

## GEOGRAPHY

### Overall grade boundaries

#### Higher level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 12	13 - 25	26 - 37	38 - 48	49 - 60	61 - 71	72 - 100

#### Standard level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 13	14 - 26	27 - 38	39 - 48	49 - 60	61 - 70	71 - 100

This session, some excellent extended essays were submitted in geography. It is essential that the research question is stated clearly early in the essay and is not speculative in nature. All relevant maps, diagrams and graphs should be placed in the main text, not relegated to an appendix.

This examination session went smoothly and feedback from centres via G2 forms was positive. Centres are strongly encouraged to submit G2 forms; the number of centres returning G2s has dropped since electronic submission was introduced. At both higher and standard level the number of candidates reaching the top grades was the same as in November 2007, indicating that the examination papers were accessible. However, at the lower end, particularly at standard level, there was an increase in the number of candidates receiving grades 1, 2 and 3.

Many candidates are being very well prepared for the examinations, and are becoming better at responding appropriately to particular command terms. Answers often include references to studied detailed case studies, and an increasing number of candidates also refer to their internal assessment fieldwork in paper two responses. The quality of annotated diagrams, and of maps included in responses, remains an area of weakness.

Care is still needed, especially in paper one responses, to avoid sweeping generalizations about major regions comprised of several countries, or about large countries where the characteristics of internal regions may differ widely. Answers benefit from the use of specific, possibly local, knowledge of the topic. In discursive responses, candidates are reminded that they should consider all sides of the topic or issue in order to access the highest markbands.

## Higher level internal assessment

### Component grade boundaries

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 3	4 - 7	8 - 11	12 - 15	16 - 19	20 - 23	24 - 30

### The range and suitability of the work submitted

There was a diverse range of work submitted and the vast majority of it was pertinent and had a Geographical focus which was narrow and appropriate. Some of the fieldwork was extremely well done and many schools are to be commended for this. The most suitable work tended to be teacher led in the sense that the hypotheses were devised by the Geography departments. Those who permitted students to submit fieldwork which was of their own design were less impressive and tended to result in greater variation in standards.

Fieldwork which was carried out at locations which were clearly well known to the schools also tended to have greater depth of content. Most of the fieldwork was primary based and the best reports were supported by some secondary input. There was considerable consistency in the marks awarded for each of the criteria with the exception of a few centres who failed to encourage their students to use statistical support to substantiate reports. When statistical tests are included the data should be suitable (in terms of quantity and quality) to ensure their validity.

A few centres had weak hypotheses and this undermined quality as they tended to be simplistic and sought to test what was an obvious outcome. A very few were descriptive and lacked appropriate use of graphs and maps.

### Candidate performance against each criterion

#### A Aims and hypotheses

Most centres appeared to formulate appropriate hypotheses which were narrow, focused and readily testable. In most cases a theoretical background was incorporated which is to be encouraged along with the inclusion of justifications. Where hypotheses were simplistic or weak this undermined the capacity of the students to excel

Better reports included an understanding, in some depth, of the theory behind the research and this gave the report a clear focus from the outset.

The locational context in quite a few cases remained poor with a lack of clear links between the introduction, hypotheses and specific locations used to carry out the field research. Too many maps are simply downloaded and lack any form of manipulation. The maps should clearly show location and enable the examiner to see where sampling was carried out. All of these elements should be inextricably linked to each other to create a strong introduction.

**B Methods of data collection**

In most cases the methods were clearly outlined but despite some being justified this was not really done well. This also applied to sampling – it is important to make the type of sampling clear and to incorporate detail of how this is done – random or systematic and with some reference to sample sizes.

Methodological weaknesses continue to plague some fieldwork reports. This ranges from questionnaires which include irrelevant questions (never analysed in the subsequent report) to the misuse of statistical techniques and to data sets which are far too small (e.g. applying nearest neighbour analysis to a sample of three shops) to yield meaningful results (T. Burton, Chief Examiner). I agree with this totally and this was reflected in quite a few reports.

**C Data presentation and processing**

Poor use or even misuse of statistical tests is an issue and in quite a few cases they were totally omitted. The variety of graphs being used is poor and in many cases schools seemed to think that inclusion of graphs was a fair substitute for statistical tests. This should not be the case. Graphs in many cases were the same for all candidates from some centres. Students should be encouraged to diversify. The best candidates used variety and also used the graphs to show correlations between variables.

Weaker candidates continue to use only a limited (and sometimes inappropriate) selection of graphical methods, and do not appear to understand the particular strengths or weaknesses of different methods. (T. Burton).

