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# **GCE A LEVEL MARKING SCHEME**

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**AUTUMN 2020**

**A LEVEL  
GEOGRAPHY – COMPONENT 2  
A110U20-1**

## **INTRODUCTION**

This marking scheme was used by WJEC for the 2020 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.

## GCE A LEVEL GEOGRAPHY

### AUTUMN 2020 MARK SCHEME

#### COMPONENT 2: GLOBAL SYSTEMS AND GLOBAL GOVERNANCE

##### Guidance for Examiners

##### Positive marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, as opposed to adopting an 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.

The mark scheme for this component includes both point-based mark schemes and banded mark schemes.

##### Point-based mark schemes

For questions that are objective or points-based the mark scheme should be applied precisely. Marks should be awarded as indicated and no further subdivision should be made. Each creditworthy response should be in red ink. Annotations must reflect the mark awarded for the question. The targeted assessment objective (AO) is also indicated.

##### Banded mark schemes

For questions with mark bands the mark scheme is in two parts.

The first part is advice on the indicative content that suggests the range of concepts, processes, scales and environments that may be included in the learner's answers. These can be used to assess the quality of the learner's response. This is followed by an assessment grid advising on bands and the associated marks that should be given in responses that demonstrate the qualities needed in the three AOs; AO1, AO2 and AO3, relevant to this component. The targeted AO(s) are also indicated, for example AO2.1c.

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 marks. Examiners should first read and annotate a learner's answer to pick out the evidence that is being assessed in that question. Once the annotation is complete, the mark scheme can be applied. This is done as a two stage process.

### **Banded mark schemes Stage 1 – Deciding on the band**

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.

### **Banded mark schemes 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 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

Where the specialised concepts are integral to knowledge and understanding, they are underlined in the indicative content.

The mark scheme reflects the layout of the examination paper. Mark questions 1, 2 and, either 3 or 4 in Section A. Mark questions 5, 6 and, either 7 or 8 in Section B. Mark one question in Section C.

Be prepared to reward answers that give **valid and creditworthy** responses, especially if these do not fully reflect the 'indicative content' of the mark scheme.

### Section A: Global Systems – Water and Carbon Cycles

1. (a) (i) Using <b>Figure 1</b> , identify the environmental conditions at A on the graph.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
Award 1 mark for any of the following, up to a maximum of 2 marks					2		<b>2</b>
<p><b>Indicative content</b></p> <p>Good drainage, steep slope, very high precipitation, very low temperature.</p> <p>Award 0 marks for 1 correctly-identified condition  Award 1 marks for 2-3 correctly-identified conditions  Award 2 marks for 4 correctly-identified conditions (including use of ‘very’ qualifiers).</p>							

1. (a) (ii) Use <b>Figure 1</b> to describe how variations in temperature affect the operation of carbon cycle processes in areas with a gentle slope.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
Award 1 mark for any of the following, up to a maximum of 3 marks					3		<b>3</b>
<p><b>Indicative content</b></p> <ul style="list-style-type: none"> <li>• 1 mark for idea that neither carbonation or peat formation operate if temperature is very high</li> <li>• 1 mark for idea that carbonation operates in most temperatures except extremes</li> <li>• 1 mark for idea that peat formation operates in the medium-to-very low temperature range</li> <li>• 1 mark for idea that both carbonation and peat formation operate in medium-to-low temperature range.</li> </ul>							

1. (b) Outline the influence of climatic factors on carbon storage in the temperate grassland biome.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
	5						<b>5</b>

### Indicative content

Likely AO1 content includes outlining of how:

- Climatic extremes limit photosynthesis in winter (-10C, limited length of daylight) and there is water scarcity in summer (500mm annually). This favours grasses rather than trees
- As a result, relatively little carbon is sequestered in plant matter above-ground. In contrast, 80% of biomass and the carbon it contains is stored below ground as roots.
- The soil is carbon-rich due to root decay and the lack of leaching (high temperatures and low rainfall results in limited runoff)
- There are seasonal changes in storage e.g. seasonal dieback of grasses and rapid incorporation of the resulting litter.

Credit any other valid points.

### Marking guidance

Near the upper end, answers that score well will focus the explanation explicitly on the resulting pattern of carbon storage within the biome (e.g. the soil/vegetation balance). Band 1-2 responses are more likely to explain vegetation characteristics without maintaining a focus on carbon storage.

