AQA

ASSESSMENT and
QUALIFICATIONS
ALLIANCE

General Certificate of Education

Geography 2030
Specification

GEOG1

Report on the Examination

2009 examination - June series

General

In Section A, Coastal Environments was the most popular option choice, followed by Cold Environments with Hot Deserts and their Margins clearly a minority choice. In Section B, Food Supply Issues was the least popular choice (although not by the same margin as Hot Deserts in Section A), with Energy Issues next and Health Issues being the most popular choice.

Given the structure of the specification, with a compulsory Physical and Human Unit and then a choice of one from three options in each part, there is clearly a substantial degree of choice regarding what topics to select. However, within the Core in each section and, indeed in the option topics selected, there is a requirement to teach the whole of the content for that topic. It became clear that some centres had been selective in the content they delivered as some candidates had clearly never heard of rejuvenation, even though it forms the content of one of the 10 paragraphs indicating the subject content – 'Process an impact of rejuvenation'. Drumlins as a depositional landform in Cold Environments also appeared to have been disregarded by some centres. There is clearly a requirement to cover all the content stated in the specification – indeed this is its function – to specify what must be taught. Similarly, there cannot be an expectation that certain parts of questions will always have similar content – particularly that with a human link in Section A. Thus, flooding did not and will not always be the final extended writing question in either Question 1 or Question 3. There are occasions when it would be appropriate to place it at the end; equally there are times when it could be at the start in the shorter questions – or, as was the case on the first GEOG1 Paper, not at all. Indeed, the Specimen Paper for Question 1 had a physical geography question on meanders – the first 'live' paper reflected this structure.

There is a clear need for candidates to know the content. They must revise thoroughly so that they have the required information at their fingertips. There were candidates who were well versed in concepts, theories and case studies who could apply their knowledge to the questions asked. However, responses to some questions that required a specific knowledge base were disappointing. Examples include 3a with regard to a sediment cell and 6a with reference to the Green Revolution. On some occasions, there was a lack of knowledge, but a voicing of unsubstantiated opinions was common. Such opinions could be deemed as **ageist** – with a negative perception of an elderly population taking resources away from the young; **racist** with immigrants coming over and 'taking or stealing our jobs' and disputes that result and **stereotypical** where people from 'up North' were seen as heavy drinkers and smokers in contrast to the health conscious residents of the south with expensive gym memberships. Some questions require candidates to come to a view, but it should be an informed one and reflect evidence presented.

There is a clear need for candidates to be more aware of exam technique. There is a need to read the stem of the question where one is present, as this will indicate what a resource is about and indicate the thrust of the question. This was the case in 5a and 5b, but it appeared that many had just gone straight to the figure without the necessary focus and, for example, the fact that in 5b, the tabulated data was 5 years later than the population pyramid.

Command words must be obeyed. Thus, initially, candidates need to understand what they mean. If explain is required, then reasons must be given. In 3b, many described the location of the beach landforms, instead of explaining. Where two command words are given, there is a need to address both. Ideally, there should be some degree of balance.

Linked to this is the need to use resources. In 1c, candidates were required to describe the potholes on the photograph; many disregarded that instruction. Use of graphs and maps requires accuracy and precision. Evidence from such resources should be specific and not only a vague approximation to what is presented.

Examples are useful in aiding understanding, even when not a requirement of the specification or question. Thus, knowing examples of certain landforms gives a visual dimension that can only enhance understanding and can be useful in answering questions – e.g in the context of drumlins, potholes. The same is true of the human content, looking at population structure or ageing in a particular spatial context.

The questions set as the final parts were designed to be open ended to facilitate a broad range of responses where candidates could use what they had been taught, including case studies. Some struggled with recognising what examples and content might be included and this recognition is clearly important. There is a need for greater understanding of underlying concepts such as sustainability and globalisation.

There is overall a need for candidates to deconstruct the question. They need to identify what the command word/s is/are; they need to identify the concept(s) that the question relates to; they need to be aware whether there are any limiting factors e.g. is a case study needed? Is the question asking about specific aspects e.g. economic, social or political? Is there a specific scale e.g. local, regional?

Section A

Question 1 Rivers, floods and management

This question followed a similar format to the one in the Specimen paper in that it focussed on processes and landforms throughout. This will not always be the case, but similarly, there can be no expectation that flooding occurs in every paper, nor that it would always be an extended writing question. Part (a) was generally well done. Candidates could describe the processes, especially of traction and saltation and often suspension. Some were secure in linking load size precisely to process; others wrote in general, relative terms. There was, for some, a misconception that solution represented the very fine sediment, rather than perceiving that it was dissolved load, linked to specific rock types, such as limestone.

