Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use	
Examiner's Initials	
Question	Mark
1	
2	
3	
4	
TOTAL	

Level 1/Level 2 Certificate
Specimen Paper

Geography

8031/1 Dynamic Physical World

For this paper you must have:
- the colour insert (enclosed).

You may use a calculator.

Time allowed
- 1 hour

Instructions
- Use black ink or black ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **TWO** questions.
- 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.
- Use case studies to support your answers where appropriate.

Information
- The marks for questions are shown in brackets.
- The maximum mark for this paper is 50.
- You are reminded of the need for good English and clear presentation in your answers. Where applicable, questions should be answered in continuous prose. Quality of Written Communication will be assessed in all answers.

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Answer **TWO** questions.

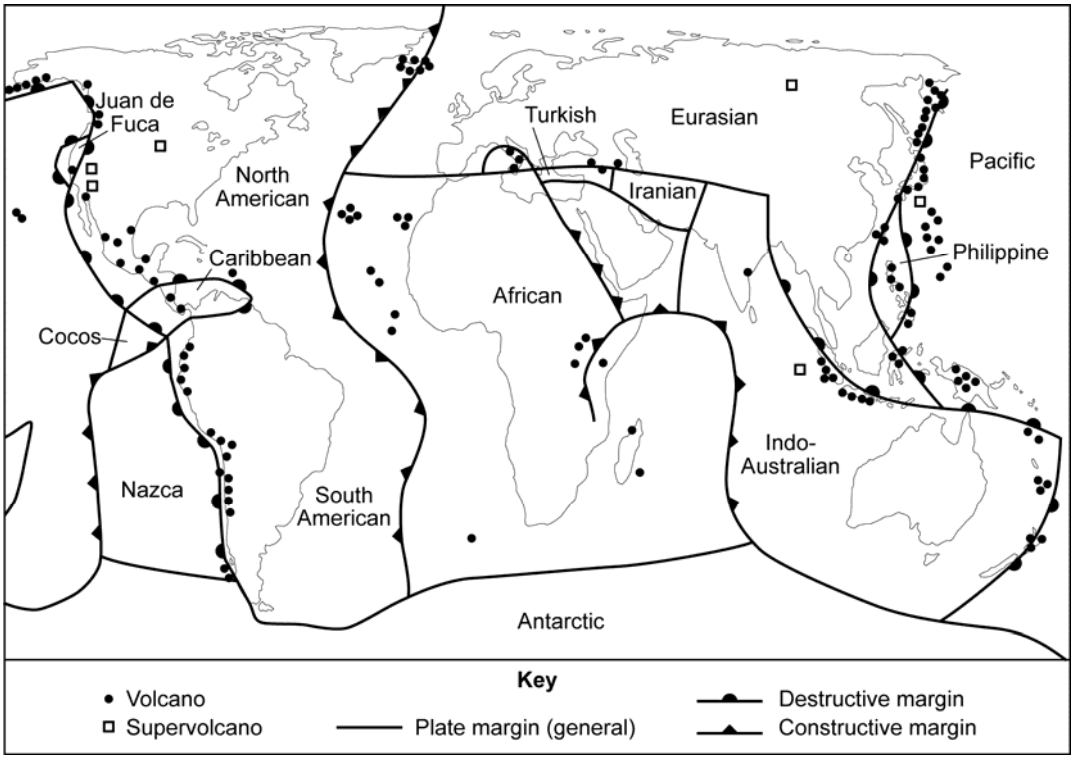
Use case studies to support your answers where appropriate.

Total for this question: 25 marks

1 Tectonic Activity and Hazards

1 (a) Study **Figure 1** which shows the earth's tectonic plates and the places where volcanoes occur worldwide.

Figure 1



1 (a) (i) Describe the distribution of volcanoes.

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(3 marks)

1 (a) (ii) Draw a labelled diagram(s) to explain why volcanoes occur at destructive plate boundaries.

