

AS LEVEL **GEOGRAPHY**

7036/1 Physical geography and people and the environment Report on the Examination

7036 June 2022

Version: 1.0



General

The paper proved accessible to many students. The average mark on the paper was 44. This was higher than the average mark in 2019 which in turn was rather lower than the preceding series. This suggests that centres are becoming more familiar with the style of question setting on this paper, and/or reflect the release of advanced information for this series.

As in previous series examiners encountered a number of students making rubric errors, e.g. attempting incompatible combinations of questions or attempting to complete every question on the paper suggesting that a number of students were unfamiliar with the structure of the paper.

Question 1

About 44% of the students attempted the Water and Carbon Cycles option.

1.1

This proved straightforward with well over 90% of students correctly identifying Option D as the correct answer.

1.2

This question differentiated well, around half of students identified D as the correct option.

1.3

Many students performed well on this question. Just over half of responses gained 2 or more marks, but just over 10% scored no marks. The key to achieving full marks was to go beyond just listing features of a flood hydrograph and to give some elaboration of each named feature. Some students appeared to confuse a storm hydrograph with the concept of soil moisture budget.

1.4

This AO3 skills question proved challenging for many students. Where students were familiar with scatter graphs and logarithmic scales they generally scored well. A surprisingly low number of responses recognised the positive relationship between the two variables, or made links between the two figures to analyse change between the two years. The best answers supported their points with clear use and manipulation of data, whilst weaker responses simply lifted values from the graphs. Few went beyond basic description of the data, with very few using or manipulating the data in a more sophisticated manner. Other responses did not score well when they drifted into explanation or possible reasons for the changes in urban populations and CO₂ emissions, this is AO2 and not valid in this AO3 question.

1.5

This question combined both AO1 and AO2 elements. This expected students to make links beyond the Water and Carbon Cycles specification content. Students had to make an evidence-based assessment of the scale of changes to stores of carbon in their named tropical rainforest case study. This question proved accessible to many, and over 40% of students scored in Level 3. These high-level responses gave clear detailed support to the points made, with good use of specific illustrative material. Some weaker responses were limited by a lack of differentiation between the different states of carbon in different stores, and often simply referred to "CO₂", when it would have been more accurate to simply refer to carbon.

1.6

Over half of students engaged well with this question, providing clear responses achieving marks in Level 3 or higher. These students generally scored well with respect to AO1 with clear and detailed knowledge of the water balance and processes within a drainage basin. The key to scoring well with respect to AO2 was the quality and clarity of the judgements made about the extent to which there is a balance between inputs and outputs of water in a drainage basin. Some responses supported their points with reference to their case study river catchment, although this was not a prescribed requirement of the question, it was credit worthy.

Weaker responses tended to either show little understanding of the concepts of the water balance or dynamic equilibrium in natural systems. Many also made flooding the focus of their response which often limited the level of credit awarded. Some of the weakest responses showed very little understanding of drainage basins as open systems.

Question 2

About 46% of the students attempted Coastal Systems and Landscapes. In previous series, this has proved to be the most popular physical option by far.

2.1

This proved to be a straightforward question with over 90% correctly identifying A as the correct option.

2.2

This question differentiated quite well, around two thirds of students identified B as the correct option.

2.3

Around 20% of students achieved full marks with a similar proportion scoring zero, so the question clearly differentiated between responses. Most students clearly had some knowledge of integrated coastal zone management. Many of the responses that scored less well focused on, or just described, traditional ideas of hard and soft engineering.

2.4

Although the average mark fell in Level 2, this AO3 skills question proved challenging for many students. Where students were familiar with scatter graphs and logarithmic scales they generally scored well. A surprisingly limited number of responses recognised the positive relationship between the two variables, or made links between the two figures to analyse change between the two years. The best answers supported their points with clear use and manipulation of data, whilst weaker responses simply lifted values from the graphs. Few went beyond basic description of the data, with very few using or manipulating the data in a more sophisticated manner. Other responses did not score well as they quickly drifted into explanation or possible reasons for the changes in population, this is AO2 and not valid in this AO3 question.

2.5

This question proved accessible to students around 90% of responses reached Level 2 or higher. The best answers gave clear assessment and supported their points with good specific details from their chosen case study. Many such responses also showed clear understanding of the specific future risks, with many showing clear understanding of issues relating to climate change, sea level rise and population pressures, amongst others. Weaker responses either did not focus

on the future, or showed little appreciation of the concept of "adaptation", and made general points about managing risks.

