GEOGRAPHY

Overall grade boundaries

Higher level

Grade:	1	2	3	4	5	6	7
Mark range:	0-12	13-25	26-36	37-48	49-60	61-72	73-100

Standard level

Grade:	1	2	3	4	5	6	7
Mark range:	0-11	12-23	24-35	36-47	48-60	61-72	73-100

Internal Assessment

Higher level

Component grade boundaries

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

The range and suitability of the work submitted

The fieldwork programmes undertaken by many schools are ambitious and the results very pleasing. Many candidates produced two excellent investigations selected from contrasting themes that were mostly related to the syllabus. This allowed candidates to work in different environments and to use a variety of data collection techniques The most popular themes were settlements, coasts and rivers, and in several cases schools chose to do two physical investigations. Occasionally, ecological investigations lacking a spatial element appeared where schools had undertaken a multi-disciplined programme at a field studies centre. In these circumstances, teachers should ensure that the investigations chosen fit the IB Diploma Geography internal assessment criteria. The best candidates collected plenty of primary data, which was effectively used to test hypotheses. Secondary data from a census, for example, was used in many cases where it was well-balanced by primary data, but in some cases it dominated the investigation. There were very few investigations that were descriptive and based upon observation and the use of non-quantitative data.

Although some of the investigations were ideal in terms of topic and methodology, they were excessively long. They often included detailed historical background, lengthy description of domestic arrangements and group dynamics and repetitive information in the analyses. In a few cases candidates produced two reports exceeding 10,000 words in total. Such detail seldom gains more credit, contravenes the advice given in the subject guide and severely overloads the candidates' work. However, many excellent investigations ranged between 2,000 and 3,000 words and some centres experienced genuine difficulties in keeping within the suggested word limit.

Candidate performance against each criterion

A: Aims and hypotheses

Aims were usually clear and unambiguous and hypotheses could be objectively tested. However, some candidates found difficulty in linking their aims and chosen survey site to the theoretical context. This should have involved a brief explanation of how the study area was well suited to the theory or processes under investigation. The best candidates chose specific and well-focused hypotheses that were fully justified, while weaker candidates stated long and rambling hypotheses or ones that were self- evident and could not be objectively tested. Examples include: "Does town X have a CBD?" or "How is national park y managed?"

B: Methods of data collection

In most cases the methods were appropriate, but only a few candidates were aware of the need for the collection of adequate data and suitable sampling techniques. There continues to be some confusion between random and systematic sampling, with some candidates assuming that random means interviewing every fifth pedestrian. Methods were clearly described by most, but sometimes presented as class instructions in the present or future tense. Only a few candidates justified their chosen techniques, time of survey, choice of sites and size of sample. It was often the case that weaker candidates collected insufficient or unreliable data that was based on qualitative work and was as a result, unsuitable for hypothesis testing. Sound methodology is therefore fundamental to the success of the investigation.

C: Data presentation and processing

It was very pleasing to see a wide range of illustrative techniques such as annotated photos, graphs and field sketches. However, mapping techniques were limited in many cases and maps were often downloaded from the internet and photocopied without additional information being added. Some candidates produced superfluous maps of the whole country when a map of the survey area would have been sufficient. Only a small minority saw the value in mapping data collected by using located proportional symbols. Many candidates used statistical tests such as Spearman's rank, chi-square and nearest neighbour, but in some cases their sample was not sufficiently large to produce a significant result. There were many errors in calculation and candidates were discouraged by anomalous results.

D: Interpretation and analysis

The best candidates were aware of the heavy weighting of this criterion and the attention it deserved. Their writing was analytical rather than descriptive and hypotheses were accepted or rejected with close reference to data collected and the theory and processes involved. Strong candidates confidently rejected hypotheses and recognised anomalies, whereas weaker candidates made broad generalizations about their findings without direct reference to any data. There was a tendency for teachers to over-credit this section and to award marks for bland description.

E: Conclusion and evaluation

Many candidates gave a broad overview of their results and linked these to their initial aims. However evaluations proved to be more difficult and some candidates apologized for their methods, faulty equipment and unreliable friends. Only a few suggested original and realistic alternative methods of data collection such as revised measurement scales or improved sampling techniques. This criterion proved to be the best discriminator.

Recommendations for the teaching of future candidates

Teachers should:

- start coursework sufficiently early in the course to avoid the submission of unsuccessful investigations for which no substitute could be found.
- allow candidates some degree of choice in the type of fieldwork they undertake.
- encourage candidates to devise some of their on hypotheses or techniques.
- select investigations that involve hypothesis testing and the collection of ample primary data.
- ensure that there are only one or two hypotheses and that they can be realistically tested.
- encourage the use of headings that conform to the guidelines and assessment criteria.
- ensure that candidates do not exceed the word limit.
- encourage candidates to use a wide range of data processing techniques.
- emphasise the need for creative thinking in their evaluations.
- ensure that candidates include a bibliography and a reference to all sources in the text.
- despatch all reports in a strong cover.

