GEOGRAPHY	**2217/11**
Paper 1	**October/November 2010**
	1 hour 45 minutes

Additional Materials: Answer Booklet/Paper

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, **one** from each section.
Sketch maps and diagrams should be drawn whenever they serve to illustrate an answer.
The Insert contains Fig. 3 for Question 2, Photograph A for Question 3, Photograph B for Question 4 and Photographs C, D and E for Question 6.

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.

[Turn over

Section A

Answer **one** question from this section.

1 (a) Study Table 1, which shows information about the population and area of selected regions in China.

Table 1

Region	Population (millions)	Area (square km)	Population Density (per square km)
Guizhou	38	176 100	216
Hubei	60	187 400	
Jiangsu	74	102 600	721
Qinghai	6	720 000	8
Shandong	91	153 000	595
Xinjiang	19	1 600 000	12

(i) List the following regions of China from the highest to the lowest population density.

Guizhou   **Qinghai**   **Shandong**

[1]

(ii) Calculate the population density of Hubei (in people per square km). You must show your calculations. [2]

(iii) Xinjiang is a highland region. Referring to physical factors, explain why some highland regions are sparsely populated. [3]

(iv) Jiangsu is a coastal region. Referring to economic and human factors, explain why many coastal regions are densely populated. [4]

(b) Study Fig. 1, which shows information about population.

over-population

optimum population
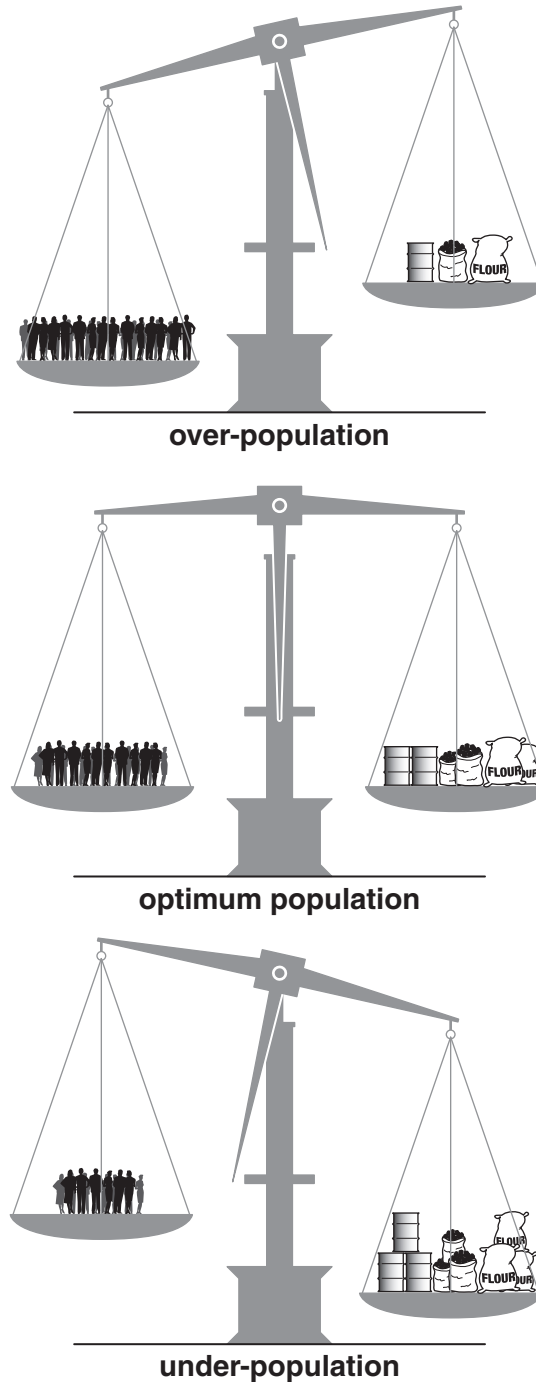
under-population

Fig. 1

(i) Suggest the likely effects of under-population on the economy of a region. [3]

(ii) Explain the problems over-population may cause for the people and natural environment of a region. [5]

(c) For an example of international migration which you have studied, explain why many people made the decision to migrate. You should name the countries between which people migrated and refer both to pull and to push factors. [7]

