CARIBBEAN EXAMINATIONS COUNCIL

REPORT ON CANDIDATES' WORK IN THE
CARIBBEAN ADVANCED PROFICIENCY EXAMINATION
MAY/JUNE 2006

GEOGRAPHY

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INTRODUCTION

This year, 1 849 candidates wrote the CAPE papers in Geography. The number writing Unit 1 was 1 029 while 820 wrote Unit 2.

There were some improvements in map-reading skills. It would appear that there was greater success in completing the syllabus since most candidates attempted the questions in Module 3 and there was an improvement in the performance on this Module over previous years. Responses to questions in human geography, Module 1 of Unit 1 and Modules 2 and 3 of Unit 2 continue to be better than those in physical geography, Modules 2 and 3 of Unit 1 and Module 1 of Unit 2.

However, there were problems that were common to all papers. There is a marked inability to define basic geographical concepts. Too many candidates are losing marks because they do not understand the geographical terms used. They do not appear to be able to differentiate economic from social and physical factors. A concerted effort must be made to overcome these common problems.

It seems that the majority of the candidates cannot write well-constructed, coherent sentences. The problem is not only one of grammar. Candidates often write two words which may have some bearing on the answer but neither describes nor explains the phenomenon as requested. When they attempt to go beyond this, they do not seem to be able to write a paragraph in which an idea is developed but present a number of disconnected statements, leaving the examiner to attempt to see the association or interpret what is written in the light of the questions asked. Responses are not structured even when the questions are. In far too many cases, examiners need to interpret what candidates write and to agree on what the candidates are attempting to convey. This is a major problem and is unacceptable at this level.

DETAILED COMMENTS

UNIT 1

PAPER 01

Module 1: Population and Settlement

Question 1

Candidates were asked to explain the relationship between doubling time and the growth of population. Most were able to define doubling time but were unable to make the link with population growth.

In Part (b)(i) candidates were given statistics and asked to use the information to outline growth of population in a country showing the characteristics. The demographics were typical of those of a Less Developed Country. Few candidates were able to use the statistics to explain population growth. Instead, many calculated population growth.

Part (b)(ii) required a problem experienced by a country with the dependency ratio shown in (b)(i). Most candidates focused on the term ‘dependency ratio’ rather than the problems experienced.

Most candidates were able to identify one measure which planners could adopt to reduce the effect of population growth but faltered in respect of a second measure. Often they gave two aspects of the same measure such as two aspects of family planning.

Forty seven per cent earned between 0 and 3 of a maximum of nine marks and four per cent earned more than 6 marks.

Question 2

In Part (a)(i) candidates were required to define 'optimum population'. Few candidates were able to make a satisfactory link between numbers and resources. In (a) (ii) they were asked for two reasons why optimum population does not remain static. Many identified two factors but could not state how they operated to produce change. Part (b) produced poor responses – the procedure for calculating annual population growth rate. Some restricted their calculations to natural increases and failed to consider net migration. Even when they knew all the elements they were unable to describe the procedure. Five per cent scored more than six marks and fifty-six per cent between 0 and 3 marks.

Question 3

Part (a)(i) was relatively well done. Most candidates understood the concept of 'counter – urbanization' altogether a few confused it with urbanization. There was a fair response to Part (a)(ii), factors influencing the scale of counter urbanization. However, the emphasis was on traditional urban problems such as crime, pollution as opposed to improvement in transportation and improvements in technology. Few were able to outline the steps they would take to carry out a traffic count. Sixty-three per cent earned between 0 and 3 and just two per cent earned 7 to 9 marks.

Module 2: Hydrological, Fluvial, Costal and Limestone Environments

Question 4

In Part 4 (a) candidates had difficulty defining the term 'fetch'. They concentrated on wave rather than wind. In Part (b) they were asked to explain why the east coasts of islands in the Eastern Caribbean were regarded as high-energy coasts. They failed to sequence winds, fetch wave energy and erosive power. A few confused the concept of high energy coasts with electrical energy. Part (c) required a description of a feature created as a result of land rising relative to the sea. The majority could identify a feature but ignored the instruction to describe. Six per cent earned at least 6 marks while 70 per cent earned less than 4 marks.

