GEOGRAPHY

Overall grade boundaries

Higher level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 13	14 - 27	28 - 40	41 - 52	53 - 63	64 - 74	75 - 100

Standard level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 13	14 - 28	29 - 39	40 - 51	52 - 63	64 - 75	76 - 100

Higher and standard level internal assessment

Component grade boundaries

Higher level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 3	4 - 7	8 - 12	13 - 16	17 - 20	21 - 24	25 - 30

Standard level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 3	4 - 7	8 - 12	13 - 16	17 - 20	21 - 24	25 - 30

The range and suitability of the work submitted

Candidates presented some very sophisticated fieldwork studies and the overall standard of fieldwork was impressive. The strongest investigations all had a clear spatial component.

Common topics were those related to: Patterns in environmental quality and sustainability (part one, core theme topic 3); Freshwater – issues and conflicts (part two, option A); Oceans and their coastal margins (part two, option B); Leisure, sport and tourism (part two, option E); and Urban environments (part two, Option G). Fieldwork based on other topics in the core, or on the part three higher level extension (global interactions) often failed to meet the same high standards as work related to part two. Note that, with some exceptions, most vegetation studies have limited relevance to the current syllabus.

Some reports were not sufficiently geographical. Examples of non-geographical fieldwork includes the non-spatial investigation of gender differences related to topics such as choice of career, and studies that rely too heavily on historical rather than geographical (spatial) data. Reports based on topics such as these did not score well.

Whereas most centres collected sufficient primary data, a few did not. Examples of “fieldwork” that did not meet the IB requirements (because it did not count as primary information) included the use of data from social media such as Facebook, and data collected from the internet and world wide web. Geography fieldwork requires that candidates go out and collect their own data in the real world, not in cyberspace. Reports deemed to contain no primary information usually score zero for all criteria except criterion D (written analysis) and criterion G (presentation), though non-fieldwork reports that include a valid fieldwork question and/or methods may gain partial credit for criterion A and criterion B.

It is clear that some topics are more suitable than others depending on the location of the fieldwork study and ease of access by the candidates. Fieldwork must be planned with care. Pilot studies may be helpful in order to ensure that sufficient primary data of good quality can be collected in the time and locations available.

Candidate performance against each criterion

Most candidates followed the recommended format of presenting the fieldwork report. A few candidates did not integrate criteria C and D, or exceeded the word count.

Criterion A – Fieldwork question and geographic context

> In many centres, candidates worked in groups to collect suitable primary data. Though not required by the syllabus, most centres are now allowing candidates some choice in deciding the fieldwork question and/or the hypotheses to be investigated.

The best projects have very specific links to the syllabus and are tightly focused. In the best examples, knowledge and understanding shine out in the first few pages as the theoretical framework for the study unfolds.

The best work tended to have fieldwork questions which were narrowly focused, appropriate and with manageable hypotheses. Fieldwork questions that were vague, had obvious outcomes, or were based on overly simplistic questions, often led to poorly developed reports. This included fieldwork questions using the phrase “To what extent...?”, which are unlikely to be answerable within the word limit.

It is important to find a spatial focus for the fieldwork and plan data collection so as to allow the use techniques of data representation that can reveal any spatial patterns in the fieldwork results. Non-spatial topics rarely score well.

Maps which show specific and pertinent features are essential but varied greatly in quality. Internet images are often not maps but can be used as an underlay for information such as study areas, sample points and other relevant geographical facts (for example, direction of river flow, prevailing winds, longshore drift direction, PLVI in urban studies, scales). Conventions, such as the inclusion of a scale and north arrow, must be observed.

The source of all non-original material (including base maps) must be given. Note that this requirement applies equally to any photos used by candidates for showing data. The source should be placed as near as possible to the photo, diagram or map, and a list of all sources should be given in the bibliography.

Criterion B – Method(s) of investigation

The group collection of data in many centres showed evidence of good co-operation. In most cases, methods were described, adequately justified, and likely to yield sufficient data of good quality to enable adequate interpretation and analysis.

As noted above, some centres are not collecting enough primary data, and some candidates are overly reliant on secondary sources (such as estate agent land values, historical photographs, neighbourhood ethnicity/census material).

For criterion B the methods used must be justified and described and should enable a sufficient quality and quantity of primary data to be produced to allow the fieldwork question to be investigated. Whenever empirical measurements are taken, for example of the orientation of the long axis of pebbles on a beach, candidates should state a clear purpose and justification.

Weaker candidates often did not provide any justification and also failed to explain sampling methods used in data collection. Many reports would be improved if candidates explained the

details of how the sample size and locations were determined, including the selection method employed.

In cases where questionnaires were used, the methods section should incorporate some justification for the precise questions asked, together with clear reference to the number of responses, time of survey and choice of survey points. A copy of the questionnaire should be included in the appendix.

The use of annotated photographs showing methods can be helpful but the excessive use of tables (presumably in an attempt to circumvent word count restrictions) is not acceptable.

Criterion C – Quality and treatment of information collected

A very wide range of maps, graphs, diagrams, photographs and other illustrations was seen.

The best reports included some truly outstanding techniques of data treatment and display, such as isopleth and choropleth maps of spatial trends and patterns, which easily exceeded the demands of the top markband for this criterion. Weaker candidates still lost marks because they forget to label axes on graphs, did not include scales or orientation on maps, and made poor use of colour, even where it would greatly improve clarity.

Many reports used statistical methods such as Spearman's Rank Correlation and Chi-squared. However, these tests were NOT always appropriate or calculated accurately. Statistical tests should not be used when the sample size is insufficient. Some candidates did not have a good grasp of how to check the statistical significance of their findings. Some candidates did not use statistics, even when their data was suitable and where it might have been helpful to their analysis.

