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Geography B 40352H

(Specification 4035)

Unit 2: Hostile world (Higher)

Report on the Examination

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General Comments

The paper proved to be an effective discriminator of geographical ability. It allowed candidates of all abilities at this tier to demonstrate positive achievement. The majority of candidates gave good responses to the range of data provided. Geographical skills such as interpreting bar graphs, climate graphs and data, maps of various scales, articles 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 of the candidates were able to offer high quality, well developed responses, demonstrating excellent understanding of geographical issues, backed up with the correct of geographical vocabulary and good use of case study examples in some instances. They were able to apply their knowledge and understanding well in unfamiliar contexts.

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

The vast majority of candidates completed the paper and there were relatively few parts of the questions that were not attempted.

Section A - Living with Natural Hazards

Question 1 was the best answered, the subject matter appearing to be the most familiar to the majority of candidates.

Question 1

Part (a) was not well done by many candidates, with only 12.5% gaining the maximum mark.
The term 'distribution' was not always understood by many candidates and many gave vague statements such as "they are on the Eurasian plate", "they are near a plate boundary", or "they are near the Equator". Latitude and longitude were rarely used to aid description. More able candidates referred to a distinctive pattern, for example a linear belt of volcanoes along with named reference points or named plate margins. Weaker candidates simply picked out points often with reference to place/direction rather than describing the distribution of volcanoes.

Part (b) elicited a range of responses. Some candidates seldom gave more than a simple idea of convergent movement and/or named the tectonic plates with poor knowledge of physical process and use of geographical terminology. The better candidates did link together the destructive plate boundary with convergence and were also able to show some knowledge of the processes that lead earthquakes at this type of plate boundary, along with the use of correct geographical terminology and 47% of candidates therefore, gained a Level 2 mark. Even at this tier, a significant number of candidates described the processes which occur at destructive, constructive and conservative plate boundaries, which limited the marks available to them as their knowledge and understanding of the processes taking place in the area shown in Figure 1 was not clear. Some candidates explained the reasons for volcanic eruptions in the area, which again tended to limit the marks available to them. Candidates may be encouraged to use annotated diagrams to illustrate physical processes / plate interaction and to refer to appropriate case studies. Part (c) (i) was well done by many candidates. However, for some candidates, errors with the use of direction and scale meant that they lost marks. The quality of written English was for some, a reason that marks were lost, an example being "Mount Sinabung is to the north-west of Sumatra". In such skills questions candidates need to be aware that rough estimations of distance may not be credited.

Part (c) (ii) did not prove problematic for the majority of the candidates. Part (c) (iii) was well done by the majority of the candidates, although there were some who did not follow the command to use Figure 2 and their own knowledge, as they gave responses which were all taken from the resource. This limited the number of marks available to these candidates. Part (d) was also well answered by many candidates. Knowledge of how buildings can be made earthquake proof and earthquake preparedness through education and drills was good and there were some well-developed descriptions of a range of methods used to try to make buildings earthquake proof, in the context of

both developed and less developed countries. References to cross bracing, base isolators and use of flexible building materials such as bamboo were common along with some development as to the effect of these methods and a pleasing number of case study examples, which added clarity to responses. Over 55% of candidates therefore, gained a Level 2 mark.

Question 2

Part (a) (i) was well done by the majority of the candidates, although there are still those on the higher tier who are unable to use direction and latitude with sufficient accuracy. Part (a) (ii) was not well answered by many candidates and a significant number were only able to state the surface temperature of the sea required for the formation of a tropical storm and/or that hot air rises to form clouds. Amongst these candidates, there was little use of geographical terminology and where terms did appear, they were often not fully understood and were often used out of sequence. There was also a tendency for some candidates to concentrate on the changes in a tropical storm after it had reached land, and of the damaging effects to the local population. However, many candidates were able to explain the formation of a tropical storm in a logical and clear fashion, along with the use of correct geographical terminology and gain a Level 2 mark. Only the better candidates at this tier were able to explain the formation of a tropical storm with a detailed, sequential development of the processes, often accompanied by a diagram that added additional information to the answer.

