GradeMax

Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME

CENTRE NUMBER | | | | | |

CANDIDATE NUMBER | | | | |

6838706465

GEOGRAPHY **0460/22**

Paper 2 **May/June 2016**

1 hour 30 minutes

Candidates answer on the Question Paper.

Additional Materials: Ruler
Protractor
Plain paper
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 Photograph A for Question 3 and Photograph B for Question 6.
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.

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

This document consists of **19** printed pages, **1** blank page and **1** Insert.

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1 Study the map extract for Slievenamon, Republic of Ireland. The scale is 1:50 000.

(a) Fig. 1 shows some of the features in the east of the map extract. Study Fig. 1 and the map extract, and answer the questions below.

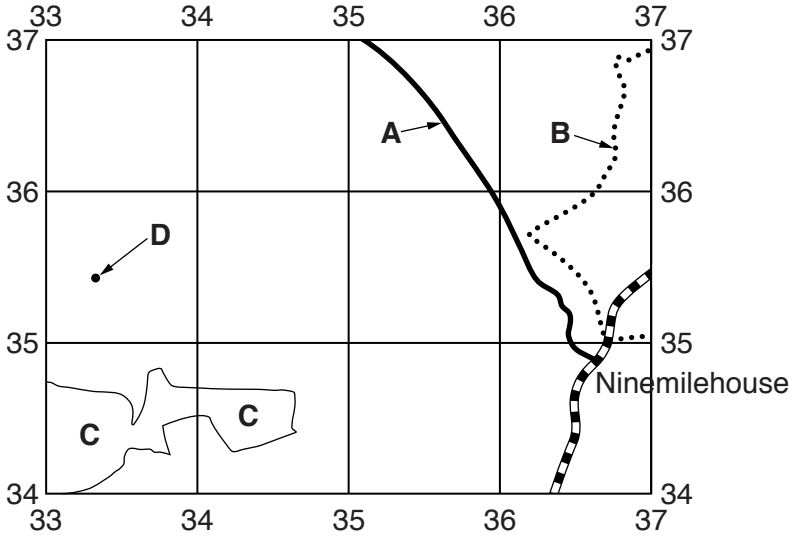


Fig. 1

Using the map extract, identify the following features shown on Fig. 1:

(i) the type of road at **A**;

.....[1]

(ii) feature **B**;

.....[1]

(iii) the land use in area **C**;

.....[1]

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

..... metres [1]

(b) What is the settlement pattern in the area shown on Fig. 1? Tick **one** correct answer below.

	Tick (✓)
linear	
nucleated	
dispersed	

[1]

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(c) Find the road junction at Ninemilehouse, shown on Fig. 1.

(i) What is the six-figure grid reference of the road junction? Tick **one** correct answer below.

	Tick (✓)
347365	
348366	
349366	
365348	
366348	

[2]

(ii) Measure the distance along the N76 road from the road junction to the southern edge of the map extract. Give your answer in metres.

..... metres [1]

(d) Look at the settlement at Fethard in the west of the map extract. Give **two** reasons for the growth of the settlement.

1.....

.....

2.....

.....[2]

(e) Find the Anner River on the map. What is the direction of flow of the river? Tick **one** correct statement below.

	Tick (✓)
to the north east	
to the north west	
to the south east	
to the south west	

[1]

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(f) Fig. 2 is a cross section along easting 30, across the valley of the Anner River. The cross section is from 300380 (at the northern edge of the map) to 300330.

