

**International General Certificate of Secondary Education  
CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**GEOGRAPHY**  
**PAPER 1**

**0460/1**

**MAY/JUNE SESSION 2002**

1 hour 45 minutes

Additional materials:  
Answer paper  
Ruler

**TIME** 1 hour 45 minutes

**INSTRUCTIONS TO CANDIDATES**

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.

Answer any **three** questions.

Write your answers on the separate answer paper provided.

If you use more than one sheet of paper, fasten the sheets together.

**INFORMATION FOR CANDIDATES**

The number of marks is given in brackets [ ] at the end of each question or part question.

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

The Insert contains Figs 1 and 4.

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**This question paper consists of 12 printed pages, 4 blank pages and an insert.**



- 1 Tables 1 and 2 give information on the population of Indonesia, a country made up of many islands in Asia.

**Table 1 Population density and farm size for Indonesia**

1	2	3
Location	Population density (persons per km <sup>2</sup> )	Farms less than 0.5ha (percentage)
Inner Islands		
Java	774	63
Bali	223	46
Outer Islands		
Sumatra	70	27
Kalimantan	15	19
Sulawesi	51	25
Irian Jaya	33	24

**Table 2 Population data for Indonesia**

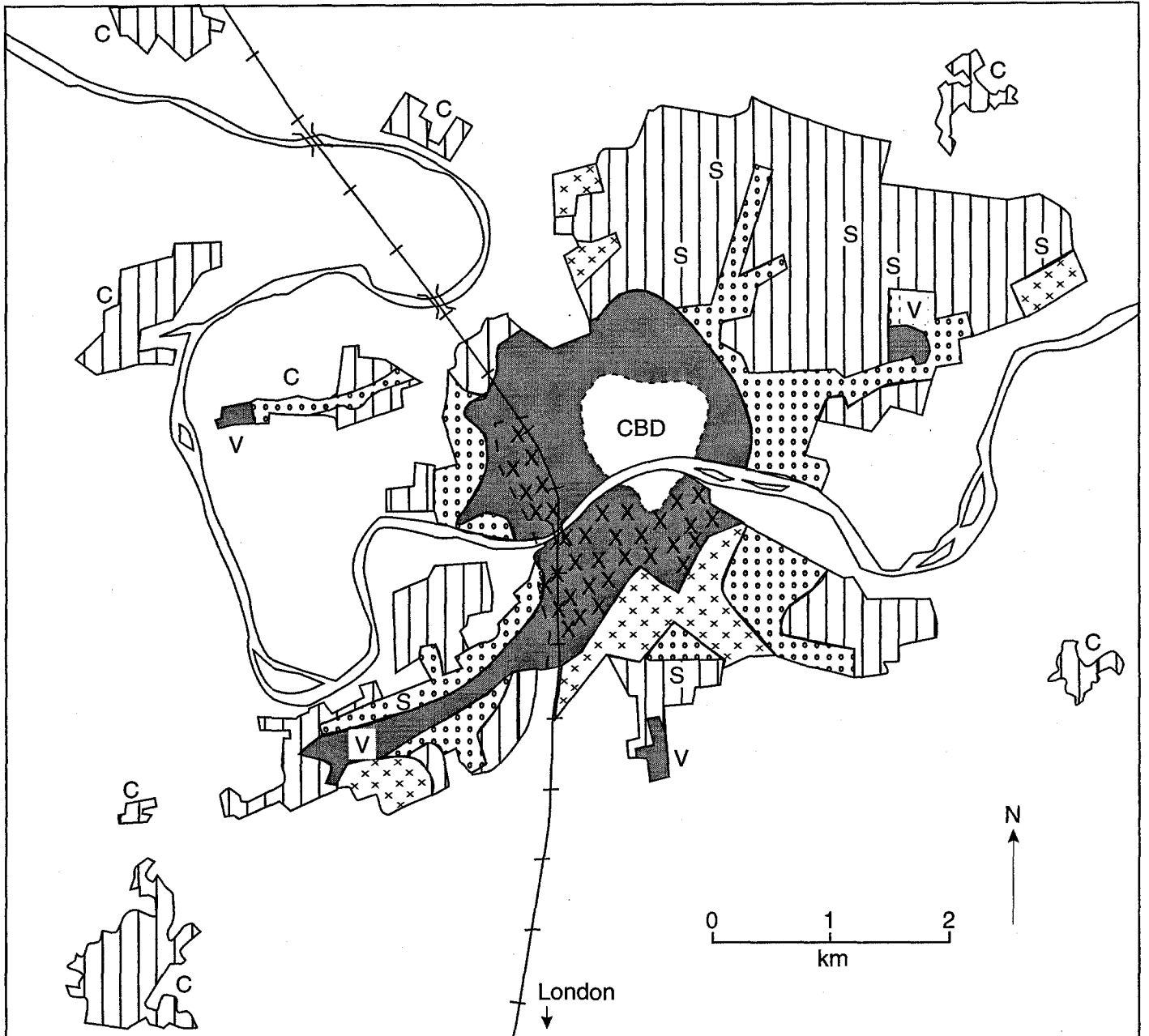
The population of Indonesia is over 200 million (over 90% live in Java and Bali).
The annual population growth rate is 1.8%.
65% of Indonesia's population live on 7% of the land area of the country.
80% of Java's population live in the countryside; many do not have enough land to grow crops to feed their families.

