



GCSE MARKING SCHEME

SUMMER 2018

**GCSE (NEW)
GEOGRAPHY - UNIT 2
3110U20-1**

INTRODUCTION

This marking scheme was used by WJEC for the 2018 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

UNIT 2 – MARK SCHEME Summer 2018

Instructions for examiners of GCSE Geography when applying the marking scheme

1. Positive marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme.

GCSE Geography marking schemes are presented in a common format as shown below:

This box contains the sub-question.							The columns to the right indicate the assessment objective(s) targeted by the question and its mark tariff.

3. Banded mark schemes

Banded mark schemes are divided so that each band has a relevant descriptor. The descriptor for the band provides a description of the performance level for that band. Each band contains a range of marks. Examiners should first read and annotate a learner's answer to pick out the evidence that is being assessed in that question. **Do not use ticks** on the candidate's response. Once the annotation is complete, the mark scheme can be applied. This is done as a two stage process.

Stage 1 – Deciding on the band

When deciding on a band, the answer should be viewed holistically. Beginning at the lowest band, examiners should look at the learner's answer and check whether it matches the descriptor for that band. Examiners should look at the descriptor for that band and see if it matches the qualities shown in the learner's answer. If the descriptor at the lowest band is satisfied, examiners should move up to the next band and repeat this process for each band until the descriptor matches the answer.

If an answer covers different aspects of different bands within the mark scheme, a 'best fit' approach should be adopted to decide on the band and then the learner's response should be used to decide on the mark within the band. For instance if a response is mainly in band 2 but with a limited amount of band 3 content, the answer would be placed in band 2, but the mark awarded would be close to the top of band 2 as a result of the band 3 content.

Examiners should not seek to mark candidates down as a result of small omissions in minor areas of an answer.

Stage 2 – Deciding on the mark

Once the band has been decided, examiners can then assign a mark. During standardising (marking conference), detailed advice from the Principal Examiner on the qualities of each mark band will be given. Examiners will then receive examples of answers in each mark band that have been awarded a mark by the Principal Examiner. Examiners should mark the examples and compare their marks with those of the Principal Examiner.

When marking, examiners can use these examples to decide whether a learner's response is of a superior, inferior or comparable standard to the example. Examiners are reminded of the need to revisit the answer as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the response provided.

Indicative content is also provided for banded mark schemes. Indicative content is not exhaustive, and any other valid points must be credited. In order to reach the highest bands of the mark scheme a learner need not cover all of the points mentioned in the indicative content but must meet the requirements of the highest mark band. Where a response is not creditworthy, that is contains nothing of any significance to the mark scheme, or where no response has been provided, no marks should be awarded.

4. Assessing Writing

The quality of writing is assessed through two separate strands:

- (i) Communicating and organising
- (ii) Writing accurately

- (i) **Communicating and organising** is assessed in items that have a tariff of 6, 8 or 10. These responses should be viewed holistically when deciding on a mark band (see stage 1 above). The definitions below clarify what is meant by the terminology in these descriptors.

Meaning: to have clarity the text must be legible. The meaning of statements should be clear and not require re-reading to make sense.

Purpose: the response should take into account what is required by the question. For example, evaluation requires consideration of pros/cons or the justification of a decision may be assisted by arguments. A suitable tone is adopted for reporting on scientific investigation in Unit 3.

Structure: well-planned responses have an overall structure with use of paragraphs to indicate portions of the response such as introduction, main arguments and conclusion. Chains of reasoning provide a logical structure within paragraphs. Signposting links sections together and is used to assist the reader.

- (ii) **Writing accurately** takes into account the candidate's use of specialist language. It also takes into account the accuracy of the candidate's spelling, punctuation and grammar. This assessment is restricted to specific items (one item in each unit). The descriptors for writing accurately are printed in the mark scheme for each relevant item. In applying these descriptors learners may only receive marks for responses that are in the context of the demands of the question; that is, where learners have made a genuine attempt to answer the question.

5. Marking Core and Options questions

Core Themes Mark **both** questions

Options Themes Learners are instructed to answer **one** question. If the candidate has responded to both questions then the examiner must mark both questions. Award the higher mark that has been attained.

