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General Certificate of Secondary Education
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Geography A   **40301F**

(Specification 4030)

Unit 1: Physical Geography (Foundation)

Report on the Examination

General

This was the second paper on the new specification, but the first with a substantial Year 11 cohort. There was some evidence of this in the quality of responses and evidence that messages had been heeded from last year. The Restless Earth question was by far the most popular in Section A and indeed the most frequently done on the paper. The Water on the Land question in Section B was a close second. The Rocks, Resources and Scenery question was the second most popular on Section A, but the least well done. Question 3 - The Challenge of Weather and Climate - was the minority question here, with fewer than 2500 candidates attempting it and almost 6000 doing Living World. In Section B, there was greater equality between the two less popular questions with 9800 doing Ice on the Land and almost 1200 doing The Coastal Zone. However, there was a clear difference in the standard of responses to question 6 in contrast to questions 5 and 7, with the former being significantly weaker.

The presence of a six mark question – a shift from the four mark maximum of the legacy specification still appears to be problematic for many candidates at this level. Whilst there are some very good structured, specific and supported answers, many are disjointed and superficial, and so marks are low within level 1. Identifying what is needed for level 2 and ensuring candidates are aware of the descriptors would lead to better performance. So too would the knowledge of specific content. Thus, as last year, there needs to be greater and more accurate knowledge developed as part of a revision programme. Integrated into this, specific case study knowledge must be incorporated. Candidates must refer specifically to the case study selected when asked to do so. Mentioning the name and writing generically has the hallmarks of a level 1, rather than a level 2 answer. All too often, examples given are vague, inaccurate or absent and so level 1 becomes the maximum level attainable – even if are linked and developed ideas.

It is essential that candidates obey command words – for example, 'describe' requires writing about something so that it offers some detail/can be visualised. This is different to identification. For example in question 1(c)(ii), effects often appeared as a list and, although relevant, listing is lower level 1. Statements need greater development and linking so that the effects of a supervolcano eruption are clear. Similarly, where help is given regarding explanation of landforms, there needs to be some thought and application of knowledge. Thus, in question 6(c), there was a need to appreciate what was being shown rather than just give a statement of what was displayed. The same is true for question 7(b)(ii) where there was a requirement to make sense of the triggers and put in a sequence, not just write them out in a random order – often one that did not make sense. Candidates must take the time to look at the question and take it apart so that they understand exactly what is wanted. Questions that involved the description of features present were often poorly done. Candidates need to practise how to describe – whether using words or labels, and be aware that only what is visible should be written about.

SECTION A

Question 1 The Restless Earth

1(b)(i) was poorly done, given the popular nature of the topic and the expected familiarity with a volcano. Few obtained three marks, with many scoring one mark – usually for identifying the crater. There is a need to look at the photograph and then write a description of what is visible – in this case for three specific points. A significant minority related to the structure of the earth, and others just guessed and referred to coastal or glacial landforms, seemingly not recognising the volcano itself. Candidates fared better on 1(b)(iii), with a majority getting two or three marks. There was some confusion with destructive plate margins; some were too literal in points noted – perceiving the mantle rather than magma moved through the gap left. The best responses had a clear sequence and used appropriate terminology.

Most candidates got the idea of size in 1(c)(i), reflecting the fact that 50% gained half marks. Shape was a clear discriminator with successful candidates able to convey the idea of a supervolcano being a large depression, and the term caldera was not uncommon. For 1(c)(ii) candidates had to ensure that they considered a supervolcano – which some did not and that there was at least some reference to a global scale for level 2. Finally, there was a need to describe, not to list a variety of effects. The best linked ideas with reference to ash clouds and global cooling and the effect that this would have

on food supplies in different continents. Some did refer to the example of Yellowstone which often enhanced the answer, though full marks could be obtained without.

Part 1(d)(i) presented similar challenges for some as 1(b)(i). Candidates got one mark here usually for identifying the use that was present. However better candidates scored two or three marks as they progressed to an element of description. Observing the photograph (one only here) and writing down what was visible could quickly amass marks. Thus, a recognition of farming and cattle grazing on flatter areas of grassland was comfortably worth three marks. Too many candidates described problems, rather than attempts to cope with them. There was some misunderstanding of the term communications – wrongly perceived to be telephone type rather than roads, railways. Some solutions were too simplistic and unrealistic, such as adding fertiliser to poor soils. The best responses related to terracing to create flat land, grazing animals rather than growing crops, and the use of llamas or small railways.

Question 2 Rocks, Resources and Scenery

Many candidates did not attempt question 2(b) based on a fundamental and new part of the specification. Those that did attempt the question were, at times, guessing. Successful candidates obtained three marks where they demonstrated their knowledge by identifying processes as demanded in the question with regard to erosion, transportation and deposition – however conveyed.

