SPECIMEN ASSESSMENT
MATERIAL: SET 3

Please write clearly, in block capitals.

Centre number | | | | | | Candidate number | | | | |

Surname _____

Forename(s) _____

Candidate signature _____

GCSE
GEOGRAPHY

Paper 1: Living with the physical environment

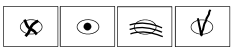
Additional specimen Morning Time allowed: 1 hour 30 minutes

Materials
For this paper you must have:
- a pencil
- a ruler
- a calculator.

Instructions
- Use black ink or black ball-point pen.
- Fill in the boxes at the bottom of this page.
- Answer **all** questions in Section A and Section B.
- Answer **two** questions in Section C.
- You must answer the questions in the spaces provided. Do **not** write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information
- The marks for questions are shown in brackets.
- The total number of marks available for this paper is 88.
- Spelling, punctuation, grammar and specialist terminology will be assessed in Question 01.10.

Advice
For the multiple-choice questions, completely fill in the circle alongside the appropriate answer(s).

CORRECT METHOD  WRONG METHODS 

If you want to change your answer you must cross out your original answer as shown. 

If you wish to return to an answer previously crossed out, ring the answer you now wish to select as shown. 

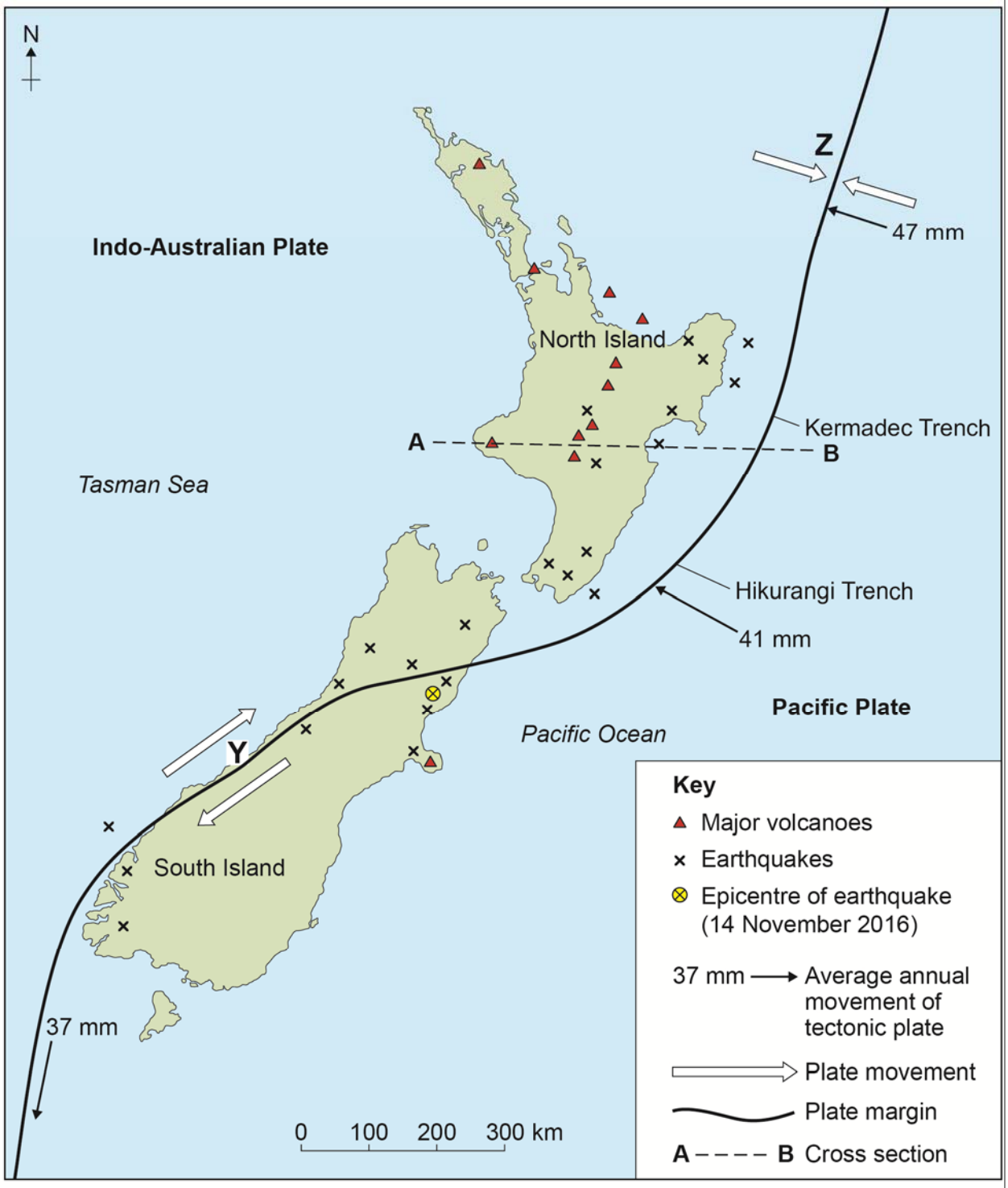
Section A The challenge of natural hazards

Answer **all** questions.

0 1 **The challenge of natural hazards**

Study **Figure 1**, a map showing tectonic hazards in New Zealand.

Figure 1



0 1 . 1 Using **Figure 1**, name the type of plate margin at **Y**.

[1 mark]

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0 1 . 2 Using **Figure 1**, which **one** of the following statements is true?

Shade **one** circle only.