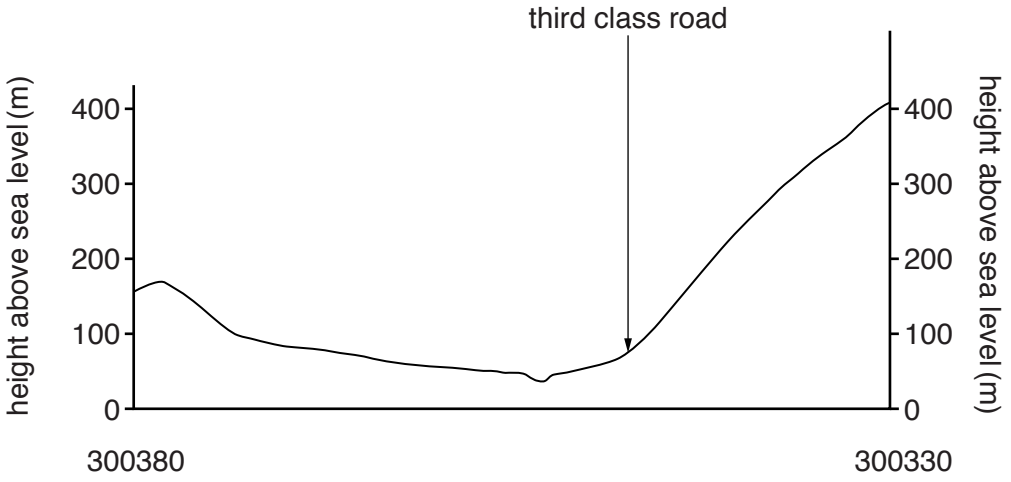


Fig. 2

On Fig. 2, using labelled arrows, mark the positions of:

(i) the Anner River; [1]

(ii) the south-facing valley side; [1]

(iii) the R692 road. [1]

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(g) Fig. 3 shows an area in the south of the map extract.

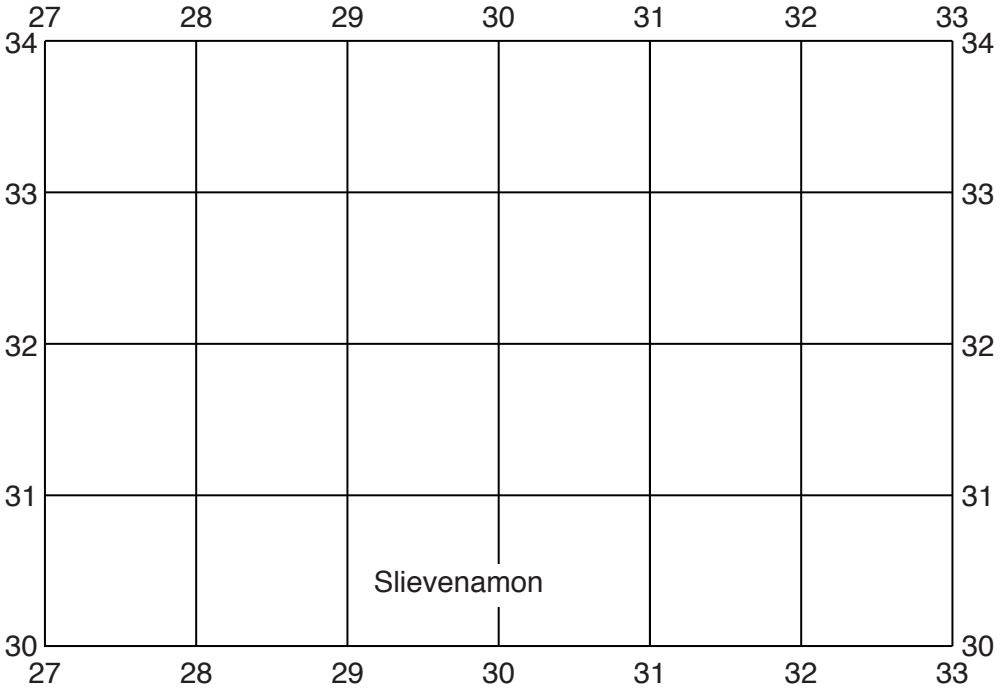


Fig. 3

Describe the relief **and** drainage of the area shown on Fig. 3.

Relief .....

.....

.....

.....

.....

.....

Drainage .....

.....

.....

.....

.....

.....[6]

[Total: 20 marks]

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2 **(a)** Fig. 4 shows an industrial system.

Inputs ⟶	**Processes** ⟶	**Outputs**
Examples: raw materials labour land …….. …….. ……..	Examples: research and development manufacture of components assembly of components …….. …….. ……..	Examples: finished product profits ……. …….. ……..

Fig. 4

Complete Fig. 4 by adding each of the following examples.

waste products *capital* *marketing*

[3]

(b) Two motor vehicle producers, Volkswagen from Germany and Toyota from Japan, have factories in many countries. The distribution of the Volkswagen factories is shown on Fig. 5. The distribution of the Toyota factories is shown on Fig. 6. Study Figs. 5 and 6 and answer the questions on the opposite page.