(4 marks)

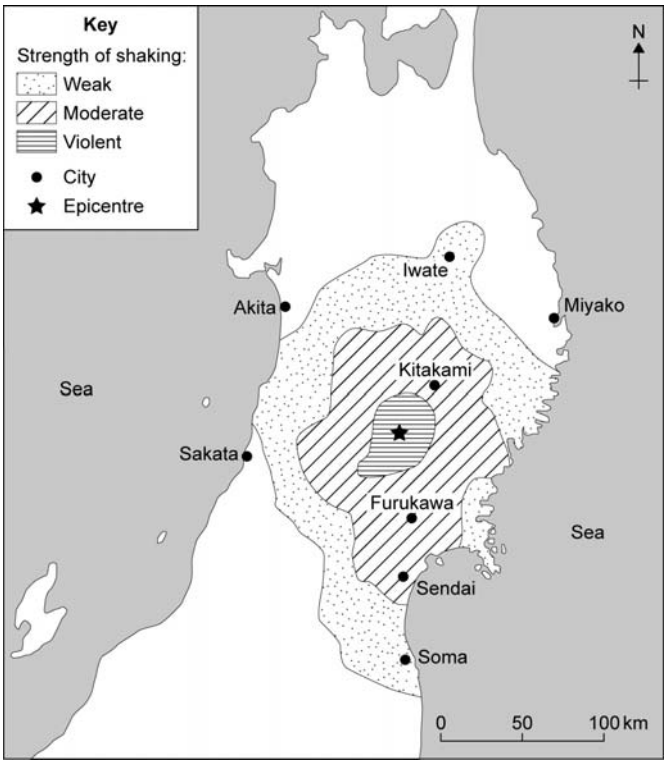
Question 1 continues on the next page

1(b) Study **Figure 2**, **Figure 2** shows information about an earthquake in Japan (2008).

Figure 2

Earthquake shakes northern Japan
June 15, 2008

The earthquake was centred in a mountainous region in the countryside on Japan's main island, Honshu. As a result of the earthquake 12 people died and 358 were injured, many by broken glass. Large numbers of people are in temporary shelters because their homes have been destroyed. Many roads were badly damaged and one road bridge collapsed. A bus carrying 20 passengers was forced off the road and skidded down a hillside. All high speed trains in the area were stopped, delaying 117 000 passengers. Over 2000 passengers were trapped inside three trains for nine and a half hours. The earthquake caused landslides, crushing buildings and blocking roads. In one hot spring resort a landslide buried seven people. It was reported that aftershocks caused cracks in a dam and people had to be evacuated.



1(b) (i) Describe the location of the earthquake epicentre.

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(1 mark)

Barcode

1(b) (ii) From **Figure 2**, give **two** examples of the primary effects of the earthquake and **two** examples of the secondary effects of the earthquake.

Complete the table below.

Primary effects	Secondary effects
1 …… …… ……	1 …… …… ……
2 …… …… ……	**2**…… …… …… …… ……

(4 marks)

1(b) (iii) Using an example, describe the methods used to reduce the damaging effects of earthquakes.

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(4 marks)

1(c) (i) Give **one** reason why a tsunami is a secondary effect of plate movement.

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(1 mark)

1(c) (ii) Use a case study to describe and explain the damaging effects of a tsunami on coastal areas.

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(8 marks)

Extra space .....

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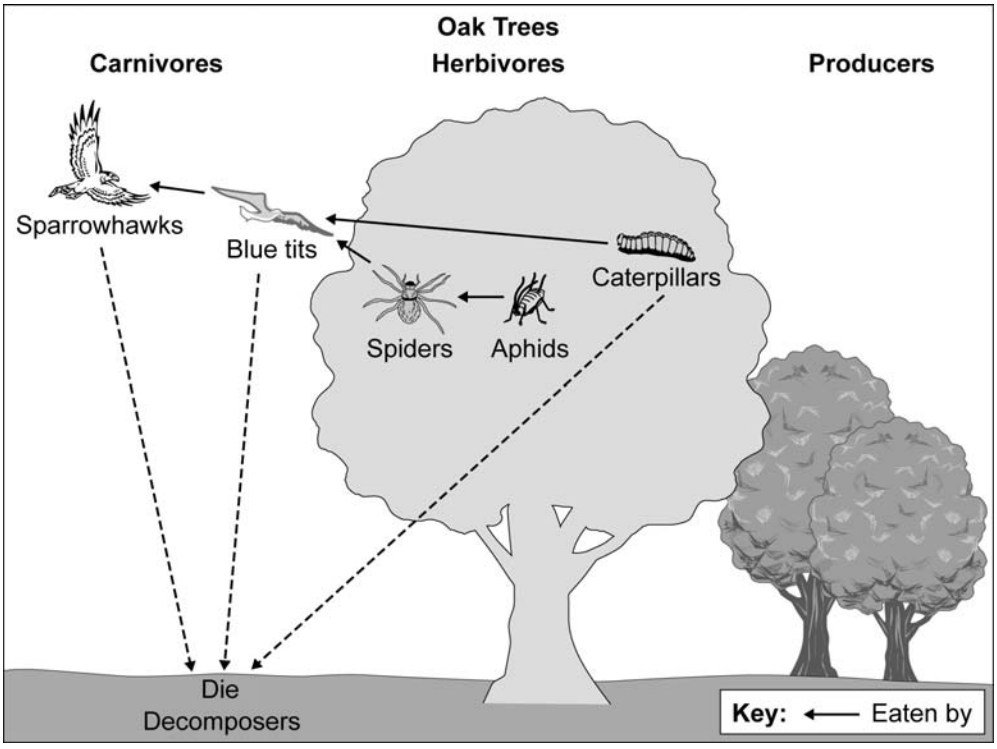
Total for this question: 25 marks