Question 5

The stimulus was a diagram showing daily fluctuation in river discharge and in Part (a) candidates were asked for the unit of measurement and the factors that would account for the fluctuation. In both parts the performance was extremely poor. Some failed to consider the fact that the changes were daily. Too many confused the diagram with a storm hydrograph. Few knew the unit of measurement. In Part (b) they were asked to explain the formation of two surface features caused by the solution of limestone. Candidates do not know the difference between surface and underground features. When they knew them, they could not explain their formation. They confused features – clints and grykes. Only one per cent earned between 7 and 9 and 84 per cent between 0 and 3 marks.

Question 6

This was relatively well done as 11 per cent of the candidates earned between 7 and 9 and 41 per cent between 0 and 3 marks. In Part (a) they were asked for a definition of infiltration. Many confused it with percolation. Few were precise and so could not earn full marks. In Part (b) they were asked to use the diagram given to describe the changes in infiltration in relation to the duration of rainfall.

Most saw the relationship but concentrated more on infiltration while ignoring rainfall duration. They, therefore, could not earn full marks. Most correctly identified flooding as a consequence of the gap between run off and infiltration but could not develop the issue. In Part (c) they were asked to identity a factor other than rainfall that affects infiltration. The response to this was fair.

Module 3: Natural Events and Hazards

Question 7

This question had the best response in the entire paper. Seventy-seven per cent earned more than six marks and two per cent between 0 and 3 marks. They were able to classify the hazard events in Part (a) and also to describe how hazards could be exacerbated by human activities in Part (b).

Question 8

In Part (a) candidates were asked to use diagrams to assist in an explanation of the relationship between basin shape and flood responses. Responses were poor. Many considered drainage patterns rather than drainage basins. They did not appear to understand the meaning of flood responses. Diagrams were not well executed. In Part (b) times were given for the arrival of earthquake waves and candidates asked to identify the types of waves. This presented difficulty and candidates do not appear to be familiar with the characteristics of seismic waves. Five per cent earned between 7 and 9 and 72 per cent between 0 and 3 marks.

Question 9

Candidates were given several mechanisms for predicting volcanic eruption and asked to explain how they were used. In general, they could not explain how they were used as predictive tools. Part (b) required candidates to explain why more deaths or injuries result from earthquakes than from volcanic eruptions and few could relate this to predictive powers, the six of the areas affected or to the secondary effect of earthquakes. Four per cent earned more than 6 marks and 61 per cent between 0 and 3 marks.

UNIT 1

PAPER 02

SECTION A

Question 1

This was the compulsory map-reading question based on a map extract of Dominica. In Section (a) candidates were asked to describe the location of a town with the aid of a sketch map. **Surprisingly, a large number of candidates in several centres seemed to have been supplied with tracing paper to trace the map. They produced large maps which, obviously did not comply with the concept of a sketch map. This is the first time that this has been seen on such a large scale and should not be allowed to happen again**. Apart from this, candidates ignored the instruction to describe the location of the town and instead described the functions and the settlement pattern in the area.

Part (b) explains how the drainage pattern is influenced by the relief. Few candidates paid attention to the drainage pattern. They made no attempt to identify patterns but focused on a few of the rivers. Responses were extremely weak.

In Part (c), the questions based on the photographs were well done although there was a tendency to see more than what was actually shown.