Many candidates are now producing maps based on their findings; this is key to successful internal assessment (IA) fieldwork as it guarantees that the report has a clear spatial focus. An increasing number of candidates are now placing their graphs/data directly onto background maps, making it much easier to visualize any spatial patterns that may exist.

There were several cases (usually weaker candidates) where multiple pages of very similar graphs were included. These represented a significant amount of work but led to little extra value in terms of analysis. The use of spatial data presentation should be stressed, not only because it is better, but also because it is more succinct and would save time and space for candidates.

For this criterion, the choice of scales and use of colour remained two relatively weak areas. For graphs to be compared, it is essential that scales are identical. In the case of quantitative maps, such as choropleth maps, it is important that the colours chosen help the viewer discern which is the highest class and how the classes are ordered, by, for example, grading several tones of a single colour from light (= less) to dark (= more).

Criterion D – Written analysis

A small number of candidates failed to integrate criteria C and D, offering instead two entirely separate sections. Such candidates need to be made aware of the formal IA requirement that criteria C and D be combined into a single, unified, coherent section.

The written analysis varied from superficial (mark band 3-4) to very detailed (mark band 9-10). Better candidates wrote perceptive analyses, including valid explanations, and quickly reached the top mark descriptors. They referred confidently to findings by actually quoting graphs and figures. Trends, spatial patterns and any anomalies found were identified, linked and discussed. Many top range samples used statistical testing appropriately and determined the confidence level of their results. In the best reports these discussions were associated closely to the specific fieldwork question and the established geographical theory and context.

Weaker candidates tended to resort to simplistic statements and descriptive summaries. In some cases, they presented pages and pages of raw data in rough tables but made little reference to the material. In the worst cases, they largely ignored the data they had collected.

Reports which investigated more than one hypothesis and then presented separate analyses for each hypothesis tended to score less well on these criteria than reports which integrated the discussion of results into a single section where the connections between hypotheses could be readily explored.

Criterion E – Conclusion

Most candidates wrote conclusions that were consistent with their analysis. Some were, however, very brief and in some cases, candidates failed to summarize the findings of their fieldwork investigation. Weaker candidates sometimes introduced new material into their conclusion, or included information which would have been better placed in their analysis.

The strongest conclusions did refer back to the original fieldwork question and were based on the evidence and consistent with the results and analysis.

Criterion F – Evaluation

Most candidates were able to make some sensible evaluations of methods, with valid suggestions for improvements. However, this criterion is designed to make candidates think beyond any problems resulting from the weather, teachers and class mates, and evaluate the fieldwork process in terms of such things as sample size, choice of locations and the quality and quantity of data/information collected.

Note that where evaluation is undertaken using only a table, ALL the words used in the table will count towards the total word count.

Many candidates failed to consider how the original fieldwork question or hypothesis might be modified or improved. There were more recommendations for improvements to methods than for worthwhile extensions.

Criterion G – Formal requirements

It was disappointing that many candidates still failed to gain full marks for this criterion. There are still too many reports which lack a final check and proofread. Moderators would like to see all candidates gaining the full four marks available for this criterion.

While most candidates performed well in this criterion, some missed full marks on account of poor referencing and failure to number and integrate illustrative material appropriately within the text. The formal requirement that illustrative material be integrated into the text is meant to signpost the need for candidates to number (consecutively) all graphs, maps and photos, and then make clear reference in the main body of the report to these graphics by referring to their figure number or page number.

Almost all reports respected the 2,500-word limit.

Teachers are reminded of the need to check word limits carefully and to award zero marks for this criterion if the limit is exceeded. They are reminded that any deliberate attempt to circumvent the word limit (including the excessive use of tables) should not be encouraged.

Candidates should take care to ensure that the word count stated on the report's title page or cover is correct. It is helpful to moderators if word counts are provided for each sub-section of the report. Candidates should be made aware that relying on automated word counts may give higher totals than the true "IB count" which excludes titles, labels (though not annotations) on diagrams and so on.

Some candidates included material in the appendix that was of central importance to the report and which should have been incorporated into the main text. Centres are reminded that moderators are NOT required to read the appendix, which means that any diagrams or maps essential to the study MUST be included in the main body of the report.

Recommendations for the teaching of future candidates

Candidates should be encouraged to:

- Choose a tightly focused fieldwork question and, if relevant, a strictly limited number of hypotheses.
- Link the fieldwork question clearly with the syllabus.
- Personalize any downloaded maps to show the location, choice of topic and/or sample points, following standard geographic conventions such as including a scale and north arrow.
- Justify (in detail) all the methods used and explain the sampling method(s) employed.
- Avoid using extensive tables in reports, especially in the sections for methods and evaluation.
- Incorporate a greater variety of appropriate graphical and mapping techniques in their analysis.
- Limit the application of statistical tests such as Spearman's Rank Correlation to situations where sufficient data has been collected.
- Focus in the analysis on interpreting (not just describing) results and explaining their findings, focusing on any spatial patterns or trends identified.
- Number and place all the illustrations appropriately within the text, and then refer to them throughout the written analysis.
- Pay close attention to the assessment criteria and follow the recommended structure for fieldwork reports.

Teachers should be encouraged to:

- Introduce the geographic skills listed in the subject guide (pages 15-18) in the time leading up to undertaking IA fieldwork. Candidates need to be introduced to a wider range of graphical techniques and simple statistical tools. Fieldwork investigations really are better when a variety of techniques are used.
- Look at the feedback from moderators on previous performance and take note of the IA section in the subject report published after each examination session.
- Help candidates appreciate the distinctions between terms such as "ethnicity", "nationality" and "culture", if these are relevant to the fieldwork question. This is an ideal teaching opportunity. Candidates should be given the skills, knowledge and opportunity to explore these terms effectively and sensitively.
- Help candidates choose an appropriate fieldwork question, and any related hypothesis or hypotheses.

