# CARIBBEAN EXAMINATIONS COUNCIL 

Caribbean Secondary Education Certificate CSEC

## GEOGRAPHY SYLLABUS

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Correspondence related to the syllabus should be addressed to:

The Pro-Registrar
Caribbean Examinations Council
Caenwood Centre
37 Arnold Road, Kingston 5, Jamaica, W.I.

Telephone: (876) 630-5200
Facsimile Number: (876) 967-4972
E-mail address: cxcwzo@cxc.org
Website: www.cxc.org

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Prince Road, Pine Plantation Road, St Michael BB11091

The Geography Syllabus (CXC 02/0/SYLL 05) was revised in 2015 for first examinations in 2017. Teaching is expected to commence on the revised syllabus in September 2015.

The amendments to the syllabus are indicated by italics.

Please check the website www.cxc.org for updates on CXC's syllabuses.

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## Geography Syllabus

## - RATIONALE

Geography is concerned with the spatial distribution of human and natural systems and the interrelationships between them. It facilitates an understanding of both the issues emerging from human exploitation of natural resources and how natural resources may be managed to assure sustainability. It contributes to an awareness and understanding of the natural environment and fosters an appreciation of its sustainability. It also encourages the development of a sense of responsibility in using and conserving the natural resources of the planet.

Spatial appreciation, interpretation of a variety of illustrations and map reading skills are essential to a study of the subject. These skills enable an individual to operate better in space by being able to establish a location and an orientation of an area and to be able to read the landscape as well as assess the forces which have shaped them.

The study of Geography, therefore, prepares an individual not only for a career in fields such as teaching, environment planning and management, international relations and geographical information systems, but also helps to develop skills that are beneficial in other fields. In addition, it contributes to more meaningful and enjoyable travel and related leisure activities.

The CSEC Geography syllabus, though not limited to a study of the Caribbean, focuses on areas that are particularly relevant to Caribbean students. The syllabus utilises field studies to concretise the link between the subject matter of Geography and the methods of investigation associated with it. By being engaged in the conduct of a field study, the student gets an opportunity to observe, experience, reflect on, and draw conclusions about the intricate inter-dependence and inter-relationships that comprise the human and natural systems.

A student completing the CSEC Geography syllabus should be able to make informed and rational decisions and act responsibly with respect to the human and natural systems. Based on the attributes of the Ideal Caribbean Person as articulated by CARICOM, this course will also contribute to the development of a person who demonstrates multiple literacies, independent and critical thinking, questions past and present practices and brings this analysis to bear on an innovative application of science and technology to solving problems one might encounter from day to day. This course of study will also contribute to a person who will learn to know, learn to do, learn to live with others, le arn to be and learn to transform oneself and society.

## - AIMS

The syllabus aims to:

1. develop an understanding of geographical phenomena;
2. stimulate interest in the nature of natural and human systems and their interaction;
3. promote an understanding of the processes at work in natural and human systems;
4. develop an understanding of the inter-relationships between the natural and the human environment;
5. foster an awareness of the need for the sustainable use of the earth's resources;
6. develop practical skills to enhance geographical knowledge; and
7. promote knowledge and understanding of Geography at the local, regional and global scales.

## - GENERAL OBJECTIVES

On completion of this syllabus, students should:

1. acquire practical skills and techniques in drawing sketch maps and diagrams and in reading and interpreting maps, photographs, tables and graphs which give geographical information;
2. understand geomorphic, atmospheric and biotic systems;
3. understand the relationship between the natural and human systems;
4. appreciate their role as individuals in the sustainable use of the environment;
5. recognise the national and regional responsibilities for the sustainable use of the environment;
6. understand the spatial and cultural factors affecting the distribution and structure of human population;
7. account for the growth of urban settlements;
8. develop an awareness and understanding of factors influencing the spatial patterns of economic activity;
9. understand the impact of the human systems on the environment;
10. recognise their social and civic responsibility towards the use of resources and the environment.

## - ORGANISATION OF THE SYLLABUS

The syllabus is organised under three main sections:

| Section I | - | Practical Skills and Field Study; |
| :--- | :--- | :--- |
| Section II | - | Natural Systems; |
| Section III | - | Human Systems. |

## - APPROACHES TO TEACHING THE SYLLABUS

Critical to the study of Geography is the recognition of the inter-dependence and inter-relationships of the elements that comprise the human and natural systems. Teachers will find it useful to employ an integrated approach to teaching this syllabus. In this way students will have an opportunity to observe, experience, reflect on, and draw conclusions about the intricate inter-dependence and interrelationships that comprise the human and natural systems.

While the topics are presented within this Syllabus in a linear manner, it must be emphasised that an integrated approach will enable students to develop:

1. an understanding and appreciation of the inter-relationships among the natural systems, the human systems and the skills component of the syllabus as the various factors associated with a particular topic can be fully explored;
2. the critical thinking and problem solving skills; and
3. an awareness of their role, as well as others, in the sustainable use of the earth's resources.

Additionally, integrating the teaching and learning of the three sections of the syllabus allows for more efficient use of class time and also helps students to be better prepared for the constructed-response question on the examination paper. The following are some suggestions of the ways in which topics in Sections I, II and III can be integrated for efficient and effective teaching and learning.

| $\#$ | SECTION | SPECIFIC OBJECTIVES |
| :--- | :--- | :--- |
| 1. | Natural Systems | $3 ; 28-30$ |
| 2. | Natural Systems |  |
|  | Human Systems <br> Practical Skills | 1 (i-k); 4 |
| 3. | Natural Systems |  |
|  | Human | $10 ; 16-19$ |
| Practical Skills | 1 (i-k); 4 |  |

Note that School-Based Assessment (SBA) topics can be selected from among all the Specific Objectives but students can also select a topic that highlights an integrated approach, for example, "Investigating the impacts of human activities on tropical forest vegetation."