Standard level

Component grade boundaries

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

The range and suitability of work submitted

This is the first examination period for the new syllabus in which the requirements for standard level geography were changed. The requirements are clear; two pieces of work, either fieldwork or research essay, based on a question to be investigated, or one of each, of approximately 1000 words in length. The majority of centres matched the requirements of the syllabus and submitted a very good range of work. As a general rule, the fieldwork assignments scored higher marks than the research assignments for reasons described in Section B. Unfortunately there were a number of centres that did not follow the instructions regarding the new syllabus. These centres produced a variety of problems:

- A failure to follow the requirements of the internal assessment in terms of both format and word count. On page 55 of the syllabus, the requirements are fully stated. The format acts as a guide to the criteria and failure to follow the format may result in a failure to cover all the criteria. In the same way, those assignments that contained less than the approximate 1000 word requirement, were unable to cover the criteria.
- Two assignments were required, covering different themes. Some centres sent more than two assignments and some centres continued to follow the "old" syllabus requirements. Assignments in which the teacher instructed the candidates to answer set questions and often provided the source of the data to be used (whether text book or website), are inappropriate and cost the candidates marks.
- Some centres allowed candidates to choose inappropriate topics in that they were not geographical. All topics for field work or research must contain a spatial element.

- Some centres, after ignoring the requirements of the syllabus, sought to change the criteria to fit the work.
- Some centres show a lack of understanding of the standards and inflate marks to the extent that there is a great difference between the standards of the assignments presented and the marks awarded by the teacher. If candidates receive inflated marks for their work, there is no incentive or reason for them to seek to improve what they are doing.

All of these problems could have been avoided by a careful reading of the requirements for internal assessment in the syllabus and consideration of the standards set by the criteria. Teachers must understand that when they fail to follow these requirements, their candidates are penalized in the assessment process.

Candidate performance against each criterion

Criterion A

The strongest candidates had assignments with strong, clear, focused hypotheses or questions from which investigations could be made. The weaker candidates had general or inappropriate hypotheses or questions or, often no questions or hypotheses at all from which to begin an investigation. In this latter case, it was difficult for the candidates to fulfill, to a satisfactory level, the other criteria.

Criterion B

For the field work assignments, the majority of candidates performed reasonably well in this criterion. Candidates who presented research assignments, however, found it difficult to achieve high marks as they did not justify or explain the data selected and the data they used was rarely innovative, or from a variety of sources.

Criterion C

Again, data presented in field work assignments was generally more satisfactory than data presented in research projects for the simple reason that in the latter, candidates tended to rely on computer-generated data rather than creating their own maps and diagrams.

Criterion D

This criterion offers the most marks of all the criteria but the extent to which the candidate can achieve good marks here depends on the quality of the hypothesis or question being investigated. The best candidates had strong hypotheses/questions to consider and provided a balanced interpretation of the data with a good level of understanding. The weaker candidates were content with a description of the findings, usually coming to simplistic conclusions. In this case the problem was that the original hypotheses/questions were often either weak, too general or inappropriate.

Criterion E

This criterion was satisfactory. The majority of candidates were able to come to reasonable conclusions about their investigations. The stronger candidates were able to suggest improvements to their work while the weaker candidates were content to arrive at basic conclusions that were obvious.

Recommendations for the teaching of future candidates

- Teachers should be familiar with the requirements for geography internal assessment and while this point is obvious, it was evident that there were centres where the teacher either did not know the requirements or did not understand them. To prevent candidates from being penalized for teacher errors, teachers should send the correct work.
- Candidates should be aware of the requirements of the internal assessment and should have a copy of the criteria on which their work will be assessed. They can then use the criteria as guide to organize their work.
- The strongest indicator of a successful project is the strength of the hypothesis or question to be investigated. The narrower the focus of the hypothesis/question the easier it is to collect data and the more relevant the subsequent discussion.
- Many centres sent work that carried no teacher's marks or comments. The instructions for internal assessment state that one draft of the work may be made and the teacher may comment or offer advice, but the next draft is the original that is sent for assessment. This original piece of work should contain the teacher's marks and annotation. This helps the moderator to see how or why marks have been awarded and also authenticates the work.

Higher and standard level paper 1

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0-5	6-11	12-16	17-23	24-29	30-36	37-50

General comments

Although this examination paper was very different in both format and demands to the previous paper 1, there was a close correlation with past achievements. Perhaps the one noticeable difference was that this paper tended to be more discriminating in providing the stronger candidates with the opportunity to show how well they could perform.
It was expected that the longer essay-type part-questions (worth 15 marks) would prove to be more challenging, but it says much for the preparation of the candidates that this was not generally the case, although there were obviously some exceptions.
The feedback provided by centres on form G2 tended to show overall satisfaction with the new format, syllabus coverage and presentation and most also rated the level of difficulty as 'appropriate'.

The areas of the programme which proved difficult for the candidates

The majority of candidates demonstrated a sound knowledge of the topics in the core theme. The main problem, however, was the failure to always appreciate the significance of the inter-relationships between population, resources and development. This was most obvious in the extended responses (worth 15 marks) where many candidates seemed to be unable to develop an argument that encompassed concepts, information and knowledge beyond the discreet part of the syllabus they felt the question was asking. With any new examination structure there is always a transition period and perhaps these difficulties arose as a consequence of teaching the course as a set of independent units, as was possible in the past, instead of emphasising the inter-related nature of the topics.

It was also obvious that many candidates found the time constraints a challenge, with the second essay frequently being rushed, written in point form, or not completed. In almost all these cases, the earlier part-questions worth a relatively small number of marks, were excessively long.