[Total: 25 marks]

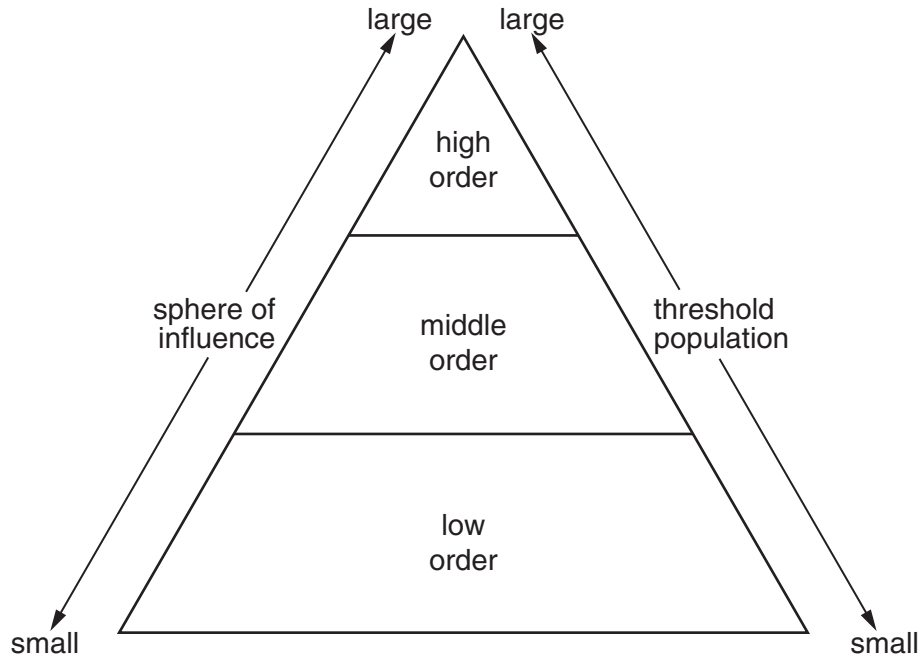**2 (a)** Study Fig. 2, which shows the hierarchy of services.

Fig. 2

- **(i)** What is meant by the term *sphere of influence* of a service? [1]

- **(ii)** Give an example of:

    A a low order service,

    B a high order service. [2]

- **(iii)** Explain why high order services have a large threshold population. [3]

(b) Study Fig. 3 (Insert), which is a land use map of a suburban area of Lima, in Peru (an LEDC).

- **(i)** Identify **three** different examples of services in the area shown by Fig. 3. [3]

- **(ii)** What evidence on Fig. 3 suggests that this suburban area has been planned? [4]

- **(iii)** Suburban areas, such as that shown on Fig. 3, are growing rapidly around many cities. Describe the impacts of this growth on the natural environment. [5]

(c) Many settlements have grown into large urban areas.

For a named example of a large urban area which you have studied, explain the reasons for its growth. [7]

[Total: 25 marks]

Section B

Answer **one** question from this section.