Candidates seemed familiar with the Hjulstrom curve in (b), but they did not necessarily understand it. There is a need to make clear and precise statements, not half-truths. For example, it is not true to say that as velocity increases, the size of load that is eroded increases. Statements such as this needed qualification regarding the fact that this applied from sand to boulders. Care should be taken when reading off the graph and there should have been recognition of the logarithmic scale. Allowances were made for the limited gradation, but some pieces of 'evidence' were inaccurate. Common errors were to describe transportation, rather than erosion and too many drifted into explanation, ignoring the command 'describe'. The best perceived the relationship, focussed on the erosion curve and recognised the exceptional circumstances for the smallest material.

There were two elements to part (c). Some of the marks were for skills and thus the requirement to describe the potholes seen in Figure 2. Many described generically; some believed that they were formed by the removal of boulders from the bed, leaving behind hollows. Better quality responses described the potholes that were visible and related their explanation to the load, the eddying of the water in small depressions and the impact of the abrasion process in forming the cylindrical potholes.

There are ten separate items in the specification that form this unit. One of these sections refers to 'Process and impact of rejuvenation'. It was from this section that part (d) was derived. It was clear that a significant number of candidates did not know what rejuvenation was – and included all sorts of river landforms, such as ox bow lakes, levees as well as generic meanders and waterfalls. A small number perceived it as a management technique, designed to improve the look of the area. A common approach was to define rejuvenation and then to consider a landform such as knick points and relate these to long profile and waterfalls. The best went on to consider terraces and/or incised meanders and a minority went on to identify the contrasts

between entrenched and ingrown. Examples were referred to and these appeared to aid understanding.

Question 2 Cold environments

Some struggled with the interpretation of Figure 3 in part (a). They perceived that velocity affected depth, rather than the other way around. They also saw that the steepest decline of the line reflected the fastest decrease in speed, whereas the reverse was true. There was a need to study the graph and understand what was being shown, following the reading of the stem. Good responses selected salient points that showed change in speed, rather than any depth – such as 155 metres to 210 metres and quoted the reduction in speed of 21 metres. Accuracy varied – and to be awarded marks for evidence on such a straightforward scale this was essential. Some candidates drifted into explanation.

The majority of candidates referred to the ice budget in (b). Marks were available for defining the key processes and better candidates related to the net change, perceiving the relative importance of accumulation over ablation for advance. Some referred to reasons for melting and this was valid.

A significant number of candidates confused a drumlin with a roche moutonee. There was a need to comply with the dual command to describe and explain. Where both of these were recognised, the descriptive element was often stronger. Here, there was reference to shape in cross section and plan form and a range of appropriate dimensions. Explanation for many proved to be the weaker component. However, it did discriminate, for the best engaged in a knowledgeable discussion of alternative theories, even deciding which had more credence at times.

Responses to part (d) were often descriptive with potentially relevant material being included in a general, mechanical way instead of being targeted to the question. The quality and accuracy of case study information was an important feature of a good answer as it provided evidence of sustainability. This may have related to the economic activity or the environment or both. Oil in Alaska and the Exxon Valdez disaster featured frequently as did whaling in the Southern Ocean and tourism in Antarctica. There was a need to address the time element here and consider whether development had become more sustainable – and thus whether contemporary activities are more sustainable than earlier ones. Some made a case that some developments did not consider the lifestyle of the indigenous people and others noted the steps taken to minimise the impact with the pipeline in Alaska and restrictions on whaling and tourism.

Candidates need to come to a view, supported by their evidence. Knowledge of place was disappointing at times as some believed the Arctic and Southern Ocean to be in the same part of the world and others related to the impact on the tundra of the Exxon Valdez, rather than on Prince William Sound.

Question 3 Coastal environments

A significant proportion of candidates appeared not to know what a sediment cell is or had very vague ideas in part (a). Some merely tried to define the term 'cell'. The best answers were purposeful and applied their knowledge accessing 3 or 4 marks. These were all too rare, given that marks were awarded for such features as 'a section of coast, they represent closed systems and are separated by specific landforms, such as headlands'.

Too many failed to obey the command word as they described rather than explained the location of the beach landforms in part (b). Some included the 'cliff behind beach'. Reference to the storm beach was most common, although at times this was linked to high tide, rather than extreme waves. There was a belief that cusps resulted from deposition, rather than the scouring action of the sea. Those that had precise knowledge were rewarded quickly. Only two landforms had to be referred to in order to access the 4 marks.

