



General Certificate of Secondary Education
2012

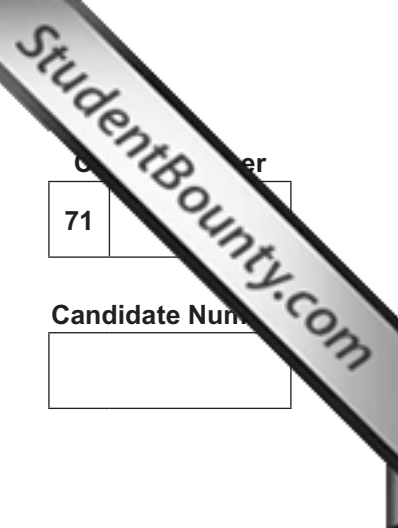
Geography

Unit 1:
Understanding Our Natural World

Higher Tier

[GGG12]

THURSDAY 14 JUNE, MORNING



Centre Number	
71	
Candidate Number	

TIME

1 hour 30 minutes.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.
 Write your answers in the spaces provided in this question paper.
 Answer **all three** questions.
 You are provided with an O.S. map for use with **Question 1**.
 Do **not** write your answer on this map.

INFORMATION FOR CANDIDATES

The total mark for this paper is 100.
 Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.
 Quality of written communication will be assessed in questions **1(c)**, **1(h)(ii)** and **2(e)**.



7318

For Examiner's use only	
Question Number	Marks
1	
2	
3	
Total Marks	

Theme A: The Dynamic Landscape

Examiner Only

Marks	Remark

1 (a) Study the Ordnance Survey extract of Poole and Swanage, England and answer the questions which follow.

(i) State the height of the land at its highest point in grid square 0177.

_____ metres [1]

(ii) State the straight line distance from the Visitor Centre at Swanage, (GR 036787) to the hotel at the end of the spit (GR 038871).

_____ km [2]

(iii) State the direction of Old Harry (GR 0582) from the World Heritage Site at Swanage (GR 0378).

_____ [1]

(iv) The southern coastline from GR 9876 to GR 0376 is lined with cliffs. Explain how hydraulic pressure erodes cliffs such as these.

_____ [3]

- (v) Name the method of coastal protection found in GR 0379 and describe how it works.

Method _____ [1]

_____ [2]

- (b) **Fig. 1** is part of a tourist brochure for Brownsea Island (GR 0188). Using map evidence state **three** activities suitable for holidaymakers on Brownsea Island.



© National Trust
Fig. 1

_____ [3]

Examiner Only	
Marks	Remark

(d) Study **Fig. 3** which shows how some people use the coast. Answer the questions which follow.



© Gordon Smith

Fig. 3

(i) State **one** human activity shown at the coast in **Fig. 3**.

_____ [1]

(ii) State **one** other use made of the coast by people.

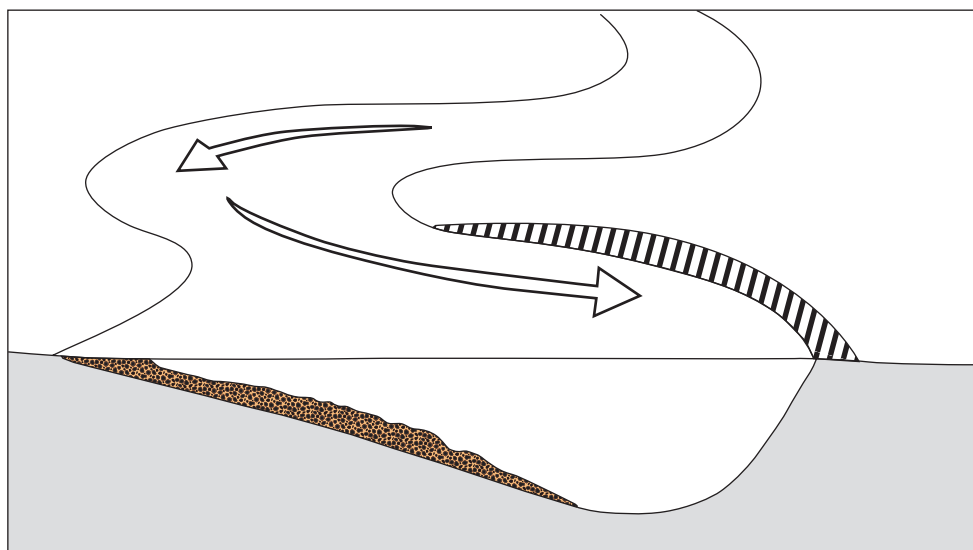
_____ [1]

(iii) Describe the conflicting nature of **one** human activity in a coastal area. Refer to a place in your answer.

