Questions matter

A Level Geography

7037/2: Human geography

Report on the exam

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Summary

The examination proved to be quite accessible enabling many students to score well in both the core sections and in their chosen option. At the same time, the overall distribution of marks across the whole mark range suggested that the paper discriminated well

Students appeared to be fully familiar with the structure of the examination and there were very few incidences of rubric infringement. To complete the thirteen questions in the time allowed is clearly demanding but students were generally well prepared and the vast majority completed their responses with answers of an appropriate length.

As is the usual practice with this paper, students complete two compulsory core sections and then select one of the three options. Each of the different question types and tariffs showed good quality responses with students addressing the relevant Assessment Objectives appropriately.

There was good evidence of geographical knowledge and understanding and good application of knowledge using the resources within the paper. Resources used for the AO3 questions allowed students to demonstrate a range of geographical skills.

As in previous series, option 3 (Contemporary urban environments) and option 4 (Population and the environment) were more popular choices amongst students than option 5 (Resource security).

Areas where students excelled

In the 4-mark questions assessed exclusively in terms of AO1, Q1.1 was answered well and good knowledge of the institutions that regulate global systems was in evidence. There was frequent reference to the role of the UN as prompted in the question, but students also showed suitably referred to-institutions such as the WTO, IMF and WHO and their roles in global governance.

Q3.1 was also answered well with many students familiar with urban microclimates and how urban form can impact upon local weather and climate. Many quickly accumulated marks by making clear links between the aspects of urban form (such as building materials and structures) and the impact on temperature, wind flows and rainfall.

The AO3 (.2) questions provided opportunities for students to demonstrate their geographical skills of analysis and interpretation of a variety of graphical presentations and maps. Level 2 was accessed frequently as students showed an awareness of general patterns and trends, utilising the data for some manipulation and / or identification of anomalies. There were also plenty of opportunities in 1.2 and 2.2 for students to demonstrate links within and between the resources.

The 6- and 9-mark questions in each section referring to stimulus material (.3) were attempted with some confidence. Students used their own knowledge and understanding alongside the resources to answer the question and this was most effectively done in the options (3.3, 4.3 and 5.3). Each scenario required students to consider an area of the specification (mitigation strategies for non-communicable diseases, edge cities and the environmental impacts of dams / barrages), link the resource and utilise their own knowledge. Students are clearly well prepared for these questions and relatively few gave descriptive or analytical responses based solely on the novel resource.

The 9-mark questions in the options all showed a mean score well into Level 2 with some good knowledge and evaluation of sustainable urban drainage, managing soil problems and the relationship between physical and energy mix.

The 20-mark essay questions continue to illustrate the strong subject knowledge, evaluative skills and preparation of many students. These questions differentiate well, and the increasing confidence shown in these was demonstrated with over 60% of entries attaining at least Level 3. In 1.4 there was strong subject knowledge relating to the governance of the global commons (policies and issues pertaining to Antarctica were most frequently seen) and in 2.4 students demonstrated good knowledge and understating of either their local or distant place study in assessing the role of endogenous factors shaping lived experience.

Areas where students struggled

In the 4-mark (AO1) questions, the key point to note was the difficulty some students had with outlining how they used a qualitative data source, such as 2.1, to investigate lived experience in the past in their local place–addressing the requirements of the question. A significant proportion simply defined the idea of qualitative data or described a source without linking it to the past lived experience required.

In the options, 4.1 also proved more difficult as the concept of the ecological footprint was not well understood by some and many assumed it to be the same as a carbon footprint. In 5.1 the key was to outline the global pattern of water availability, whereas some responses took a more localised approach to their answers.

Relatively few students gave solely descriptive accounts of the novel resources provided in the .3 questions. Where this did occur, students only obtained credit in Level 1.

There was good subject specific knowledge evident in the .4 9-mark questions in the options, but students would be advised to include relevant examples of places / situations to add weight to their theoretical knowledge and assessment.

In the 20- mark essays there were some areas in which students struggled. In 2.4 some responses referred to both their local and distant places rather than just one as stressed in the question. In this case the best response was credited by examiners.

Q3.5 also highlighted a lack of knowledge regarding urban regeneration policies from 1979. Whilst the specification does not list any particular policies, a number of responses only referred to contemporary (post 2012) urban strategies.

Point marked questions

4-mark questions are point marked. A mark may be awarded where a student makes a single relevant point and subsequent marks awarded (if applicable) where the student develops those points with additional knowledge.

Levels marked questions

6-mark, 9-mark and 20-mark questions are levels marked where the response is holistically marked against the assessment objectives, given a mid-level mark initially and then a fine tune mark awarded within that level.

Assessment Objectives (AOs)

AO1: Demonstrate knowledge and understanding of places, environments, concepts, processes, interactions and change, at a variety of scales (30-40%).

AO2: Apply knowledge and understanding in different contexts to interpret, analyse and evaluate geographical information and issues (30-40%).

AO3: Use a variety of relevant quantitative, qualitative and fieldwork skills to:
- investigate geographical questions and issues
- interpret, analyse and evaluate data and evidence
- construct arguments and draw conclusions (20-30%)

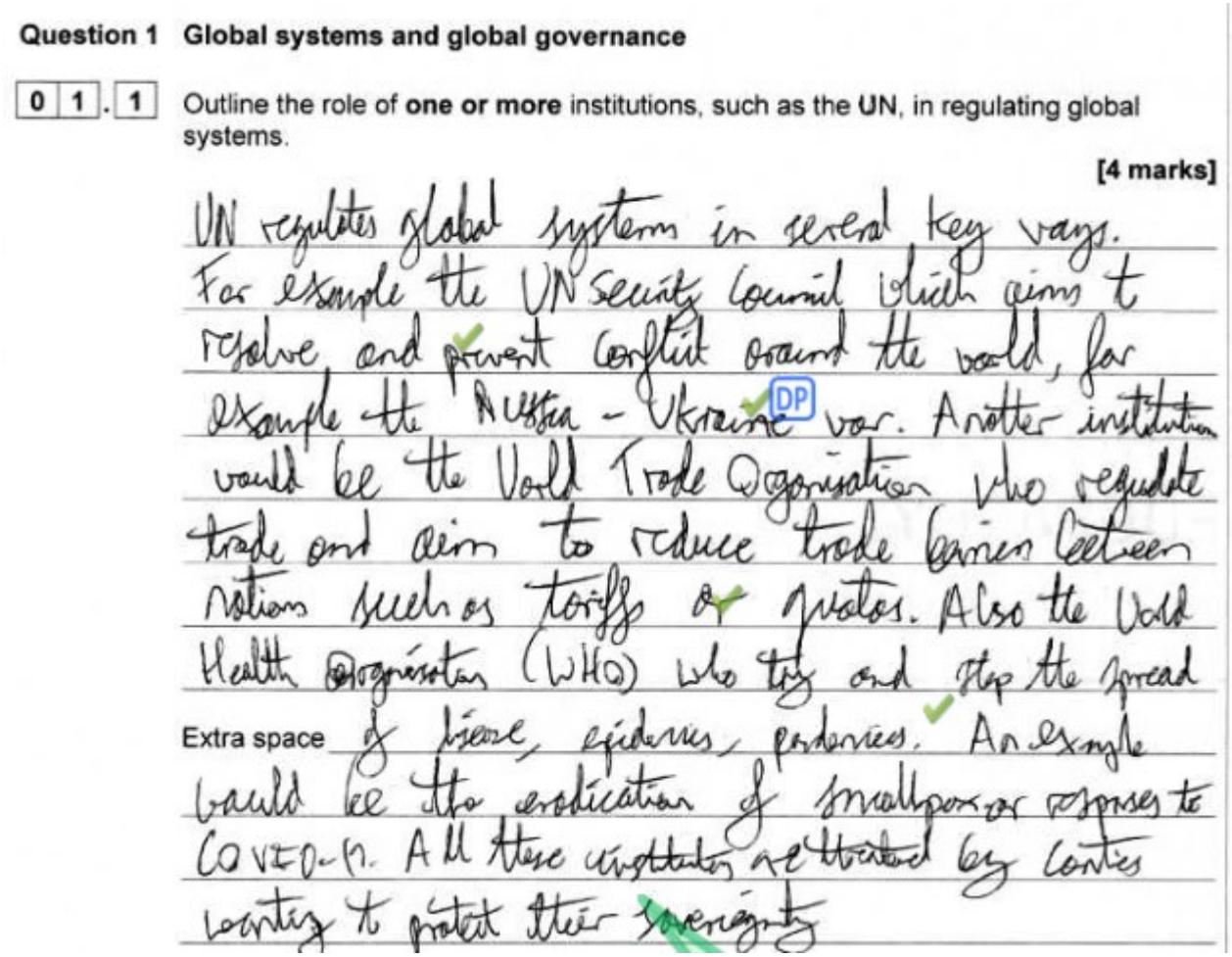
4-mark AO1 questions

These questions assess knowledge and understanding and require students to outline key processes, concepts, interaction and change.

