C A R I B B E A N E X A M I N A T I O N S C O U N C I L

REPORT ON CANDIDATES' WORK IN THE SECONDARY EDUCATION CERTIFICATE EXAMINATION

MAY/JUNE 2011

GEOGRAPHY
GENERAL PROFICIENCY EXAMINATIONS

GENERAL COMMENTS

In 2011, 12,689 candidates wrote the examinations. Of this number, approximately 66 per cent obtained Grades I–III. This performance is consistent with that of 2010.

Overall, there was some improvement in performance on Paper 02, but on the compulsory Map Reading question performance continues to be unsatisfactory. Many candidates were unable to shade climatic areas on the World Map or to name selected islands of the West Indies as identified on a map.

Many candidates continue to display a lack of understanding of basic geographical concepts . This is sometimes reflected in their interpretation and response to questions. Performance on the School-Based Assessment (SBA) also continues to be unsatisfactory while that on Paper 032 (the Alternative to the SBA) showed some improvement. Preparation of sketch maps and the formulation of research questions, on this paper, is still weak.

DETAILED COMMENTS

Paper 01 – Multiple Choice

Paper 01comprised 60 multiple-choice questions. The mean on this paper was 59 out of 60 or 61 per cent. This represents an increase over the performance 2010 when the mean was 54 out of 60 or 59 per cent.

Paper 02 – Essay Questions

Section A – Map Work

Question 1

Part (a) was adequately handled by most candidates. Common errors include the following:

- placing northings before eastings
- inserting commas, decimals points and letters between the eastings and northings
- giving a four figure grid reference instead of a six figure

In Part (b), candidates were required to measure distance on the map; approximately 50 per cent of candidates obtained full marks, while 25 per cent had problems giving answers to the nearest 100m, for example 6.8km or 6800m was rounded off to 7km/7000m. Too many candidates incorrectly expressed distances in metres for example, 6.8m instead of kilometres. This indicates a problem that can be solved by practice in estimating distances between points in the local environment.

For Part (c), candidates were tested on their ability to measure bearing. This section was well done. Most candidates gave the correct bearing. However, many candidates wrote the compass direction instead of the bearing and several candidates gave bearing and direction. More practice is needed in the use of the protractor.

Part (d) (i), required candidates to identify types of vegetation depicted on the map. This was very well done with about 90 per cent of the responses being correct. A small percentage of candidates confused the word vegetable with vegetation and so named crops such as dasheen, bora, lettuce and gave cultivated areas as examples of vegetation.

In Part (d) (ii), most candidates were able to name the services depicted on the map extract. Common errors included, petrol station and post office instead of police station. Few candidates gave general responses such as social services.

For Part (e), candidates were required to label features on a cross section. Most candidates gave incorrect responses. Many of them interpreted the cross section as the long profile of a river, giving responses such as upper course and lower course while others listed types of vegetation. It was obvious that many candidates do not understand the concept of a cross section and could not relate the profile to northing 29.

Part (f) required candidates to identify drainage features. This section was poorly done, with a small fraction of the candidates giving correct responses. Most candidates merely listed features from the key such as waterfall, dam and waterhole. Many confused the term drainage features with drainage pattern and wrote trills, dendrite and radial drainage. Candidates were expected to examine the map and identify the many rivers (high density) flowing mainly to the east. Reference to stream meandering, swamp and ponds also earned marks.

In Part (g), candidates were given a part of a map shown the 20m contour line and asked to shade land over 20m above sea level. Of great concern is the fact that almost half of the candidates shaded the area below 20m while most were unable to recognize and correctly label landforms such as spur, valley and plain.

For Part (h), candidates' responses showed little understanding of the concept of the relationship between cultivation and settlement, drainage and relief. A large number of candidates answered this section incorrectly. Most candidates gave general descriptions about why persons settle in an area or why water is needed for cultivation with absolutely no reference to the map extract. Some candidates completely misread the question and related drainage and relief to settlement.

