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3183513699

GEOGRAPHY **0460/12**

Paper 1 Geographical Themes **May/June 2021**

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. Any 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 population structure of Thailand (an LEDC in Southeast Asia) in 1980 and 2015.

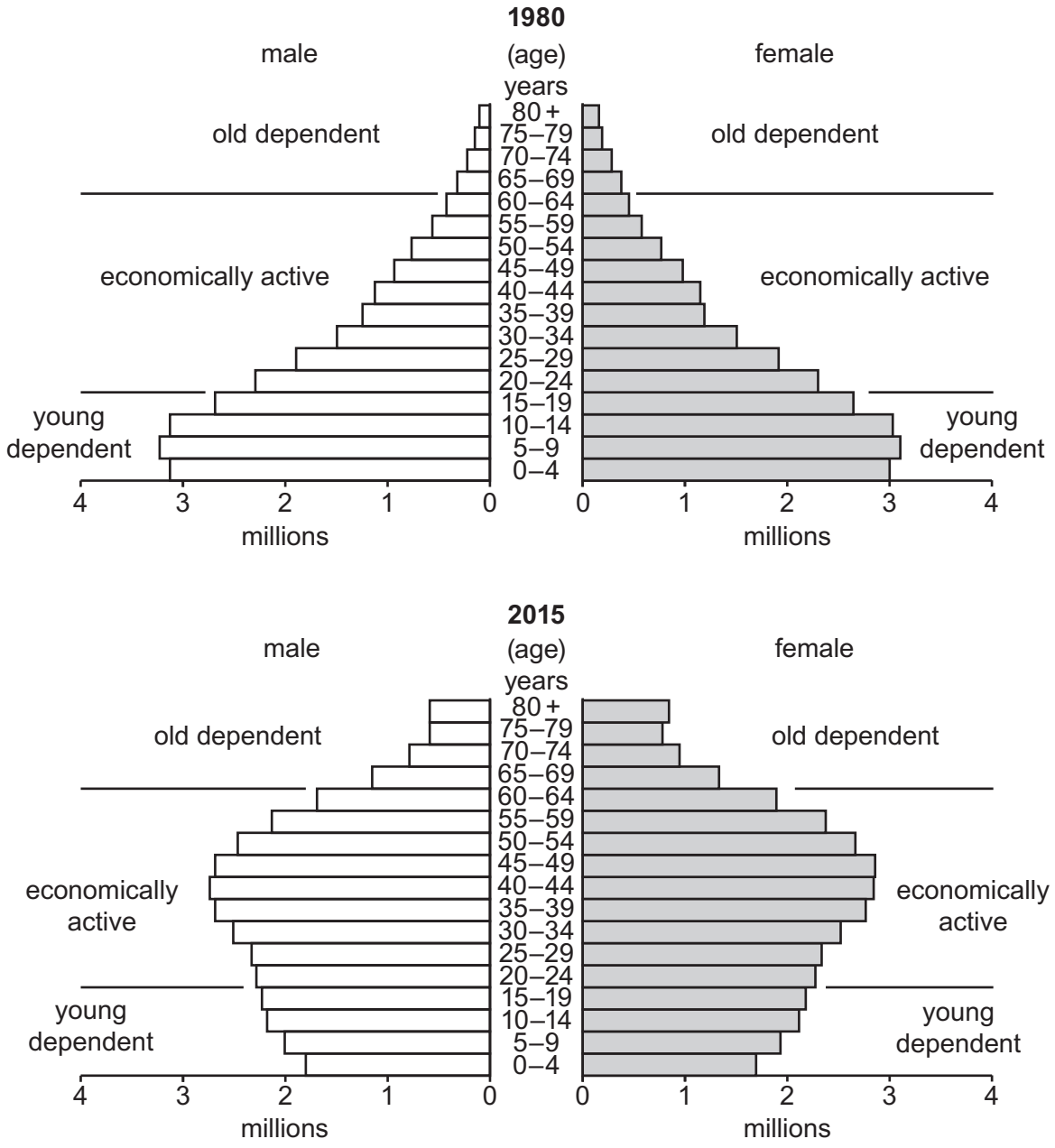

Fig. 1.1

(i) How many of the population of Thailand in 1980 were female and aged 0 to 4?

.....million [1]

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(ii) Describe how the **total** population of Thailand aged 0 to 4 changed between 1980 and 2015. You should use statistics in your answer.

