Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME	

CENTRE NUMBER						CANDIDATE NUMBER				

GEOGRAPHY **0460/12**

Paper 1 Geographical Themes **October/November 2020**

1 hour 45 minutes

You must answer on the question paper.

You will need: Insert (enclosed)
Calculator
Ruler

INSTRUCTIONS

- Answer **three** questions in total, **one** from each section.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- If additional space is needed, you should use the lined pages at the end of this booklet; the question number or numbers must be clearly shown.

INFORMATION

- The total mark for this paper is 75.
- The number of marks for each question or part question is shown in brackets [ ].
- The insert contains additional resources referred to in the questions.

Definitions
MEDCs – More Economically Developed Countries
LEDCs – Less Economically Developed Countries

This document has **32** pages. Blank pages are indicated.

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Section A

Answer **one** question from this section.

1 **(a)** Study Fig. 1.1, which shows information about the Demographic Transition Model.

Demographic Transition Model

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Fig. 1.1

(i) Identify the stage when population is growing most rapidly.

..... [1]

(ii) Using Fig. 1.1 **only**, compare:

the birth rates in Stage 2 and Stage 3 .....

.....

.....

the death rates in Stage 1 and Stage 2 .....

.....

..... [2]

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(iii) Using information from Fig. 1.1 **only**, explain why the rate of population growth changes as a country moves from Stage 1 to Stage 4.

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..... [3]

(iv) Explain why birth rates are still high in many LEDCs.

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(b) Study Fig. 1.2, which shows information about the population of 10 urban areas in Botswana (an LEDC in Africa) in 1991 and 2011.