SECTION A

CORE THEMES

Core Theme 5, Question 1

(a) (i) Give the total increase in carbon dioxide emissions between 1900 and 2000. Tick one box from the options below:		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit this response only.	21,500 (1)				1		1

(a) (ii) Complete the sentences by selecting the correct word from the box below. Use each word only once.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit these responses only.	atmosphere (1) forest (1) respiration (1)	3					3

(a) (iii) Ice cores can be used as evidence of climate change. Give one other piece of evidence that climate change is taking place.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit one valid answer.	Tree rings (1), historical records (1), temperature records (1), glacial retreat/advance (1), sea level (1), extreme weather events (1) pollen analysis (1), Fossils (1), changes in nature/migration pattern (1)	1					1

(a) (iv) Explain why ice cores are evidence of climate change.						AO1.1	AO1.2	AO2	AO3	Accuracy	Total
							4				4
Use the descriptors below, working upwards from the lowest band.						<p>Responses should show understanding between the evidence of ice cores and why they can be used to illustrate climate change has taken place.</p> <p>Examples include:</p> <p>In locations such as Greenland and Antarctica, the snowfall from each winter is compressed from the following year's snowfall and eventually turns into ice. Within each layer the gases that are present when the snow fell are trapped and provide evidence of the chemical composition at the time. If these layers are analysed then a comparison of chemical composition and therefore temperature can be made across thousands of years.</p>					
Band	Marks	Descriptor									
2	3-4	Demonstrates understanding of why ice cores evidence climate change. There is a clear link between the composition of the ice core and a change in climate.									
1	1-2	Simple statements show basic understanding of why ice cores evidence climate change.									
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.									

(b) Suggest why this eruption could contribute to climate change. Use evidence from the photograph.			AO1.1	AO1.2	AO2	AO3	Accuracy	Total
					3			3
Band	Marks	Descriptor	<p>This large eruption put ash/dust/sulphur into the atmosphere. Global circulation system move the material around the globe. Material reflects sunlight back into space. Less solar energy reaching the earth. Can lead to average temperatures cooling.</p>					
2	2-3	Good interpretation identifies factors that could contribute to climate change. Evidence used from photo to support answer.						
1	1	Valid statements that are not elaborated.						
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.						
<p>Responses must ascribe meaning to large ash cloud in the photo.</p> <p>Credit valid chain of reasoning.</p>								

(c) (i) Describe the trend in the number of North Atlantic tropical storms between 1970 and 2011.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Reserve one mark for reference to increasing. Credit any other valid statement / quantification.	Increasing (1) Fluctuating (1) Range between 4 and 27 per year (1)				2		2

(c) (ii) Calculate the percentage increase in the number of tropical storms in the North Atlantic between these years. Show your working in the space below.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Accept this answer only for 1 mark. Accept logical variations on working	Answer = 90 (1) $\frac{19-10}{10} \times 100$ (1)				2		2

(c) (iii) Give one reason why the intensity of storms may increase due to climate change.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit one valid statement with one mark and its development that links warmer air temperatures to increase intensity of storms with a second mark.	Increase in sea temperature (1) heats the air above (1) air rises quickly (1) higher evaporation rates (1) more water vapour/energy in storm leading to a greater intensity (1)		2				2

(c) (iv) Tick (✓) one box which describes the location where tropical storms begin.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit this answer only	Between the Tropic of Cancer and the Tropic of Capricorn (1)	1					1

(d) (i) Complete the gaps in the paragraph below to describe the path of Hurricane Matthew		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit these answers only.	Barbados (1) North westerly (1) 32° or 33° (1)				3		3

(d) (ii) To what extent did Hurricane Matthew impact on people's lives and the economy of Haiti? Use evidence from the photograph and fact box.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
				6			6

