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Cambridge IGCSE

**Cambridge Assessment International Education**
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER | | | | | |

CANDIDATE NUMBER | | | | |

*5653305727*

**GEOGRAPHY** **0460/22**

Paper 2 **October/November 2019**

**1 hour 30 minutes**

Candidates answer on the Question Paper.

Additional Materials: Ruler
Plain paper
Protractor
Calculator

1:50 000 Survey Map Extract is enclosed with this Question Paper.

**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 pages at the end of the booklet. The question number(s) must be clearly shown.

Answer **all** questions.

The Insert contains Figs. 5.1 and 5.2 for Question 5.
The Survey Map Extract and the Insert are **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.

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

This syllabus is regulated for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **16** printed pages, **4** blank pages, and **1** Insert.

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**[Turn over**

**1** Study the map extract for Degeberga, Sweden. The scale is 1:50 000.

**(a)** Fig. 1.1 shows some features in the west of the map extract around the main settlement of Degeberga.

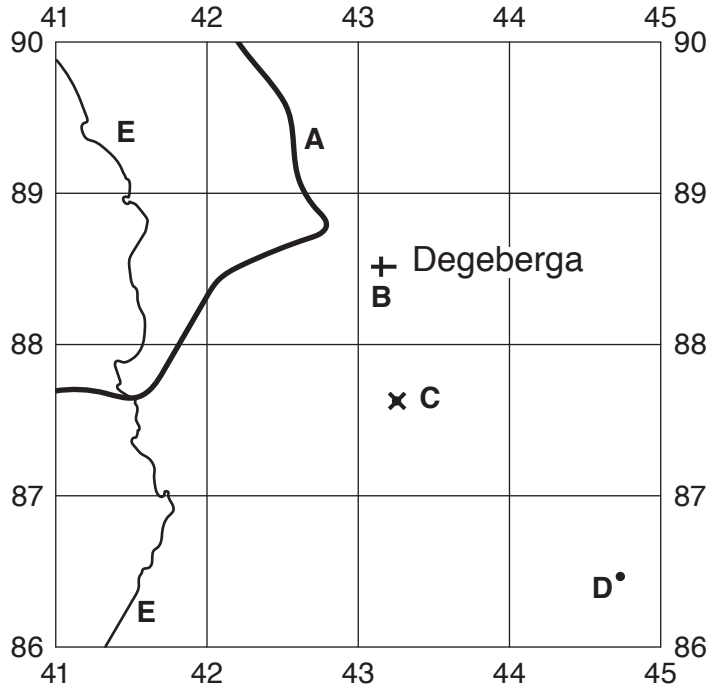



**Fig. 1.1**

Using the map extract, identify the following features shown on Fig. 1.1:

**(i)** feature **A**

..... [1]

**(ii)** feature **B**

..... [1]

**(iii)** feature **C**

..... [1]

**(iv)** the height above sea level at spot height **D**

..... metres [1]

**(v)** the height above sea level of contour **E**.

..... metres [1]

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**(b)** Fig. 1.2A shows an area in the north west of the map extract and Fig. 1.2B shows an area in the south east of the map extract. Study the two areas and answer the questions below.

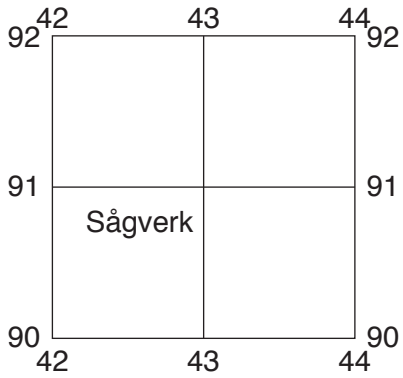



**Fig. 1.2A**

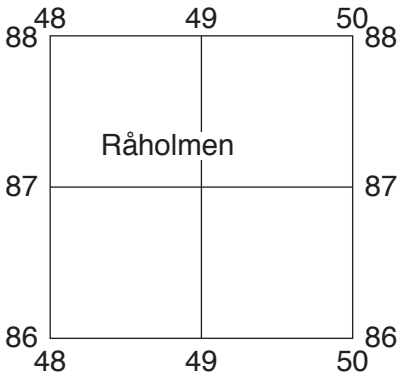



**Fig. 1.2B**

The table below compares the features of the two areas. Complete the table by putting ticks in the correct **five** boxes. Use only **one** tick for each row.

| | Area in Fig. 1.2A | Area in Fig. 1.2B | Both these areas | Neither of these areas |
|---|---|---|---|---|
| Example: motorway | | | | ✓ |
| flat land | | | | |
| steep land | | | | |
| gentle slopes | | | | |
| mostly forest | | | | |
| mostly arable land | | | | |

[5]

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**(c)** Fig. 1.3 shows a cross section along northing 86 from 440860 to 510860.