Section B – Natural Systems

Question 2

This question required candidates to demonstrate knowledge of volcanic features — how they are formed the changes they may undergo over time — and to account for the nature of volcanic eruptions at different plate boundaries. The responses showed that the demands of the question were not clearly understood by candidates. This was the first of three optional questions in Section B and was the most popular among candidates. Approximately 54 per cent of candidates attempted this question. Of this amount, approximately 26 per cent gave acceptable responses.

For Part (a), the diagrams of a composite cone were poorly drawn and labelled. Candidates failed to distinguish between the layers of ash and lava. In labeling, a number of candidates confused the vent with the pipe. Also, the parasitic cone/secondary cone was referred to mostly as the side vent. Many candidates included the magma chamber in their diagram and a number of them wrote an extensive discussion, rather than drawing and labelling as was required by the question.

The responses to Part (b) (i), were satisfactory. In some cases features were incorrectly referred to as 'substances, particles, activities, components, elements, materials and things' in the definition of intrusive and extrusive features. The terms magma and lava were used interchangeably to answer this Part of the question. Candidates need to recognize that lava is produced from magma.

Many candidates did not attempt Part (b) (ii). The changes which extrusive features may undergo overtime were poorly described. The effects of the processes of weathering and erosion, along with the stages in the development of a volcano, are the responses which were expected.

Part (c) (i), was fairly well done. While many candidates accurately referred to the plates sliding past each other and the build-up of pressure, friction, and tension, too few candidates explained that the release of pressure resulted in earthquakes.

Part (c) (ii) asked candidates to account for the nature of the eruption and the shape of volcanoes at convergent and divergent plate boundaries. Most candidates demonstrated an understanding of the concept of convergent and divergent plate boundaries but failed to apply the knowledge to adequately answer the question. Candidates often failed to account for volcanoes at convergent boundaries being composite/ash and cinder cones and having violent/explosive eruptions, acidic lava and steep slopes. Many candidates identified that the plates at the divergent plate boundary moved away from each other but often failed to account for volcanoes at the boundary as being shield volcanoes and having non-violent eruptions, basic lava and gentle slopes.

In many cases, candidates placed focus on the process of subduction and overlooked the required discussion on the nature of the eruptions and the shape of the volcanoes at the two boundaries.

Question 2 was straightforward with no ambiguity but candidates still did not perform at a high level. Too many candidates failed to use geographical terms in their discussions.

Teachers need to ensure that their students read and understand what questions ask of them and use the correct geographical language in their response.

Question 3

This question tested candidates' knowledge of the water cycle, limestone features, drainage patterns and coral erosion. Approximately 30 per cent of candidates attempted this question, but only about 10 per cent of them obtained acceptable grades.

Part (a) was generally well done as most candidates were able to score 75 per cent (3 out of 4) of the marks. Attention must be given to the spelling of technical terms and the presentation of diagrams.

For Part (b) (i), many candidates could only identify one significant feature of each of the drainage patterns and several candidates interpreted the drainage to be man-made rather than natural. Some candidates were not familiar with the topic.

Very few candidates scored more than 50 per cent (2 out of 4) of the marks for Part (c) (i). Candidates failed to recognize limestone related features and so were vague in their definitions.

Part (c) (ii) was poorly done. Candidates recognized cockpit as a limestone feature but failed to realize that it was caused by weathering. Some candidates actually described cockpit as being formed underwater.

Part (d) was moderately well done. At least 50 per cent of the candidates confused the erosion feature caused by wave action with either depositional features (beaches) or the creation of stacks, arches and cliffs.

Question 4

This question tested candidates' knowledge and understanding of aspects of weather and climate based on Objectives 17, 18, 20 and 22 of the syllabus. This question was the least popular in this section. In general, the question was poorly done. About 80 per cent of the candidates who did this question scored less than 10 out of 24 marks.

Part (a) required candidates to shade three tropical climatic zones on a map of the world which was provided.

