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Examiners' Report
June 2016

GCSE Geography A 5GA2F 01

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Introduction

With candidates now required to answer all topics in Section A, on the physical geography of Coasts, Rivers and Tectonic Landscapes, while still having an option between Waste and Water in Section B it is clear that the increase in content has had an overall impact on the specificity of learning for any one section. The physical processes in the Section A topics, particularly Weathering and Mass Movement on Coasts and Hotspots on the Tectonic Landscapes topic, proved a challenge.

The paper performed well across most sections, with the highest average marks found on the Section B topics. However, the overall average mark on the paper did see a fall from the previous year. Tectonic Landscapes proved to be the most challenging section of the paper significantly underperforming compared to other topics and in comparison to previous years. In Section B, the 'waste' section was again the most popular choice by candidates/centres. It also scored a marginally higher average compared to 'water'.

The rest of this report contains a series of comments, examples and tips which will give centres and candidates guidance on the performance of this series and offer suggestions for future learning.

Question 1 (a) (i) 1

The majority of candidates were able to recognise 45 as the correct answer.

Question 1 (a) (i) 2

The majority of candidates recognised that by 2012 the dock was destroyed by the sea.

Question 1 (a) (i) 3

Most candidates were able to recognise that Newtok will lose its water source by 2017.

Question 1 (a) (i) 4

Almost all candidates understood that coastal changes would cause more people to move away.

Question 1 (c)

This question proved to be a great discriminator. Candidates had quite variable levels of understanding of both weathering and mass movement. Many confused weathering with erosion with regular references to examples of weathering after describing erosion. Many candidates did not understand the difference between the two, one that weathering is the breakdown of material (in situ) and that erosion is the wearing away of material due to the movement of an eroding agent. Those who understood weathering often referred to freeze thaw and were able to develop a description of this process. Many candidates picked up a mark for simply giving a named example of weathering processes. The distinction and the understanding of the process is something that clearly needs to be worked on for future reference.

More candidates understood the concept of mass movement. Many linked the process to slumping or soil creep and could understand that it was associated with material falling down a cliff, while some developed this linking it to the action of gravity. There was a large minority of candidates who confused the process with longshore drift and transportation processes. Some candidates simply left the answer space blank as they did not understand the question.

Overall terminology in physical geography is key to understanding the processes and ultimately the landforms. Greater time spent on this would help understanding across the rivers and coasts topics.

The following response scored 4 marks.

(c) Outline the following coastal processes:

(4)

Weathering

Physical weathering is when water gets into a crack of a rock and overnight when the temperature drops it turns to ice which puts pressure on the rock causing it to expand

Mass movement

Soil creep is the slowest downhill mass movement, gravity pulls the water in the soil down hill - the soil moves with the water and forms ripples, known as terracettes.

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Examiner Comments

This is a response from a candidate with a clear understanding of coastal processes. They understand the process of freeze thaw and develop the point through the action of pressure. For mass movement, the movement of material is clearly linked to the process of gravity. The candidate would also receive credit for a named process but does not need this in this instance.

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Examiner Tip

Ensure that you understand a definition for each process in physical geography and can link this to a named example.

Question 1 (d)

This question produced mixed responses and differentiated well amongst candidates. There were a significant number of candidates who answered the question without referring to forecasting, instead focusing entirely on preparation and defences. Without the link to forecasting these responses did not score marks. Answers were typically of two types, (i) where the candidate made explicit reference to forecasting and the work of the Met. Office and DEFRA, or (ii), where the candidate made implicit references to forecasting and described how forecasting would help, e.g. improved preparation, ability to evacuate or even the potential to plan defences.

Many candidates also did not use located detail which meant they were restricted to 3 marks. The use of a named place or example did not score a mark, however it was necessary to get 4 marks. Candidates should try to apply knowledge from the case studies they have used. Many candidates who scored 4 marks were able to do this. Credit was given for general references to the work of the Met. Office and DEFRA in the UK as an example.