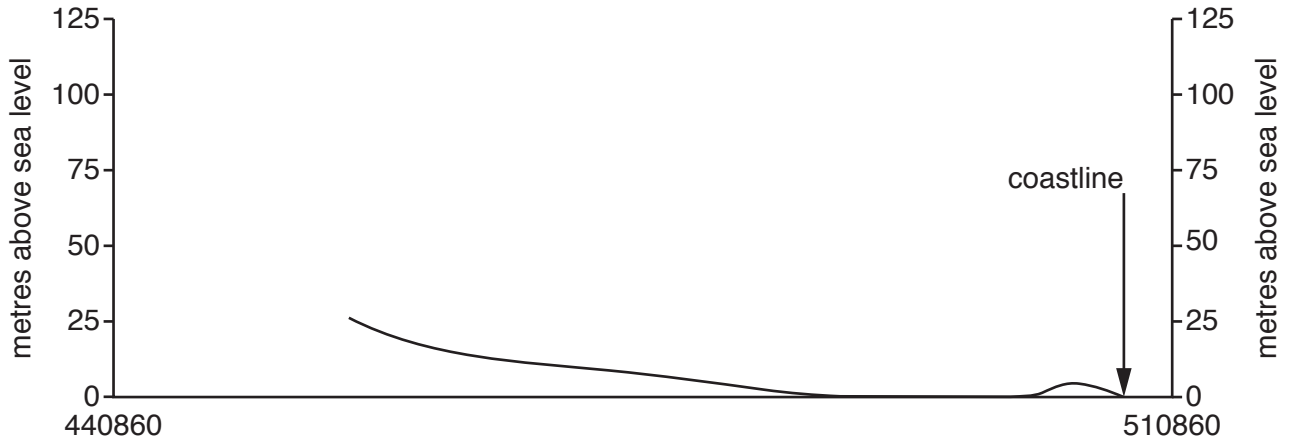



**Fig. 1.3**

**(i)** On Fig. 1.3, **use labelled arrows and the letter shown** to show the positions of:

public road 19 (**X**)

the Segesholmsån river (**Y**). [2]

**(ii)** On Fig. 1.3, **complete the cross section**. [2]

**(d)** Look at the coastal settlement around Nyehusen and Furuboda. Give map evidence that suggests that this is a tourist settlement.

.....

.....

.....

..... [2]

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**(e)** Find the following two triangulation points:

the 22 m triangulation point south of Nyehusen
the 129 m triangulation point near Norrlia, south of Degeberga.

**(i)** Give the compass direction **from** the 129 m triangulation point **to** the 22 m triangulation point.

..... [1]

**(ii)** Measure the bearing **from** the 129 m triangulation point **to** the 22 m triangulation point.

..... degrees [1]

**(iii)** What is the six-figure grid reference of the 129 m triangulation point near Norrlia?

..... [2]

[Total: 20]

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**2** **(a)** **(i)** Which **one** of the following statements describes a *settlement hierarchy*? Tick only **one** box.

| Statement | Tick (✓) |
|---|---|
| settlements in order of population size and importance | |
| linear, nucleated and dispersed settlement | |
| how a settlement has grown over time | |
| the physical factors which lead to the growth of a settlement | |

[1]

**(ii)** Which **one** of the following statements describes *a service*? Tick only **one** box.

| Statement | Tick (✓) |
|---|---|
| the site and situation of a settlement | |
| the sphere of influence of a settlement | |
| amenities provided in a settlement for the population e.g. shops | |
| a type of settlement pattern e.g. linear | |

[1]