3 **(a)** Study Photograph A (Insert), which shows an area of coastline and Fig. 4 which is a map of the same area.
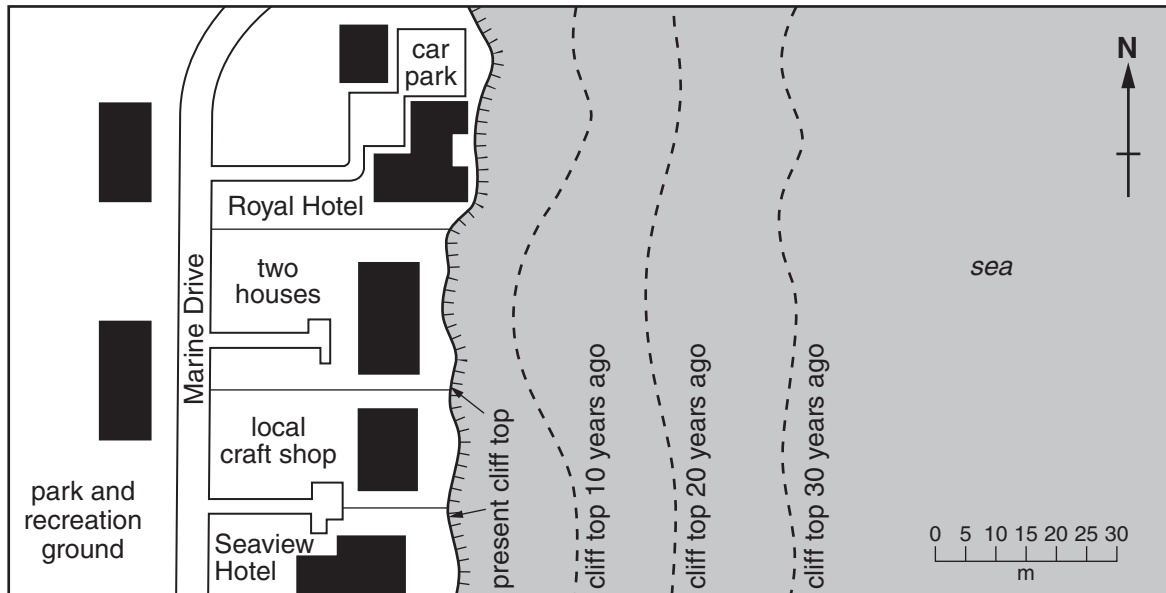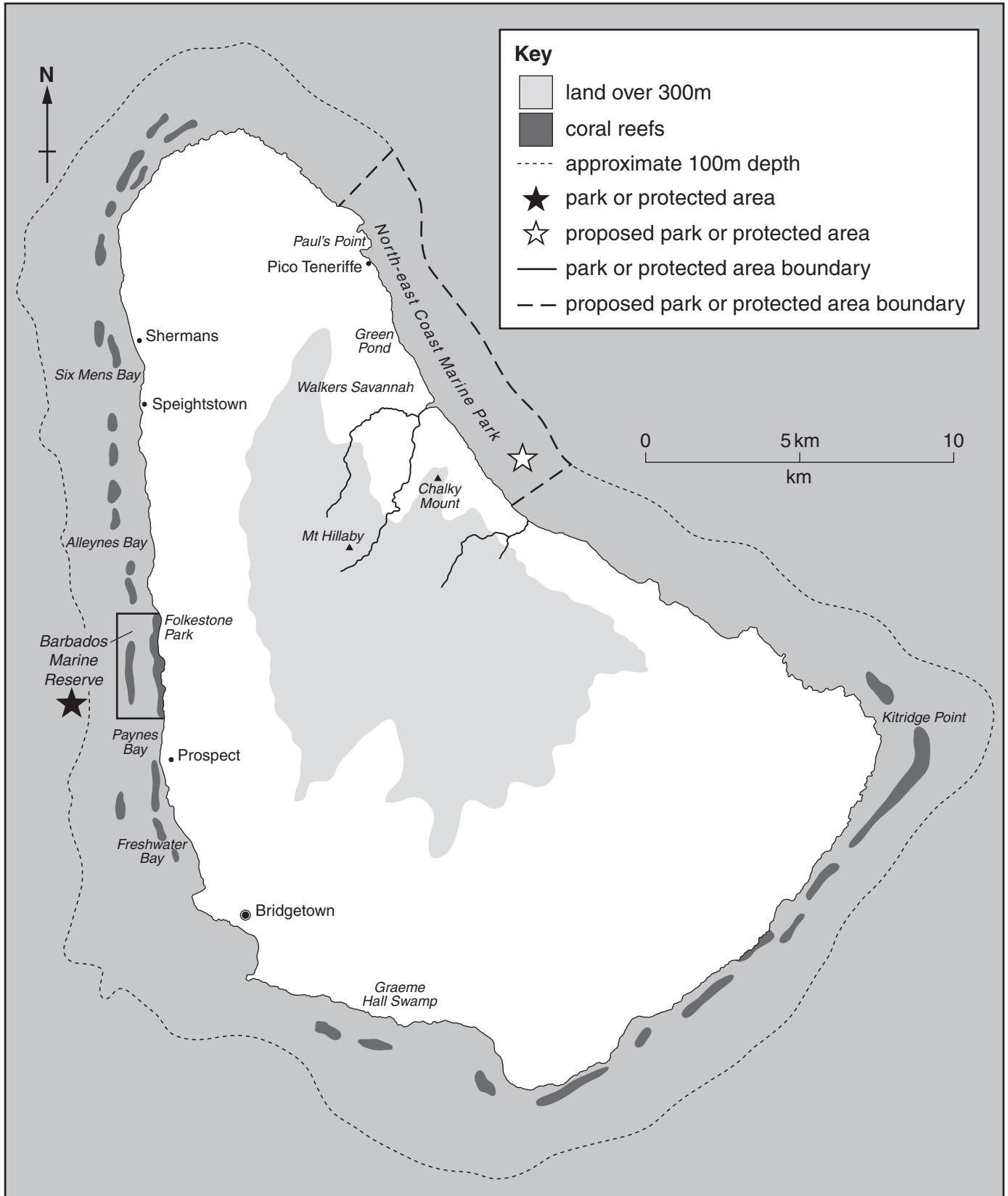