[1 mark]

A All earthquakes are found along a plate margin. ⬭

B Earthquakes and volcanoes are evenly spread across New Zealand. ⬭

C Volcanoes and earthquakes only take place on land. ⬭

D The majority of volcanoes occur in a line through the central part of North Island. ⬭

0 1 . 3 Using **Figure 1,** how much movement will there be along plate margin **Z** in 100 years?

Shade **one** circle only.

[1 mark]

A 47 millimetres ⬭

B 47 centimetres ⬭

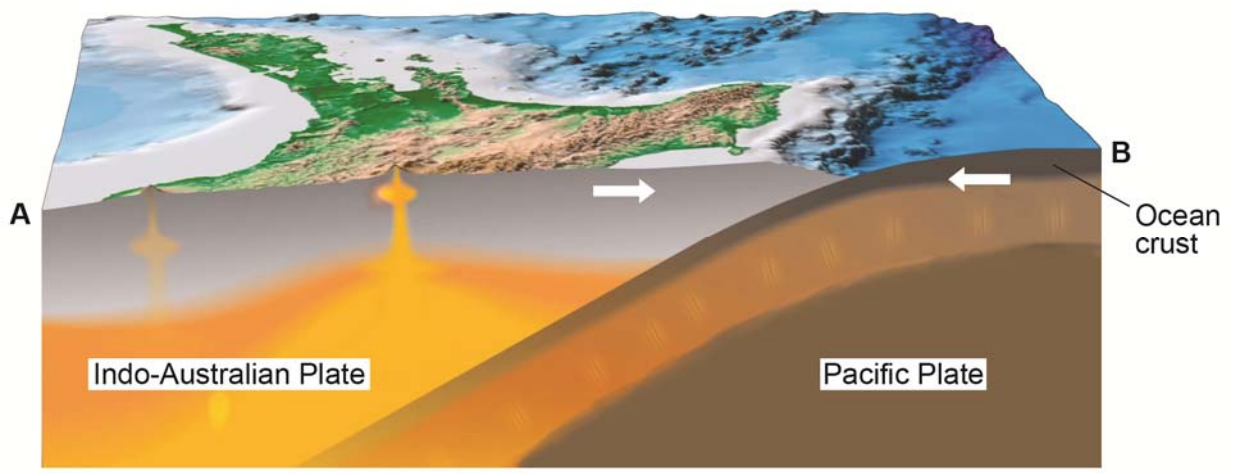
C 4.7 metres ⬭

D 47 metres ⬭

Question 1 continues on the next page

Study **Figure 2**, a block diagram showing a cross section between **A** and **B** on **Figure 1**.

Figure 2

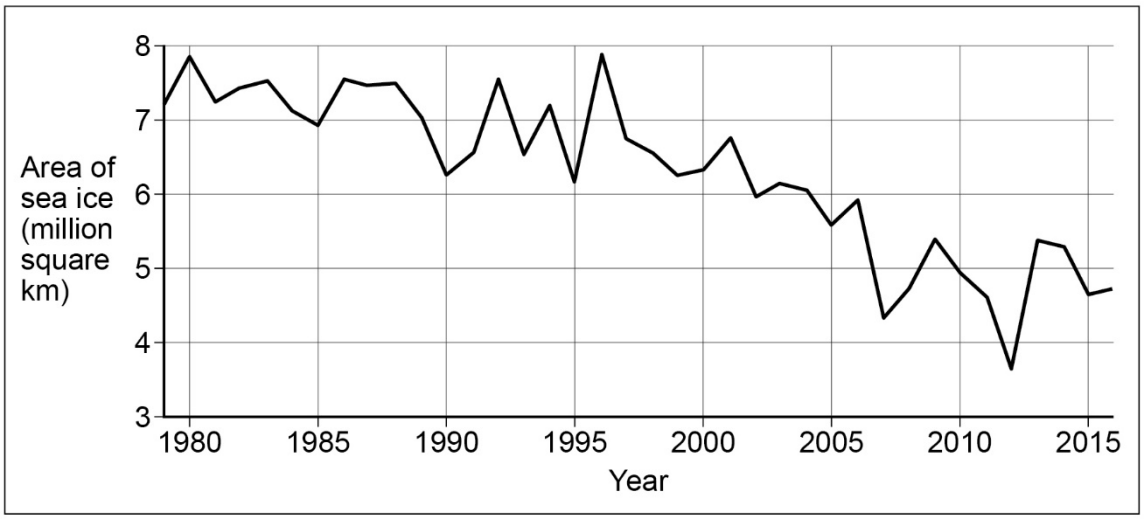


0 1 . 4 Using **Figures 1 and 2**, suggest why both volcanoes and earthquakes occur in New Zealand.

[6 marks]

Study **Figure 3**, a graph showing the area of Arctic sea ice each September between 1979 and 2016.

Figure 3



0 1 . 5 Using **Figure 3**, describe how the area of Arctic sea ice has changed.

[2 marks]

0 1 . 6 Give **two** ways that human activity may have contributed to the changes shown in **Figure 3**.