(d) Using located examples, describe how the effects of coastal flooding are reduced through forecasting.

(4)

forecasting helps people be aware of flooding so they can be prepared for it. it also helps ~~peopt~~ save peoples lifes, so it tells people when its good and safe to travel because people can be stuck at places

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Examiner Comments

This answer reads in a simplistic way. It scores 3 marks as it shows how forecasting can help, making the assumption that the reader understands the concept of forecasting. This candidate scores marks for the descriptive comments about improved awareness, therefore preparation and enabling people to act. It does not gain any further credit, and could only achieve full marks if it made reference to a located example, which in this case it does not. No credit is given for the example but it was a requirement to achieve full marks.

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Examiner Tip

Ensure that you make reference to a place example to get the 4th mark on a case study question. Try to use or apply material from your case studies.

Question 2 (b) (ii) 1

Many candidates struggled to understand that waterfalls are formed as a result of vertical erosion.

Question 2 (b) (ii) 2

There was a mix of responses to this question. Many candidates thought the answer was attrition, but it was in fact hydraulic action. This was because the following sentence in Question 2(b)(ii) 3 gave an explanation of this process. This was overlooked by some candidates.

Question 2 (b) (ii) 3

The majority of candidates understood that the force of water caused erosion in this item.

Question 2 (b) (ii) 4

Many candidates struggled with this item and often gave the answer 'vertical' rather than 'steep sided valleys'. This was probably due to confusion with item 2(b)(ii) 1.

Question 2 (c)

This question was generally well answered by the majority of candidates with many picking up credit for references to disruption on the roads or damage to people's homes as a result of flooding. The main issue for candidates was their inability to follow the commands of the question, hence where it says 'Using Figure 2b...' it requires candidates to extract information from the resource; therefore place or road names would enable this. Candidates could not achieve full marks without this.

This is an example of a common answer which scored 4 marks.

(c) Study Figure 2b.

