Version 1.0

General Certificate of Secondary Education
June 2011

Geography B 40352H

(Specification 4035)

Unit 2: Hostile world (Higher)

Report on the Examination

Further copies of this Report on the Examination are available from: aqa.org.uk

Set and published by the Assessment and Qualifications Alliance.

The Assessment and Qualifications Alliance (AQA) is a company limited by guarantee registered in England and Wales (company number 3644723) and a registered charity (registered charity number 1073334).
Registered address: AQA, Devas Street, Manchester M15 6EX.

General Comments

The paper proved to be a very effective discriminator of geographical ability. It allowed candidates of all abilities at this tier to demonstrate positive achievement. The majority of candidates gave very good responses to the range of data provided. Geographical skills such as interpreting line graphs, pie charts, climate graphs, maps of various scales, photographs, sketches and diagrams were good. Opportunities for extended writing were given in one or more parts of each question, and even the lesser ability candidates at this tier were able to offer a response which demonstrated some good geographical understanding. The more able candidates were able to offer high quality, well developed responses, demonstrating excellent understanding of geographical issues, backed up with the correct use of geographical vocabulary, and good use of case study examples in some instances. They were able to apply their knowledge and understanding very well in unfamiliar contexts.

As in the two previous series, there was an imbalance between the numbers of candidates completing Sections A and B of the examination paper. The vast majority of candidates opted for Section A - Living with Natural Hazards, whilst very few chose Section B - The Challenge of Extreme Environments.

Most candidates appeared to have completed the paper and there were relatively few parts of the questions that were not attempted.

Section A - Living with Natural Hazards

Question 1

Part (a) was well done by the majority of candidates, with most able to interpret information from Figure 1 and therefore describe the distribution pattern of natural hazards. Over half achieved the maximum mark. Relatively few candidates misunderstood the concept of geographical distribution which suggests that many centres are preparing candidates well for this type of question. However, a significant number lost marks by confusing east and west, and some failed to score as they described the distribution of natural hazards in terms of the right/left/top/bottom of the maps. Some candidates explained the reasons for the distribution of natural hazards in the United States, when this was clearly not demanded by the question. Some of these candidates lost marks as they filled up the writing space with information that was not required. This also resulted in the unnecessary use of additional writing sheets.

Part (b) elicited a range of responses. Some candidates seldom gave more than a simple idea of plate movement and/or named the tectonic plates with poor knowledge of physical process and use of geographical terminology. However, 57% of candidates gained a Level 2 mark. These candidates referred to the processes taking place at destructive, constructive or conservative plate boundaries, with some referring to similar plate boundaries they had studied. Only 19% of candidates were able to continue the explanation of tectonic processes to provide the level of sequence and detail necessary to gain a Level 3 mark and this is an area for future development. Some candidates lost marks by describing the effects of earthquakes or volcanic eruptions. Underlining commands and key terms in the question can help candidates to give a focused response. It was pleasing to note that relatively few candidates wrote about both earthquakes **and** volcanic eruptions.

Question 2

Part (a)(i) was not always well done. Most candidates correctly named the state in which Mount St. Helens was located, but many were not able to accurately use distance and direction. This is an area for future development. Only 36% of the candidature gained the maximum mark. In part (a)(ii) most candidates gained both marks. When marks were lost it was due to candidates listing more than one response, or ignoring the command to use Figure 2 to answer the question. In part (b) 50% of the candidates were able to use the resources to good effect and use their own knowledge to gain a Level 2 mark. However, a significant number of candidates stayed at Level 1 as they listed advantages without fully developing the points.

Question 3

18% of the candidature failed to attempt Part (a) (i). It is clear that many did not understand the instruction to "Complete Figure 3", and this is an area for future development. Of those candidates who did attempt the question, most were able to accurately complete the climate graph. In part (a) (ii) most candidates demonstrated the ability to interpret a climate graph, although a small proportion confused temperature figures with rainfall. Many candidates were able to link variations in temperature and rainfall to time periods e.g. summer and winter. Some candidates did not focus their answers on 'patterns of temperature and rainfall' and limited their answers to extracting information for single months. Part (b) elicited a range of responses with candidates who developed responses from Figure 3 scoring well. The 42% of candidates who reached Level 2 often used a case study approach to develop their answers e.g. the role of Santa Ana winds in Californian wildfires. Part (c) was well answered by the majority of candidates with over half gaining a Level 2 mark. Amongst these candidates there was evidence of case study exemplars, full explanation of how various methods worked and use of technical terms such as 'back burning'. Those candidates who offered limited elaboration of the methods shown in Figure 4, or stated other methods by which damage from wildfires could be limited, gained Level 1 marks. Those who merely lifted information such as *'make a wildfire emergency plan'* from Figure 4, failed to gain any credit.