Award the marks as follows:

Band	Marks	
<b>3</b>	<b>4-5</b>	Developed outlining of two climatic factors influencing carbon storage. Applies developed knowledge and understanding of temperate grassland.
<b>2</b>	<b>2-3</b>	Partial outlining of one or two climatic factors influencing carbon storage. Partial knowledge and understanding of temperate grassland.
<b>1</b>	<b>1</b>	Limited or no outlining of climatic factors influencing carbon storage. Limited or no knowledge and understanding of temperate grassland.
	<b>0</b>	Response not creditworthy or not attempted.

2. (a) Use <b>Figure 2</b> to analyse the strength of the relationship between precipitation and discharge for the 12-month period shown.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
					5		<b>5</b>
<p><b>Indicative content</b></p> <p>AO3 content includes using the two sets of data in <b>Figure 3</b> to analyse the strength of the relationship between them.</p> <ul style="list-style-type: none"> <li>• PP is always higher than discharge; the difference is less between Dec-Apr and more between May-Nov</li> <li>• Close relationship between October and June, with both rising then falling, albeit unevenly.</li> <li>• Inverse/no relationship from June (or April) to September: one rise, the other falls.</li> <li>• The relationship has a time lag - the peak discharge follows 1-2 months after peak PP.</li> </ul> <p><b>Marking guidance</b></p> <p>Near the upper end, answers that score well will make sustained and specific reference to the resource provided, carrying out an explicit analysis of the strength of the relationship.</p> <p>Near the lower end, answers will display limited use of the resource with limited or no comparison.</p>							
Award the marks as follows:							
<b>Band</b>	<b>Marks</b>						
<b>3</b>	<b>4-5</b>	Well-developed analysis of the strength of the relationship. Sustained use of data from the resource to support a 12-month analysis.					
<b>2</b>	<b>2-3</b>	Partial analysis of the relationship (may be implied not explicit). Some use of data from the resource to support a 12-month analysis.					
<b>1</b>	<b>1</b>	Limited statements with little or no use of data from the resource.					
	<b>0</b>	Response not creditworthy or not attempted.					

2. (b) Explain ways in which the graph shown in <b>Figure 2</b> might differ for a river basin of similar size in a neighbouring high-altitude grassland area.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
		5					<b>5</b>

### Indicative content

Likely AO2 applied knowledge and understanding content should focus on effects of altitude on climate. Credit logical connections established between altitude and parent material (e.g. neighbouring highland area may be an igneous intrusion).

- Higher altitude means more orographic rainfall, so both PP and discharge will increase especially in winter (summer may be similar to Figure 2)
- Differences between PP and discharge likely to be less due to less ET, especially winter
- Lag time between peaks may be less if upland area is igneous/impermeable so more overland flow and less throughflow
- Grasses might be shorter / sparser in an upland area, meaning there would be less interception and increased water flows.

Credit any other valid points.

### Marking guidance

Near the upper end, answers that score highly will provide more detailed explanations using appropriate terminology and concepts, and will address the entire 12-month period/different seasons.

Award the marks as follows:

Band	Marks	
3	4-5	Two well-explained differences in the graph/data. Applies developed knowledge and understanding of catchment hydrology.
2	2-3	One or two partially-explained differences in the graph/data. Some application of knowledge and understanding of catchment hydrology.
1	1	One limited explanation of a difference in the graph/data. Fragmented or no applied knowledge and understanding.
	0	Response not creditworthy or not attempted.



3. Evaluate strategies to increase local carbon cycle and water cycle storage.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
	10			10			<b>20</b>

### Indicative content

This is not prescriptive and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

#### AO1

Candidates will provide a description and explanation of water and carbon storage strategies at a local scale (also credit medium-scale/regional initiatives but not global actions). This could include:

- carbon storage via peat restoration (2.1.8)
- carbon storage via afforestation (2.1.7)
- water storage via aquifer recharge (2.1.5)
- various drainage basin stores (2.1.2)
- various drainage basin land uses (2.1.4).

#### AO2

Candidates demonstrate application of knowledge and understanding through synthesis and evaluation. This may include:

- Evaluation of the success of specific schemes e.g. peat restoration
- Evaluation of the importance afforestation for both carbon and water storage
- Evaluation of the benefits gained by local communities
- Evaluation of possible costs for local people, places and environments
- Reflecting on the immediate/local value of improved water storage for people, compared with the longer-term / global-scale value of local carbon sequestration.

Near the upper end, answers that score highly will show application of knowledge and understanding by explaining and discussing complex ideas, synthesising information, and coming to rational conclusions which evaluate the local strategies/actions using varying criteria and perspectives.

Responses in the middle range will show some application of knowledge and understanding to provide some evaluation and synthesis, prior to drawing partially supported conclusions.