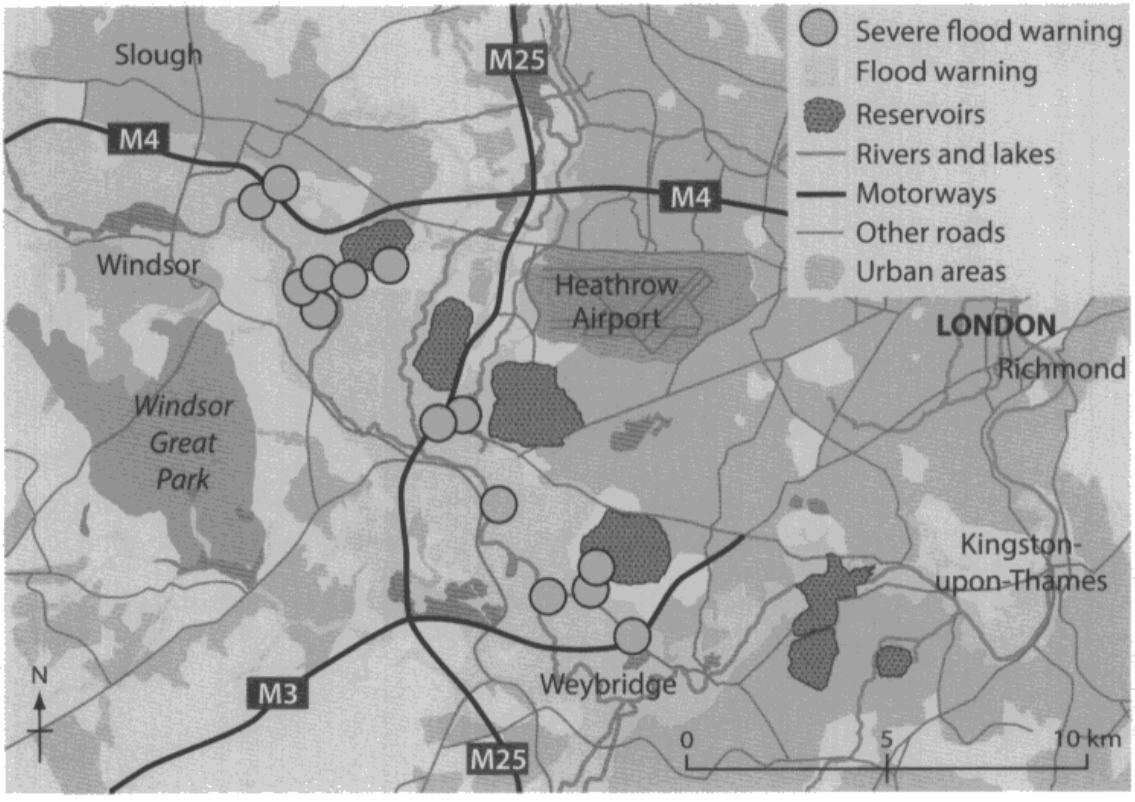

Figure 2b

Flood warnings around south west London, February 2014

Using Figure 2b, suggest **two** impacts of the possible flooding on people.

(4)

1 Flights at Heathrow Airport could be delayed if the river was to flood. This would effect people as they may be stranded or have to wait in London for another flight.

2 The river could possibly cause conjestion on the M25 due to the river flowing in the same direction as the motorway. If it was to flood it would block the motorway eff affecting people who are travelling

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Examiner Comments

The candidate clearly makes reference to the impact and then develops this, in line with the command 'suggest', i.e. two developed points. This candidate identifies the impact in terms of flight delay and then develops this by indicating that people may have to wait for a later flight. There is clear reference to the figure, in this case the use of the name of the airport and road names.

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Examiner Tip

Ensure that you make specific reference to the figure by using place names or road names. To get full marks on a 'suggest' question state the issue and then develop it.

Question 2 (d)

This question was again well answered by most candidates who were able to understand advantages of engineering. Some candidates simply regurgitated the advantages and disadvantages of methods of both hard and soft engineering; however, many were able to focus on hard engineering as asked for in the question. Some of the methods exemplified were coastal methods and not river methods therefore limiting the candidates' answers, however, these were in the minority.

Most candidates were able to score 2-3 marks for offering a description of the advantages, with common responses including the durability, the effectiveness of a method or a specific description of an advantage of a named method. However, many candidates did not secure the top mark because they failed to offer any explanation of their advantages. Examples sometimes helped candidates achieve this, but were not a requirement for full marks.

This is an example of a clear and well written answer.

(d) Explain the advantages of using hard engineering to manage rivers in the UK.

(4)

In York, River Ouse they use embankments which are very effective on stopping flooding. An advantage of embankments is that they do not break and that they are reliable. Since they're made out of cement they last for a long time meaning it saves money. Embankments have smooth surfaces as well meaning no water build ups.

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Examiner Comments

This candidate scores 4 marks with a well-developed and focused answer. They describe the effectiveness and durability of the methods and develop the answer through cost savings using cement. They also explain the advantage of a hard engineering type in the final sentence. The candidate made reference to a named place but this was not a requirement for the marks.

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Examiner Tip

Ensure that when you describe a method e.g. the durability of a hard engineering technique, that you develop the explanation through the use of link words, for example, 'such as' or 'which means that...'. This will make it clear to the examiner that you are attempting to explain.

Question 3 (b) 1

Most candidates were able to identify the earliest eruption date as 1585.

Question 3 (b) 2

Many candidates used the resource to identify that the Cumbre Vieja was one of the active volcanoes.

Question 3 (b) 3

Many candidates were able to identify Teneguia as the volcano which led to the death of one man.

Question 3 (b) 4

Most candidates were able to identify that the 1949 eruption caused the formation of a lava lake.