Answers needed to show greater precision, sequence of process and appropriate terminology. This was not always the case. Too many candidates remained in Level 1 as they noted the long, thin area of sand that continued to grow along the coast due to longshore drift. At times this was linked to the wind only and the essential aspect of the waves was omitted. Swash and backwash were confused; the angle of approach was at 90 degrees. These are basic errors and prevented many, given their weak answers, from gaining many marks. The best saw a clear sequence in formation and went onto explain why the spit was hooked regarding wind direction and wave refraction.

Part (d) was a question on coastal erosion. This should have been clear. Yet, many launched into answers relating to coastal flooding or coastal management. Where answers were focussed, there was often a clear imbalance between the physical and socio-economic consequences. The physical component related to retreat of the cliffs without going into any detail or recognising other processes. The best did go on to consider slumping and sliding. Often socio-economic consequences were vague and general. Better responses referred specifically to their case study and noted the impact in areas such as Holderness, Walton on the Naze, Lyme Regis etc.

Question 4 Hot desert environments and their margins

As in other questions, a significant number of candidates disregarded the 'describe' command word in part (a) and went onto explain why hot deserts are arid. Overall, this was relatively well done. There was a need for precision where the command word was addressed. Very dry and hot was inadequate. Thus, specific precipitation totals and temperatures were required and although large diurnal ranges were credited, there were marks available here for specifying what that diurnal range was.

There was some confusion in part (b). Many drifted on to erosion, especially abrasion and deflation by the wind. Many focussed on exfoliation and described this process, whilst granular disintegration was also relatively to the fore. Chemical weathering was inappropriate here.

Description was better than explanation in part (c). The landforms were often recognised as mesas and buttes, although others increased the scale to inselbergs; others considered yardangs. Some were able to go on to offer explanation. This often focussed on wind erosion; few recognised that these were relict features – the result of water erosion in wetter periods and the role of water in deserts today.

Responses to part (d) generally had a clear structure; they addressed the struggle first and then ways in which improvements were being attempted. The prescribed example of the Sahel was usually referred to, although the level of precision proved to be a good discriminator. Stone lines featured prominently in the improvements and solar cookers as an alternative to fuelwood were also noted. There was a need to evaluate and consider the extent to which the statement was valid. Only the best engaged with this aspect of the question.

Section B

Question 5 Population change

There is a need to read the stem of the question. The lead in statement to part (a) provided the focus of the question regarding population migration change. Some candidates ignored this and went on to discuss the location of member states before and after 2004. Even where the migration change was identified, some failed to consider the command word 'Describe' and others struggled with the notion of 'pattern'. Single countries do not constitute a pattern, unless flagged up as exceptions. Candidates need to be taught how to describe a pattern, for on the human components, they are a generic question, although the subject matter will vary. There is a need to have an overview and then to add to the initial statement – putting flesh on the bones. Most recognised the increase versus decrease at a basic level between countries that were members before May 2004 and those after. Often, single countries, rather than groups of countries were referred to, such as Spain. The use of compass points would aid the description with statements such as 'the highest rates of increase due to migration were in the south with countries such as…'.

However, more were able to explain appropriately with approximately half the candidates achieving Level 2. Here, a variety of reasons were considered including economic reasons but also the relevance of better weather for retirement migration in the south. Weaker candidates saw it erroneously as an MEDC/LEDC split.

Too many focussed on the individual bars, rather than the overall pattern in part (b). Groupings of age categories was a more useful approach. Often, there was no recognition of the overall shape and descriptive words and phrases such as convex, contracting base were all too rare. This should have been the starting point, supported by evidence from the population pyramid. Often the longest bars were noted, giving a piecemeal description only. Some perceived that the information on the table had already been incorporated into the pyramid, despite the discrepancy in the dates flagged up in the stem of the question. Many did recognise the impact on the economically active, especially up to 34. Few went on to consider the impact on younger groups in the future. Too many focussed on males, even though the breakdown into males and females was not provided for the eastern Europeans and some drifted away from structure looking at the implications for jobs etc.

Part (c) was designed to facilitate a range of responses using whatever case studies candidates had used. Thus, for example, they could have considered population increase in China, eastern European migrants into the UK, Mexicans into the USA, the growth in the numbers of elderly in the UK. Having decided on an appropriate example or examples, candidates then had to identify a range of economic and political effects. Often these were imbalanced with the emphasis on economic. There was significant drift to social. The best offered a degree of balance with reference for example to the economic impacts of an ageing population (often seen negatively only) and linked to government policy and retirement age and immigration.

Question 6 Food supply issues

Part (ai) should have been a straightforward question. However, only about half achieved 2 or more marks. There is a need to take into the exam room a body of knowledge and to use this to answer questions set. The lack of knowledge clearly proved problematic for some as they struggled to identify appropriate characteristics. There was some confusion with the initial Agricultural Revolution and GM crops. The best identified more than 4 clear points cataloguing valid features that recognised the role of HYV's, but went beyond this into other features.