- Prepare candidates to be able to draw good introductory maps, including well-chosen annotations specific to their chosen fieldwork question.
- Ensure that ample quantitative data is collected.
- Ensure that the work has a clear spatial component, and involves collecting data that the candidates can then represent on a map or maps.
- Ensure that candidates are familiar with the assessment criteria.
- Add comments to all reports explaining why particular marks have been awarded.
- In preparation for the electronic submission of IA (the exact session when this will happen is yet to be confirmed), some consideration should be given to avoiding the use of fold-out diagrams in future fieldwork reports.

Final comments

The general standard of work seen at moderation was encouraging. Most candidates are acquiring valuable knowledge and a sound understanding of basic fieldwork techniques and how to conduct geographic investigations.

All the teachers concerned in organizing IA fieldwork are to be commended for helping candidates undertake fieldwork and to further develop their candidates' skills in researching, processing and interpreting empirical data.

The rank order of candidates after moderation was in almost all cases a very close fit to the rank order of the marks awarded by teachers.

Higher and standard level paper one

Component grade boundaries

Higher level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 8	9 - 17	18 - 24	25 - 31	32 - 38	39 - 45	46 - 60

Standard level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 8	9 - 17	18 - 24	25 - 31	32 - 38	39 - 45	46 - 60

The areas of the programme and examination that appeared difficult for the candidates

A minority of candidates still provided explanation for the command term “describe”. Applying knowledge and understanding to some of the longer response questions proved difficult for some candidates. There was no one question in the exam that seemed to generate the weakest responses. Reasons for the structure of “Qatar’s” population pyramid were not well understood by some candidates with many not recognizing that migration of males was the cause of the bulge in the male economically active group. In some rare instances there were obvious gaps in knowledge, for example in naming Millennium Development Goals, or being able explain the impact of an anti-natalist policy or understanding physical water scarcity and it is important that teachers cover the entire core syllabus. Analysis and in some cases evaluation is also vital in the essays and this is a skill that was lacking in some section B responses. In section B, question 6 and 7 seemed the most popular but only by a narrow margin, with question 5 being a little less popular. Candidates must be encouraged to use paragraphs to organize their essays and to ensure that they answer the question set.

The areas of the programme and examination in which candidates appeared well prepared

Time management seemed better this session with most candidates having time to write a lengthy extended response in section B. Most candidates appeared familiar with the command terms and hence gave appropriate answers. There was evidence that many candidates made a rough plan of their essay before writing it. Very few candidates needed any extra pages this session and any that were attached to the script tended to be rough notes only. Most candidates used China’s one-child policy as the anti-natalist case study in 1c and there were many strong responses. There was detailed knowledge as to how aid does not always help in reducing disparities. The greenhouse effect was quite well understood by many candidates but it was surprising how few chose to explain the energy flows through an annotated diagram. Question 4 as a whole was very accessible to most candidates. Most candidates attempted all the essays with reasonable confidence and an increased number of candidates achieved full marks for their essays this session.

The strengths and weaknesses of the candidates in the treatment of individual questions

Section A

Question 1

(a) On the whole, there were strong responses referring to the size of age groups (dependent and economically active) and/or the gender imbalance. Many candidates forgot to back up description with data from the graph, which limited some strong responses to 2 marks maximum. A few candidates struggled to offer a description of the pyramid and focus too much of their response on explanation. These answers were self-limiting.

(b) Mostly good answers with candidates recognizing that the structure reflected male immigration of workers. Other responses were less successful based on gender discrimination in the Middle East or that birth rates had changed or that women had emigrated.

(c) The vast majority of candidates made use of China's one-child policy although there were rare cases of others being used such as India or Singapore. Most candidates were able to give valid and distinct socio-economic impacts but were less successful in developing these with explanation and detail. Good responses referred to the impact of the one-child policy on gender imbalance, aging population, social issues such as marriage and "Little Emperors" and future problems of work force, attracting inward investment and looking after family 4-2-1.Some candidates ignored the numbers given in the booklet and answered in one paragraph and it was difficult to distinguish between the three separate impacts. There were some candidates who struggled to identify three distinct socio-economic impacts and in some cases the entire question was developed based on one impact such as gender imbalance or aging population. These were self limiting.

Question 2

(a) (i) The majority of the candidates correctly interpreted the graph and chose C.

(ii) Lots of different answers here; some were sub-targets rather than the correct MDG "improve maternal health". Some answers mistakenly selected gender equality or reduced infant mortality linked indirectly to pregnant women in graph C. Some just quoted the information on the graph which again showed a lack of awareness of this MDG.

(b) Responses here showed that candidates either knew the MDGs or they did not. As the MDGs underlie the entire core theme it was quite surprising how many candidates were unable to identify any.

(c) Some strong responses here with excellent development and/or exemplification such as some governments scrapping school fees (*e.g.* Kenya), or improvements in sanitation provided at school encouraging increased attendance by girls, or building schools in rural areas making them more accessible. Vague responses such as

"parents think it is important" were not credited. Some candidates were not able to appreciate the importance of "percentage" used in the question.

(d) On the whole this was well answered. The best responses identified the type of aid they were referring to. For example, financial Aid from the IMF leading to the problem of indebtedness or food aid, leading to dependency or saturating local markets and hindering local agricultural production. On rare occasions a candidate wrote about AIDS as opposed to aid. Corruption and dependency were often cited as reasons but were not well developed, also statements such as "people in poor countries are uneducated and so do not know how to use aid" were not credited.

Question 3

(a) This was a very straightforward question with most candidates achieving full marks. However, description needed to be specific and geographical in nature though – left and right or entire continents in the description were not credited. Many candidates incorrectly stated that most high physical water scarcity is on the equator, which is not the case. Some responses seemed to veer off into explanation, which was not required by the command term ("describe").