## - SUGGESTED TIMETABLE ALLOCATION

It is recommended that a minimum of five 40-minute periods per week, over two academic years or the equivalent be allocated to the syllabus. The time should include at least one double period.

## CERTIFICATION

The syllabus is offered for General Proficiency certification. A candidate's performance will be indicated on the certificate by an overall numerical grade on a six-point scale as well as a letter grade for each of three profile dimensions, namely, Practical Skills, Knowledge and Comprehension, and Use of Knowledge.

## DEFINITION OF PROFILE DIMENSIONS

On completion of the syllabus, students are expected to develop skills under three profile dimensions:

1. Practical Skills (PS);
2. Knowledge and Comprehension (KC);
3. Use of Knowledge (UK).

## Practical Skills (PS)

The ability to:

1. use scale for measurements;
2. read maps;
3. collect and collate data for geographical analysis;
4. draw maps, diagrams and sketches;
5. construct graphs, tables and divided circles using simple statistical data;
6. read and identify patterns in maps, photographs, diagrams, graphs and tables.

## Knowledge and Comprehension (KC)

The ability to:

1. define terms and recall facts on a range of geographical phenomena;
2. describe processes impacting on the development of the natural and human environments;
3. describe the interaction between biotic and abiotic factors in an area or biome.

## Use of Knowledge (UK)

The ability to:

1. explain geographical processes;
2. interpret and draw inferences from geographical data;
3. disaggregate and organise information to show inter-relationships;
4. explain the importance of the factors contributing to the development of natural and human environments;
5. draw conclusions.

## - FORMAT OF THE EXAMINATION

The examination is offered at the General Proficiency level. The assessment comprises three papers: Paper 01, Paper 02 and Paper 031 OR Paper 032.

Papers 01 and 02 are assessed externally. Paper 031 is the SBA and is assessed internally by the teacher and moderated by CXC. Paper 032 is an alternative to the SBA, assessed externally and is intended for those students who registered to sit the examination as private candidates.

## EXTERNAL ASSESSMENT BY WRITTEN PAPERS (80 per cent of total assessment)

## Paper 01 (1 hour 30 minutes, 30 per cent of total assessment)

## 1. Composition of the Paper

Paper 01 consists of 60 multiple choice items assessing all areas of the syllabus. All questions are compulsory.

## 2. Mark Allocation

This paper is marked out of a total of 60. The marks are distributed across questions and profiles as indicated below:

$$
\begin{array}{lll}
\text { Practical Skills (PS) } & - & 24 \\
\text { Knowledge and Comprehension (KC) } & - & 28 \\
\text { Use of Knowledge (UK) } & - & 08
\end{array}
$$

## Paper 02 ( 2 hours 30 minutes, 100 marks, 50 per cent)

## 2. Composition of the Paper

Paper 02 comprises four compulsory questions with one question each assessing
(a) Map-reading skills
(b) Natural systems
(c) Human systems
(d) Integration of both natural and human systems.

## 3. Mark Allocation

This paper consists of constructed response questions and is marked out of 100. The marks are distributed across questions and profiles as indicated in the following table:

| Content area | Question | Profile |  |  | Marks |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  | PS | KC | UK |  |
| Map Reading | 1 | 12 | 7 | 6 | 25 |
| Natural Systems | 2 | 5 | 8 | 12 | 25 |
| Human Systems | 3 | 5 | 8 | 12 | 25 |
| Natural Human Systems | 4 | 5 | 8 | 12 | 25 |
| Total |  | 27 | 31 | $\mathbf{4 2}$ | $\mathbf{1 0 0}$ |

## 3. Question Type

Questions will be structured into different sub-parts and may require short or extended responses. Questions may also include stimulus materials such as maps, charts, tables, diagrams, photographs or prose or any combination of these. The answers are written in the space provided in the booklet.

## INTERNAL ASSESSMENT (20 per cent)

## Paper 031 (SBA) ( 40 marks of the total marks)

## 1. Composition of Paper

Paper 031 is the SBA and is internally assessed. For this paper, the students presents the report from a field study in which he or she identifies a geographical topic for investigation, develops field study questions, conducts an enquiry, and communicates the findings and recommendations.

The Field Study Report should be completed by students and submitted to reach the Council by April 30 of the year of the examination. The report should not exceed 1000 words, excluding the strategy sheet, illustrations, tables, bibliography and appendices.

Further details of the SBA requirements are given on pages 27-42.

## 2. Mark Allocation

The paper is marked out of 40 and the marks are distributed to profiles as follows:

| Practical Skills (PS) | - | 10 marks |
| :--- | :--- | :--- |
| Knowledge and Comprehension (KC) | - | 10 marks |
| Use of Knowledge (UK) | - | 20 marks |

## Paper 032 (1 hour 45 minutes, 20 per cent of total marks)

Paper 032 is the alternative to the SBA. This paper is done by students who register to sit the examination as private candidates. The paper is externally assessed and covers knowledge of the research skills used in conducting the field study and presenting the report.