2 Ecosystems and Global Environments

2 (a) Study **Figure 3** which shows part of a deciduous forest ecosystem.

Figure 3



Suggest why the tree is important in the food web.

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(4 marks)

2(b) (i) Suggest **one** way in which deciduous trees adapt to the climate.

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(2 marks)

2(b) (ii) Suggest **one** way in which deciduous trees adapt to the soil.

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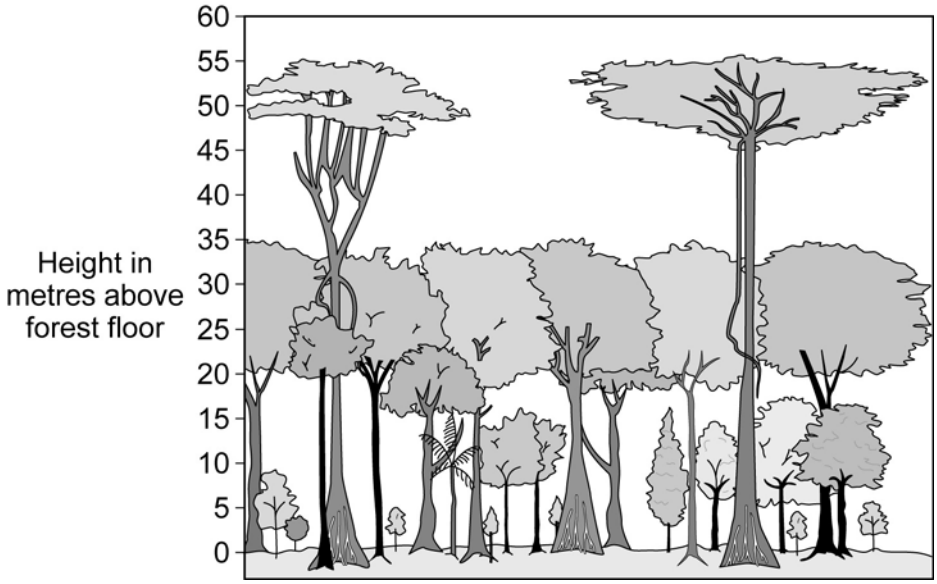
(2 marks)

2(c) Study **Figure 4.** **Figure 4** shows a diagram of a tropical rainforest.

Figure 4



Using **Figure 4** describe the characteristics of the vegetation of a tropical rainforest.

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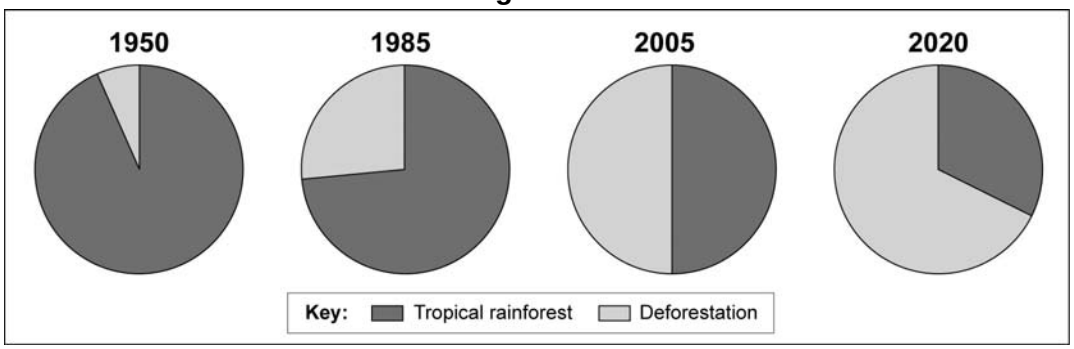
(3 marks)

2 (d) Study **Figure 5** showing information about deforestation in Borneo, an island in south east Asia.