In some cases graphs appeared as token gestures rather than having meaningful links to the written analysis. Photographs were rarely sourced and this was a problem with almost all centres.

Maps could certainly be used more effectively and should be encouraged. Some were generated using excellent techniques whether by hand or computer. In contrast many were poorly labelled, drawn and lacked links. The direct download seems to be an issue of concern and should be discouraged.

**D Interpretation and analysis**

The quality of analysis tended to vary markedly – some centres simply described whilst others had a truly discursive approach which really strived to explain patterns and anomalies. In some cases the level of depth was excellent and the reports were a pleasure to read.

**E Conclusion and evaluation**

Most candidates produced some conclusive materials. The very best had sound conclusions referring back to hypotheses and accepting or rejecting them. Evaluations were often relevant but some simply criticized the weather or faulty equipment. Recommendations for improvements and new ideas were less well done but in the case of some they were exceptional. The word limit appears to have been adhered to in the majority of cases.

## Recommendations for the teaching of future candidates

Candidates should be encouraged to:

- State their hypotheses clearly near the beginning of the report, before trying to justify their choice. When they have several hypotheses these should all be clearly stated at the beginning and not dealt with separately as a series of mini reports
- Avoid simplistic (“Yes/No”) hypotheses, or those involving causation, since these can be extremely difficult to test. Also those which, from the outset, are very predictable.
- Clearly define any key concepts which are central to the work.
- Use an annotated sketch-map to show the location, choice of topic and/or sample points. These maps should have some degree of originality – hand drawn or at least manipulated to indicate personal endeavour
- Ensure that the quality and quantity of at least some of the data collected will allow for the application of statistical tests.
- Ensure that statistical calculations are performed accurately and are appropriate to the task.

As in previous sessions, teachers should be encouraged to:

- Help candidates choose an appropriate hypothesis or hypotheses – there are benefits in having a group do one piece of coursework rather than asking students to produce independent work. In the case of the latter there tended to be a greater variation in standards.
- Ensure that the fieldwork study involves the collection of sufficient quantitative data
- Add comments to fieldwork reports, indicating the extent to which the work matches the assessment criteria.

## Standard level internal assessment

### Component grade boundaries

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 3	4 - 7	8 - 11	12 - 15	16 - 19	20 - 23	24 - 30

### The range and suitability of the work submitted

There was a wide range of topics submitted for SL IA. Many candidates carried out fieldwork projects and there were a smaller number of research assignments. On the whole the fieldwork that was submitted was usually more successful than the research assignments. There were investigations on a range of topics: coasts, settlement, ecosystems, micro-climate and the core theme. A lot of SL data collection had been done with HL students but in most centres the hypotheses had been appropriately scaled down given the lower word count. Some centres however had too many hypotheses with one having 8. This led to very superficial reports that failed to score well against the criteria. Research assignments on the whole less strong, some students did not collect data from a secondary source and thus had hardly anything to manipulate for criterion C. Downloading a population pyramid or a bar graph from a web site, for example is not manipulating data. As in previous sessions, it was also noticed that there are still many teachers that do not write comments on the allocation of marks for each criteria.

### Candidate performance against each criterion

#### A Aims and hypotheses

Good use of theory was made in most centres. The most successful candidates focused on one or two clearly testable hypothesis. In some cases, location surprisingly was still not well developed and many did not use maps to point the exact location of their data collection, even when this was a crucial part of their hypothesis. In this sense it is necessary to point out that, again downloaded material with no input from the candidate makes no much sense. There were cases where candidates had too many variables in one hypothesis and ended up with shallow discussions in the analysis sections.

#### B Methods of data collection

In terms of criterion B it was generally better accomplished in fieldwork than research assignments as many of the latter simply ignored the requirements, especially the ones related to the reliability of the data or the sampling. In fieldwork most methods were well described, but candidates need to still work on stressing sampling techniques used. Many centres use good annotated photographs to explain the methods.

#### C Data presentation and processing

Although in some centres an impressive variety of graphical techniques was used to present the findings, there were also schools in which the processing and presentation of data was not as strong as in previous sessions, some pieces of fieldwork contained well manipulated

data in the form of graphs, pie charts, and statistics but there was a very limited number of maps being used to display results even when the data would have been very easily mapped. As mentioned before, some of the research assignments ignored this criterion completely as no data was processed, instead the candidates downloaded graphs from web sites and commented on that in the analysis. A few schools had the tendency to produce repetitive types of graphs (esp. pie charts) with few statistics. Statistical test methods were rarely applied. As in previous sessions it is necessary to point out techniques of data presentation should include graphs and statistics as well as maps, to score high in criterion C.