Question 3 (c)

Although the content required to answer this question is familiar amongst candidates, many struggled to gain more than 1-2 marks on this question. There were two main issues which limited the performance of candidates: (i) that candidates made references to volcanic eruptions which were not relevant to the question and (ii) that candidates did not focus on economic issues as requested but wrote about social issues. Those candidates that focused their answers on a specific place often achieved more marks, for example those who referenced San Andreas could often relate to the fact that people are employed through tourism (not because of earthquakes) due to people visiting San Francisco, or due to the fact that people earn good wages in Silicon Valley. Other good responses referred to the Japanese proofing as a consequence of their developed state, or the inability to leave poor areas, for example in Turkey.

Those candidates that opted for the generic approach, as many did, were limited to 3 marks for not relating to a specific example. As per usual no credit was offered for the named example but it allowed the candidate to access full marks.

This response scored 3 marks.

(c) Using located examples, describe the economic reasons why people continue to live in areas affected by earthquakes.

(4)

Many people continue to live in areas affected by earthquakes because they may not be able to afford to move somewhere else. They could have family that live locally. Another reason is that they could make their houses earthquake proof so there will be hardly any damage done to there homes.

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Examiner Comments

This candidate has a good grasp of the content. They raise the point about the wealth of an individual determining their choice over where they live. They also make the comment about earthquake proofing which has an implicit link to economic issues. This candidate did not, however, make reference to a located example and therefore could not be awarded full marks. This was a fairly typical response from those who showed understanding.

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Examiner Tip

Ensure that you apply your case study knowledge to examples or questions which require located examples.

Question 3 (d)

This question posed many problems for candidates and was a challenge to the vast majority. Many candidates simply opted to leave it blank and therefore did not gain credit. However, there were further issues beyond this. Many candidates simply did not understand the concept of a hotspot and therefore wrote about volcanism at divergent or convergent plate boundaries. These responses scored 0 marks due to a lack of understanding.

For those candidates who did score some credit many did not understand the concept of annotation. Therefore diagrams simply had basic labels and only those with some description could score up to 2 marks. For those who had some understanding and could offer more than a description there was often no more than a hint at explanation which led to 3 marks. A small percentage of candidates managed to score 4 marks on this question.

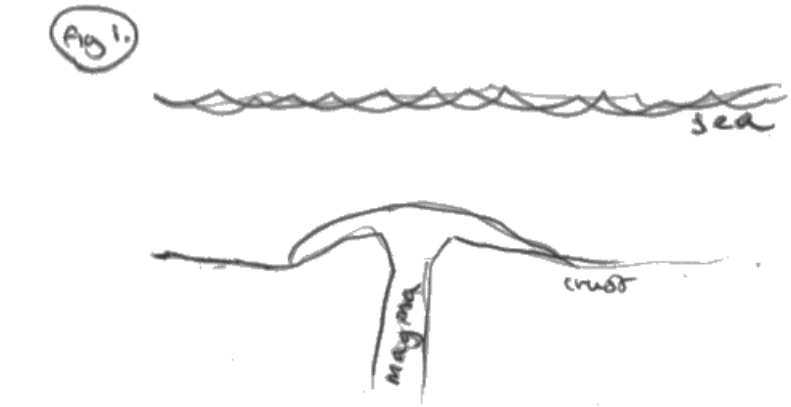
Some candidates offered explanation as a block of text below a diagram. This approach unfortunately was not an annotation therefore only scored 2 marks.

The best answers were those whereby candidates did the formation in 2-3 diagrams as a sequence. Next to these, or annotated onto these, were comments about the process of formation at each stage. This showed that the candidate had the appropriate understanding and had some level of explanation at each stage. This is a skill that clearly needs to be practised in the context of this topic.

