



GCE A LEVEL MARKING SCHEME

SUMMER 2022

A LEVEL GEOGRAPHY – COMPONENT 1 A110U10-1

INTRODUCTION

This marking scheme was used by WJEC for the 2022 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

COMPONENT 1: CHANGING LANDSCAPES AND CHANGING PLACES SUMMER 2022 MARK SCHEME

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.

Advance Information

Areas of content suggested as **key areas** of focus for revision and final preparation in relation to the Summer 2022 examinations are indicated within this mark scheme. Where additional specification references to those included in the advance information notice are included, these references are in italics.

GCE A LEVEL GEOGRAPHY - COMPONENT 1

SUMMER 2022 MARK SCHEME

Section A: Changing Landscapes

Either: Coastal Landscapes

(a) Use Figure 1 to describe changes in the coastal environment shown. Skills: 8.2	A01	A02.1a	A02.1b	A02.1c	A03	Total
					5	5

The coastal section consists of barrier beaches but many will interpret as a spit, which is plausible, so credit this approach. Expect candidates to identify specific features directly from the resource.

Indicative content

Overview may include:

- Small decrease in shallow water
- Coast becomes more discontinuous/separated

Specific descriptive statements may include:

- Breaching/break up of the barrier beach/'spit' e.g. in square 2C
- Increased access to the lagoon in 2E behind barrier beach/'spit'
- Reduction in length of 'spit'/North Beach as seen in square 3D
- Tip of 'spit' isolated in square 3C/D
- Changing shape/dimensions of islands e.g. in square 3E.

Accept other valid descriptive comments.

Award the n	Award the marks as follows:							
Band	AO3 (5 marks)							
3	4-5 marks Well-developed description of the changes. Reference to overall pattern.							
	Wide use of the resource, including scale, to support the description of the changes.							
2	2-3 marks Partial description of the changes. Series of isolated comments.							
	Partial use of the resource to support the description of the changes.							
1	1 mark Limited statements with no use of the resource.							
	0 marks Response not creditworthy or not attempted.							

(b) Outline two economic impacts of coastal processes on human activity. Content: 1.1.9	AO1	A02.1a	AO2.1b	A02.1c	A03.1	Total
	8					8

Candidates should clearly outline how coastal processes produce**s two** economic impacts. These can be positive or negative. Some answers may provide a detailed account of a specific impact such as the negative impacts of a storm on a given settlement whilst others may view the broader economic advantages of tourism. Accept approaches that focus on breadth or depth for marks in Band 3.

Positive:

- Coastal processes can produce spectacular scenery of erosion that encourages tourism e.g. coastal cliffs of Purbeck
- Coastal processes can produce sheltered areas that can be used for harbours e.g. Poole Harbour
- Coastal processes can produce produce features of deposition such as beaches and dunes that can be used for leisure e.g. Studland.

Negative:

- Coastal processes can damage settlements that have to be repaired e.g. East Anglia, Yorkshire coast
- Coastal processes can damage economic activity that reduces output/has to be repaired e.g. erosion of agricultural land in Lincolnshire
- Coastal processes can increase insurance premiums in coastal areas e.g. Pevensey
- Coastal processes can damage infrastructure which needs repair and hinders movement of people/goods/services e.g. Devon
- Coastal processes can erode beaches that can lead to a reduction in tourism revenue.

Award th	e marks as follows:
Band	AO1 (8 marks)
	6-8 marks Demonstrates detailed and accurate understanding of how coastal processes result in two economic impacts.
3	Demonstrates accurate knowledge and understanding using appropriate, and well-developed examples.
	Well-annotated sketches / diagrams / maps may also be used and should be credited.
	3-5 marks
	Developed outline of one/less developed treatment of two economic impacts.
2	Demonstrates partial understanding of how coastal processes result in economic impact(s).
	Demonstrates mostly accurate knowledge and understanding using appropriate, partially developed examples.
	Generalised sketches / diagrams / maps may also be used and should be credited.
	1-2 marks Demonstrates limited knowledge of economic impacts.
1	Demonstrates limited understanding of how coastal processes result in economic impacts.
	Demonstrates limited knowledge and understanding using appropriate examples.
	Basic sketches / diagrams / maps may also be used and should be credited.
	0 marks Response not creditworthy or not attempted.

2. (a) (i) Use Figure 2 to analyse variations in grain size along the transect Skills: 3.6	AO1	A02.1a	AO2.1b	A02.1c	A03	Total
					5	5

Overview may include:

- Decrease in range from 1 to 3
- Increase in sorting from 1 to 3
- Coarse sand always has the highest % weight within each sample.