- (a) (i) Using data from Table 1 on Bali and Irian Jaya, complete the graph (Fig. 1, Insert). [2]  
(ii) What relationship is shown by the graph you have now completed? [1]  
(iii) Table 1 gives data on population density. How is population density calculated? [2]
- (b) (i) What do you understand by the terms 'overpopulation' and 'voluntary migration'? [2]  
(ii) What information in Tables 1 and 2 suggests that parts of Indonesia may be overpopulated? [2]  
(iii) The voluntary migration of large numbers from the Inner Islands (Java and Bali) to the Outer Islands of Indonesia is known as transmigration. Suggest **two** reasons why the government of Indonesia has encouraged this migration to take place. [2]
- (c) Jakarta, the capital of Indonesia, is one of the largest cities in the world. Its population is now over 13 million and is growing rapidly (4% per year).  
Why are large cities in developing countries, such as Jakarta, growing so rapidly? [6]
- (d) (i) Describe some of the problems for large cities in developing countries which result from the rapid growth of population. [5]  
(ii) Why do city authorities find the problems you have described in (d)(i) difficult to deal with? [3]

- 2 Fig.2 (opposite) shows land use in and around a town to the north of London, the capital and major city of the United Kingdom.

Use information from the map to answer (a) and (b).

- (a) (i) Describe the location of the oldest residential area in the town. [1]
- (ii) In which part of the town is the largest area of
- A modern housing (built since 1945),
- B newer industry? [2]
- (iii) What do you understand by the term 'commuter village'? [1]
- (iv) Suggest reasons for the location in the town of
- A newer industrial areas, [3]
- B modern shopping centres. [2]
- (b) Fast rail links make it possible to travel from the town shown in Fig.2 to London in less than 1 hour.
- (i) Suggest how the people living in the town might benefit from being closely linked by rail to London. [4]
- (ii) How might the growth and development of a town be affected by being so close to a major city? [4]
- (c) (i) Describe the main features of the CBD of a town or city. [4]
- (ii) State **one** problem associated with the CBD of a town or city. Describe attempts which have been made to deal with the problem you have stated. [4]