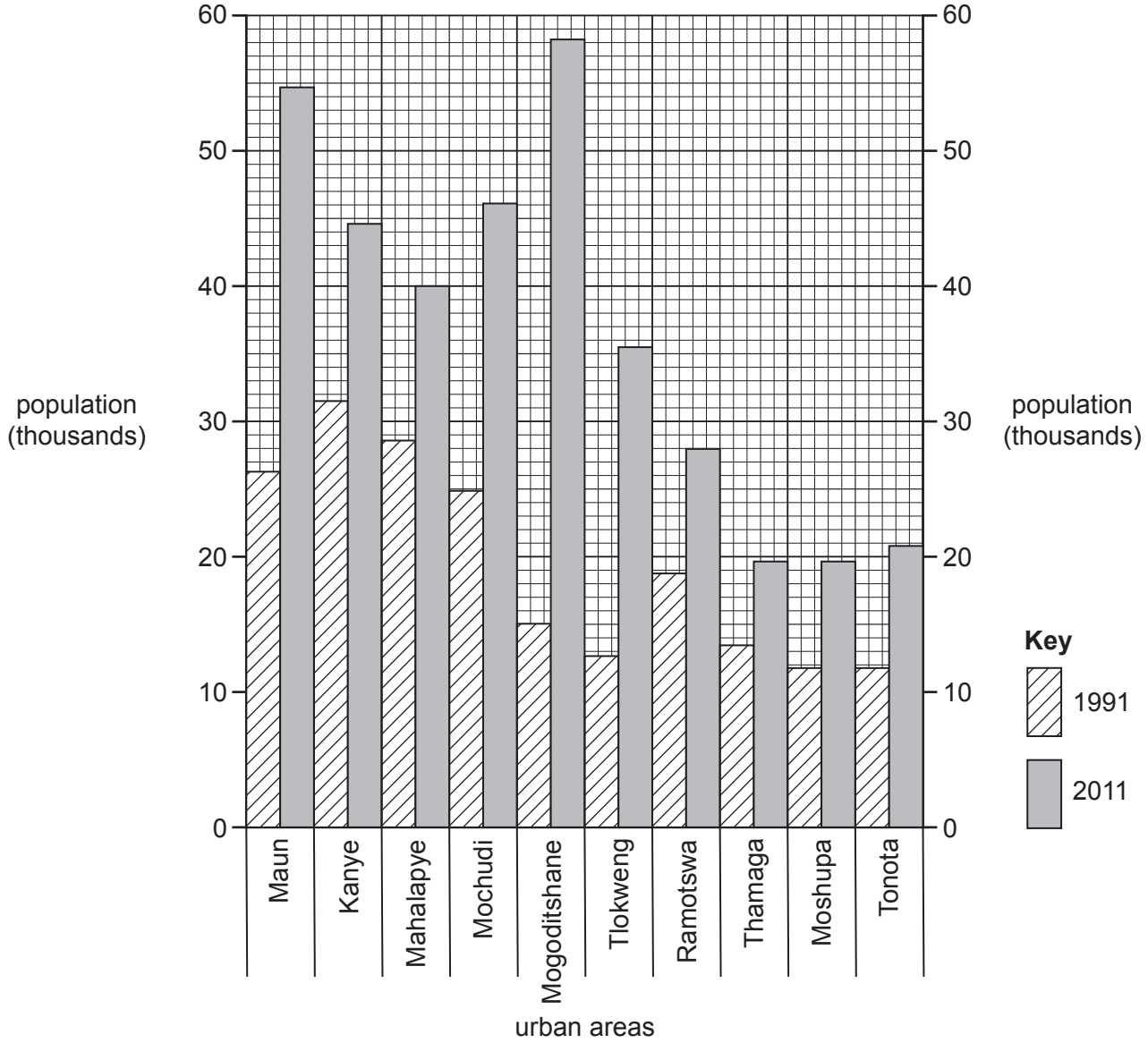

Fig. 1.2

(i) Put the following urban areas in rank order according to their population growth between 1991 and 2011.

Kanye Maun Mogoditshane Thamaga Tonota

..... Highest population growth

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.....

.....

..... Lowest population growth [3]

(ii) Describe the problems caused by rapid population growth in urban areas in LEDCs.

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..... [5]

(c) For a country or area you have studied which is **sparsely populated**, explain why there is a low population density.

Name of country or area .....

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[Total: 25]

2 **(a)** Study Fig. 2.1, which shows information about the increasing percentage of people living in urban areas in 1950, 2007 and 2030 (estimated).