Qualities seen in more successful responses

To score well in these questions, students should aim to write ~~a~~ clear and focused responses that ~~is~~ are focused directly on the concept being assessed. Knowledge of the key area in the specification is vital and students should aim to construct a direct answer and provide a suitable example.

For example, in this response the student states that the UN attempts to resolve and prevent conflicts, which is exemplified with reference to the Russia-Ukraine war. Further credit comes from the description of the roles played by both the World Trade Organisation and the World Health Organisation. It scored the maximum 4 marks.



Question 1 **Global systems and global governance**

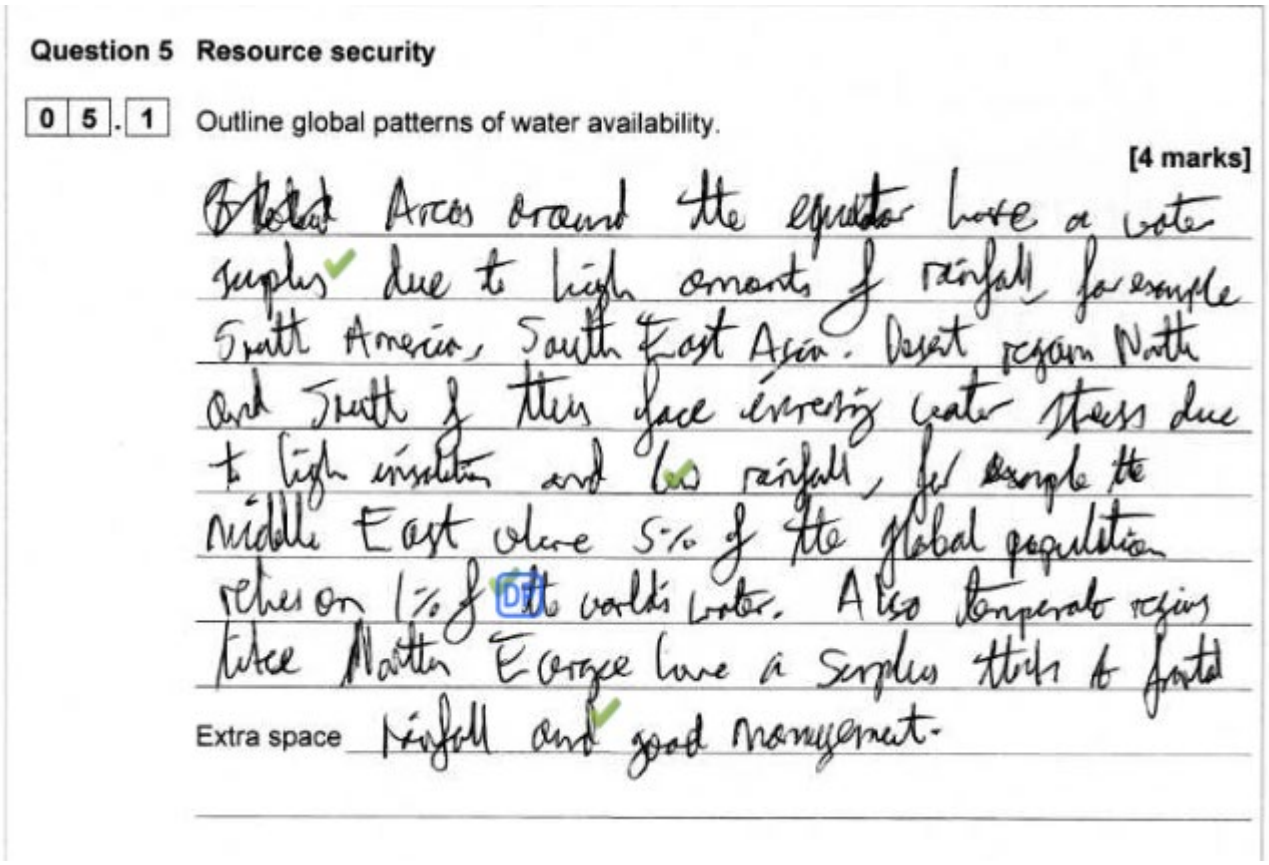
0 1 . 1 Outline the role of **one or more** institutions, such as the **UN**, in regulating global systems.

[4 marks]

UN regulates global systems in several key ways. For example the UN Security Council which aims to resolve and prevent conflict around the world, for example the Russia - Ukraine DP war. Another institution would be the World Trade Organisation who regulate trade and aim to reduce trade barriers between nations such as tariffs or quotas. Also the World Health Organisation (WHO) who try and stop the spread of disease, epidemics, pandemics. An example would be the eradication of smallpox or responses to COVID-19. All these institutions are trusted by countries country to protect their sovereignty

Extra space

A second example is shown below from Question 5.1. This was also awarded 4 marks and takes a straightforward global approach to outlining patterns of water availability. It is concise and gets the 4 AO1 marks in a clear and focused way.



Question 5 Resource security

0 5 . 1 Outline global patterns of water availability.

[4 marks]

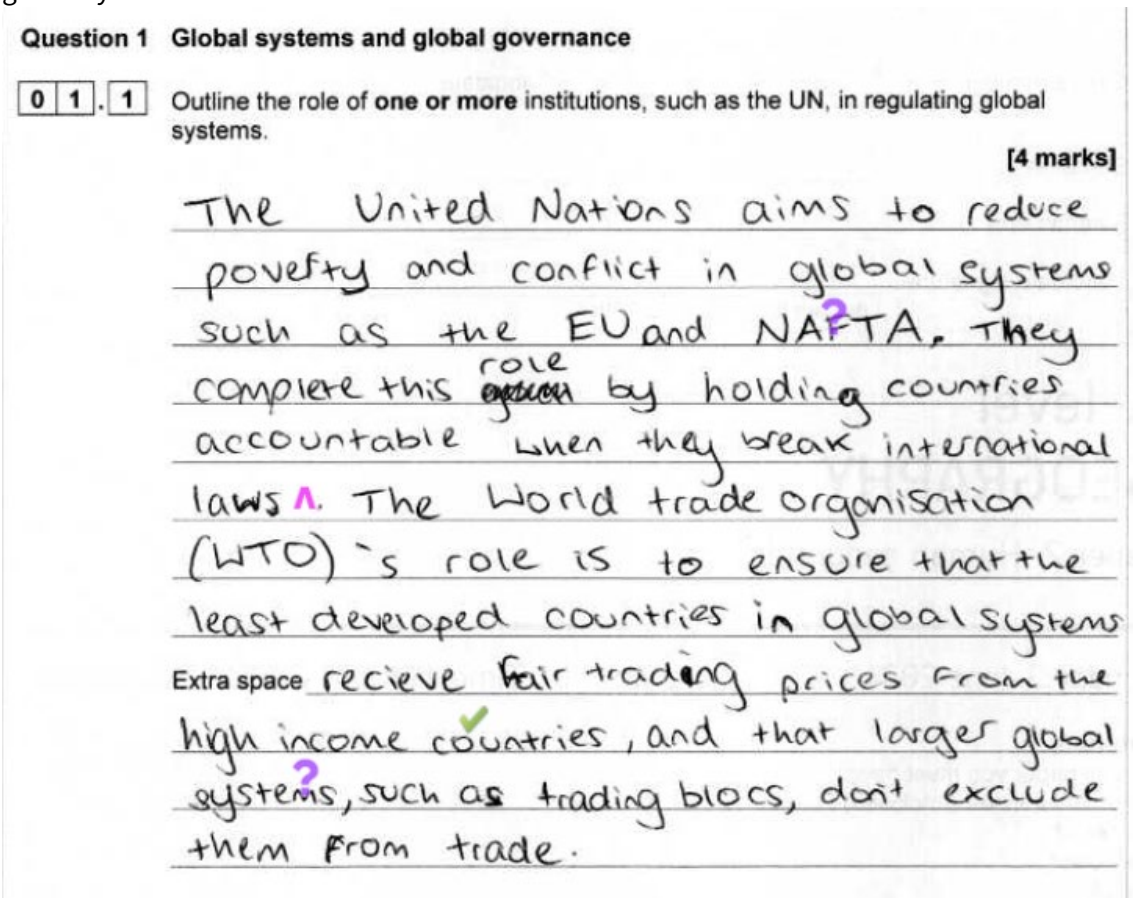
Global Areas around the equator have a water surplus ✓ due to high amounts of rainfall for example South America, South East Asia. Desert regions North and South of these face increasing water stress due to high insolation and low ✓ rainfall, for example the Middle East where 5% of the global population relies on 1% of the world's water. Also temperate regions like North East have a surplus which is forced

Extra space rainfall and ✓ good management.

Limitations of less successful responses

The weaker responses to the 4 mark questions tend to show a poor understanding of the key concept or a vague / unclear awareness of the topic. These responses often confuse ideas and fail to state ideas clearly.

The response below was awarded 1 mark as the point about the role of the World Trade Organisation is just about credit-worthy. The rest shows confusion between different organisations and their roles in a global system.