The levels of knowledge, understanding and skill demonstrated

There were inevitably some candidates that had difficulty with knowledge and understanding but it was rare to find a centre where all the candidates performed poorly. On the contrary, many scripts reflected a depth of knowledge, included excellent case studies and showed a high level of skill in interpreting data and in the drawing of maps and diagrams.

Candidates scored least well in Question 2 (global distribution of refugees, asylum seekers and displaced people), suggesting that the approach of this question was unexpected or that there was a lack of knowledge in this area.

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

Question 1 – population-resource relationships

This was only marginally less popular than question 3, but scored higher marks on average.

(a) Description and analysis of the diagram was generally well done with almost all recognising that it applied to the Malthus and Boserup models. The most frequent failing was in giving an explanation of the diagrams with little or no description.

(b) The concept of overpopulation was obviously understood by the candidates, most providing an explanation of it in terms of population growth and carrying capacity. However, the question asked about measuring it and this proved problematic for some. The stronger responses included demographic, social and economic indicators, but the poorer responses concentrated only on population density measurements or failed to mention any indicators at all.

(c) Some very good definitions were given of sustainable development, but there were also responses that showed a complete lack of understanding by defining it only as sustaining or maintaining economic development. This resulted in answers based on inappropriate case studies, such as the Green Revolution or Mauritius, or even discussions of the Rostow model. The best responses focussed on the management techniques of recycling, conservation and substitution, providing appropriate and fully developed examples for each technique. Marks were lost on occasions by candidates writing extensively (although accurately) on sustainable development projects without directly addressing the question of resource management

Question 2 – global distribution of refugees, asylum seekers and displaced people

This was the least popular question by far and scored the lowest overall marks.

(a) The best responses were able to identify at least two trends, which were quantified, and also noted the anomalies. However, there were also those responses that simply listed the values for each region without recognizing any pattern.

(b) This question also produced some good answers, with candidates often giving at least three accurate reasons for the values of their chosen region in explanations that discussed push and pull factors and encompassed a contemporary knowledge of events. Weaker responses were characterized by superficial generalizations.

(c) The overall mark for this question was low, mainly because candidates either misread it or were unable to provided a reasoned description of the demographic characteristics of

each of the three groups. Many referred to the groups as being 'poor, unskilled, cheap labour' and It was also obvious that many mistook displaced people to be economic migrants. However, there were the strong responses that analysed the groups in terms of age and sex differentiation.

(d) This question on the advantages and disadvantages of food aid seems to have provided an interesting dichotomy in responses – they were either very good or very poor. The stronger group were able to use accurate and relevant case studies which were discussed in depth as the basis of their response. Their essays were well organized, adopted a structured approach and provided a reasoned evaluation. The weaker responses showed a low level of knowledge and skill in synthesizing information and used only inappropriate or inaccurate examples which were always superficial.

Question 3 – global distribution of malnutrition

This was the most popular question, with most candidates achieving satisfactory to good marks.

(a) As in question 2(a), identification of the main trend in the data provided difficulties for some candidates who were unable to identify the obvious difference between the richer and poorer countries, or note the anomalies. Listing of values alone, with no attempt at classification, seemed to be a common response in these cases.

(b) Discussing the factors responsible for malnutrition in one region was fairly straightforward, and the majority of the candidates did so successfully. Most marks were lost because of a failure to address both conditions of malnutrition - hunger and overweight - or by providing negative reasons ("there are so few hungry in the USA because it is a rich country").

(c) While there are still a handful of candidates who do not know what is meant by population structure, this question was generally answered well. Many candidates provided clear diagrams of population pyramids and most discussed changes in fertility and mortality rates, life expectancies and were able to identify the most vulnerable groups in the population.

(d) The really well structured essays were few in number and generally responses were disappointing. Very few saw any relevance in the opening comment (malnutrition is not due to a shortage in the global production of food) as an indicator directing candidates to consider the reasons for food being so poorly distributed. The choice of country often showed a surprising lack of geographical knowledge with generalizations being made which were not applicable. However, there were also responses that were excellent. These were most often based on a country that had been in the news recently or that had been investigated as a case study. Here candidates were able to extract relevant information and were able to review both the internal and external factors responsible for food shortages.

The type of assistance and guidance the teachers should provide for future candidates

As this is the first time that the new syllabus has been examined and in a new format, it is reassuring that so many centres coped well. For others, it has been a learning experience. The comments which follow are intended to provide guidance in both approaching the teaching of the course and in coping successfully with the examination.

Teaching the course:

- There is a need to provide candidates with a clearer, more accurate appreciation of the world. General geographical knowledge in many cases is weak and candidates often appeared to have only a superficial knowledge of the areas or regions they were discussing. In these cases responses were riddled with statements such as "Sub-Sahara Africa has a hot, dry climate/suffers from desertification", or "Ethiopia/China has infertile soils", or "LEDCs have corrupt governments", or "all the farmers are subsistence farmers/nomads/involved in shifting agriculture". Probably the best way to address this problem is to study three to four countries in depth (including at least one LEDC, one MEDC and a NIC). Such studies should provide candidates with a number of case studies, the knowledge of which could provide them with the necessary hard factual information to support answers to any number of examination questions.
- The new course places emphasis on the inter-relationships between the different elements of the core and, wherever possible, these inter-relationships should be noted and stressed. Again, this is probably best done through the study of a small number of countries where comparisons and contrasts can be drawn. Posing questions, such as "is poverty the cause or consequence of high fertility rates in LEDCs?" or "is sustainable development possible in a rich country?", in either class discussions or homework assignments could also help in encouraging candidates to draw on knowledge from different areas of the course.

