

GCSE

GEOGRAPHY

Paper 1 - Living with the Physical Environment

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## Mark Scheme

(88 Marks)

## Section A The Challenge of Natural Hazards

01.1	<p><b>One mark for the correct answer:</b></p> <p>Where the Nazca plate meets the Pacific plate is a <b>constructive</b> plate margin.</p> <p>Credit one mark for an answer which describes the plates moving away from each other.</p> <p><b>One mark for the correct answer:</b></p> <p>Where Eurasian plate meets the Indo-Australian plate is a <b>destructive</b> plate margin.</p> <p>Credit one mark for an answer which describes the plates moving towards each other.</p>	[4]
01.2	<p>One mark for the correct answer:</p> <p><b>A.</b> The amount of energy released by an earthquake is called the magnitude of the earthquake.</p> <p>No credit if more than one statement is shaded.</p>	[1]
01.3	<p><b>Basic (1-2 marks)</b></p> <p>Simple descriptive statements with some development.</p> <p>Must refer to a named example.</p> <p>May not refer to immediate <b>and</b> long-term responses.</p> <p><b>Clear (3-4 marks)</b></p> <p>Must include a named example.</p> <p>Must refer to immediate <b>and</b> long-term responses.</p> <p>Should attempt to evaluate the responses.</p> <p><b>Detailed (5-6 marks)</b></p> <p>Shows thorough understanding of immediate <b>and</b> long-term responses.</p> <p>Detailed named example.</p> <p>Must evaluate the responses.</p>	[6]
01.4	<p>Credit <b>two</b> different patterns of distribution of tropical storms, e.g.</p> <ul style="list-style-type: none"> <li>• There were more tropical storms in the northern hemisphere. (1)</li> <li>• There were more tropical storms over oceans compared with over land. (1)</li> <li>• There were more storms towards the coasts on either side of the Pacific Ocean. (1)</li> <li>• There were more storms over the Pacific Ocean than the Atlantic Ocean. (1)</li> </ul>	[2]

01.5	<p><b>Basic (1-2 marks)</b></p> <p>Simple descriptive statements with some development.</p> <p><b>Clear (3-4 marks)</b></p> <p>Must refer to Figure 3.</p> <p>Must use specific geographical terminology.</p> <p>E.g. Figure 3 shows the global circulation model. It shows how warm air rises at the equator and moves out 30° north and south of the equator. Here the cool air sinks and surface winds (trades winds) blow back towards the equator. At certain times in the year the air will rise more rapidly, this will speed up this process and will cause a tropical storm.</p>	[4]
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01.6	<p><b>Basic (1-3 marks)</b></p> <p>AO1 Basic knowledge of how the UK dealt with an extreme weather event.</p> <p>AO2 Basic geographical understanding of the challenges faced by the UK as a result of this weather event.</p> <p>AO3 Basic knowledge and understanding in making a judgement about the issues and/or reach a conclusion. Justification is restricted to one or more basic points.</p> <p><b>Clear (4-6 marks)</b></p> <p>AO1 Clear knowledge of the ways in which the UK responded to a specific extreme weather event.</p> <p>AO2 Clear geographical understanding of the challenges faced by people as a result of this weather event.</p> <p>AO3 Clear application of knowledge and understanding in making a judgement about the issues. Must reach a conclusion. Justification is clear and supported with evidence.</p> <p><b>Detailed (7-9 marks)</b></p> <p>AO1 Detailed and specific knowledge of the ways in which the UK responded to a specific extreme weather event.</p> <p>AO2 Detailed, accurate and specific geographical understanding of the challenges faced by people as a result of this weather event. An understanding of the management strategies used to the reduce the risk from the weather event.</p> <p>AO3 Detailed application of knowledge and understanding in making a judgement about the issues. Must reach a conclusion which is well support with evidence. Justification is balanced and detailed.</p> <p>No credit to be given for the causes of the weather event.</p> <p>AO1 = 3 marks, AO2 = 3 marks, AO3 = 3 marks</p> <p>3 marks for SPaG.</p>	<p>[9]</p> <p>[3]</p>
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<b>01.7</b>	Credit one mark for each correct answer:  A. CO <sub>2</sub> levels increased most rapidly after 1900.  D. Temperatures and CO <sub>2</sub> levels appear to be linked.  No credit if more than two statements are shaded.	<b>[2]</b>
<b>01.8</b>	Credit two different ways that humans may cause global warming.  E.g. <ul style="list-style-type: none"><li>• Burning fossil fuels which releases CO<sub>2</sub>, which may make the greenhouse effect stronger. (1)</li><li>• Deforestation could result in an increase of CO<sub>2</sub>, which may make the greenhouse effect stronger. (1)</li></ul>	<b>[2]</b>