Question 1 **Global systems and global governance**

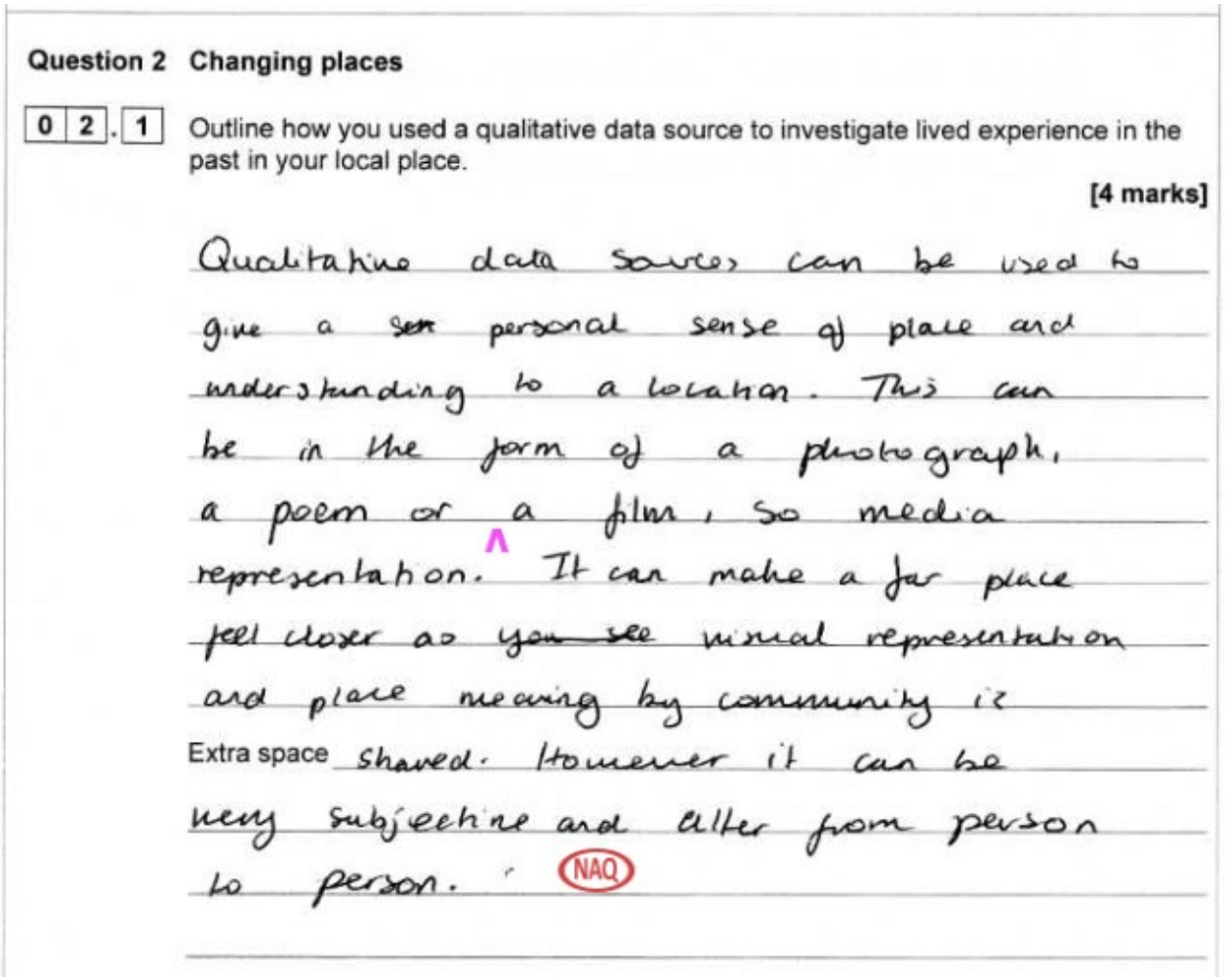
0 1 . 1 Outline the role of **one or more** institutions, such as the UN, in regulating global systems.

[4 marks]

The United Nations aims to reduce poverty and conflict in global systems such as the EU and NAFTA. They complete this role by holding countries accountable when they break international laws. The World trade organisation (WTO)'s role is to ensure that the least developed countries in global systems

Extra space recieve fair trading prices from the high income countries, and that larger global systems, such as trading blocs, don't exclude them from trade.

In the example below, the response has not followed the commands of the question and whilst ~~they~~ it describes the role of a qualitative source and give a number of examples it does not say how it was used to investigate past lived experience in their local place. This response received no credit.



Question 2 Changing places

0 2 . 1 Outline how you used a qualitative data source to investigate lived experience in the past in your local place.

[4 marks]

Qualitative data sources can be used to give a ~~sen~~ personal sense of place and understanding to a location. This can be in the form of a photograph, a poem or a film, so media representation. It can make a far place feel closer as ~~you see~~ visual representation and place meaning by community is shared. However it can be very subjective and alter from person to person.

NAQ

Extra space

6-mark AO3 skills questions

These questions assess how students interpret, analyse and evaluate data, evidence and resources.

Qualities seen in more successful responses

The resources used in this examination paper included a compound bar graph, scatter graph, maps, dot maps, tables and proportional symbols. There were no calculations or 'practical tasks' involved in the AO3 skills this time. In order to gain Level 2 marks, students should draw out the overall patterns or trends of the data, exemplify the points they are making, look for anomalies and try to do more than simply make statements that refer to the basic evidence shown. In many cases it is possible to look at the extremes of the data, provide some basic data manipulation or contrast so that there is evidence of analysis rather than basic description. With the interpretation of the maps, the best answers made use of the map conventions (e.g. scale, direction) and made clear links or contrasts between the two maps.

The example below shows all of these characteristics in that it gives a general overview of both resources, uses some selected data to illustrate this, identifies those countries that do not fit the general pattern and does some data manipulation (difference, percentages). It even provides a little critique of the way the data is presented which is part of the AO3 strand to '*interpret, analyse and evaluate data and evidence*'.

Figures 1a and **1b** are in the insert.

Figure 1a shows percentage workforce in skill level categories in selected south-eastern Asian countries in 2016.

Figure 1b shows GDP per capita and adult literacy rates in 2016 in the south-eastern Asian countries shown in Figure 1a.

0 1 . 2 Analyse the data shown in **Figure 1a** and **Figure 1b**.

[6 marks]

AO3 As a general trend, the 6 countries with the highest literacy rate have the highest GDP per capita. The anomaly to this is the Philippines, which has AO3 a 96% literacy rate but a GDP of $~~7000~~ $500. Phillipines literacy rate is ~~18% higher than~~ 26% higher than AO3 Lao PDR however the GDP is only 15.4% higher. As a general trend, the areas with the highest proportion AO3 of high skilled workers also have the highest GDP. The anomaly to this is the Phillipines, which has 1% AO3 less high skilled workforce ~~than Malaysia~~ than Malaysia, however Malaysia's GDP per capita is 4.06x greater. A critique of this graph is that you cannot see Extra space AO3 these countries spatially to evaluate global location on all of these factors.

L2

In this example the student follows the same approach with the maps from Q2.2. The overall pattern is noted, there are links between the two resources, data is used in support and anomalies are identifies. This also obtained the full 6 marks.

Figures 3a and **3b** are in the insert.

Figure 3a shows percentage population in the Falmouth area with no education qualifications in 2011.

Figure 3b shows the index of multiple deprivation (IMD) map for the Falmouth area in 2011.

0 2 . 2 Interpret the maps shown in **Figure 3a** and **Figure 3b**.

[6 marks]

As a general trend, the areas with the highest level of deprivation such as Northern Falmouth also have the ~~lowest~~ highest AO3 percentages of the population with no education ~~or~~ qualifications. The anomaly to this is in the centre of Falmouth which is 3 on the IMD decile however has areas where between AO3 0-6.1% of the population have no eduation or qualifications. As a general trend, the South of Figure 3b is more AO3 deprived than the North. The anomaly of this is around Penryn with an average deprivation of 4. The average deprivation AO3 is the South is 19.6% higher (5.6) than the North (6.7). A critique of this graph is that you cannot see much of the education data in Figure 3a, only in certain areas, Extra space which makes analysis much more tricky.

L2

Limitations of less successful responses

Less successful responses to these questions sometimes fail to identify key trends or patterns, miss clear connections between resources and sometimes not address the question by offering explanation for the data being shown.

In the example below, the response was awarded the top of Level 1, 3 marks as it does identify the broad pattern on each map, uses some data in support and even identifies anomalies but it fails to connect the two resources and treats them as two separate entities.