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..... [2]

(iii) Describe how the **shape** of Thailand's population pyramid changed between 1980 and 2015.

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(iv) Suggest reasons for the decrease in the number of young dependents in Thailand between 1980 and 2015.

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(b) Study Fig. 1.2, which predicts how the number and percentage of people aged 65 and over in Australia (an MEDC) may change between 2017 and 2057.

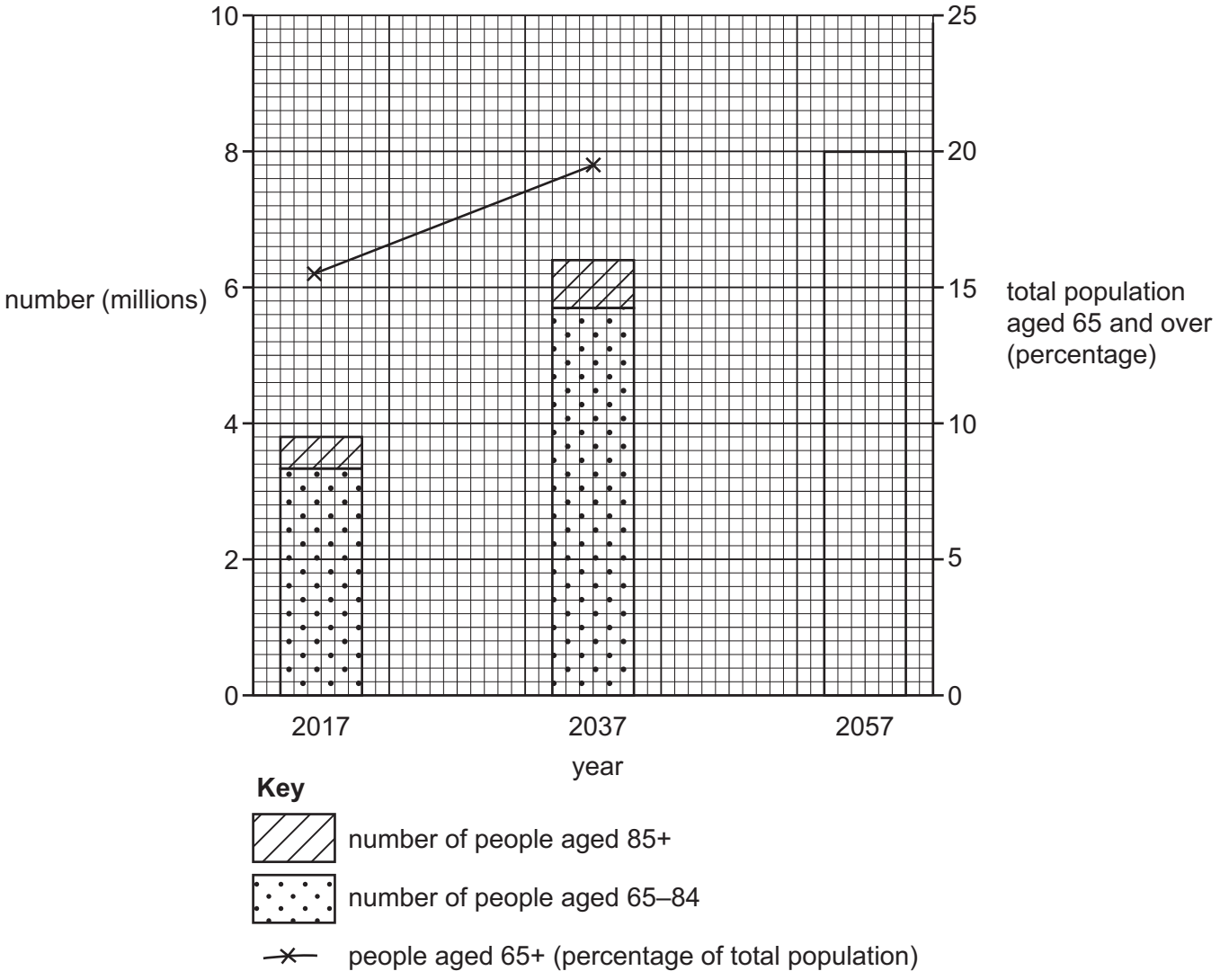

Fig. 1.2

(i) **Complete Fig. 1.2** by plotting the following information for 2057.