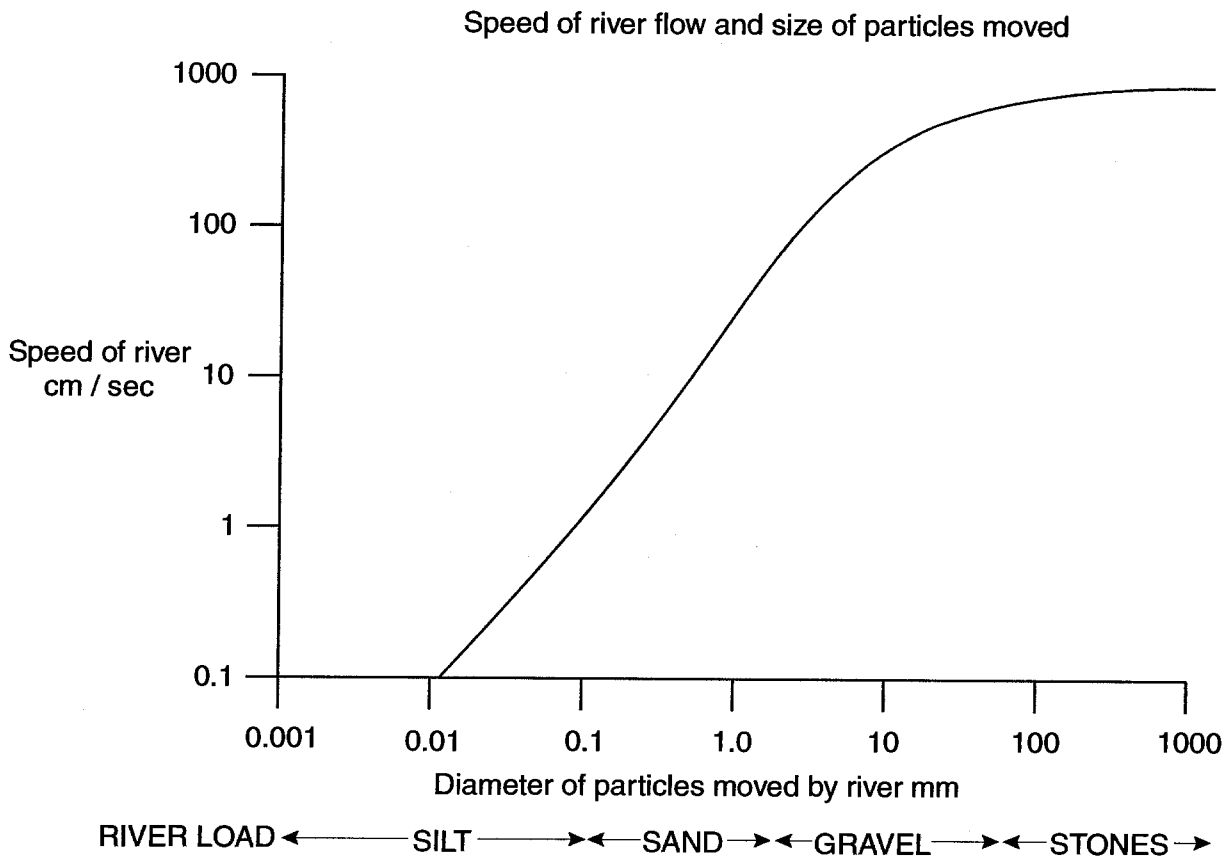
S	Modern Shopping Centres		Mainly pre-1914	} Residential Areas
CBD	Central Business District		1914-1939	
V	Old Village Centre		Since 1945	
C	Commuter Village		Older	} Industrial Areas
			Newer	

Fig.2

3 (a) Study Fig. 3.



**Fig. 3**

- (i) When the speed of the river is 10 centimetres per second, what is the largest size and type of particle that can be moved by the river? [2]
- (ii) What does the graph show about the relationship between the speed of the river and
- A the size of the particles moved, [1]
- B the type of load that the river may carry? [1]
- (iii) State **three** ways in which a river may carry its load. [3]

(b) Now look at Fig. 4 (Insert) showing an area which has been glaciated.

(i) On Fig. 4, using the letter in brackets, mark **one** example of each of the following:

- arête (A),
- corrie or cirque (C),
- hanging valley (H),
- terminal moraine (T).

[4]

(ii) Describe the main features of a corrie.

[3]

(iii) Suggest how the lake at **N** may have been formed.

[3]

(iv) Explain why deposits of loose, angular rocks (scree) are found along the side of the main valley shown in Fig. 4.

[4]

(v) Describe the appearance of a terminal moraine and the materials of which it is composed.

[2]

(vi) Give reasons why the terminal moraine you located by (T) in (b)(i) may have developed.

[2]

4 (a) The four weather graphs **W**, **X**, **Y** and **Z** (Fig. 5) were drawn from information obtained at a school weather station over 7 days.

(i) Write down **W**, **X** and **Y** as a list and name the weather instruments used to collect the data shown on these graphs. [3]

(ii) State

**A** the daily range of temperature on Day 2,

**B** the pressure on Day 7,

**C** the rainfall on Day 5. [3]

(iii) How is the information in Graph **X** obtained? [2]

(b) The information for graph **Z** (Fig. 5) was obtained from a rain gauge.