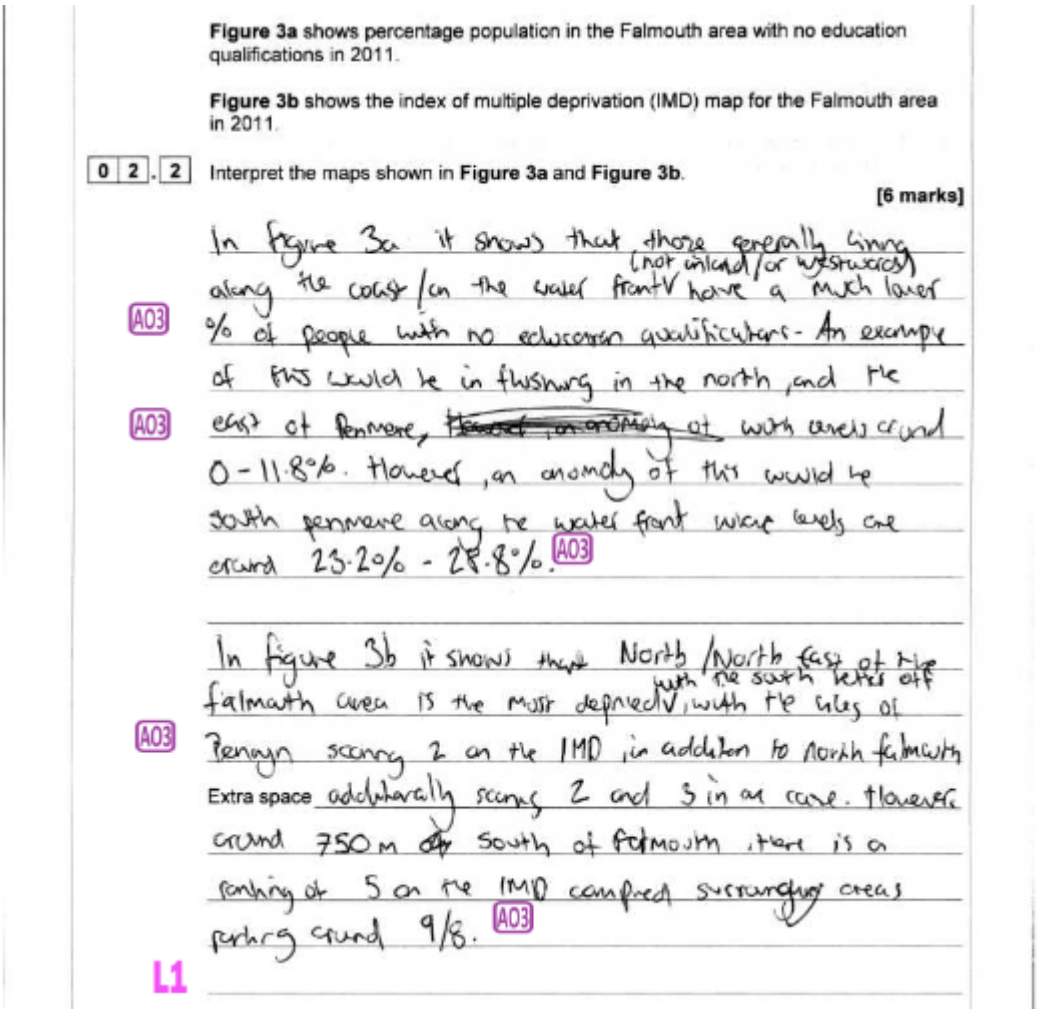


Figure 3a shows percentage population in the Falmouth area with no education qualifications in 2011.

Figure 3b shows the index of multiple deprivation (IMD) map for the Falmouth area in 2011.

0 2 . 2 Interpret the maps shown in **Figure 3a** and **Figure 3b**.

[6 marks]

In figure 3a it shows that those generally living along the coast (not inland / or westwards) on the water front have a much lower AO3 % of people with no education qualifications - An example of this would be in Flushing in the north, and the east of Penmere, ~~[illegible]~~ with areas around 0 - 11.8%. However, an anomaly of this would be south penmere along the water front where levels are around 23.2% - 28.8%. AO3

In figure 3b it shows that North / North east of the falmouth area is the most deprived, with the south levels off AO3 Penryn scoring 2 on the IMD, in addition to North falmouth Extra space additionally scoring 2 and 3 in one case. However around 750m ~~off~~ South of Falmouth, there is a ranking of 5 on the IMD compared surrounding areas perhaps around 9/8. AO3

L1

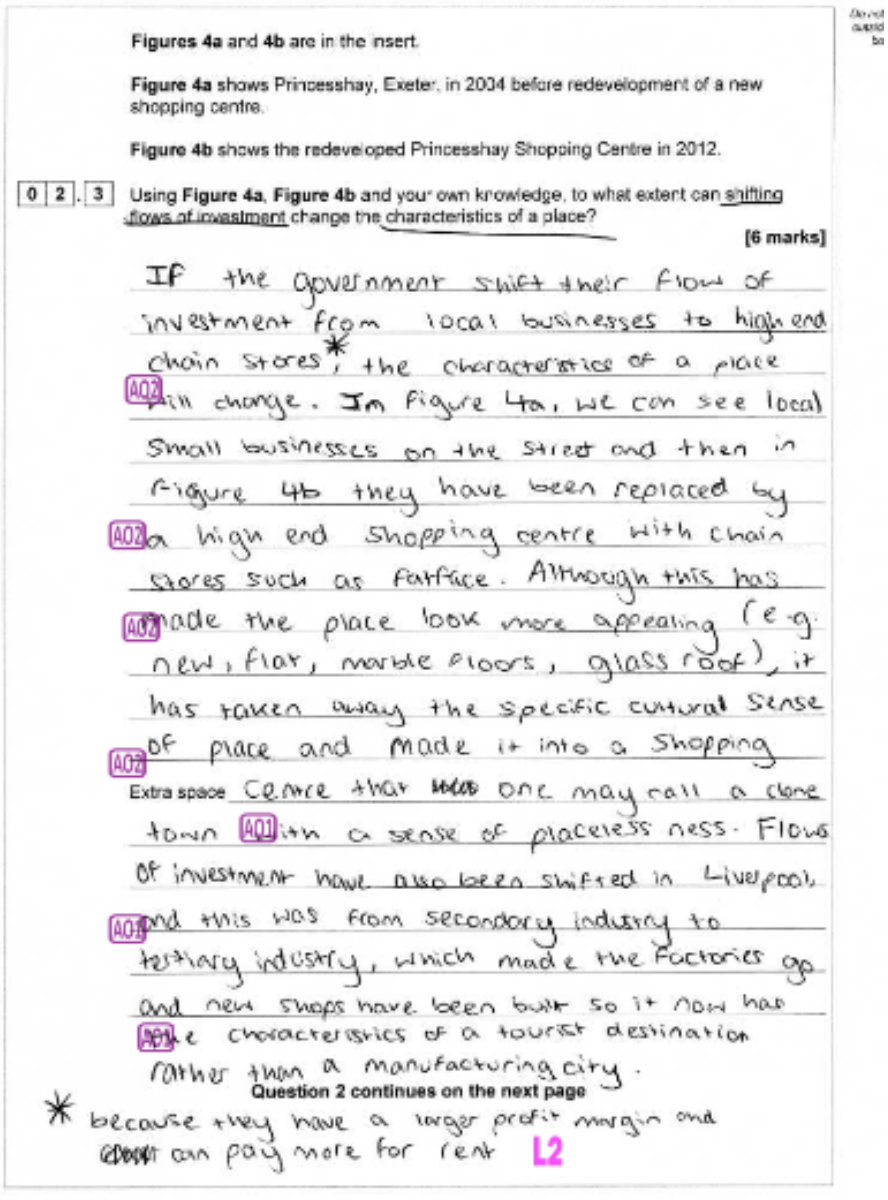
6- & 9-mark AO1/AO2 questions with stimulus

These questions assess knowledge and understanding when applied to novel situations (resource prompts).

Qualities seen in more successful responses

The AO1/AO2 questions using a novel resource, aim to test students' abilities to apply their knowledge of a key idea to the situation presented and bring in some of their own knowledge to support their argument. In these questions, AO2 is more heavily weighted than AO1 and therefore the argument along with the application from the resource is key but 'own knowledge' ~~as well~~ also gains credit.

The response shown below engages with the resource and shows an understanding of the changes that have taken place in Princesshay, linking them to change in character. It also incorporates some of the student's own knowledge into the answer with reference to placelessness and clone towns as well as a brief comparison with changes that have occurred in Liverpool. The answer could have explained the change more clearly but there is plenty here to place this in Level 2 and it was given 6 marks.



Figures 4a and **4b** are in the insert.

Figure 4a shows Princesshay, Exeter, in 2004 before redevelopment of a new shopping centre.

Figure 4b shows the redeveloped Princesshay Shopping Centre in 2012.

0 2 . 3 Using **Figure 4a**, **Figure 4b** and your own knowledge, to what extent can shifting flows of investment change the characteristics of a place?