Part 2(c)(i) revealed a significant lack of knowledge of a basic term. Again, such a key term is basic and underpins this topic. There was much confusion with erosion and weather, as opposed to weathering. A need to know and revise key terms is clearly apparent.

A granite tor is the only significant landform within granite areas, and clearly flagged in the specification, yet most had no idea how they were formed – referring to plate movement and waves at times. Better candidates made reference to weathering and the loss of the surrounding land (yet many believed the rock type to be different). However, the quality of description was poor and there can be no reason for omitting a question when one command is 'describe' and a photograph is provided. Candidates had to write down what could be seen – the grey colour, the blocks, the stepped profile, the cracks or joints etc.

Too often, in 2(e)(i) candidates referred to tourism – after the quarry had been closed, or believed that many people go to visit. The question did not ask about uses of the material but for the advantages for the local area. Better responses noted the income for workers and this being spent in local shops, or use as a building stone in keeping with the area. Relatively few fully engaged with the question in 2(e)(ii). Often the characteristics of the rock type were noted, without then referring to problems that had to relate to farmers. Good responses noted the impermeable nature of granite, and that this made it boggy and no good for crop growing.

Question 3 Challenge of Weather and Climate

This question was well done. There was an appreciation that the depression and its warm front would bring cloudy and wet weather. Those with a little more precision, such as wind speed accrued full marks. In contrast 3(b) was less well done. This was due to two main factors – the failure to comply with the command word to 'explain' rather than describe and to have the knowledge to appreciate what happened at the two fronts versus the warm sector in between. There was much confusion between warm and cold fronts. Better candidates had a clearer sequence, with a notion of air rising. Explanation of the effects of this in causing rain and differences in the way the air rises were all too rare.

Approximately a fifth obtained the two marks available in 3(c)(ii), with a further third getting one of the available two marks. Only one cause was permitted and there was a mark for identification and then a little exemplification of this. The best referred to the burning of fossil fuels and the implications of this – in a variety of ways – with regard to increased carbon dioxide, the recognition that greenhouse gases were being released. Too often, there were vague ideas of (unspecified) pollution and a drift to consequence, rather than cause. In 3(c)(iii), many appeared to be guessing – and such a topical area proved to be beyond many candidates. Many were guessing and suggested any natural disaster or once again drifted to consequences, such as melting polar ice caps. Common responses referred to animals, particularly cows and rising amounts of methane. There was very little reference to increased temperatures in times before major industrialisation. The sticking point in part 3(c)(iv) was the need to

relate specifically to the UK. Despite this being in the question, candidates noted the impacts globally – especially with regard to the effect in the Maldives. Too many drifted into economic consequences – again a failure to meet the requirements of the question. In level 2 responses candidates noted flooding in specific parts of the UK, such as London, or changes in crops that might be grown in parts of England.

Question 4 Living World

In 4(b)(i), there was again a need to look at the photograph and to write down what was visible in describing the characteristics of the vegetation. Many did not use the photographs specifically or referred to features that were clearly not visible, such as shallow roots. Better candidates often noted the cactus in photo A or the presence of needles and then looked at spiky leaves or flowers in B with some recognition that plants grow close to the ground/shrubs in C. Observing the photograph and writing down specific features would lead to many more amassing the marks available. In 4(b)(ii) ideas were often basic with some recognition of how vegetation adapts, rather than a clear explanation. Thus, cacti storing water was common as were deep or shallow roots. The best looked at such features but went on to explain that cacti stored water because rain was rare or that roots were shallow to capture water when it fell, before it could evaporate. There was also some specific reference to small leaves and reasons for this.

As in 3(c)(ii), only one cause was permitted in 4(c)(i) and there was a mark for identification and then a little exemplification of this. The best responses referred to logging or ranching and noted the use of the wood or farming type. Too often, there was a drift to both impacts and responses – neither of which were relevant here. Again, a clear need to answer the question asked. Conversely in 4(c)(iii), candidates often wrote about cause – when the question here demanded reference to effects. Others referred to the effect on people, rather than the local environment. Common good answers related to the impact on animal habitats and how this led to possible extinction, while fewer recognised the effects on the water cycle and soil. Strategies were often suitably selected in 4(c)(iv). These included reference to selective logging and replanting trees. To access level 2 there had to be some recognition of how the strategy led to sustainability – e.g. by referring to the forest growing back or it being there 'forever'.

SECTION B

Question 5 Water on the Land

The labelling of the black and white photograph was reasonably well done in 5(b)(i). Candidates who obtained two or three marks indicated an understanding of the question and appreciated the need to label something that could be clearly seen. They ensured their arrows connected with the appropriate feature. This was important as a label for meander that fell short of it was actually showing the flood plain. Too many candidates tried to label things that were not visible, including source and mouth, the depth of the water and river cliffs and slip off slopes. Part 5(b)(ii) had many plans and drawings (to a lesser extent) rather than the cross-section specified in the question. Marks therefore were limited to level 1. There was confusion between the inside and outside bend, and some were clearly guessing as to what the answer might be which was disappointing given the mainstream nature of the content. Better answers had a clear cross section, showing the asymmetrical profile and labelled features such as river cliff.