_____ [3]

Examiner Only	
Marks	Remark

(e) Study Fig. 4 below which shows a cross section of a river feature. Answer the questions which follow.



Adapted from: <http://onlinegeography.wikispaces.com/W-4> licensed under a Creative commons Attribution Share-Alike 3.0 license

Fig. 4

(i) Name the feature shown in Fig. 4.

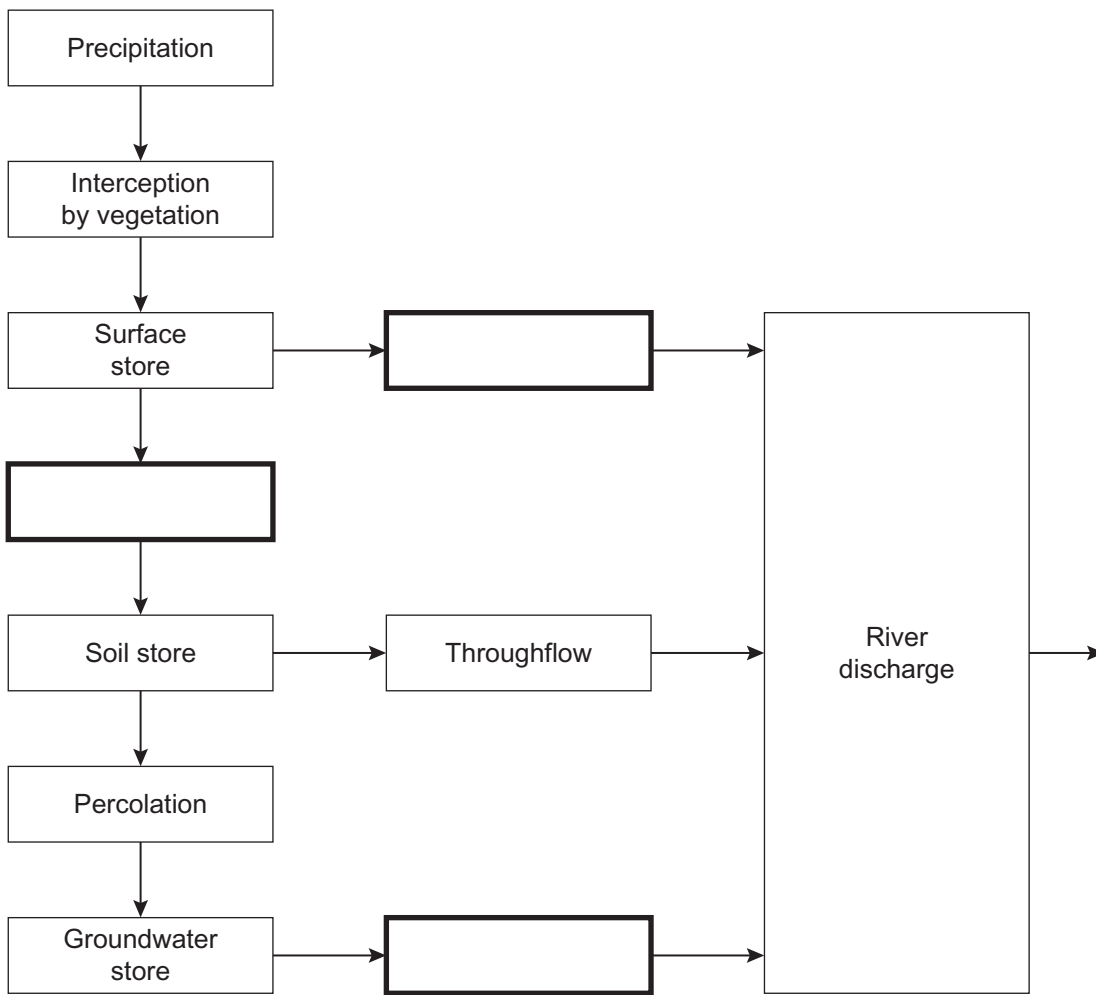
_____ [1]

(ii) Explain how this feature was formed.

 _____ [5]

Examiner Only	
Marks	Remark

(f) Study **Fig. 5** which shows part of the water cycle. Answer the questions which follow.



Source: Principal Examiner

Fig. 5

(i) Complete **Fig. 5** by filling in the blank spaces. [3]

(ii) Name **one** input and **one** output shown on **Fig. 5**.

