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Commentary on Edexcel GSCE 2012 Geography B Sample Assessment Materials - Unit 1

The aim of this document is to support you with the **delivery of Edexcel GSCE 2012 Geography B - Unit 1** by using the **Sample Assessment Materials** to give some guidance on understanding the assessment and help you to deliver the level of detail required by Specification B in relation to the demands of assessment.

The sample assessment materials along with the specification itself were approved by Ofqual in the summer of 2012.

It would be useful to have a copy of the sample assessment materials, to hand – both question paper and mark scheme.

Only the higher tier paper will be used here but many of the comments apply equally well to the Foundation tier papers.

Beginning on Page 52, Question 1 on Topic 1 of 'Dynamic Planet', which is Unit 1 The relevant mark scheme for this Unit begins on page 71.

A quick reminder that the main structure of this paper has not changed. The four topics of Section A contain the first four, compulsory questions. The Unit 1 topics remain unchanged in name, although there are a few content changes which I'll flag up as appropriate.

Sections B and C still offer the same choice. The candidate selects between two possible optional topics in section B and section C.

In Unit 1 each of the four Section A questions is broken up into:

(a) a two-mark part

(b) a four mark part,

(c) a 6 mark part.

The (a) part either **tests students' ability** to use a resource **describing a trend, pattern or relationship** or **knowledge to identify features** of that resource. Once students move onto the (b) part of the question the resource is **no longer significant** or relevant.

So, Question 1 part (a) is a two-mark question requiring a basic point and some added detail. For this question part**, it can be answered from the resource**, by offering an appropriate comment about the thickness of the crust which is visibly thicker under continents than oceans with some data available for the second mark, or it can be answered by students presenting **knowledge** of other characteristic differences which are not evident on the diagram. **For** example,

thickness and rock type can only gain one mark as the question calls for **one** difference. Bold type is used to emphasize the need for only one difference.

Question 1 part (b) is 4 mark question which calls for a **sequence of processes** that lead to earthquakes at these locations. This is made clear in the mark scheme on page 71.

If **students annotate diagrams then any further text is not necessary**.

A useful classroom exercise is to insist that diagrams, and only diagrams, be used to explain a sequence of processes. What's helpful about such an exercise is that it makes students focus on **annotation** that **explains** rather than **labelling** that only **describes.** So try drawing a diagram with an annotation that shows how 'friction causes earthquakes', for example, rather than simply adding a label 'friction'.

Question 1 part (c) is a 6-mark, levels marked question. The mark scheme is divided into two parts with the first part (the indicative content) suggesting the **sort of material** that candidates might cover.

The second part of the mark scheme is the 'descriptors' for each of the three levels. These require an answer to be constructed logically with a beginning, middle and an end and, in this case that a case-study is used to provide evidence of the differences in primary and secondary impacts. The absence of such evidence would mean that the student would **not** satisfy the level descriptor relevant to location in either level 2 or level 3. However, **if the generic material is good enough then the answer could still reach both those levels but not at the top of them.** The focus on primary and secondary impacts is new content; at least the terminology is a new part of this topic on page 12 of the specification in section 1.2.a.

Students should be familiar **with the technical terms within the specification which will form the basis of the questions**.

This 6 mark question uses a '**new' command word on this paper from 2014 and beyond– 'compare'**.

The question is: "For a named volcanic event, compare the primary and secondary impacts."

There is a relatively short list of command words used on these papers and I'll cover them as they crop up. In this case, comparative language as in, 'fewer deaths - more deaths' is called for and, use link words and phrases that also suggest comparison such as 'whereas' or 'on the other hand…'.

Moving on to Question 2. Question 2 focuses on a resource. The 'stem' of the question (that is the text above the resource) tells us that changing climate has possible impacts on Canada.

There is no expectation that students know anything about Canada. Part (a) of the question requires an understanding of the term **'economic'**. Understanding of the term economic alongside terms such as **social**, **political and environmental**, are among the terms within the specification students need to

be familiar with. In this particular question they need to see how various changes might impact on the economy of Canada, in other words how these impacts can cost them money or interrupt economic activity. The mark scheme on page 74 lists several possibilities in which the impact is translated into an economic outcome, for example higher insurance costs.

Question 2 part (b) follows on from (a). It is a 4 mark question and asks students to 'Explain how human activity is leading to climate change' and following Four-mark question are always point marked. One mark for a basic point with a second mark for some extra detail or data. **So without the question explicitly requesting two points (although some do) two points is a bare minimum.** Of course a third can always be added. In this particular question there are a wide range of possible 'human activities' that students can choose**. A four mark answer should identify at least two and develop them with some detail of the process.**

Students could structure their answers in such a way as to clarify what distinct points: '*Firstly, increased industrial activity leads to more CO2 being release. d More CO2, which is greenhouse gas, leads to warming as radiation is absorbed by this and other greenhouse gases. Secondly, land use changes such as deforestation reduces one of the processes by which CO2 is removed from the atmosphere.'* The use of 'firstly' and 'secondly' structures the answer.