(b) This was probably the question that most candidates struggled with. The nature of this question allowed for only a very narrow response and if the candidates were unfamiliar with what physical water scarcity is they failed to answer this question appropriately. There were however some very clear answers that defined the term and identified the link between population numbers and demand, with many giving illustrations from a variety of global locations.

(c) Many good answers used an annotated diagram to illustrate the flows of energy although the majority answered through extended text. Many candidates are very familiar with the greenhouse effect and could adequately explain the energy flows and gases involved, often achieving full marks. There were still a surprising number who got muddled up with ozone depletion or who could only describe the enhanced greenhouse effect.

Question 4

(a) Most candidates could identify the relationship but in some cases an example and/or identification of an anomaly was missing.

(b) This was well done by a large number of candidates but some missed the word "environmental" and included economic or social advantages/benefits. Reduction of landfill sites and conservation of raw materials and energy formed the most common answers with satisfactory development and/or exemplifications.

(c) A very accessible and well-answered response with most candidates using solar or wind power to answer the question. Most mentioned cost of uptake with low power output as valid disadvantages and gave pertinent explanation/exemplification. There were also a number that chose HEP and illustrated this with exemplification, usually the Three Gorges Dam.

Section B

Question 5

Many good answers took the time to introduce the aspects of development that were advanced by gender equality such as GNI per capita, reduced population growth, political advancement, *etc*. There were some good answers that were well crafted with balance and focus. Stronger responses examined a variety of issues such as the elimination of gender disparity in primary and secondary education, the ratio of literate women to men in young adults, the share of women in the non-agricultural employment sectors and the proportion of seats in national parliaments, to name just a few; all backed with specific geographical examples or case studies. Alternative strategies such as improved trade; development of infrastructure; drive to age of high mass consumption and progress in tertiary and quaternary occupations were also discussed. Composite indices of social and economic development were used to good effect in the best answers. Case studies were seen from Kerala, India; Saudi Arabia; Finland; Norway and Japan to name just a few. This question allowed very good candidates to demonstrate accurate, specific, well-detailed knowledge and understanding of gender issues; examples and case studies were well chosen and developed. The best answers contained wide, well balanced, analysis with good evaluation and application. These answers were a pleasure to read and reflected a very intelligent and well crafted approach. There were some scripts which took the opposite view from the statement but these tended to be rare with moderate success. The weaker responses tended to ignore the question and focus their response on a list of examples of where women's rights are not prioritized with no explanation as to how tackling this will help with development.

Question 6

This question was answered by a large number of candidates. There were a number of good responses that recognized the impact of rapid population growth and gave a balanced approach which addressed both elements well. The better answers were able to expand on the link by outlining how population growth led to degradation and reduced biodiversity. There were some excellent responses that recognized that population was a factor not only in its size but also in the increased affluence of many countries and the desire for Western diets. Other candidates recognized that growth was not simply a matter of the amount of food required but also space and commented upon urban growth and its impacts on biodiversity. Many also highlighted that growth produced increased resource consumption such as oil and linked this to climate change, with its associated impact on soils and biodiversity. In addition, candidates made the point that natural processes could lead to both elements. In the weaker responses the main problem was often the lack of precise case study material, drawing on examples from "in Africa" or "in the Amazon rainforest". Some failed to link the ideas of soil degradation and reduced biodiversity to rapid population growth. These weaker scripts were characterized by sweeping generalizations and marginal and superficial content.

Question 7

There were some very good answers with candidates demonstrating a wide knowledge and understanding of major issues around oil. These included geo-politics; oil as a raw material for plastics, paints, fertilizers; environmental concerns, as well as oil as the major source of fuel. The best answers were intelligent and well crafted. These responses contained accurate, specific, well detailed knowledge and understanding with named examples and case studies which were well chosen and developed. These developed essays made interesting reading with both a clear focus and balance and covered various aspects of the dependency on oil. Most candidates concentrated on the finite/non-renewable nature of oil stocks as both fuel and raw material and argued that the use of renewable resources is urgently needed in order to guarantee sufficient energy availability for the future and to mitigate the adverse effects of dependence on oil, especially its adverse environmental impacts such as pollution and global climate change as well as geo-political issues. Several candidates made reference to “energy returned on energy invested” and were well versed on facts and figures of both oil production and oil consumption.

Recommendations and guidance for the teaching of future candidates

- It would be beneficial to teach how to tackle descriptions of patterns using regions and compass points.
- Candidates need to take care to read the essay questions carefully, and perhaps underline key words in order to ensure that they focus on all aspects of the question correctly.
- Candidates should study the whole of the core theme: sometimes there were obvious gaps in knowledge of a particular section.
- If the question asks for **two** reasons, encourage the candidate to write **two** distinct paragraphs.
- Candidates should be encouraged to give examples to support their ideas.
- Candidates should be reminded to use data and real world examples to support the extended response/essay style question.
- Continue to encourage candidates to use sketch maps and diagrams in their responses where relevant.
- Candidates should learn the definitions in the guide.
- Handwriting is a consistent problem. Candidates must be encouraged to write neatly.
- There is still work to be done on command terms: a number of candidates were focused on explaining when describing was asked for, or giving general information around a question rather than focused information.