Examination technique:

- The biggest change is probably the inclusion of the extended essay-type response and candidates need to practise how to approach such questions. It would be expected that responses should be structured and this implies some degree of planning. Candidates would be well advised to think in terms of classifying the information they wish to include as demographic, economic, social, environmental, political or other.
- There is a heavy demand for examples in the questions set and candidates should be advised that marks would be lost if this requirement is not met. A good knowledge of the example used is expected. Again, a study of a few countries, as suggested above, could prove helpful in allowing candidates to support assertions with precise and accurate facts.
- The time factor could be a problem. It is worth noting that the expectation of the time spent on any question is directly proportionate to its allocation of marks. Time could also be saved by using diagrams and annotated maps to replace text. Bulleted or numbered points are acceptable, but candidates should be advised that these should be fully developed and not just listed.
- Practice in interpreting data is recommended. There will always be some diagram, table or map as stimulus material for each question and it is expected that candidates should be able to classify the information shown and note any anomalies. It is also generally expected that descriptions of the data should include some quantification.
- Candidates should be strongly advised to be very clear about the demands of a question before they attempt to answer it. There were many responses marked "QNU – question not understood" or "QNA – question not answered" by the examiners. Careful attention should be paid to all the directive terms and to adjectives, such as "demographic" (question 2c). The poor performance of candidates, in many cases, could be ascribed to the tendency to pick up one or two words in a question and then to base their whole response on this (see the comments for question 1c).

Higher level paper 2

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0-11	12-22	23-30	31-39	40-47	48-56	57-80

General Comments

This new examination was well received by the candidates and it offered many an opportunity to show their depth of knowledge and understanding in their chosen options. There was a balance between the choice of essays or structured questions, with a tendency for stronger candidates to select the essays and weaker candidates the structured questions. For the latter, this was a safer route and avoided the risk of complete misinterpretation of the essay title. It appeared that most centres had prepared their candidates to answer questions from four topics, and the majority conformed. It was usually weaker candidates who deviated from the chosen topics of a particular centre and resorted to question 11 on topographical mapping. This often proved to be an unsuccessful strategy due to lack of preparation and training in mapping skills.

Overall, this examination proved to be a good discriminator by rewarding candidates with genuine geographical knowledge and depriving the generalist of credit.

The levels of knowledge, understanding and skill demonstrated

Although the majority of candidates completed four questions in the allocated time, their answers were sometimes abbreviated and obviously hurried at the end. Only a small minority of candidates failed to follow instructions and answered both the essay and structured question on the same topic. In this case only one of the two answers was marked, and unfortunately, twenty five per cent of the total marks were lost.

Many of the skills required by the essay and the structured question were common to both. These included following command terms, demonstrating knowledge and understanding of concepts and processes and supporting the answer with relevant and recent examples. In many cases, the candidates' essay-writing skills were well developed. The best candidates produced carefully structured answers, which were easily followed by the examiner. These essays included a short introduction defining the topic and indicating the direction of the discussion. This was followed by a development of the topic using case studies, and finally, an overview was given in the conclusion. In the structured questions, high marks were achieved by those candidates who observed both the command terms and the mark weighting. In some cases marks were lost when candidates used explanation when only description was required or they failed to refer to the data provided in the stimulus material.

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

Section A

Question 1: Drainage basins and their management.

(a) Essay

This was a relatively unpopular question that was not well handled by those who were unfamiliar with the alluvial classification of the river. The scope of many answers was limited to a narrow range of features - floodplains, levées and deltas - with meandering processes largely ignored. Many recognised the agricultural potential of alluvium, but not the implications for communications, urban and industrial development as well as recreation.

(b) Structured question

This was a very popular question that yielded a wide range of results, including some very informative answers. In part (i) some candidates were unable to define discharge accurately, but managed to describe the relationships shown on the graph. In part (ii) some candidates produced flawless storm hydrographs that corresponded to the diagram, while others were poorly labelled and missing some features such as baseflow and precipitation input. In part (iii) many candidates achieved full marks because only the identification of factors was required, although many went much further by explaining how a number of factors affected the lag time. In part (iv) many candidates discussed discharge instead of velocity and interpreted "control" narrowly as a reduction in velocity and without reference to increasing velocity.

Question 2: Coasts and their management.

(a) Essay

This was a moderately popular question and the quality of essays from some centres was outstanding. These candidates evaluated management strategies at specific locations and illustrated both the physical processes and the associated strategies with sketch maps. It was evident that some candidates were applying fieldwork knowledge, which made their answers particularly impressive. Marks were lost where candidates simply described the strategies, but were unable to evaluate them because their knowledge of coastal processes was limited.

(b) Structured question

This was an unpopular question and only a minority of candidates answered all parts competently. In part (i) few could distinguish a ria from a fjord and in (ii) long-term eustatic and isostatic changes were seldom discussed. Alternative answers focused upon short-term tidal change or recent increases in sea level resulting from the enhanced greenhouse effect. Answers to part (iii) recognised a few economic advantages such as tourism and deep inlets for fishing and navigation, but disadvantages were seldom discussed in any detail.