The majority of candidates did not shade the actual areas; rather they shaded whole continents and even ocean. Very few of the candidates were able to correctly name one place in any one of the three zones. Some candidates named the place in their answer booklet rather than on the map.

For Part (b), candidates were required to describe the characteristics of temperature and rainfall for two types of climate. This was the area where most candidates were able to earn a few marks but many candidates were unable to adequately describe the temperature and rainfall characteristics. Instead of giving rainfall and temperature amounts in numbers, candidates used terms such as 'hot', 'a lot of', 'high' and 'large amounts'. In general, the responses were vague. Of great concern is the fact that some candidates described tropical climates as having cold winters.

Part (c), required that candidates give two reasons data for 30 years were used to determine climate. It seems that most candidates did not understand the question as they gave the definition of weather and climate instead of providing reasons. Very few candidates earned full marks for this section.

Candidates were also required to explain how mountains affected rainfall and temperature. The responses were poor. Many candidates gave a combined explanation instead of treating the two elements separately. Only a few candidates related the rainfall discussion to relief rainfall and many also linked their answers to vegetation and trees keeping the place cool by lowering temperature. Most candidates could not explain why temperature on the summit of a mountain was lower than the temperature of the surrounding lowland.

Many candidates only attempted Part (a), which referred to the world; many did not respond to Parts (b) and (c).

The candidates who scored satisfactorily on this question displayed an ability to shade the climatic zones, describe the characteristics of two types of climate and explain how mountains affect rainfall.

More attention needs to be given to this aspect of the syllabus.

Section C – Human Systems

Question 5

This question tested patterns of migration (rural to urban as well as international migration), population change and density. It was attempted by approximately 48 per cent of the candidates and was fairly well done by just over 60 per cent of them.

Part (a) (i) was not well done. Candidates did not make adequate use of the stimulus material provided and appeared not to understand what was required.

For Part (a) (ii), many candidates were unable to identify the two CARICOM countries which were identified on the stimulus material.

In Part (b), most candidates appeared to have grasped the concepts of natural increase and migration; however, some of them were unable to give clear definitions.

Part (c) was generally well done and most candidates were able to score heavily on this question. However, it must be noted that the majority of candidates gave reasons for migrating instead of describing the pattern of migration. A few candidates failed to indentify a country.

Part (d) was also well done as candidates' responses showed that they clearly understood the concept of rural to urban migration. Factors were clearly identified but some candidates failed to elaborate on or adequately develop the points to score full marks.

Part (e) was poorly done; as many candidates seemed to have confused population growth with population density and gave long responses on factors influencing population growth in cities.

Some candidates were able to adequately identify points that accounted for high population density in a Caribbean country; however, many of them did not develop those points to score full marks.

Question 6

This question tested candidates' ability to interpret economic information given in a table and to outline ways in which governments of the Caribbean promote economic development and the challenges which they face in doing so. Approximately 45 per cent of the candidates attempted this question; About 55 per cent of them responded satisfactorily.

Part (a) was generally well done and most candidates scored three out of four marks. Part (a) (iv) proved the most difficult.

Responses to Part (b) were generally good. A few candidates could not define secondary industry and a larger number of them gave the name of a firm/company they had studied as examples of a secondary industry.

For Part (c), only a few candidates were able to link 'government polices' with the concept of promoting sustainable development in primary economic activities. Most answers linked policy with increased productivity and efficiency.

Part (d) was generally well done. Candidates showed a good understanding of the challenges facing the fishing industry which was the most popular of those for which they were asked to identify challenges. A few candidates still continue to ignored the instructions and gave answers for all three primary activities given as options.

Question 7

This question required candidates to do a comparison of farming systems and the marketing of farm products in the Caribbean and the Prairies of Canada. This question had the lowest response rate in Section C, with less than 10 per cent of candidates attempting it. Scores for this question were generally low with only approximately 40 per cent of candidates giving acceptable responses.