(i) Describe the main features of a rain gauge. [3]

(ii) Explain how a rain gauge is used to measure the rain that has fallen. [2]

(iii) Look at Fig. 6 which shows four possible locations for a rain gauge at a school weather station (**P**, **Q**, **R** and **S**).

Which of the sites would you choose, giving a reason for your choice?

Give reasons why you rejected each of the other locations. [4]

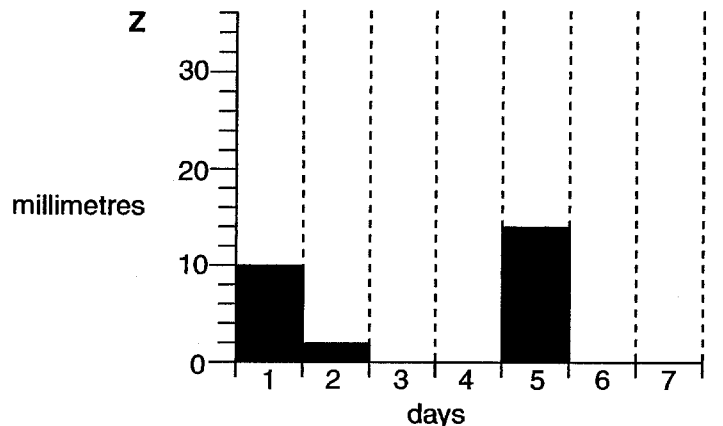
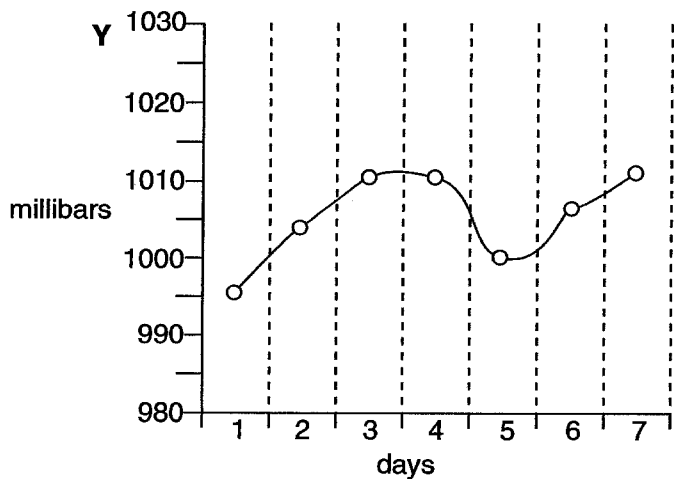
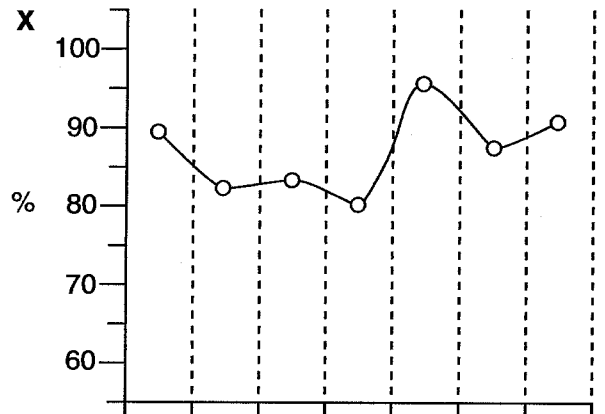
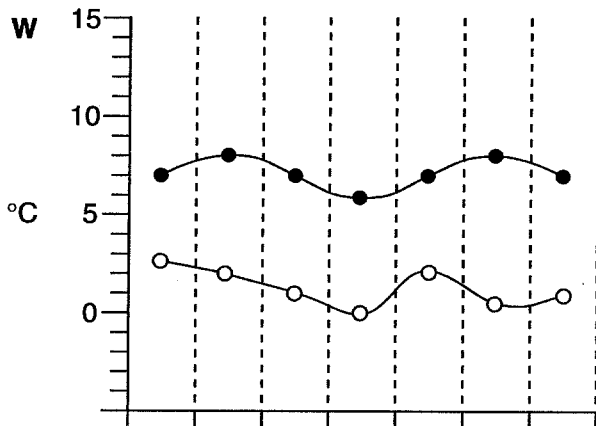