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Distribution of Toyota factories

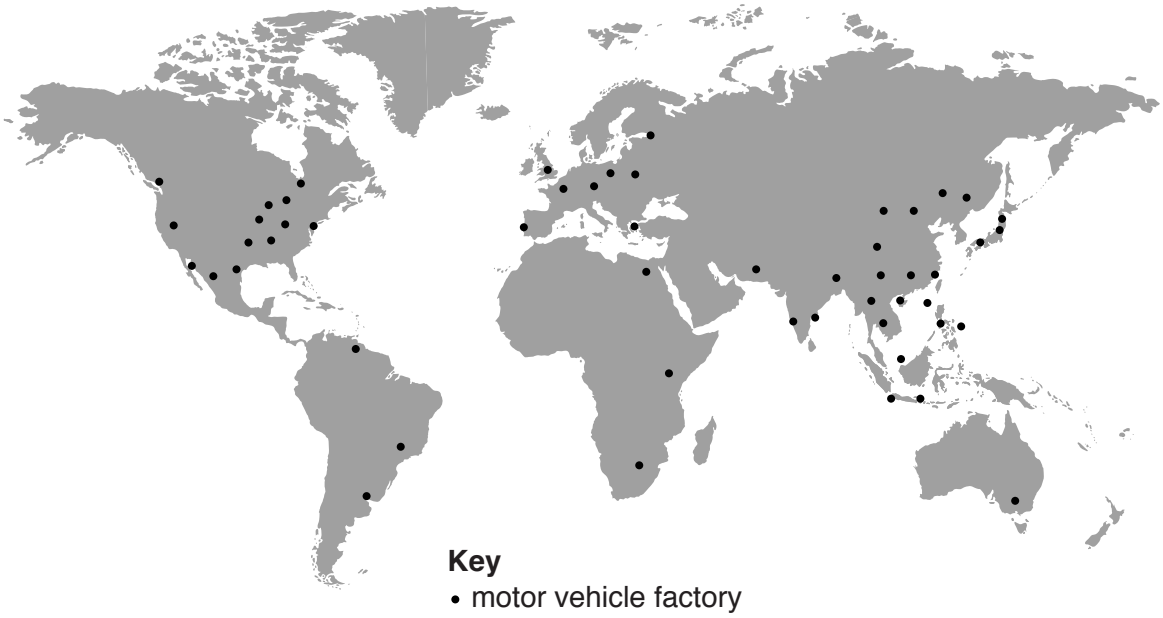


Fig. 6

(i) Give **two** similarities between the distribution of Volkswagen factories and the distribution of Toyota factories.

1 .....

.....

2 .....

.....[2]

(ii) Give **two** differences between the distribution of Volkswagen factories and the distribution of Toyota factories.

1 .....

.....

2 .....

.....[2]

(c) Suggest **one** reason why companies like Volkswagen and Toyota locate factories outside Germany and Japan.

.....

.....[1]

[Total: 8 marks]

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3 **(a)** Study Photograph A (Insert), which shows an area of tropical rainforest. Describe the vegetation seen in the photograph.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....[6]

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(b) Two features of plants in the tropical rainforest are given below. Explain how each feature is adapted to the equatorial climate:

(i) channelled leaves with drip tips;

.....

.....

.....[1]

(ii) broad leaves.

.....

.....

.....[1]

[Total: 8 marks]

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4 Fig. 7 shows the 10 regions of Ghana in west Africa. Fig. 8 shows the net population migration rate of the regions. Study Figs. 7 and 8 and answer the questions on the opposite page.