Question 3: Arid environments and their management

(a) Essay

This was not a popular question, but there were some excellent responses from those candidates who knew both the causes and remedies for desertification. Other candidates had only shallow knowledge of physical processes such as climate change and reference to specific locations was often vague, and statements such as Africa, were unacceptable. There was a tendency to include arid desert areas, which were not transitional and therefore irrelevant.

(b) Structured question

This was another unpopular choice of question and answers were relatively weak. Parts (i) and (ii) were well-handled by most, but the annotated sketch map requirement in (iii) defeated

many candidates. Marks for (iii) and (iv) depended heavily on case study knowledge and answers were often unconvincing and superficial.

Question 4: Lithospheric processes and hazards

(a) Essay

This was an exceptionally popular question that produced a wide range of marks, some close to the maximum. Many candidates successfully compared the impacts for two recent earthquake events in countries of contrasting levels of development using plenty of supporting factual evidence. However, in some cases the interpretation did not extend to the impacts resulting from seismic processes themselves such as depth of focus, duration, magnitude or from other variables such as population density. Marks were also missed where candidates simply presented the facts without setting them in the context of the question and organizing them by factor.

(b) Structured question

This question was relatively unpopular and revealed a worrying level of confusion over the processes of weathering, mass movement and erosion. In part (i) description of the relationships on the graph was superficial and lacked reference to the data given and in (ii) explanations showed little grasp of weathering processes in general. In part (iii) few candidates recognised a range of factors such as urban sprawl, road building, dam construction and deforestation. Examples were poorly developed and often restricted to the Aberfan disaster. More recent examples from a wider geographical area would have been useful.

Question 5: Ecosystems and human activity

(a) Essay

This was an unpopular question and the rationale behind the selection by some candidates was the chance to romanticize the rainforest. Only a minority who attempted it were confident of their material and produced good answers that appreciated the ecological relationships in the forest and the impacts of management. Detailed case study knowledge was rare.

(b) Structured question

This was a relatively popular question with a wide range of responses. Candidates performed well in parts (i) and (ii) showing a good understanding of ecosystem dynamics, but in part (iii) nutrients were often omitted from the discussion and replaced by a general 'nature trail' covering two different environments -usually a desert and a forest. There were also a number of erroneous biomes such as the ocean or a polluted river.

Question 6: Climatic hazards and change

(a) Essay

This was a moderately popular question with a wide range of marks. The best answers showed a good grasp of the mechanisms of the enhanced greenhouse effect and addressed the global issues of responsibility and consequences. Many highlighted sea level change and the predicament of low-lying countries such as Bangladesh, but few mentioned other potential problems such as drought, reduction of biodiversity, severe weather and global cooling resulting from negative feedback mechanisms. At worst, answers were generalized and emotional and candidates failed to present an argument. Some candidates were unable to

separate the enhanced greenhouse effect from other atmospheric problems such as ozone depletion and acid deposition.

(b) Structured question

This was a popular question, but it produced disappointing results. Most candidates handled part (i) well, recognising a positive relationship for the three regions shown on the graph, but in part (ii) candidates found difficulty in explaining the urban heat island phenomenon and the atmospheric processes involved. In part (iii) only a minority of candidates fully understood the slant of this question and the meaning of intensification. The enhanced greenhouse effect was a popular choice, but other possibilities such as drought, flood and El Niño were seldom explored.

Section B

Question 7: Contemporary issues in geographic regions

(a) Essay

The majority of candidates avoided this question and many of those who attempted it failed to appreciate the depth of conceptual understanding required by this abstract topic. Uncertainty over the concept and lack of teaching resources may explain the reluctance of teachers in selecting this as a class topic.

(b) Structured question

This question was also far down the popularity league and the marks were unexciting. Most candidates were able to describe the patterns and relationships shown on the maps of Malaysia in part (i) and (ii), but some wasted time by giving explanations that were not required. Part (iii) was more challenging and some candidates selected a comparative "region" that was of an unsuitable scale. The choice of a city made comparison difficult and was self-penalizing.

Question 8: Settlements

(a) Essay

The popularity of this topic might be explained by the possibilities it offers for fieldwork along with the availability of resources. Some candidates adopted the “write all you know” approach; unaware of the inner urban focus and the need to discuss changes rather than simple patterns. However, there were a number of excellent and well-structured essays that included detailed case studies accompanied by impressive sketch maps. Many were aware of the dynamism of the inner urban area and the political, technological, social and economic factors that had stimulated change. Gentrification and urban renewal were often acknowledged with frequent reference to the London Docklands, but revival of the CBD was seldom discussed probably because of uncertainty over the definition of the inner urban area.

(b) Structured question

This was a popular question that was well-handled by many candidates. In part (i), candidates competently analysed the data, recognising that the largest agglomerations were in LEDCs and in Asia, but in part (ii) many produced simplistic explanations which related high growth rates to high birth rates while ignoring rural and urban push and pull factors responsible for migration. There were some excellent case studies of remedies for urban problems in Latin America and Cairo in part (iii), but some candidates had a tendency to generalize over

problems of overpopulation or pollution in their chosen city, without reference to specific strategies or districts within the city. Many candidates found evaluation difficult.