Fig. 5



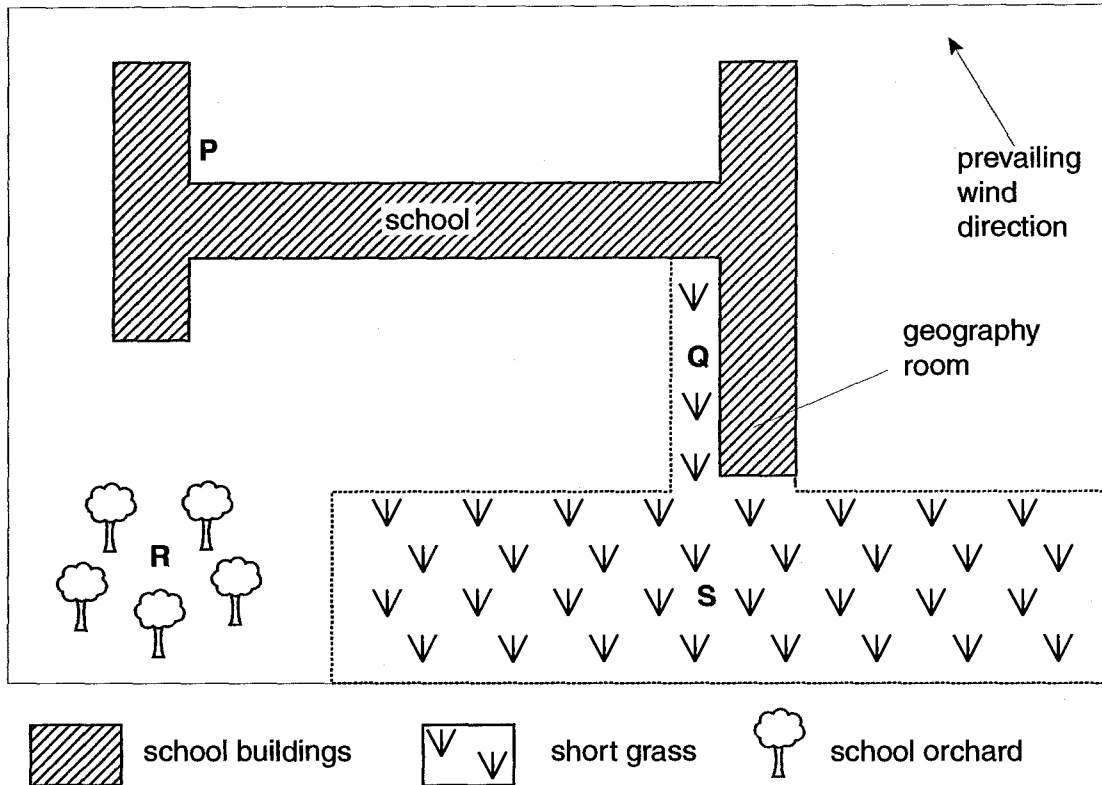


Fig. 6

(c) Place M is located in a region which has a Mediterranean climate.

Monthly average temperature and rainfall figures are given below.

Climate data for Place M (altitude 100 m)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
temperature / °C	10	10	12	16	20	25	28	28	24	20	15	11	
rainfall / mm	62	37	37	23	23	14	6	7	15	51	56	71	Total 402

(i) Describe the main features of the climate shown. [3]

(ii) Give a reason for each of **two** of the features you have described in (c)(i). [2]

(d) Describe the main features of the natural vegetation found in a region with a Mediterranean climate. [3]

5 Fig. 7 shows a factory system for manufacturing industry.

Use the diagram to help you answer (a), (b) and (c).