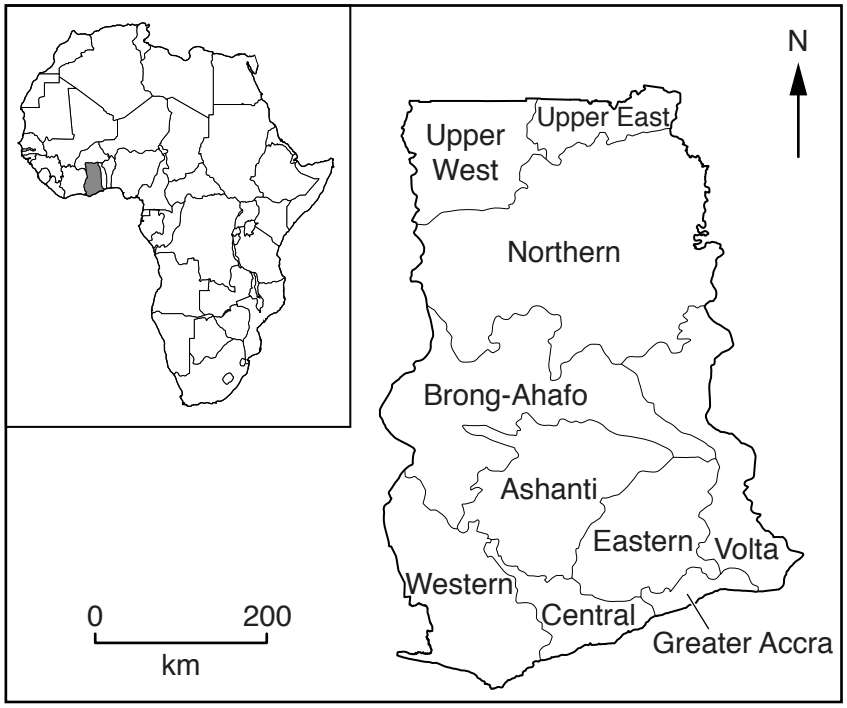


Fig. 7

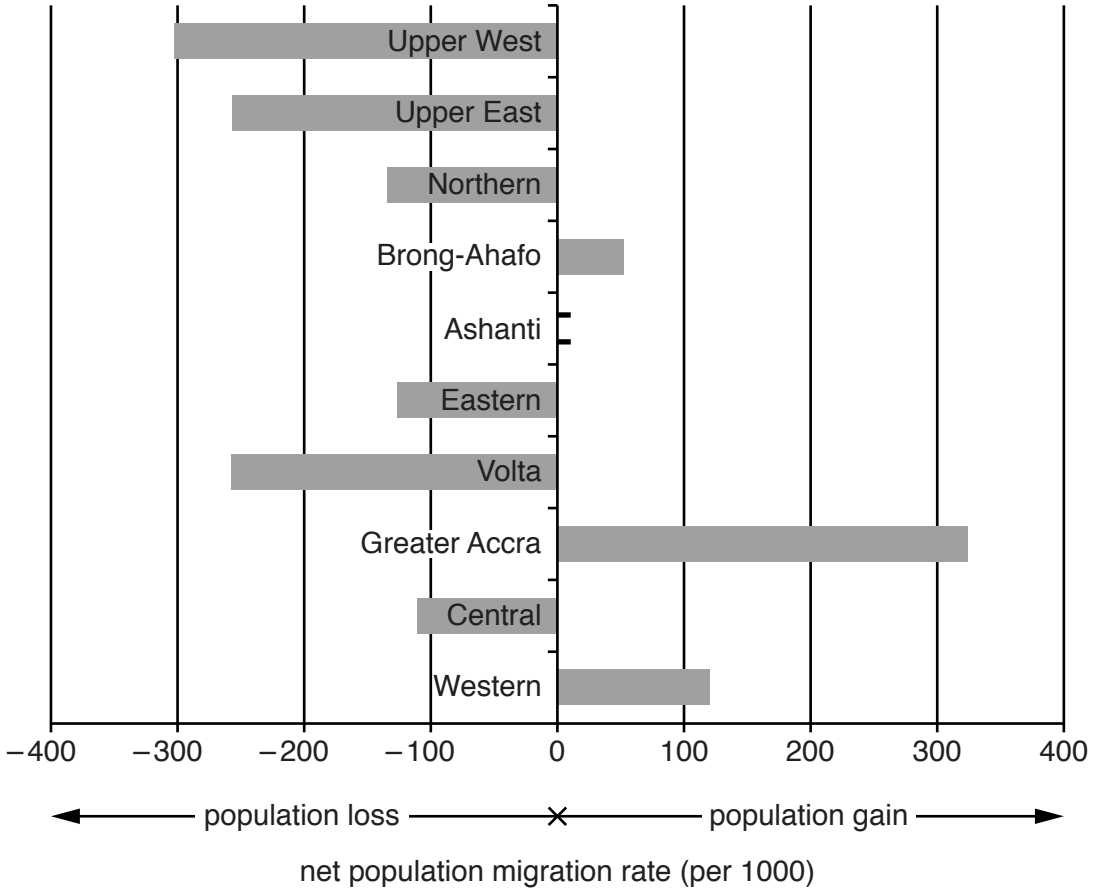


Fig. 8

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(a) Ashanti region had a net population gain of 50 per 1000. Plot this information on Fig. 8.