[2 marks]

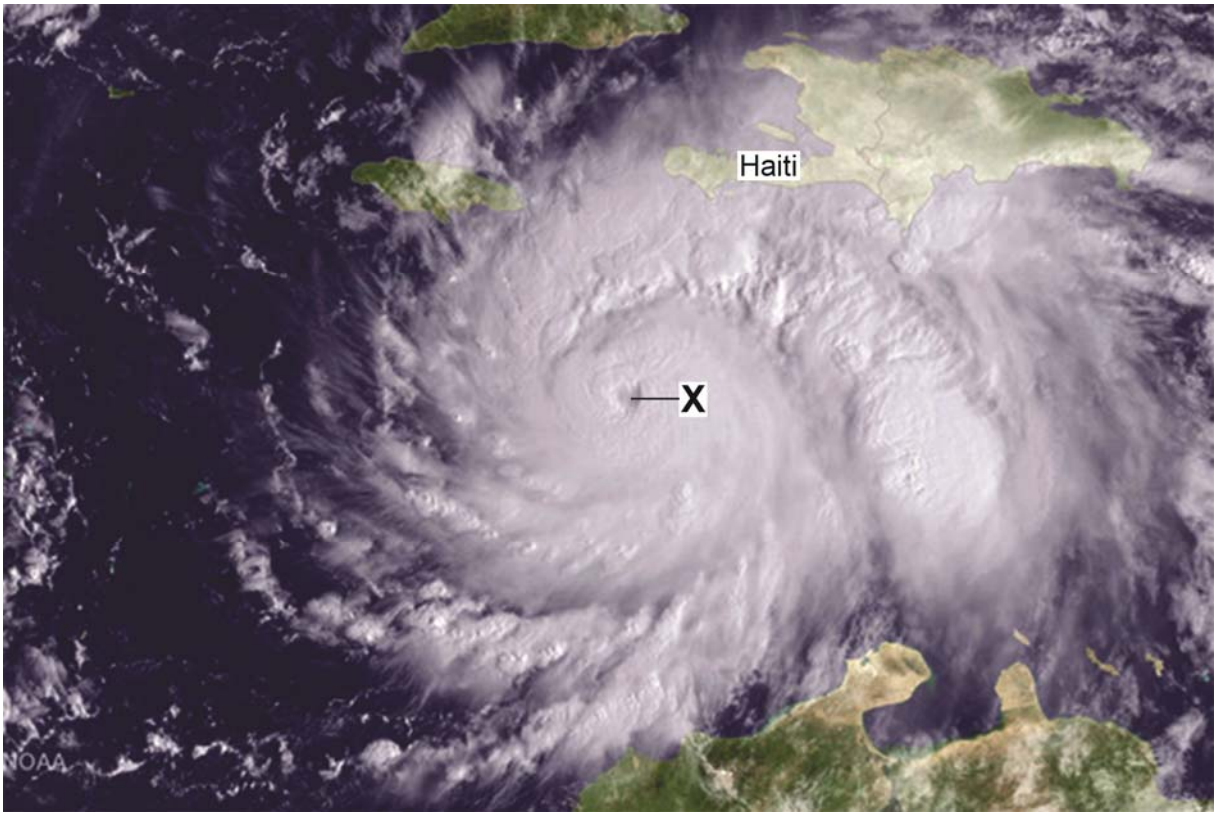
1

2

0 1 . 7 Explain how volcanic activity and orbital changes may cause long-term climate change.
[4 marks]

Study **Figure 4**, a satellite image of Hurricane Matthew shortly before it crossed Haiti in October 2016.

Figure 4



0 1 . 8 Using **Figure 4** and your own understanding, complete the following sentences.

[2 marks]

Figure 4 shows that the pattern of winds moving around the hurricane centre was anticlockwise because _____

_____

_____

At X, the eye of the hurricane, the weather conditions were likely to be _____

_____

_____

Question 1 continues on the next page

Study **Figure 5**, a photograph showing the effects of Hurricane Matthew in south western Haiti.

Figure 5

0 1 . 9 Using **Figure 5,** state **two** primary effects of Hurricane Matthew.

[2 marks]

1 _____

_____

2 _____

_____

0 1 . 10 Using a named example, evaluate the immediate and long-term responses to tropical storms.

[9 marks]
[+ 3 SPaG marks]

End of Section A

Turn over for Section B

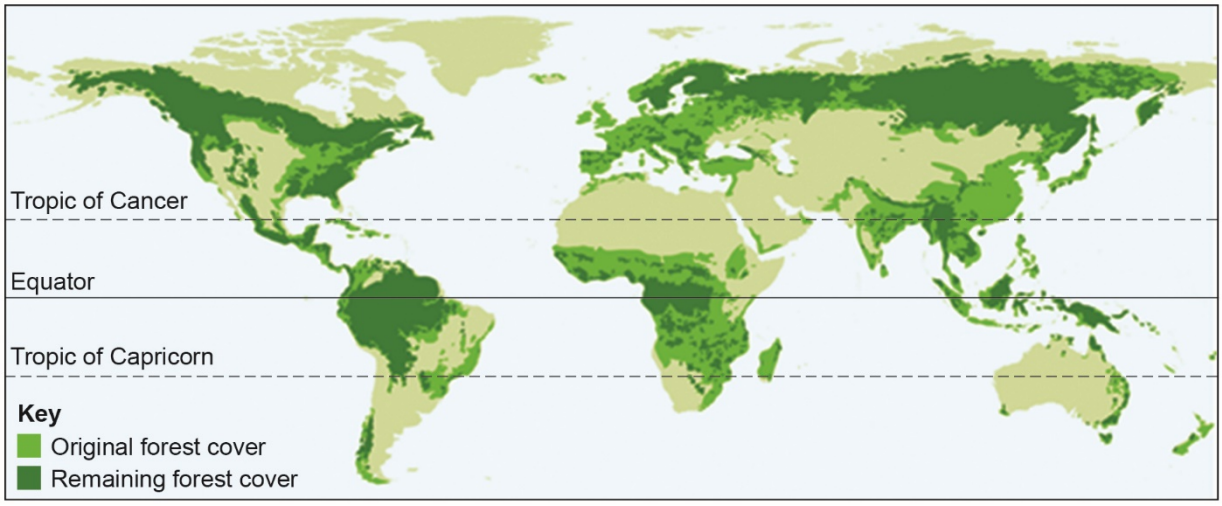
Section B The living world

Answer **all** questions.