Near the lower end, responses provide very limited application of knowledge and understanding of physical systems to provide little or no evaluation of the statement.

Award the marks as follows:		
	<b>AO1 (10 marks)</b>	<b>AO2.1c (10 marks)</b>
<b>Band</b>	<i>Description and explanation of carbon cycle and water cycle strategies/actions</i>	<i>Evaluation of the strategies/actions using a range of criteria/perspectives.</i>
<b>3</b>	<p><b>7-10 marks</b></p> <p>Demonstrates detailed and accurate knowledge and understanding of all elements of the question.</p> <p>Makes use of appropriate and well-developed examples and may include well-annotated diagram(s).</p>	<p><b>7-10 marks</b></p> <p>Applies knowledge and understanding to produce a thorough and coherent evaluation that is supported by evidence.</p> <p>Applies knowledge and understanding of water and carbon cycles to thoroughly and coherently discuss complex interlinkages. Balanced coverage of the main issues leading to substantiated conclusions.</p>
<b>2</b>	<p><b>4-6 marks</b></p> <p>Demonstrates accurate knowledge and understanding of most elements of the question.</p> <p>Makes some use of examples and may include simple diagram(s).</p>	<p><b>4-6 marks</b></p> <p>Applies knowledge and understanding to produce a coherent but partial evaluation.</p> <p>Applies knowledge and understanding of water and carbon cycles in a partially-balanced way.</p>
<b>1</b>	<p><b>1-3 marks</b></p> <p>Demonstrates limited knowledge and understanding of some element of the question.</p> <p>Makes limited or no use of examples and may include a simple diagram.</p>	<p><b>1-3 marks</b></p> <p>Applies knowledge and understanding to produce a limited evaluation.</p> <p>Applies knowledge and understanding of water and carbon cycles in an unbalanced way (one may be absent).</p>
	<p><b>0 marks</b></p> <p>Response not creditworthy or not attempted.</p>	<p><b>0 marks</b></p> <p>Response not creditworthy or not attempted.</p>

4. Evaluate possible consequences of water and carbon cycle feedbacks.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
	10			10			<b>20</b>

### Indicative content

This is not prescriptive and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

#### AO1

Candidates will provide a description and explanation of possible consequences for life on Earth associated with feedback loops in the carbon and/or water cycles. This may include:

- Increased carbon emissions driving global warming (2.1.9)
- How positive and negative feedback loops operate and thresholds are crossed (2.1.10)
- Cryosphere (albedo change), marine carbon and terrestrial carbon feedback loops (2.1.9)
- Methane feedbacks and permafrost melting (2.1.10)
- Global-scale risks of global warming e.g. sea-level rise, acidification of the oceans (2.1.9)

#### AO2

Candidates demonstrate application of knowledge and understanding through synthesis and evaluation. This may include:

- Evaluation of the severity of different or combined risks/feedback loops
- Evaluation of the permanence/irreversibility of changes (tipping points)
- Evaluation of the differing consequences created by positive or negative feedback
- Evaluation of consequences for places, people and environmental (in a global context)
- Evaluation of local/global resilience or the planet/people/places to the consequences

Near the upper end, answers that score highly will show application of knowledge and understanding by explaining complex ideas, synthesising information, and coming to rational conclusions which evaluate the consequences, perhaps at varying scales, using varying criteria and perspectives.

Responses in the middle range will show some application of knowledge and understanding to provide some evaluation and synthesis, prior to drawing partially supported conclusions.

Near the lower end, responses provide very limited application of knowledge and understanding of physical systems to provide little or no evaluation of the statement.