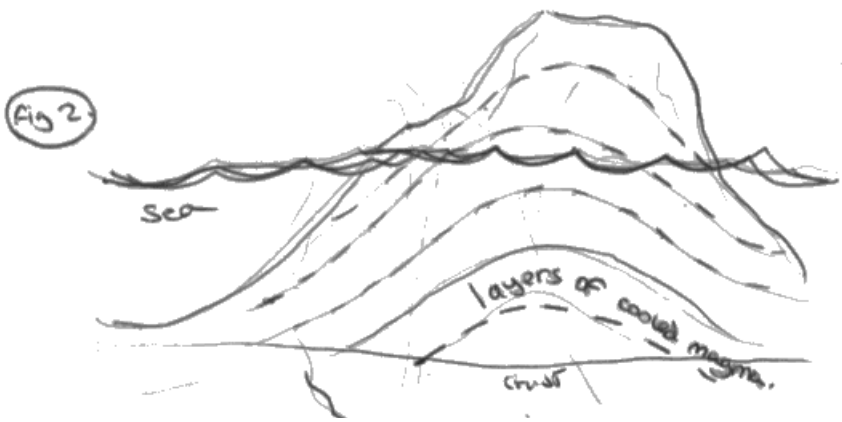
This response was awarded 4 marks.

(d) Use an annotated diagram(s) to explain the formation of a hotspot (volcanic island).

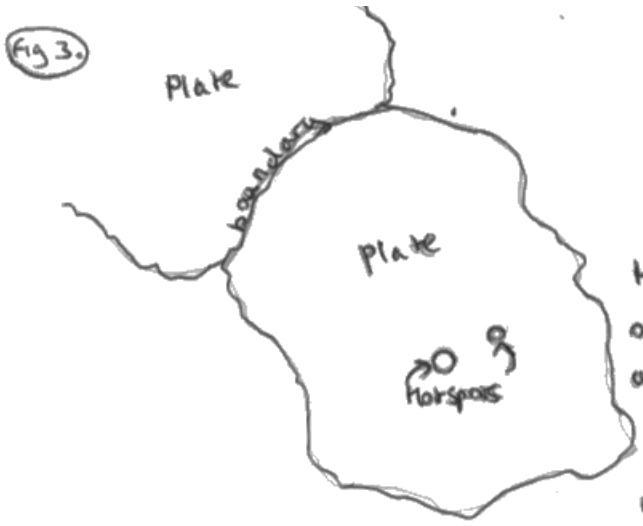
(4)



Magma rises from a gap in the crust. This then cools and forms a layer. This continues, until it ~~rises~~ rises out of the ocean.



This is formed by layer upon layer of dried, cooled magma, forming a volcanic island.



Hot spots rarely occur on plate boundaries and are usually found on in the middle of them. If it is on a boundary, it is classed as an anomaly.

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Examiner Comments

In this answer the candidate shows clear progression and understanding of a hotspot. There is no ambiguity over it being a divergent or convergent plate boundary. There is detailed description and evidence of some development in the comments.

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Examiner Tip

When describing or explaining landforms, break down the diagrams into a sequence over time. This way it is clear to the examiner that you understand the temporal progression.

Question 4 (a) (i) 1

The majority of candidates were able to read the map and recognise that the value for Kerry was 160+MW.

Question 4 (a) (i) 2

The vast majority of candidates recognised that the wind value for Limerick was 81-160MW.

Question 4 (a) (iv)

Most candidates were able to offer some reason for the variation in electricity generated from wind power, shown in the figure. Many related it to the variation in wind speeds across Ireland for 1 mark. Some identified the difference in land height as a valid reason also. Good answers, which developed their points, were able to develop the reason for the variation, for example wind speed was higher near the coast, or wind speed was higher in areas of larger fetch.

Question 4 (b) (i) 1

Most candidates were able to recognise answer E as the correct response for stage 3.

Question 4 (b) (i) 2

Most candidates were able to recognise answer B as the correct response for stage 8.