Question 9: Productive activities

This topic proved to be one of the least popular and the performance of candidates, on the whole, was mediocre.

(a) Essay

There was a wide mark range with some well-exemplified answers supported by a good theoretical basis. Weaker responses were generalized and there was uncertainty over the definition of NICs.

(b) Structured question

The response to this question was disappointing in terms of popularity and performance. In both parts (i) and (ii) candidates demonstrated little knowledge or understanding and in part (iii) answers were often restricted to LEDCs and the advantages of agribusiness were seldom acknowledged.

Question 10: Globalization

(a) Essay

This was a popular topic that produced some excellent answers, especially in the essay question. Candidates' marks ranged widely and reflected their ability to address both costs and benefits through the careful selection of relevant examples. Popular choices of examples included Kenya and Nepal, where social, economic and environmental effects of tourism could be considered. Weaker answers had a narrow scope, included few examples and presented ideas haphazardly.

(b) Structured question

In parts (i) and (ii) most candidates accurately defined TNCs, and could describe their global activities with reference to the diagram. In part (iii) however, many strayed off the topic of positive impacts and they made weak references to examples.

Question 11: Topographic mapping

It was recognized in the marking process that this question included some serious errors in its reproduction that necessitated leniency.

(a) Almost all candidates gave an accurate grid reference and orientation.

(b) An error in the reproduction of the map led to a distortion of the scale bar resulting in its reduction and lack of correspondence with the given scale of 1:50,000. Consequently, a wide range of answers from 1:27,000 to 1:35,000 were accepted for the scale of the aerial photograph. However, despite this concession, very few candidates showed a real understanding of the process of scale conversion and calculations were often missing or inaccurate

(c) The darkness of the photo made changes difficult to detect between the photo and the map and this was acknowledged in the allocation of marks. Credit was given for any four

changes including the following: any changes in the size of settlements, the road network, the cropped area and the forest.

(d) Annotated sketch maps were generally inaccurate and poorly presented, lacking the basic requirements of scale and key. However, the explanation for the communication pattern showed a good understanding of physical and human influences on the landscape.

The type of assistance and guidance the teachers should provide for future candidates

Teachers should:

- deter candidates from answering questions on topics which they have not studied.
- train candidates to analyse essay questions carefully and to produce a brief plan before starting to write the answer.
- make candidates aware of the full range of command terms that appear in questions.
- emphasize the importance of using geographical terminology in their answers.
- ensure that candidates can produce clear and well-labelled diagrams and are able to use them appropriately.
- encourage candidates to research and revise recent case studies.
- give candidates timed questions and exam practice.

Standard level paper 2

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0-5	6-10	11-15	16-19	20-24	25-28	29-40

General Comments

This new examination was well received and most centres seemed pleased with the level of difficulty of the questions and with the overall presentation of the paper (with the exception of question 11). Candidate choices showed a balance between essays and structured questions. Almost all of the candidates were able to complete the paper in the time available. Only a very few candidates chose two questions from the same section.
It was obvious in a number of cases that candidates had not studied the option they chose to answer. This was particularly the case with Option 5, (Ecosystems and Human Activity), structured question, part (b).
Relatively few candidates made really effective use of sketch maps and diagrams. This was particularly evident in essay questions where perhaps the traditional concept of an essay was inhibiting in this respect, though this should not be the case in a geographical essay.
This examination proved to be a good discriminator by rewarding candidates with detailed geographical knowledge, examples and case studies while depriving those who adopted a general approach of credit.

Areas of the programme which proved difficult for candidates

Even though candidates had a choice of two study options, it was evident that in some areas they had not prepared properly with reference to the learning outcomes stated in the syllabus. Areas that seemed to prove difficult were as follows:

- drawing a flood hydrograph to represent the conditions shown in the diagram, Q. A1 (b) (ii) and the factors that control the velocity of a river, Q. A1 (b) (iv)
- an understanding of submergent coastlines, Q. A2 (b)
- arid environments and their management
- weathering and slope instability, Q. A4 (b)
- the circulation of nutrients in an ecosystem, Q. A5 (b) (iii)
- "the regional approach" Q. B7 (a)
- knowledge of the home region Q. B7 (b) (iii)
- Productive Activities B9 in general.

The levels of knowledge, understanding and skill demonstrated

Many of the skills required by the essay and the structured question were common to both. These included following command terms, demonstrating knowledge and understanding of concepts and processes and supporting the answer with relevant and recent examples. In many cases, the candidates' essay-writing skills were well developed. The best candidates produced carefully structured answers, which were easily followed by the examiner. These essays included a short introduction defining the topic and indicating the direction of the discussion. This was followed by a development of the topic using case studies, and finally, an overview was given in the conclusion. In the structured questions, high marks were achieved by those candidates who observed both the command terms and the mark weighting. In some cases marks were lost when candidates used explanation when only description was required or they failed to refer to the data provided in the stimulus material.

It remains a concern that many candidates prefer to make generalizations based upon general knowledge rather than on the specified content of the programme in terms of detailed geographical knowledge, theories and ideas.

Not all candidates were able to use case studies when required and these were not only lacking in detail but also poorly located. With a few exceptions, relevant sketch maps were either poorly drawn when asked for, or absent when they could have added considerably to an answer.