Number of people aged 65–84 years = 7 million

Number of people aged 85+ years = 1 million

People over 65 years as a percentage of total population = 23% [3]

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(ii) Explain why increasing numbers of people aged 65 and over may cause problems for MEDCs, such as Australia.

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(c) For a named country you have studied, describe the causes and consequences of **under-population**.

Name of country .....

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2 **(a)** Study Fig. 2.1 (Insert), which shows information about urbanisation.

(i) Define the term *urbanisation*.

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..... [1]

(ii) Using Fig. 2.1 **only**, name:

– the continent which has most cities with a population of 10 million or more

.....

– the continent where there are no cities with a population of over 5 million.

..... [2]

(iii) Using Fig. 2.1 **only**, describe the distribution of areas with over 80% of their population living in urban areas.

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(iv) Explain why the percentage of the total population living in cities in LEDCs is likely to continue growing rapidly.

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(b) Study Figs. 2.2 and 2.3 (Insert), which are photographs taken in part of the urban area of Mumbai, India (an LEDC).

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

1 .....

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2 .....

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3 .....

..... [3]

(ii) Explain why the quality of life of some people who have moved to areas like those shown in **both Figs. 2.2 and 2.3** may be worse than in the rural areas they moved from.

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(c) For a named urban area you have studied, describe what has been done to reduce the problems caused by urban growth.

Name of urban area .....

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Section B

Answer **one** question from this section.

3 **(a)** Study Fig. 3.1, which shows the Earth's tectonic plates and their boundaries.