Figure 5



2 (d) (i) What percentage of Borneo had been deforested by 2005?

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(1 mark)

2 (d) (ii) What is expected to happen to the amount of tropical rainforest in Borneo by 2020?

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(1 mark)

2 (d) (iii) Explain why tropical rainforests are being cut down.

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(4 marks)

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2 (e) Use a case study of a hot desert area in an MEDC to describe and explain how the area is being managed sustainably.

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(8 marks)

Extra marks .....

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Turn over for the next question

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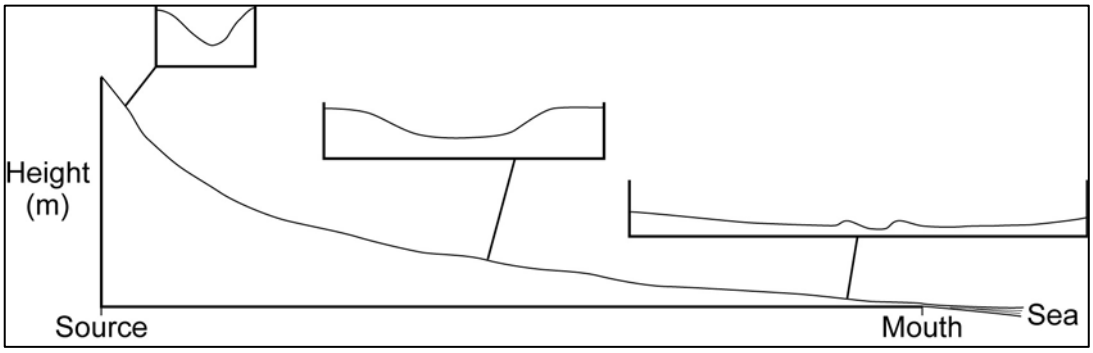
Total for this question: 25 marks

3 River Processes and Pressures

3(a) Study **Figure 6** which shows a long profile and cross profiles of a river and its valley.

Figure 6



Describe how the cross profile of a valley changes downstream.

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(3 marks)

3(b) (i) Study **Figure 7** on the insert, a photograph of a waterfall in the Glens of Antrim, Northern Ireland.

Describe the features of a waterfall shown in **Figure 7**.

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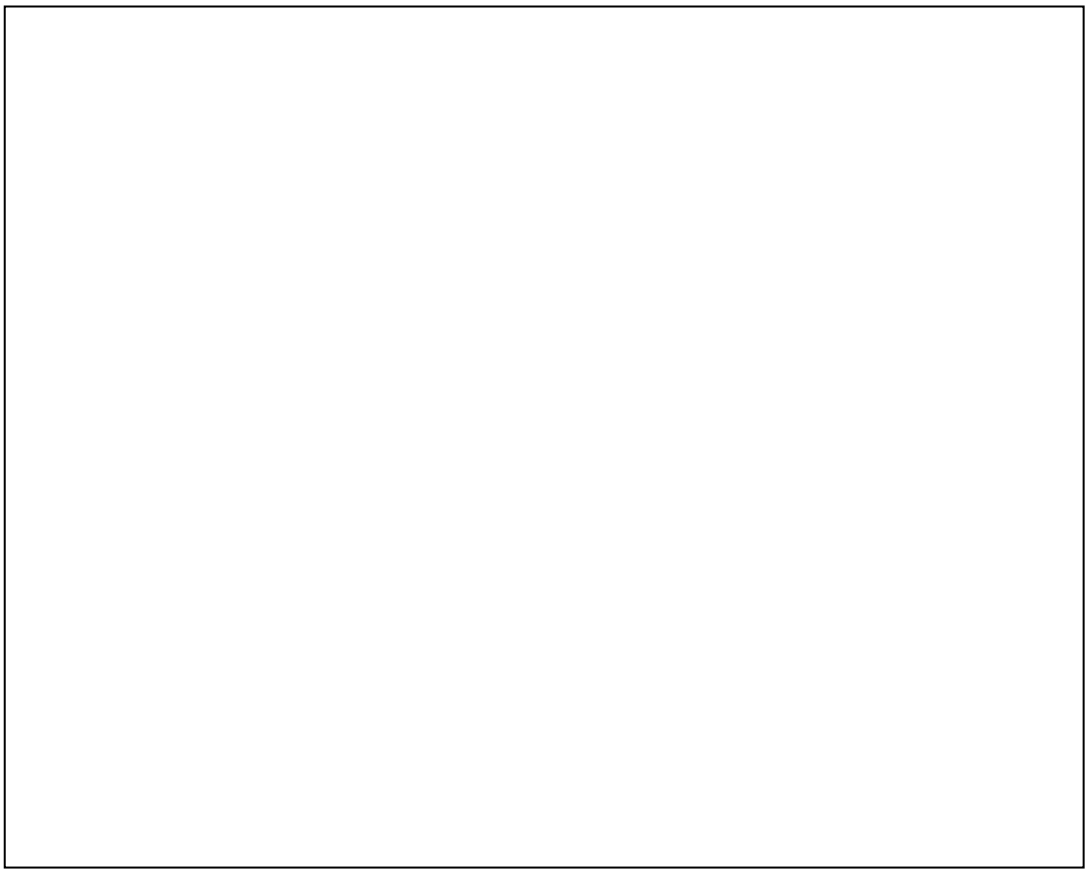
(3 marks)