[1]

(b) Using Figs. 7 and 8, describe the pattern of internal migration in Ghana.

.....

.....

.....

.....

.....

.....[3]

(c) Table 1 shows the region of birth of the residents of Greater Accra region.

Table 1

Region of Birth	Number
Greater Accra	2 326 543
Eastern	454 571
Volta	345 729
Central	255 637
Ashanti	246 564

Region of Birth	Number
Northern	93 677
Western	82 855
Brong-Ahafo	61 995
Upper East	40 809
Upper West	16 489

(i) Using Fig. 7 and Table 1, describe the main features of migration to Greater Accra.

.....

.....

.....

.....[2]

(ii) Suggest **one** reason for the features of migration you described in **(c)(i)**.

.....

.....[1]

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(d) Fig. 9 shows the ages of citizens of Ghana who live in other countries.

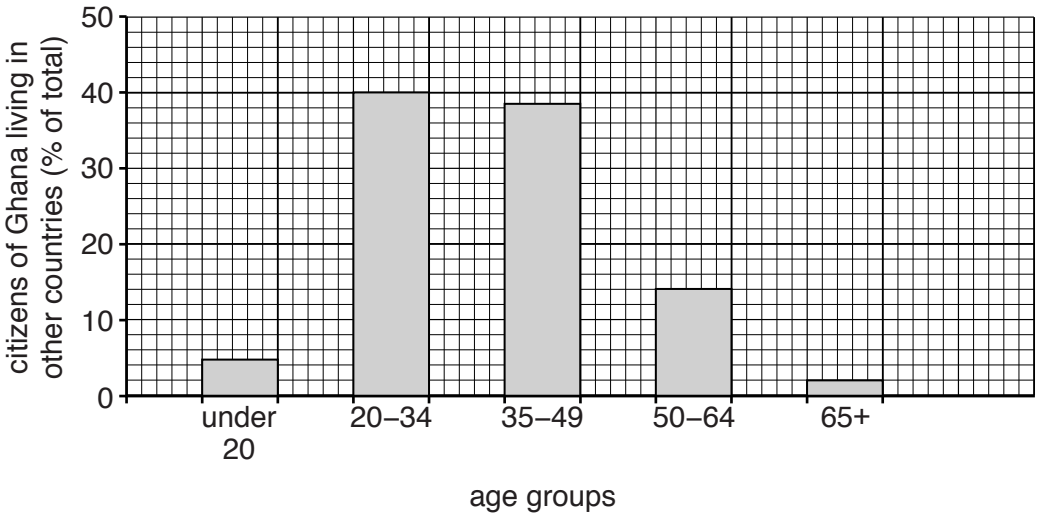


Fig. 9

Suggest **one** reason for the pattern of ages shown in Fig. 9.

.....

.....

.....[1]

[Total: 8 marks]

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TURN PAGE FOR QUESTION 5

5 Table 2 gives information about the most powerful earthquake in each year between 2003 and 2012.

Table 2

Year	Magnitude (Richter Scale)	Number of deaths	Depth of focus (km)
2003	8.3	0	27
2004	9.1	227 898	30
2005	8.6	1313	30
2006	8.3	0	10
2007	8.5	25	34
2008	7.9	87 587	19
2009	8.1	192	18
2010	8.8	547	35
2011	9.0	20 896	29
2012	8.6	0	23

(a) Table 3 describes the depth of earthquake foci.

Table 3

Depth of focus (km)	Description
0–50	shallow
50.1–300	medium
300.1–670	deep

Using Tables 2 and 3, describe the depth of foci of the ten earthquakes shown in Table 2.

.....