Percentage of population in urban areas

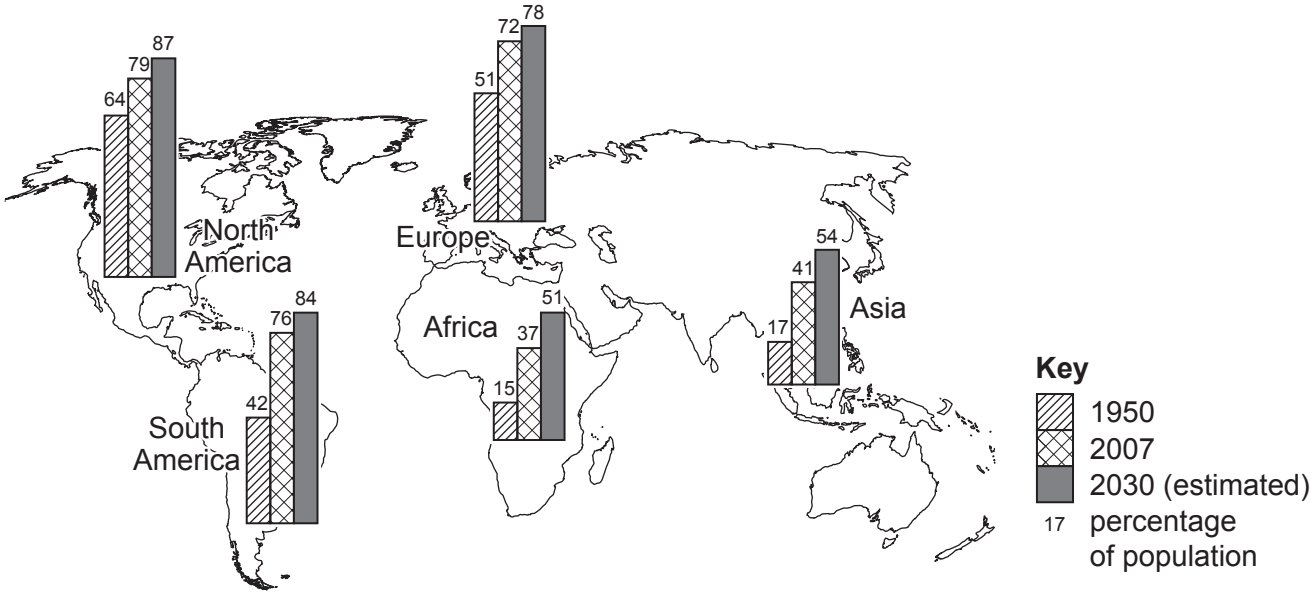

Fig. 2.1

(i) Which word in the list below is used to describe the increase in the percentage of people living in urban areas?

Circle **one** of the following:

depopulation emigration immigration urbanisation [1]

(ii) Identify the continent where the percentage of population living in urban areas:

- was the largest in 2007

  .....

- is estimated to increase the most between 2007 and 2030.

  ..... [2]

(iii) Describe **three** impacts of the growth of urban areas on the surrounding natural environment.

1 .....

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2 .....

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3 .....

..... [3]

(iv) Explain why rural areas experience problems when large numbers of people move away from them.

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..... [4]

(b) Study Fig. 2.2 (Insert), which is a photograph showing homes in a squatter settlement in Accra, Ghana (an LEDC in Africa).

(i) Describe **three** features of the buildings shown in Fig. 2.2.

1 .....

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2 .....

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3 .....

..... [3]

(ii) Explain why many people who live in squatter settlements suffer from diseases.

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..... [5]

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(c) Explain why people have migrated to a named rapidly growing urban area you have studied.

Name of urban area .....

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[Total: 25]

Section B

Answer **one** question from this section.

3 **(a)** Study Fig. 3.1, which shows information about flows through a drainage basin.