**Section B      The Living World**

<b>02.1</b>	Two separate differences must be identified. Only credit differences that describe the global distribution of tropical rainforests. Credit use of the key. E.g. <ul style="list-style-type: none"> <li>• Tropical rainforests are found on either side of the equator. (1)</li> <li>• Tropical rainforests are found in South America, Asia and Africa. (1)</li> <li>• The largest expanse of tropical rainforest is in South America (the Amazon). (1)</li> </ul>	<b>[2]</b>
<b>02.2</b>	Two marks for the correct answers: <b>D.</b> Deciduous forest is the largest biome found in Europe. <b>E.</b> Rainforests are found on either side of the equator. No credit if more than two statements are shaded.	<b>[2]</b>
<b>02.3</b>	Credit marks for: <ul style="list-style-type: none"> <li>• A sense of scale, e.g. very large ecological areas on the earth's surface (or biomes). (1)</li> <li>• Reference to adapting to the environment, e.g. with fauna and flora (animals and plants) adapting to their environment. (1)</li> </ul>	<b>[2]</b>
<b>02.4</b>	Credit two marks for identifying how animals might adapt to the to the physical conditions of a tropical rainforests. Should include a named example (although not essential). Credit third mark for developing the answer.	<b>[3]</b>
<b>02.5</b>	Credit two marks for identifying two examples of interdependency within a tropical rainforest. Credit two marks for an explanation of each interdependency.	<b>[4]</b>

02.6	<p><b>Basic (1-3 marks)</b></p> <p>AO1 Basic knowledge of some development opportunities in a hot desert <b>or</b> a cold environment. Answers may lack named examples.</p> <p>AO2 Basic geographical understanding of some developments in a hot desert <b>or</b> a cold environment.</p> <p>AO3 Basic knowledge and understanding in making a judgement about the benefits and challenges brought by these developments to reach a conclusion. Justification is restricted to one or more basic points.</p> <p><b>Clear (4-6 marks)</b></p> <p>AO1 Clear knowledge of the benefits and challenges of development opportunities in a hot desert <b>or</b> a cold environment. Answers must include named examples.</p> <p>AO2 Clear geographical understanding of the benefits and challenges of development opportunities in a hot desert <b>or</b> a cold environment.</p> <p>AO3 Clear application of knowledge and understanding of the benefits and challenges of development opportunities in a hot desert <b>or</b> a cold environment. Must reach a conclusion. Justification is clear and supported with evidence.</p> <p><b>Detailed (7-9 marks)</b></p> <p>AO1 Detailed and specific knowledge of the benefits and challenges of development opportunities in a hot desert <b>or</b> a cold environment. Must include named examples.</p> <p>AO2 Detailed and accurate geographical understanding of benefits and challenges of development opportunities in a hot desert <b>or</b> a cold environment.</p> <p>AO3 Detailed application of knowledge and understanding in making a judgement about the benefits and challenges of development opportunities in a hot desert or a cold environment. Must reach a conclusion which is well support with evidence. Justification is balanced and detailed.</p> <p>AO1 = 3 marks, AO2 = 3 marks, AO3 = 3 marks</p> <p>3 marks for SPaG.</p>	<p>[9]</p> <p>[3]</p>
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## Section C The Physical Environment of the UK

Answer **two** questions.