Input _____

Output _____ [2]

Examiner Only	
Marks	Remark

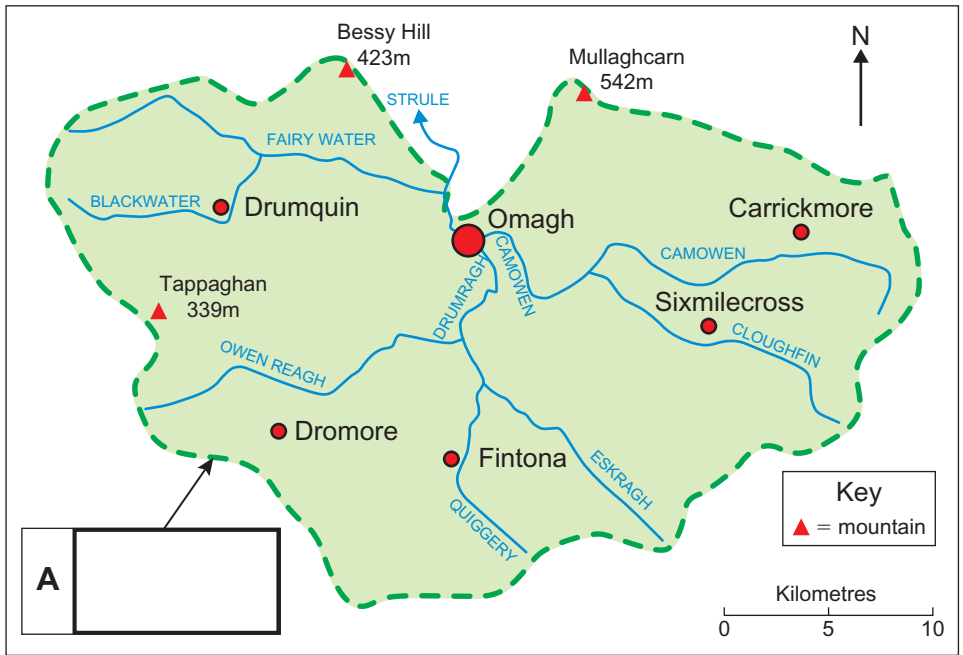
(iii) Explain **one** effect on the drainage basin cycle if the vegetation is removed.

[3]

Examiner Only	
Marks	Remark

(g) Study **Fig. 6** which shows a drainage basin which experienced flooding in Co. Tyrone. Answer the questions which follow.

Examiner Only	
Marks	Remark



© Higher Ground by Derek Polley, published by Colourpoint books, 2001. ISBN 9781898392521

Fig. 6

(i) Label the drainage basin feature **A** shown in **Fig. 6**. [1]

(ii) State fully **one** human cause of flooding.

[3]

(h) (i) State the meaning of the term **soft engineering**.

[2]

Theme B: Our Changing Weather and Climate

- 2 (a) Study **Fig. 7** which shows a weather system over the British Isles on a day in July 2009. Answer the following questions.

Image removed due to copyright restrictions

Fig. 7

- (i) Complete the following statements to describe the weather conditions shown on **Fig. 7**.

The pressure at X is _____ mb

The wind direction at Weymouth is _____ [2]

Examiner Only	
Marks	Remark

[Turn over

- (ii) Explain how the weather system in **Fig. 7** caused the hot, sunny weather that people were able to enjoy on the beach in Weymouth as shown in **Fig. 8**.



Source: Alistair Coleman / Duckorange

Fig. 8

[3]

- (b) (i) Explain how a barometer measures the pressure of the atmosphere.

[3]

Examiner Only	
Marks	Remark

Examiner Only	
Marks	Remark

(ii) Weather stations on land collect data which is used to create a weather forecast. Name **two** other sources of data which can be used to create a weather forecast.

1. _____

2. _____

[2]

(c) Depressions are weather systems which can have both positive and negative effects on the economy of places. Describe **one** positive and **one** negative effect of depressions on the economy, referring to different places in your answer.

[4]

(d) (i) Study **Fig. 9** which shows two sources of climate change. Answer the questions which follow.



Fig. 9

Identify the cause of climate change from each source shown in **Fig. 9**.