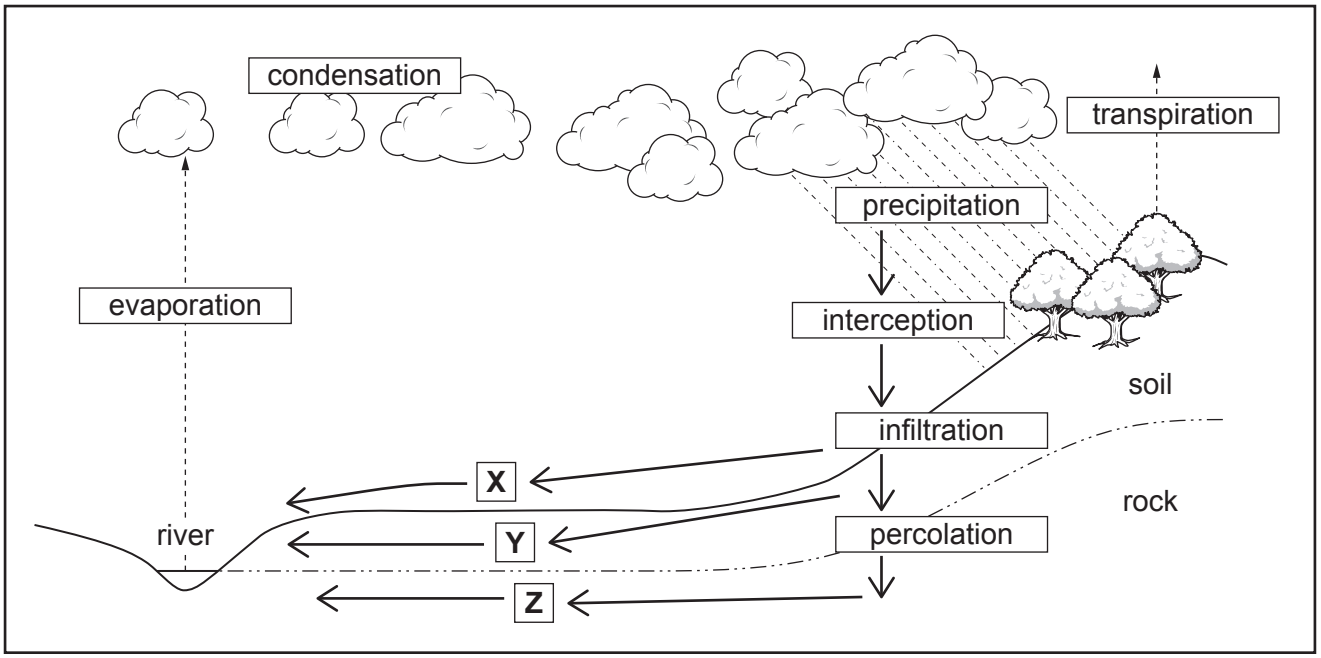

Fig. 3.1

(i) What is meant by *transpiration*?

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..... [1]

(ii) Explain why the amount of interception varies:

- from place to place

.....

.....

- at different times of the year.

.....

..... [2]

(iii) Identify the processes which take place at **X**, **Y** and **Z** in Fig. 3.1.

X .....

Y .....

Z ..... [3]

(iv) Cawston Creek is a small river in Canada. On the outline map, Fig. 3.2 below, mark with arrows and label the following:

- a source (label **S**)
- a confluence (label **C**)
- a tributary which is less than 1 km long (label **T**)
- the watershed (label **W**) [4]

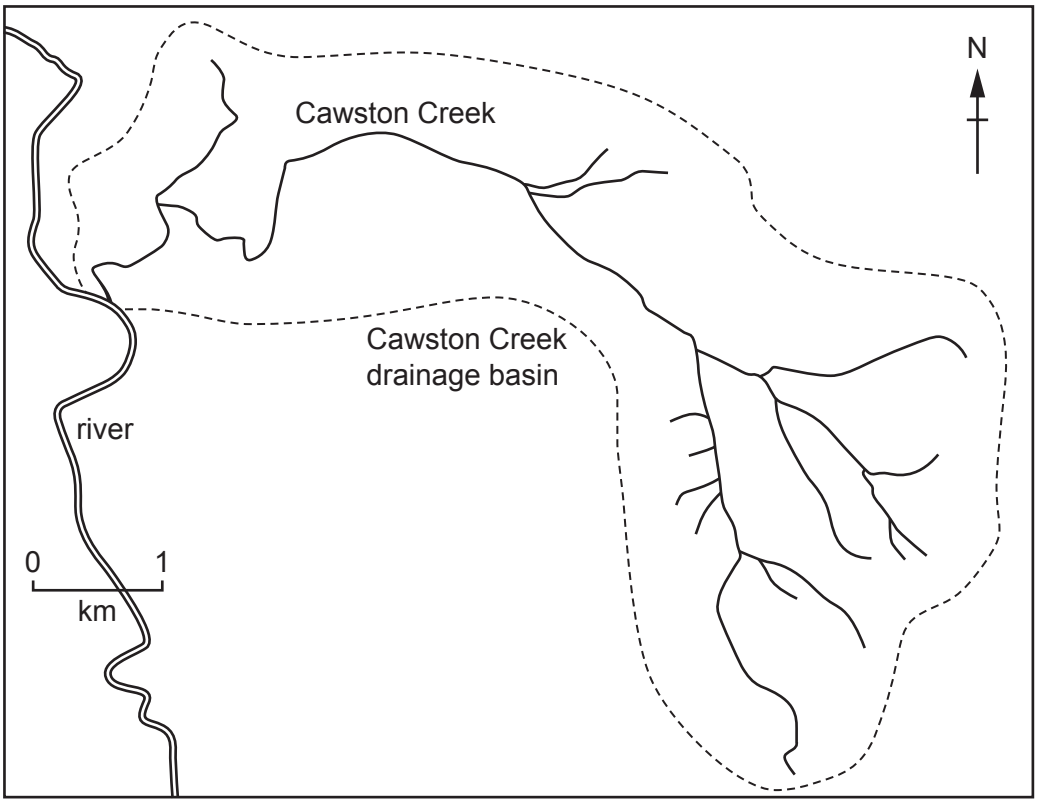

Fig. 3.2

(b) Study Figs. 3.3 and 3.4 (Insert), which are photographs showing two different rivers and their valleys.