Use the descriptors below, working upwards from the lowest band.			<p>Responses should show a good understanding of the impacts of hurricanes and candidates are able to identify these as impacts on the economy or people. The candidates are also required to make a judgement as to how far they agree with the statement.</p> <p>Examples include:</p> <p>People: loss of homes, loss of possessions, lack of food and water, lack of shelter, death of family members and friends, transport routes blocked, threat of disease etc.</p> <p>Economy: Businesses destroyed, stock damaged, cost of repair estimated at US\$1.89 billion. Entire coffee and cocoa plantations destroyed.</p>
Band	Marks	Descriptor	
3	5-6	Applies detailed understanding of the impacts on people and the economy. Makes a judgment on 'to what extent' Meaning is clear. The response has purpose, is organised and well structured.	
2	3-4	Demonstrates understanding of impacts on people and/or economy. Response may be unbalanced, but use of the resources is evident. Max if has not addressed 'to what extent' Meaning is generally clear. The response is structured.	
1	1-2	Simple statements show basic understanding of the impacts of hurricanes. Meaning may lack clarity in parts. Statements are linked by a basic structure.	
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.	

Core Theme 6, Question 2

(a) (i) Calculate the range of GDP values shown in the table. Show your working in the space below.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit these answers only	17030 (1) 18,562 - 1,532 (1)				2		2

(a) (ii) Give two limitations of using Total GDP as a measure of economic development.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit one mark for each valid limitation given	Does not show disparities in wealth (1) Does not show variance between regions within a country (1) Does not include all productive activities in a country/only includes legal activities in a country (1) Does not take account of size (population) of country (1) Does not consider cost of living (1)	2					2

(a) (iii) Complete the paragraph by selecting the correct word or phrase from the box below.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit these answers only.	continuum of economic development (1) higher (1) lower (1)	3					3

(b) Suggest one way in which the photograph shows that China is closing the development gap.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Responses must ascribe meaning to this photo. Credit one valid statement with the second mark reserved for development.	<p>Valid statement from photo may include:</p> <ul style="list-style-type: none"> • Toys R Us / McDonalds are MNCs • Westernisation / globalisation of shops • Ownership of cars/mopeds <p>Points for development may include:</p> <ul style="list-style-type: none"> • shows investment of foreign capital • shows greater demand for luxury goods / emerging middle classes • indicates increased income 			2			2

(c) (i) Name the mapping technique shown above.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit this response only.	Choropleth (1)				1		1

(c) (ii) Give three ways in which the map can be adapted so that it is easier to understand.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit three valid responses each with one mark.	<p>Reduce the number of categories (1)</p> <p>Replace the numbers in the key with a description – high use etc. (1)</p> <p>use variations of the same colour (1)</p> <p>Appropriate changes to the key (1)</p> <p>obtain data for all countries (1)</p> <p>Add statistics/symbols to map (1)</p> <p>Lines of latitude/longitude (1)</p> <p>Naming of continents/countries (1)</p>				3		3

(c) (iii) What is irrigation? Tick one box below.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit this response only.	Supplying water to land to help crops grow (1)	1					1