Award marks as follows:		
	<b>AO1 (10 marks)</b>	<b>AO2.1c (10 marks)</b>
<b>Band</b>	<i>Description and explanation of water and carbon feedback and consequences.</i>	<i>Evaluation of possible consequences using a range of criteria/perspectives.</i>
<b>3</b>	<p><b>7-10 marks</b></p> <p>Demonstrates detailed and accurate knowledge and understanding of all elements of the question.</p> <p>Makes use of appropriate and well-developed examples and may include well-annotated diagram(s).</p>	<p><b>7-10 marks</b></p> <p>Applies knowledge and understanding to produce a thorough and coherent evaluation that is supported by evidence.</p> <p>Applies knowledge and understanding of water and carbon cycles to thoroughly and coherently discuss complex interlinkages. Balanced coverage of the main issues leading to substantiated conclusions.</p>
<b>2</b>	<p><b>4-6 marks</b></p> <p>Demonstrates accurate knowledge and understanding of most elements of the question.</p> <p>Makes some use of examples and may include simple diagram(s).</p>	<p><b>4-6 marks</b></p> <p>Applies knowledge and understanding to produce a coherent but partial evaluation</p> <p>Applies knowledge and understanding of water and carbon cycles in a partially-balanced way.</p>
<b>1</b>	<p><b>1-3 marks</b></p> <p>Demonstrates limited knowledge and understanding of some element of the question.</p> <p>Makes limited or no use of examples and may include a simple diagram.</p>	<p><b>1-3 marks</b></p> <p>Applies knowledge and understanding to produce a limited evaluation.</p> <p>Applies knowledge and understanding of water and carbon cycles in an unbalanced way (one may be absent).</p>
	<p><b>0 marks</b></p> <p>Response not creditworthy or not attempted.</p>	<p><b>0 marks</b></p> <p>Response not creditworthy or not attempted.</p>

### Section B: Global Governance: Change and Challenges

5. (a) (i) Calculate the interquartile range of the camp population sizes shown in <b>Figure 3</b> . Show your workings.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
Award 1 mark for any of the following, up to a maximum of 2 marks					2		<b>2</b>
<p><b>Indicative content</b></p> <ul style="list-style-type: none"> <li>Identifies quartiles in working: 34,600 and 24,300 (1 mark)</li> <li>Subtracts correctly using numbers from Figure 3 to generate the IQR or range (1 mark).</li> </ul> <p>Guidance: <math>34,600 - 24,300 = 10,300</math> (2 marks) <math>441,300 - 10,500 = 430,800</math> (1 mark)  <math>441,300 - 10,500 = 431,800</math> (0 mark).</p>							

5. (a) (ii) Use <b>Figure 3</b> to analyse the relationship between the camp population sizes and their distance from the Bangladesh-Myanmar border.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
Award 1 mark for any of the following, up to a maximum of 3 marks					3		<b>3</b>
<p><b>Indicative content</b></p> <ul style="list-style-type: none"> <li>1 mark for analysing the direction of the relationship (e.g. 'it is negative/inverse' or 'the largest camp is right on the border and several smaller ones are further away')</li> <li>1 mark for analysing the strength of the relationship (e.g. 'it is only a very weak negative relationship' or 'the friction of distance is not apparent in many cases')</li> <li>1 mark for including anomalies / outliers in the analysis (e.g. 'Leda is 3<sup>rd</sup> smallest camp but just 3km from border').</li> </ul> <p>Expect some quantification for award of full marks.</p>							

5. (b) Suggest reasons why measurements of migrant populations, such as those in <b>Figure 3</b> , are often inaccurate.		AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
			5					<b>5</b>
<b>Indicative content</b>								
Likely AO2 content includes a range of possible influences on the quantification and mapping of migrants.								
<ul style="list-style-type: none"> <li>• Out of date information - new refugee movements can occur in large volumes &amp; quickly</li> <li>• Hard to monitor movements, especially in rural areas in LDCs</li> <li>• Illegal movements / trafficking are, by their nature, hidden from the authorities</li> <li>• Migrant populations may grow beyond what data show due to natural increase</li> <li>• In other diaspora contexts, issue of whether mixed heritage people are included in data counts.</li> </ul>								
<b>Marking guidance</b>								
Near the upper end, answers that score highly will provide more detailed suggestions using appropriate terminology, concepts and possibly varied contexts.								
Award the marks as follows:								
<b>Band</b>	<b>Marks</b>							
<b>3</b>	<b>4-5</b>	Two well-developed suggestions of why measurements may be inaccurate. Applies developed knowledge and understanding of migration issues.						
<b>2</b>	<b>2-3</b>	One or two partial suggestions of why measurements may be inaccurate. Some application of knowledge and understanding of migration issues.						
<b>1</b>	<b>1</b>	One limited suggestion about measurements. Fragmented or no applied knowledge and understanding.						
	<b>0</b>	Response not creditworthy or not attempted.						

6. (a) Use Figure 4 to analyse how far the protection of Earth's oceans improved between 1990 and 2017.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
					5		<b>5</b>

### Indicative content

Likely AO3 content includes analysis and assessment of the growth in size of MPAs and the changing proportion of oceans that have different levels of protection.

- Overall growth from 2 to 14 million km<sup>2</sup> will check final version Fig 4
- Growth was slow but sped up in 2005 and again in 2015 - so rate of improvement in protection has increased
- Most MPAs used to only offer the lower level of protection ('some' not 'strong') but now the proportion of strong protection is increasing (slightly under half in 2017)
- However, only a very small proportion of ocean - 4.3% - has this protection. Therefore there is much more to be done / overall level of protection remains poor.