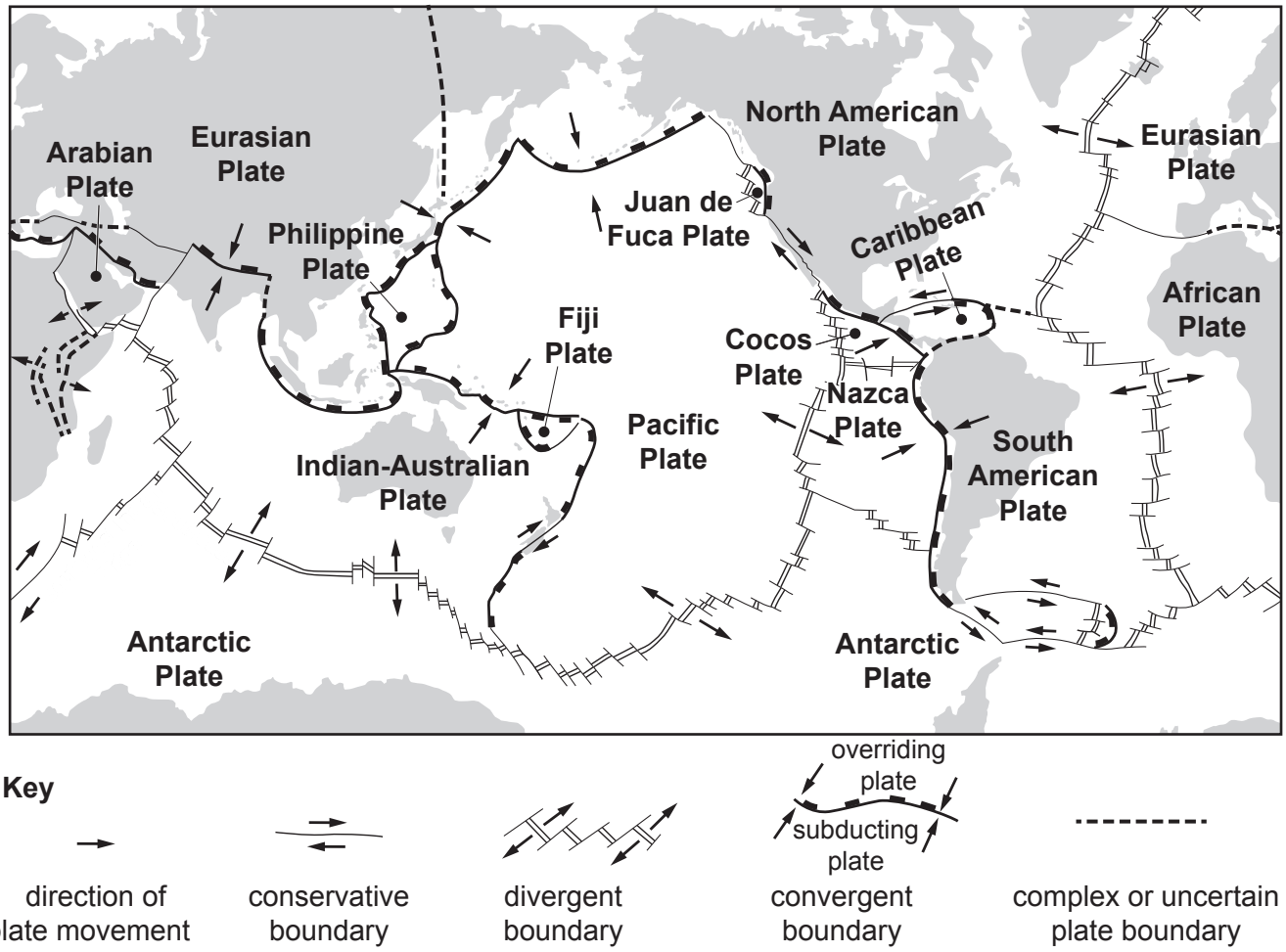

Fig. 3.1

(i) At which type of plate boundary do plates move **away from** each other?

Circle your answer.

Conservative | Convergent (Destructive) | Divergent (Constructive)

[1]

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(ii) Explain why boundaries where plates move **towards** each other are known as destructive boundaries.

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..... [2]

(iii) Explain why volcanoes form at places where plates move **away from** each other.

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(iv) Draw a diagram of a strato-volcano (composite cone) in the box below and label its main features.

[4]

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(b) Study Fig. 3.2 (Insert), which shows information about an eruption of Mauna Loa volcano in Hawaii.

(i) Compare the flow of lava from Mokuaweoweo crater (labelled **M** on Fig. 3.2) with the flow from Pu'u Ula'ula crater (labelled **P**).

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(ii) Explain why more deaths and injuries are caused by earthquakes than by volcanic eruptions.

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

Name of area .....

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4 **(a)** Study Fig. 4.1, which shows a map of an upland area, and Fig. 4.2 (Insert), which is a photograph of a waterfall.

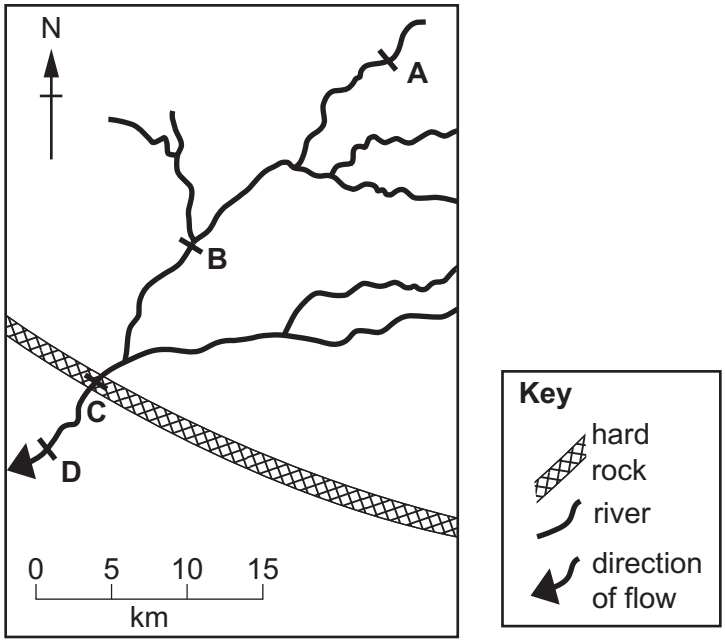

Fig. 4.1

(i) Which location **A**, **B**, **C** or **D** is the most likely position of the waterfall shown in Fig. 4.2?

..... [1]

(ii) Identify features **X** and **Y** in Fig. 4.2.

X .....

Y ..... [2]

(iii) Explain why a gorge may form downstream of a waterfall.

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..... [3]

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(b) Study Fig. 4.3 (Insert), which is a map of an area in Asia where river flooding occurred.

(i) Describe the location of the areas shown in Fig. 4.3 where flooding occurred.

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(ii) Suggest reasons why the rivers flooded in the areas shown in Fig. 4.3.

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(iii) Suggest the methods which could be used in the area shown in Fig. 4.3 to prevent flooding.