<p>(c) (iv) Explain why population growth and agricultural change lead to increasing demand for water.</p> <p><i>Your ability to spell, punctuate and use grammar accurately will be assessed in your answer to this question.</i></p>			AO1.1	AO1.2	AO2	AO3	Accuracy	Total																		
				8			3	11																		
<p>Use the descriptors below, working upwards from the lowest band.</p> <table border="1"> <thead> <tr> <th>Band</th> <th>Mark</th> <th>Descriptor</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>7-8</td> <td> <p>Thorough understanding of why both population growth and agricultural change lead to increasing demand for water.</p> <p>Meaning is unambiguous. The response has clear purpose, is fluent and logically structured.</p> </td> </tr> <tr> <td>3</td> <td>5-6</td> <td> <p>Good understanding of why both population growth and agricultural change lead to increasing demand for water.</p> <p>Meaning is clear. The response has purpose, is organised and well structured.</p> </td> </tr> <tr> <td>2</td> <td>3-4</td> <td> <p>Some understanding of why either population growth and/or agricultural change impacts on water demand.</p> <p>Meaning is generally clear. The response is structured.</p> </td> </tr> <tr> <td>1</td> <td>1-2</td> <td> <p>Simple statements showing basic understanding of factors leading to increased water demand.</p> <p>Meaning may lack clarity in parts. Statements are linked by a basic structure.</p> </td> </tr> <tr> <td></td> <td>0</td> <td> <p>Award 0 marks if the answer is incorrect or wholly irrelevant.</p> </td> </tr> </tbody> </table>			Band	Mark	Descriptor	4	7-8	<p>Thorough understanding of why both population growth and agricultural change lead to increasing demand for water.</p> <p>Meaning is unambiguous. The response has clear purpose, is fluent and logically structured.</p>	3	5-6	<p>Good understanding of why both population growth and agricultural change lead to increasing demand for water.</p> <p>Meaning is clear. The response has purpose, is organised and well structured.</p>	2	3-4	<p>Some understanding of why either population growth and/or agricultural change impacts on water demand.</p> <p>Meaning is generally clear. The response is structured.</p>	1	1-2	<p>Simple statements showing basic understanding of factors leading to increased water demand.</p> <p>Meaning may lack clarity in parts. Statements are linked by a basic structure.</p>		0	<p>Award 0 marks if the answer is incorrect or wholly irrelevant.</p>	<p>Responses should demonstrate understanding of the reasons for increasing demand for water.</p> <p>Population growth – more people require more water for cooking, drinking, washing etc. More water will be used in the production of more food to feed a larger population. More water used in the production of products such as steel.</p> <p>Agricultural change – increased quantity of reservoirs, wider use of irrigation systems, increased use of hydroponics</p>					
Band	Mark	Descriptor																								
4	7-8	<p>Thorough understanding of why both population growth and agricultural change lead to increasing demand for water.</p> <p>Meaning is unambiguous. The response has clear purpose, is fluent and logically structured.</p>																								
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	0	<p>Award 0 marks if the answer is incorrect or wholly irrelevant.</p>																								

After awarding a level and mark for the geographical response, apply the performance descriptors for writing accurately that follow. Having decided on a band, award a second mark (out of 3).

In applying these indicators, learners may only receive marks for responses that are in the context of the demands of the question; that is, where learners have made a genuine attempt to answer the question.

Band	Marks	Performance descriptions
<i>High</i>	3	<ul style="list-style-type: none"> • Learners spell and punctuate with consistent accuracy • Learners use rules of grammar with effective control of meaning overall • Learners use a wide range of specialist terms as appropriate
<i>Intermediate</i>	2	<ul style="list-style-type: none"> • Learners spell and punctuate with considerable accuracy • Learners use rules of grammar with general control of meaning overall • Learners use a good range of specialist terms as appropriate
<i>Threshold</i>	1	<ul style="list-style-type: none"> • Learners spell and punctuate with reasonable accuracy • Learners use rules of grammar with some control of meaning and any errors do not significantly hinder meaning overall • Learners use a limited range of specialist terms as appropriate
	0	<ul style="list-style-type: none"> • The learner writes nothing • The learner's response does not relate to the question • The learner's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning

(d) 'The advantages of the LHWP are greater than the disadvantages for Lesotho.' To what extent do you agree with this statement? Use evidence from the resources.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
				6			6
Use the descriptors below, working upwards from the lowest band.		<p>Responses should consider the advantages and disadvantages of the LHWP for Lesotho. Only credit responses that can be linked to the resources.</p> <p>Advantages:</p> <ul style="list-style-type: none"> Income for Lesotho Increase water availability Potential for HEP <p>Disadvantages:</p> <ul style="list-style-type: none"> Loss of land Little compensation for loss of income Water security for locals has not been improved. 					
Band	Marks	Descriptor					
3	5-6	Detailed evaluation including advantages and disadvantages of the LHWP to Lesotho. Information in the resources is interpreted carefully and used to good effect to justify the argument. Meaning is clear. The response has purpose, is organised and well structured.					
2	3-4	Some evaluation including advantages and disadvantages of the LHWP for Lesotho. There is valid but limited interpretation of information in the resource. Max if does not make decision. Meaning is generally clear. The response is structured.					
1	1-2	Simple statements may include advantages and/or disadvantages of the LHWP. Max if only advantages or disadvantages or they are in relation to S. Africa Meaning may lack clarity in parts. Statements are linked by a basic structure.					
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.					