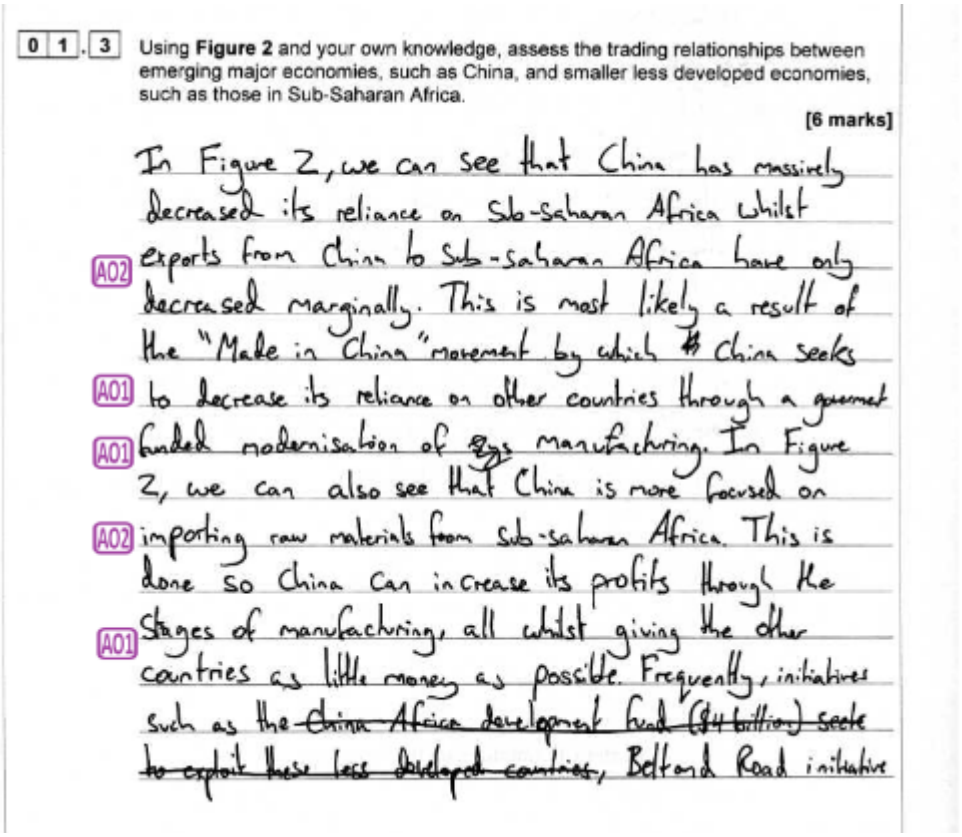
[6 marks]

If the government shift their flow of investment from local businesses to high end chain stores*, the characteristics of a place AO2 will change. In figure 4a, we can see local small businesses on the street and then in figure 4b they have been replaced by AO2 a high end shopping centre with chain stores such as Fatface. Although this has AO2 made the place look more appealing (e.g. new, flat, marble floors, glass roof), it has taken away the specific cultural sense AO2 of place and made it into a shopping Extra space centre that ~~does~~ one may call a clone town AO1 with a sense of placeless ness. Flows of investment have also been shifted in Liverpool AO1 and this was from secondary industry to tertiary industry, which made the factories go and new shops have been built so it now has AO1 the characteristics of a tourist destination rather than a manufacturing city.

Question 2 continues on the next page

* because they have a larger profit margin and ~~could~~ can pay more for rent L2

In this next response, from Section 1, Global systems and global governance, the student clearly does what is required by assessing the trading relationships between China and sub-Saharan Africa, uses evidence from the resource to support the answer and includes some of their own knowledge to add weight to the response. It was assessed as Level 2, 6 marks.

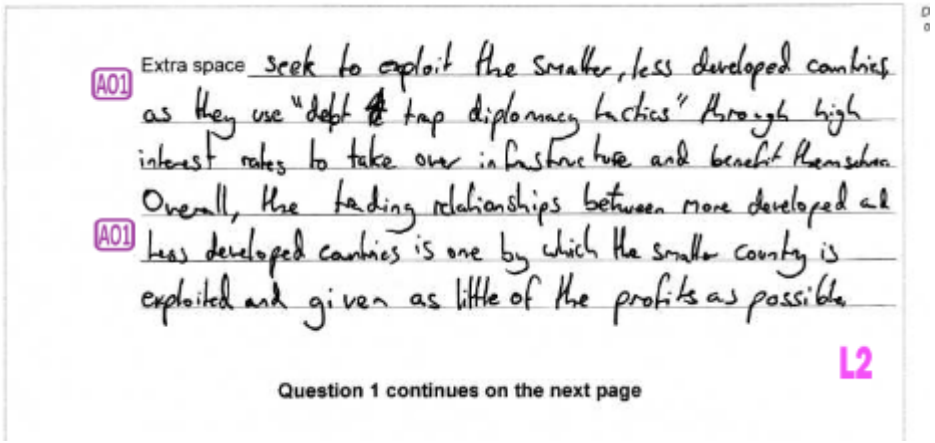


0 1 . 3 Using **Figure 2** and your own knowledge, assess the trading relationships between emerging major economies, such as China, and smaller less developed economies, such as those in Sub-Saharan Africa.

[6 marks]

In Figure 2, we can see that China has massively decreased its reliance on Sub-Saharan Africa whilst exports from China to Sub-Saharan Africa have only decreased marginally. This is most likely a result of the "Make in China" movement by which China seeks to decrease its reliance on other countries through a government funded modernisation of its manufacturing. In Figure 2, we can also see that China is more focused on importing raw materials from Sub-Saharan Africa. This is done so China can increase its profits through the stages of manufacturing, all whilst giving the other countries as little money as possible. Frequently, initiatives such as the ~~China-Africa development fund ($4 billion) seek to exploit these less developed countries~~, Belt and Road initiative

AO2 AO1 AO1 AO2 AO1



Extra space seek to exploit the smaller, less developed countries as they use "debt trap diplomacy tactics" through high interest rates to take over infrastructure and benefit themselves. Overall, the trading relationships between more developed and less developed countries is one by which the smaller country is exploited and given as little of the profits as possible

AO1 AO1

L2

Question 1 continues on the next page

Limitations of less successful responses

When students do not score so well on these questions it can usually be put down to one of three things. Either, they analyse the resource (doing what they should be doing with the .2 questions), only comment on the resource as a route towards answering the question (so use none of their 'own knowledge') or the reverse where they use only their own knowledge (AO1) and do not interface with the resource (AO2).

In the response to 2.3 below, the student makes implicit reference to the resource and states some of the ways that places change due to investment but the ideas are rather basic and there is no additional knowledge added. It was awarded 2 marks in Level 1.

0 2 . 3 Using **Figure 4a**, **Figure 4b** and your own knowledge, to what extent can shifting flows of investment change the characteristics of a place?

[6 marks]

Flows of investment can come from local or governmental organisations (externally or internally). **AO1** If an area is more deprived, it is likely to come from governments in the form of regeneration or rebranding. Before the investments, the area could have felt a colder or unwelcoming place with little money, whereas now it is a **AO2** brighter more energetic area to spend time in.

However locals may protest against this due to the threat towards / loss of

Extra space local businesses. There have also **AO2** been green spaces lost to the building. Overall, it may be more inviting to an outsider rather than an insider.

In the next example, the student engaged with the resource and quoted evidence from it to present their view that Le Defense is an edge city but shows little actual knowledge of the edge city concept. It was assessed at the top of Level 1 and awarded 3.

Figure 6b shows the central area of La Défense.

0 3 . 3 Using **Figure 6a**, **Figure 6b** and your own knowledge, to what extent do you agree that La Défense shows the characteristics of an edge city?

[9 marks]

AO1 An edge city is a city which is developed in the surrounding areas of a major city. Figure 6a clearly demonstrates how La Defense is situated 3km west of the centre of Paris. This shows how La Defense is a city which has developed on the edge of another city. and This can be seen in figure 6a as the picture is a visual representation of how the tall nse buildings and developments which have been built in La Defense to make it a city which is situated in the surrounding AO2 area of Paris, separated by a strip of green space. This shows how La Defense shows characteristics of an edge city as it has a geographically close location AO2 however it is seperate from the centre of Paris due to the type of buildings which have been built and the use of the land. Figure 6b also represents La Defense as an edge city as it shows it as its own individual city due to the Extra space design and location of the buildings. A1