Higher and standard level paper two

Component grade boundaries

Higher level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 7	8 - 15	16 - 22	23 - 29	30 - 35	36 - 42	43 - 60

Standard level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 6	7 - 12	13 - 15	16 - 20	21 - 24	25 - 29	30 - 40

The areas of the programme and examination that appeared difficult for the candidates

The questions on physical geography often posed difficulties, compared to those on human geography. Lack of detailed knowledge of physical processes was also a difficulty. Candidates had some difficulty in the definition and understanding of geographical terms, such as hydrograph, hydrological, advancing coast, demographic. Map reading continued to be a significant weakness, as was the ability to describe a distribution or pattern on a map or diagram. Many candidates did not read the questions carefully and often failed to understand and respond to command words such as describe, explain, compare, contrast, discuss and evaluate. Many candidates did not provide a meaningful conclusion or evaluation to their responses to score full marks on part (c) of questions. Many answers were merely descriptive, and “all I know” about a particular topic. Handwriting was often poor and many answers were difficult to read.

The areas of the programme and examination in which candidates appeared well prepared

There were relatively few rubric problems, with most candidates able to answer the required number of questions. Timing also did not appear to be a significant issue for many. Case studies and examples were often well developed, showing a good level of knowledge and understanding. Some candidates illustrated their answers with clear maps and diagrams. The best answers were argumentative and discussed and/or evaluated a question, with a clear summary paragraph at the end of an essay.

The strengths and weaknesses of the candidates in the treatment of individual questions

Question 1

(a) There were few problems in the interpretation of the satellite image. Some candidates did not keep to the question, and described impacts of flooding that were not related to traffic movement.

(b) This was either done very well, identifying eutrophication and salinization as the main impacts of agriculture and/or irrigation, or missed the point all together.

(c) There were some very good answers, showing clear understanding of the hydrograph and associated responses. Good knowledge was shown of factors affecting the stream hydrograph. The best responses included an annotated diagram of a stream hydrograph. However, many candidates either wrote about a flood event or tried to discuss the hydrological cycle, demonstrating a lack of understanding of the term “stream hydrograph”.

Question 2

(a) There were few problems with the two definitions, although the term drainage divide was less successful.

(b) This question was not well understood, and there was some confusion about the meaning of the term stream discharge. Some candidates had a reasonably good idea and could relate discharge to the explanation of friction, hydraulic radius and wetted perimeter. Channel size was dealt with better than shape.

(c) Generally this question was very poorly answered, with the question not being understood by many candidates. The term hydrological impacts caused significant problems. The majority of candidates either tried to relate to the hydrological cycle, or wrote an answer that focused on human and economic, rather than hydrological, impacts.

Question 3

(a) The definition of littoral drift was generally well understood. Many candidates were able to identify a feature caused by littoral drift, such as spit or tombolo, but often did not describe the feature, choosing instead to explain its formation.

(b) There was sound knowledge of the landforms associated with volcanic or tectonic activity, but the explanation of their formation was often not developed.

(c) There were some very strong answers about coral reefs and generally no overall problems with interpreting this question. A lot of attention was given to the ecological impacts. Many answers tended to be rather descriptive, or tended to focus on local rather than global issues, with limited discussion of the statement.

Question 4

(a) Most candidates correctly identified photograph B. The term advancing coast was not understood by many candidates, and hence parts (ii) and (iii) were poorly answered. Most candidates did not recognize the raised beach or abandoned cliff line on the photograph.

(b) There were some very good answers but many candidates confused east and west. Many wrote a lot about the change in ocean currents / temperature / fishing industry, but not about the climatic conditions. A simple, annotated diagram to show the operation and impact of El Niño would gain credit.

(c) There were some very good answers, with appropriate case studies relating to the consequences of ocean pollution. The weakest answers were largely descriptive, and not focusing on consequences of pollution.

Question 5

(a) This question was very poorly answered. Topographic map interpretation was often weak and there was little specific reference to the map. Although correctly identified, many candidates did not describe the glacial trough. There was a lack of knowledge and understanding of glacial landforms. Many candidates thought the corrie/tarn was a pingo. Even if identification was correct the subsequent description was not valid in many cases.

(b) Many candidates did not refer to map evidence, as specified by the question. There were some good attempts at describing relief, slope, remoteness and low population density, but also some rather fanciful ideas about needing oxygen to survive.

(c) This question elicited some excellent answers with good contrasting and well-developed case studies such as Niger and Alaska. There was often good evaluation of the question and discussion of the benefits to local people. Some introduced the idea of the controlling TNCs and the environmental effects that the local people had to endure (*e.g.* in Niger).

Question 6

(a) There was little difficulty in defining the term desertification. The map question was generally well answered, although weaker candidates did not refer to places on the map, or refer to latitude, longitude and the Tropic of Capricorn.

(b) This question was generally well done, with good knowledge and understanding of the causes of flash floods in deserts.

(c) This question did not cause significant problems, as long as candidates related the human activity to a specific extreme environment. There were some good case studies, such as the loss of snow/glaciers in Switzerland and a change in economic focus. Permafrost or cold areas were done better than the rather repetitive attempt to relate the question to arid areas. Weaker responses tried to look at climate change as a whole and were not related to a named extreme environment.

Question 7

(a) This question was generally well answered. Candidates were able to use map evidence to describe storm intensity and direction.

(b) The formation and development of hurricanes was generally well understood, and most candidates gained about four marks, but often failed to elaborate sufficiently to gain the top marks. They were not able to identify two distinct factors or were unable to explain how the factors worked and were interlinked. Some candidates spent too much time on pressure and winds, and missed the obvious factors of sea temperature and distance from equator. The Coriolis effect was not clearly understood.

(c) The term vulnerability was often not clearly understood or emphasized. Unfortunately, most responses focused on only socio-economic factors and failed to include demographic factors. There was a rather wide-ranging misinterpretation of the term demographic, which many took to mean geographic location. There were some good contrasting case studies.

Question 8

(a) Many candidates could describe an impact of an earthquake or volcanic eruption, such as destruction of homes, but did not then go onto describe how this affects the quality of life.

(b) This was a straightforward question. However, many candidates did not clearly distinguish between points B and C, or interpret the diagram correctly to show the differences between short and long-term responses. Where points B and C were distinguished there were some very clearly developed answers.