3 (b) (ii) Draw a labelled diagram(s) to explain the formation of a waterfall.

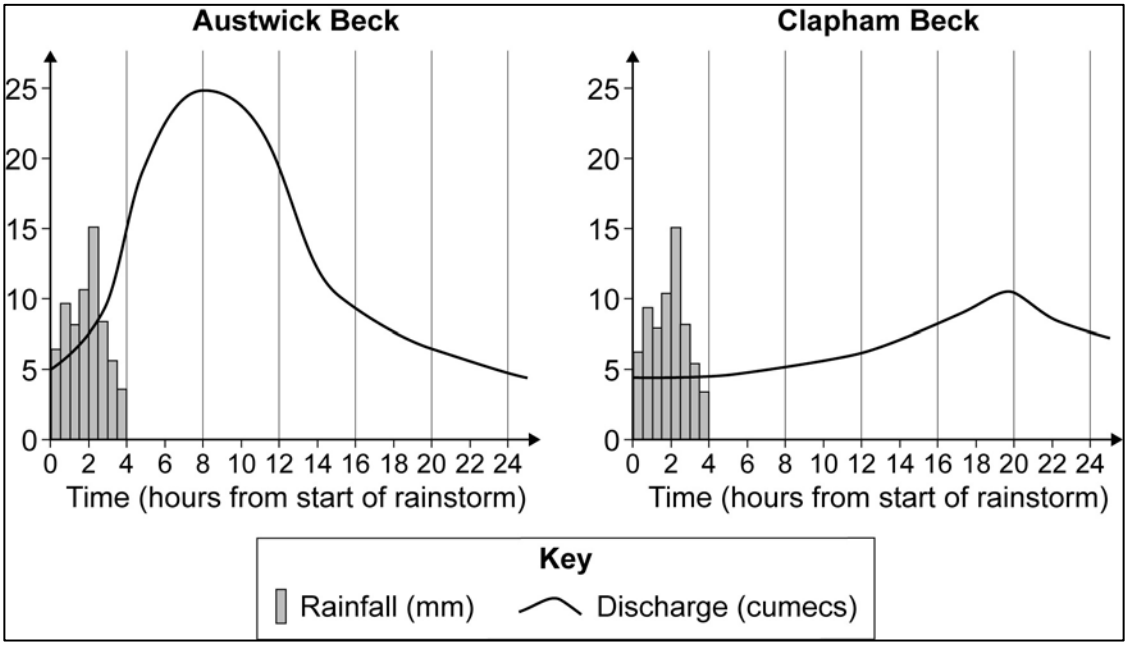


(4 marks)

3(c) Study **Figures 8a** and **8b** which are hydrographs for two different streams in North Yorkshire after the same storm.

A hydrograph shows the link between rainfall and discharge in a river.

Figure 8a **Figure 8b**



3(c) (i) Use **Figures 8a** and **8b** to complete the following:

Peak rainfall in both streams: …… mm

Peak discharge for Clapham Beck: …… cumecs

Lag time (the time difference between the peak rainfall and the peak discharge) for Austwick Beck: …… hours

(3 marks)

3(c) (ii) Suggest reasons why the discharge for Austwick Beck is different from that of Clapham Beck.

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3(d) Using a case study (of a country or region you have studied), explain why the demand for water is increasing.