2.6

Just under half of students accessed this question well giving responses that reached Level 3 or better, but around a quarter also only scored in Level 1, so it did differentiate quite well. The best responses demonstrated clear detailed knowledge of a range of specific submergent and emergent features, and secure knowledge about possible factors that would affect their development in the future. Most started with the supposition that due to climate change and warming, sea levels will rise at an increasing rate in coming decades, with the best answers offering some quantitative support. Many then suggested that this global eustatic rise in sea level will indeed lead to the more rapid formation of submergent features. However, the best responses then countered this with reference to more localised areas where isostatic uplift may outpace the predicted sea level rise. Weak responses showed little understanding of the above, and often focused on erosional and depositional landforms.

Question 3

Around 10% of students opted for this question, making it the least popular physical option by far. (Although this is double the proportion that attempted it in the 2019 series.)

3.1

This was quite accessible and almost 90% correctly identified C as the correct option.

3.2

This question differentiated well, over half of students accurately choosing option C.

3.3

This question proved quite challenging to some, and differentiated well. Around a fifth of students achieved maximum or zero marks. For those who were clearly familiar with outwash plains the question proved straightforward and they gave clear and succinct responses, with specific features accurately identified and described. For the 20% achieving zero, outwash plains were clearly unfamiliar.

3.4

This AO3 skills question proved challenging for many students. Less than a third were able to score in Level 2. Where students were familiar with scatter graphs and logarithmic scales they generally scored well. A surprisingly limited number of responses made links between the two figures to analyse change between the two years. The best answers supported their points with clear use and manipulation of data, whilst weaker responses simply lifted values from the graphs. Few went beyond basic description of the data, with very few using or manipulating the data in a more sophisticated manner. Other responses did not score well as they quickly drifted into explanation or possible reasons for the changes in population, this is AO2 and not valid in this AO3 question.

3.5

This question differentiated well with around 30% reaching Level 3 and around 20% remaining in Level 1. Just over 70% of students engaged well with the question achieving Level 2 or higher. The best answers gave clear assessment and supported their points with good specific details from their chosen case study. Many such responses also showed clear understanding of the

specific future risks, with many showing clear understanding of issues relating to climate change and population pressures, amongst others. Weaker responses either did not focus on the future, or showed little appreciation of the concept of "adaptation", and made general points about managing risks. Some were limited by focusing on quite dated illustrative material, with a significant number summarising the historical impacts of the building of the Trans-Alaskan Pipeline for example.

3.6

Periglacial landscapes were the focus of this question. Those who confused this with other kinds of cold environments, e.g. glacial or glaciated, inevitable limited their access to credit. Answers scoring well gave clear assessment of possible future change, with explicit reference to the rate of that change. They included AO1 knowledge and understanding of factors such as possible future climate change. Where there was little focus on the speed of any possible change answers struggled to achieve much credit, as this constituted the AO2 application of knowledge and understanding and allowed access to the higher levels. More than 40% of students reached Level 3 or better, indicating that most students were familiar with periglacial features, and most engaged in some clear assessment.

Question 4

About 80% of the students answered the Hazards questions, making it by far the most popular option of Section B.

4.1

This question was accessible to the majority of students, but it differentiated quite well. Almost 70% correctly identified B as the correct option.

4.2

This proved to be a straightforward question for students with nearly all students correctly choosing option B.

4.3

This question differentiated responses well. Around a quarter gained all 3 marks or scored zero. The best responses gave a succinct summary of the formation of rift valleys. Many gave a short clear sequence of formation. Surprisingly many students appeared very unfamiliar with rift valleys, some even suggested glaciers were involved in their formation.

4.4

Considering the simplicity of the pie charts provided, this AO3 skills question proved quite challenging for many students. Those scoring well confidently used and manipulated the data, easily engaging with the wide range of values from 10s of thousands to billions. Many converted raw values to fractions and percentages with ease. These answers often made succinct and clear links between the two figures, identifying similarities and differences in the proportions of those affected by, or killed by the different hazards. The weakest answers rarely went beyond lifting values from the figures, or seemed to struggle with the idea that pie charts help to give a visual representation of each category's share of the total number. Inevitably, a number of students appeared unprepared for these AO3 skills questions and sought to explain and give reasons for the data, which would be AO2 content and so therefore did not gain any credit.

4.5

This question differentiated quite well, with almost 2/3 of students getting into Level 2 or higher, and only about 15% getting in to Level 3. The best responses had clear knowledge and understanding of the tectonic processes operating at different plate margins. These often also evidenced a clear grasp of how the nature of volcanic activity differed at these different boundaries. It was envisaged that most students would take a theoretical approach, and then possibly support points with some specific detail or evidence from a named example. Many did do this, but a significant number also made case studies of volcanoes in different tectonic settings the focus. This was creditworthy. Again, the best answers gave very clear assessment, and came to a clear view of the predictability of volcanic activity in different settings. The weakest answers displayed very little knowledge and understanding of either the nature of different plate margins or volcanic activity.