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(c) Describe the changes which occur along a river and its valley from its source to its mouth. You should refer to processes and landforms.

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Section C

Answer **one** question from this section.

5 **(a)** Study Fig. 5.1, which is a map showing the HDI of Nigeria's states. Nigeria is an LEDC in Africa.

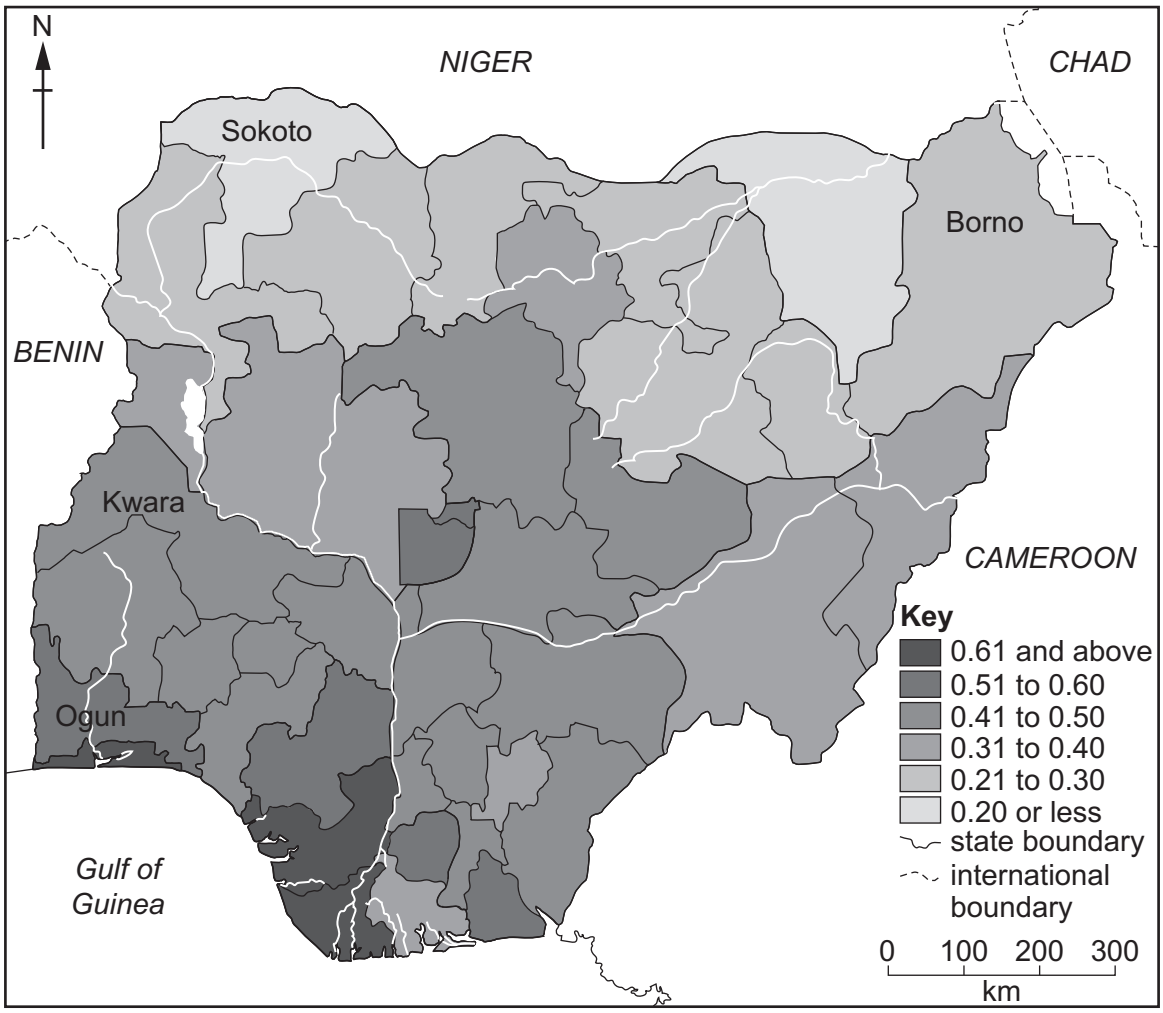

Fig. 5.1

(i) What is meant by the initials HDI?

H..... D..... I..... [1]

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(ii) Put the following states in rank order according to their HDI.