Over half of the candidates recognised a physical and a human cause of flooding in 5(c)(i), with almost a further 20% getting one mark. A failure to score was usually due to confusion between the two causes, whilst the fact that some did not attempt the question – given the presence of the stimulus material – is incomprehensible. The most common mark awarded in 5(c)(ii) was one where there was a recognition of the additional water going to the river. Good responses which got two or three marks developed a sequence realising that the ground was saturated or frozen and that surface runoff was more rapid. Too many looked at the cause of melting, rather than flooding as a consequence, which is what was needed.
There were a significant number who talked about the sea in 5(d) or who confused hard engineering with soft engineering. Too many also answered a different question regarding the advantages and disadvantages of hard and/or soft engineering. Better candidates engaged with the question and tried to explain – so they noted that the increased bank height with levees meant that more water could be

held in the river or that a dam would keep the water behind it until the level of the river was low enough for it to be released.

Question 6 Ice on the Land

Some candidates failed to attempt question 6(a)(iii). Those who did attempt it often had an idea of reduced snowfall and global warming, but ideas were separate and amounted to identification, rather than explanation. Some were very basic – noting the fact that snow and ice melted, but not the underlying reasons why.   Many drifted into effects of the ice melting, rather than the cause. Few managed to link two reasons and begin to explain the underlying reasons for the retreat of the glacier. Part 6(a)(iv) focussed on one economic effect of the retreat. Here many candidates wrote about cause (the previous question) or disregarded the need to consider an economic impact, rather than environmental. Few scored here, yet the loss of tourism might have been noted as well as jobs or even different tourists and activities on the lakes.

Candidates generally recognised the melting or the presence of moraine in 6(b). Too many drifted from the glacier to the valley and described what they assumed, rather than what could clearly be seen. Careful observation and a record of this would have yielded more marks – such as the colour of the ice, the lines of material, the uneven surface – all were clearly visible, but often not identified by candidates.

The best responses in 6(c) used the diagrams as triggers to order thoughts and apply some knowledge. Here, there was a clear sequence, noting the V-shaped valley, the formation of ice occupying the value, the processes responsible for the final revealing of the U-shaped valley. Too many gave a too literal interpretation of the diagrams, without seeking to explain the formation of the landform. Some answers got only the start with the river valley and the U shaped valley being revealed at the end.

The responses to 6(d) showed significant variation.   Basic answers overstated the effects – all death and destruction of all and everything. Somewhat better were those that had a range of effects identified – such as roads being blocked, people trapped, some dying. The best linked and developed statements were more realistic in describing the effects with regard to people suffocating, needing rapid rescue, the impact on buildings and tourism. A substantial number drifted to the cause of avalanches.

Question 7 The Coastal Zone

In 7(a)(i) the recognition of the swash and backwash merited two marks (or words that conveyed these terms) and the recognition of the movement of material for the third mark. This is a very basic part of the specification. About a quarter identified two relevant landforms in 7(a)(ii), whilst a third recognised one landform.

In 7(b)(i), most could identify two landforms, but describing them proved more challenging. Too many described those that were not present – but which candidates assumed would/should be there. Thus, arches and stacks were prominent. There was a drift to explanation (the next question).   Only better responses sought to describe – and this could have been done by noting what the cliffs were like – that they were steep, had an overhanging part – or by the position of features such as the wave-cut platform at the bottom of the cliff. The phrases supplied in 7(b)(ii) needed to be used as a stimulus to put the formation of headlands and bays into a sequence. Too many just wrote them out without seeking to ensure that they made sense, were in a sequence or explained the formation of headlands and bays. Better candidates noted the positioning of the hard and soft rock next to each other and the more rapid erosion of the soft rock, leaving the hard rock to form the headland and the soft rock the bay. The phrases did not need to be written out word for word, but used as the basis as the answer. Either approach was permissible.

There had to be reference to a case study in 7(c)(ii) and this had to be used to explain why cliffs collapse. Failure to use the case study meant that level 1 only could be obtained. The presence of and use of a case study could have lifted these to level 2. Level 2 answers not only used the case study, but also sought to obey the command to explain and so noted the effects of coastal protection at Mappleton further southwards for the Holderness coast. Some referred to the soft boulder clay here that was susceptible to erosion. Both of these approaches refer to places or key facts that are true for the case study and allow access to the higher level.

In 7(d), many perceived that land was growing and the coastline extending, rather than retreating. Better responses described the coast and the attempts to protect it. Few made the link between areas of protection and the lack of erosion required by the command 'explain'.

Mark Ranges and Award of Grades

Grade boundaries and cumulative percentage grades are available on the Results statistics page of the AQA Website.

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