Specific comments may include:

- Site 1 has pebbles and gravel
- Site 2 has no pebbles
- Site 3 has no gravel or pebbles
- Site 2 has no fine sand grains
- Site 3 has highest % weight of coarse sand
- Site 1 has wide range of grain size
- Site 2 has narrow range of grain size.

Accept other valid analytical comments.

Dand	AO2 (5 morks)			
Band	AO3 (5 marks)			
	4-5 marks			
	Well-developed analysis of the changes in grain size along the transect.			
3	Reference to overall pattern.			
	Use of all elements of the resource to support the analysis of the changes in grain size distribution.			
	2-3 marks			
Partial analysis of the changes in grain size along the transect.				
2	Series of isolated comments.			
	Partial use of the resource to support the analysis of the changes in grain size distribution.			
4	1 mark			
1	Limited statements with no use of the resource.			
	0 marks			
	Response not creditworthy or not attempted.			

(a) (ii) Suggest how marine and aeolian processes may have influenced the variations in grain size shown in Figure 2 . Content: 1.1.5, 1.1.7	A01	A02.1a	A02.1b	A02.1c	A03	Total
			8			8

Candidates should show apply knowledge and understanding of the processes that lead to variations in grain size distributions along a beach dune transect.

Possible approaches may include a discussion of:

- the role of drying out of sediment on lower beach wet sediment requires more energy to move
- the processes that lead to lower beach areas having larger grain sizes higher energy found in intertidal zones due to wave energy, currents etc.
- how aeolian processes transport finer sediment sizes leaving larger material behind
- the impact of variety of energy in intertidal zone and resulting larger range of grain sizes.

ard the m	arks as follows:							
Band	AO2.1b (8 marks)							
3	6-8 marks Well-developed discussion that identifies marine and aeolian processes that influence grain size distribution and explains link to characteristics shown in Figure 2. Well-annotated sketches / diagrams / maps may also be used and should be credited.							
3-5 marks								
2	Partial discussion that identifies marine and aeolian processes that influence grain size distribution with some explanation of link to characteristics shown in Figure 2.							
	Generalised sketches / diagrams / maps may also be used and should be credited.							
1	1-2 marks Limited discussion that identifies marine and aeolian processes that influence grain size distribution with limited link to characteristics shown in Figure 2.							
	Basic sketches / diagrams / maps may also be used and should be credited.							
	0 marks							
	Response not creditworthy or not attempted.							

Examine the relative importance of marine erosional processes to the characteristics and formation of one or more landforms of coastal erosion. Content: 1.1.5	AO1	A02.1a	AO2.1b	A02.1c	A03	Total
	10			5		15

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

AO1 content encompassess knowledge and understanding of the factors that are important in the charateristics and formation of one or more landforms of coastal erosion. Candidates are directed towards marine processes but may consider other factors such as subaerial processes, geology, energy regimes and human activity. The balance of the content will depend upon the landform(s) chosen but candidates should demonstrate the ability to link the factors addressed to their characteritics and formation.

The content may include knowledge and understanding of:

- the characteristics of the chosen landforms
- the formation of the chosen landforms
- the marine erosional processes involved
- the sub-aerial processes involved
- the influence of geology lithilogical and structural factors
- the coastal energy regime wave and tidal regimes
- the influence of human activity coastal defenses, mineral extraction, climate induced sea level change.

AO₂

AO2.1c content encompasses the application of knowledge and understanding to evaluate the importance of marine processes in the charateristics and formation of one or more erosional landforms. Candidates may reach the conclusion that marine processes are important but a conclusion is not necessary in order to reach the top of Band 3. The content may vary according to the landform but may include an examination of:

- the importance of marine processes compared to other factors
- the relative importance of different marine processes
- the importance of different factors over space
- the changing importance of different factors over different time periods.