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

A1 – Drainage basins and their management

(a) Essay

This was a relatively unpopular question that was not well handled by those who were unfamiliar with the alluvial classification of the river. The scope of many answers was limited to a narrow range of features – floodplains, levées and deltas – with meandering processes largely ignored. Many recognised the agricultural potential of alluvium, but not the implications for communications, urban and industrial development as well as recreation, in fact the implications for land use were frequently ignored or sketchily described.

(b) Structured question

This was a very popular question that yielded a wide range of results, including some very informative answers. In part (i) some candidates were unable to define discharge accurately, but managed to describe the relationships shown on the graph. In part (ii) some candidates produced flawless storm hydrographs that corresponded to the diagram, while others were poorly labelled and missing some features such as baseflow and precipitation input. Many were unable to translate the information shown on the diagram into a hydrograph and some labelled the axes incorrectly as velocity and discharge rather than time and discharge. In part (iii) many candidates achieved full marks because only the identification of factors was required, although many went much further by explaining how a number of factors affected the lag time. In part (iv) many candidates discussed discharge instead of velocity and interpreted "control" narrowly as a reduction in velocity and without reference to increasing velocity. Many candidates were not familiar with the way in which discharge, velocity, gradient, friction and cross sectional area are related.

A2 – Coasts and their management

(a) Essay

This was a moderately popular question and the quality of essays from some centres was outstanding. These candidates evaluated management strategies at specific locations and illustrated both the physical processes and the associated strategies with sketch maps. It was evident that some candidates were applying fieldwork knowledge, which made their answers particularly impressive. Marks were lost where candidates simply described the strategies, but were unable to evaluate them because their knowledge of coastal processes was limited. The best candidates reviewed both hard and soft management techniques.

(b) Structured question

This was an unpopular question and only a very few candidates answered all parts competently. In part (i) few could identify a ria and in (ii) long-term eustatic and isostatic changes were seldom discussed. Alternative answers focused upon short-term tidal change or recent increases in sea level resulting from global warming.
Answers to part (iii) recognized a few economic advantages such as tourism and deep inlets for fishing and navigation, but disadvantages were seldom discussed in any detail.

A3 – Arid environments and their management

(a) Essay

This was not a popular question, and there were almost no good responses. Candidates had only shallow knowledge of physical processes such as climate change and the human factors that may accelerate desertification. Reference to specific locations was often vague – "e.g. Africa" where even the Congo was suggested as a potential area of desertification. There was a tendency to include arid desert areas, which were not transitional and therefore irrelevant.

(b) Structured question

This was another unpopular choice of question and answers were relatively weak. Parts (i) and (ii) were well-handled by most, but the annotated sketch map requirement in (iii) defeated many candidates. Marks for (iii) and (iv) depended heavily on case study knowledge and answers were almost always unconvincing and superficial.

A4 – Lithospheric processes and hazards

(a) Essay

This was an exceptionally popular question that produced a wide range of marks, some close to the maximum. Many candidates successfully compared the impacts for two recent earthquake events in countries of contrasting levels of development using plenty of supporting factual evidence. However, in many cases the interpretation did not extend to the impacts resulting from seismic processes themselves such as depth of focus, duration, magnitude or from other variables such as population density.

(b) Structured question

This question was relatively unpopular and revealed a worrying level of confusion over the processes of weathering, mass movement and erosion. In part (i) description of the relationships on the graph was superficial and lacked reference to the data given and in (ii) explanations showed little grasp of how even climate affects weathering. In part (iii) few candidates recognised a range of human factors such as urban sprawl, road building, dam construction and deforestation, or of natural factors such as slope gradient, geology and erosion.

A5 – Ecosystems and human activity

(a) Essay

This was an unpopular question and the rationale behind the selection by some candidates was the chance to romanticize the rainforest. Only a minority who attempted it produced good answers that appreciated the complex ecological relationships in a forest biome. Few were able to describe the biome's structure or explain it with reference to factors such as the climate or nutrient cycling – essential in order to assess the impact of humans. The human impacts were, for the most part interpreted as negative and there were few good accounts of progressive management schemes.

(b) Structured question

This was a relatively popular question with a wide range of responses. Candidates performed well in parts (i) and (ii) showing a good understanding of ecosystem dynamics, but in part (iii) only a few candidates were able to draw nutrient cycling diagrams that provided the best answers. Many candidates described human effects in terms of the pollution of local ecosystems, such as a coral reef or a lake, rather than on contrasting biomes.

A6 – Climatic hazards and change

(a) Essay

This was a moderately popular question with a wide range of marks. The best answers showed a good grasp of the mechanisms of the enhanced greenhouse effect and addressed the global issues of responsibility and consequences. Many highlighted sea level change and the predicament of low-lying countries such as Bangladesh, but few mentioned other potential problems such as drought, reduction of biodiversity, shifting climate belts, severe weather and global cooling resulting from negative feedback mechanisms. At worst, answers were generalized and emotional and candidates failed to present an argument relating to the developed and developing worlds. Most could not see how LEDCs contribute to the problem.

(b) Structured question

This was a popular question, but it produced disappointing results. Most candidates handled part (i) well, recognizing a positive relationship for the three regions shown on the graph, but in part (ii) candidates found difficulty in explaining the differences in values for cities of the same size and the causes of heat islands in general. In part (iii) the majority of the candidates concentrated on global warming, ozone depletion and acid rain, but again, had imperfect knowledge of the atmospheric processes involved. Confusion between ozone depletion and the enhanced greenhouse effect let down many candidates. Large numbers of candidates seem unaware that many effects of potential global warming are mostly "possible effects". Very few candidates selected climatic hazards from section 3.6.1 of the syllabus.