The final part of Question 2, 2 (c), addresses an area of the specification that has been **revised** from 2012. The question is drawn from the first sub-section of 2.2.a on page 13 of the specification. The key idea is "The climate of the UK appears to be changing as a result of global changes caused by human activity." The command phrase is '**Explain how'** which implies covering the **possible impacts** on the climate in terms of changing temperature, rainfall patterns and more localised effects **but also the processes** that might lead to these changes. Students need to do more than describe a few possible changes as this only completes the first part of the question. The specification covers the possible changes in air masses and ocean currents.

Question 3 begins with a global outline map on which the only additional information is the distribution of tropical rainforests. In order to answer the question a basic knowledge of world geography is assumed. Of course it is possible to make a basic point about the unevenness of the distribution without that knowledge but the second, developed point, really has to be rooted in that assumed knowledge as in '… a belt around the equator'. It is worth pointing out that a feature of this distribution type question is that it more or less excludes a single country or continent approach in that 'the rainforest is on the western and central side but not in the east of Africa' does not address the global distribution. Questions that do allow that would be worded differently as in 'Describe one feature of the distribution of tropical rainforest'.

The (b) part of question 3 comes from the second part of 3.1. on page 14 of the specification: *"Evaluate the role of temperature and precipitation in explaining biome location, plus local factors including* altitude and soils"

To answer the question students need to know that 'climate' is made up of temperature and precipitation. This would produce a two point answer with a basic point and some development to show how the process works.

The final part of question 3 takes its wording taken straight from the specification; the first part of 3.2.a: *"Consider the role of human activity in the direct destruction of tropical rainforests, including deforestation for timber, mining and conversion to agricultural land".*

Once again students may recall going through the list of causes in class from deforestation for timber, through mining to conversion for agricultural land. It is worth pointing out that because these are listed in the specification under the umbrella term 'including' there is an **expectation that these have been covered** as opposed to e.g. which just indicates what could rather than should be studied.

Given that three different processes are indicated in the specification it would be appropriate for answers to cover each of them with a little place specific detail.

Question 4 starts with a model of the hydrological cycle and the task of distinguishing between stores and processes. The task is based on **assumed knowledge** rather than a pure skill such as the **description of a trend or a pattern**. The instruction to 'identify' requires the name – no further detail is required.

The (b) part of this question comes from the second part of 4.2 a on page 15: "*Examine located examples of human activities which disrupt water supply, including deforestation, overabstraction of groundwater and reservoir construction".* The use of 'including' followed by 'three examples of human activities' suggests located examples be used.

Two or three examples with a little detail are needed

The final part of question 4 is highlights the **critical importance of students recognising key terms**. The 'Intermediate technology' is drawn from the second part of 4.2b *(Examine the role of named small-scale intermediate technology solutions, such as water harvesting in the developing world)* which they will have covered through one or more examples with a specific location in the **developing** world.

The specification does not require intermediate technology to be studied in a developed world setting; the focus of this question is on the management of water resources and not just the intermediate technology. So students who use their knowledge by applying it to the question drawing conclusions about its 'contribution' to management perhaps by making comparisons with larger schemes or pointing out some of the drawbacks of intermediate technology will be likely better answer the question.

Section B offers a choice that has been made for them by teacher selection of preferred topics. The questions have a different form with two 2-mark questions followed by an 8-mark question that also includes 3 SPaG marks. It is worth pointing out that students that score nothing at all for the content of their

answer on these SPaG loaded questions may gain no SPaG marks either. So, even accurate spelling, punctuation and grammar score 0 for SPaG if the content is irrelevant.

Question 5 begins with what might be described as a **pure skills** question, though the question asks for a **description of a trend**, in this case the 'rate of erosion'. The unevenness of this trend is indisputable and there is plenty of data available to support that point.

The part (a) (ii) question that follows is not based directly on the resource but calls for understanding of a process. It is worth pointing out that the 'acceptable answer' column in the mark schemes; a facility not used in all questions is used here. The principle here is that students can interpret questions in many different ways and, given the resource; it is perfectly possible that they might approach this from the point of view of different rock resistances.

Questions worth a total of 8 marks are new on Units 1 and 2 but the basic approach is no different than for 6 mark questions of the past.

We have already addressed the SPaG element although it might be helpful to point out that students tend to concentrate on spelling but **rather neglect** both punctuation and grammar when they review their answers.

This particular question addresses a newly reworded part of the specification – the second part of 5.2.a "Explore the conflicting views of how the case study coastal area should be managed" and with wording more or less taken directly from that section students are asked to comment on the different and conflicting views and attitudes about coastal management which will have been delivered through a case study.