	Award the marks as follows:								
	AO1 (10 marks)	AO2.1c (5 marks)							
Band	Demonstrates knowledge and understanding of the processes and factors that influence the characteristics and formation of one or more erosional landforms.	Applies knowledge and understanding to examine the importance of marine processes in the characteristics and formation of one or more erosional landforms.							
	7-10 marks Demonstrates detailed and accurate knowledge and understanding that is relevant to the question.	4-5 marks Applies knowledge and understanding to construct a well-developed discussion that is supported by evidence.							
3	Demonstrates detailed and accurate knowledge and understanding of the processes and factors that influence the characteristics and formation of one or more erosional landforms.	Applies knowledge and understanding to produce a thorough and coherent examination of the importance of processes and factors that influence the characteristics and formation of one or more erosional							
	Demonstrates detailed and accurate knowledge and understanding using appropriate, accurate and well-developed examples.	landforms.							
	Well-annotated sketches / diagrams may be used and should be credited.								
	4-6 marks	2-3 marks							
	Demonstrates accurate knowledge and understanding that is relevant to the question.	Applies knowledge and understanding to construct a partial discussion that is supported by some evidence.							
2	Demonstrates accurate knowledge and understanding of the processes and factors that influence the characteristics and formation of one or more erosional landforms.	Applies knowledge and understanding to produce a partial examination of the importance of processes and factors that influence the characteristics and formation of							
	Demonstrates accurate knowledge and understanding using examples	one or more erosional landforms.							
	Sketches / diagrams may be used and should be credited.								
	1-3 marks Demonstrates limited knowledge and understanding that is relevant to the question.	1 mark Applies knowledge and understanding to construct a limited discussion supported by limited evidence.							
1	Demonstrates limited knowledge and understanding of the processes and factors that influence the characteristics and formation of one or more erosional landforms.	Applies knowledge and understanding to produce a limited examination of the importance of processes and factors that influence the characteristics and formation of							
	Demonstrates limited knowledge and understanding using limited examples	one or more erosional landforms.							
	Basic sketches / diagrams may be used and should be credited.								
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.							

Assess the success of one strategy used to manage the interaction between human activity and coastal processes and/or landscapes. Content: 1.1.9, 1.1.10	A01	A02.1a	A02.1b	A02.1c	A03	Total
	10			5		15

The indicative content 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

AO1 content encompasses knowledge and understanding of one management strategy. Be prepared to accept a broad strategy that encompasses a number of measures as well as a narrower approach that may focus one or two measures such as groynes and beach nourishment. The content will depend upon the strategy chosen and may include:

- an outline of the reasons why a management strategy is needed this could include rates of erosion/rates, or places, of deposition/impacts on industry, settlements, people
- an outline of the characteristics of the management strategy which could include the physical structures and operation
- an outline of how the management strategy modifies coastal processes/landscapes
- an outline of the positives of the management strategy
- an outline of the negatives of the management strategy.

A_O2

AO2.1c content encompasses the application of knowledge and understanding to assess the success of the strategy. A conclusion may be drawn in the context of the strategy chosen but a conclusion is not necessary in order to reach the top of Band 3. The content may vary according to the strategy but may include an assessment of:

- the extent to which modification of the erosional or depositional processes operating in a coastal environment has been successful
- whether the reduction of impacts of erosion on human activity such as farming, industry, infrastructure and settlement has been successful
- whether there has been improvement or reduction in the aesthetic character of the coast
- the extent to which there has been an improvement of the coast as an amenity
- the extent to which there has been a changing focus of coastal erosion e.g. sediment trapped by groynes impacts upon processes on other parts of the coast
- geographical variations in success
- temporal variations in success
- success with reference to different stakeholders
- success with reference to sustainability of landscapes and people.

ward th	e marks as follows:	
	AO1 (10 marks)	AO2.1c (5 marks)
Band	Demonstrates knowledge and understanding of the structure and operation of one management strategy.	Applies knowledge and understanding to assess the success of one management strategy.
3	7-10 marks Demonstrates detailed and accurate knowledge and understanding of the need for, structure and operation of the selected management strategy Demonstrates detailed and accurate knowledge and understanding using appropriate, accurate and well-developed examples. Well-annotated sketches / diagrams may be used and should be credited.	4-5 marks Applies knowledge and understanding to construct a well-developed discussion that is supported by evidence. Applies knowledge and understanding to produce a thorough and coherent assessment of the success of the management strategy.
2	4-6 marks Demonstrates partial knowledge and understanding of the need for, structure and operation of the selected management strategy Demonstrates partial knowledge and understanding using examples Sketches / diagrams may be used and should be credited.	2-3 marks Applies knowledge and understanding to construct a partial discussion that is supported by some evidence. Applies knowledge and understanding to produce a partial assessment of the success of the management strategy.
1	1-3 marks Demonstrates limited knowledge and understanding of the need for, structure and operation of the selected management strategy Demonstrates limited knowledge and understanding using limited examples Basic sketches / diagrams may be used and should be credited.	1 mark Applies knowledge and understanding to construct a limited discussion supported by limited evidence. Applies knowledge and understanding to produce a limited assessment of the success of the management strategy.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

Or: Glaciated Landscapes

Skills: 8.2	A	AOS	AOS	AOS	5	To
5. (a) Use Figure 3 to describe changes in the glacial environment shown.)1	2.1a	2.1b	2.1c)3	tal

Indicative content

Overview may include:

- Overall shrinkage of Glacier Steffen
- General growth in size of lakes
- Increase in overall number of lakes.

