Instructions

- Use black ink or ball-point pen.
- Fill in the boxes at the top of this page with your name, centre number and candidate number.
- In Section A answer all questions.
- In Section B answer either question 4 or 5.
- Answer the questions in the spaces provided – there may be more space than you need.

Information

- The total mark for this paper is 69.
- The marks for each question are shown in brackets – use this as a guide as to how much time to spend on each question.
- Questions labelled with an asterisk (*) are ones where the quality of your written communication will be assessed – you should take particular care on these questions with your spelling, punctuation and grammar, as well as the clarity of expression.
- The marks available for spelling, punctuation and grammar are clearly indicated.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.
1 (a) Study Figure 1a.

Figure 1a

Two sections of coastline (X and Y) in Cornwall

(i) Compare coastlines X and Y.
(ii) Suggest reasons for the formation of the beach, Landform Z. (3)

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(b) Explain the management techniques used to protect a named area of coastline. (4)

Named area of coastline .................................................................
(c) Study Figure 1b.

<table>
<thead>
<tr>
<th>Location</th>
<th>Average erosion rate (m/year)</th>
<th>Geology</th>
<th>Type of coastal defences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seaford (Sussex)</td>
<td>0.14</td>
<td>Chalk</td>
<td>Rip rap and beach replenishment</td>
</tr>
<tr>
<td>Trimingham (Norfolk)</td>
<td>1.5</td>
<td>Boulder clay</td>
<td>Wooden revetments, groynes and concrete sea wall</td>
</tr>
</tbody>
</table>

**Figure 1b**

Information about two coastal locations in England

Explain the possible reasons for the difference in average erosion rates shown in Figure 1b.

(6)
2 Study Figure 2.

Figure 2

Ordnance Survey (OS) map extract of River Eden flowing through Cumbria
(a) (i) Identify the river landform shown at grid square 412565. 

(ii) Outline two river processes on a meander such as the one in grid square 4357.
(b) Draw an annotated diagram(s) to explain the formation of a levee.
(c) Using examples, explain the effects of river flooding on people and the environment.

(Total for Question 2 = 15 marks)
**Topic 3: Tectonic Landscapes**

3. (a) Define the term *earthquake focus*.  

(b) Study Figure 3a.

![Figure 3a](Image)

**Figure 3a**

A cartoon about the Haiti earthquake in 2010

Describe the message shown in Figure 3a.
(c) Study Figure 3b.

Figure 3b

A volcano on a convergent (destructive) plate boundary

Explain two other characteristic physical features found at this type of plate boundary.

(4)
(d) Explain the effects of **either** a named volcanic eruption **or** an earthquake.

Named volcanic eruption **or** earthquake

(Total for Question 3 = 15 marks)

TOTAL FOR SECTION A = 45 MARKS
SECTION B – ENVIRONMENTAL ISSUES

Answer EITHER Question 4 OR Question 5.

Topic 4: A Wasteful World

Spelling, punctuation and grammar will be assessed in 4*(d).

If you answer Question 4 put a cross in the box □.

4 (a) Study Figure 4a.

The EU energy mix in 1990 and 2013

Suggest **two** reasons for the changes shown in Figure 4a.

(Source: from http://www.carbonbrief.org/seven-charts-showing-how-the-eus-energy-use-is-being-transformed)
(b) Explain two ways a country’s energy consumption is affected by income and wealth.
(c) Study Figure 4b.

(Source: from © Meriel Jane Waissman/Getty Images)

**Figure 4b**

Examples of domestic waste in a High Income Country (HIC)

(i) Define the term **throw away society**.

(2)

____________________________________________________________________________________
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____________________________________________________________________________________
(ii) Explain the methods used to recycle waste on a local scale.

Use examples in your answer. (4)
*(d) Examine reasons for the different attitudes towards the exploitation of a named non-renewable energy source. (6)

Named non-renewable energy source

(Total for spelling, punctuation and grammar = 4 marks)
(Total for Question 4 = 24 marks)
Topic 5: A Watery World

Spelling, punctuation and grammar will be assessed in 5*(d).

If you answer Question 5 put a cross in the box □.

5 Study Figure 5a.

Figure 5a

Water consumption in selected countries by sector, 2011

(a) Suggest two reasons for the differences shown in Figure 5a. (4)

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(b) Explain **two** ways in which water supply in High Income Countries (HICs) is affected by rainfall.

(4)
(c) Study Figure 5b.

**Method X**

**Method Y**

(Source: from thewaterproject.org/images/hand_dug.jpg)

**Figure 5b**

**Two appropriate technologies to manage water in Low Income Countries (LICs)**

(i) Define the term *appropriate technology*.

(ii) Explain how industrial water use is managed in HICs.

Use examples in your answer.
*(d) Examine reasons for the different views about the value of a named water-management scheme.*

*(6)*

**Named water-management scheme**

*(Total for spelling, punctuation and grammar = 4 marks)*

*(Total for Question 5 = 24 marks)*

**TOTAL FOR SECTION B = 24 MARKS**

**TOTAL FOR PAPER = 69 MARKS**