

Surname						Other Names					
Centre Number						Candidate Number					
Candidate Signature											

For Examiner's Use

General Certificate of Education
June 2007
Advanced Level Examination



GEOGRAPHY (SPECIFICATION A)
Unit 4 Challenge and Change in the
Natural Environment

GGA4

Tuesday 12 June 2007 1.30 pm to 3.00 pm

You will need no other materials.
You may use a calculator.

Time allowed: 1 hour 30 minutes

Instructions

- Use blue or black ink or ball-point pen.
- Fill in the boxes at the top of this page.
- Answer **three** questions in the spaces provided: **two** from **Section A** and **one** from **Section B**.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The maximum mark for this paper is 90.
- Each question in Section A is worth 15 marks.
- Each question in Section B will be marked out of 30 and multiplied by 2 to give a mark out of 60.
- The marks for questions are shown in brackets.
- Section B of this unit assesses your understanding of the relationship between the different aspects of Geography.
- You are expected to use a calculator where appropriate.
- All questions should be answered in continuous prose where appropriate. You will be marked on your ability to use an appropriate form and style of writing, to organise relevant information clearly and coherently, and to use specialist vocabulary where appropriate. The legibility of your handwriting and the accuracy of your spelling, punctuation and grammar will also be considered.

Advice

- Where appropriate, sketch maps and diagrams should be used to illustrate answers and reference made to regional examples and case studies.
- You are advised to spend about 30 minutes on Section A and about 60 minutes on Section B.

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Question	Mark	Question	Mark
1		4	
2		5	
3		6	
		×2	
		=	
Total (Column 1) →			
Total (Column 2) →			
TOTAL			
Examiner's Initials			

SECTION A

Answer **two** questions from this section.

1 COAST PROCESSES AND PROBLEMS**Total for this question: 15 marks**

Study **Figure 1** which shows the Cardiff Bay Barrage on a 1:50 000 OS map extract.

Figure 1

OS map extract 1:50 000
Landranger 171
Easting: 71 to 75
Northings: 17 to 22

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third-party copyright constraints.

(a) What are the economic advantages of building coastal barrages?

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(4 marks)

(b) How can coastal barrages impact on the physical environment?

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(4 marks)

(c) How far do benefits outweigh costs in building coastal defences **other than** barrages?

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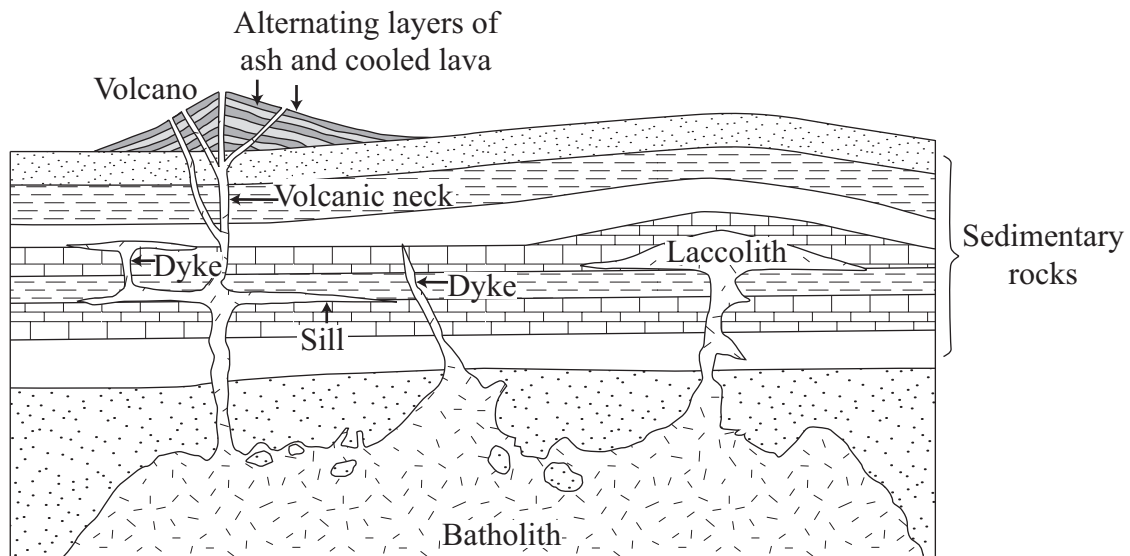
(7 marks)

2 GEOMORPHOLOGICAL PROCESSES AND HAZARDS

Total for this question: 15 marks

Study **Figure 2** which is a diagrammatic section through part of the earth's crust.

Figure 2



(a) Distinguish between intrusive and extrusive volcanic activity.

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(4 marks)

(b) Outline the differences between the intrusive features shown in **Figure 2**.

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(4 marks)

(c) Examine the positive impacts of volcanic activity.

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(7 marks)

3 COLD ENVIRONMENTS AND HUMAN ACTIVITY

Total for this question: 15 marks

Study **Figure 3** which shows a pyramidal peak, Snowdon, in north Wales.

Figure 3



(a) Describe the main features of pyramidal peaks.

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(4 marks)

(b) Outline the processes leading to the formation of corries.

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(4 marks)

(c) Discuss the environmental conflicts that occur in glaciated areas such as Snowdonia.

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(7 marks)

SECTION B

Answer **one** question from this section.

Total for this question: 30 marks

Note to Candidate

You should bear in mind that essay Questions 4, 5 and 6 are synoptic in nature. In your response to these questions you are required to show your knowledge and understanding of different aspects of geography, the connections between these different aspects and, where relevant, of human perspectives upon geographical themes and issues.

- 4** To what extent are coastal protection schemes pointless?
(30 marks)
- 5** Discuss the assertion that mass movement is the least important form of geomorphological hazard.
(30 marks)
- 6** Discuss the statement that economic development inevitably has a negative impact on cold environments.
(30 marks)

END OF QUESTIONS

Write the question number in the left-hand margin.

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