Question 4

In part (a) the vast majority of candidates were able to identify peaks and troughs from the graph and gain two of the four marks available. The better candidates then linked these to a natural cycle of changing ocean temperatures. Some stated that they were linked El Nino and La Nina events and 44% gained three or four marks. A small minority of candidates assumed the graph related to sea temperatures and not tropical storm days. Part (b) was not always well answered. Almost half of the candidates did gain a Level 2, and there was good use of case study examples such as the actual effects of Hurricane Katrina, Hurricane Hanna and Cyclone Nargis. Other candidates developed points well, identifying primary and secondary effects to gain a Level 2 mark. However, candidates who were able to offer only simple lists of effects stayed in Level 1. A significant number of candidates failed to score as they either described the path of the tropical storm or its life-cycle. Others failed to score as they described the weather a tropical storm may bring, when the question clearly states that the effects of a tropical storm are required. Part (c) elicited a wide range of responses. Most candidates chose to agree with the statement. Some candidates gave simple reasons for their chosen viewpoint; these were often taken directly from the data provided or were lists of methods of management used in either developed or less developed countries. These were valid statements and many were able to gain a top Level 1 and score 4 marks. However, the majority of the candidates did develop ideas further to gain a Level 2 mark through good use of the resource along with the application of their own knowledge and understanding in constructing an argument for or against the issue. These tended to be clear descriptions of methods of management or a clear argument that even though the statement was true, there is always something that a less developed country can do to protect itself. Relatively few of the candidates sustained the development of their argument to gain a Level 3 mark. Only 7% of candidates did sustain the development of an argument and this was often through building up a detailed case study of the effects of actual tropical storms. There were some very good comparisons of the effects and management of Hurricane Katrina in the United States and Hurricane Hanna in Haiti. These gave a detailed response, a range of ideas and a clear line of argument along with detailed exemplars. At Level 3, it was encouraging to see that a significant proportion of candidates chose to argue against the statement. Their answers were based on the growing effectiveness of appropriate technology and the low cost community disaster mitigation programmes that less developed countries now employ. Bangladesh was a much cited example. Hurricane Katrina was often cited as an example of why and how developed countries can also suffer huge economic, environmental and social losses from tropical storms. At Levels 1 and 2, there was some confusion with the management of earthquakes and with the level of economic development in a country such as the United States.

Section B - The Challenge of Extreme Environments

Question 5

Part (a) was well done by the majority of candidates, with most able to interpret information from Figure 9 and therefore describe the distribution pattern of extreme environments. Over 40% achieved the maximum mark. Relatively few candidates misunderstood the concept of geographical distribution, which suggests that many centres are preparing candidates well for this type of question. However, a significant number lost marks by confusing directions, and some failed to score as they described the distribution of extreme environments in terms of the right/left/top/bottom of the maps. Some candidates explained the reasons for the distribution of extreme environments when this was clearly not demanded by the question. Some of these candidates lost marks as they filled up the writing space with information that was not required. This also resulted in the unnecessary use of additional writing sheets. In part (b), the majority of candidates opted to explain the formation of the hot desert environment. For many candidates, their knowledge and understanding of climatic reasons for the formation of extreme environments was often limited to basic statements with little real explanation. Some candidates strayed into explanation of the causes of desertification, limiting their marks. Only 20% of candidates were able to give detailed explanation of the factors affecting climate and vegetation. However, the majority of the candidates did develop some explanatory points to gain a Level 2 mark.

Question 6

Part (a) (i) was well answered by the majority of the candidates, though the third blank space proved problematic for some candidates. In part (a) (ii) many candidates lost a mark by listing several reasons for changes to the area of sea ice, rather than developing **one** reason as demanded by the question. In part (b), some candidates were only able to offer vague, general responses such as 'it will affect animals', but 50% were able to develop the points made and gain a Level 2 mark. There were many good responses that focused on threats to ecosystems, and some use of case study exemplars.

Question 7

In part (a) a significant number of candidates did not read the pie charts with sufficient accuracy, and this is an area for future development. Many candidates also lost marks by failing to recognise that the **proportions** of the levels of desertification were different and not the amounts. Part (b) was well done by the majority of candidates, with 57% developing a sequenced, process-led response to gain a Level 2 mark. There was a variety of ideas, sometimes well expressed and occasionally with detail far beyond the demands of the question. A small minority of candidates lost marks by giving the effects of deforestation on people, or by giving solutions to the problems caused by deforestation. Some candidates failed to score as they merely restated, without elaboration, the information provided in Figure 12.

Part (c) was well answered by the majority of candidates with over 60% gaining a Level 2 mark. Amongst these candidates there was evidence of case study exemplars, full explanation of how various methods worked and some use of geographical vocabulary. Those candidates who offered limited elaboration of the methods shown in Figure 4, or stated other methods by which damage from wildfires could be limited, gained Level 1 marks. Those who merely lifted information such as *'build earth bunds'* from Figure 13, failed to gain any credit.