SECTION B

Module 1: Population and Settlement

Question 2

In this question, candidates were provided with a map of the world and asked to name specific areas (a)(i) which they ably accomplished. In Part (ii) they were asked to describe the distribution of population in South America. Again, most failed to describe. Perhaps more effort should be devoted to ensuring that candidates understand what is expected from these terms. This is a recurrent problem and candidates lose marks because they do not follow instructions. Part (iii) was also based on the map of South America but candidates gave very general responses to a request for reasons for variations in population distribution within the continent. It seems that they were not familiar with conditions within South America. In Part (b), there were a few extremely good responses to this question which requested reasons for changes in the character of rural settlements. On the whole, however, it appears that candidates are not aware of the changes or reasons for them. Perhaps more attention should be devoted to rural settlements and up-to-date material sought. Candidates wrote extensively about rural urban migration and push/pull factors without addressing the central issue – the changes resulting from factors such as migration, technology and transport.

Question 3

In responding to Part (a)(i) candidates are expected to give the full name and use of the urban model shown. The Hoyt model was not a satisfactory response. A fair number of candidates were able to name it as well as to label the different sectors (ii). There was less success with Part (iii) which required reasons for the pattern and, therefore, a clear understanding of the Hoyt's rationale. A good response had to make the link between the pattern and the role of transport.

The responses to Part (b) were also unsatisfactory. Candidates were clearly more familiar with urban land use in developed than in developing countries and their answers were written with countries rather than with specific cities, as requested in mind. They also tended to describe rather than explain. A good response should have addressed the unplanned nature of many cities, the reasons for the presence of squatter areas, the highly differentiated residential areas, the strong emphasis on commercial/administrative over industrial functions.

There was a better response to Part (c), the problems affecting the quality of life in large cities in the developing world. However, it was clear that their discussions were not based on a knowledge of specific case studies. They were mainly rambling accounts that could not be applied to any country in the world.

Module 2: Hydrological, Fluvial, Costal and Limestone Environments

Question 4

This was the more popular of the two questions in Module 2. How do meanders develop? A surprisingly large number of candidates could not answer this question. Some described the development in terms of differential erosion of hard and soft rocks, interlocking spurs, the overcoming of obstacles. Some of those who were generally on the right track confused concave and convex, point bars and riffles. Few were able to give a coherent account and to show an appreciation of the complexity of the processes that one expects at this level. Some of the best efforts were more appropriate to the CSEC level.

In Part (b), candidates were required to explain how the shape and size of river channels affected their efficiency. Candidates had to appreciate the concept of efficiency to do justice to this question. They had to understand the role of friction and its influence on velocity and a good response would have had this concept as an introduction. This appreciation was generally absent. They confused channel shape and size with drainage basin shape and size. Shape was interpreted as plain view, whether the river meandered or "flowed straight" or in some cases, whether a valley was V-shaped or U-shaped. A few discussed the concept of wetted perimeter and hydraulic radius but could not develop the discussion to demonstrate the effects on efficiency. Candidates have an extremely poor understanding of basic geographical concepts and perform poorly on all questions which are based on such concepts.

Question 5

Relatively few candidates selected this question and it was not well handled. They did not understand the concept of a beach profile and this was demonstrated in the types of diagrams produced in Part (a). In Part (b) they were expected to explain how the composition of beach materials influenced the slope. Many compared sandy with shingle beaches. Some outlined the role of constructive and destructive waves in beach formation. In Part (c) they had to describe the role of sub-aerial and marine processes in the formation of cliffs. They were more familiar with marine than sub-aerial process. They were able to explain marine processes but not how these played a role in the formation of cliffs. Some placed the emphasis on cliff retreat.

Module 3: Natural Events and Hazards

Question 6

To answer Part (a) adequately, candidates had to appreciate that the secondary effects of earthquakes could be just as lethal as the primary. People are killed by the collapse of buildings but also by fires resulting from ruptured gas mains, from mudslides and tsunamis.

By and large, candidates were unfamiliar with the term seismic gap and there were numerous inventive and creative responses to this Part (b).

Part (c) was fairly well done – the stages of disaster planning. There was some confusion between actions generally considered as a response and with those regarded as belonging to recovery. However, on the whole, candidates were able to gain marks on this section.

Question 7

Surprisingly, a large number of candidates were unfamiliar with intrusive landforms. This is an area that is covered in the CSEC syllabus and candidates should have been able to build on this base. Generally, responses were poor, diagrams unacceptable. When the landforms were correctly identified little information was given on their formation.

