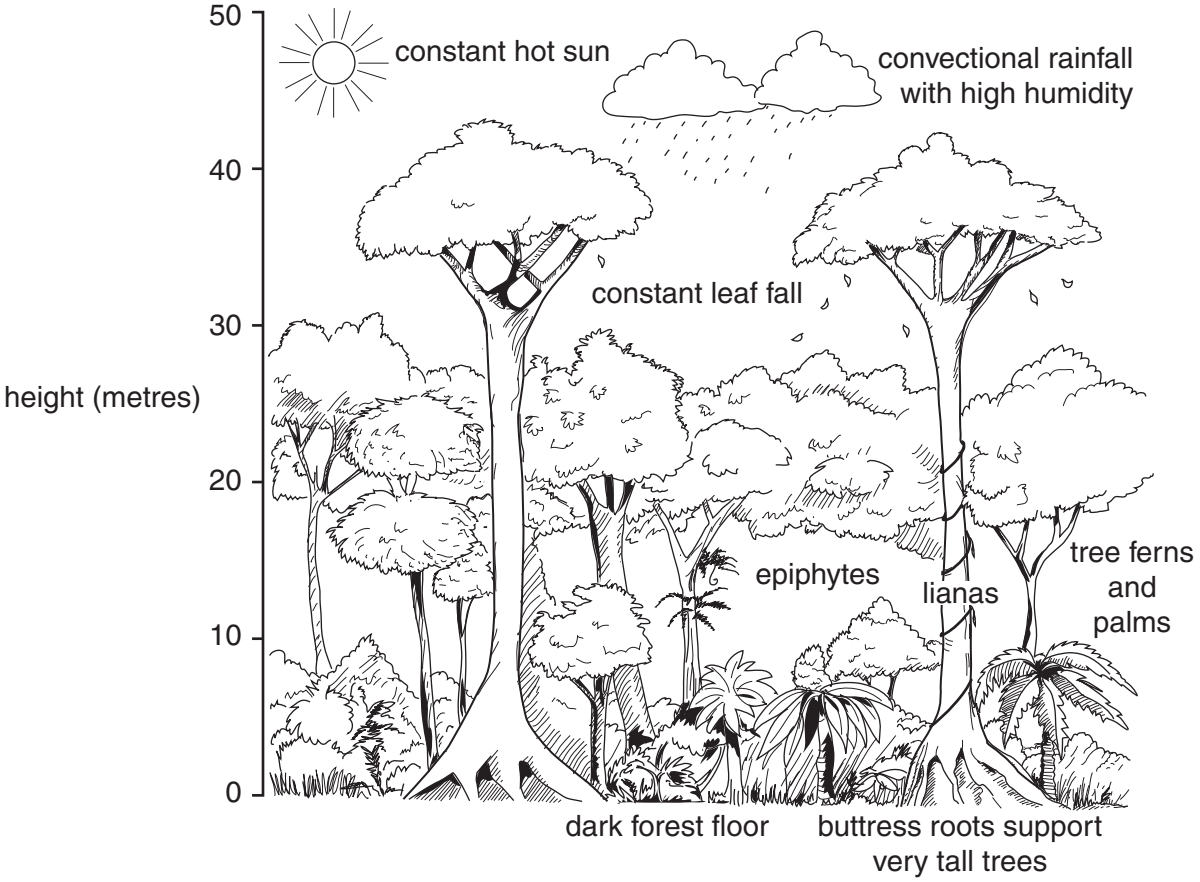

Fig. 6

(i) The tropical rainforest has a hot, wet climate.

Tick the correct pair of figures in the table below to show the annual average temperature and rainfall.

average annual temperature	annual average rainfall	✓
15°C	250 mm	
30°C	2500 mm	
60°C	750 mm	

[1]

(ii) On Fig. 6, label the following layers:

- canopy;
- emergents. [2]

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(iii) Describe the processes which lead to a high annual rainfall in the tropical rainforest.

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(iv) Explain why the tropical rainforest has a wide variety of plants, insects and animals.

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(b) Study Fig. 7, a map of a small area of rainforest in Brazil.