L1

9-mark AO1/AO2 questions

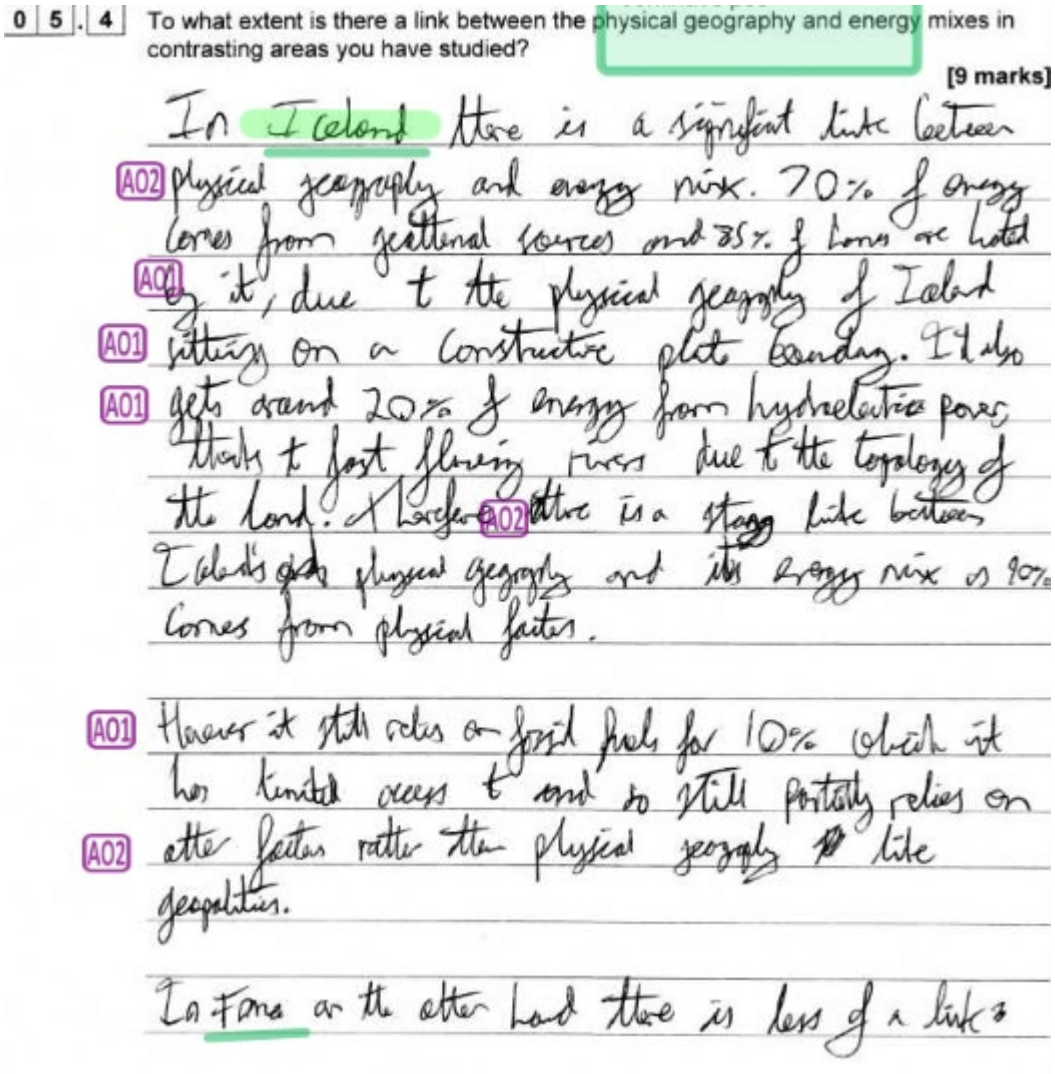
These questions assess knowledge and understanding without the use of resources.

Qualities seen in more successful responses

These questions assess students' subject knowledge and application within the specification units. Responses should have a balance of AO1 knowledge and AO2 evaluation / assessment in which the subject knowledge is applied to actually answer the question.

Good answers show detailed knowledge and a clear and explicit evaluation / assessment.

In this example drawn from the Resource security option, the student uses Iceland and France as their contrasting areas of study and makes an immediate statement regarding the extent of the link between physical geography and energy mix in Iceland. The response shows good AO1 knowledge and synoptic links to the physical geography specification. There is detailed knowledge of the background to the energy mix of both Iceland and France and the contrasts are clear. This was assessed as Level 3 and awarded 8 marks.



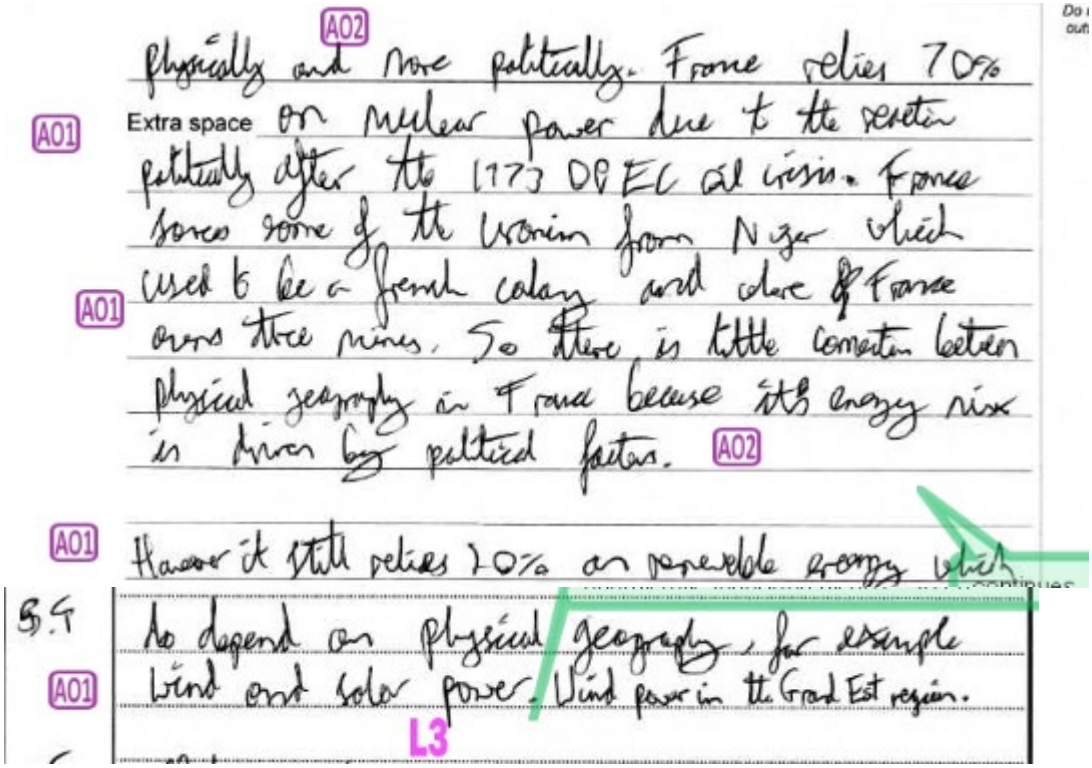
0 5 . 4 To what extent is there a link between the physical geography and energy mixes in contrasting areas you have studied?

[9 marks]

In Iceland there is a significant link between physical geography and energy mix. 70% of energy comes from geothermal sources and 35% of homes are heated by it, due to the physical geography of Iceland sitting on a constructive plate boundary. It also gets around 20% of energy from hydroelectric power, thanks to fast flowing rivers due to the topology of the land. However there is a strong link between Iceland's physical geography and its energy mix as 90% comes from physical factors.

However it still relies on fossil fuels for 10% which it has limited access to and so still partially relies on other factors rather than physical geography like geopolitics.

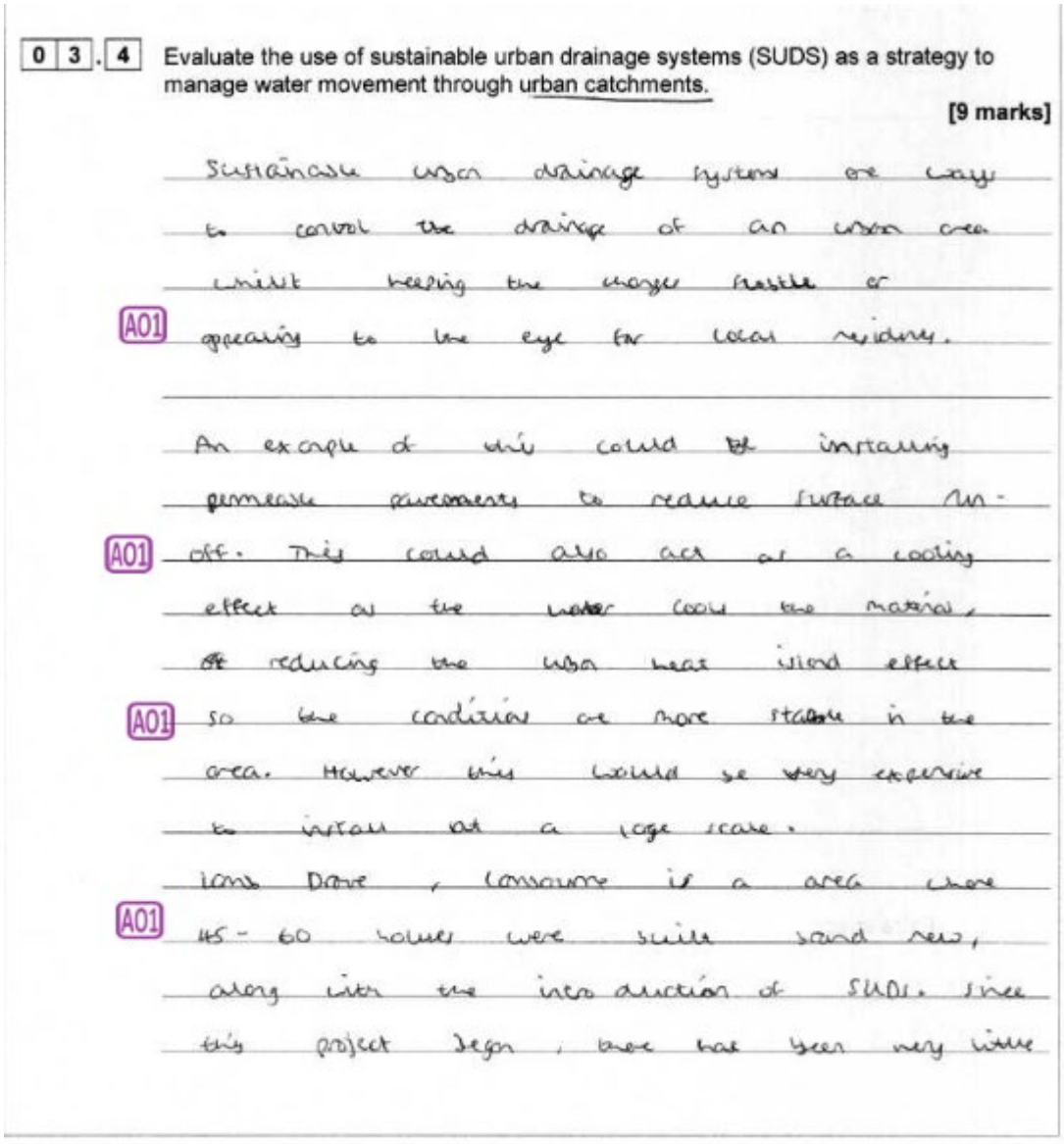
In France on the other hand there is less of a link