#### **D Interpretation and analysis**

In general, fieldwork projects contained stronger analysis than research assignments. Discussion revealed understanding in most centres though the depth varied from one school to another and amongst candidates within the same school. Top range candidates made clear reference to the data and the hypothesis in their analysis and identified and explained anomalies. Descriptive essays were still a problem as some candidates failed to make use of data and to refer to the hypotheses.

#### **E Conclusion and evaluation**

The conclusions were strong in most cases although a number of candidates did not evaluate methods used nor suggest improvements for their projects. Generally speaking they were stronger in fieldwork reports and weaker in these research assignments that had no data and limited analysis.

## Recommendations for the teaching of future candidates

Candidates should be encouraged to:

- Reduce the number of hypotheses being investigated.
- Improve mapping, hand drawn or computer generated and link location to theory and map sample sites.
- Use annotated maps and photographs in the sections relating to criterion A and B to help candidates to reduce words in line with the word limit.
- Refer to hypotheses when they are discussing their findings.
- Avoid use of tables with text, because words in such tables count.
- Construct big and clearly labelled graphs.
- Place questionnaires within the appendix but the data presentation within the text.
- Use a range of presentation techniques which allow for relationships to be shown.
- Where possible, apply statistical test methods so as to give room for a detailed analysis and conclusion.
- Match the amount of text for each criterion approximately to its mark weighting.
- Effort should be made to utilise all data collected.

Teachers should be encouraged to:

- Encourage students to focus on depth and limit the number of hypotheses.
- Include notes on the allocation of marks in the samples.
- Give further guidance to students to ensure clear well labelled structure with clearly titled, contents pages, page numbering and chapter headings, good referencing strategy.
- Encourage students to place photos, graphs, and maps appropriately within the text. All these should be numbered /labelled and referred to within the text.
- For research assignments encourage data collection from secondary sources and require them to comment on the reliability of them.

## Higher and standard level paper one

### Component grade boundaries

#### Higher level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 7	8 - 14	15 - 19	20 - 24	25 - 30	31 - 35	36 - 50

#### Standard level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 7	8 - 14	15 - 19	20 - 24	25 - 30	31 - 35	36 - 50

### General comments

Only 20% of centres submitted the G2 feedback forms in time for the Grade Awards meeting. Of the forms returned, 100% felt that the clarity of wording and presentation were either satisfactory or good; only 6% felt that the syllabus coverage had not been satisfactory.

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

Question three was the most popular, followed by questions one and two. This distribution was also reflected, to some degree, in the average marks awarded for each question. In terms of content, there appeared to be no serious areas of weakness, but responses about the spatial distribution of consumption of a named resource (Question 2(c)) and about how resources can be managed sustainably (question 2(d)) were disappointing.

It remains a concern that some candidates still appear to struggle with their time allocation in this paper. Many candidates are still reluctant to describe trends by summarizing information without resorting to exhaustive blow-by-blow accounts of every axis and line on a graph.

Fewer candidates resorted to bullet points or note form in those questions which required extended writing.

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

As the overall performance in this paper indicates, candidates seem generally well prepared in all areas.

Question 1(c) which required a diagram or diagrams yielded a wide range of results, including many excellent attempts. It was encouraging to see candidates including diagrams and/or maps in other responses as well.

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

### Question 1 – population / development

This was attempted by about 66% of the candidates.

- a) Presented few difficulties, though some candidates were reluctant to include any quantification.
- b) Most responses revealed an acceptable knowledge of infant and crude mortality rates, and made some sound suggestions about the correlation of IMR with development. Some candidates did not specifically point out the deficiencies of CMR as a measure of development.
- c) Many alternative approaches were adopted here, with generally satisfactory results. Diagrams ranged from outstanding to small and poorly labeled. Some responses failed to focus on population structure, and some considered only increases in mortality rates.
- d) While there were many carefully thought-out and well-planned responses covering a wide range of material, and incorporating some sound examples, many candidates relied on a very limited range of ideas. There were numerous alternative successful approaches, which ranged from discussions of overpopulation and under-population to discussions of changing age-sex ratios in a population and how population policies might differ.

### Question 2 – population density / renewable resources / resource consumption

About 60% of candidates chose this question. The level of performance was slightly lower than that of the other two questions.