## 1. Composition of the Paper

This paper consists of six compulsory constructed-response questions. The paper is marked out of a total of 40 marks. The marks are distributed across profiles indicated as follows:

| Practical Skills (PS) | - | 10 marks |
| :--- | :--- | :--- |
| Knowledge and Comprehension (KC) | - | 10 marks |
| Use of Knowledge (UK) | - | 20 marks |

## 2. Question Type

The paper consists of short answer questions which may include stimulus materials such as maps, charts, tables, diagrams, photographs or prose or any combination of these. The answers are written in the space provided in the booklet.

## Note additional guidelines for Paper 032 are provided on Page 43.

## PAPER MARK ALLOCATION BY PROFILES

The weighting of the profile dimensions for the examination is as follows:

| Profile Dimensions | General Proficiency |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Paper 01 | Paper <br> 02 | $\begin{gathered} \hline \text { Paper } 03 \\ \text { (SBA) } \end{gathered}$ | Total |
| Practical Skills (P1) | 24 | 27 | 10 | 61 |
| Knowledge and Comprehension (P2) | 28 | 31 | 10 | 69 |
| Use of Knowledge (P3) | 08 | 42 | 20 | 70 |
| Total | 60 | 100 | 40 | 200 |
| \% | 30 | 50 | 20 | 100 |

## - REGULATIONS FOR RESIT CANDIDATES

Candidates may elect to resit the examination at any time. However, resit candidates who have earned a moderated score of 50 per cent of the score for the SBA may elect not to repeat this component, provided they rewrite the examination no later than two years immediately following their first attempt. These candidates must rewrite Papers 01 and 02 of the examination for the year in which they re-register. Resit candidates who have obtained a moderated score of less than 50 per cent of the score for the SBA must repeat the component at any subsequent sittings.

Resit candidates may enter through schools, recognised educational institutions or the Local Registrar's Office

## - REGULATIONS FOR PRIVATE CANDIDATES

Private candidates will be required to write Paper 01, Paper 02 and Paper 032, the Alternative to the SBA. A private candidate must enter through a school, a recognised educational institutions or the Local Registrar's Office.

## - STUDY AREAS OF THE SYLLABUS

Study areas from the Caribbean and selected countries outside of the Caribbean should be drawn from the areas listed below.

## Caribbean

Anguilla, Antigua and Barbuda, The Bahamas, Barbados, Belize, Cayman Islands, Cuba, Dominica, Dominican Republic, Dutch Caribbean, Grenada, Guadeloupe, Guyana, Haiti, Jamaica, Martinique, Montserrat, Puerto Rico, St Kitts and Nevis, St Lucia, St Vincent and the Grenadines, Suriname, Trinidad and Tobago, Turks and Caicos Islands, the Virgin Islands.

## Countries outside of the Caribbean

United States of America, United Kingdom, Singapore, Brazil, India, China and Nigeria.

## SECTION I: PRACTICAL SKILLS AND FIELD STUDY

## GENERAL OBJECTIVE

On completion of this section, students should acquire practical skills and techniques in drawing sketch maps and diagrams and in reading and interpreting maps, photographs, tables and graphs which give geographical information.

## SPECIFIC OBJECTIVES

1. Given an extract from a topographic map of any Caribbean territory, or a sketch map, students should be able to:
(a) (i) read conventional (map) symbols;
(ii) interpret conventional (map) symbols.
(b) locate places, using four and six-figure grid references;
(c) give direction of one place in relation to another using the 16 points of the compass;
(d) measure the grid bearing of one place in relation to another;
(e) use the scale to measure straight and curved distances:
(f) (i) copy a section of the map;
(ii) reduce a section of the map;
(iii) enlarge a section of a map.
(g) (i) draw cross sections and sketch sections;
(ii) interpret cross sections and sketch sections;
(h) (i) calculate gradients;
(ii) differentiate among steep, moderate and gentle slopes;
(i) draw diagrams to illustrate geographical features;
(j) describe landscapes using the following: relief, drainage and land use;
(k) explain the inter-relationships among relief, drainage and land use.

## SECTION I: PRACTICAL SKILLS AND FIELD STUDY (cont'd)

2. Given a ground or aerial photograph, sketch map or a diagram, students should be able to: interpret geographical features.
3. Students should be able to:
(a) illustrate weather systems, using isobars and relevant symbols;
(b) interpret rainfall and temperature graphs and maps.
4. Students should be able to:
(a) (i) identify the main lines of latitude and longitude;
(ii) locate a place from its latitude and longitude;
(iii) calculate the Standard Time of places.
(b) name and locate countries in the Caribbean;
(c) draw sketch maps to show relative location and spatial distribution;
(d) draw diagrams to illustrate geographical features;
5. Students should be able to:
(a) construct tables, graphs and draw diagrams as specified in the content;
(b) use descriptive statistics (mean, median and mode) to summarise data;
(c) interpret graphs, tables, statistical maps and diagrams as specified in the content.
6. Students should be able to:
collect, record and present information based on a geographical field study on at least one (1) chosen objective from the syllabus.