(i) Describe the similarities and differences between the **rivers** shown in Figs. 3.3 and 3.4.

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..... [3]

(ii) Explain how rivers erode their valleys.

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(c) Draw a labelled diagram to show the features of a river delta.
Explain how a river delta is formed.

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[Total: 25]

4 **(a)** Study Fig. 4.1, which is a cross section through a volcano.

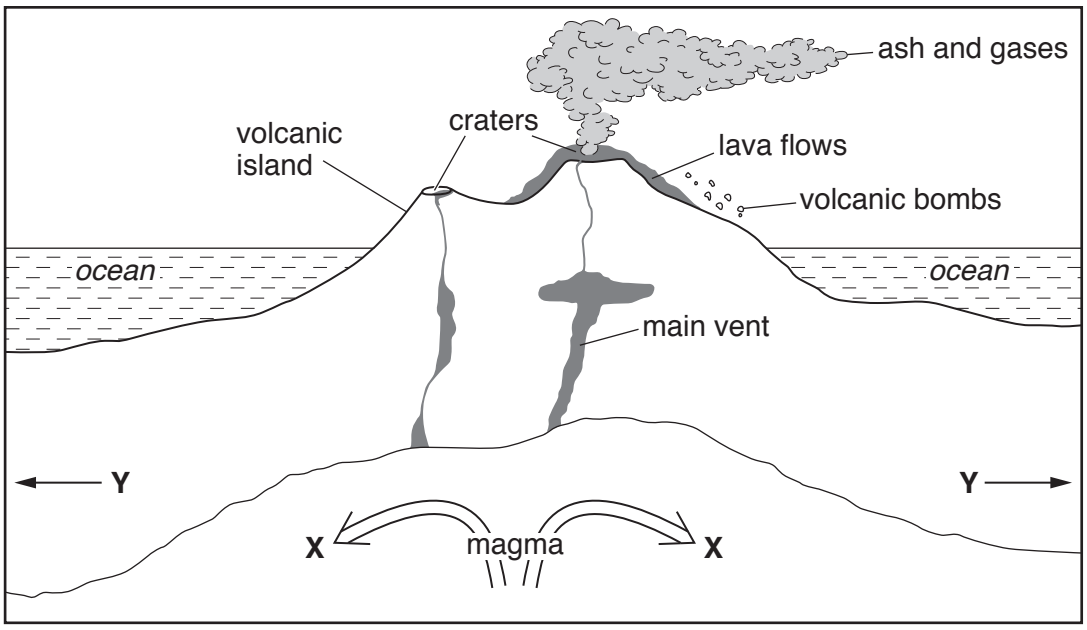

Fig. 4.1

(i) What type of plate boundary is shown in Fig. 4.1?

..... [1]

(ii) Choose the correct labels for features **X** and **Y** shown in Fig. 4.1.

Choose from the list below:

- convection currents
- direction of plate movement
- lava escaping from the volcano
- new crust created
- subduction.

X .....

Y ..... [2]

(iii) Using Fig. 4.1, identify **three** different hazards caused by a volcanic eruption which may cause injuries, deaths and damage.

1 .....

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2 .....

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3 .....

..... [3]

(iv) Describe the benefits of living near volcanoes.

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..... [4]

(b) Study Fig. 4.2, which shows information about two earthquakes, one which occurred in an MEDC and one in an LEDC.

Location	Kobe (in an MEDC)	Port-au-Prince (in an LEDC)
time of day	05:46	16:53
depth of focus	16 km	12 km
magnitude (Richter scale)	7.2	7.2
deaths	6434	220 000
injured	40 000	300 000
homeless people	316 000	895 000
cost of damage	US$220 billion	US$11 billion

Fig. 4.2

(i) Describe the differences in the impacts of the earthquakes at Kobe and Port-au-Prince.

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..... [3]

(ii) Explain why earthquakes of the same magnitude may have different impacts.

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(c) For a named example you have studied, explain the causes of an earthquake.

Name of example .....