**(b)** Fig. 2.1 shows settlement in a valley in northern England.

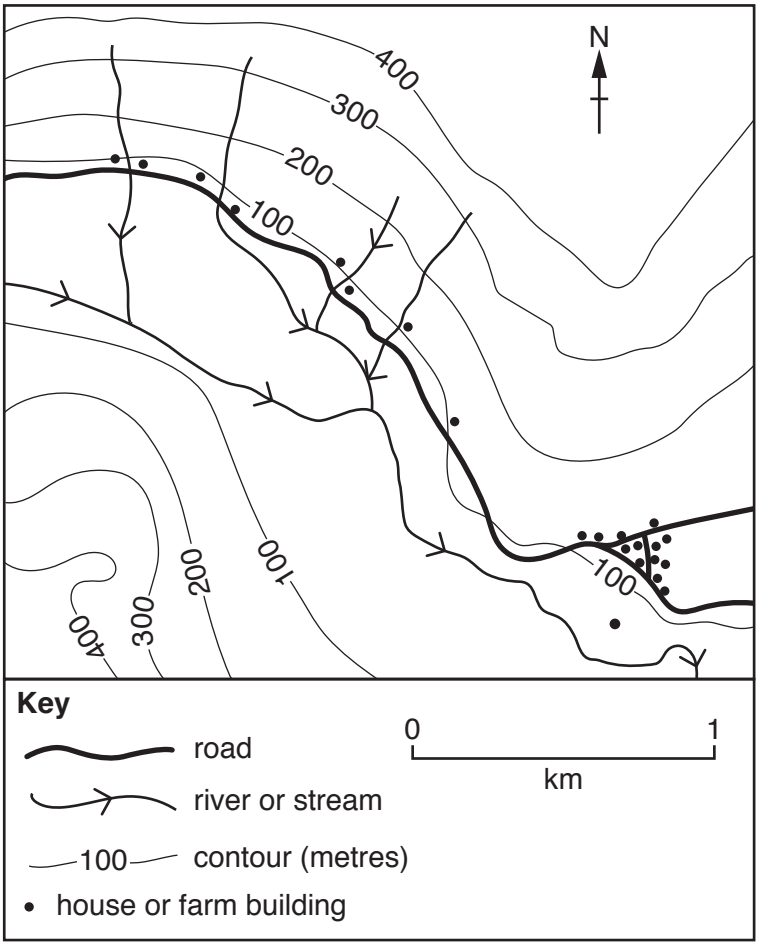



**Fig. 2.1**

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Suggest how each of the following factors has influenced the sites and growth of settlement in the area shown in Fig. 2.1:

**(i)** transport and accessibility

.....

.....

.....

..... [2]

**(ii)** water supply

.....

..... [1]

**(iii)** protection from flooding

.....

..... [1]

**(iv)** relief.

.....

.....

.....

.....

..... [2]

[Total: 8]

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**3** **(a)** Fig. 3.1 shows the temperatures and rainfall of an area of equatorial climate.