## SECTION I: PRACTICAL SKILLS AND FIELD STUDY (cont'd)

## CONTENT

## 1. MAPS:

(a) Essential elements of maps (title, scale, legend, north point and border); placement of labels and the use of colours);
(b) Grid references - 4 and 6 figures;
(c) Compass Direction (16 points);
(d) Grid bearings measured clockwise from Grid North (indicated by the direction of the Easting lines);
(e) Measuring straight and curved distances (to nearest 100 metres);
(f) Copying, reducing or enlarging topographic maps guided by the map scale;
(g) Cross sections and sketch sections including inter-visibility (profile view of the landscape and relief and whether or not one point could be seen from another);
(h) (i) Calculate gradient, using ratios and percentages;
(ii) variations in slope - steep, moderate and gentle;
(i) Diagrams that illustrate features of the physical (for example, land above a certain height, distribution of major landforms) and human environment (for example, distribution of farmland, settlement or forest);
(j) Landscape descriptions:
(i) Relief - the distribution, height and size of landforms; types of slopes (concave, convex, straight, terraced/stepped); nature and height of slopes (steep, gentle, undulating, uneven), spurs, valleys, plains, depressions, ridges, plateaux, escarpments, cliffs, passes (cols, saddles);
(ii) Drainage - drainage patterns, density, direction of flow, quality of the drainage, shape and size of channel;
(iii) Land use - vegetation, agriculture, industry, transport networks and settlement form and distribution.
(k) Landscape inter-relationship and patterns (map correlations); the association among relief, land use patterns and drainage.

## SECTION I: PRACTICAL SKILLS AND FIELD STUDY (cont'd)

## 2. Photographs, Maps and Diagrams

Landforms/features (physical and human) in photographs, maps and diagrams relevant to the Syllabus.
3. Weather systems
(a) Weather systems - their pattern of isobars; relevant symbols and wind direction: InterTropical Convergent Zone (ITCZ), tropical waves, tropical storms/hurricanes, cold fronts anticyclones. (Note that station models not required).
(b) Rainfall and temperature graphs and maps (for example, range, seasons, relationship between temperature and rainfall).
4. Location and Time
(a) (i) Main lines of latitude and longitude (Equator, Tropics of Cancer and Capricorn, Arctic and Antarctic Circles, North and South Poles, Greenwich/ Prime Meridian);
(ii) Name and locate a place from its latitude and longitude;
(iii) Earth's rotation, longitude and time.
(b) Caribbean Countries as outlined in the syllabus.
(c) Sketch maps that illustrate relative location and spatial distribution.
(d) Diagrams that illustrate geographical features (apart from those on topographical maps).

## 5. Tables, Graphs, Maps and Central Tendency

(a) Construction of tables, bar graphs, line graphs, divided circles, climate graphs, dot maps.
(b) Measures of Central Tendency: mean, median and mode.
(c) Interpretation of data on charts, tables, bar graphs (including population pyramids), line graphs, climate graphs, divided circles, dot maps, choropleth maps and isopleth maps.

## SECTION I: PRACTICAL SKILLS AND FIELD STUDY (cont'd)

## 6. FIELD STUDY

(a) (i) Field study topic based on at least one of the specific objectives of the syllabus;
(ii) Field study questions;
(iii) Instruments to collect data.
(b) Use of research techniques:
(i) sampling methods (for example, random, stratified and point);
(ii) data collecting methods (for example, questionnaires; interviews; checklists, field observations).
(c) Maps:
(i) site showing the immediate area - large-scale (1:10 000; 1:25 000);
(ii) location - small-scale maps (Atlas scale or larger) to show regional or national position.
(d) Ensure the use of appropriate map symbols (for example, use of conventional symbols and colours) and relevant annotated photographs and diagrams.

## Suggested Teaching and Learning Activities

To facilitate students' attainment of the objectives of this Section, teachers are advised to engage students in the teaching and learning activities listed below.

1. Use topographic maps to identify conventional map symbols and observe the patterns and the interrelationship of relief, drainage and land use. (The school surroundings can be used to highlight inter-relationships).
2. Measuring distance: Help students to appreciate that different units of measurement are more appropriate for (a) large distances (for example, the journey from school to the furthest settlement in your country - kms/miles); (b) intermediate distances (for example, the height of the classroom window - metres/feet); and (c) small distances (for example, the size of a pencil-cm/inches).
3. Guide students to build models of parts of topographical maps, attaching labels to identify different relief forms.
4. Grid References: Design exercises that require students to use their rulers to subdivide a square.
5. Design lessons using the temperature and rainfall maps and diagrams in the atlas and from the Internet. Have students interpret and draw inferences from this data.

## SECTION I: PRACTICAL SKILLS AND FIELD STUDY (cont'd)

6. Google Earth software could be used to show how an area has changed overtime using the relevant function on this software. Traditional relief maps could also be draped over or added as a layer in Google Earth, so that students could see the relationship between satellite images and topographical maps. Students would also see more recent representations of an area. Exercises on location, land uses and other spatial patterns as well as the inter-relationship between the physical and human environment can also be designed using Google maps.
7. Use virtual field trips as a strategy to build data collection, presentation and other skills associated with the SBA. Group work and role playing can be incorporated here. Have students design and administer questionnaires linked to the specific objectives.
8. Invite personnel involved in the creation, use or maintenance of Spatial Data (Geographic Information Systems agencies) to make presentations to the class on how spatial data is generated, used and stored. (Field trips to such agencies can also be arranged). This would enable students to compare traditional versus contemporary ways in which spatial data is used. This will also help students to better understand and appreciate the relevance of the skills component of Geography.