### Question 3: Coastal Landscapes in the UK

<b>03.1</b>	<p>Credit one accurate answer with a mark.</p> <p><b>B.</b> Longshore drift transports material along the coast.</p> <p>No credit if more than one statement is shaded.</p>	<b>[1]</b>
<b>03.2</b>	<p>Simple descriptive statements for one mark. Credit one mark for some development.</p> <p>E.g. This is a spit. (1) It was formed by longshore drift which transports material along the coast and deposits it at sharp bends in the coast. (1)</p>	<b>[2]</b>
<b>03.3</b>	<p><b>Basic (1-2 marks)</b></p> <p>Simple descriptive statements about how an arch forms.</p> <p><b>Clear (3-4 marks)</b></p> <p>Includes a clear explanation of how an arch forms.</p> <p>E.g. Different types of erosion wears away at a weakness in a headland causing a cave to form. Large waves cause erosion by repeatedly compressing air in the cracks (hydraulic power). Abrasion causes further erosion as particles in the water scrape against the cliff. Eventually, the cave will develop into an arch.</p>	<b>[4]</b>
<b>03.4</b>	<p>1. Credit one mark for two types of coast defence identified (up to two marks). Credit additional marks for accurate descriptions of how each type of coastal defence protects the coastline.</p>	<b>[4]</b>
	<p>2. <b>Basic (1-2 mark)</b></p> <p>Simple descriptive statements with some development about both the problems or advantages of coastal defence.</p> <p><b>Clear (3-4 marks)</b></p> <p>Should refer to the coastal defence methods described in 3.4.1.</p> <p>Should use specific geographical terminology.</p> <p>Should include advantages or disadvantages of coastal defence.</p>	<b>[4]</b>

**Question 4: River Landscapes in the UK**

<b>04.1</b>	<p><b>Basic (1-2 mark)</b></p> <p>Simple descriptive statements with some development about the features of a river.</p> <p><b>Clear (3-4 marks)</b></p> <p>Must refer to Figure 9.</p> <p>Must use specific geographical terminology.</p> <p>Must include an example from each section of the river.</p> <p>Shows a clear understanding of the features found in each section of a river.</p>	<b>[4]</b>
<b>04.2</b>	<p>One mark for the correct answer.</p> <p><b>B.</b> Traction is when large particles are rolled along a river bed.</p> <p>No credit if more than one statement is shaded.</p>	<b>[1]</b>
<b>04.3</b>	<p>Credit one mark for an accurate answer.</p> <p>1732</p>	<b>[1]</b>
<b>04.4</b>	<p>Credit one mark for an accurate answer.</p> <p><b>C</b> 1.2 km</p>	<b>[1]</b>
<b>04.5</b>	<p>Simple descriptive statements with some development.</p> <p>Must refer to Figure 11.</p> <p>Must show some understanding of the relationship between precipitation and discharge to achieve the second mark.</p>	<b>[2]</b>
<b>04.6</b>	<p><b>Basic (1-2 marks)</b></p> <p>Simple descriptive statements with some development.</p> <p>Should refer to a named example.</p> <p><b>Clear (3-4 marks)</b></p> <p>Must include clear explanation.</p> <p>Must refer to a named example.</p> <p>Must show a clear understanding of how successful the flood management scheme has been.</p>	<b>[6]</b>

**Question 5: Glacial Landscapes in the UK**

<b>05.1</b>	One mark for the correct answer:  <b>B.</b> 20 000 years ago.  No credit if more than one statement is shaded.	<b>[1]</b>
<b>05.2</b>	One mark for the correct answer:  <b>D.</b> Lower Man  No credit if more than one statement is shaded.	<b>[1]</b>
<b>05.3</b>	One mark for the correct answer:  North-west	<b>[1]</b>
<b>05.4</b>	Credit one mark for each type of glacial landform identified (up to two marks).  Credit additional marks for accurate descriptions of how each type of glacial landform is formed.	<b>[4]</b>
<b>05.5</b>	1. Simple descriptive statements with some development that describe the features of drumlins. Must refer to Figure 14.	<b>[1]</b>
	2. Simple descriptive statements with some development.	<b>[1]</b>
<b>05.6</b>	<p><b>Basic (1-2 marks)</b></p> <p>Simple descriptive statements with some development.</p> <p>Basic understanding of issues arising from economic activities in glaciated areas.</p> <p><b>Clear (3-4 marks)</b></p> <p>Must include a clear understanding of the impact of economic activities in glaciated areas.</p> <p>May include a named example (although not essential).</p> <p><b>Detailed (5-6 marks)</b></p> <p>Must include detailed explanation.</p> <p>Named examples may be given (although not essential).</p> <p>Shows thorough understanding of the impact of economic activities in glaciated areas.</p>	<b>[6]</b>