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Section C

Answer **one** question from this section.

5 **(a)** Study Fig. 5.1, which is a diagram showing development indicators for four countries.

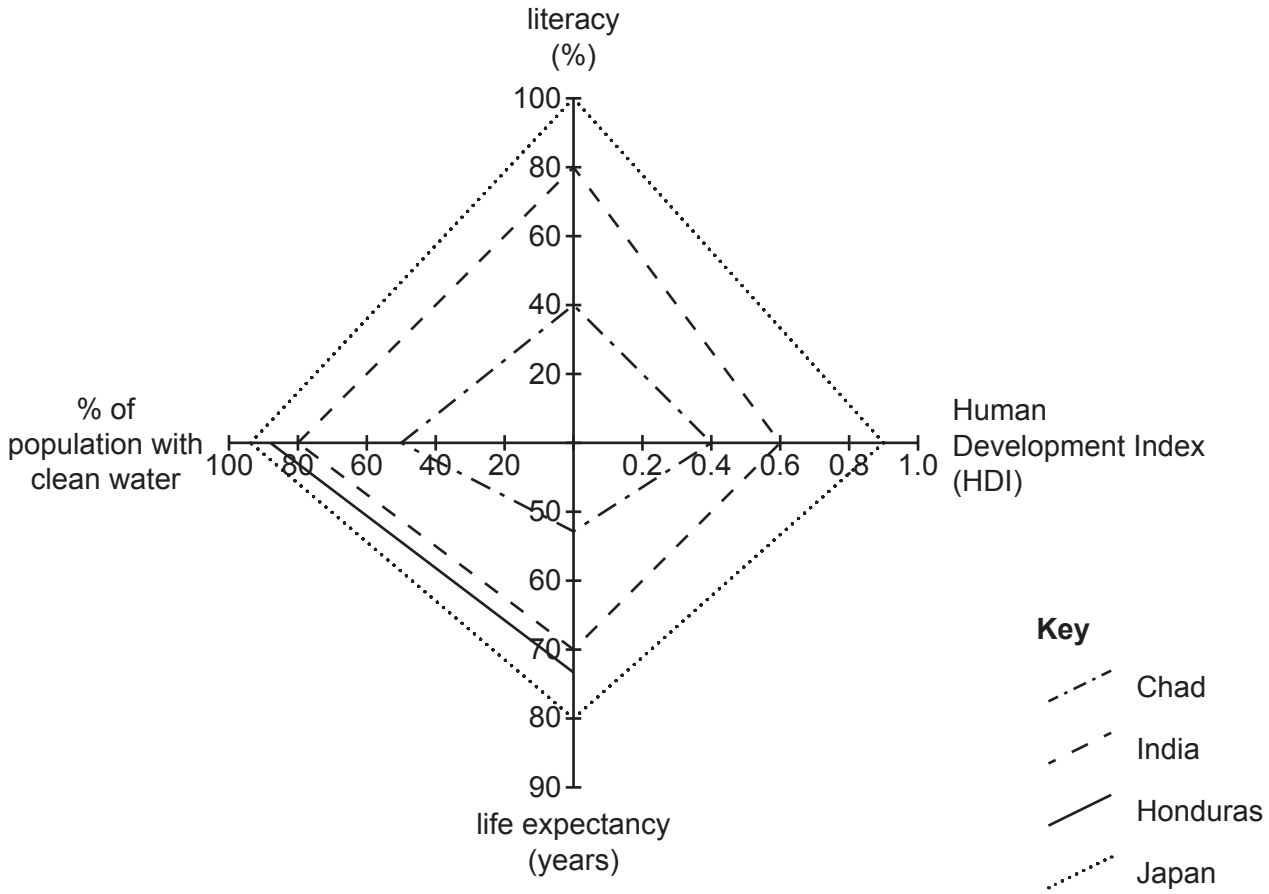

Fig. 5.1

(i) Identify the country shown in Fig. 5.1 which has the shortest life expectancy.