A _____

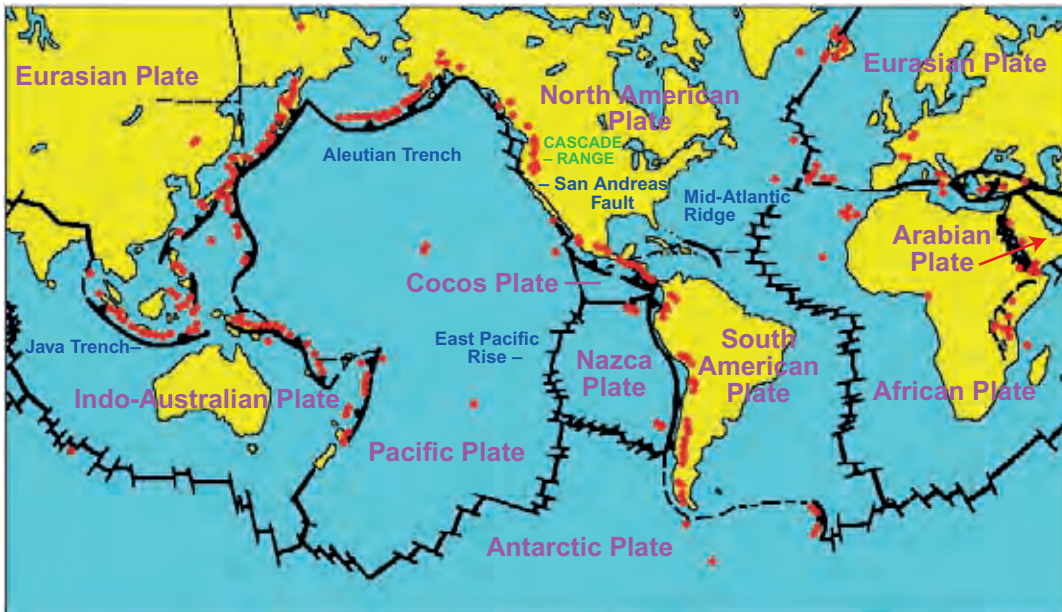
B _____

[2]

Theme C: The Restless Earth

Examiner Only	
Marks	Remark

- 3 (a) Study Fig. 10 which shows the world distribution of crustal plates and volcanoes. Answer the question which follows.



Source: USGS, Topinka, USGS/CVO, 1997, Modified from Tilling, Heliker and Wright, 1987 and Hamilton, 1976.

Key
● volcano
⚡ plate boundary

Fig. 10

Describe the world distribution of volcanoes shown on the map referring to named places in your answer.

[4]

(b) Study **Fig. 11** which shows Slemish Mountain which is a volcanic plug. Answer the question which follows.



© iStockphoto / Thinkstock
Fig. 11

Explain how a volcanic plug such as Slemish Mountain was formed.

[3]

(c) (i) Complete **Table 1** below to show another example of each of these rock types.

Table 1

Igneous	Sedimentary
Granite	Sandstone

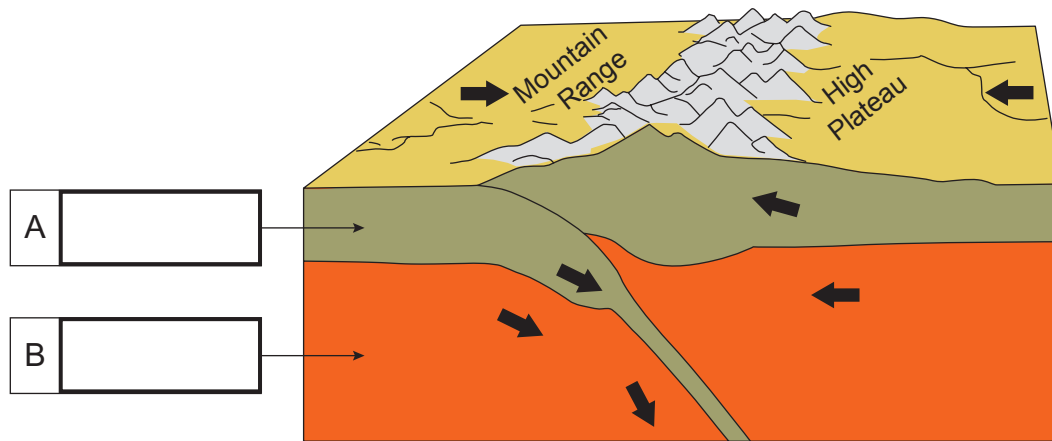
[2]

Examiner Only	
Marks	Remark

(ii) Explain how sedimentary rocks were formed.

[3]

(d) Study Fig. 12 which shows a collision plate boundary. Answer the questions which follow.



Source: United States Geological Survey.
Fig. 12

(i) Add labels at A and B on Fig. 12 to indicate the following two layers:

Mantle

Crust

[2]

Examiner Only	
Marks	Remark

[Turn over

(ii) Explain how fold mountains are formed at a collision plate boundary.

[3]

(e) Earthquakes may occur far away from plate boundaries. Name an earthquake in the British Isles which you have studied. Outline the cause of this earthquake and describe and explain fully **one** impact this earthquake had.

Name of Earthquake _____

Cause

[2]

Impact

[3]

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Marks	Remark

- (f) Attempts have been made to manage the impacts of earthquakes. Describe **one** long term management strategy used to manage the effects of an earthquake you have studied.

Location of earthquake _____

Long term strategy

_____ [3]

THIS IS THE END OF THE QUESTION PAPER

Examiner Only

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