Fig. 4

(i) How far has the cliff eroded in the last 30 years? Give your answer in metres. [1]

(ii) Suggest **two** reasons why rapid erosion has taken place in the area shown in Photograph A. [2]

(iii) Explain how coastal erosion may cause problems for the people who live in the area shown on Fig. 4. [3]

(iv) Name and explain **two** processes by which waves erode coasts. [4]

(b) Study Fig. 5, which shows the island of Barbados.

Key

land over 300m

coral reefs

- - - - - approximate 100m depth

★ park or protected area

☆ proposed park or protected area

—— park or protected area boundary

– – proposed park or protected area boundary

Paul's Point

Pico Teneriffe

North-east Coast Marine Park

Shermans

Green Pond

Six Mens Bay

Walkers Savannah

Speightstown

0   5 km   10

km

Chalky Mount

Mt Hillaby

Alleynes Bay

Folkestone Park

Barbados Marine Reserve

Paynes Bay

Prospect

Kitridge Point

Freshwater Bay

Bridgetown

Graeme Hall Swamp

N

Fig. 5

    (i) Describe the distribution of coral reefs shown on Fig. 5. [3]

    (ii) Describe the conditions required for the development of a coral reef. [5]

(c) Explain how **one** of the following has formed in a named area which you have studied:

- a spit;

- an area of coastal sand dunes.

You should use labelled diagrams in your answer. [7]

[Total: 25 marks]