0 2 **The living world**

Study **Figure 6**, a map showing global forest cover.

Figure 6



0 2 . 1 Using **Figure 6**, which **one** of the following statements is true?

Shade **one** circle only.

[1 mark]

A Most of the world's forests are situated between the Tropic of Cancer and the Tropic of Capricorn. ⬭

B The greatest amount of deforestation has occurred in North and South America. ⬭

C A high proportion of the original forest cover has been removed in Africa and Europe. ⬭

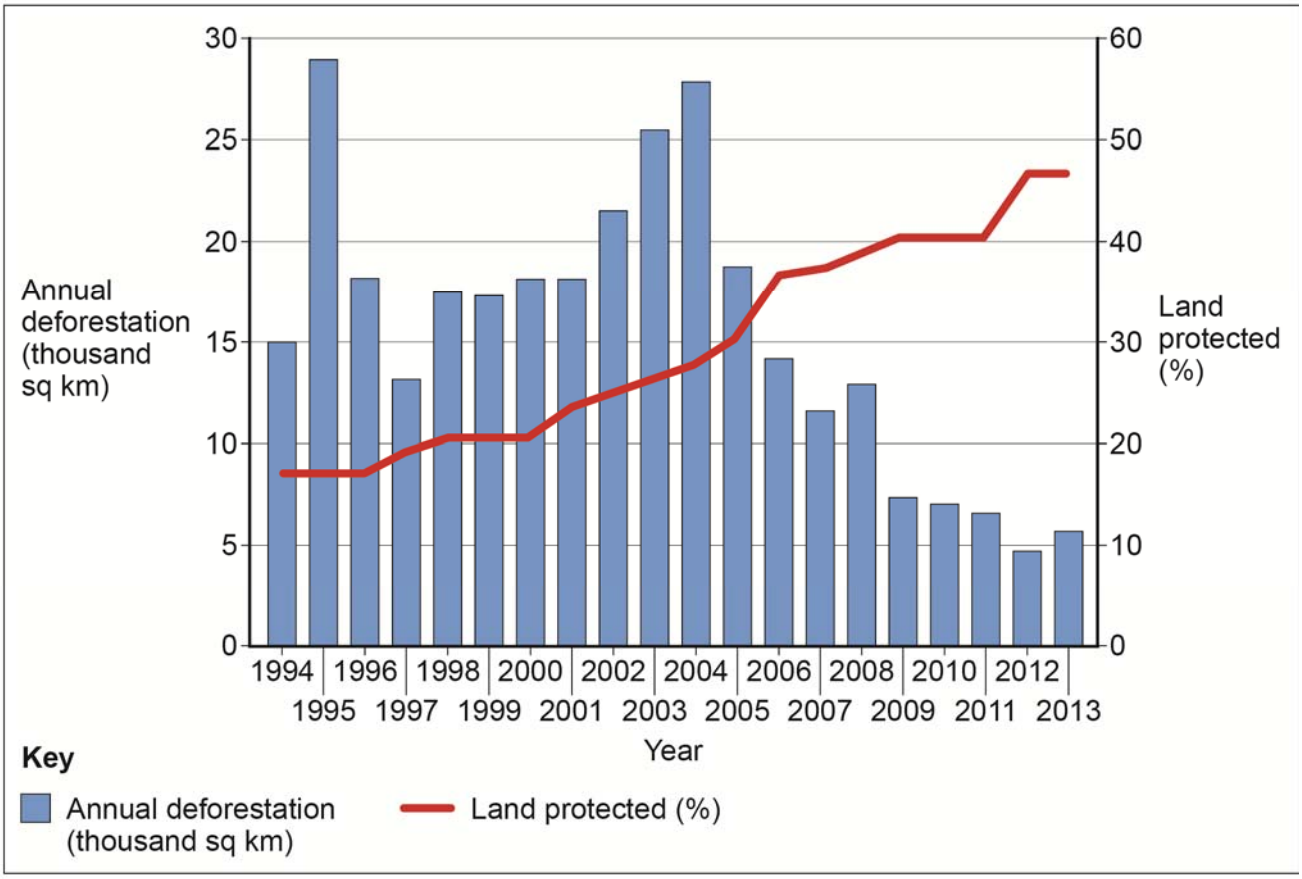
D Most of the original forest cover in south and east Asia still remains today. ⬭

0 2 . 2 Outline **one** reason for the high levels of biodiversity in tropical rainforests.

[2 marks]

Study **Figure 7**, a graph showing annual deforestation and land protected in the Amazon rainforest of Brazil between 1994 and 2013.

Figure 7



0 2 . 3 Using **Figure 6**, which **one** of the following statements is true?

Shade **one** circle only.

[1 mark]

A Annual deforestation was over 15000 sq km in every year between 1994 and 2005. ⬭

B The highest level of deforestation was in 1995 and the lowest level was in 2012. ⬭

C The percentage of land protected increased by approximately 20% between 1994 and 2013. ⬭

D Annual deforestation decreased every year between 2004 and 2013. ⬭

0 2 . 4 Using **Figure 7**, suggest **two** reasons for the changes in annual deforestation in Brazil between 2004 and 2013.

[2 marks]

1 _____

_____

2 _____

_____

Study **Figure 8**, information about Carajás mine in Brazil, South America.