The responses to Part (b) were poor largely because there was no appreciation of the difference between the theory of continental drift and plate tectonics. Candidates must see these as developmental processes.

UNIT 2

PAPER 01

Module 1: Climate, Vegetation and Soils

Question 1

The focus was on greenhouse gases and global warming. The definition of the 'greenhouse effect' was fair in Part (a) but there was some confusion about which of the gases was responsible for the effect in Part (b). On the role of greenhouse gases in global warming, there were a few excellent responses which earned full marks. However, the majority could not explain the role in allowing the entry of shock wave and re-radiation. Many explained the effects in terms of the depletion of the ozone layer and U-V rays. Four per cent earned between 7 and 9 marks and 59 per cent between 0 and 3 marks.

Question 2

Here too, there were a few candidates who gave excellent responses to this question and gained full marks on Parts (i) and (ii) which called for a labeling of a diagram illustrating conditions of atmosphere stability. However, most seem not to have recognized the graph. Neither did they appear to understand the concept of lapse rate in Part (b). They were credited for recognizing the change in temperature with altitude but few were specific enough to earn full marks. In Part (c) many gave the correct answer for absolute humidity but could not distinguish the essential difference between absolute and relative humidity. Fifty-one per cent earned between 0 and 3 and nine per cent more than 6 marks.

Question 3

Many candidates produced well drawn sketch maps of areas of tropical grasslands but too many wasted time trying to draw maps of the entire world. Some drew detailed cross sections for which they were not given credit. While they were able to identify the characteristics of the grasslands, most were unable to outline the ways in which the vegetation was adapted to drought. The percentage earning between 7 and 9 marks was 13 while 51 per cent earned between 0 and 3 marks.

Module 2: Economic Activity

Question 4

This question examined the candidates' understanding of economic activity and the responses were fairly good. They were able to describe the characteristics of primary economic activity required in (a)(i) and to give examples of quaternary activities. In so far as the latter was concerned, the response 'Hi tech' was not appropriate neither was 'computer.' In Part (b)(i), knowledge of the aims of CAP and its influence on agriculture (ii) in the EU was also quite good although few quoted the more recent reforms.

In Part (c), many candidates confused sustainable agriculture with subsistence agriculture and few mentioned the requirement to maintain productivity for the future. Roughly 20 per cent of the candidates earned in excess of 6 marks and 29 per cent between 0 and 3 marks.

Question 5

The focus of this question was tourism. The response to Part (a) – a package tour was fairly good and candidates earned marks for the inclusion of a group of services, fixed prices but there was some confusion with "all inclusive" and 'group tours'. Part (b) required higher-order reasoning and the performance here was not very good. In essence, they were asked why was it that some considered the economic benefits of tourism over-valued. They tended to argue in terms of disadvantages and negative impacts, but there were those who correctly argued for leakage of profits, low level employment. Arguments to contradict the view of the critics were not credited. Forty-nine per cent of the candidates gained between 0 and 3 marks and 12 per cent more than 6 marks.

Question 6

Very few candidates understood the term 'deindustrialization' and the performance on this question was extremely poor. Less than one per cent gained more than 6 marks and 93 per cent between 0 and 3. They confused the term with spatial changes which could be a result of deindustrialization. Others saw it in terms of rural/urban changes. As a result, they were unable to cite those factors contributing to deindustrialization and when they did they were unable to elaborate or give examples. Few mentioned the increasing emphasis on services in developed countries.

Module 3: Development and Disparity in the Caribbean

Question 7

In Part (a) few candidates were able to explain the strategy of 'import substitution'. Many attempted a literal translation and a variety of goods/services were 'substituted' rather than the expected goods previously imported. Candidates largely ignored the impact of the strategy on the location of the industry.

In Part (b) some wrote in general terms absent the factors influencing the location of industry and sometimes, chanced upon a part of the expected response. Most could identify the criteria used to demarcate homogeneous regions.