..... [1]

(ii) **Complete Fig. 5.1** by plotting the following information:

- 90% of the population of Honduras are literate.
- the Human Development Index (HDI) of Honduras is 0.63. [2]

(iii) Explain why the Human Development Index (HDI) is a good method of comparing development **between countries**.

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..... [3]

(iv) Explain why there may be inequalities in levels of development **within a country**.

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(b) Study Fig. 5.2, which shows four plans that the government of an LEDC in Africa is considering.

Plan 1 Build more schools in rural areas and allow all children up to the age of 16 to attend free of charge.
Plan 2 Build a multi-purpose dam across a major river which flows through the centre of the country.
Plan 3 Offer financial incentives to attract transnational corporations which manufacture electrical goods.
Plan 4 Build one large coastal tourist resort and another resort close to a national park in the mountains.

Fig. 5.2

(i) Suggest **three** reasons why the government is considering Plan 1.

1 .....

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2 .....

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3 .....

..... [3]

(ii) Choose Plan 2, 3 or 4.

Explain why the plan which you have chosen will result in development in the country.

Plan chosen .....

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..... [5]

(c) For a named area you have studied, describe how economic development is damaging the natural environment.

Name of area .....

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[Total: 25]

TURN PAGE FOR QUESTION 6

6 **(a)** Study Figs. 6.1 and 6.2, which show information about a subsistence farming area in The Gambia (an LEDC in Africa).