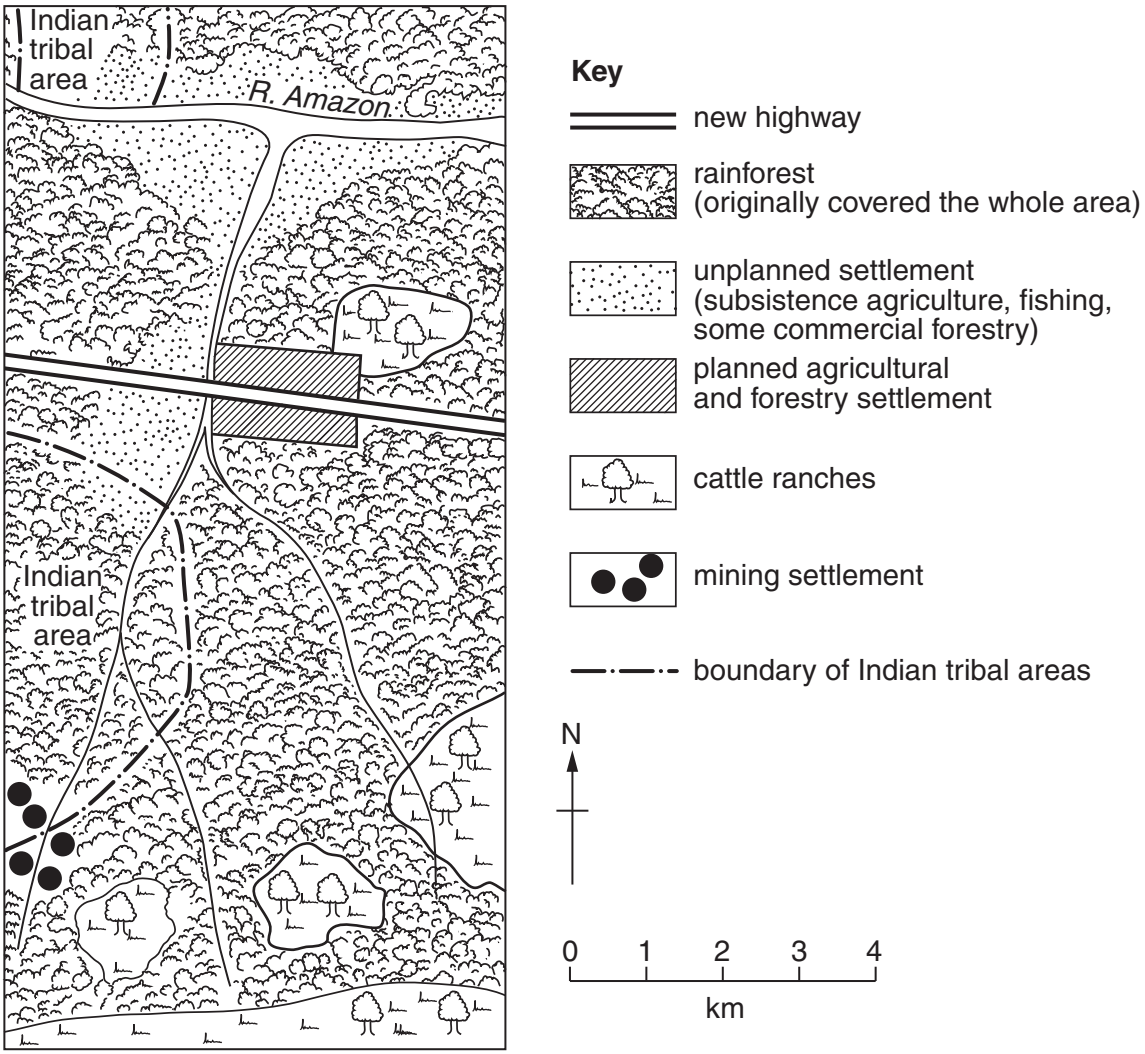

Fig. 7

(i) Using Fig. 7 **only**, identify **three** ways in which the rainforest is being used to create wealth for Brazil and employment for its people.

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(ii) Explain why the tropical rainforest is important globally.

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(c) For a named tropical rainforest you have studied, describe the impact of deforestation on the **local** natural environment.

Name of tropical rainforest .....

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[Total: 25 marks]

END OF QUESTION 4

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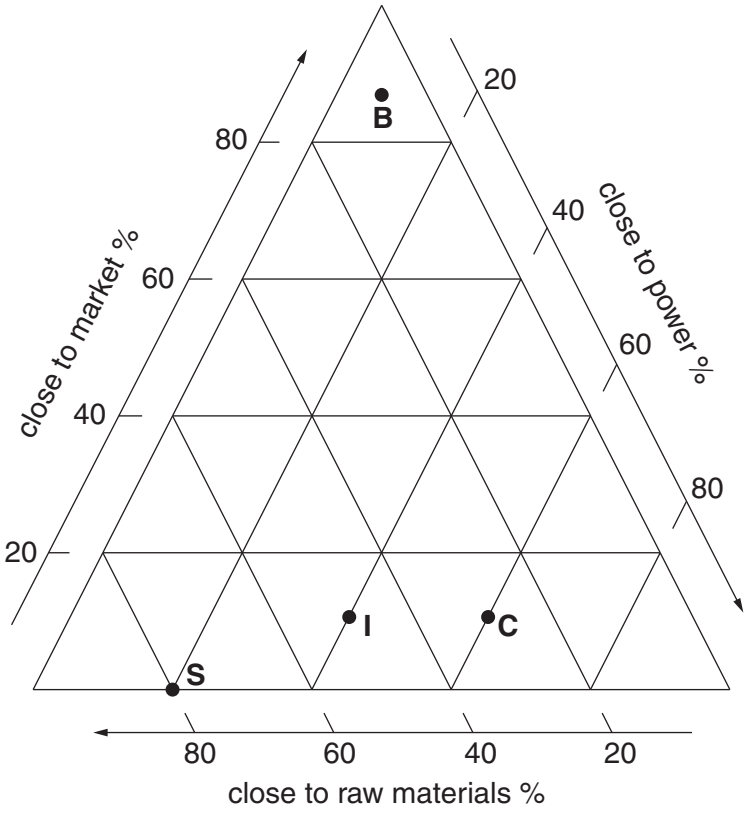
QUESTION 5