Question 8

This was very, very poorly done. The mechanism of "backwash effect" suggested by Myrdal was rarely mentioned and its role in the development of peripheral areas could not be explained. This situation could be the result of several factors. The candidates were not taught the model. The model was not taught in the context of industrial development and could not be applied. Even those candidates who performed well on other questions faltered on this. Similarly, few understood the need for a Gender Development Index In Part (b) and many rambled on about gender differences. Very few were able to state concisely the indices measured in the Gender Development Index in Part (c) and merely made intelligent guesses.

Question 9

In Part (a) the candidates were provided with a table showing Human Development Indices for three Caribbean countries and asked to make comparisons. There were many excellent responses. They described and compared the trends and the best answers were supported by evidence from the tables.

In Part (c) a few candidates did not link the fact that in the absence of pollution there were benefits to coral reefs and tourism, for example. Responses were fair.

UNIT 2

PAPER 02

SECTION A

Question 1

This was the compulsory map-reading question. Too many candidates cannot read and interpret maps and a greater effort must be made to integrate map-reading skills into the teaching of the content of the syllabus. For example, the factors affecting the distribution of population could be taught through the medium of maps.

In Part (a)(i), the identification of the vegetation on the map extract posed no difficulty. However, few could make a simple statement that the distribution was even/widespread; scattered or in isolated patches using map evidence. Far too many spent time describing and explaining the distribution of crops. In Part (ii), even when the vegetation was correctly identified, very few gave reasons for the pattern – relief, human activity.

In Part (b), candidates stated correctly that there was greater economic activity to the north than south of northing 64 but the elaboration that could have secured full marks were missing. Some confused economic activity with settlement and explained the factors influencing the settlement, for example, Port Antonio and the small villages. Others listed schools and hospitals.

Part (c) was devoted to the application of Spearman's rank correlation to an understanding of relationships between two variables. There is some disquiet about the request for a formula and the argument is that students ought not to be required to learn a formula but that the emphasis should be on the application. This is the only formula that students are required to learn and, it may be that we are underestimating the abilities of students. The fact is that more candidates knew the formula and correctly applied it for full marks than were able to state the null hypothesis or to identify the limitations of using the statistical test. Some answers were marked by careless calculations or transcripts when they knew the formula. The fact that so many did not respond to any part of this question indicates that the test is being ignored. This is the only tool required for the analysis of relationships among indicators.

SECTION B

Module 1: Climate, Vegetation and Soils

Question 2

Most of the candidates knew the weather system which affected the Caribbean. The main difficulty was in locating the systems on the map of the Caribbean. Cold fronts were placed too far south by which time they would have lost their character. Similarly, the majority knew the conditions associated with a cold front Part (ii). In Part (b)(i) the definition of a microclimate was not well done although the term 'micro' should have given an indication of its meaning.

Part (b)(ii) had both extremely good and very poor responses. In other words, those who know the answer knew it extremely well while others guessed. In some cases the candidates were able to identify the difference between urban and rural microclimates but they could not account for them.

Question 3

The soils which develop under coniferous forest were not on the syllabus and it is regrettable that the question appeared on the paper in (a)(ii). This was taken into consideration during the marking. The definitions of soil horizons were in the main inadequate in Part (ii). There was a fairly good understanding of soil-forming factors although some candidates confused physical and chemical processes. Responses also tended to be skeletal and the link between the soil- forming factors and the process was often not made. Soil conservation methods were well understood. Candidates should be encouraged to avoid different aspects of the same process – deforestation/afforestation.

Module 2: Economic Activity

Question 4

There is a great deal of confusion over the terms 'traditional' and 'non-traditional'. Many interpreted traditional as subsistence or peasant and excluded plantation altogether or was classified as non-traditional. Also, they were unfamiliar with the techniques in non-traditional agriculture and only a very few considered hydroponics or organic farming, for example. There were instances in which they did not distinguish between the effects of traditional versus non-traditional but rather discussed them together. In some cases the techniques were described but candidates made no reference to their influence on the environment.