Question 8

22% of the candidature failed to attempt Part (a) (i). It is clear that many did not understand the instruction to "Complete Figure 14" and this is an area for future development. Of those candidates who did attempt the question, most were able to accurately complete the climate graph. In part (a) (ii) most candidates demonstrated the ability to interpret a climate graph although a small proportion confused temperature figures with rainfall. Many candidates were able to link variations in rainfall to time periods; fewer recognised that there was a small annual range of temperature with no discernable peaks or troughs. Some candidates did not focus their answers on 'patterns of temperature and rainfall' and limited their answers to extracting information for single months. Part (b) elicited a range of responses. Some candidates were only able to make simple statements, without

necessarily linking climate to vegetation, but 37% of the more able candidates were able to clearly explain links and the inter-relationships between climate and vegetation to achieve Level 2. These mainly focused on adaptations such as drip-tips, waxy leaves etc. Part (c) also elicited a wide range of responses, but was generally well done. Most candidates chose to agree with the statement. Some candidates gave simple reasons for their chosen viewpoint; these were often taken directly from the data provided or were lists of problems caused by deforestation or low levels of economic development. These were valid statements and many were able to gain a top Level 1 and score 4 marks. However, the majority of the candidates did develop ideas further to gain a Level 2 mark through good use of the resource along with the application of their own knowledge and understanding in constructing an argument for or against the issue. These tended to be clear descriptions of problems caused by deforestation or low levels of economic development with occasional exemplars. In Section B more of the candidates sustained the development of their argument to gain a Level 3 mark. Almost 25% of candidates did sustain the development of an argument and this was often through building up a detailed case study of the effects of deforestation. There were some detailed, sophisticated answers which referred to changes in flora, animal habitats, food chains, soil and river systems and consequences for indigenous peoples, along with the possible effects on global climate. At Level 3, it was encouraging to see that a significant proportion of candidates chose to argue that deforestation should not stop, but that exploitation of rainforests should be done in a more sustainable manner, with many candidates contextualising their responses with initiatives in the rainforests of Borneo.

Some general points for development

The resources used in the June 2011 examination papers for Unit 2 act as a stimulus for candidates to help them respond to questions and to be of value for teachers in centres to help prepare candidates for future examinations. They are provided as prompts for candidates to enable them to apply their knowledge and understanding to unfamiliar contexts, and also to assess their understanding of geographical skills. Centres should encourage candidates to become comfortable with using a range of resources such as maps, photographs, tables of figures, graphs, diagrams and text etc. They should encourage candidates to be able to explain patterns, trends, relationships, causes, effects, opinions etc by applying their own knowledge and understanding to these contexts.

There is a need for greater accuracy when answering skills questions e.g. reading graphs and pie charts, especially on Tier H where often no choices of answer are provided as they are on Tier F. Where appropriate, figures should be cited and units should always be given. Candidates should be reminded that there are often questions that require the completion of a graph and that they should be equipped with a pencil and a ruler.

Candidates should be instructed to quote both axes of graphs when identifying trends and patterns e.g. Figure 4 - peak / trough years and the number of tropical storm days. Candidates also need to be aware of the difference between absolute and relative values when comparing proportional pie charts.

In questions where candidates are required to describe patterns from a map, they should be encouraged to use the information provided in the key and/or scale and directions should be used to aid their response. Candidates should be encouraged to use lines of latitude as points of reference on global maps.

There is a need for detailed knowledge of physical process in order to access Level 3 on tier H. In section A, there is a need for detailed knowledge of the reasons why earthquakes and volcanic eruptions occur. In Section B, there is a need for detailed knowledge of the reasons for the climate of extreme environments. Generally, knowledge of air masses, prevailing winds, pressure zones, effects of latitude etc was disappointing and is something which needs to address. Questions that demand knowledge of physical process are often not well answered, and candidates should be encouraged to give a detailed sequential development of the process. This should be supported by case study exemplars where appropriate.

Some use of case study examples is a good strategy in responding to the Decision Making question (questions 4 (c) and 8 (c) on the Foundation Tier and Higher Tiers). The instruction ‘Use your case studies to support your answers where appropriate’ appears at the beginning of each section of the examination paper. Candidates should be aware that case studies help to exemplify and contextualise

their responses. The best Level 3 answers to the Decision Making question make use of knowledge of accurate information to exemplify issues and develop a clear line of argument. A summative or reflective statement often improves the quality of the response. Responses to questions which demand a viewpoint or opinion to be expressed in a clear line of argument may be improved by centres allowing candidates to practise their reasoning skills, by, for example, using scaffolding techniques including key words such as 'because', 'so that', 'as a consequence' etc.

Candidates should use an answer plan and try to develop points by giving as much depth as possible on one point before moving on to the next point. Centres need to emphasise that 'listing' or simple statements will only achieve Level 1 irrespective of how many points are given. Development of points is required for responses to achieve Levels 2 and 3.

Candidates should again be reminded about the need to read the question carefully and respond appropriately to command words. The best answers directly address the demands of the question. A well focused, planned answer helps to avoid the inclusion of peripheral information, or giving causes when effects are required by the question.

A long preamble to answers is not necessary e.g. the causes of an earthquake do not have to be described before the candidate goes on to describe the effects, or the effects do not have to be described before the candidate goes on to explain how damage can be reduced. This leads to the excessive use of additional writing sheets. When additional answer sheets are used it should be clear which question part is being answered.

Candidates should be reminded to respond appropriately according to the number of marks available.

Mark Ranges and Award of Grades

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

UMS conversion calculator www.aqa.org.uk/umsconversion