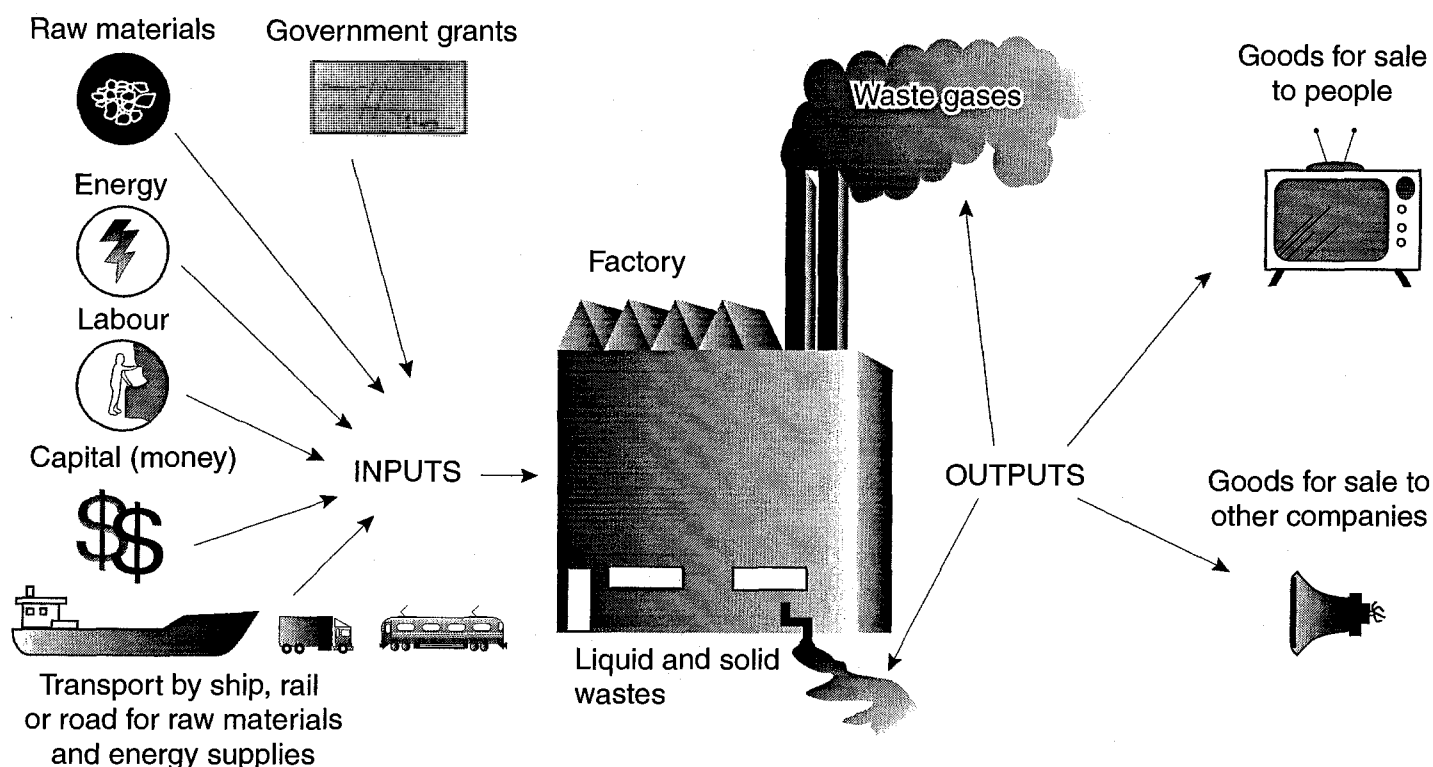


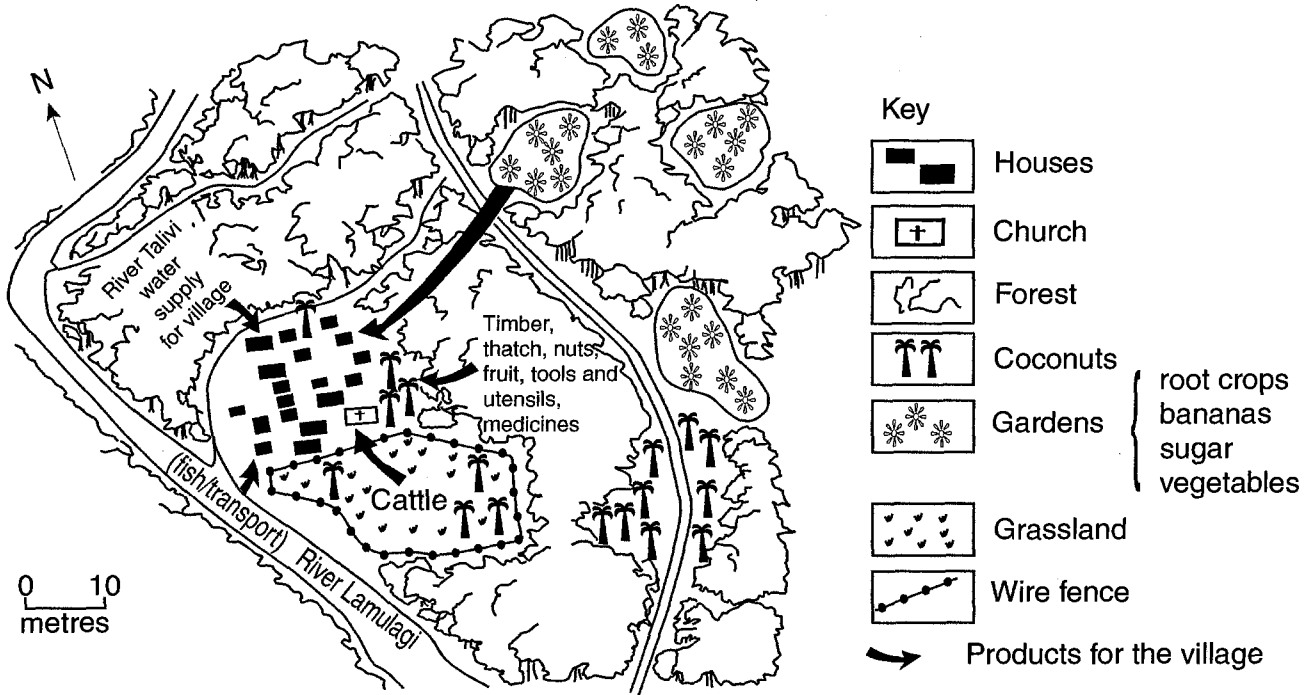
Fig. 7

- (a) What do you understand by the terms 'inputs' and 'outputs'? [2]
- (b) (i) Name and locate an important centre for motor vehicle assembly. [1]  
(ii) Why is this industry referred to as an assembly industry? [2]  
(iii) Name **three** different components used in the production of a motor vehicle. [3]  
(iv) Why are component factories serving a motor vehicle assembly factory often located close to it? [2]  
(v) Why do motor vehicle assembly factories occupy a large area of land? [3]  
(vi) Explain why good transport links are important in the location of a motor vehicle assembly factory. [2]  
(vii) Give reasons why factories assembling motor vehicles require large amounts of labour and capital. [2]
- (c) Fig. 7 also shows that the outputs from some industries are waste products.  
(i) Name **two** of these waste products. [2]  
(ii) Explain why these waste products may cause problems for people and the environment. [4]  
(iii) How can the problems you described in (c)(ii) be reduced? [2]

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6 Fig. 8 provides information on land use in an area of tropical rain (evergreen) forest in the Solomon Islands, located in the Pacific Ocean. Use this information to help you to answer (a) and (b) below.

**Land use in Kologhona Village (Solomon Islands)**



Like all the families in the village I cultivate my 'garden' by bush-fallow farming.

Using an axe and bushknife I clear away all but the largest trees. The branches are left on the ground to dry. I pile all these branches around the tree stumps and burn them.