Question 4 (b) (ii)

Many candidates understood the concept of recycling and were able to gain at least 1 mark. Many scored 1 mark for the idea that recycling enabled you to re-make materials from old, which in itself was considered an advantage. Other simple statements such as 'that it was good for the environment', or 'reduced pollution' were also common. To get a second mark candidates had to develop the point they had made. Therefore candidates who offered two descriptions were simply held at 1 mark. Common responses involved re-making material therefore less need for natural resources or better for the environment as there will be less waste/landfill created.

Candidates were often limited in this response for not answering the question rather than for their understanding.

Question 4 (c)

This concept was one which had not been on the paper for some time. Candidates were well briefed and prepared for it. As usual, the majority of responses focused on Germany and the UK. UK waste disposal focused on the variety of forms of recycling we employ, while the Germany examples tended to focus on the 'Grune Punkt' scheme, the various incinerators and landfill issues and waste exporting; it was interesting to note the various locations around the world where Germany seemed to export to! It was apparent that the case detail was the same/similar to that from 8 years ago on Germany; therefore many centres could look to update their specific facts. Candidates however enjoyed this question and many were able to score at least 2-3 marks, though some were self-limiting by not including anything specific about the location.

(c) Describe how a named High Income Country (HIC) disposes of its solid waste.

(4)

Named HIC Germany

Germany has 68 incinerators across the country. One example is Darmstadt, ~~where~~ which is responsible for 212,000 tonnes of waste a year. They are also known as the recycling capital of Europe, as they recycle most of their waste. Some of this waste is exported to other countries, so the other countries can deal with the waste.

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Examiner Comments

This was a fairly typical response on German waste management – which focused heavily in candidates' responses. The use of data here makes it specific to the case example and the candidate employs a range of waste methods in their answer which was awarded all 4 marks.

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Examiner Tip

Ensure that your answer uses facts or details which are specific to waste management in the country – this should be more than just the country name.

Question 4 (d)

Despite a tricky concept, as the specification does not ask for examples, many candidates coped well with the concept of this question. Many candidates understood the differences between countries with high and low carbon footprints and could often describe reasons for this. Some were able to explain these reasons but few appreciated the variations between countries of similar type, though this was not really expected at Foundation Tier. Most candidates talked in the context of HIC and LIC though some offered reasons for specific countries. In all, it was pleasing to see that candidates had an understanding of the concept of carbon footprint, many borrowing this idea from their study of Unit 1 Challenges for the Planet.

The response below was awarded 9 marks in total.

* (d) Explain why the carbon footprint varies for countries at different levels of development.

(6)

The reasons Carbon footprint varies in different countries is due to the amount of waste they produce and also on the population of that countries. As LICs and MICs are not fully developed, especially with the LICs, they do not have as much polution from things like cars and factories. Whereas, in HICs such as Germany and America, there is alot more pollution as these are highly developed countries where the mayority of the population will use vechiles or work in factories which increase the carbon footprint. There is a couple of countries that do not fit in with this theory though; China is a MIC yet is one of the highest polluters in the world due to its heavy population and use of factories which creates lots of pollution.

(Total for spelling, punctuation and grammar = 4 marks)

(Total for Question 4 = 24 marks)

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Examiner Comments

This candidate offered explanations for two different points in relation to carbon footprint. While slightly generic in context the reasoning was sound at Foundation Tier and the candidate showed a solid level of understanding. The answer had few spelling errors and read well considering the limited time spent on the answer.

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Examiner Tip

When looking for variations in carbon footprint try and explain in the context of examples. The UK is a good example to use as for many candidates it is familiar.

Question 5 (a) (i) 1

The majority of candidates were able to give 3650 as the correct answer for this item.

Question 5 (a) (i) 2

The majority of candidates recognised the answer as 3290.

Question 5 (b)

The concept of water supply and water use is seemingly synonymous with many candidates and as such there was a whole range of answers which did not entirely focus on the question set. The question really wanted candidates to look at the issues of supplying water as a consequence of low rainfall. The obvious answer here is drought. However, many candidates took the approach of overuse. This approach was accepted as long as it was in the context of water supply issues. Centres need to make sure candidates are clear about the differences between water use and water supply problems.