### Marking guidance

Near the upper end, answers that score well will analyse the resource thoroughly and will reflect explicitly on how far/the extent to which there has been improvement.

Near the lower end, answers will display limited use of the resource with limited or no analysis and interpretation, merely unselective data description.

Award the marks as follows:

Band	Marks	
3	4-5	A well-developed analysis of how far protection has improved. Wide use of the resource as evidence.
2	2-3	A partial analysis of how far protection has improved. Partial use of the resource as evidence.
1	1	Limited statements with little or no use of evidence.
	0	Response not creditworthy or not attempted.

6. (b) Outline how the concept of the Global Commons supports the need for improved management of Earth's oceans.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
	5						<b>5</b>

### Indicative content

Likely AO1 content will link the concept of the Global Commons with the need for (improved) management of Earth's oceans.

- Oceans are one of the four GCs
- Oceans provide multiple services: resources, transport, waste disposal etc
- All countries rely on the oceans for these and other services, some more than others
- Therefore there is shared/common/mutual self-interest in managing oceans sustainably, keeping these services available in the long-term
- This rationale provides the basis for global-scale agreements (UNCLOS) and local improvements (e.g. Pembrokeshire and Devon Blue Flag beaches, etc.)
- But poor management (e.g. plastic waste) shows actions have not matched aspirations and improvement is needed urgently.

### Marking guidance

Near the upper end, answers may show developed knowledge and understanding of the GCs and other related/relevant concepts such as sustainability or interdependence.

Answers near the lower end may have very little knowledge and understanding of the GCs.

Award the marks as follows:

Band	Marks	
<b>3</b>	<b>4-5</b>	Developed outlining of the concept of the Global Commons. Sustained focus on the need for improved management of Earth's oceans.
<b>2</b>	<b>2-3</b>	Partial outlining of the concept of the Global Commons. Partial focus on the need for improved management of Earth's oceans.
<b>1</b>	<b>1</b>	Limited outlining of the concept of the Global Commons. Limited or no focus on the need for improved management of Earth's oceans.
	<b>0</b>	Response not creditworthy or not attempted.



7. 'Cultural change in the UK has occurred mainly because of its past role as a maritime power.' Discuss.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
	10			10			<b>20</b>

### Indicative content

This is not prescriptive and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

#### AO1

Candidates will provide a description and explanation of cultural change in the UK (as perhaps evidenced by diverse demography, religion, food, fashion, etc.) on account of past maritime/ocean power and other factors/processes e.g. EU migration and technology. This may encompass:

- Connections between places created by the UK's past role as a maritime power (2.2.6)
- Connections between places created by EU and Commonwealth membership (2.2.2, 2.2.6)
- Other influences on cultural change such as transport and technology (2.2.1, 2.2.7)
- The importance of UK and its cities as a global migration hub (2.2.3)
- UK membership of supranational institutions and obligations towards refugees (2.2.4, 2.2.6).

#### AO2

Candidates demonstrate application of knowledge and understanding through synthesis and evaluation. This may include:

- Discussion of the importance of connections established in the past
- Discussion of the importance of past movements from Commonwealth (Windrush Generation)
- Discussion of the significance/size of migration from the EU after 2004
- Discussion of the role of diaspora communities or other factors affecting cultural diversity
- Discussion of the role of data flows in influencing cultural change and diversity.

Near the upper end, answers that score highly will show application of knowledge and understanding by explaining complex ideas, synthesising and evaluating information about migration/oceans/technology, and coming to rational conclusions about why cultural change has happened in the UK.

Responses in the middle range will show some application of knowledge and understanding of migration/oceans/technology to provide some evaluation and synthesis, prior to drawing partially supported conclusions.

Near the lower end, responses provide very limited application of knowledge and understanding of migration/oceans/technology to provide little or no discussion of the statement.