End of Question 2

SECTION B – OPTIONS

Theme 7, Question 3

3. (a) (i) Define birth rates. Tick one box below.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit this response only.	The number of births per thousand of population per year in a country (1)	1					1

(a) (ii) Give the median literacy rate for Angola between 2000 and 2014.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit one mark within tolerance.	68.5 (1)				1		1

(a) (iii) Describe the changes in death rates in Angola between 2000 and 2014.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
					4		4

Use the descriptors below, working upwards from the lowest band. Responses should show the ability to use the data in the table and to communicate findings.

Band	Marks	Descriptor
2	3-4	Demonstrates understanding of the changes in death rates and describes the trend and/or fluctuations.
1	1-2	Simple statements showing an overall trend in death rates.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Responses should describe the changes in death rates across the whole time period. Band 2 answers will include the overall trend together with fluctuations and quantification.

(a) (iv) Analyse the relationship between GDP per capita, literacy rates and natural population change in Angola.						AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Use evidence from the table.								6			6
Use the descriptors below, working upwards from the lowest band.						<p>Responses should analyse the data shown in in the table and how the indicators interrelate to each other.</p> <p>Examples include:</p> <p>GDP is a causal factor. As GDP increases death rate falls – vaccinations programmes, investment in hospitals/sanitation.</p> <p>As GDP increases literacy increases – increased spending on education</p> <p>There was an increase in death rate between 2003 and 2005 which maybe an indicator of an epidemic or war.</p> <p>As GDP has increased, literacy rates have increased and death rates have fallen.</p> <p>Death rate falling faster that birth rate – natural increase is greater</p>					
Band	Marks	Descriptor									
3	5 - 6	Detailed analysis of the interrelationship between indicators. Reasoned understanding is applied to make some sense of the data. Meaning is clear. The response has purpose, is organised and well structured.									
2	3 - 4	Analysis of some interrelationship between indicators. Some understanding is applied to the data. Meaning is generally clear. The response is structured.									
1	1 - 2	Valid statements show basic understanding of the trends shown for each indicator or relationships between them. Meaning may lack clarity in parts. Statements are linked by a basic structure.									
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.									

(b) (i) Study the box below. Give three more factors that lead to a change in birth rates.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit one mark for each valid factor.	<p>Examples of change may include:</p> <p>Access to better health care (1) Change in law to allow/prevent abortions (1) Religious factors (1) <i>Qualified</i> reference to culture (1) Access to education (1) Number of women working (1) Government incentives (1) Falling infant mortality (1) Increased wealth (1)</p>	3					3

(b) (ii) Give one reason why the age at which women start a family will affect birth rates.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
<p>Credit one valid statement with one mark and its valid explanation for a second mark. (1+1)</p> <p>Must have reference to effect on birth rate. Do not double credit.</p>	<p>Younger age increases birth rates /number of young children (1) because longer period of reproduction (1).</p> <p>Older age reduces birth rate (1) because mother focuses on career rather than children (1)</p>		2				2

(c) (i) Give the percentage of children aged 5-14 who do not work or attend school.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit this answer only	8.9 (1)				1		1

(c) (ii) Suggest one consequence of work for these children in Angola. Use evidence from the photograph.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Responses must ascribe meaning to this photo. Credit one mark for a valid statement and one additional mark for its elaboration.	<p>Valid statements may include:</p> <ul style="list-style-type: none"> • Children are not at school • Lack of protective clothing / footwear / helmet • Recognise a dangerous environment • Materials on floor / badly lit • Earning money • Learning a trade <p>Points for development may include:</p> <ul style="list-style-type: none"> • so are less likely to gain a well-paid job/career in the future • could lead to injury • so possible injury from falls • Supporting family 			2			2

(c) (iii) Explain why it is difficult to increase the percentage of girls in education in sub-Saharan Africa.						AO1.1	AO1.2	AO2	AO3	Accuracy	Total
							4				4
Use the descriptors below, working upwards from the lowest band.						<p>To gain Band 2 and clear link between the factor and why it prevents education is needed.</p> <p>Examples include:</p> <p>Women marry at a young age and therefore begin a family much earlier. Therefore they are often unable to continue or finish their education as they have a home and children to look after.</p> <p>Society is male dominated and girls often stay at home to look after other family members.</p>					
Band	Marks	Descriptor									
2	3-4	Demonstrates detailed understanding of why it is difficult to increase the number of girls in education. Clear link between factor and why that prevents education.									
1	1-2	Simple statements show basic understanding of why it is difficult to increase the percentage of girls in education.									
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.									