## - SECTION II - NATURAL SYSTEMS

## GENERAL OBJECTIVES

On completion of this section, students should:

1. understand geomorphic, atmospheric and biotic systems;
2. understand the relationship between the natural and human systems;
3. appreciate their role as individuals in the sustainable use of the environment;
4. recognise the national and regional responsibilities for the sustainable use of the environment.

## SPECIFIC OBJECTIVES

Systems Associated With the Lithosphere, Atmosphere, Biosphere and Hydrosphere
Students should be able to:

1. describe the internal structure of the earth;
2. explain the theory of plate tectonics;
3. describe the consequences of the movement of plates;
4. explain the formation of intrusive and extrusive volcanic features;
5. describe the formation of the three types of rock;
6. (a) define weathering;
(b) explain the processes of weathering as specified in the content;
(c) explain the processes of mass movement as specified in the content;
7. explain the formation of limestone features in the Caribbean as stated in the content;
8. differentiate between weather and climate;
9. explain the factors influencing the weather and climate of a place as stated in the content;
10. describe the characteristics of the Equatorial and Tropical Marine Climates;
11. describe the weather conditions associated with Caribbean weather systems;
12. describe the "greenhouse effect";

## SECTION II - NATURAL SYSTEMS (cont'd)

13. describe the ways in which human activities influence climate change;
14. compare the consequences of climate change in the Caribbean with those in EITHER the United States of America (USA) OR the United Kingdom (UK);
15. compare measures to reduce the effects of climate change in the Caribbean with those of EITHER the United States of America (USA) OR the United Kingdom (UK);
16. (a) describe the adaptations of vegetation to the environment;
(b) explain the characteristics of the Tropical Rainforest biome;
17. explain the impact of human activities on the tropical forests' biomes in the Caribbean;
18. describe the major constituents of soil;
19. explain the factors influencing the formation of latosols;
20. describe the hydrological cycle;
21. (a) describe river processes;
(b) describe wave processes;
22. (a) explain the formation of river landforms;
(b) explain the formation of coastal landforms;
23. describe drainage patterns;
24. describe types of coral reefs;
25. describe the conditions necessary for the successful formation of coral reefs in the Caribbean;
26. explain the importance of coral reefs in the Caribbean;
27. explain the importance of mangrove wetlands in the Caribbean;
28. distinguish between a natural hazard and a natural disaster;
29. describe the impact of earthquakes, hurricanes, volcanoes, landslides and flooding on the physical and human environments in the Caribbean;
30. explain the responses of individuals, national and regional agencies in the Caribbean to reduce the effects of the natural hazards and disasters identified in Objective \#29.

## SECTION II - NATURAL SYSTEMS (cont'd)

## CONTENT

## Systems Associated with the Lithosphere. Atmosphere, Biosphere and Hydrosphere

## Structure of the Lithosphere, Plate Tectonics and Rock Formation

1. Internal structure of the earth including continental and oceanic plates, crust, mantle and core.
2. Theory of plate tectonics, including global distribution of plates, movement of plates and types of plate boundaries.
3. The occurrence and the distribution of earthquakes, island arcs, volcanoes, fold mountains, major faults and ocean trenches.
4. Characteristics of:
(a) Intrusive volcanic features (sills, dykes, plugs and batholiths);
(b) Extrusive volcanic features (caldera, shield volcano, composite cone, lava plateau).
5. The rock cycle: formation of igneous, sedimentary and metamorphic rocks.

## Weathering and Mass Movement

6. (a) Definition of weathering, emphasising the "in situ" condition.
(b) (i) Location, processes and results of chemical weathering (carbonation and hydrolysis);
(ii) Location, processes and results of physical weathering (frost action, exfoliation);
(iii) Processes and results of biological weathering.
(c) Definition, causes and results of mass movement (soil creep and landslides).
7. The characteristics of limestone and the processes leading to the formation of limestone features created on the surface (clints and grykes, surface depressions, cockpits, swallow holes) and underground (caves, stalactites, stalagmites, pillars, underground rivers).

## Weather, Climate, Vegetation and Soil.

8. Difference between weather and climate.
9. Factors influencing weather and climate: latitude, altitude, relief, distance from the sea (continentality) and winds (land and sea breezes and prevailing winds).

## SECTION II - NATURAL SYSTEMS (cont'd)

10. Characteristics of Equatorial and Tropical Marine Climates - temperature, precipitation, pressure.
11. Weather conditions associated with Caribbean weather systems:
(a) tropical waves, hurricanes and cold fronts (before, during and after);
(b) ITCZ and anticyclones.
12. Insolation, radiation and the role of greenhouse gases in heating the earth.
13. Human activities that contribute to global warming and influence climate change (such as deforestation and activities that lead to emissions of carbon dioxide and other greenhouse gases).
14. Examples of the consequences of Climate Change in the Caribbean and EITHER United States of America (USA) OR the United Kingdom (UK): for example, sea level rise - examples of increased incidence of coastal flooding, impacts on coral reefs, coastal wetlands and settlements; changes in weather patterns and their impacts.
15. Measures to reduce the effects of climate change in the Caribbean and that of EITHER the United States of America (USA) OR the United Kingdom (UK) (for example, mitigation measures including reduced emissions, sustainable forestry, education).
16. (a) Adaptations of vegetation to the environmental factors of climate, soil, biotic conditions (including humans).
(b) The inter-relationship among climate, vegetation and soil seen in the characteristics of the tropical rainforest biome: types of trees; types of leaves and roots; structure; species composition; seasonality.
17. Positive impacts (sustainable management) and negative impacts (deforestation, soil erosion, soil exhaustion) of human activities on tropical forests' biomes.
18. Major constituents of soil: organic and inorganic matter, bacteria, water and air.
19. Factors influencing the formation of latosols: interaction amongst climate, vegetation, biota, and water in soil.