(c) Stronger candidates had few problems with this question and were able to discuss the statement explicitly with good knowledge of building design and modifications and other ways of reducing vulnerability. Weaker responses mentioned building design, but with no detail or development, and focused on general ways to reduce vulnerability. A few did not include anything on building design at all.

Question 9

(a) Candidates scored well in both areas, although some had difficulty in the precise definition of the terms environmental and perceptual carrying capacity.

(b) There were many descriptive responses to this question, with little geographic analysis of the differences in provision of leisure facilities between the CBD and rural–urban fringe. Many candidates did not analyse why the differences exist, focusing merely on “lack of space”.

(c) There were some good answers to this question, with effective use of case studies such as the London Olympics, showing detailed case study knowledge. However, often the answers were descriptive with limited explicit discussion of the effectiveness of the strategies as a means of urban regeneration. Most

responses looked only at one side of the argument and hence did not go beyond band D.

Question 10

(a) This question was tackled reasonably well. Stronger candidates were able to describe the distribution, with reference to latitudes, the prime meridian, and continental areas. Weaker candidates wrote little on geographic distribution, and too often described an LEDC/MEDC contrast and ex-colonies of the UK that are not relevant.

(b) This question was answered reasonably well with a range of social and cultural factors discussed. There were also some very weak, generalized answers showing limited understanding.

(c) This essay elicited some very good responses, with a balanced view regarding the importance of physical and human factors with reference to specific examples. Many responses were, however, merely descriptive of the importance of physical factors, with little said on human factors. A substantial minority did not understand the term physical factors, and equated it with physical location.

Question 11

(a) This question was quite well answered, although few gained the full four marks. Weaker candidates merely listed places.

(b) This was quite well answered, with understanding of the importance of movement of tourists or migrants, of transport links, and effective prevention campaigns. There was often a focus on why a disease did not spread within a specific country when the disease arrived. The reasons given tended to be repetitive and/or overlapping. Development of the reasons was missing. There was also an overwhelming idea that birds, insects, animals and food transported the disease, rather than focusing on the movement of people. Some candidates discussed spread within countries, rather than between countries.

(c) This question elicited some good responses with detailed case studies, such as Ethiopia, and an understanding of the causes of food deficiency and the idea of the interrelationships between factors. Stronger responses were able to link deficiency with physical, human, demographic and political factors. A few briefly mentioned causes and then spent the majority of the answer discussing solutions (some credit was given for this). There were an alarmingly large number who used very out-of-date case studies, such as the Irish potato famine.

Question 12

(a) The interpretation of the graph posed few problems, with some good attempts at quantification.

(b) There were some very good answers to this question, but also many generalized responses with little or no reference to actual trade agreements, and sometimes not referring to food production.

(c) This was a popular question and produced some good answers. However, often responses were very descriptive of the causes of disease, rather than its geographic impacts. Nor were they able to make explicit contrasts. Many candidates answered the question by writing “all I know about how/why the disease occurs/spreads” with no indication of demographic, social or economic impacts. Some were able to include some discussion of prevention and treatment. Candidates had problems with the command term contrast, and while stronger candidates attempted this many ignored the command term.

Question 13

(a) A substantial and worrying number of candidates could not define the term urbanization, often equating it merely with growth of cities and rural–urban migration.
The description of changes in distribution of millionaire cities was often well answered.

(b) This question proved difficult for many candidates who often described location of economic activities within urban areas rather than their movement, and found it difficult to relate to geographic reasons. The weakest answers interpreted the question as being about population movement, such as suburbanization, city growth in general or used the same reason but with different activities. Others identified reasons for movement without identifying a named economic activity. The phrase “within urban areas” seemed to be the main stumbling block.

(c) There were some very good responses regarding the sustainable management of urban areas, with case studies including Rio de Janeiro, Curitiba, and the London Olympics, showing a clear understanding of sustainability in cities, including diagrams, and an explicit examination of the challenges facing many cities. Weaker answers were often descriptive. Often, little attempt was made to define sustainability and as a consequence many answers degenerated into long-winded descriptions of recycling and reducing traffic in cities.

Question 14

(a) This question posed few problems, although weaker responses tended to name “Group 7” rather than a specific group of people. Most candidates were able to successfully distinguish between the employment characteristics for the two areas, using quantification.

(b) There were some good responses to this question, with candidates discussing suburbanization and gentrification. Weaker responses considered movement to/from large cities, including rural–urban migration, which is not relevant to movement within cities.

(c) This was a popular question with some very good responses and effective use of case studies. Many described problems of poverty in cities in both high-income and low-income countries, put forward possible solutions and discussed their effectiveness. Weaker responses were merely generalized descriptions of urban problems.

Recommendations and guidance for the teaching of future candidates

Teachers should encourage candidates to:

- Attempt to define the terms being used in the question – these are normally credited, *e.g.* discharge, vulnerability.
- Practice describing distributions. If a distribution or a pattern is asked for, then they should use the features/names given on the diagram, and not try to explain when asked to describe a pattern.
- Practise using topographic maps, so that map evidence can be provided when required.
- Be prepared for questions which might not be what they expect, and emphasize that they need to answer the question asked rather than just writing all they know about a topic.
- Draw sketch maps or diagrams in an answer: often, these can gain credit.
- Structure their part (c) answers carefully, and include an evaluation and a reasoned conclusion. Many candidates did not define the terms which meant that answers lacked clarity and structure and sometimes missed the point.
- Avoid the use of pre-learned answers that don't directly answer the question.