Often, candidates addressed one side only – usually the ways in which it was unsuccessful in part (aii). Again, there was some confusion with GM crops. The best presented a balanced and

informed account, recognising the success in the form of increased food supply, surplus to sell and the limited extent as some farmers got into debt and became poorer than they had been initially.

The recognition of an appropriate/intermediate technology strategy was challenging for some as high technology solutions were suggested. Where appropriate exemplars were selected – such as stone lines in Burkina Faso, water pumps at Kukri Mukri and Bangladesh and drip irrigation – it was detail that facilitated progress to Level 2.

In part (c), there was generally a recognition of the issues indicated in Figures 8a and 8b. Thus, food miles and the associated carbon footprint and the role of TNC's was to the fore in many accounts. Others went beyond what was given to consider economic implications and fair trade. At the lower end, accounts were descriptive and the links to globalisation were not really apparent. This was essential to access Level 2 and there was often a real attempt to consider the issues. Few addressed the issue of seasonality of foodstuffs, although it was clearly flagged up in the resource. Candidates should be encouraged to use information and to express supported opinions and ideas on issues, such as globalisation.

Question 7 Energy Issues

Part (ai) was generally well done. Most identified either the solar panels and/or the wind turbine. Many related to the usefulness regarding electricity generation or for heating. A significant number related the sustainability to the renewable and non-polluting features of the methods adopted.

The need to assess the contribution of the methods in part (aii) proved more challenging. There was a need to refer to the text in Figure 9b and then to identify how they may reduce the environmental impact. Answers were diverse, but the evaluation aspect proved challenging. Relatively few sought to assess the impact and were aware of its limited extent.

Many had a range of ideas in part (b). A significant proportion focussed on factors other than wind. Thus, noise, birds and appearance featured highly. Some added on reference to wind. To access Level 2, there was a need for greater precision on the specific conditions and locations that would be required for wind turbines and to seek to have a more complete view, including wind specific points, but considering other factors also.

There was a wide variety of environmental impacts that could have been referred to in part (c). Global warming and acid rain were to the fore; there was less reference to visual impact and pollution – although the Exxon Valdez did make a re-appearance. Some incorrectly referred to the hole in the ozone layer. There was a need to address two command words here and the 'Describe' aspect was generally much stronger. Impacts that were well documented related to acid rain in Scandinavia on lakes and forests and the oil spill in Alaska were effectively used. Specific facts were essential in providing detailed support. The explanation was much poorer; some struggled to identify the gases responsible, beyond carbon dioxide. There was a need to identify how the gases got into the air and how the links between this and their environmental impact. Some drifted into the impact of pollution on people which was not relevant.

Question 8 Health Issues

Describing a pattern in part (ai) again proved challenging for a significant proportion, although the vast majority did obtain 2 marks here. There is a need to write what can be seen on the map and to identify groups of countries, not individual ones (unless in the context of exceptions). The obvious point referred to the dominance of malaria in Africa especially, followed by the northern part of South America and parts of South East Asia. Many were less precise in the latter two areas. It was valid to note that there was a clear dominance in the tropics, whilst stating that they mostly occurred in the Southern hemisphere was invalid.

In (aii), a significant proportion failed to perceive the importance of Figures 10a and 10b and were unable to link them together. This proved to be a good discriminator as Level 2 demanded the link between the information and the explanation. Weaker responses related to a limited range such as better healthcare; better answers considered the role of education and preventative measures in South America as opposed to Africa.

AIDS appeared too frequently in part (b) – a question that demanded a 'disease of affluence'. Popular, relevant choices referred to coronary heart disease, type 2 diabetes and obesity. There was a need to engage with the economic impact and to see beyond just the cost of health care. Answers which suggested that health care might entail matters like research for new drugs were inevitably better than those that were concerned with just more doctors, beds. The best saw beyond health care into days lost from work from illness and the implications of this. Some drifted incorrectly on to the cause and the symptoms of the disease.

There was a focus on life expectancy as a measure of morbidity in part (c). Some recognised this as a measure; some confused morbidity with mortality. Often regional differences were limited and the scale very broad – northern England as opposed to the south of England. At the other end of the scale, intra-urban contrasts were the focus. The best sought to identify regional variations in types of cancer for example and then explored a variety of factors – such as age, lifestyle, levels of education and wealth – often in a simplistic manner. There was limited recognition that a variety of factors had to be considered simultaneously to discover an explanation. At times, there was a lack of knowledge. There was a need to apply what was known to the question.