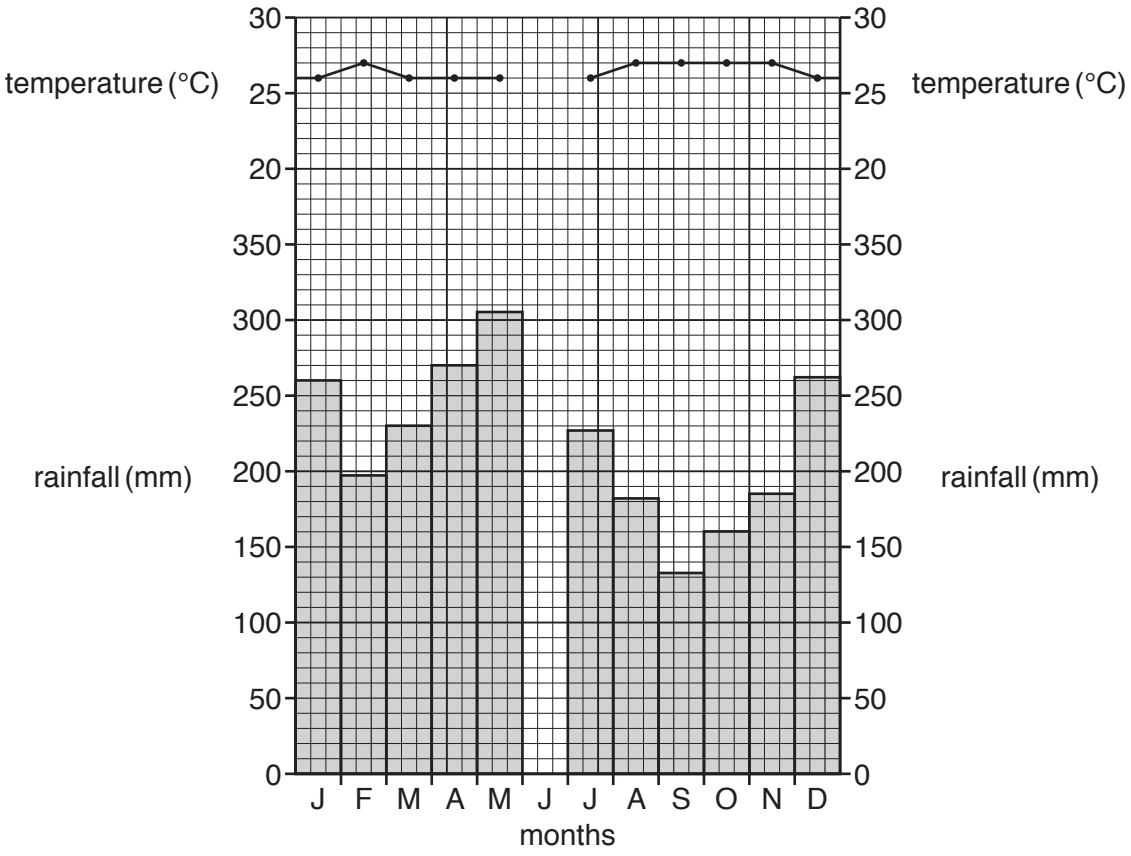



**Fig. 3.1**

**(i)** The area shown on Fig. 3.1 has a temperature of 24 °C and 250 mm of rainfall in June. **Plot this information** on Fig. 3.1. [1]

**(ii)** Use the information in Fig. 3.1 to complete the table below.

| Feature of the climate | Amount | Description |
|---|---|---|
| mean temperature of the hottest month | ..... °C | hot |
| mean temperature of the coldest month | 24 °C | ..... |
| annual temperature range | 3 °C | ..... |

[3]

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**(b)** The equatorial climate is constant throughout the year. Table 3.1 shows a typical day's weather.

**Table 3.1**

| Weather element | Average reading | Time |
|---|---|---|
| maximum temperature | 33 °C | 14:00 |
| minimum temperature | 25 °C | 06:00 |
| maximum humidity | 95% | 15:00 |
| minimum humidity | 53% | 13:00 |
| cloud | 0 – 2 oktas | 00:00 – 06:00 |
| | 3 – 5 oktas | 06:00 – 12:00 |
| | 6 – 8 oktas | 12:00 – 18:00 |
| | 2 – 5 oktas | 18:00 – 24:00 |

**(i)** Calculate the daily range of temperature shown in Table 3.1.

..... °C [1]

**(ii)** Using information in Table 3.1, at what time of day would rainfall be expected? Tick **one** box below.

| Time | Tick (✓) |
|---|---|
| 00:00 – 06:00 | |
| 06:00 – 12:00 | |
| 12:00 – 18:00 | |
| 18:00 – 24:00 | |

[1]

**(c)** Explain why the equatorial climate is constant throughout the year with little seasonal variation.

.....

.....

.....

.....

..... [2]

[Total: 8]

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**4** **(a)** Table 4.1 gives the definitions of some terms used in the study of earthquakes.

**Table 4.1**

| Letter | Definition |
|---|---|
| A | an ocean wave produced when there is movement of the sea bed caused by the fault movement which causes an earthquake |
| B | a type of stress where forces pull in opposite directions causing stretching |
| C | the point in the Earth where an earthquake occurs |
| D | a scale measuring the total amount of energy released by an earthquake |
| E | the point on the Earth's surface directly above an earthquake focus |

For each of the following terms give the letter for the correct definition from Table 4.1:

**(i)** focus Letter ..... [1]

**(ii)** epicentre. Letter ..... [1]

**(b)** Fig. 4.1 gives information about a series of earthquakes which occurred in New Zealand in November 2016.

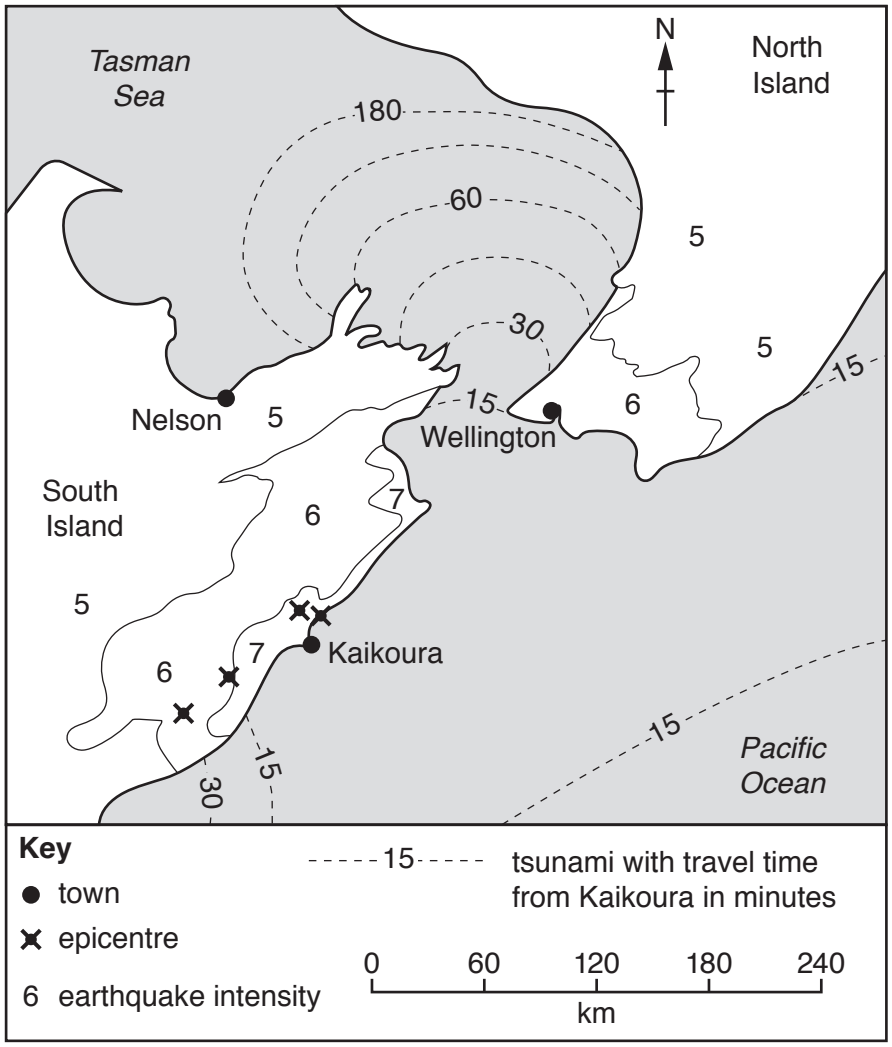



**Fig. 4.1**

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Table 4.2 describes the effects of different earthquake intensities (strengths).

**Table 4.2**

| Intensity value | Description of effects |
|---|---|
| 4 | Felt by people moving. Cars rock. |
| 5 | Sleepers wakened. Some windows broken. Furniture moves. |
| 6 | Small bells ring. Trees sway. Loose objects fall. |
| 7 | Difficult to stand up. People run outdoors. Walls crack. |
| 8 | Partial collapse of buildings. Chimneys fall. |
| 9 | Ground cracks. Pipes break. |

**(i)** Using Fig. 4.1 and Table 4.2, describe the effects of the earthquakes on the buildings in Nelson.

.....

..... [1]

**(ii)** Using Fig. 4.1 and Table 4.2, explain why the earthquakes caused loss of life near Kaikoura but not in Wellington.

.....

.....

.....

.....

..... [2]

**(c)** Fig. 4.1 shows a tsunami which first appeared near Kaikoura.

**(i)** How long did it take the tsunami to reach Wellington from Kaikoura?

.....minutes [1]

**(ii)** What is the distance from Kaikoura to Wellington?

..... km [1]

**(iii)** Calculate the speed of the tsunami between Kaikoura and Wellington.

..... km per minute [1]

[Total: 8]

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**5** Figs. 5.1 and 5.2 (Insert) are photographs which show two rural areas in Madagascar.

**(a) (i)** Look at the agriculture shown in Fig. 5.1. Which **two** of the following terms describes this agricultural system? Tick **two** boxes.

| | **Tick (✓)** |
|---|---|
| intensive | |
| mixed | |
| extensive | |
| pastoral | |
| arable | |

[2]

**(ii)** Using evidence from Fig. 5.1 **only**, explain how soil erosion has been prevented in this area.

.....

.....

.....

.....

.....