5 (a) Study Fig. 8, which shows information about the location of selected factories.



Key

B bakeries
S sawmills
I iron and steel works
C chemical factories

Fig. 8

(i) Plot, using an **X** on Fig. 8, information about the location of cotton textile factories. Use the data in the table below.

Percentage of cotton textile factories		
Close to market	Close to power	Close to raw materials
30	50	20

[1]

(ii) What is meant by the *raw materials* and the *market* of a factory?

Raw materials

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Market

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(iii) Using information from Fig. 8 **only**, compare the importance of the factors influencing the locations of iron and steel works and bakeries.

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(iv) Explain how the cost of transport influences the location of different types of industry.

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(b) Study Fig. 9, which shows information about high technology exports from Israel.

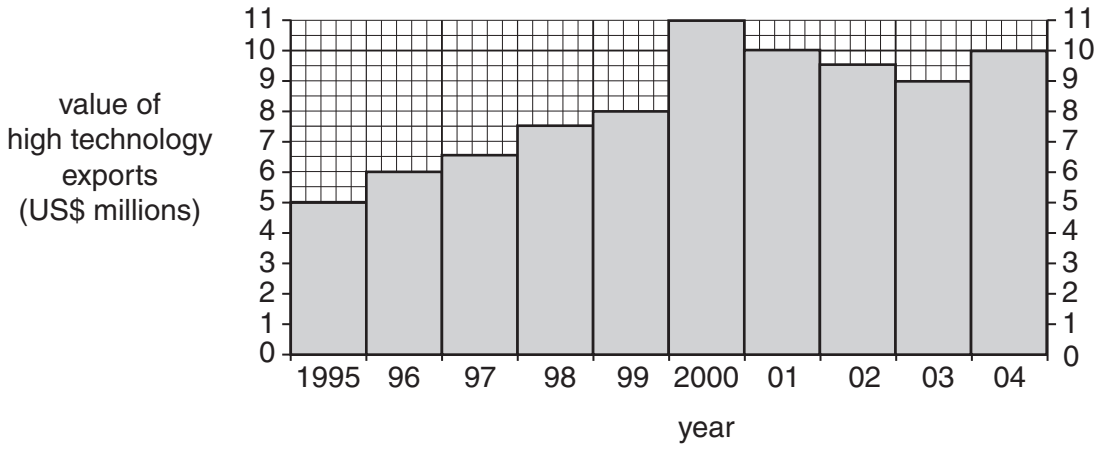

Fig. 9

(i) Using Fig. 9 **only**, describe the changing amount of high technology exports from Israel between 1995 and 2004. You should use statistics to support your answer.

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(ii) Suggest how the growth of high technology industry may have benefitted the people and economy of Israel.

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(c) Explain why high technology industry is located in a named area you have studied.

Name of area .....

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[Total: 25 marks]

END OF QUESTION 5

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QUESTION 6

6 (a) Study Figs 10A, 10B and 10C, which show information about Sri Lanka (an LEDC).