Specific comments may include:

- Retreat of terminus from A3 to B3
- Growth of existing lakes e.g. expansion into D2
- Appearance of new lake in square D1/D2
- Disappearance of ice damned lake in square E1
- Increase in supra-glacial debris.

Accept other valid descriptive comments.

Band	AO3 (5 marks)				
4-5 marks Well-developed description of the changes to Glacier Steffen. Reference to overa pattern.					
	Wide use of the resource, including scale to support the description of the changes.				
2	2-3 marks Partial description of the changes to Glacier Steffen. Series of isolated comments.				
	Partial use of the resource to support the description of the changes.				
1	1 mark Limited statements with no use of the resource.				
	0 marks Response not creditworthy or not attempted.				

5. (b) Outline the impact of two glacial processes on human activity. Content: 1.2.10	AO1	A02.1a	A02.1b	A02.1c	AO3	Total
	8					8

Candidates should identify two appropriate glacial processes and outline their impact on human activity.

Possible approaches may include:

- glacial lake outburst floods which may impact on settlements causing mortality, destruction of housing, infrastructure and economic costs
- formation glacial troughs that can be used for resrvoirs water for power and irrigation
- formation of steep slopes that can be used for sports and leisure
- avalanches that can cause destruction of settlement
- glacial deposition may produce sediments that are beneficial to human activity e.g. boulder clay
 used for agriculture and sand/gravel used for construction.

Band	AO1 (8 marks)
	6-8 marks Well-developed outline of two glacial processes and explanation of how they impact on human activity.
3	Demonstrates accurate knowledge and understanding using appropriate, and well-developed examples.
	Well-annotated sketches / diagrams / maps may also be used and should be credited.
	3-5 marks Developed outline of one glacial process/less developed treatment of two and explanation of how they impact human activity.
2	Partial knowledge and understanding using appropriate, and partially developed examples.
	Generalised sketches / diagrams / maps may also be used and should be credited.
	Demonstrates accurate knowledge of one economic impact.
	1-2 marks Limited outline of one glacial process and explanation of how it impacts human activity.
1	Limited knowledge and understanding using limited examples.
	Basic sketches / diagrams / maps may also be used and should be credited.

6. (a) (i) Use Figure 4 to analyse variations in grain size along the transect. Skills: 3.6	AO1	A02.1a	A02.1b	A02.1c	AO3	Total
					5	5

Overview may include:

- Smaller size sediment becomes more important from site 1 to 3
- Decrease in range of sediment size site 1 to 3.

Specific comments may include:

- Coarse gravel biggest in site 1 and 2 whilst coarse sand biggest in site 3
- Boulders only occur at site 1
- Pebbles disappear at site 3
- Coarse sand increases form site 1 to 3.

Accept other valid analytical comments

Award the m	narks as follows:
Band	AO3 (5 marks)
3	4-5 marks Well-developed analysis of the changes in grain size along the transect. Reference to overall pattern. Use of all elements of the resource to support the analysis of the changes in grain size distribution.
2	2-3 marks Partial analysis of the changes in grain size along the transect. Series of isolated comments. Partial use of the resource to support the analysis of the changes in grain size distribution.
1	1 mark Limited statements with no use of the resource.
	0 marks Response not creditworthy or not attempted.

6. (a) (ii) Suggest how glacial and fluvioglacial processes may have influenced the variations in grain size shown in Figure 4 . Content: 1.2.6	AO1	A02.1a	A02.1b	A02.1c	VO3	Total
			8			8

The question links to the resource which shows variations in the grain size across a transect from a terminal moraine to an outwash plain (sandur). Candidates may use this as a basis for possible approaches and may include applied knowledge and understanding of:

- the role of glacial deposition at a terminal moraine
- the processes that lead to terminal moraine areas having larger grain sizes higher energy in glaciers providing larger grains by glacial erosion and transport
- how fluvial processes transport finer sediment sizes leaving larger material behind
- fluvial processes in braided streams and impacts on grain size larger grains on bars etc.