..... [3]

**(b)** People living in the area shown on Fig. 5.2 have used the land to increase their food supply. Using evidence from Fig. 5.2 **only**, describe how this has been done.

.....

.....

.....

.....

.....

..... [3]

[Total: 8]

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**6** **(a)** Fig. 6.1 shows changes in the share of world wealth production (GDP) in three world regions. These changes are part of globalisation.

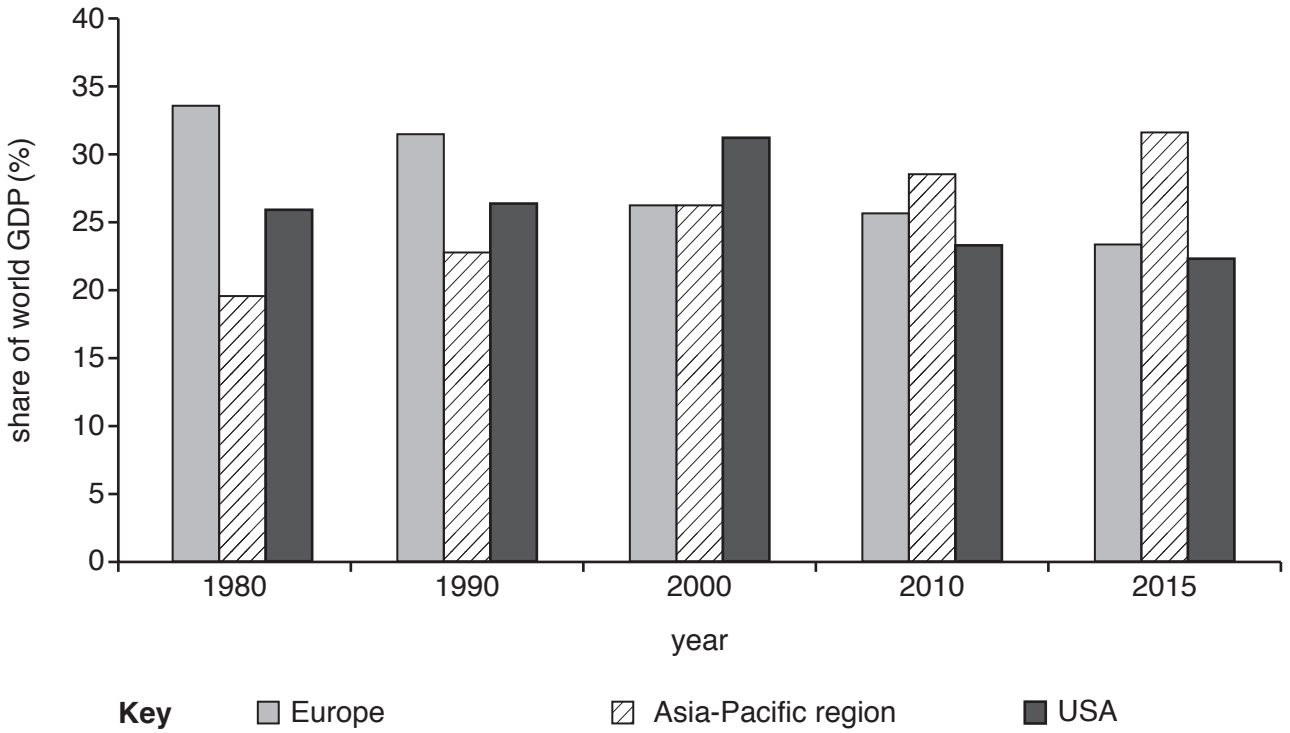



**Fig. 6.1**

Describe the changes in each region.

**(i)** Europe

.....

..... [1]

**(ii)** Asia-Pacific region

.....

..... [1]

**(iii)** USA

.....

.....

.....

..... [2]

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**(b)** Improved communication is part of globalisation. Table 6.1 shows changes in internet use in different parts of the world.

**Table 6.1**

**Percentage of the population who use the internet**

| | 2005 | 2014 |
|---|---|---|
| Africa | 2 | 19 |
| N and S America | 36 | 65 |
| Arab States | 8 | 41 |
| Asia-Pacific | 9 | 32 |
| Europe | 46 | 75 |

**(i)** Which region shown in Table 6.1 has seen the greatest increase in percentage internet use?

..... [1]

**(ii)** Suggest how increased internet use can help people in LEDCs.

.....

.....

.....

.....

.....

..... [3]

[Total: 8]

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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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