Question 5

In Part (a) candidates were asked to draw a well-labeled sketch map showing the location of tourism development and locations unsuitable for this development. Such a sketch map could have included the location of a popular resort, the nearest town/capital or airport, an area of swamps or one exposed to prevailing winds or our steep rocky coasts. These are the locational issues that would be drawn to their attention in a discussion of tourism development in the Caribbean islands. Sketch maps were poorly executed. It was not always clear why an area was unsuitable.

Part (b) called for an explanation of factors influencing the nature and location of the tourist industry. They were expected to write about the characteristics of the sites, in some islands, proximity to airports or capital cities, the success of all-inclusive resorts in isolated areas. In so far as the nature was concerned, they should have been able to write authoritatively on ecotourism, heritage, sports and cruise ships. Their responses were unsatisfactory.

Part (c) required candidates to 'describe ONE conflict that arises because of the development of tourism'. Conflict was confused with disadvantages.

Module 3: Development and Disparity in the Caribbean

Question 6

Many candidates responded to this question. Most wrote at length about the impact of emigration in Part (a) and marks on this section were high. Those who performed badly did so because they confused emigration with immigration and ignored the manner in which the movement influence development.

Part (b) called for an evaluation of education strategies with respect to the reduction in inequalities. Many attempted to evaluate the strategies without mentioning the strategies. Others described the strategies but did not evaluate their effects on reducing inequalities. However, there were extremely good responses and high scores.

Question 7

This was not well done. Part (a) called for a discussion of regional disparities in wealth across the Caribbean. Many looked at disparities within countries. Responses were general and not supported by any Caribbean examples. They could have applied equally to Britain or the U.S.A.

The responses in Part (b) illustrated the problems students continue to have with models of development and their inability to apply these models to the real world. But it was pleasing to see that some candidates used the example of attempts to regenerate Kingston's inner city and discussed its limited impact because of lack of political continuity and high crime levels.

INTERNAL ASSESSMENT

Generally, the standard of the internal assessments was low. Skills were not carefully chosen, especially for Unit 2. Often where skills were appropriate, the actual data and analysis did not reflect use of the skills.

'Sampling methods' were often stated as the skill, but not utilized. Questionnaire administration was heavily used in Unit 2.

Many of the studies were very descriptive. Graphs and tables were described and summarized, but little analysis and discussion done.

Cover Page	Must be on the cover, with the research question/statement clearly outlined.
Purpose	Variables must be clearly stated and some explanation given of the research problem.
Methodology	If field work is involved the candidates must state clearly when and where and give details of the technologies used. If a questionnaire is used, a sample must be included in the appendix; the number of respondents, location and method of sampling must be given. If secondary data are being used the source must be clearly stated, the method of presentation, analysis including formulas must be given. Care must be taken that data collected lends itself to analysis and interpretation.
Presentation	Inappropriate graphs were often used, for example, line graphs were used to show discrete data. The fonts were often too small. Many figures lacked: figure numbers, titles, axes, north arrow, frames, scales and keys. Figures were often poorly drawn, with text in pencil. Photographs were often not labeled. Maps were not used effectively and not given appropriate titles. Study areas not always highlighted in map and standard colours not often used (for example, rivers drawn in red, orange, and green).
Quality and Description of Data	Data were sometimes of poor quality. For example, the testing of lapse rate with five temperature readings at different places, or basing an analysis on one interview.

Students often gave detailed descriptions of what is already clearly given in figures.

Photographs and maps were not used effectively. Where photo analysis is the skill, the student often used secondary data, rather than gathering the data from the actual photos or maps.

Analysis

Generally poorly done. There was little attempt to relate findings to expected outcomes, textbooks or accepted models. For example, students found that river velocity is decreasing downstream, but made no attempt to explain the anomaly. Factors influencing industrial location were examined but Weber's model was not used or tested and no locational analysis was done.