Part (a) was attempted by approximately 95 per cent of candidates but only about 35-40 per cent scored full marks. This suggested that many candidates were not knowledgeable about the challenges related to the marketing of agricultural products in the Caribbean.

Candidates performed fairly well on Part (b) (i) which tested their knowledge of the characteristics of commercial arable farming in the Caribbean. Approximately 65-70 per cent of candidates scored full marks on this part of the question.

For Part (b) (ii), most candidates were able to correctly identify three problems which affect commercial arable farming in the Caribbean. Part (c) was misinterpreted by approximately 40 per cent of candidates. The misunderstanding seemed to have centered on the use of the term 'average age'. Reasons for the increase in the average age of farm workers could have included, for example, the fact that more young persons are now choosing to take up white collar jobs in the urban areas.

Part (d) was generally well done. Approximately 80 per cent of candidates were able to correctly outline at least two reasons why small farmers tend to grow a variety of crops. Part (e), however, was poorly done. There seemed to have been a general lack of knowledge of wheat farming on the Canadian Prairies. Candidates were very vague in their descriptions of the climatic conditions in the Prairies. Many candidates were not able to relate the farming carried on in the Prairies with climate factors such as temperature and precipitation.

Section D – Human: Environment Systems

Question 8

This question examined candidates' knowledge of the impact of hazards and how disaster organizations can improve responses to hazards or help to decrease the impact of hazards in the Caribbean. Question 8 was the most popular in Section D with approximately 50 per cent of candidates attempting it. Of this number, approximately 50 per cent obtained satisfactory grades.

Many candidates misread Part (a) (i) giving 'Australia' instead of 'Australasia' as the answer. Candidates need to be more careful when reading questions and using information from given table.

Part (a) (ii) was well done; the majority of the candidates performed well on this section. Part (a) (iii) was the most difficult. Many candidates did mathematical calculations of the difference but made no attempt to compare or give the relationship as required by the question.

For Part (b) (i), many candidates failed to mention that natural hazards posed a threat to human activities, rather they assumed that they cause destruction. Candidates need to be able to distinguish between a natural hazard and a natural disaster.

Part (b) (ii) was well done. However, weaker candidates tended to list the impacts rather than describe them. Many candidates failed to describe how people lost their lives during the given events.

In Part (c) (i), many candidates were knowledgeable about the activities of the disaster organizations but failed to state how the organizations contributed to the improved responses. Candidates need to familiarize themselves with the name(s) and functions of disaster organization(s) in their own country.

For Part (c) (ii), candidates did not relate their responses to CDEMA; instead they gave what they would do or what they thought should be done to reduce the impact of natural disasters. Most candidates did not look at this question from a regional point-of-view but dealt with it at a national or individual level. Weaker candidates spent a lot of time describing the activities without explaining how the activities can reduce the impact of natural hazards.

Question 9

For this question, candidates were asked to identify, on a map of the Caribbean, some islands which experienced hurricane or volcanic activities. In addition, the question examined candidates' knowledge of pollution and its effects on the environment. Approximately 45 per cent of candidates responded to this question with about 63 per cent of this number gave satisfactory responses.

For Part (a) too many candidates were embarrassingly unfamiliar with the islands of the Caribbean. Many of the weaker candidates gave the names of continents and countries from all over the world. Most candidates were unfamiliar with countries from the eastern Caribbean islands. Less than 10 per cent of candidates were able to correctly identify the islands of the Caribbean. More than 60 per cent of candidates failed to follow the instruction in "naming" only four countries, most candidates attempted to label all six of the countries identified on the map. In such cases, the first four in the list were considered.

In Part (b) (i) (a), most candidates got one out of the allocated two marks. Many candidates failed to mention 'harmful substances' in their definition of water pollution. For Part (b) (i) (b), candidates failed to mention the extent to which trees are removed. Part (b) (ii) well done.