Award the marks as follows:		
	<b>AO1 (10 marks)</b>	<b>AO2.1c (10 marks)</b>
<b>Band</b>	<i>Description and explanation of maritime history and other reasons for cultural change in the UK.</i>	<i>Discussion of what the main reason for cultural change is, using a range of criteria/perspectives.</i>
<b>3</b>	<p><b>7-10 marks</b> Demonstrates detailed and accurate knowledge and understanding of all elements of the question.</p> <p>Makes use of appropriate and well-developed examples and may include well-annotated diagram(s).</p>	<p><b>7-10 marks</b> Applies knowledge and understanding to produce a thorough and coherent evaluation that is supported by evidence.</p> <p>Applies knowledge and understanding of migration and ocean governance to thoroughly and coherently discuss complex interlinkages. Balanced coverage of the main issues leading to substantiated conclusions.</p>
<b>2</b>	<p><b>4-6 marks</b> Demonstrates accurate knowledge and understanding of most elements of the question.</p> <p>Makes some use of examples and may include simple diagram(s).</p>	<p><b>4-6 marks</b> Applies knowledge and understanding to produce a coherent but partial evaluation.</p> <p>Applies knowledge and understanding of migration and ocean governance in a partially-balanced way.</p>
<b>1</b>	<p><b>1-3 marks</b> Demonstrates limited knowledge and understanding of some element of the question.</p> <p>Makes limited or no use of examples and may include a simple diagram.</p>	<p><b>1-3 marks</b> Applies knowledge and understanding to produce a limited evaluation.</p> <p>Applies knowledge and understanding of migration and ocean governance in an unbalanced way (one may be absent).</p>
	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>

8. 'Injustices caused by land grabs are greater than those caused by competition over ocean resources.' Discuss.	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
	10			10			<b>20</b>

### Indicative content

This is not prescriptive and candidates are not expected to cover all points for full marks. Credit other valid points not contained in the indicative content.

#### AO1

Candidates will provide a description and explanation of the injustices/challenges/problems caused by land grabs and competition/disputes over ocean resource. This may include:

- Land grabs leading to displacements (2.2.4)
- Consequences for refugees (2.2.4)
- Land grabs by MNC (and local collaborators) displacing rural populations (2.2.5)
- Issues over ocean territorial limits and rights (2.2.6)
- Tensions over islands and the Arctic (2.2.8).

#### AO2

Candidates demonstrate application of knowledge and understanding through synthesis and evaluation. This may include:

- Discussion of the severity of the injustice for the people who are affected
- Discussion of the extent of the injustice / the number of people affected
- Discussion of different kinds of injustice (legal, economic, moral dimensions)
- Discussion of ways injustices might be mitigated/managed (e.g. UNCLOS)
- Discussion of the long-term consequences of different kinds of injustice.

Near the upper end, answers that score highly will show application of knowledge and understanding by explaining complex ideas, synthesising and evaluating information about migration/oceans, and coming to rational conclusions about which kind of injustice is greatest/worst.

Responses in the middle range will show some application of knowledge and understanding of migration/oceans to provide some evaluation and synthesis, prior to drawing partially supported conclusions.

Near the lower end, responses provide very limited application of knowledge and understanding of migration/oceans to provide little or no discussion of the statement.

Award the marks as follows:		
	<b>AO1 (10 marks)</b>	<b>AO2.1c (10 marks)</b>
<b>Band</b>	<i>Description and explanation of land grab issues &amp; competition over ocean resources.</i>	<i>Discussion of which injustice is greatest, using a range of criteria/perspectives.</i>
<b>3</b>	<p><b>7-10 marks</b> Demonstrates detailed and accurate knowledge and understanding of all elements of the question.</p> <p>Makes use of appropriate and well-developed examples and may include well-annotated diagram(s).</p>	<p><b>7-10 marks</b> Applies knowledge and understanding to produce a thorough and coherent evaluation that is supported by evidence.</p> <p>Applies knowledge and understanding of migration and ocean governance to thoroughly and coherently discuss complex interlinkages. Balanced coverage of the main issues leading to substantiated conclusions.</p>
<b>2</b>	<p><b>4-6 marks</b> Demonstrates accurate knowledge and understanding of most elements of the question.</p> <p>Makes some use of examples and may include simple diagram(s).</p>	<p><b>4-6 marks</b> Applies knowledge and understanding to produce a coherent but partial evaluation.</p> <p>Applies knowledge and understanding of migration and ocean governance in a partially-balanced way.</p>
<b>1</b>	<p><b>1-3 marks</b> Demonstrates limited knowledge and understanding of some element of the question.</p> <p>Makes limited or no use of examples and may include a simple diagram.</p>	<p><b>1-3 marks</b> Applies knowledge and understanding to produce a limited evaluation.</p> <p>Applies knowledge and understanding of migration and ocean governance in an unbalanced way (one may be absent).</p>
	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>

### Section C: Challenges of the 21<sup>st</sup> Century

9. To what extent do global flows impact negatively on the physical environment?	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		Total
	8			12	10		30

Within the answer to question 9, candidates should use the maps and charts in Figures 5, 6, 7 and 8 and apply their knowledge and understanding from across the whole specification in order to develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured. The indicative content is not prescriptive and candidates are not expected to cover all points for full marks.