## Fluvial and Coastal Processes

20. The hydrological cycle (evaporation, condensation, precipitation, transpiration, run-off, infiltration, through-flow, percolation, ground water flow) and its features (springs, aquifers, water table).
21. (a) Drainage system - fluvial processes (erosion, transportation, deposition).

## SECTION II - NATURAL SYSTEMS (cont'd)

(b) Coastal system - wave processes (erosion, transportation and deposition).
22. Landforms:
(a) rivers - river valleys, waterfalls, meanders, braided channels, ox-bow lakes, levees, flood plains, deltas.
(b) coastal - cliff, wave-cut platform, headland, bay, cave, arch, stack, spit, bay-bar, tombolo, beach;
23. Drainage patterns - dendritic, trellis, radial and relationship to rock type and geology;
24. Types of coral reefs: fringing, barrier and atoll.
25. Conditions necessary for the successful formation of coral reefs: water - depth, salinity, temperature, turbidity; the presence of beneficial algae and fish.
26. Importance of coral reefs - coastal protection; raw material for beaches; ecological and economic benefits.
27. Importance of mangrove wetlands: coastal protection; ecological; socio-economic benefits.

## Natural Hazards and Natural Disasters

28. Difference between a natural hazard and a natural disaster.
(a) Natural hazard - risk resulting from processes associated with the lithosphere, biosphere and atmosphere.
(b) Natural disaster - effects of the event on the physical and human landscapes, especially in areas of high population density.
29. (a) Areas in Caribbean countries at high risk from the hazards of earthquakes, hurricanes, volcanoes, landslides, flooding.
(b) The effects of natural hazards and disasters - short term and long term.
30. Responses of individuals, national and regional agencies to the risk of the hazards and the effects of natural disasters in the Caribbean: the stages in the hazard/disaster management cycle.

## SECTION II - NATURAL SYSTEMS (cont'd)

## Suggested Teaching and Learning Activities

To facilitate students' attainment of the objectives of this Section, teachers are advised to engage students in the teaching and learning activities listed below.

1. Have students create a concept map or poster showing the impact of plate tectonics on the physical and human environment.
2. Place students in groups to create a news report/documentary/skit on the hazards that affect the region. Ask students to conduct interviews, Internet research, review maps to aid with their presentations.
3. Invite an environmentalist to make an interactive presentation on the challenges faced by fluvial (river) and/or coastal systems as a result of both natural and human factors. The presentation can be followed by a question and answer session between the students and the expert on the methods that can be adopted to improve the monitoring of the particular environment. The students should be encouraged to explore their role in the sustainable use and management of the environment.
4. Have students tour the school as a class, paying close attention to the geographical features of the school environment. Class discussions and exercises can focus on potential hazards as well as theirs and other agencies' role in reducing the effects of hazards. Guide the students to construct a thematic map of the potential hazards of the school's environment which can form the basis of a report concerning ways to improve its environment.
5. Have the class develop a disaster plan for their school or have them assess the school's existing disaster plan based on what they have learned in this section. Students would be expected to critique the existing plans and make recommendations for improvement, where applicable.
6. Use Social Networking Websites to create groups for interaction.
7. Use digital devices to create presentations, for example, issues pertaining to global warming and climate change. Have students create PowerPoint presentations and download films pertinent to topics in the syllabus.
8. Have students use Google Earth to create 'fly throughs' (three-dimensional (3D) videos) over an area such as the length of a coastline, along a road or railway or even part of or an entire river's course. This facility could also be used to highlight the relationship between the physical and human environment.
9. Field trips remain an excellent strategy to investigate geographical phenomena, for example, rivers, vegetation, coastal features.

## SECTION III: HUMAN SYSTEMS

## GENERAL OBJECTIVES

## POPULATION, ECONOMIC, AGRICULTURAL AND SUSTAINABLE DEVELOPMENT SYSTEMS

On completion of this section, students should:

1. understand the spatial and cultural factors affecting the distribution and structure of human population;
2. account for the growth of urban settlements;
3. develop an awareness and understanding of factors influencing the spatial patterns of economic activity;
4. understand the impact of the human systems on the environment;
5. recognise their social and civic responsibility towards the use of resources and the environment.

## SPECIFIC OBJECTIVES

Students should be able to:

1. explain the factors influencing the distribution of population and population density in the Caribbean;
2. interpret maps and diagrams of population distribution, density and structure;
3. compare the factors affecting the growth of population in the Caribbean with ANY ONE of the following countries: India, China, Nigeria;
4. differentiate among: urbanisation, urban growth and urban sprawl;
5. describe the causes, benefits and problems of population growth in named urban areas in the Caribbean;
6. discuss the attempts to control urbanisation in the Caribbean;
7. (a) describe the causes of in-migration and out-migration in the Caribbean since the 1990s;
(b) describe the consequences of in-migration and out-migration in the Caribbean since the 1990s;
8. (a) define primary, secondary and tertiary activities;