The fire clears the ground, kills off some weeds and pests and the ash fertilizes the ground. I plant the crops in holes made with a digging stick. After that I go to the garden from time to time to weed and harvest the crops. After 2 or 3 years we just leave the garden for the forest to regrow.



(Bush-fallow farming is also known as shifting cultivation)

**Fig. 8**

- (a) (i) What is meant by subsistence farming? [2]
- (ii) Describe the processes of the small-scale subsistence farming system practised around Kologhona Village. [4]
- (iii) Name **two** food crops and **one** other output of the farming system. [3]
- (iv) Suggest reasons why the farmers abandon the gardens after growing crops for 2 or 3 years. [2]
- (b) Timber companies are exploiting forest in parts of the Solomon Islands.
- If the forest around Kologhona Village were to be cleared, explain what would happen to:
- (i) the food supply of the villagers, [3]
- (ii) the importance of the rivers to the villagers. [2]
- (c) From a study you have made of a small-scale system of **cash crop** farming:
- (i) name an area where this farming system is practised, [1]
- (ii) describe **three** factors which have encouraged this type of farming at the location you have named in (c)(i), [3]
- (iii) describe the processes used in the farming system, [3]
- (iv) what are the main outputs of this farming system? [2]

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Question 6. Fig. 8 © Choices – Development – Solomon Islands. World Wide Fund.

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