Teachers should:

- Enforce geographical vocabulary and terminology. Definitions of terms are provided in the syllabus; make sure that these are known. Valuable marks are often lost through incorrect definitions.
- Continue to emphasize the importance of command terms, especially the difference between "describe" and "explain", and the importance of reading the question carefully. Candidates need to understand what is meant by "examine", "discuss the statement", "contrast" and "evaluate". This needs targeted practice.
- Ensure candidates fully know and understand the challenging areas of physical geography.

- Continue to emphasize the need to use detailed, accurate examples in answers. Case studies should be current and/or relevant.

Further comments

There was a tendency for some candidates to consider part (c) of a question as a continuation of the parts (a) and (b), which is usually not the case.

Far too many candidates (especially at standard level) attempted to do both questions in their selected options. Some, but not all, then subsequently scored one out. This inevitably led to self-penalization due to time pressure.

A few attempted part (a) in all questions.

Higher level paper three

Component grade boundaries

Higher level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 4	5 - 8	9 - 12	13 - 14	15 - 17	18 - 19	20 - 25

The areas of the programme and examination which appeared difficult for the candidates

Many candidates struggled to demonstrate much understanding of the key associated geographical concepts of place and scale. Very few engaged properly with provocative spatial steers such as “country” and “national identity” (question 1b) and “everywhere” (question 3b). Active engagement on the part of candidates with the spatial concepts referenced in essay titles is always likely to be rewarded highly by geography examiners, in line with markscheme instructions.

Important geography of the real world in 2014 was not discernible in most scripts. Many candidates know much about the trivia of Burger King menus but seemingly know little about religion, jihadist campaigns and the cultural shockwaves that have traversed parts of Africa and the Middle East in the last few years. Few mentions were made in answers to question 1b of the Boko Haram group. Yet this terror group’s abduction of Nigerian schoolgirls had grabbed headlines across the world in the run-up to the May 2014 exams. With a name that translates as “Western education is forbidden”, Boko Haram is a movement that more IB higher level geography candidates might hopefully be aware of, given that it purports to be a reaction to the cultural imperialism of the Western world.

Some candidates struggled to stay focused on contemporary global interactions when writing their essays. Many drifted into the distant past, providing historical accounts of the actions of European missionaries, which is not exactly in keeping with the twenty-first century spirit of the paper. There was careless application of case studies too (while the Chernobyl disaster is a good example of transboundary pollution, it is a poor example of how global interactions affect the world).

As in previous sessions, weaker candidates were often tempted to merely agree with discussion statements. They were apparently unaware of the requirement that both sides of the argument should be given equal weighting, as part of a balanced evaluation.

The areas of the programme and examination in which candidates appeared well prepared

In question 1a, the reduction of the friction of distance (part of the “shrinking world” effect) was a very popular, well-rehearsed and, in general, competently executed topic.

To judge by this examination, the distinction between cultural homogeneity and hybridity is far better understood now than it was in 2011, when the first examination for the current course

was sat by candidates. Candidates are also showing greater familiarity with the diaspora concept and appreciate its importance for contemporary human geography.

Synthesis has been performed increasingly well in successive examinations. In the most recent examination, most candidates were able to deliver an appropriate response to the longer question, knitting together several themes from the subject guide in a discursive manner.

The strengths and weaknesses of the candidates in the treatment of individual questions

Question 1

(a) "Friction of distance" and transport innovation appears to be a well-understood and well-learned area of the curriculum. Even the weakest candidates were able to provide a short descriptive account of different modes of transport improving over time (in terms of the reduced time taken to move people or goods between locations). Many had learned the topic in advance in some depth, with accompanying locational details and data. This was not, however, always sufficient to reach the highest mark band available. Some conceptual sophistication was also expected, such as clear, well-explained linkages with the concept of time–space convergence (or time–space compression). Alternatively, greater geographical knowledge was expected of how, in context, the friction of distance has lessened for specific global flows, such as commodity movements, thereby linking specific locales (such as the flower farms sited around Lake Naivasha, Kenya and the flower markets near Old Street, London, England). In contrast, band C answers often provided greater detail of, say, the technical specifications of jet engines, yet went on to merely assert that this allows "people" to "move around the world quicker".

(b) Many candidates performed a synthesis of the following topics: the influence of the McDonald's corporation, national membership of trade blocs (especially the EU), the spread of English at the expense of native languages, the erosion of national traditions as a result of indigenous peoples' contact with tourists, the dissemination of music and film through the internet, the growing homogenization of world cities, the prosperity of diaspora populations, and the resurgence of nationalism as a reaction to globalization (some candidates showed good contemporary knowledge of political movements in the EU). Arranged in a way that provided both support for, and rejection of, the statement, this was usually sufficient for band D. However, the sophistication with which these complex ideas were handled usually left a lot to be desired in work around the C/D boundary (see comments below on how performance could be improved in the future).

Question 2

(a) While most candidates attempting this question were pleasingly familiar with glocalization, there was less familiarity with foreign direct investment (FDI). Some candidates explained why TNCs invest in foreign crime in order to reduce their costs (implying, perhaps, that such benefits might help a company's future expansion). Only a few were able to demonstrate much understanding of how FDI flows operate

beyond 'building a factory'. The best answers looked at outsourcing, while a tiny minority were aware of the geographical importance of mergers and joint ventures. Although McDonald's is still the preferred case study of choice for candidates and teachers, most candidates remain in complete ignorance of how the company's presence in India is in the form of a joint venture. This goes a long way to explaining why it has been so successful at glocalizing its products in India, due to the expert local knowledge of its Indian partner companies.