Figure 8

Factfile

Carajás Mine

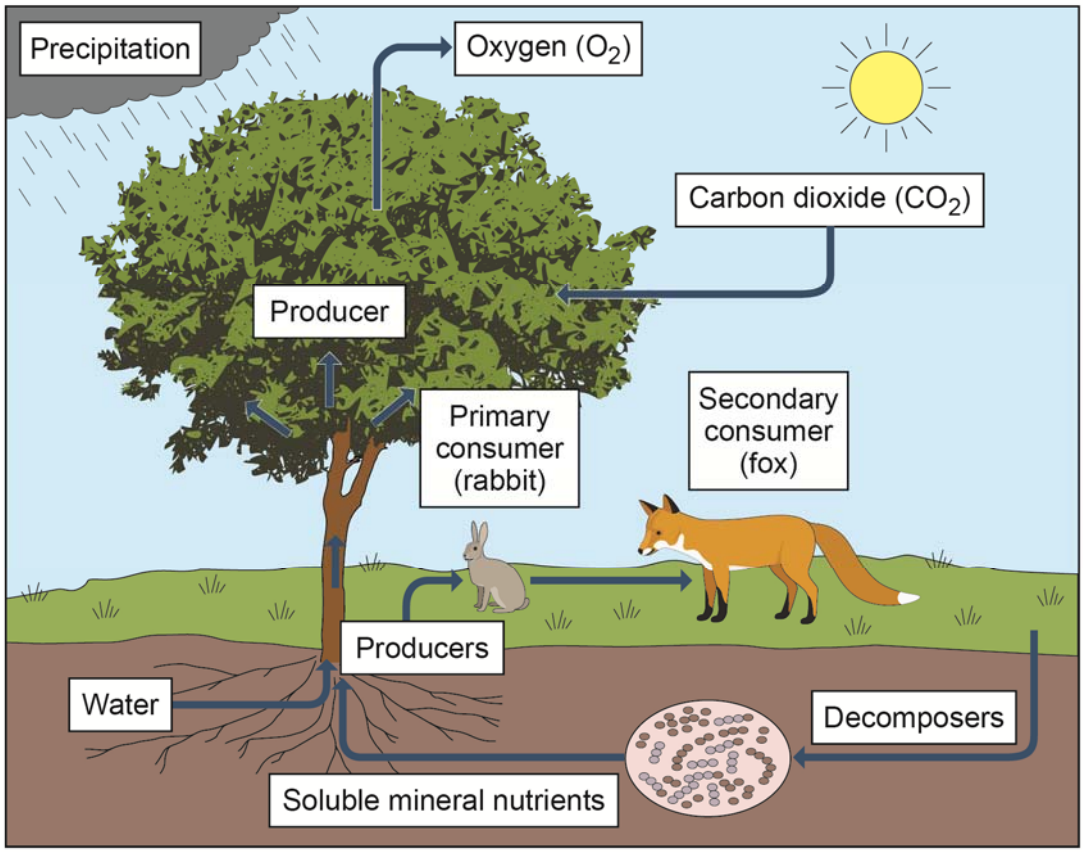
- Largest iron ore mine in the world.
- Area is estimated to contain over 6.5 billion tonnes of iron ore.
- Over 100 million tonnes iron ore mined each year, with much exported to Asia.
- Gold, manganese, copper, bauxite and nickel mined in smaller mines.
- Powered by Tucuruí hydro-electric power station.
- 900 km railway link built to the coast.
- Recent development of a new iron-ore mine to the south.
- Local Indians now unable to carry on their traditional farming.
- Many local Indians have died because of imported diseases such as measles.
- Some drinking water polluted by mercury, affecting the health of the local farmers.

0 2 . 5 Using **Figure 8** and your own understanding, explain how deforestation can have economic impacts.

[6 marks]

Study **Figure 9**, a diagram showing energy flows in an ecosystem in the UK.

Figure 9



0 2 . 6 Describe the role of producers in an ecosystem.

[1 mark]

0 2 . 7 Give **one** reason why energy is lost at each level in a food chain.

[1 mark]

0 2 . 8 Using **Figure 9** and your own understanding, complete the following sentences.

[2 marks]

If a disease reduced the number of primary consumers, one effect on the food chain would be that

_____

_____

Decomposers help to return nutrients to the soil by

_____

_____

Question 2 continues on the next page

0 2 . 9 Choose **one** of the following environments:

Environments on the fringe of hot deserts ☐

Cold environments ☐

Tick the box indicating the environment chosen.

To what extent is your chosen environment at risk from human activity?

[9 marks]

End of Section B

Section C Physical landscapes in the UK

Answer **two** questions from the following:

Question 3 (Coasts), Question 4 (Rivers), Question 5 (Glacial).

Shade the circle below to indicate which **two** optional questions you will answer.