In Part (c) (i), most candidates wrongfully associated global warming with the depletion of the ozone layer. Candidates were not clear about the distinction between the two. Candidates must understand that the greenhouse effect is a useful phenomenon and that the increase in greenhouse gases is responsible for global warming. In many instances, candidates identified the cause but failed to explain how it leads to global warming. For example, while a number of candidates identified deforestation, they did not mention that the removal of trees will lead to an increase of carbon dioxide (Co_2) in the atmosphere, thereby contributing to the trapping of more heat. Most candidates attained three out of six marks.

Part (c) (ii), most candidates got at least four out of six marks as they discussed coral reef at length and deviated into two effects thereafter. Although many candidates discussed the consequences, these were not linked to the *marine* environment in the *Caribbean*. The word marine was misunderstood and responses were given in relation to rivers. The stronger candidates were able to identify consequences such as increasing temperature leading to coral bleaching, loss of habitat and a rise in sea level as well as coastal erosion and coastal flooding.

Question 10

The question tested candidates' ability to use a bar graph to represent information given in a table. Additionally, it tested their knowledge of pollution associated with agriculture and efforts made by Caribbean countries to reduce the impact of these forms of pollution. Less than 10 per cent of candidates did this question. Of this number, 60 per cent gave satisfactory responses.

Part (a) tested the ability of candidates to draw a bar graph. Many candidates omitted the title or did not give the full name. Candidates need to pay more attention to these elements. Part (b) was well done. However, many candidates ignored the agricultural origin of pollution.

The average mark received by candidates, for Part (c), ranged from 2 to 3 out of 4. Many candidates ignored the 'individual' aspect of the question and wrote from a group/community perspective.

For Part (d), the average mark was 5–6 out of 12. The main error in this section was that the 'specific examples' were not provided. Candidates also gave general responses. Many of them left out the 'consequences' of the measure provided to reduce the impact of deforestation. Candidates also seemed to have interpreted measures to reduce deforestation as measures to reduce the impact of deforestation.

Paper 031 – School Based Assessment

Table of Contents

This section was well done. However, there were a few instances where candidates did not number the pages of the report.

Aim of Study

Candidates encountered difficulty writing aims that allowed for the collection of adequate primary data. The aims were too general. In some cases, aims were not provided. It is suggested that terms such as *identify*, *explain*, *describe* and *compare* be used when writing aims. Many aims were not geographical. Some studies focused on the entire territory or town instead of a small area in the territory/town which could be studied in the field.

Location of Study

Most candidates provided both territorial and site maps. In relation to the territorial map, many candidates did not write the names of the study area on the map or in the key. For the site map, some candidates did not provide details of the site and the surrounding environs; hence it was difficult to identify how to get to the study site. The presentation of both maps in many reports was poor. Some candidates did not include the scale, title and key on the maps. Many candidates presented Google maps which were not manipulated to show only the relevant data. Candidates should be aware of the element of a map or sketch map.

Methodology

This section was done fairly well.

How

Candidates provided at least one example of the instrument used to collect data. However, many of them did not describe clearly how the primary data were collected. The use of questionnaires and interviews was abused. Some studies did not require the use of questionnaires and interviews but they were used. This was evident in studies of coastal processes or rivers.

Where

Some candidates did not indicate the specific location of the study area in relation to the territory.

When

Candidates were able to write correctly the date and time when the studies were done.

Presentation of Data

Many candidates used a variety of illustrations to show the primary data collected but some illustrations were not appropriate for the data presented, for example, using pie charts to show continuous data. There were many instances of duplication of data, for example, showing the same data on photography as well as on a sketch. Many illustrations were obtained from secondary sources. Many illustrations lacked accuracy, neatness and clarity. Photographs were not fully labelled and correctly titled.

Quality of Data

Some candidates were not awarded full marks for this criterion. The data were not comprehensive enough to achieve the aim/s in many cases or the data were not relevant to the aim/s. Many candidates relied totally on secondary data instead of using mainly primary data.