The level of descriptive detail required for the top level is described as 'detailed' in the mark scheme which translates as **a number of specific comments**, **probably a figure or two drawn from the case study** making it 'identifiable' in that they are specific to it. What really matters though is how well the **conflicting views are explained** – we use the term 'asserted' in the mark scheme in Level 2 to suggest a lower level 'explanation' which doesn't so much explain but simply make an assertive statement or series of statements such as *'there are different views because different groups of people are affected in different ways'*. One can rarely argue with this type of statement but obviously knowing *'that local residents who are threatened by coastal erosion such as those living in Seaview Avenue support hard engineering estimated to cost 3 million but other local taxpayers are reluctant because they can see few benefits and many costs, not least the 10% increase in local council tax'* offers reasons for conflicting views that are identified, illustrated and thoroughly explained

If we move on to Question 6, as with Question 5 the opening two-mark – part a i question - is a pure skills question that asks students to compare the hydrographs on page 63. The command word is a little more demanding but the data is less complex than 5 a i.

The a ii question that follows is clearly not based directly on the resource, although the resource acts as a type of 'prompt', but asks for understanding of a process. It is worth pointing out that the 'acceptable answer' column in the mark schemes is again used here. The principle here is that students can interpret questions in many different ways and, given the resource; it is perfectly possible that they might approach this from the point of view of differences in rainfall.

The final part of this question uses specification wording and asks students to make an assessment of costs and benefits. This calls for a judgment to be made with 'on the one hand' but 'on the other hand' type comparisons being made using case-study evidence to support an argument. The level of descriptive detail required for the top level is 'detailed' which translates into a number of specific comments, probably a figure or two that are drawn from the case study making it 'identifiable' in that they are specific to it. What really matters though is how well the costs and benefits are explained – again we use the term 'asserted' in the mark scheme in Level 2 to suggest a lower level 'explanation' which doesn't so much explain but simply make an assertive statement or series of statements such as '*traditional engineering has many advantages but also several disadvantages too including costs'.* Once again one can rarely argue with this type of statement but obviously knowing '*that local residents who are threatened by flooding such as those living in Floodplain Avenue receive direct benefits from hard engineering in terms of flood damage and insurance costs but other local taxpayers are reluctant because they can see many costs, not least the 10% increase in local council tax to help pay for the scheme and the visual impact on the river itself*' offers costs and benefits are identified, illustrated and explained thoroughly.

The final section of the paper, Section C, covers the last two options of course. If students manage their time well, they have, discounting the SPaG marks, about a minute a mark throughout the examination experience. This translates into about 12 minutes for this final question. Of course there is no reason why students have to work their way through these papers in a sequential manner – there is no question by question 'theme' running through the paper that would help them.

Question 7's resource-based question uses a well-known diagram but presumes some knowledge too in that the significance of the arrows will be lost on students who are unfamiliar with the idea of a food web. These questions are designed to pose a slightly **stiffer challenge** than the equivalent Section A 'skills' questions and this presumption of knowledge is one such route to make them just a little more demanding.

The second question reflects a change in the specification with a named process, **bleaching**, now identified on the specification so used here. Once again the expectation is a basic mark for identifying the process with the extension coming through detail of the threat it poses to marine species.

For most candidates the most demanding) questions on the paper are the final parts of questions 7 and 8. As with the final parts of questions 5 and 6 this is partly realised through the choice of command word, in this case **'explain'** but

also the frequent need to make distinctions about either **causes or consequences**, in this case 'positive and negative impacts'. Although students should be made aware that they obviously need to cover both of these, they shouldn't worry overmuch about balance. In this particular question there are plenty of options on both sides but on other areas of the specification balance might be harder to achieve. As before the key is to present a 'case', an argument, presenting information that addresses the **'explain how'** command by describing the action and explaining its 'impact'. Students need to be self-reflective in their answers, thinking about what constitutes 'positive' and 'negative', loss of species being the obvious one here, and perhaps extending into long-term as opposed to short-term impacts and the key idea of sustainability.

The skills 'starter' question for question 8 uses a photograph which requires some knowledge to interpret thus raising the task a little from a simple description of 'what you see'. Students are generally weaker at photographic interpretation than almost any other skill that they might be called upon to deploy and practice helps. In this particular example they need to be clear that they are searching for something about the settlement rather than the general environment and something that is 'characteristic'. There are two obvious features outlined in the mark scheme, on page 89, with a further couple of possibilities as 'acceptable answers'.

The second part of the question is once again taken fairly directly off the specification; in this case the second part of 8.2.a. There is a very wide range of possible answers but students need to keep their responses as precise as possible perhaps beginning with generic statements and then rooting it in a local community, preferably named or at least located.

The toughest questions on the paper are the final parts of questions 7 and 8. As with the final parts of questions 5 and 6 this is partly realised through the choice of command word, in this case 'explain' but also the frequent need to make distinctions about either causes or consequences or pay close attention to restrictions in the title which narrow the focus, in this case 'the survival of **communities**'. Although students should be made aware that they obviously need to cover more than one **'attempt to ensure'** they need to keep the focus strongly on survival, in other words the continued existence. They need to present a 'case', presenting information that addresses the '**explain how'** command by describing the action and explaining its **'impact'** on the community and, perhaps, introducing the relative success or failure of such schemes. Critical comments that suggest that the students appreciates the limitations of plans and policies and the fact that their costs and benefits fall unevenly.

I hope that this document has been useful in furthering understanding of the sample assessment materials and how they can be used to inform your teaching and your students' learning over the course of the next year and beyond.