Relief

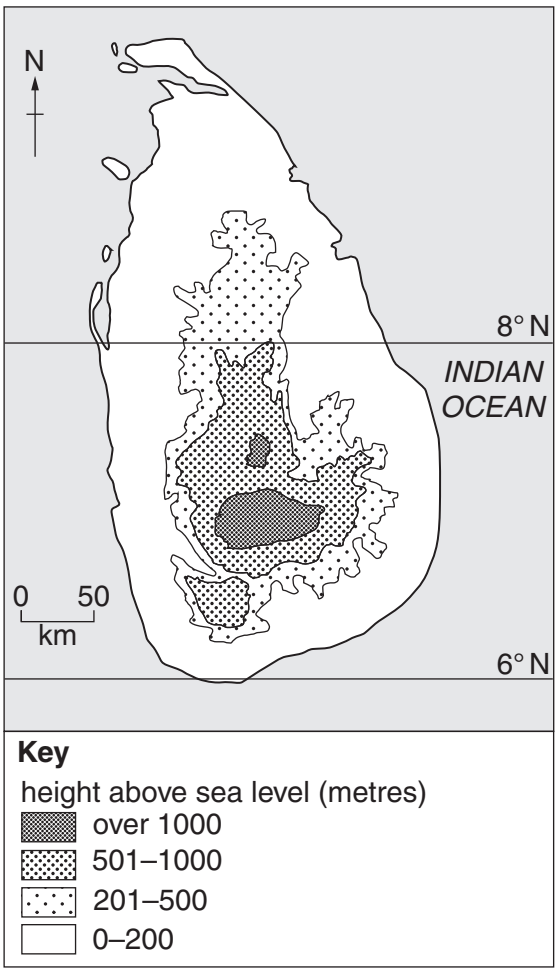

Fig. 10A

Average annual rainfall (mm)

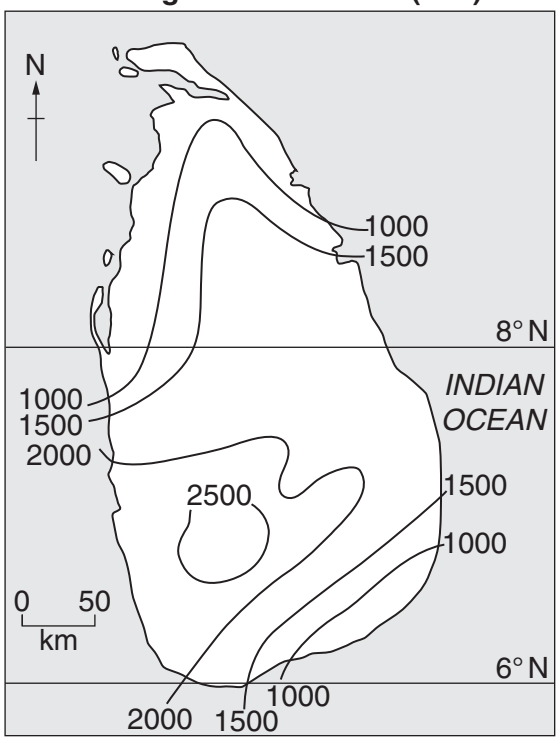

Fig. 10B

Large scale water transfers

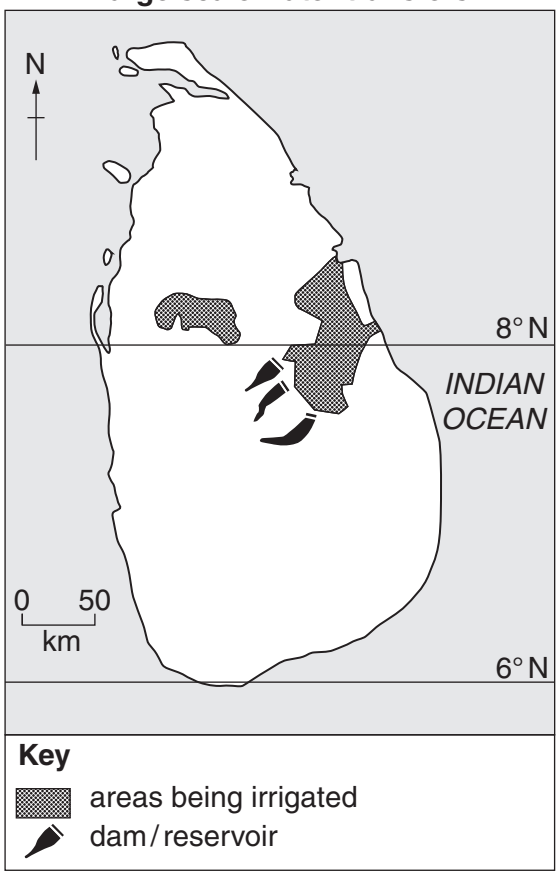

Fig. 10C

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(i) On Fig. 10B, shade the area of over 2500 mm annual rainfall. [1]

(ii) Give **two** reasons for the location of the reservoirs shown on Fig. 10C.

1 .....

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2 .....

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(iii) Describe the location of the areas which are irrigated on Fig. 10C.

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(b) Study Fig. 11, which shows information about hydro-electric power.

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Fig. 11

(i) Explain how hydro-electric power is generated.

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(ii) What are the benefits of generating electricity using hydro-electric power stations rather than by using fossil fuels?

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(iii) Explain the factors which influence the location of hydro-electric power stations.

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(c) For a named country or area where large amounts of fuel wood are used for energy, describe the problems this causes for local people.

Name of area or country .....

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[Total: 25 marks]

END OF QUESTION 6

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Additional Page

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