4.6

This question required students to make a link across the specification units. Such a question will always feature in each examination series. It is clear that many students were well prepared for this with over 60% of students achieving Level 3 or better. In this case, the link was from Hazards to Changing Places. The concept of human and physical characteristics of place, was integrated into this hazards question. Examiners encountered a range and variety of case studies. However, some centres clearly still interpreted the requirement to study a 'recent' event very broadly. Students were not penalised for this. The best answers had clear specific details from their case study, and carefully differentiated between the impacts on the human characteristics of place, and the impacts on the physical characteristics of place. At the highest levels there was an expectation that students would identify physical characteristics of place as referring to the natural environment/physical geography, not the human built environment.

One issue that was encountered by all examiners was the unexpectedly high number of students that did not see, or ignored, the requirement to make "reference to **a** seismic event", singular. The specification only directs students to study one recent seismic event, so the exam questions cannot ask for reference to more than one. This was problematic, but examiners awarded credit for the best AO1 knowledge and understanding for one case study and then tried to take a more holistic view of the quality of the AO2 assessment across the response as a whole.

Question 5

Around 20% of the students attempted Contemporary Urban Environments.

5.1

This question proved to be relatively straightforward, just less than 90% correctly identifying option B as the correct response.

5.2

This also proved to be an accessible question, with around 80% correctly choosing C as the correct option.

5.3

This question differentiated well. Around a quarter of students gained maximum marks, and just less than 40% scored either 0 or 1 mark. Those that were familiar with the term, were able to identify 2 or 3 clear reasons for social segregation in urban areas, with many also offering some illustrative evidence. Differences in wealth, and therefore ability to afford different housing, proved popular as part of a response, but others identified ethnicity, race and religion as equally plausible

reasons. The question does ask for causes, so maximum credit was reserved for those summarising more than one reason for the segregation. Like other 3-mark AO1 questions with "summarise" as the command, responses did need to go beyond just listing or identifying causes in order to achieve full credit.

5.4

Considering the simplicity of the pie charts provided, this AO3 skills question proved quite challenging for many students. Answers scoring well showed confidence in the use of data, including manipulation of data. Strong answers evidenced engagement with the wide range of values from low millions, to hundreds of millions and billions. Many students converted raw values to fractions and percentages with ease. These were often also able to make succinct clear links between the two figures, identifying similarities and differences in the proportions of urban populations in the two time periods. The weakest answers rarely went beyond lifting values from the figures, or seemed to struggle with the idea that pie charts help to give a visual representation of each category's share of the total number. Inevitably, a number of students appeared unprepared for these AO3 skills questions and sought to explain and give reasons for the data, which would be AO2 content and so therefore did not gain any credit.

5.5

This question proved accessible for most students, with around 40% accessing Level 3. Very few responses scored 3 marks or less. Generally, the AO1 knowledge and understanding of the two waste management strategies was good, with many also supporting their points with some illustrative examples or evidence. Therefore, it was the quality of the AO2 assessment that moved the best responses through the levels. It was pleasing that a number of students, widened the concept of "sustainability" beyond the physical environment, but looked at economic and social sustainability also. Although creditworthy, the question did not require a case study, and some students sought to give a detailed account of the waste management strategies in their learned case study. This could gain AO1 credit, where relevant, but a number then ran out of time, or space, to assess the sustainability, so gained few AO2 marks.

5.6

This question required students to make a link across the specification units. Such a question will always feature in each examination series. It is clear that many students found this question challenging, and just less than 40% scored Level 3 or higher. In this question, the link was from Contemporary Urban Environments to Changing Places. The concept of human and physical characteristics of place, was integrated into this urban environments question. Examiners encountered a range and variety of case studies. The best answers had clear specific details from their case study, and carefully differentiated between the impacts on the human characteristics of place, and the impacts on the physical characteristics of place. At the highest level there was an expectation that students would identify physical characteristics of place as referring to the natural environment/physical geography, not the human built environment.

A significant issue for many students was a lack of clear specific understanding of the concept of counter-urbanisation. In some answers it was clear that the term was unfamiliar to some students. Some answers were definitely addressing concepts such as deindustrialisation, suburbanisation or even urban sprawl over time periods such that the case studies provided could not be seen as counter-urbanisation. Examiners agreed a flexible view in this regard as the exact nature of counter-urbanisation can differ in different settings. However, for higher level marks examiners were expecting the idea of moving away from the urban area, rather than just outwards from the centre.

One issue encountered by all examiners was the unexpectedly high number of students who did not address the requirement to make "reference to **an** urban area", singular. This was problematic, but examiners awarded credit for the best AO1 knowledge and understanding for one case study and then tried to take a more holistic view of the quality of the AO2 assessment across the response as a whole.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the <u>Results Statistics</u> page of the AQA Website.