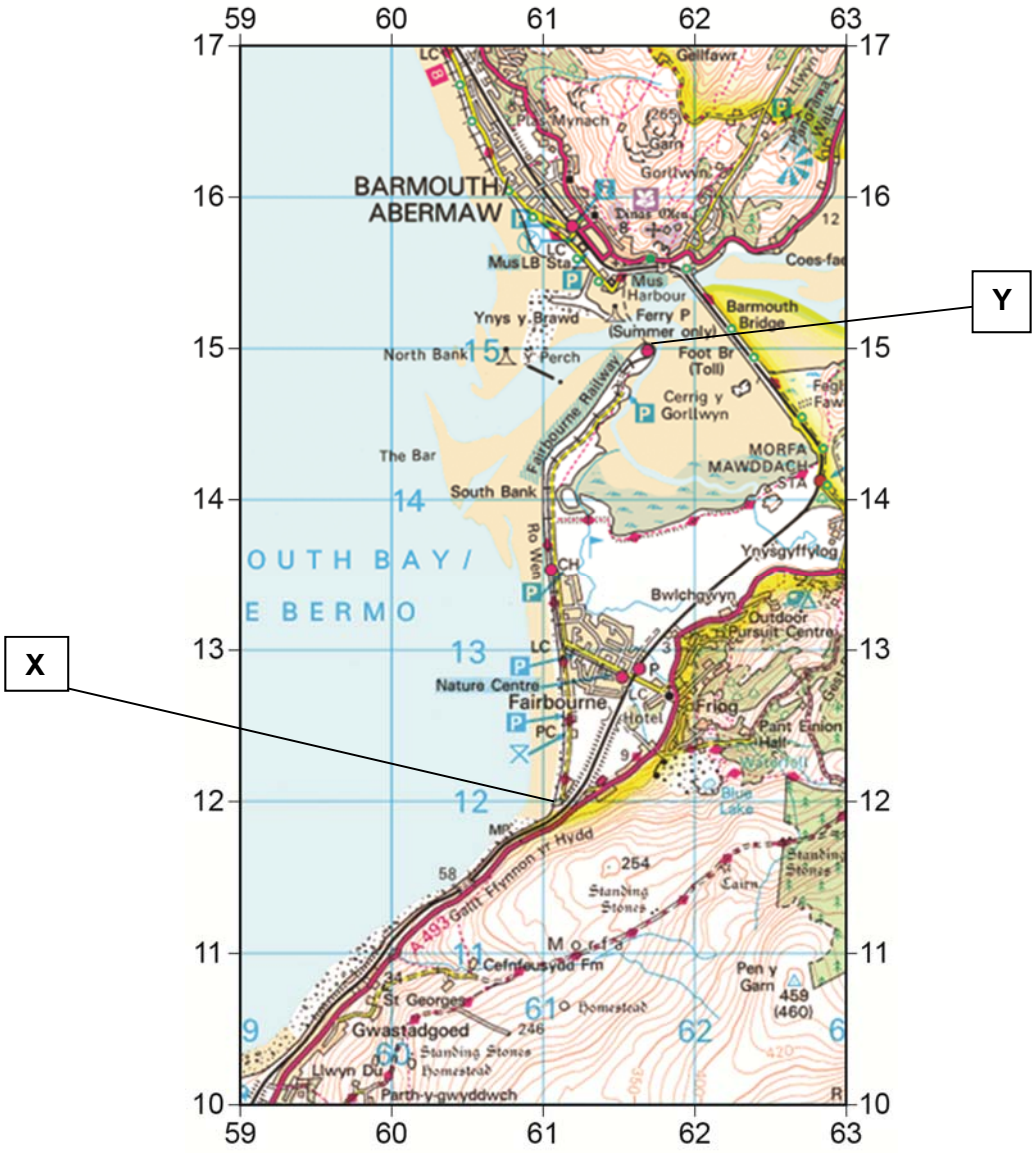
Question 0 3 ⬭ Question 0 4 ⬭ Question 0 5 ⬭

CORRECT METHOD ⬬ WRONG METHODS ⊗ ⊙ ≈ √

0 3 **Coastal landscapes in the UK**

Study **Figure 10**, a 1:50 000 Ordnance Survey map of the Barmouth area.

Figure 10



Turn over ►

0 3 . 1 Using **Figure 10**, give the 6 figure grid reference for a shingle beach.

Shade **one** circle only.

[1 mark]

A 616138 ⬭

B 609138 ⬭

C 596106 ⬭

D 614147 ⬭

0 3 . 2 Using **Figure 10**, which of the following statements best describes the features of grid square 6016?

Shade **one** circle only.

[1 mark]

A An area of flat land, a small stream and a saltmarsh in the north. ⬭

B A steep cliff, a road and railway, no buildings and narrow beach. ⬭

C A long narrow piece of land, car park, railway and wide beach. ⬭

D A beach with groynes, a small coastal settlement and an A road. ⬭

0 3 . 3 Using **Figure 10**, how long is the coastline between **X** (611120) and **Y** (617150)?

Shade **one** circle only.

[1 mark]

A 2.3 km ⬭

B 2.7 km ⬭

C 3.0 km ⬭

D 3.4 km ⬭

Study **Figure 11** a photograph of part of the coastline shown in **Figure 10**.

Figure 11

0 3 . 4 Using **Figures 10 and 11**, in which direction was the photographer facing when the picture was taken?

Shade **one** circle only.

[1 mark]

A north east ⬭

B north west ⬭

C south west ⬭

D south east ⬭

0 3 . 5 Using **Figures 10 and 11**, suggest **one** reason why the area in grid squares 6014 and 6015 shows evidence of deposition.

[1 mark]

0 3 . 6 Feature **Z** labelled on **Figure 11** is a spit.

Explain the formation of a spit.

[4 marks]

0 3 . 7 ‘Hard engineering strategies are effective in protecting the coastline.’

Do you agree with this statement?

Explain your answer.