Award the m	ward the marks as follows:							
Band	AO2.1b (8 marks)							
3	6-8 marks Well-developed examination that identifies glacial and fluvioglacial processes that influence grain size distribution and explains link to characteristics shown in Figure 4. Well-annotated sketches / diagrams / maps may also be used and should be credited.							
2	3-5 marks Partial examination that identifies glacial and fluvioglacial processes that influence grain size distribution with some explanation of link to characteristics shown in Figure 4. Generalised sketches / diagrams / maps may also be used and should be credited.							
1	1-2 marks Limited examination that identifies glacial and fluvioglacial processes that influence grain size distribution with limited link to characteristics shown in Figure 4. Basic sketches / diagrams / maps may also be used and should be credited.							
	0 marks Response not creditworthy or not attempted.							

7. Examine the relative importance of glacial weathering on the characteristics and formation of one or more landforms of glacial erosion. Content: 1.2.5	AO1	A02.1a	A02.1b	A02.1c	AO3	Total
	10			5		15

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.

A01

AO1 content encompassess knowledge and understanding of the factors that are important in the formation of one or more landforms of glacial erosion. Candidates are directed towards glacial weathering and may consider this in a number of contexts. Reference may be made to the role of weathering in a glacial advance where the landscape is impacted by increases in freeze-thaw weathering that decrease resistance to erosion. There could also be reference to the role of weathering during a glaciation in the production of frost shattered landforms above the ice or the part played by weathering as an input of debris into the glacial system. Candidates may also refer to the role weathering in a post glacial setting and the modification of glacial landforms of erosion. Answers may also consider other factors such as glacial erosion processes, geology and post glacial modifications by other geomorphic processes. The balance of the content will depend upon the landform(s) chosen but candidates should demonstarte the ability to link the factors and processes addressed to their characteritics and formation.

The content may include knowledge and understanding of:

- the characteistics of the chosen landforms
- the formation of the chosen landforms
- glacial weathering
- geological factors involved
- the influence of different glacial erosion processes
- other geomorphic processes
- the influence of preglacial conditions fluvial environment that may be influenced by geology
- postglacial modifications.

AO₂

AO2.1c content encompasses the application of knowledge and understanding to evaluate the importance of geology in the charateristics and development of one or more erosional landforms. Candidates may reach the conclusion that geology is important but a conclusion is not necessary in order to reach the top of Band 3. The content may vary according to the landform but may include an examination of:

- the importance of glacial weathering compared to other factors
- the relative importance of different processes of glacial erosion
- the relative importance of postglacial processes
- the importance of different factors over space.

	AO1 (10 marks)	AO2 1c (5 marks)
	AO1 (10 marks)	AO2.1c (5 marks)
Band	Demonstrates knowledge and understanding of the role of glacial weathering and other factors/processes in the characteristics and development of one or more landforms of glacial	Applies knowledge and understanding to appraise through an examination of glacia weathering in the characteristics and development of one or more landforms of
	erosion.	glacial erosion
	7-10 marks Demonstrates detailed and accurate knowledge and understanding that is relevant to the question. Demonstrates detailed and accurate knowledge	4-5 marks Applies knowledge and understanding to construct well-developed discussion that i supported by evidence.
3	and understanding of the influence of glacial weathering and other factors/processes on the characteristics and development of one or more landforms of glacial erosion	Applies knowledge and understanding to produce a thorough and coherent examination of the influence of glacial weathering and other factors/processes of the characteristics and development of or
	Demonstrates detailed and accurate knowledge and understanding using appropriate, accurate and well-developed examples.	or more landforms of glacial erosion.
	Well-annotated sketches / diagrams may be used and should be credited.	
	4-6 marks Demonstrates partial knowledge and understanding that is relevant to the question.	2-3 marks Applies knowledge and understanding to construct a partial discussion that is supported by some evidence.
2	Demonstrates partial knowledge and understanding of the influence of glacial weathering and other factors/processes on the characteristics and development of one or more landforms of glacial erosion	Applies knowledge and understanding to produce a partial examination of the influence of glacial weathering and other factors/processes on the characteristics and development of one or more landforr
	Demonstrates partial knowledge and understanding using examples	of glacial erosion
	Sketches / diagrams may be used and should be credited.	
	1-3 marks Demonstrates limited knowledge and understanding that is relevant to the question.	1 mark Applies knowledge and understanding to construct a limited discussion supported limited evidence.
1	Demonstrates limited knowledge and understanding of the influence of glacial weathering and other factors/processes on the characteristics and development of one or more landforms of glacial erosion.	Applies knowledge and understanding to produce a limited examination of the influence of glacial weathering and other factors/processes on the characteristics and development of one or more landform
	Demonstrates limited knowledge and understanding using limited examples	of glacial erosion
	Basic sketches / diagrams may be used and should be credited.	
	0 marks Response not creditworthy or not attempted.	O marks Response not creditworthy or not attempted.