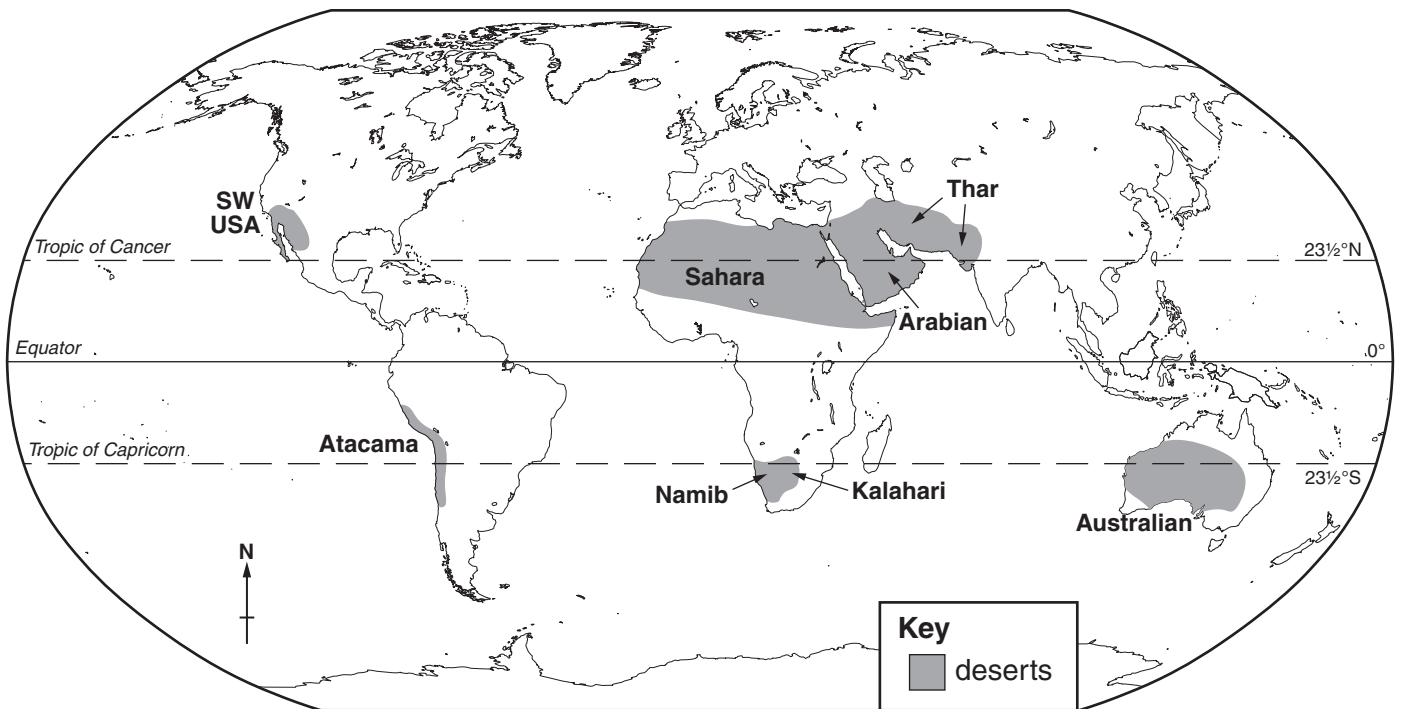**4 (a)** Study Fig. 6, which shows the location of tropical deserts.

Fig. 6

(i) Name a tropical desert in the Northern Hemisphere. [1]

(ii) Describe the location of the Atacama desert. [2]

(iii) Describe and explain the main characteristics of daytime and night-time temperatures in tropical deserts. [3]

(iv) Explain why tropical desert areas have an annual precipitation of less than 250mm. You may use labelled diagrams or sketch maps in your answer. [4]

(b) Study Photograph B (Insert), which shows vegetation in a tropical desert.

(i) Describe the main features of the vegetation shown in Photograph B. [3]

(ii) Explain the relationship between the climate and the natural vegetation in tropical desert areas. [5]

(c) For a named tropical desert, explain how and why the natural environment is threatened by human activities. [7]

[Total: 25 marks]

Section C

Answer **one** question from this section.