Analysis and Discussion

In most instances, this section was not properly done. It was not well-organized; points were not well developed, well sequenced and coherent. Some candidates separated the analysis from the discussion and failed to refer to the illustration in the written accounts. Other candidates analysed and discussed data that were not relevant to the aims of the studies, for example, the number of respondents, gender and age range were emphasized in some studies related to natural processes.

Conclusion

For the most part, this section was done fairly well. However, some candidates did not relate the conclusion to the aims of the study. In many cases, new information/data were introduced. The conclusion should be a succinct summary consistent with the data obtained.

Communication of Information

Many candidates used geographical terms appropriately. However, many of the studies had numerous grammatical errors.

Bibliography

Many candidates failed to adhere to acceptable format in compiling the bibliography. Deviations from the standard include

- not presenting the reading list in alphabetical order
- using the first name of the author to begin the source entry
- excluding from the list, the Geography texts which were referred to in the report

Paper 032 – Alternative to School-Based Assessment

Question 1

This question tested candidates' ability to complete a sketch map based on an extract from a map. They were required to insert specific features on the sketch map extract. While some good responses were given, many candidates were unable to accurately locate and insert the features.

Question 2

This question tested candidates' ability to frame a research question or statement which would guide the collection of data regarding climate change awareness and the impact of rising sea levels on coastal villages in the areas shown on the map provided. The responses were poor as some candidates were unable to formulate a clear and suitable research question or hypothesis. For the scenario given, a suitable answer might have been: *What is the level of awareness of climate change and the impact of rising sea levels of the residents of the coastal villages of Seine Bight and Placenta*?

Question 3

Part (a) required candidates to list six types of data they would record in the field. It was generally poorly done. The types of data that could have been recorded include: *date, gender, age range, schooling, occupation, awareness of aspects of climate change, awareness of potential impact of rising sea level, length of residency*.

In Part (b), most candidates were not able to describe how the data would be collected and when the data would be collected. In most cases, the methodology stated by candidates was inappropriate. Suitable answers could have included

> How: *By preparing a draft questionnaire interview and pilot test, or prepare a questionnaire based on a pilot test. Either sample or on interview all residents over 11 plus years old.*
> When: Candidates could have stated the day of the week and time that the data would be collected.

Part (c) required candidates to identify one problem (excluding weather, illness and injury) they might encounter in conducting the research and to state how they would overcome the problem. Only a few candidates were able to identify a problem, and in many cases, those who indentified the problem could not explain how it could be overcome.

Question 4

Part (a) required candidates to construct parallel bar graphs to show the results for the variable entitled 'Parking' from the table provided. A grid with labelled axes was provided. This was fairly well done as many candidates were able to accurately draw the bars to represent the data on the graph.

Part (b) was not well done. Candidates were required to prepare a report on the results of the survey as shown in the table. Some candidates were unable to give a suitable report on the results shown in the table. Candidates in some cases gave reasons instead of just reporting the information.

Question 5

Part (a) required the drawing of a pie chart to illustrate the data for 'Day 1' as shown in the table provided. In many cases, this was fairly well done. However, a number of candidates were only able to draw a few of the pie wedges correctly. There was also no evidence that showed that geometrical instruments were used in the construction of the charts. Lines were very crooked and untidy.

Part (b) was fairly well done as candidates were able to name one other method other than a pie chart that could have been used to illustrate the data used in (a).

For Part (c) candidates were required to write a brief summary of the data presented in Table 2 and to comment on the nature of the waste. This was fairly well done by some candidates. Again, some candidates were not able to summarize the results shown and to make the necessary generalizations based on the information provided. However, some candidates made a fair attempt at summarizing most of the findings in Table 2.

Question 6

Candidates were required to present information on a text that was used in their research in an acceptable format as part of the bibliography for the report. Many candidates were unable to do this correctly. In many instances, candidates wrote short paragraphs or even used subheadings to present the information. The acceptable format for writing the bibliography was not followed.