Borno Kwara Ogun Sokoto

1st ..... highest HDI

2nd .....

3rd .....

4th ..... lowest HDI [2]

(iii) Suggest **three** reasons why some states of Nigeria have a higher HDI than other states.

1 .....

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2 .....

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(iv) Explain why HDI is considered to be a better indicator of the level of development of a country than its Gross National Product (GNP).

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(b) Study Figs. 5.2, 5.3 and 5.4 (Insert), which are photographs showing different employment sectors.

(i) Identify the employment sectors shown in each of Figs. 5.2, 5.3 and 5.4.

Fig. 5.2 .....

Fig. 5.3 .....

Fig. 5.4 ..... [3]

(ii) Explain why the employment structure of a country is a good indicator of its level of development.

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(c) Explain the causes of globalisation. You should refer to examples which you have studied.

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6 **(a)** Study Fig. 6.1, which shows information about precipitation and evaporation in Los Gatos, an area in California, USA (an MEDC).

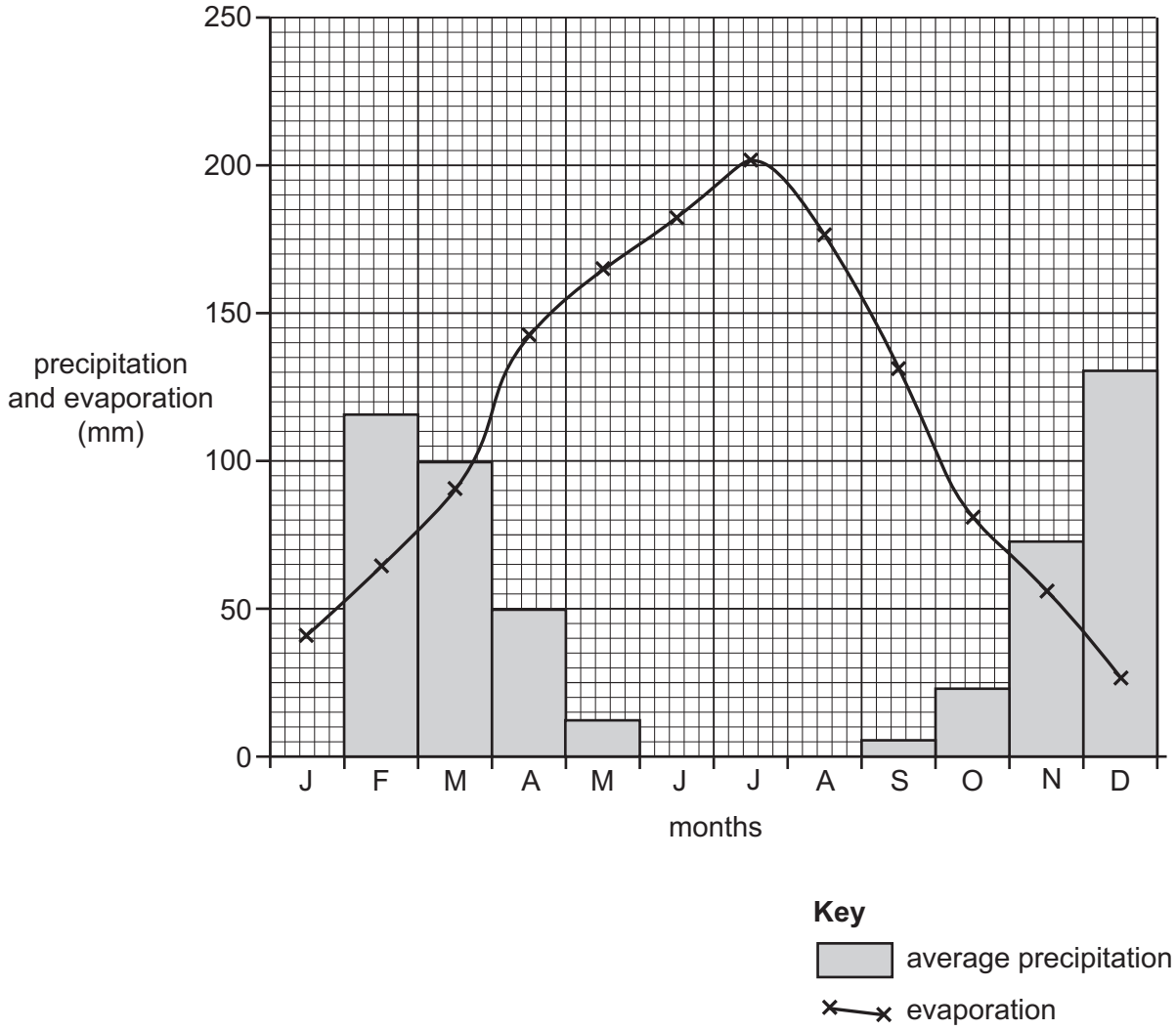

Fig. 6.1

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(i) **Complete Fig. 6.1** by plotting the following:

