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.
SECTION A – THE PHYSICAL WORLD

Answer ALL questions in this section.

Topic 1: Coastal Landscapes

1 Study Figure 1 (photograph) below.

![Figure 1 - Destructive waves at Freshwater Bay, Isle of Wight.](source: © Jason Swain/Getty Images)

(a) Describe the characteristics of destructive waves.

Use evidence from Figure 1 (photograph) in your answer.

(2)

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(b) Outline how the process of longshore drift forms a spit.

(c) Compare the **advantages** of types of soft and hard engineering used on the coast.
(d) Using examples, explain how coastal recession affects the human environment. (6)

(Total for Question 1 = 15 marks)
2 Study Figure 2 below.

![Figure 2 - A prediction of downstream changes in river channel characteristics.](image)

(a) (i) Using Figure 2, describe the changes in gradient and velocity downstream.

(ii) Outline why discharge changes downstream.
(b) Use an annotated diagram(s) to explain the formation of an oxbow lake.
(c) For a river you have studied, explain the choice(s) of management used. 

Named river

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(Total for Question 2 = 15 marks)
3 Study Figure 3a below.

Figure 3a – Information about the volcanic region of Roseau, Dominica.

(a) (i) Suggest reasons why people would continue to live in the volcanic region shown in Figure 3a.

(4)
(ii) Volcanoes are a characteristic feature of a convergent plate boundary.

State **two** other characteristic features found at a convergent plate boundary.

1. 

2. 

(b) Complete the diagram below showing earthquake characteristics.

One has been done for you.

![Diagram of earthquake characteristics](image)

**Figure 3b** – A diagram showing characteristic earthquake features.
(c) Using examples, explain how the effects of earthquakes can be reduced by building design and education.  

(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 this box □.

4 Study Figure 4 below.

![Energy mix for selected regions graph]

**Figure 4 – Energy mix for selected regions**

(a) (i) Using Figure 4, complete the table for North America and Africa.

<table>
<thead>
<tr>
<th>Region</th>
<th>Renewable %</th>
<th>Nuclear %</th>
<th>Fossil fuels %</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td>82</td>
</tr>
<tr>
<td>Africa</td>
<td></td>
<td></td>
<td>94</td>
</tr>
</tbody>
</table>
(ii) Compare the energy mix of Europe and the Middle East shown on Figure 4. Use data in your answer.

(b) Explain how wealth can affect energy consumption.
(c) Explain the **advantages** of using landfill to dispose of waste.
*(d) In the UK, explain why groups (e.g. individuals, organisations and the government) may have different views on the value of solutions to energy waste. (6)

(Total for spelling, punctuation and grammar = 4 marks)
(Total for Question 4 = 24 marks)
Figure 5 – Water use for selected countries.

(a) (i) Using Figure 5, complete the table of water use percentages for Sweden and Spain.

<table>
<thead>
<tr>
<th>Country</th>
<th>Energy</th>
<th>Industry</th>
<th>Domestic</th>
<th>Agriculture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sweden</td>
<td>25</td>
<td>15</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>Spain</td>
<td>25</td>
<td>15</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
(ii) Compare the water use in the UK and Turkey.

Use data in your answer.  

(b) Explain how greater wealth affects water consumption.  

(c) Explain the factors that can lead to a higher risk of water-borne diseases in Low Income Countries (LICs).
*(d) For a named water management scheme, explain why groups (e.g. individuals, organisations and the government) may have different views about the value of the 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