Limitations of less successful responses

Less successful responses either did not understand the key concept being tested, so students who did not know about sustainable urban drainage systems, the management of soil problems or the links between energy mix and physical geography would clearly not score well. A lack of depth of knowledge or a failure to fully assess / evaluate the issue would also lead to lower marks.

In the example below (from 3.3 Contemporary urban environments) the response shows some basic knowledge of SUDs (they refer to permeable pavements and swales), but limited understanding of how they work and there is little evaluation of their use as ways of managing water movement through urban catchments. It was given some credit at the top of Level 1, 3 marks.



0 3 . 4 Evaluate the use of sustainable urban drainage systems (SUDS) as a strategy to manage water movement through urban catchments.

[9 marks]

Sustainable urban drainage systems are ways to control the drainage of an urban area whilst keeping the image flexible or appealing to the eye for local residents.

AO1

An example of this could be installing permeable pavements to reduce surface run-off. This could also act as a cooling effect as the water cools the material, reducing the urban heat island effect

AO1 so the conditions are more stable in the area. However this would be very expensive to install at a large scale.

AO1 Long Drove, Cambourne is a area where 45 - 60 homes were built and new, along with the introduction of SUDs. Since this project began, there has been very little

need for construction maintenance due to

Extra space the productivity of the SUDs.

Swales are another example of an SUD that

A01 look rightly like a ditch with grass in

the bottom of it. Although these are very

useful, they do not have the capacity of

? rivers to reduce flooding.

Overall, SUDs are definitely sustainable but

not on a large scale due to the

example and size. L1

20-mark questions

These questions assess knowledge, understanding and application: constructing arguments and drawing conclusions.

Qualities seen in more successful responses

The 20 mark questions are a good way to assess students' deeper knowledge of a particular area of the specification, the case studies and examples used are often interesting and in many cases demonstrate secure place knowledge. The key is always to demonstrably address the question and to ensure that the application of knowledge and understanding (AO2) is evident with AO1 knowledge used in support.
The best responses are clearly organised, follow a logical structure and take a clear and sustained line of reasoning before reaching a conclusion based on the evidence provided.

When suitably focused full marks can be obtained-by essays that use the available space in the answer booklet although many do go beyond the allotted 40 lines of answer space.

This example of a response to 1.4 shows a very good understanding of the global commons, detailed knowledge and understanding of policies to manage / mitigate impacts on Antarctica and climate change and possible impacts on lives of people around the world. The answer shows a detailed understanding of these approaches and makes effective evaluative statements before coming to a clear conclusion. This was assessed in Level 4 and it was awarded 20 marks. Responses do not need to be 'perfect' to be given this mark.

which reduces the affect on the atmosphere, oceans and Antarctica. Therefore, through this governance of the global commons via trying to mitigate the rate of climate change has directly impacted

AO1 my life and others as the atmosphere would not have warmed as

AO1 much as it could have possibly and neither have the oceans as they absorb 97% of excess heat from the atmosphere.

However, this target of limiting global warming to 1.5°C has been surpassed earlier in 2024, therefore proved not to be as effective in impacting lives as it proved that the global governance of the global commons is not as useful in protecting

AO2 the global commons. ~~Furthermore, even with this global governance~~

Alternatively, the global governance of Antarctica as a global common includes IGOs such as the Antarctic Treaty

AO1 System (ATS) which look to protect Antarctica as a global common through reducing threats to the pristine environment.

AO1 Additionally, INGOs such as ~~ASOC~~ the Antarctic and Southern

Extra space Ocean Coalition (ASOC) aim to prevent the impacts of climate change on Antarctica as Antarctica is prone to melting from global warming which could lead to a positive feedback loop

AO1 as the albedo effect decreases with more ice melting, therefore the atmosphere retains even more heat and increases melting further. So, although ~~there~~ global governance of Antarctica through the ATS and ASOC have been some success due to Antarctica not being as affected from human activity, it does not

AO2 have a direct impact on any life or lives of others as Antarctica

is not a popular tourist destination, nor a place near to me to affect me directly. So, the global governance of Antarctica as a global common does not have as big of a direct

AO2 impact as the global governance climate change does which govern the atmosphere, oceans and Antarctica.

However, it can be argued that although the governance of Antarctica does not affect my life directly, it can affect others around the globe as melting of Antarctica's land ice/glaciers can contribute to eustatic sea level rise which could affect countries prone to flooding like the Maldives, therefore

AO2 would majorly effect them.

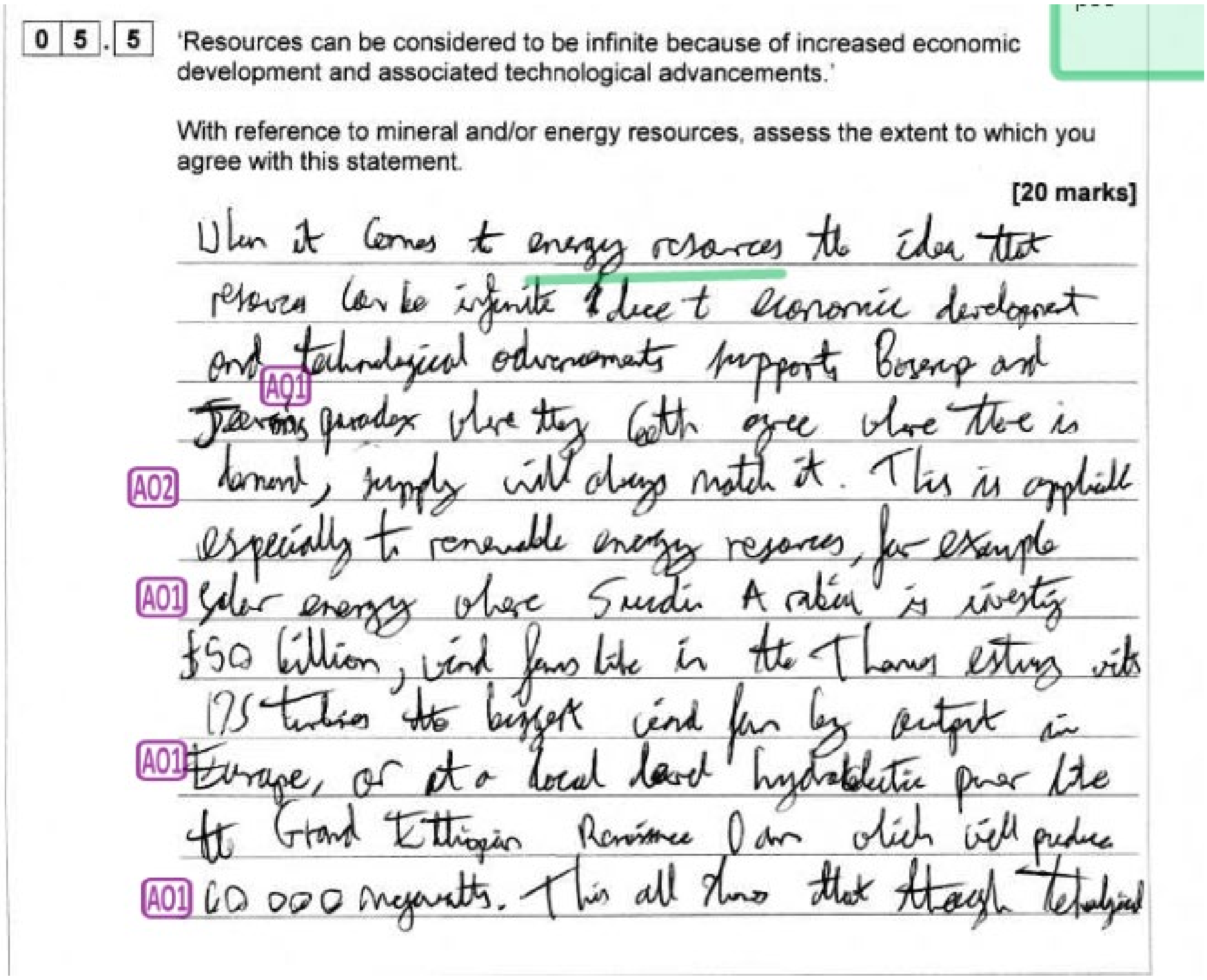
In conclusion, I believe, the global governance of climate change to protect the global commons of the atmosphere, the oceans and Antarctica does have a significant direct impact on

End of Section A

my life and others as climate change warms temperatures which is something we feel all the time, therefore governance of this would reduce the warming effect felt. However, governance of Antarctica does not have as big of a effect on me or others as it is not a direct impact. However, eustatic sea level rise from melting of land ice/glaciers could affect countries

AO2 prone to flooding like the Maldives.