These were often centre-specific. There were occasional examples of very well annotated diagrams and this approach should be encouraged. For many candidates at this tier, their knowledge and understanding of reasons for the formation of a tropical storm was very limited and this is an area for future development. Part (b) (i) did not prove problematic for the majority of the candidates, with many scoring the maximum mark. However, a number of candidates expressed their answers with incorrect compass directions; for example using 'south-west' instead of 'south-east.' Some candidates lost a mark as they gave a correct change and for the rest of their answer explained why this change occurred. In part (b) (ii), many candidates scored well and showed a good understanding of possible changes to the number, frequency and distribution of tropical storms in the future. Only the better candidates at this tier were able to sustain their response and gain all four marks.

Question 3

Part (a) (i) was well answered by many candidates, with some good manipulation of the data and with more candidates calculating the range of temperatures than in previous series of examinations. Once again, some candidates lost marks as they gave a correct comparative point and for the rest of their answer explained why this occurred. However, there was a tendency amongst some candidates to copy out temperature figures from the resource without any additional working. Also, repeated differences between individual months were often quoted. Some candidates compared the temperature figures within an area, and others failed to compare like with like. An example of the latter is where the candidate stated the highest temperature at A, the lowest at B and then calculated the difference. Part (a) (ii) was very well answered with the vast majority of candidates able to interpret the resource and identify the correct area in which wildfires were likely to occur.

The majority of candidates did well on question (a) (iii). The climate data given in Figure 7 was well used and candidates own knowledge of factors such as spontaneous heating was much in evidence. The resource was also well used in suggesting human factors that cause wildfires. Many candidates at this tier gave well developed points referring to the sunlight being magnified by glass bottles, unattended campfires and arson whilst linking these to population pressure and/or accessibility. Case study examples helped some candidates give clarity to their response and references to 'Black Saturday' in Australia and well located wildfires in California, some of which referred to the effects of the Santa Ana winds, were well used at this tier. Part (b) elicited a wide range of responses. Some candidates were only able to offer simple reasons for their chosen viewpoint; these were often basic points with some simple elaboration of the methods given in the resource. These were valid statements and these candidates were able to gain a top Level 1 and score 4 marks.

Almost 41% of the candidates did develop these 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. Those candidates who answered by ticking the 'yes ' box often achieved a Level 2 mark by giving case study examples of similar schemes such as

'Smokey the Bear' and why these were successful and this enabled the development of points. Those candidates who answered by ticking the 'No' box often achieved a Level 2 mark by giving case study examples of other methods they felt to be better than warnings to campers. Many candidates were able to gain marks through the mention of the fact that natural causes of wildfire could not be dealt with through the advice given on the poster and then give examples of alternative methods of prevention. Only 5% of the most able candidates at this tier gained level 3 responses as they combined very good use of the resource with learned knowledge to back these points up, along with sustained development through the use of one or more examples. Some candidates were self-limiting as they repeated the causes of wildfires, or they tended to concentrate on the appeal of the poster, and how it could be improved by making it more eye-catching, this having no geographical content.

Section B - The Challenge of Extreme Environments

Question 6 was the best answered, the subject matter appearing to be the most familiar to the majority of candidates.

Question 4

Part (a)(i) was well answered with most candidates being able to interpret the map. However, some candidates compared the highlands with the lowlands in the same region. Part (a)(ii) was well answered by some candidates, with some detailed explanation of the relationship between climate and vegetation. Answers tended to focus on adaptations to climate such as drip tip leaves and candidates who followed a theme such as this were able to sustain the development of a point and gain a Level 3 mark, for example, "the plants adapt to the heavy rainfall by having drip tip leaves which allow the rain to wash off and prevent the plants from being crushed by the weight of water". This tended to be centre-specific and many candidates were only able to offer very vague statements or incorrect statements. For some candidates at this tier, their knowledge and understanding of climatic reasons for the formation of extreme environments is very limited and this is an area for future development. Part (b) elicited a wide range of responses. Some candidates were only able to offer simple reasons for their chosen viewpoint; these were often basic points with some simple elaboration of the methods given in the resource.

These were valid statements and many candidates were able to gain a top Level 1 and score 4 marks. Almost 30% of the candidates did develop these 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. Those candidates who answered by ticking the 'yes ' box often achieved a Level 2 mark by giving case study examples of similar schemes such as the Heart of Borneo project or the Samboja Lestari Project and why these were successful and this enabled the development of points. Those candidates who answered by ticking the 'No' box often achieved a Level 2 mark by giving case study examples of other methods they felt to be better than those shown in the resource. Only 19.5% of the most able candidates at this tier gained level 3 responses as they combined very good use of the resource with learned knowledge to back these points up, along with sustained development through the use of one or more examples.