- (a) (a) and (b) were generally done quite well, though some weaker responses to (b) confused sub-Saharan Africa with Saharan Africa. Weaker candidates sometimes failed to recognise that the graph shows food output and wrote about food consumption. The importance of rapid population growth rates in sub-Saharan Africa was ignored in some responses.

- (b) Disappointingly, some candidates were unable to demonstrate a precise knowledge of the consumption (as opposed to the availability or production) of a specific resource. Water and petroleum were the popular choices. Very few candidates took the opportunity to distinguish between total consumption and per capita consumption.
- (c) Most candidates provided a clear definition. More candidates needed to emphasize specific strategies, rather than only listing the relative merits and demerits of alternatives to their chosen resource or resources.

### **Question 3 – aid / food and shelter / environmental issues**

72% of the candidates chose this question.

- (a) Generally done well, though some candidates did not refer to the map or population figures provided.
- (b) Known by most candidates, but not always precisely expressed.
- (c) Some candidates mistakenly chose Egypt as the country with the highest rate of growth, rather than Somalia, the correct response.
- (d) Malthus was the most popular choice and there were some clear and convincing explanations of his ideas, as there were also of the model developed by Esther Boserup.
- (e) The majority of responses were based on China, and there were some informed and thoughtful evaluations of the “one child” policy. Economic impacts were less well handled than social impacts. Some candidates were unable to evaluate the economic impacts at a national level.

## **Recommendations and guidance for the teaching of future candidates**

- As already noted, the impression gained was that the candidates were well prepared for this examination. Knowledge of both facts and concepts was excellent in many centres and candidates frequently demonstrated an ability to apply this knowledge effectively.
- Some weaknesses still remain with examination technique.
- Questions calling for responses which incorporate annotated diagrams or maps will continue to be set. It is imperative that candidates understand that in responses to such questions, significant marks are lost if no attempt is made to provide the required diagrams or maps.
- Students must be instructed to number each part of each question clearly. It is not the examiner’s role to decide which response belongs to which question.
- Candidates are reminded not to answer the final parts of questions in Paper One in list form. This practice makes it impossible for students to gain many marks since these questions are assessed using markbands designed for extended writing.

## Higher and standard level paper two

### Component grade boundaries

#### Higher level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 10	11 - 20	21 - 29	30 - 38	39 - 46	47 - 55	56 - 80

#### Standard level

<b>Grade:</b>	1	2	3	4	5	6	7
<b>Mark range:</b>	0 - 5	6 - 10	11 - 15	16 - 19	20 - 23	24 - 27	28 - 40

### The areas of the programme which proved difficult for most candidates

Essential geographical terms - vulnerability, inequality, sustainability were seldom defined or were misunderstood by some candidates

Many candidates failed to draw sufficient evidence from the stimulus provided such as the coastal photograph and the topographic map.

### The levels of knowledge, understanding and skills demonstrated

The interpretation of command terms was good on the whole. Case studies were well revised and many were well chosen to suit the question. Many candidates have been well trained in the skills of graph interpretation, but the last parts of many structured questions still prove to be a challenge to many where insufficient attention is given to evaluation. In this respect performance at SL was disappointing.

### The strengths and weaknesses of candidates in the treatments of individual questions

#### A1 Drainage basins and their management

- a) At HL, there were some outstandingly good essays here, weaker ones tended to focus on the disadvantages of flooding, playing down the advantages. At SL, the majority failed to realize that a balanced argument was required.
- b) (i) This part was usually well done but some experienced difficulty defining groundwater flow and in (ii) throughflow was omitted by some.  
(iii) This section was generally well done and case study knowledge was good. A few candidates misread this question and wrote about floods.

**A2 Coasts and their management**

- a) This was a moderately popular question with a wide range of marks. The interpretation of this question tended to be very narrow covering only erosion and deposition through natural processes. Some candidates acknowledged human action through reclamation schemes, but very few mentioned eustatic / isostatic influences.
- b) This was one of the most popular questions which was well done.

In (i) there were some excellent and well labelled diagrams of wave refraction and in (ii) some sound theoretical explanations for cliff form, but some candidates failed to draw the evidence from the photograph.

(iii) This part of the question discriminated well. The best answers focused on those natural factors which made the coastal population more vulnerable to a specific coastal hazard. Weaker answers left it to the reader to differentiate between the hazard itself and the natural factors which exacerbated its effect for a particular coastal population. Many cited Bangladesh's low-lying coastlines as a natural factor which makes the population more vulnerable to the hazard of tropical cyclones and storm surges.