**AO3** may include:

- Analysis and interpretation of the trade and embedded carbon flows shown in Figure 5
- Analysis and interpretation of the pattern of plastic waste referred to in Figure 6
- Analysis and interpretation of migration and remittance flow data in Figure 7
- Analysis and interpretation of the pattern of internet use shown in Figure 8
- Synthesis of Figures e.g. some countries out-source both waste and manufacturing (Figures 5 & 6).

**AO1** content includes knowledge and understanding of the flows shown in Figures 5-8 or other flows and impacts studied as part of the course. This may include:

- Environmental benefits for local places in UK of global shift of polluting industries (C1 -places)
- Global environmental benefit of making sure plastic does not enter oceans (C2 - oceans)
- Global environmental costs of anthropogenic carbon emissions e.g. transport used by migrants (C1 - carbon; C2 - migration)
- Global benefits of international cooperation using data networks e.g. global climate change mitigation (C2 - oceans).

**AO2** requires candidates demonstrate application of knowledge and understanding through discussion of how far flows have negative environmental impacts. Responses may include:

- Evaluation of how far different flows impact the source or destination country's environment
- Evaluation of how polluting manufacturing has global consequences irrespective of its location
- The extent to which some trade flows might have higher carbon footprint due to poor regulation
- The extent to which data and idea flows impact either negatively or positively e.g. environmental awareness spread via internet
- The extent of any uneven social vulnerability and resilience to any negative impacts
- Reflecting critically using other specialised geographic concepts such as temporal scale, risk, etc.

The question requires that candidates progress beyond describing negative impacts. At the upper end, answers that score highly will show application of knowledge and understanding by critically discussing (i.e. evaluating) the impacts they have chosen to write about, synthesising information, and coming to rational conclusions which draw across the Specification.

Responses in the middle range will show some application of knowledge and understanding to provide some evaluation and synthesis from across the specification, prior to drawing partially supported conclusions. Lower end responses provide very limited application of knowledge and understanding of possible impacts to provide little evaluation.

Credit other valid points not contained in the indicative content.

Award the marks as follows:			
	<b>AO1 [8 marks]</b>	<b>AO2.1c [12 marks]</b>	<b>AO3 [10 marks]</b>
<b>Band</b>	<i>Knowledge and understanding of global flows and the environment</i>	<i>The extent to which global flows impact negatively on the physical environment</i>	<i>Geographical changes and issues in Figures 5-8; extended writing skills.</i>
<b>3</b>	<p><b>7-8 marks</b> Demonstrates detailed and accurate knowledge and understanding of all elements of the question.</p> <p>Makes use of appropriate and well-developed examples and may include well-annotated diagram(s).</p>	<p><b>9-12 marks</b> Applies knowledge and understanding to produce a coherent, thorough and sustained evaluation.</p> <p>Applies knowledge and understanding of Specification themes in a broad and well-balanced way.</p>	<p><b>8-10 marks</b> Well-developed analysis of Figures 5-8 with sustained and detailed use of data.</p> <p>Well-constructed, coherent and logical arguments and substantiated conclusions.</p>
<b>2</b>	<p><b>4-6 marks</b> Demonstrates accurate knowledge and understanding of most elements of the question.</p> <p>Makes some use of examples and may include simple diagram(s).</p>	<p><b>5-8 marks</b> Applies knowledge and understanding to produce a coherent but partial evaluation.</p> <p>Applies knowledge and understanding of Specification themes in a narrower and partially-balanced way.</p>	<p><b>4-7 marks</b> Partial analysis of Figures 5-8 with some detailed use of data.</p> <p>Partial arguments and conclusions have been attempted.</p>
<b>1</b>	<p><b>1-3 marks</b> Demonstrates limited knowledge and understanding of some element of the question.</p> <p>Makes limited or no use of examples and may include a simple diagram.</p>	<p><b>1-4 marks</b> Applies knowledge and understanding to produce a limited evaluation.</p> <p>Applies limited knowledge and understanding of Specification themes in an unbalanced way.</p>	<p><b>1-3 marks</b> Limited analysis of Figures 5-8 with some limited use of data.</p> <p>Limited arguments and conclusions, if any.</p>
	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>

10. To what extent have global flows made countries more interdependent?	AO1	AO2.1a	AO2.1b	AO2.1c	AO3		<b>Total</b>
	8			12	10		<b>30</b>

### Indicative content

Within the answer to question 10, candidates should use the maps and charts in Figures 5, 6, 7 and 8 and apply their knowledge and understanding from across the whole specification in order to develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured. The indicative content is not prescriptive and candidates are not expected to cover all points for full marks.