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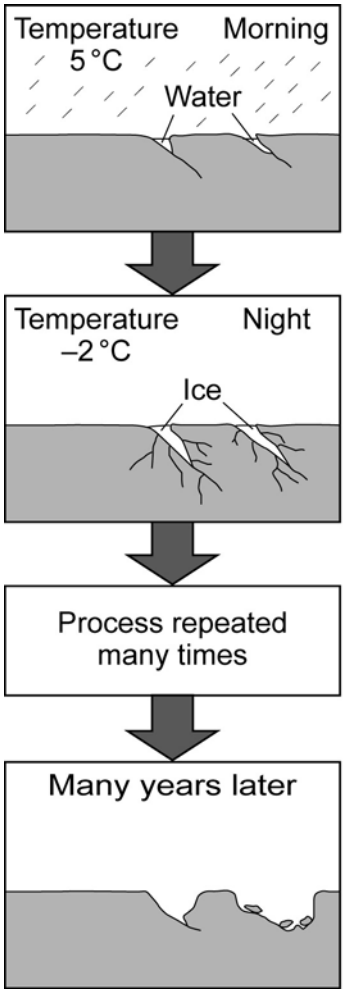
Total for this question: 25 marks

4 Coastal Processes and Pressures

4(a) (i) **Figure 9** shows how freeze thaw weathering occurs.

Add a sentence in each box to explain freeze thaw weathering.

Figure 9



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(3 marks)

4(a) (ii) Describe the features of the coastal area shown in **Figure 10.**

Figure 10

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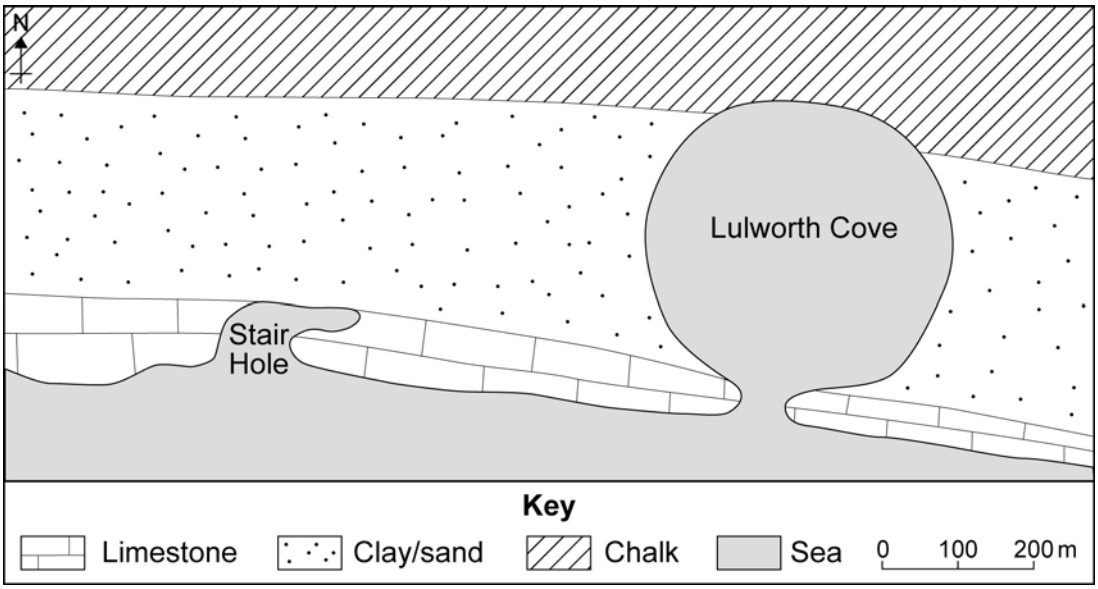
(3 marks)

4(a) (iii) Draw a labelled diagram to explain the formation of a sea stack.

(4 marks)

4(b) Study **Figure 11**. **Figure 11** shows a simplified map of part of the Dorset coast. Different types of rock are found in this area.

Figure 11



4(b) (i) Give **one** piece of evidence from **Figure 11** that suggests that clays and sands are the softest rocks.

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(1 mark)

4(b) (ii) How might continued coastal erosion change the area around Stair Hole in **Figure 11**.

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(2 marks)

4(c) Describe the economic effects of coastal flooding.

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(4 marks)

Extra space .....

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4(d) Explain how coastal areas can be protected against erosion.

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(8 marks)

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END OF QUESTIONS

Barcode