(b) The command to "examine the relationship" (as opposed to "explain the relationship") required candidates, ideally, to outline what underlying assumptions they would be making, preferably in their introduction. Weaker candidates generally established a simple positive correlation at the outset. Better answers suggested anomalies/outliers might need to be looked at too. At the very top end of the cohort, a small minority of candidates thought there could even be a reversal of the assumed relationship, whereby a wealthy country could maintain a degree of cultural isolation, whilst poorer countries sometimes become the global focus for international assistance and intervention, as in the case of Haiti. Sadly, most candidates did no more than assert that a strong positive relationship exists. To the credit of many, they performed a synthesis by suggesting that countries with a high GNI are likely to be home to many powerful TNCs, to be capable of cultural imperialism and to be highly attractive to economic migrants. Good answers sometimes made effective use of the KOF or Kearney index and demonstrated how some wealthy countries like the USA and UK score highly in all categories. However, it was a pity that more use was not made of interesting examples, such as China, which shows high participation in some ways but not in others.

Question 3

(a) In a previous exam paper, candidates were asked to explain how global interactions are measured. It was therefore appropriate to ask for a different approach to be taken with this latest question. Candidates were asked to focus their thoughts on why attempts at quantifying global interactions might not be successful. A helpful steer was given with the words "observe" and "measure", which provided two avenues for candidates to explore. Good answers thoughtfully considered how hard it might be to record certain types of illegal and legal global flows. Some candidates recognized that many types of data might be inaccurate and hard to measure reliably. A few thoughtful responses even focused on whether it is possible to track the transmission of ideas, trends or beliefs as they spread around the planet. Sadly, too many candidates reproduced a prepared response to a slightly different kind of critique and focused instead on the legitimacy of investigating certain types of global interaction. In such cases, one popular theme was a country's involvement with UN peacekeeping missions. Certainly, the legitimacy of using this as a proxy indictor of a country's level of globalization is open to question. However, it was not appropriate to do so as part of an answer to this particular question, given that peacekeeping missions *can* be observed and counted.

(b) Good answers were seen which offered a synthetic range of both physical and human transformations, some negative but others positive. The best answers demonstrated good technique, by balancing the four corners of their answer well

(physical – positive; physical – negative; human – positive; human – negative). A few even queried whether human changes could be categorized as positive or negative given that "beauty is in the eye of the beholder" (especially in relation to the global spread of eye-catching modernist architecture). Weaker answers typically failed to provide balance, or did not focus very well on the role of global interactions. Instead, such candidates wrote a much broader, unfocused answer that looked at the impacts of different societies on the environment (see comments below on how performance could be improved in the future).

Recommendations for the teaching of future candidates

Some past reports have focused on how to help the most able candidates reach the highest grades. However, it is clear that those of mid-ability sometimes struggle to optimize their performance too, often through a lack of focus on the specific instructions of the question. All too often, a generic answer is provided that synthesizes a number of broadly appropriate themes but in a way that fails to address the matter in hand. The extracts below are taken from 1b and 3b respectively and are accompanied by brief commentary that offers some guidance to candidates and their teachers on how to try and ensure that a broadly competent answer can achieve band D rather than band C.

<table>
<tr><td colspan="2">"Every country will eventually lose its distinctive national identity as a result of global interactions." Discuss this statement.</td></tr>
<tr><td>Extract from band C answer</td><td>Extract from band D answer</td></tr>
<tr><td>"TNCs such as McDonald's have spread around the world on account of globalization. Their power is enormous and they can be found in any city, although often they change the ingredients they use, such as the McArabia burger, which is available in Middle East countries. This is called glocalization. Often, the menus are written in English, and it's estimated that because of this, 3,000 world languages will soon be lost out of about 6,000."

This is a knowledgeable candidate and two relevant themes (TNCs and the dominance of English) are correctly synthesized. However, there is no reference at all to the concept of "national identity" here. An examiner is likely to make comments such as "point unfinished" or "not answering the question". The most likely outcome is a band C mark.</td><td>"TNCs like McDonald's can be found in almost every country in the world, with the effect that cities begin to look the same wherever you are. This is yet another way in which national identity can be threatened, as places no longer look as individual. The spread of English as part of cultural imperialism is another way in which nations lose their sense of identity. Some languages become lost and so a key part of a country's culture is no longer as distinctive."

There is no greater evidence of geographical knowledge here than there is in the previous response. However, it is being applied in a more direct and explicit manner. Clear links are established with the importance of language and the cultural landscape as signifiers of national identity. This has every chance of reaching band D or higher.</td></tr>
<tr><td colspan="2">"Global interactions have brought only negative impacts to human landscapes and physical environments everywhere." Discuss this statement.</td></tr>
<tr><td>Extract from band C answer</td><td>Extract from band D answer</td></tr>
</table>

"Another case study I have looked at is the Chernobyl nuclear explosion in 1986 which resulted in radioactivity becoming spread on a global scale. Countries in Europe suffered badly. In other parts of the world, other major environmental problems are found also. In Nigeria, the oil industry has brought acid rain problems for the Ogoni people. Farming systems are being modernised too, which brings a range of harmful impacts including eutrophication and salinization. Deforestation is a big problem, linked with climate change."	"In recent decades, industries have become globalized, resulting in the relocation of polluting industries to LEDCs. With less strict laws to worry about, TNCs have polluted rivers and soils in China. Elsewhere, the global movement of waste has resulted in countries like India experiencing toxic pollution due to the way that old boats from Europe are exported there to be broken apart. Finally, oil companies like BP and Shell have globalized their operations, bringing the risk of oil pollution to more and more countries."
This band C response is typical of many candidates who clearly possess geographical knowledge that could *be relevant to the question set. Essentially, however, the candidate is answering a different question: "Discuss how humans have damaged the environment". It is unclear how* any *of the activities described in this extract are linked to specific global interactions.*	*This could potentially reach band D because the impacts are clearly linked with specific global interactions, such as global flows of waste or foreign direct investment made by TNCs. Even though the vocabulary and level of located detail is not quite as good as we have seen in the previous band C answer, this candidate has made a much better attempt at addressing the essay title.*