The average precipitation in January is 130 mm. [1]

(ii) Using Fig. 6.1 **only**, name:

– a month when irrigation will be needed .....

– a month when soils may be waterlogged. ..... [2]

(iii) Using Fig. 6.1 **only**, describe how the relationship between average precipitation and evaporation varies during the year. Use statistics to support your answer.

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(iv) Suggest how water supply can be managed in areas such as California to ensure that it is available all year round.

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(b) Study Fig. 6.2, which shows information about desertification in Northern Africa.

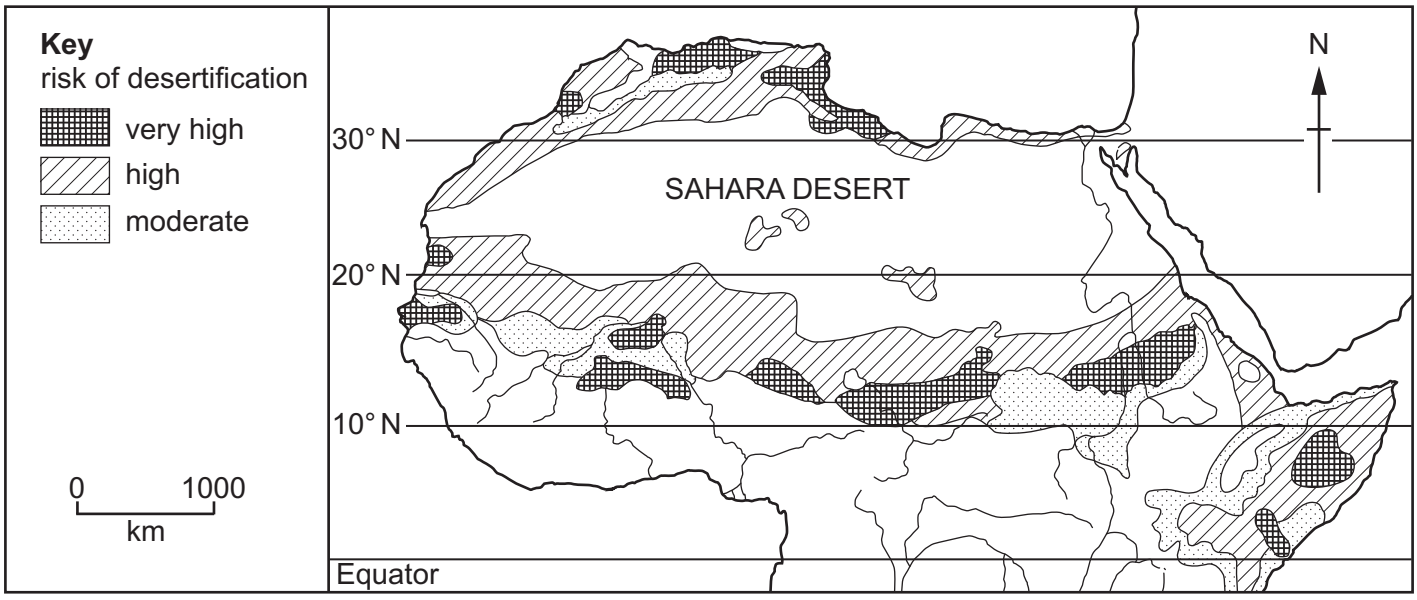

Fig. 6.2

(i) Describe the distribution of the areas in Northern Africa where the risk of desertification is very high.

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(ii) Describe the impacts of desertification on local people.

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(c) For a named area you have studied, explain how economic activity is causing the **local natural environment** to be at risk.

Name of area .....

Economic activity .....

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Additional Pages

If you use the following lined pages to complete the answer(s) to any question(s), the question number(s) must be clearly shown.

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