8. Assess the success of one strategy used to manage the interaction between human activity and glacial processes and/or landscapes. Content: 1.2.10	AO1	A02.1a	AO2.1b	A02.1c	A03	Total
	10			5		15

The specification gives a choice of of impacts of glacial process/landforms on human activity OR impacts of human activity on on glacial process/landforms. This question gives a choice of approach [and allows a combination].

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

AO1 content encompasses knowledge and understanding of one management strategy. The content will depend upon the strategy chosen and may include:

- an outline of the reasons why a management strategy is needed [impacts or issues] this could include rates impacts on industry, settlements, people etc.
- an outline of the characteristics of the management strategy which could include the physical structures and operation
- an outline of how the management strategy modifies glacial processes/landforms or human activity
- an outline of the positives of the management strategy
- an outline of the negatives of the management strategy.

AO₂

AO2.1c content encompasses the application of knowledge and understanding to assess the success of the strategy. A conclusion may be drawn in the context of the strategy chosen but a conclusion is not necessary in order to reach the top of Band 3. The content may vary according to the strategy but may include an assessment of:

- the extent to which modification of glacial processes or human activity has been successful in relation to the issues or impacts identified
- · geographical variations in success
- temporal variations in success
- success with reference to different stakeholders
- success with reference to sustainability of landscapes and people.

	AO1 (10 marks)	AO2.1c (5 marks)
Band	Demonstrates knowledge and understanding of the strategy used to manage the interaction between human activity and glacial processes and/or landscapes.	Applies knowledge and understanding to assess the success of the strategy used to manage the interaction between human activity and glacial processes and/or landscapes.
3	7-10 marks Demonstrates detailed and accurate knowledge and understanding of the need for, structure and operation of the selected management strategy. Demonstrates detailed and accurate knowledge and understanding using appropriate, accurate and well-developed examples. Well-annotated sketches / diagrams may be used and should be credited.	4-5 marks Applies knowledge and understanding to construct well-developed discussion that is supported by evidence. Applies knowledge and understanding to produce a thorough and coherent assessment of the success of the management strategy.
2	4-6 marks Demonstrates partial knowledge and understanding of the need for, structure and operation of the selected management strategy. Demonstrates partial knowledge and understanding using examples. Sketches / diagrams may be used and should be credited.	2-3 marks Applies knowledge and understanding to construct a partial discussion that is supported by some evidence. Applies knowledge and understanding to produce a partial assessment of the success of the management strategy.
1	1-3 marks Demonstrates limited knowledge and understanding of the need for, structure and operation of the selected management strategy. Demonstrates limited knowledge and understanding using examples. Sketches / diagrams may be used and should be credited.	1 mark Applies knowledge and understanding to construct a limited discussion supported by limited evidence. Applies knowledge and understanding to produce a limited assessment of the success of the management strategy.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted

Section B: Changing Places

9. (a) Use Figure 5 to describe the distribution of population aged over 65 in Norfolk.Skills: 3.2	A01	A02.1a	A02.1b	A02.1c	AO3	Total
					5	5

Indicative content

Overview may include:

- Highest in coastal area
- Lowest in/around towns and cities of 24,000 plus
- Centre of county has lowest/mainly inland lowest.

Specific comments may include:

- Higher % in the north
- Higher % on the north coast
- Anomalies to the general pattern e.g. north west of Norwich
- Lower % around Norwich/King's Lynn
- Increase in % with distance from Norwich.

Award the marks as follows:						
Band	AO3 (5 marks)					
3	4-5 marks Well-developed description of distribution of population over 65. Reference to overall pattern. Wide use of the resource to support the description.					
2	2-3 marks Partial description of distribution of distribution of population over 65. Series of isolated comments. Partial use of the resource to support the description.					
1	1 mark Limited statements with no use of the resource.					
	0 marks Response not creditworthy or not attempted.					

9. (b) Suggest why the age characteristics of a population vary from place to place. Content: 1.3.1	A01	A02.1a	A02.1b	A02.1c	AO3	Total
			8			8

Candidates should display an understanding of the reasons why there are difference in the age structure of places.

Possible approaches that refer to the map may include:

- older population move to rural settlements to retire peaceful environment
- younger population move to cities for employment higher paid jobs
- younger population move to cities for universtity
- younger popuation move away from rural settlements for employment/lack of housing/leisure
- counterurbanised villages contain middle aged population with young children
- coastal attraction for retirees pleasant climate
- lack of affordable housing in rural areas younger population leave.