## SECTION III: HUMAN SYSTEMS (cont'd)

(b) name and locate examples of primary, secondary and tertiary activities in the Caribbean;
9. explain the relative importance of primary, secondary and tertiary activities to the Caribbean;
10. differentiate between renewable and non-renewable resources;
11. name and locate areas within Caribbean countries with natural resources used for commercial purposes (as stated in the content);
12. explain the factors influencing the location of primary and secondary industries with particular emphasis on those stated in the content;
13. explain the factors influencing the development and growth of the tourism industry in the Caribbean;
14. explain the benefits and problems associated with the industries in the Caribbean as stated in the content;
15. discuss solutions to the problems faced by the selected industries in the Caribbean;
16. explain the factors influencing the development of agriculture in the Caribbean;
17. locate areas in the Caribbean where commercial farming (both large-scale and small-scale) and subsistence farming are important;
18. compare the characteristics of large scale and small scale commercial farming in a named Caribbean country;
19. compare the characteristics of sugar cane farming in Guyana with sugar cane farming in Brazil;
20. compare the ways in which changes in commercial farming in the Caribbean and in Brazil impact their economic development;
21. explain the ways in which economic activities can contribute to environmental degradation in the Caribbean;
22. discuss measures to ensure the sustainable management of resources in the Caribbean.

## SECTION III: HUMAN SYSTEMS (cont'd)

## CONTENT

## POPULATION, ECONOMIC, AGRICULTURAL AND SUSTAINABLE DEVELOPMENT SYSTEMS

1. Factors influencing distribution and density of population - historical, cultural, physical, socioeconomic factors.
2. Dot and choropleth maps and population pyramids.
3. Factors influencing population growth in the Caribbean and with EITHER India or China, or Nigeria: birth rate, death rate, natural increase, migration, fertility rate, life expectancy, government policies.
4. Definitions of urbanisation, urban growth and urban sprawl.
5. Causes of population growth in capital cities and other urban areas: for example, natural increase; migration (internal, regional and international); benefits: for example, labour supply, economic growth; and problems: for example, overcrowding, crime, housing, environmental).
6. Attempts to control urbanisation: for example, zoning, decentralisation of services, development of housing schemes, upgrade of rural areas, and diversification of agriculture.
7. Definition of in-migration and out-migration; types of migration (regional and international).
(a) Reasons for in and out migration: push and pull factors (economic, social, and political) with relevant examples of origin of migrants and main destinations of migrants.
(b) Consequences of in and out migration: economic and social impacts.
8. (a) Definitions of primary, secondary and tertiary activities;
(b) Names and location of primary, secondary and tertiary activities in the Caribbean.
9. Characteristics and relative importance of primary, secondary and tertiary economic activities to the Caribbean.
10. Renewable (forest, fish) and non-renewable (oil and natural gas, bauxite) industries.
11. Names and locations of areas within Caribbean countries with the following resources: forests, fish, limestone, bauxite, petroleum, natural gas, gold.
12. Factors (raw materials, energy, transport, markets, labour, capital, the role of government) influencing the location of THREE of the following industries:
(a) EITHER fishing OR forestry;
(b) EITHER oil and natural gas OR bauxite; and

## SECTION III: HUMAN SYSTEMS (cont’d)

(c) food processing within CARICOM and Singapore;
13. Factors influencing the development and growth of the tourism industry (for example, physical, historical, cultural, man-made attractions, role of government).
14. Benefits and problems associated with the selected industries in the Caribbean:

- Benefits (for example, employment, revenue, improved standard of living, economic development).
- Problems (for example, declining sources of raw material, high exploration costs, competition, pollution, accessibility, transportation, sustainability).

15. Solutions to problems faced by the selected industries in the Caribbean - for example, exploration of new sources of raw materials, alternative sources of raw materials, diversification.
16. Historical, physical, human and economic factors associated with agriculture.
17. Areas in Caribbean countries where commercial farming (both large-scale and small-scale) and subsistence farming are important.
18. Characteristics of commercial farming in a named Caribbean country (size of farm, ownership, labour, farming practices, products, markets, technology).
19. Characteristics of sugar cane farming - acreage, farming practices, labour, technology (for example, the use of materials, tools, techniques and sources of power to improve productivity), and markets.
20. (a) Changes in commercial farming - for example, government policies (including issues of food security), bio-fuels, value-added products, technology, shade houses, new markets.
(b) Impact on economic development - for example, cost and availability of traditional products, income, government revenue, job opportunities, diversification.
21. Environmental Degradation:
(a) Agriculture - deforestation, soil erosion and soil exhaustion, flooding, pollution.
(b) Quarrying, mining and secondary industries - deforestation, pollution, land degradation.
(c) Tourism - coral reef destruction, pollution, destruction of mangroves.
22. Measures to ensure the sustainable management of resources - regional, national and personal responses in primary and secondary industries and tourism; (for example, education, organic farming, forest and soil conservation, fisheries management, improved mining and manufacturing techniques, ecotourism).

## SECTION III: HUMAN SYSTEMS (cont'd)

## Suggested Teaching and Learning Activities

To facilitate students' attainment of the objectives of this Section, teachers are advised to engage students in the teaching and learning activities listed below.