A further example of a Level 4 response is taken from the Resource security option, 5.5 below. It shows detailed knowledge and understanding of the topic, utilises examples well and brings in some concepts showing wider geographical understanding. It also ends with a clear evaluative conclusion. This was awarded 18 marks in Level 4.



0 5 . 5 'Resources can be considered to be infinite because of increased economic development and associated technological advancements.'

With reference to mineral and/or energy resources, assess the extent to which you agree with this statement.

[20 marks]

When it comes to energy resources the idea that resources can be infinite due to economic development and technological advancements supports Boserup and Jevons paradox where they both agree where there is demand, supply will always match it. This is applicable especially to renewable energy resources, for example solar energy where Saudi Arabia is investing £50 billion, wind farms like in the Thames estuary with 175 turbines the biggest wind farm by output in Europe, or at a local level hydroelectric power like the Grand Ethiopian Renaissance Dam which will produce 60 000 megawatts. This all shows that though technological

AO2 advancement and economic development use of Continue fossil renewable energy can be infinite.

AO2 However, renewable energy relies on physical geography like in all these examples, Saudi Arabia is strong for Solar, Where North Sea is windy for turbines and
AO1 Ethiopia has the Nile for hydroelectric. Furthermore non-renewable forms of energy like fossil fuels are finite
AO2 regardless of technology, despite the fracking revolution etc. they will eventually run out. Supporting the Malthus idea
AO2 that supply can not always be maintained.

For minerals like Copper also are finite supporting the Malthus theory, an example of this would be developed Countries who are keeping to exhaust their
AO2 finite supplies of minerals like Copper and looking to developing Countries. For example China
AO1 on the Congo now owns 15 of the 19 Copper-Cobalt mines in the country. This shows that despite advancement and economic development resources like
AO2 minerals are finite and there will have to be demand side changes in the future to deal with this.

However, technological advancements and economic development
AO2 can make finite mineral resources appear infinite

through recycling. For example between 70 and 80%
AO1 of copper is recycled and TNCs like Apple also use
Extra space 22% recycled minerals in their iPhones.
AO1 Rosenau and Seevan's paradox could argue that
the amount of recycling of minerals will only cause
AO2 them to advance in tech making finite resources appear
infinite.

In conclusion, thanks to technological advancement
and economic development some resources can be
AO2 considered to be infinite like renewable energy
resources, but they are partly reliable on physical
geography. But mainly resources like non-renewable
fossil energy supplies and minerals are finite,
AO2 advancements and money can make these resources last
longer but they can't make them last forever.

Limitations of less successful responses

At the other end of the scale, less successful responses can be attributed to a number of reasons – maybe the student misreads the question, sometimes they start out with good intent but then drift away from the question focus – a brief plan is often a precursor to a good response. Some students just do not know the relevant subject content – either they did not learn it or failed to effectively revise it. Sometimes responses can include examples that are over-simplified, out-dated or clichéd and there is limited evidence of deep knowledge and understanding. As an example in 2.4 a student ,referenced the redevelopment of the Albert Docks in Liverpool as a cause of deindustrialisation rather than understanding the complete timeline.

There are some instances where it appears students have run out of time although these are fewer than in previous series.

The response below is from 4.5. It uses Japan as the example of a country experiencing demographic transition and shows some valid AO1 knowledge, but there are some very simplistic views of the environment (hilly, so people are fitter and there are lots of trees so lots of oxygen). It does attempt to answer the question and reaches a conclusion but overall the response is partial and was assessed as a Level 2 response and given 7 marks.

0 4 . 5 Using a case-study of a country/society experiencing population change, assess the relative importance of environmental and socio-economic factors in demographic transition.

[20 marks]

Japan is a country which is experiencing a shrinking and an ageing population, with a fall of 40 m estimated by 2060. Demographic transition can be described as a change in the population of age, gender, income and of this can be due to environmental factors. Japan is a 'rural' country, with 70% of its surface area covered by mountainous land. This can cause an ~~change in~~ ageing population. The mountains create a hilly topography all over Japan, meaning it takes more effort for the Japanese to walk anywhere. This makes them more fit, which can reduce the risk of non-communicable diseases. As it is mountainous, it also has a lot of trees which release a lot of oxygen, making the air much cleaner than most developed countries. This increases the life expectancy age, to 85, therefore increasing the ageing population.

Socio-economic factors can also change the demographic of Japan. People in Japan can have late marriages, causing the change of pregnancy could fall. AO1 Another reason for a shrinking population is also to the cost of education and healthcare, people do not have the money to easily support a child? so they don't have children. This can contribute to the ageing population, but also a fall in the working age. Due to the lack of people of working age in Japan, the government is encouraging foreign skilling workers to work in Japan. They are mainly encouraging men to work in Japan, changing the population pyramid. AO1 The would be a high number of working age men, high number of elderly people, but still a low number of infants. AO2

Fundamentally, I think that the communist aspect of Japan is key to solving an ageing population. The socio-economic factors can cause a fall in population in the short term, but by many governments outright against population decline by raising taxes and interest AO2 age. Meaning the

Extra space

factors can change the demographic transition, but slowly they still return as so they are before.

In the response to 3.5 below, the student doesn't really get to grips with the question and does not engage with the approaches to urban regeneration since 1979 perhaps this was not learned or revised well?. However they do attempt to discuss aspects of environmental sustainability within urban areas and there is some evaluation as well as reaching a conclusion. The response is partial, assessed as Level 2, 7 marks.

reduce the chance of flooding.

0 3 . 5 'Urban regeneration in Britain since 1979 has evolved to feature more dimensions of sustainability.'

To what extent do you agree with this statement?

[20 marks]

ULE2 COP21

There have been many Urban regeneration projects in Britain which have been used ~~as~~ which have included features of ~~in~~ Sustainability. With global increases in population, urbanisation and threats of global warming, it is more important than ever to ensure that urban regeneration is sustainable. Sustainability involves meeting the needs of the current population (AO2) (AO1) when not compromising the needs for future generations. I agree with the statement as there are many examples of sustainable urban regeneration projects. ^

One urban regeneration strategy which has been used in the UK includes the change in

disposal of waste. This can be seen with the proposal to build an ~~incineration~~ incineration plant in Cambridge. ~~Ag~~ This Incineration is a more sustainable method of waste disposal which can be seen used in HIC across the world as it ~~reduces~~ reduces the land space used during landfill. and the amounts of methane which is released. The ash created during incineration ~~here~~ can also be used during construction such as building roads. This show of incineration is a more sustainable method which is used. However, it has created tension with communities such as 'not in my back yard' which involves people agreeing with the use of incineration but not wanting it to be built near them. NAQ

Another sustainable method which has been introduced ~~included~~ includes Ultra Low emission zones in London in 2019. This is where vehicles driving in areas of London must meet the standards required or they have to pay a daily charge. AO1 This is to reduce the amount to ~~pa~~ air pollution created in London, in order to make London an more environmentally friendly and sustainable place. However, this impacts the poorest part of the population in London the most as they are more likely to have cars which don't meet the requirements

outside the box

whereas the richer ~~poor~~ people of the population can just ~~by~~ buy a new car, making it not very sustainable.

Extra space

Another sustainable urban development method which has been used includes incorporating structures such as solar panels onto new houses. This make the houses more energy efficient as it is a method of a renewable energy source. This makes it more sustainable as it reduces the amount of fossil fuels being burned to create energy for homes. Furthermore green roofs have been built on on many urban buildings as this reduces flooding by capturing and storing water and acts as an insulation, therefore ~~reducing~~ Creating sustainable methods to live.

Overall there have been many examples of urban regeneration projects which are sustainable however they come with challenges. Furthermore, there are many ~~on~~ projects which are unsustainable as a result of cost and the need for regeneration due to growing populations.

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Synoptic question

These questions assess knowledge and understanding applied to links across specification content.

The synoptic question appears once each series in either Paper 1 or Paper 2 and makes links across specification content. The questions tend to appear in either the 9-mark or 20-mark questions.

In this series, the synoptic question appeared in Paper 1, the 9-mark questions 05.4 and 06.4.

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