Cross section of farming area

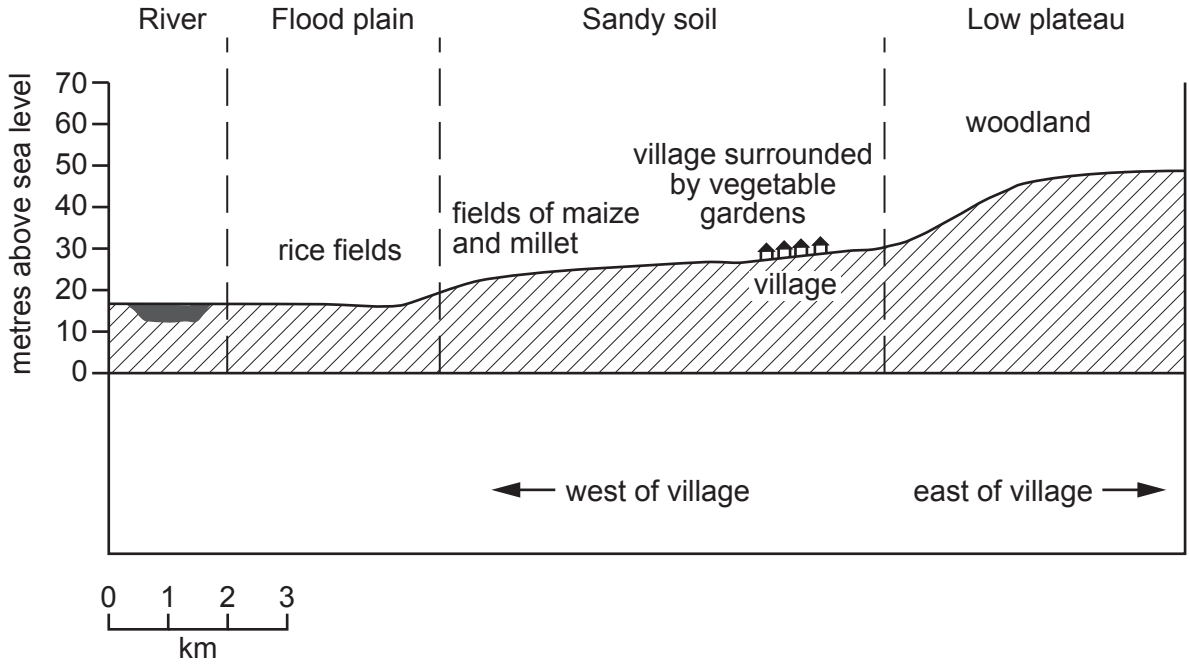

Fig. 6.1

Sketch map of farming area

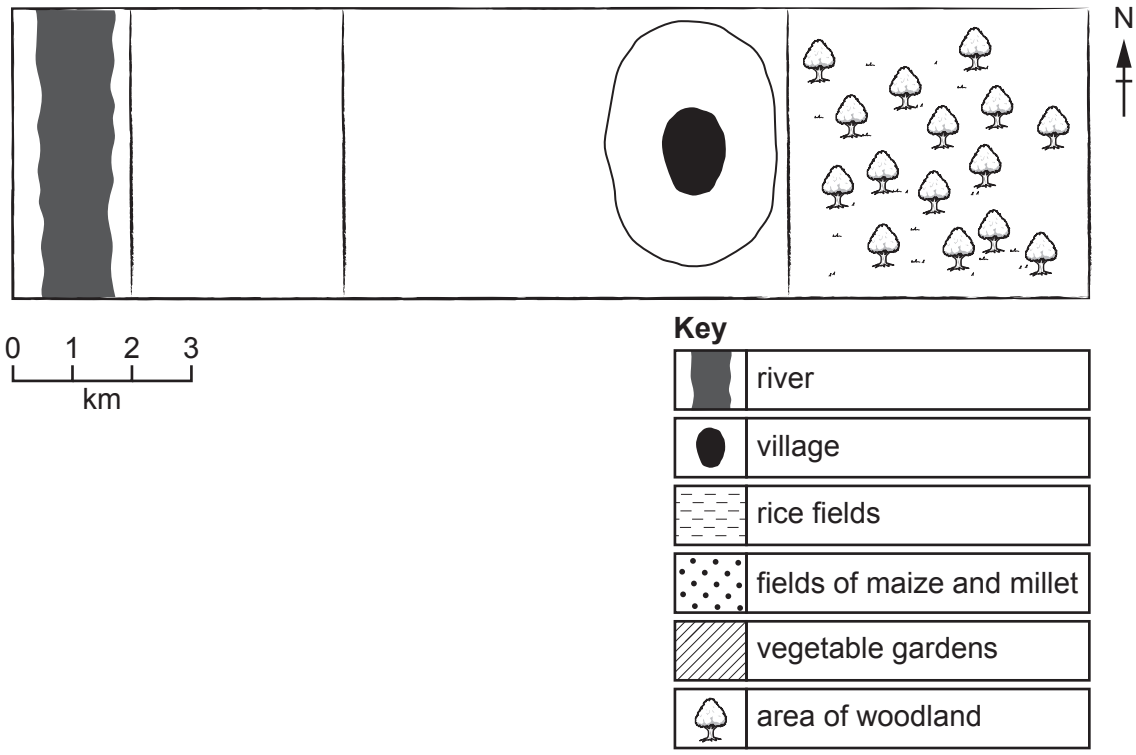

Fig. 6.2

(i) What is meant by *subsistence* farming?

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..... [1]

(ii) **Use the key to complete the sketch map**, Fig. 6.2, which shows land use in the farming area by shading:

- the rice fields
- the vegetable gardens
- the fields of maize and millet. [2]

(iii) Suggest **three** reasons why the vegetable gardens are closer to the village than the rice fields.

1 .....

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2 .....

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3 .....

..... [3]

(iv) Describe the problems which may be caused for local people if the area of woodland to the east of the village was cleared to grow more maize and millet.

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..... [4]

(b) Study Fig. 6.3, which shows recommendations which agricultural experts have given to subsistence farmers in areas such as the one shown in Fig. 6.1.

Recommendation 1 Build a covered, concrete-lined well close to the farm.
Recommendation 2 Put electric fences around the fields of maize and millet.
Recommendation 3 Use some of the land to graze a small herd of goats.

Fig. 6.3

(i) Explain how each of the three recommendations in Fig. 6.3 may increase the farmers' food supply.

Build a covered, concrete-lined well close to the farm

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Put electric fences around the fields of maize and millet

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Use some land to graze a small herd of goats

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..... [3]

(ii) Describe other methods farmers in LEDCs can use to increase their agricultural output.

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..... [5]

(c) For a named country or region you have studied, explain how **natural factors** have caused food shortages.

Name of country or region .....

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Additional Pages

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