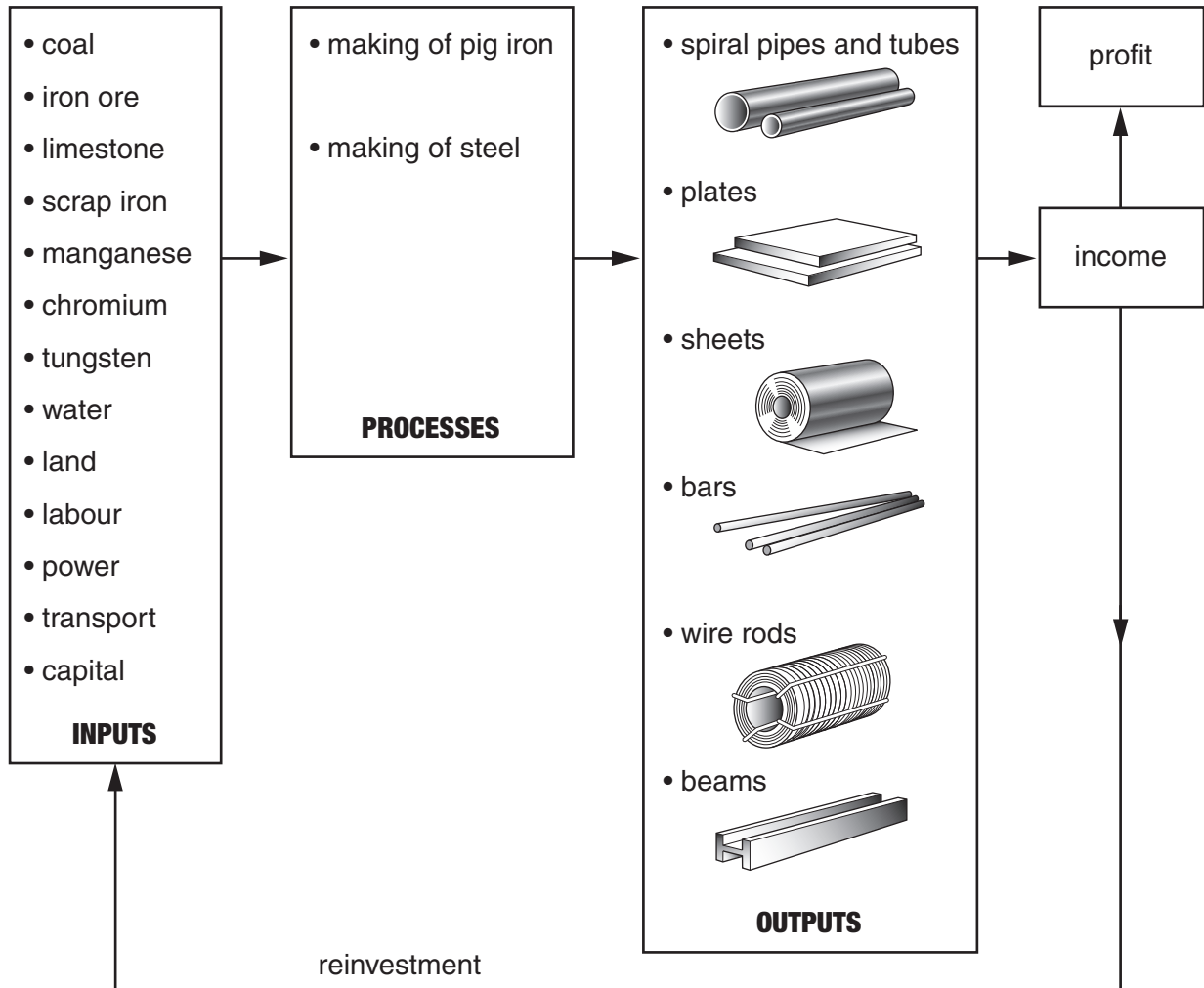**5** **(a)** Study Fig. 7, which is a flow diagram showing information about the iron and steel industry.

INPUTS	PROCESSES	OUTPUTS		
• coal • iron ore • limestone • scrap iron • manganese • chromium • tungsten • water • land • labour • power • transport • capital	• making of pig iron • making of steel	• spiral pipes and tubes • plates • sheets • bars • wire rods • beams	income	profit

reinvestment

Fig. 7

(i) What is meant by the term *processes*? [1]

(ii) From Fig. 7, give **one** example of each of the following:

A an input;

B an output. [2]

(iii) Describe **three** problems which manufacturing industries, such as the iron and steel industry, might cause for the natural environment. [3]

(iv) Suggest how the government of a country may encourage the growth of manufacturing industry in an area. [4]