End of Question 3

Theme 8, Question 4

(a) (i) Define the term ecological footprint. Tick one box below.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit this answer only	A measure of the impact each person has on the environment (1)	1					1

(a) (ii) Give the median ecological footprint for the countries shown in the table.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit this answer only	6.34 (1)				1		1

(a) (iii) Describe the variations in ecological footprints between the groups of countries shown.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
					4		4

Use the descriptors below, working upwards from the lowest band.

Band	Marks	Descriptor
2	3-4	Demonstrates understanding of the variations in ecological footprint values with reference to the grouping of countries.
1	1-2	Simple statements showing an overview of the differences in ecological footprint values.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Responses should describe the variations in ecological footprint values. Band 2 answers will include the extremes of values together with some reference to the grouping of countries.

(a) (iv) Analyse the relationship between ecological footprint, population and GNI per capita. Use evidence from the table.						AO1.1	AO1.2	AO2	AO3	Accuracy	Total
								6			6
Use the descriptors below, working upwards from the lowest band.						<p>Responses should analyse the data shown in in the table and how the indicators interrelate to each other. Candidates should also make use of the country groupings provided.</p> <p>Examples include:</p> <p>The highest ecological footprints are found in the oil producing countries which have the highest GNI per capita and some of the lowest populations. – production of oil creates pollution. Prosperous economy leads to more consumerism.</p> <p>The countries with the lowest ecological footprint have lower GNI per capita. – low consumerism.</p> <p>Therefore we can see there appears to be a direct relationship between these factors.</p>					
Band	Marks	Descriptor									
3	5-6	Detailed analysis of the interrelationship between indicators. Reasoned understanding is applied to make some sense of the data. Meaning is clear. The response has purpose, is organised and well structured.									
2	3-4	Analysis of some interrelationship between indicators. Some understanding is applied to the data. Meaning is generally clear. The response is structured.									
1	1-2	Valid statements show basic understanding of the trends shown for each indicator or relationships between them. Meaning may lack clarity in parts. Statements are linked by a basic structure.									
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.									

(a) (v) Give three factors that are measured when calculating a country's ecological footprint.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit three valid statements	Water (1) Energy (1) Waste (1) Agriculture (1) Housing (1) Industry (1) Infrastructure (1)	3					3

(a) (vi) Give one reason why consumerism has led to destruction of ecosystems.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit one valid statement with one mark and its valid explanation for a second mark. (1+1) Must have reference to effect on ecosystem.	Greater demand for land for raw materials/factories/products (1) New 'must have' technology products become available which people want to buy(1) shorter life span of technological products (1) results in disposal of e-waste in ecosystems (1) Demand for leisure services/infrastructure (1) these require large amounts of space such as an airport/golf course		2				2

(b) Use the table to give the percentage of deaths in Spain.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Credit this answer only	16.6 (1)				1		1

(c) (i) Suggest one consequence of climate change. Use evidence from the photograph.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
Responses must ascribe meaning to this photo. Credit one mark a valid statement and one additional mark for its elaboration.	Increased levels of drought/ increased use of water (1) so water shortages/unable to use water in garden/wash car/price rises/of food (1)			2			2

(c) (ii) Explain why it is difficult for governments to reduce greenhouse gas emissions.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
			4				4

Use the descriptors below, working upwards from the lowest band.			<p>To gain Band 2 a clear link between the factor and why it makes reduction difficult needs to be made.</p> <p>Examples include:</p> <p>NICs & LICs are rapidly industrialising to aid development and as such burning fossil fuels at an increasing rate. Restricting their use of fossil fuels is impractical and would interrupt further development. Renewable energy is not currently cost effective for LIC countries to use.</p>
Band	Marks	Descriptor	
2	3 - 4	Demonstrates detailed understanding of why it is difficult to reduce greenhouse gas emissions. Clear link between factor and why that prevents reduction.	
1	1 - 2	Simple statements show basic understanding of why it is difficult to reduce greenhouse gas emissions.	
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.	

End of Question 4