B7 – Contemporary issues in geographic regions

(a) Essay

The majority of candidates avoided this question and almost all of those who attempted it failed to understand the concept of the "regional approach". So few candidates attempted this question that general comments are impossible.

(b) Structured question

This question was also far down the popularity league and the marks were unexciting. Most candidates were able to describe the patterns and relationships shown on the maps of Malaysia in part (i) and (ii), but some wasted time by giving explanations that were not required. Part (iii) was more challenging and some candidates selected a comparative "region" that was of an unsuitable scale, though there were some good answers with detailed sketch maps of the local region. The size of the region on the maps (600x300 km) may have discouraged some students from choosing a local region at a much smaller scale that they had studied. The choice of a city by some candidates made comparison difficult and was self-penalizing.

B8 – Settlements

(a) Essay

Some candidates adopted the "write all you know about city structure" approach unaware of the inner urban focus and the need to discuss changes rather than simple patterns. However, there were a number of excellent and well-structured essays that included detailed case studies accompanied by impressive sketch maps. Many were aware of the dynamism of the inner urban area and the political, technological, social and economic factors that had stimulated change. Gentrification and urban renewal were often acknowledged as dynamic factors but changes in the CBD were seldom discussed probably because of uncertainty over the definition of the inner urban area. Weaker candidates frequently discussed cities in LEDCs instead of MEDCs.

(b) Structured question

This was a popular question that was well-handled by many candidates.
In part (i), candidates competently analysed the data, recognising that the largest agglomerations were in LEDCs and in Asia. In part (ii) many produced simplistic explanations which related high growth rates to high birth rates while ignoring rural and urban push and pull factors responsible for migration and the concept of primacy. There were some excellent case studies of remedies for urban problems in part (iii), but some candidates had a tendency to generalize over problems of overpopulation or pollution in their chosen city, without reference to specific strategies or districts within the city. Many candidates found evaluation difficult and the weaker candidates did not seem familiar with the meaning of "management strategies".

B9 – Productive activities

(a) Essay

Very few candidates answered this question. There was a wide mark range with a small number of well-exemplified answers supported by a good theoretical basis. Weaker responses were generalized. There was uncertainty over the definition of NICs and candidates did not use named examples.

(b) Structured question

Hardly any candidates chose this question making general comments difficult.
Even those candidates who were able to answer part (i) failed to identify specific changes relevant to part (ii). Part (iii) was very poorly answered with little evidence that the candidates had studied agribusiness in any context.

B10 – Globalization

(a) Essay

This was a popular topic that produced a few excellent answers. Candidates' marks ranged widely and reflected their ability to address both problems and benefits through the careful selection of relevant examples. Popular choices of examples included Kenya and Nepal, where social, economic and environmental effects of tourism could be considered. Weaker answers had a narrow scope, included few facts or examples and presented ideas haphazardly. The weakest candidates answered from their own knowledge rather than appearing to have studied the topic.

(b) Structured question

In parts (i) and (ii) most candidates accurately defined TNCs, and could describe their global activities with reference to the diagram though there were frequent misapprehension about the way in which some firms operate globally. Nike in particular was often attributed to owning many factories in Asia and employing large numbers of workers. Weaker answers simply described TNC operations without assessing how well it fitted the model. In part (iii) however, many strayed off the topic of positive impacts and into disadvantages of TNCs in LEDCs and they made weak references to examples, with few facts and figures, even if the points they made were generally valid.

C11 – Topographic mapping

It was recognized in the marking process that this question included some serious errors in its reproduction that necessitated leniency.

(a) Most candidates gave an accurate grid reference and orientation, though some got the grid reference the wrong way round.

(b) An error in the reproduction of the map led to a distortion of the scale bar resulting in its reduction and lack of correspondence with the given scale of 1:50,000. Consequently, a wide range of answers from 1: 27,00 to 1:35,000 were accepted for the scale of the aerial photograph. However, despite this concession, very few candidates showed a real understanding of the process of scale conversion and calculations were often missing or inaccurate

(c) The darkness of the photo made changes difficult to detect between the photo and the map and this was acknowledged in the allocation of marks. Credit was given for any four changes including the following: any changes in the size of settlements, the road network, the cropped area and the forest.

(d)Annotated sketch maps were generally inaccurate and poorly presented, lacking the basic requirements of scale and key. However, the explanation for the communication pattern showed some understanding of physical and human influences on the landscape.

The type of assistance and guidance the teachers should provide for future candidates

Teachers should:

- deter candidates from answering questions on topics which they have not studied.
- train candidates to analyse essay questions carefully and to produce a brief plan before starting to write the answer.
- make candidates aware of the full range of command terms that appear in questions.
- emphasize the importance of using geographical terminology in their answers.
- ensure that candidates can produce clear and well-labelled sketch maps and diagrams and to use them appropriately, even in essay answers.
- encourage candidates to research and revise recent case studies.
- encourage candidates to incorporate examples into their answers even when not specifically asked to do so.
- give candidates timed questions and exam practice.