Award the ma	Award the marks as follows:						
Band	AO2.1b (8 marks)						
3	6-8 marks Well-developed suggestions to explain differences in age characteristics of places. Applies developed knowledge and understanding of varying age characteristics. Well-annotated sketches / diagrams / maps may also be used and should be credited.						
2	3-5 marks Partially developed suggestions to explain differences in age characteristics of places. Some application of knowledge and understanding of varying age characteristics. Generalised sketches / diagrams / maps may also be used and should be credited.						
1	1-2 marks Limited suggestions to explain differences in age characteristics of places. Fragmented or no application of knowledge and understanding of varying age characteristics. Basic sketches / diagrams / maps may also be used and should be credited.						
	0 marks Response not creditworthy or not attempted.						

10. (a) Use Figure 6 to analyse variations in employment structure. Skills: 2.5	A01	A02.1a	A02.1b	A02.1c	A03	Total
					5	5

Analysis may take an approach that examines sector by sector, settlement or an amalgam of both.

Overview may include:

- services are most important
- London has higher proportion of employment in 'modern economy'.

Specific comments may include:

- higher employment in manufacturing in older industrial towns
- higher employment in banking/services in London
- education sector etc. important in both settlements
- comments that refer settlements to GB average e.g. London above GB average for banking/older towns below GB average for banking
- older industrial towns have more traditional industry.

Award the marks as follows:								
Band	AO3 (5 marks)							
4-5 marks Well-developed analysis of the varying employement structure of GB settlements in Figure 6. Reference to overall pattern.								
	Use of all elements the resource to support the analysis of employment structure.							
2	2-3 marks Partial analysis of the varying employment structure of GB settlements in Figure 6. Series of isolated comments.							
	Partial use of the resource to support the analysis of employment structure.							
1	1 mark Limited statements with no use of the resource.							
	0 marks Response not creditworthy or not attempted.							

10. (b) Outline two different ways in which urban places can be reimaged. Content: 1.3.9	AO1	A02.1a	A02.1b	A02.1c	AO3	Total
	8				l.	8

Looking for knowledge of two ways in which urban places can be re-imaged (re-invented to differentiate it from previous negative images).

Possible approaches could include:

- re-imaging through sports stadia or complexes e.g. Olympic Park London
- re-imaging through cultural quarters to take advantage of historical heritage e.g. Cathedral Quarter Leicester
- re-imaging through industrial heritage e.g. Liverpool Docks
- re-imaging through festivals, for example, music or food e.g. Parklife, Manchester
- re-imaging through flagship developments e.g. Canary Wharf, London and Guggenheim Museum, Bilbao
- re-imaging through making a place desirable in which to live.

Band	AO1 (8 marks)			
	6-8 marks Clear and developed outline of two ways in which urban places can be re-imaged			
3	Demonstrates accurate knowledge and understanding using appropriate, and well-developed examples.			
	Well-annotated sketches / diagrams / maps may also be used and should be credited.			
	3-5 marks Clear and developed outline of one way in which urban places can be re-imaged			
2	Partial outline of two ways in which urban places can be re-imaged			
Partial knowledge and understanding using appropriate examples. Generalised sketches / diagrams / maps may also be used and should be credited.				
1	Limited knowledge and understanding using limited examples.			
	Basic sketches / diagrams / maps may also be used and should be credited.			
	0 marks Response not creditworthy or not attempted.			

11. Assess the impacts of quaternary industry clusters on people and places. Content: 1.3.6	AO1	A02.1a	AO2.1b	A02.1c	A03	Total
	10			5		15

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

AO1 content encompasses knowledge and understanding of how the growth of quaternary industry can impact people and places. Answers may focus on one area or contain a variety of examples

The content will depend upon the places chosen and may include knowledge and understanding of:

- the growth of quaternary industry in one or more places types of industry [including research, financial technology, software and systems design, cybertechnology, artificial intelligence, robotics, biotechnology and genomics], locations of industry, structure of quaternary industry
- the impacts on people changing skills [including loss of traditional jobs], high wage jobs, working conditions, perception of place, demographic change, work patterns
- the impacts on place changing environment, connectivity at a local, regional and global scale, integration with education, structural changes to industrial environment, changes to employment structure, rapid innovation.

AO₂

AO2 content encompasses the application of knowledge and understanding to assess the impacts of quaternary industry growth on people and places. A conclusion may be drawn in the context of the area(s) chosen but a conclusion is not necessary in order to reach the top of Band 3. Content may vary according to examples selected but may include an assessment of:

- the scale of the impacts on people and place
- the relative impacts on people and place
- relative impacts over geographical space
- impacts over time.