(b) Study Fig. 8, a map showing the north east industrial region of India.
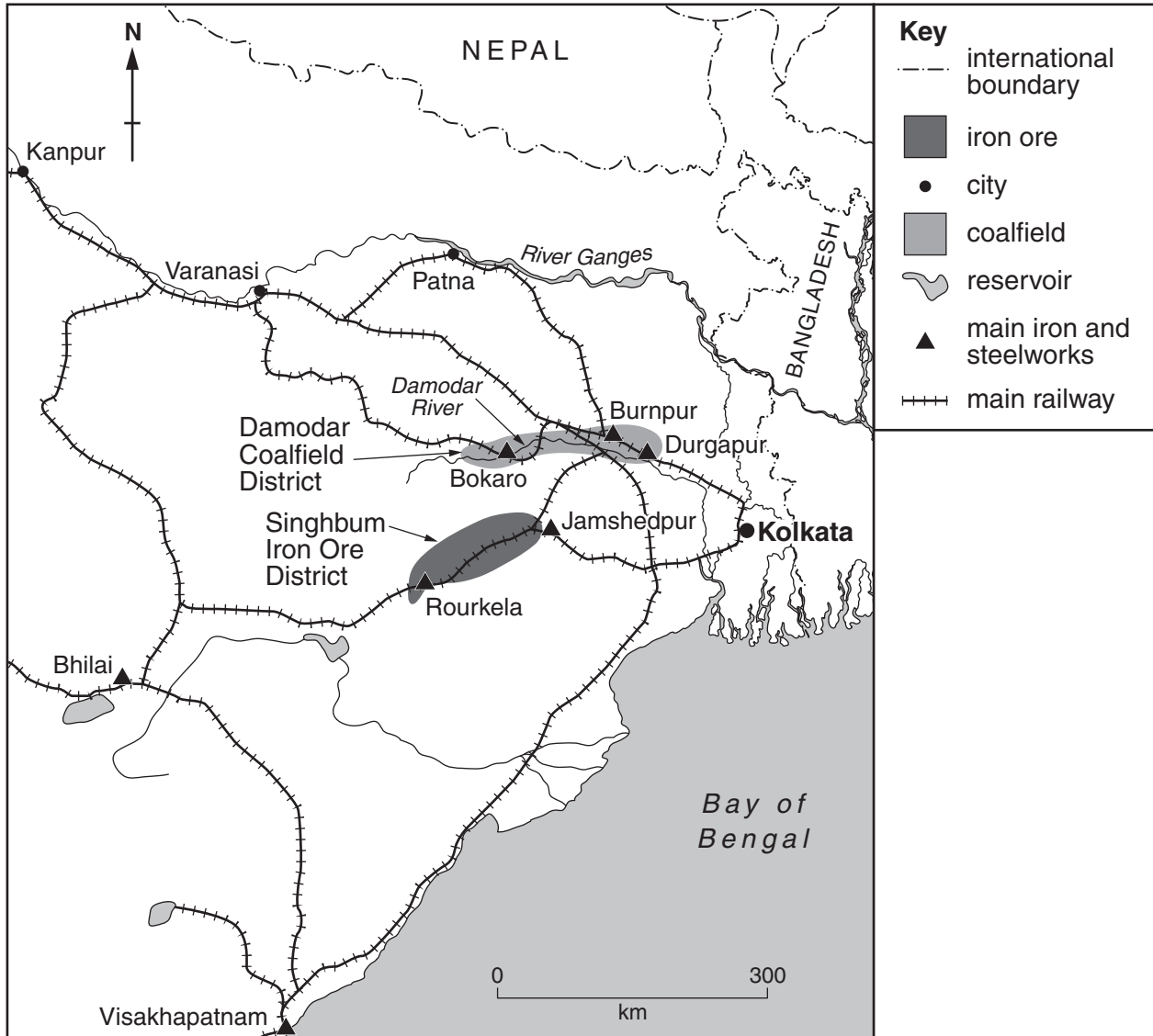
Fig. 8

(i) Describe **three** likely benefits to the people of an area, such as the one shown in Fig. 8, of the development of manufacturing industry. [3]

(ii) Using only the information in Figs 7 and 8, suggest what advantages the valley of the Damodar River has for the location of the iron and steel industry. [5]

(c) Tourism is an important economic activity which has developed in many parts of the world.

For a named area which you have studied, explain why the tourist industry has grown up there. You should refer to natural and human attractions. [7]

[Total: 25 marks]

6 **(a)** Study Photographs C, D and E (Insert), which show three different types of farming.