**A3 Arid environments and their management**

(a) and (b) were both unpopular questions at HL and SL and performance was weak

**A4 Lithospheric processes and hazards**

- a) This was one of the most popular questions and there were some excellent answers where the candidates clearly identified and explained the role of natural factors (other than earthquake magnitude) and showed an understanding of the term "vulnerability".
- b) This was a very popular question with some impressively high marks. Parts (i) and (ii) were well done and candidates observed and explained the contrasting volcanoes. There were some excellent answers to (iii) where candidates had detailed knowledge of the effects of two contrasting and recent volcanic eruptions.

**A5 Ecosystems and human activity**

- a) This was an unpopular question that yielded low mean marks. Ecosystem function was seldom mentioned and generalizations about tropical rainforest were all too common. Very few responses referred to positive aspects of human activity such as protection, conservation and restoration strategies.
- b) Parts (i) and (ii) were well done, but secondary succession eluded some candidates. In (iii) there were some good answers at both HL and SL, focussing mainly on problems, but few differentiated between those which were long-or short-tem.

**A6 Climatic Hazards and Change**

- a) Although this was an unpopular question, there were some excellent essays on microclimate at HL where the full range of climatic characteristics was discussed and meaningful comparisons made with surrounding rural areas. At SL, several weaker

responses explained the urban heat island effect in terms of a mini greenhouse effect operating in the atmosphere above a city.

- b) This was a moderately popular question where the trends on the graph were accurately observed and explained in parts (i) and (ii). Case study knowledge was well applied in (iii), with the occasional diversion to tectonic instead of climatic hazards. The answers for (iv) showed an excellent understanding of human response to natural hazards.

### **B7 Contemporary issues in geographical regions**

This section was answered by too few candidates to comment..

### **B8 Settlements**

- a) This was an unpopular question at both HL and SL, but only well done by some. Discussion was restricted mostly to the influence of a settlement's services upon the size of its surrounding sphere of influence. Other factors such as competition from adjoining settlements were sometimes considered, but very few candidates discussed the factors affecting the shape of the sphere of influence.
- b) This was one of the most popular questions where mean marks were high.  
 (i) Most candidates competently described the differences in access to sanitation between rural and urban areas, but part (ii) was poorly answered by many who failed to discuss distribution and focused on social segregation rather than deprivation, which few defined.

In (iii) there were some excellent responses here based on very specific knowledge of schemes in cities – eg Kampong Improvement in Indonesia and HDB developments in Singapore. The best responses placed importance on discussing the extent to which they were successful. Weak answers tended to have little knowledge except at a very general level and did not use case studies effectively; named urban areas were often missing

### **B9 Productive activities: aspects of change**

(a) and (b) Both questions were unpopular and performance was weak at both HL and SL. It seemed that those who answered this question had not studied the option.

### **B10 Globalization**

- a) A popular question with some excellent responses at both HL and SL. There were exceptions where some candidates misinterpreted the question and examined the effects of cultural integration in terms of the reduction of differences instead of inequalities.
- b) This was the most popular question with the highest mean marks particularly at HL.  
 (i) There were many competent answers describing both the relationship and the anomalies and in (ii) many successfully explained both the general factors affecting international growth and those specific to one region or country.

(iii) There were some excellent answers where candidates broadly interpreted sustainable tourism to include not only conservation of the environment, but also community involvement and the avoidance of economic leakage from the country. Case study knowledge was impressive except at SL where weaker candidates did not understand the meaning of sustainable and used, as a result, inappropriate examples.

### **C11 Topographic mapping**

This was a moderately popular question where performance was disappointing at both HL and SL.

- a) The majority of candidates were able to state the compass direction, although some had difficulty with determining the time of day as mid-afternoon.
- b) The standard of annotated sketch maps was abysmally low with even the most basic conventions such as scale and orientation missing. Drawing techniques were rudimentary and major relief features and communication pattern were indistinct
- c) Most candidates competently described the site of the nuclear power station and their evaluations were usually realistic.
- d) Most candidates failed to use both the map and the photograph to collect evidence on economic activities. The majority only discussed tourism offering broad generalizations of unspecified and unlocated places and activities.

This was a very disappointing set of answers and was very unpopular with SL students

## **Recommendations and guidance for the teaching of future candidates**

- Revise case studies more thoroughly to include specific details and place.
- Make note of the mark weighting of questions.
- Ensure that evaluation is covered in any question.
- Use up-to-date case studies.
- Ensure that students have legible handwriting.
- Practise writing answers under timed conditions.