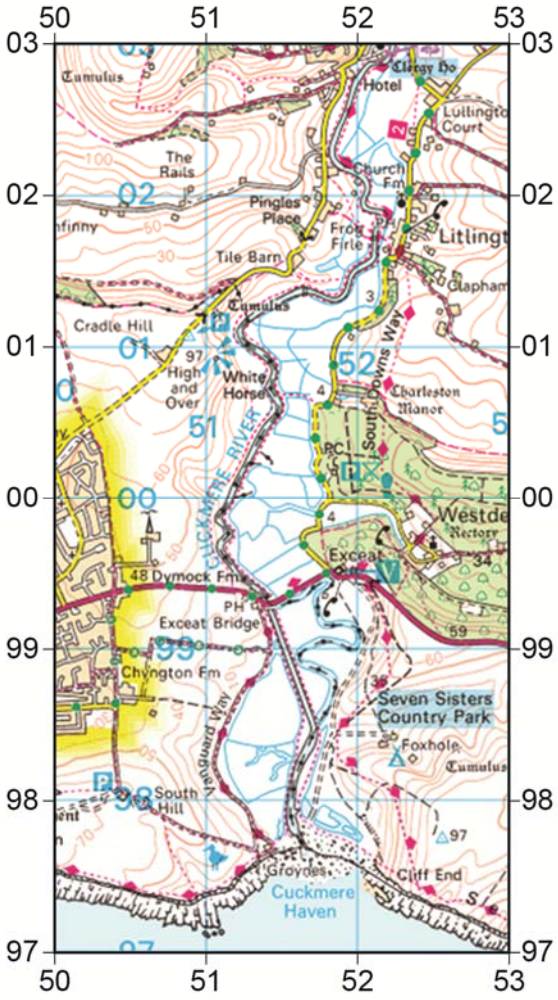
[6 marks]

Turn over for the next question

0 4 **River landscapes in the UK**

Study **Figure 12**, a 1:50 000 Ordnance Survey map of the River Cuckmere in Sussex.

Figure 12



0 4 . 1 Give the 6 figure grid reference of the mouth of the River Cuckmere.

Shade **one** circle only.

[1 mark]

A 512983 ⬭

B 516977 ⬭

C 523974 ⬭

D 515985 ⬭

0 4 . 2 Using **Figure 12**, which grid square matches the following description?

'There is a meandering river. Land is flat in the south, but it rises to 70 metres in the north west. Two secondary roads pass through the area.'

Shade **one** circle only.

[1 mark]

A 5297 ⬭

B 5202 ⬭

C 5101 ⬭

D 5002 ⬭

Study **Figure 13**, a photograph of the River Cuckmere and its valley.

Figure 13

Question 4 continues on the next page

0 4 . 3 Using **Figures 12 and 13**, give the grid reference of point **X** on **Figure 13**.

Shade **one** circle only.

[1 mark]

A 517985 ⬭

B 513993 ⬭

C 516989 ⬭

D 520991 ⬭

0 4 . 4 Using **Figure 13**, describe **one** feature of the River Cuckmere where it reaches the sea at point **Y**.

[1 mark]

0 4 . 5 Using **Figures 12 and 13**, suggest why there is a straightened channel next to the natural river meander.

[1 mark]

0 4 . 6 Feature **Z** labelled on **Figure 13** is a floodplain.

Explain the formation of a floodplain.

[4 marks]

0 4 . 7 'The causes of river flooding are usually the result of **human** factors.'

Do you agree with this statement?

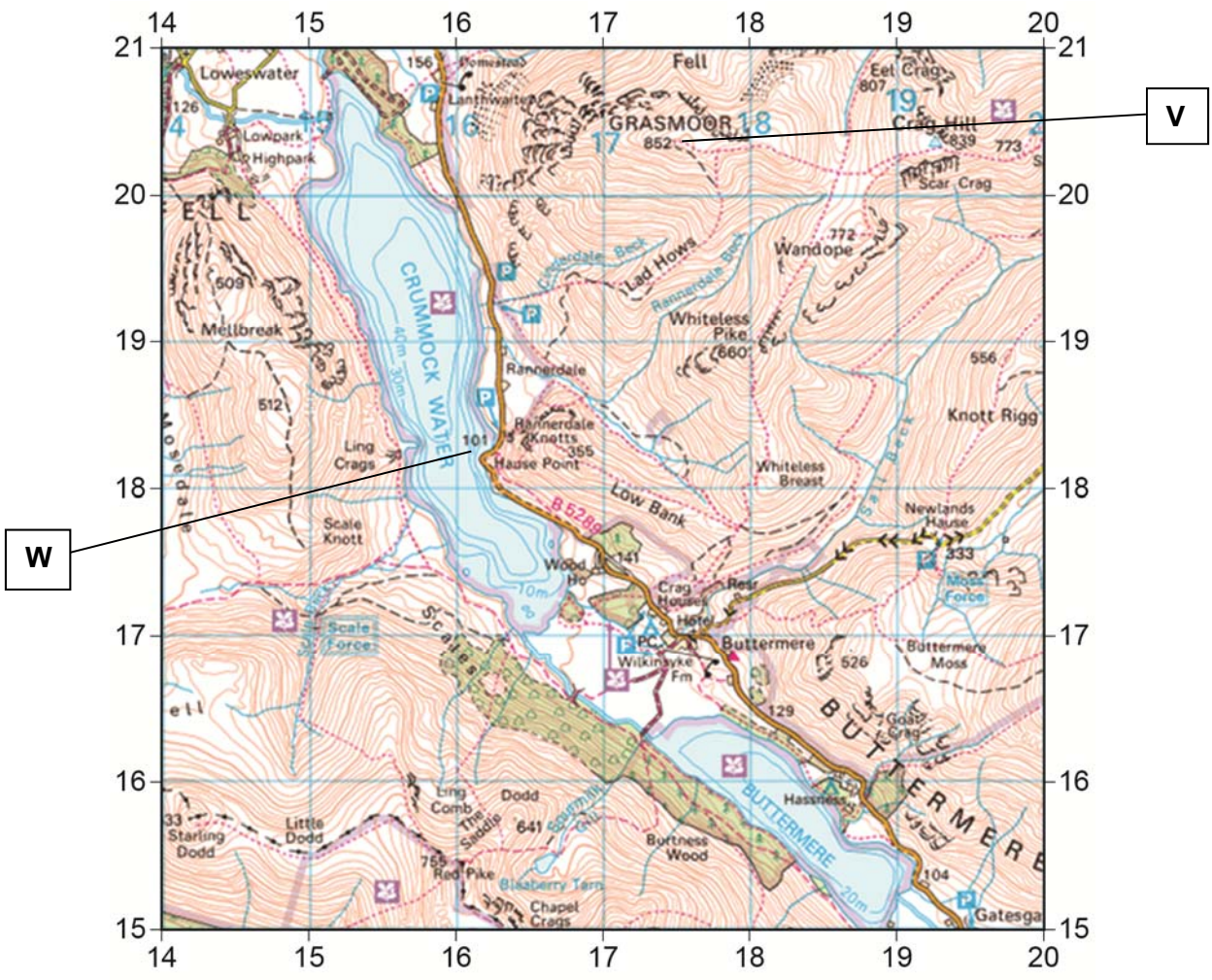
Explain your answer.