   (i) What is meant by:

   A *subsistence farming*;

   B *commercial farming*? [2]

   (ii) Which **one** of the photographs, C, D or E, shows pastoral farming? [1]

   (iii) Describe **three** differences between the farming systems shown in Photographs D and E. [3]

(b) Study Fig. 9, which shows the number of people who are under-nourished in Sub-Saharan Africa and in South and East Asia.
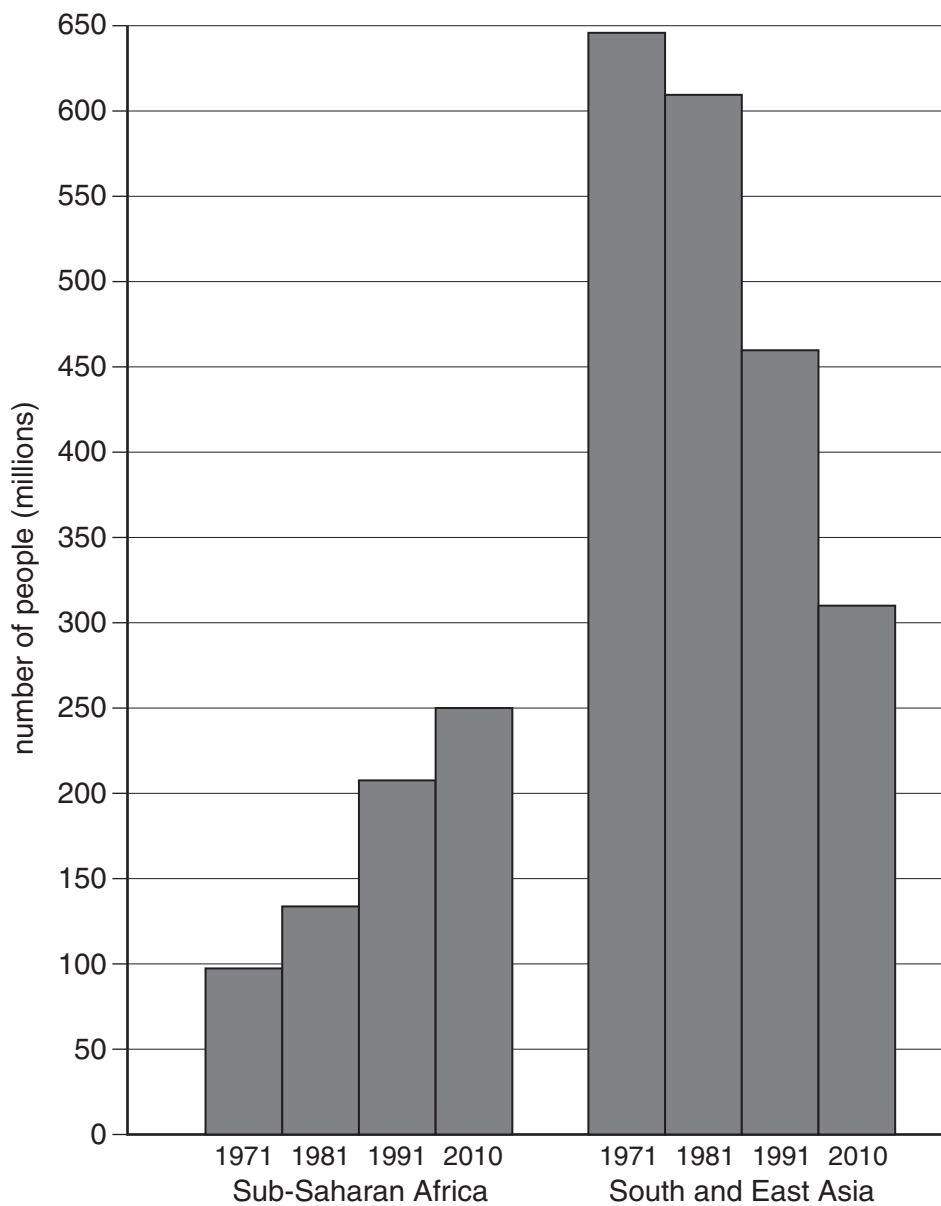
Fig. 9

   (i) Compare the trends in Sub-Saharan Africa and South and East Asia between 1971 and 2010. Support your answer with dates and statistics from Fig. 9. [3]

                                                           [Turn over

    (ii) Explain how food shortages can be caused by the natural environment. [4]

    (iii) Explain how subsistence farmers in LEDCs (less economically developed countries) would benefit if they increased their production of food. [5]

(c) All farming systems have inputs, processes and outputs.

Name an area where small-scale subsistence farming takes place. Describe the inputs, processes and outputs of this farming system. [7]

[Total: 25 marks]