#### AO3 may include:

- Analysis and interpretation of migration and remittance flow data in Figure 7
- Analysis and interpretation of the pattern of plastic waste flows described in Figure 6
- Analysis and interpretation of the patterns and trends in internet use shown in Figure 8
- Analysis and interpretation of the trade and embedded carbon flows shown in Figure 5
- Synthesis of the Figures e.g. identifying multiple interdependencies (US and China are linked in all of Figures 5,6, and 7).

**AO1** content includes knowledge and understanding of the flows shown in Figures 5-8 or other flows and interdependencies studied as part of the course. This may include:

- Mutual economic dependency of host and source countries (C2 - migration)
- Connected between places in the UK and other countries (C1 - places)
- Data and trade flows and the mutual benefits which connectivity may bring (C2 - governance)
- Interdependency of all places and life on Earth from a physical systems perspective, especially in relation to the climate (C2 - carbon).

**AO2** requires candidates demonstrate application of knowledge and understanding through evaluation of the extent to which places are made more interdependent by different global flows. Responses may include:

- Evaluating the extent to which all global flows give rise to interdependence
- Evaluating the extent to which some interdependent relations are more one-sided than others
- Evaluating the extent to which countries within regions (e.g. EU) could be especially interdependent on account of free movement
- Evaluating the extent to which some places remain isolated from global flows and networks
- Evaluating the extent to which interdependency is changing/lessening (e.g. Trump's USA)
- Reflecting critically using other specialised geographic concepts such as scale, risk, etc.

The question requires that candidates progress beyond describing possible connections. At the upper end, answers that score highly will show application of knowledge and understanding by critically evaluating the flows and interdependencies they have selected, synthesising information, and coming to rational conclusions which draw across the Specification.

Responses in the middle range will show some application of knowledge and understanding to provide some evaluation and synthesis from across the specification, prior to drawing partially supported conclusions.

Lower end responses provide very limited application of knowledge and understanding of the extent to which global flows make countries more interdependent and provide little evaluation.

Credit other valid points not contained in the indicative content.

Award the marks as follows:			
	<b>AO1 [8 marks]</b>	<b>AO2.1c [12 marks]</b>	<b>AO3 [10 marks]</b>
<b>Band</b>	<i>Knowledge &amp; understanding of global flows and interdependent countries.</i>	<i>The extent to which global flows make countries more interdependent.</i>	<i>Geographical changes and issues in Figures 5-8; extended writing skills.</i>
<b>3</b>	<p><b>7-8 marks</b> Demonstrates detailed and accurate knowledge and understanding of all elements of the question.</p> <p>Makes use of appropriate and well-developed examples and may include well-annotated diagram(s).</p>	<p><b>9-12 marks</b> Applies knowledge and understanding to produce a coherent, thorough and sustained evaluation.</p> <p>Applies knowledge and understanding of Specification themes in a broad and well-balanced way.</p>	<p><b>8-10 marks</b> Well-developed analysis of Figures 5-8 with sustained detailed use of data.</p> <p>Well-constructed, coherent and logical arguments and substantiated conclusions.</p>
<b>2</b>	<p><b>4-6 marks</b> Demonstrates accurate knowledge and understanding of most elements of the question.</p> <p>Makes some use of examples and may include simple diagram(s).</p>	<p><b>5-8 marks</b> Applies knowledge and understanding to produce a coherent but partial evaluation.</p> <p>Applies knowledge and understanding of Specification themes in a narrower and partially-balanced way.</p>	<p><b>4-7 marks</b> Partial analysis of Figures 5-8 with some detailed use of data.</p> <p>Partial arguments and conclusions have been attempted.</p>
<b>1</b>	<p><b>1-3 marks</b> Demonstrates limited knowledge and understanding of some element of the question.</p> <p>Makes limited or no use of examples and may include a simple diagram.</p>	<p><b>1-4 marks</b> Applies knowledge and understanding to produce a limited evaluation.</p> <p>Applies limited knowledge and understanding of Specification themes in an unbalanced way.</p>	<p><b>1-3 marks</b> Limited analysis of Figures 5-8 with some limited use of data.</p> <p>Limited arguments and conclusions, if any.</p>
	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>	<p><b>0 marks</b> Response not creditworthy or not attempted.</p>