[6 marks]

0 5 **Glacial landscapes in the UK**

Study **Figure 14**, a 1:50000 Ordnance Survey map of part of the Lake District.

Figure 14



0 5 . 1 Using **Figure 14**, which landform is located in grid square 1519?

Shade **one** circle only.

[1 mark]

A corrie ⬭

B drumlin ⬭

C hanging valley ⬭

D ribbon lake ⬭

0 5 . 2 Using **Figure 14**, what is the difference in height between Grasmoor (labelled **V** at 176203), and the edge of Crummock Water (labelled **W** at 162183)?

Shade **one** circle only.

[1 mark]

A 653 metres ⬭

B 751 metres ⬭

C 791 metres ⬭

D 953 metres ⬭

0 5 . 3 Using **Figure 14**, suggest in which direction valley glaciers moved across this area during the last ice age.

Shade **one** circle only.

[1 mark]

A north to south ⬭

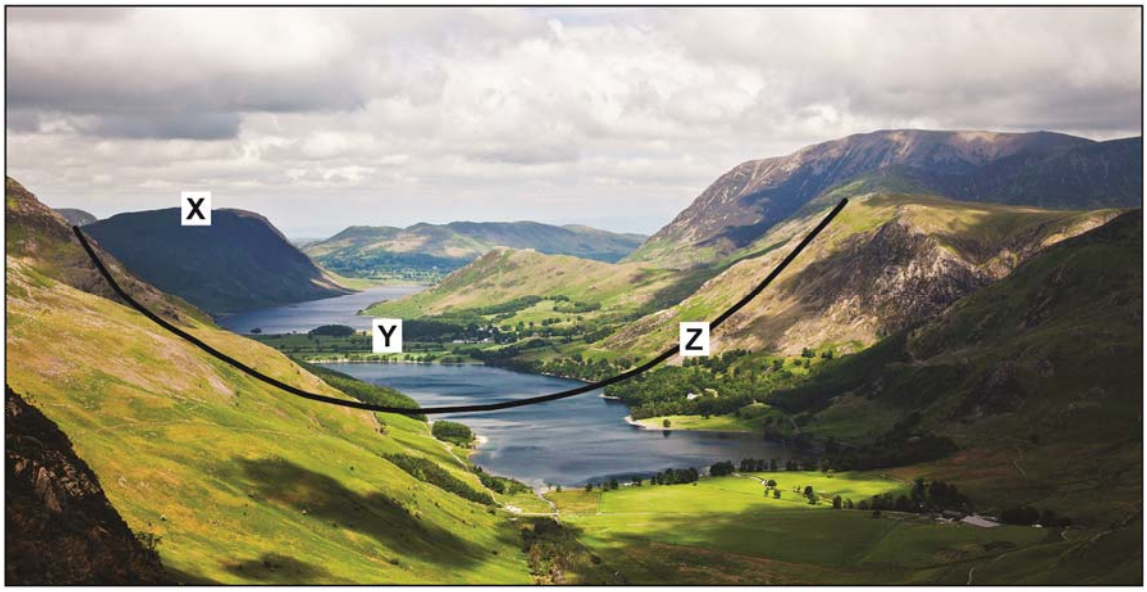
B north east to south west ⬭

C west to east ⬭

D south east to north west ⬭

Study **Figure 15**, a photograph of part of the area shown in **Figure 14**. Lake Buttermere is in the foreground.

Figure 15



0 5 . 4 Using **Figures 14 and 15**, name hill **X**.

Shade **one** circle only.

[1 mark]

A Mellbreak (1419) ⬭

B Dodd (1615) ⬭

C Whiteless Pike (1718) ⬭

D Grasmoor (1720) ⬭

0 5 . 5 Using **Figures 14 and 15**, suggest a reason why there is an area of flat land separating Lake Buttermere and Crummock Water, shown as **Y** on **Figure 15**.

[1 mark]

0 5 . 6 Feature **Z** shown on **Figure 15** is a glacial trough.

Explain the formation of a glacial trough.

[4 marks]

0 5 . 7 'Economic activity can cause conflict between different land uses in glaciated upland areas.'

Do you agree with this statement?

Explain your answer.

[6 marks]

END OF QUESTIONS

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