Question 5

Part (a) was well done by the majority of the candidates with 31% being able to use the resource to good effect and gain the maximum three marks. Part (b) was also well done by the majority of the candidates, with 48% being able to give clear explanations and gain a Level 2 mark. This was often a development of the effects of ice melting, such as the effects on ecosystems. Some candidates could not reach the maximum mark as their responses did not evoke a clear sense of place. An example of this would be when candidates attempted to explain the effects of sea-level rise on polar bears in Antarctica. A few candidates lost marks as they did not restrict their answer to cold climates, and mentioned the effect of global warming on world sea levels as a whole, leading to flooding in Bangladesh. In part (c) (i), most candidates were able to give a reason for territorial claims. This was usually from the resource, but some candidates gave reasons that were not from Figure 11.

A number of candidates did not score as they suggested that oil drilling was taking place in the Antarctic. Part (c) (ii) was well done by the majority of the candidates, although some did not study the resource closely enough and said that 8 countries had made territorial claims. Part (c) (iii) was not

always well answered with some candidates confusing 'responses' with 'threats' and describing problems found in Antarctica, often they simply stated the effects of overfishing or tourism without reference to the role of organisations. Although acceptable, there was heavy reliance on the given text and relatively few instances where candidates had used their own knowledge. There was very little mention of organisations other than those included in the resource.

Question 6

Part (a) (i) was well answered by many candidates, with some good manipulation of the data and with more candidates calculating the range of temperatures than in previous series of examinations. As with the equivalent question in Section A, some candidates lost marks as they gave a correct comparative point and for the rest of their answer explained why this occurred. Again, as with Section A, there was a tendency amongst some candidates to copy out temperature figures from the resource without any additional working. Also, repeated differences between individual months were often quoted and some candidates compared the temperature figures within an area. Part (a) (ii) was very well answered with the vast majority of candidates able to interpret the resource and identify the correct area in which a hot desert was likely to be found. Some candidates did very well on question (a) (iii). The climate data given in Figure 14 was generally well used and candidates own knowledge of factors such as the effects of high temperatures on vegetation and soil was evident. The resource was also well used in suggesting the effects of relief and continentality.

The better responses at this tier gave well developed points referring to rain shadow areas and the process of orographic rainfall. Clear knowledge and understanding of the factors affecting climate and vegetation tended to be centre-specific. Some of the better candidates did use case study examples such as the Great Dividing Range and this helped to give clarity to their response. Part (b) (i) was well answered with most candidates being able to complete the flow diagram correctly, although the question was missed by some candidates, who left the boxes empty. Performance on part (b) (ii) was also variable at the higher tier, with some candidates demonstrating a good understanding of the effects of climate change on desertification with clear references as to how lack of vegetation cover and/or soil erosion increased the risk of land becoming desertified. Other candidates were only able to offer simple suggestions such as "there will be less rainfall" or "temperatures will increase" without linking these to the idea of increased risk of desertification. Part (b) (iii) was well answered, with many candidates being able to develop points and gain a Level 2 mark. These candidates showed a good knowledge and understanding of a wide range of schemes such as reforestation, animal husbandry, coppicing and various soil/water management schemes and how they served to reduce the risk of desertification. Case study examples were used to good effect to gain Level 2 marks.

Some general points for development

Candidates must only answer questions from **either** Section A **or** Section B. There remains a number of candidates who attempt both sections in full or in part.

Candidates should not give more points than they are asked for e.g. when asked to give one point, candidates should not list a number of discrete points. If the question asks for description of one point, but has a tariff of two marks, then the first mark will be for identification of the point and the second will be for description. If asked to tick two boxes in a multiple choice question, candidates should not tick more than two boxes.

The resources used in the June 2012 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 accuracy when answering skills questions e.g. reading graphs, giving compass directions etc.

Candidates should be reminded that there are often questions that require the completion of a graph (2 (a) (i) and 5 (a) (i) on the Foundation Tier) and that they should be equipped with a pencil and a ruler. Candidates should read these questions carefully and follow the command to complete the figure so as not to lose marks unnecessarily.

In describing features and patterns from a map, the terms 'distribution' and 'location' are not understood by a significant number of candidates at both Foundation Tier and Higher Tier.

Questions that demand knowledge of physical process are still often not well done 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 3 (c) and 4 (c) on the Foundation Tier and 3 (b) and 4 (b) on the Higher Tier). 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 on 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.

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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