.....[1]

(b) **(i)** Describe the variation in the number of deaths caused by the earthquakes shown in Table 2.

.....

.....[1]

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(ii) Suggest **two** reasons for this variation.

1 .....

.....

2 .....

.....[2]

(c) Fig. 10 shows the location of these powerful earthquakes.

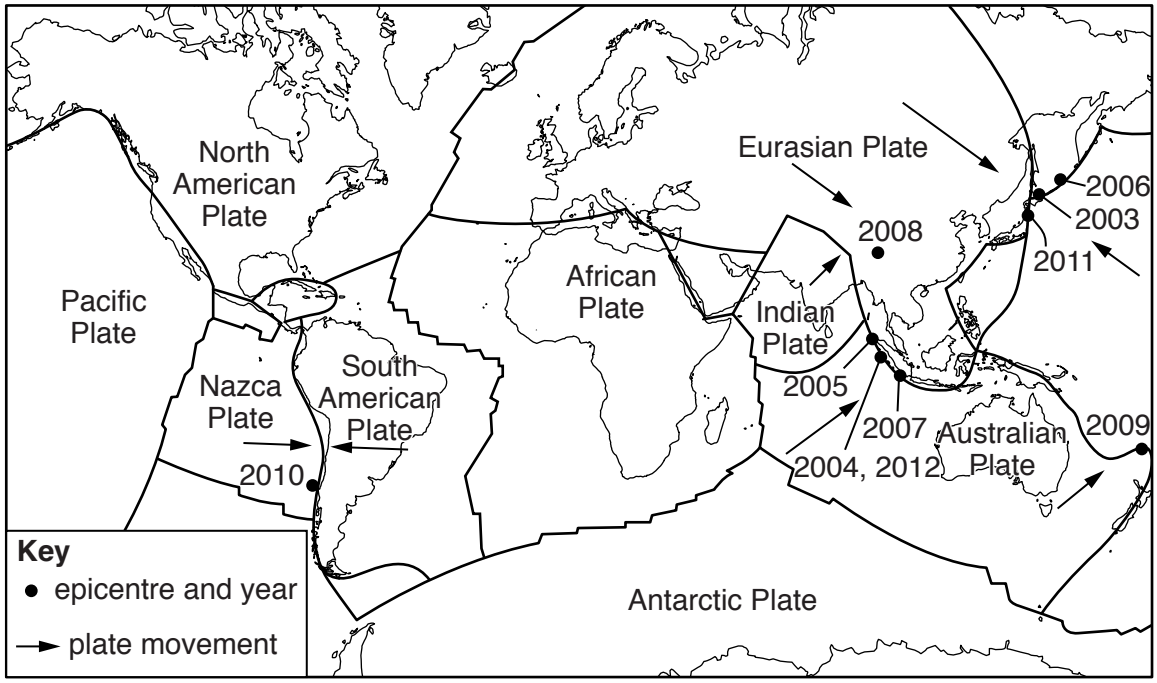


Fig. 10

Using Fig. 10, describe and give reasons for the distribution of powerful earthquakes. Refer to plate tectonics in your answer.

.....

.....

.....

.....

.....

.....

.....

.....[4]

[Total: 8 marks]

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6 **(a)** Increasing food supply can be done by increasing the area of cultivation or by making agriculture more intensive. Fig. 11 below describes some of these methods.

In some countries the area of irrigated agriculture has increased. There have been increased inputs of fertiliser. Deforestation has occurred and marsh has been drained. Some steep mountain slopes have been terraced. Agriculture has become more mechanised. Areas of unused bushland and other natural vegetation have been brought into cultivation. Improved crop varieties have been introduced and the methods of cultivation and harvesting have been improved.

Fig. 11

Using information from Fig. 11 **only**, describe:

(i) **two** ways of increasing the area cultivated;

1 .....

.....

2 .....

.....[2]

(ii) **two** ways of making agriculture more intensive.

1 .....

.....

2 .....

.....[2]

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(b) Study Photograph B (Insert), which shows a valley in South Africa. Describe the **relief** and **land use** of the valley sides and the valley floor.

Valley sides

relief .....

.....

.....

land use .....

.....

.....

Valley floor

relief .....

.....

.....

land use .....

.....

.....[4]

[Total: 8 marks]

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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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