Question 5 (c) (i) 1

Over 60% of candidates understood that Supply/Use 2 referred to glacial melt, though some did get confused with snowmelt.

Question 5 (c) (i) 2

Over 80% of candidates identified cattle farming as the correct Supply/Use for this item.

Question 5 (c) (ii)

In Question 5(b) many candidates found it difficult to distinguish between water supply and water use/management. This was also apparent in this question.

Those that scored credit linked the forms of management to the resource and focused on management of agriculture, supply or industrial/domestic use – all were acceptable. Some candidates had the understanding but did not outline a single idea and therefore were restricted to 1 mark.

Question 5 (d)

This question produced a variety of responses and really depended on the extent to which the candidate had understood the concept of 'local scale'. Answers in reference to reservoirs/dams, aquifers, rivers or appropriate technology were most common. As is often the case at Foundation Tier, candidates were limited by not using full explanations despite having some understanding. Many answers which focused on appropriate technology methods were often well-developed. Some candidates were limited by not explaining how the water was obtained but giving an explanation of why it was used. This is an area which centres and their candidates could focus on.

This answer was awarded 3 marks.

(d) Using examples, explain the different methods used to obtain water on a **local** scale.

(4)

A method of obtaining ~~was~~ water is by using a resivour - ie ~~graham~~ graham waters. The resivour at graham waters holds enough water to continue supplying the cambridgeshire in summery weather. Another method of obtaining water is through aquajils in the ground. water can be drawn out but there is higher consequences to this.

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Examiner Comments

While this answer includes a local scale example (which would enable it to reach top marks) only the point on reservoirs is developed enough as an explanation while the point on aquifers is more descriptive. Both points needed to be explained.

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Examiner Tip

For a 4 mark question ensure you refer to more than one method when asked for examples.

Question 5 (e)

Candidates seemed to have a firm grasp of the concepts in this question and were able to apply their knowledge to named examples. A range of valid reasons were provided from overuse in commercial farming, or industry or simply wastage in a domestic context. However, many treated this as a 4 mark question and lacked range or depth in explanation which would enable them to reach Level 3 in their answers.

*(e) Explain why HICs are facing an increasing demand for water.

(6)

HICs like Germany have many factories that require water to keep their machinary cool. This means that they use most of their water for industrial purposes, which results in houses needing the water the industry is taking. This is an industrial reason.

Another reason is that the population is increasing and people are living longer. This results in more water being needed as more people require it. This is a domestic reason why More water is demanded.

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Examiner Comments

This candidate has clear development in both of their points. While the points are generic (the question does not ask for examples), the development is enough to take this to the top of Level 3. The sentence structure is a little simplistic and there are a few grammatical errors.

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Examiner Tip

Ensure that each point raised in an answer has the appropriate depth, rather than listing off a range of different examples.

Paper Summary

Congratulations to candidates on behalf of the Unit 2 team for your efforts in this exam series. Below are a few suggestions as to how centres could help improve candidate performance for the future:

- Ensure that you understand the different commands, particularly the difference between 'outline', 'suggest' and 'explain'. Candidates seemed to cope well with description at Foundation Tier
- On case study questions, support your points with specific locational detail. This was an issue on a variety of extended answers across the paper
- Ensure that you learn the terminology of the physical geography topics to allow you to fully understand different concepts and features in Section A
- Ensure when completing landform questions that you break the answer down into a series of stages to help examiners understand the changes in process over time
- If asked to write about a point with reference to HIC or LIC ensure that the point is specific, perhaps related to a named place, so that you avoid generic answers
- Ensure that your responses have enough depth to match the mark tariff. This was particularly an issue on 3 mark 'outline' questions where the point made needed a detailed development or perhaps an example.

We hope that this information will help for useful reflection and progress in the final outing of this specification next summer.

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