Award the	e marks as follows:	
	AO1 (10 marks)	AO2.1c (5 marks)
Band	Demonstrates knowledge and understanding of the impacts of quaternary industry growth on people and places.	Applies knowledge and understanding to assess the impacts of quaternary industry growth on people and places.
3	7-10 marks Demonstrates detailed and accurate knowledge and understanding of the impacts of quaternary industry growth on people and places. Demonstrates detailed and accurate knowledge and understanding through the use of appropriate and well-developed examples. Well-annotated sketches / diagrams may be used and should be credited	4-5 marks Applies knowledge and understanding to construct a well-developed discussion that is supported by evidence. Applies knowledge and understanding to produce a thorough and coherent assessment of the impacts of quaternary industry growth on people and places.
2	4-6 marks Demonstrates partial knowledge and understanding of the impacts of quaternary industry growth on people and places. Demonstrates partial knowledge and understanding through the use of appropriate and partially developed examples. Generalised sketches / diagrams may be used and should be credited	2-3 marks Applies knowledge and understanding to construct a partial discussion that is supported by some evidence. Applies knowledge and understanding to produce a partial assessment of the impacts of quaternary industry growth on people and places.
1	1-3 marks Demonstrates limited knowledge and understanding of the impacts of quaternary industry growth on people and places. Demonstrates limited knowledge and understanding through the use of appropriate and limited examples. Basic sketches / diagrams may be used and should be credited	1 mark Applies knowledge and understanding to produce a limited discussion with support from limited evidence. Applies knowledge and understanding to produce a limited assessment of the impacts of quaternary industry growth on people and places.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

12. Assess the importance of recreation in the rebranding of rural places. Content: 1.3.7	AO1	A02.1a	AO2.1b	A02.1c	A03	Total
	10			5		15

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

AO1 content encompasses knowledge and understanding of the processes of rebranding and the role of recreation in the rebranding of one or more rural places. The content will depend upon the examples chosen and may include knowledge and understanding of:

- how recreation operates to rebrand rural areas outdoor sports, rambling etc.
- how recreation can strengthen the image and identity of rural places by media and marketing.
- the process of rebranding in rural places top down and bottom-up approaches
- the reasons for rebranding economic decline, affordability of homes, environmental concerns etc to counter negative social, demographic and economic images
- the other processes of rebranding of rural places heritage, festivals, high tech developments, crafts, stimulating population growth, stimulating business growth.

AO₂

AO2.1c content encompasses the application of knowledge and understanding to assess the importance of recreation in the rebranding of rural places. A conclusion may be drawn in the context of the place(s) chosen but a conclusion is not necessary in order to reach the top of Band 3. The content may vary but may include an assessment of:

- the relative importance of recreation compared to other aspects of rebranding
- the relative importance of different types of recreation
- the relative importance of processes of rebranding
- the relative importance of recreation as defined by different stakeholders
- the relative success over geographical space
- (varying) success over time.

	e marks as follows:	
	AO1 (10 marks)	AO2.1c (5 marks)
Band	Demonstrates knowledge and understanding of recreation and the rebranding process in rural places.	Applies knowledge and understanding to appraise through an assessment of the role of recreation in the rebranding process in rural places.
3	7-10 marks Demonstrates detailed and accurate knowledge and understanding of recreation and the rebranding process in one or more rural places. Demonstrates detailed and accurate knowledge and understanding using appropriate, accurate and well-developed examples. Well-annotated sketches / diagrams may be used and should be credited.	4-5 marks Applies knowledge and understanding to construct a well-developed discussion that is supported by evidence. Applies knowledge and understanding to produce a thorough and coherent assessment of the importance of recreation in the rebranding of one or more rural areas.
2	4-6 marks Demonstrates accurate knowledge and understanding of recreation and the rebranding process in one or more rural places. Demonstrates partial knowledge and understanding using s o m e examples. Sketches / diagrams may be used and should be credited.	2-3 marks Applies knowledge and understanding to construct a partial discussion that is supported by some evidence. Applies knowledge and understanding to produce a partial assessment of the importance of recreation in the rebranding of one or more rural areas.
1	1-3 marks Demonstrates limited knowledge and understanding of recreation and the rebranding process in one or more rural places. Demonstrates limited knowledge and understanding using limited examples. Basic sketches / diagrams may be used and should be credited.	1 mark Applies knowledge and understanding to construct a limited discussion that is supported by limited evidence. Applies knowledge and understanding to produce a limited assessment of the importance of recreation in the rebranding of one or more rural areas.
	0 marks Response not creditworthy or attempted.	0 marks Response not creditworthy or attempted.