1. There is a range of graphic organisers (for example, Frayer, Spoke, Venn) around which lessons can be designed to help students recognise spatial patterns and the inter-relationships between the human and physical systems. Have students study the tourism industry, for example, using this approach where they will use graphic organisers to first brainstorm about the industry and build on what they already know. An Internet search provides many more useful examples.
2. Have students engage in team/group based learning. The jigsaw type of cooperative learning where each group member must participate can be used for the study of population, agriculture and industries.
3. Organise field trips to farms or fishing villages. Invite personnel from the agriculture and forestry departments to conduct interactive sessions with students.
4. Have students engage in library research, reviewing newspapers and other resources on issues relating to agriculture or industry. Their research findings can be delivered by a variety of methods such as PowerPoint presentations.
5. Have students use the atlas to highlight how physical factors influence population distribution and density in the Caribbean and the selected country outside of the Caribbean. Use topographical and Google maps/aerial photographs to show such patterns. Students can draw and interpret graphs, tables and diagrams that show population data. Refer to the Population Reference Bureau for video clips and other relevant population information.
6. Have students conduct a mini census in their school to find out the characteristics of the school's population (for example, sex, age, ethnicity, religion). Use the appropriate graphs, charts and diagrams to present the data collected.
7. Using apps, like Jing, have students create screen casts of lessons and post these online for students and teachers to view and to generate class discussions. Students can also use the apps to create short videos, for example, on agriculture in the Caribbean.
8. Have students design scenarios in which economic activities contribute to environmental degradation. Have students develop hypotheses, say how they would collect and present the data as well as analyse, discuss and draw conclusions.

## - SCHOOL-BASED ASSESSMENT (40 marks, 20 per cent)

School-Based Assessment is an integral part of student assessment in the course covered by this syllabus. It is intended to assist students in acquiring and using certain knowledge, skills and attitudes that are associated with the subject. The activities for the SBA are linked to the syllabus and are part of the learning activities to enable the student to achieve the objectives of the syllabus.

School-Based Assessment provides an opportunity to individualise a part of the curriculum to meet the needs of students. It facilitates feedback to the student at various stages of the experience. This helps to build the self-confidence as students proceed with their studies. School-Based Assessment also facilitates the development of the critical skills and abilities that are emphasised by this CSEC subject and enhances the validity of the examination on which the candidate's performance is reported. SBA, therefore, makes a significant and unique contribution to both the development of relevant skills and the testing and rewarding of students for the acquisitions of those skills.

During the course of study for the subject, students shall obtain marks for the competence they develop and demonstrate in undertaking their SBA assignments. These marks contribute to the final marks and grades that are awarded to students for their performance in the examination.

The guidelines provided in this syllabus for selecting appropriate tasks are intended to assist teachers and students in designing assignments that are valid for the purpose of SBA. These guidelines are intended also to assist teachers in awarding marks that are reliable estimates of the achievement of students in the School-Based Assessment component of the course. In order to ensure that the scores awarded by teachers are in line with the CXC standards, the Council undertakes the moderation of a sample of the School-Based Assessment assignments.

The Caribbean Examinations Council seeks to ensure that the SBA scores are valid and reliable estimates of accomplishment. Candidates are provided with the guidelines below in order to successfully complete the SBA.

## THE FIELD STUDY

The Field Study is the SBA component of the Geography Syllabus.
The Field Study is intended to:

1. provide the student with the opportunity to pursue a study of an area of special interest within the prescribed syllabus;
2. develop self-directed learning in which a student identifies and defines a geographical problem, conducts an enquiry to address a problem and presents the findings;
3. provide an opportunity to apply relevant knowledge, skills, attitudes and principles of the discipline to the local environment;
4. give an opportunity for teacher involvement in the evaluation process.

## GENERAL OBJECTIVES

On completion of the Field Study in Geography the student should have acquired:

1. Knowledge of the:
(a) facts relevant to the topic of study;
(b) principles and generalisations which give meaning and coherence to those special facts.
2. Critical thinking skills, in particular, the ability to:
(a) identify and define problems suitable for field enquiry;
(b) devise a simple programme of enquiry covering planning field study, collecting and recording primary and secondary data;
(c) present and discuss findings;
(d) draw conclusion with reference to the problem.
3. Social and research skills, including the ability to:
(a) work independently and in a group;
(b) identify relevant information from different sources;
(c) collect data in the field;
(d) process and present data using appropriate techniques;
(e) express ideas clearly and concisely in writing;
(f) compile and present a study that is objective, logical and neat.
4. A balanced perspective of research outcomes so that the student:
(a) has confidence to advance opinions based on the findings;
(b) is ready to recognise and acknowledge that these findings may differ from what was expected.

## GUIDELINES FOR THE CONDUCT OF THE SBA

One of the most important aims of the Field Study is to encourage students to work on geographical topics in which they are particularly interested. Groups of students may work on the same or different aspects of a general topic taken from any system in the syllabus, but individual reports must be submitted.

Students who duplicate or allow the duplication of work submitted in the same or previous years, will be penalised.

## The Field Study Report

1. The Field Study report should be a clear account of a manageable geographical enquiry undertaken in the field.
2. The Field Study Report should be no more than 1000 words in length (excluding bibliography, illustrations and appendices). It can be legibly hand written or technologically aided. In either case, note that marks will be awarded on the same basis as outlined in the criteria on pages 36-42.
3. Each candidate must submit a strategy sheet (see example given in page 46, Appendix 1). The strategy sheet will help the student to identify and carefully define the area for the field study. The teacher is required to:
(a) give the Strategy Sheet to each student prior to the commencement of the Field Study;
(b) give a deadline for the return of the strategy sheet;
(c) give critical comments, where necessary, and return the Sheet to the student.
4. The students should be informed that:
(a) the Strategy Sheet should be completed and submitted to the teacher by the given deadline and before the field work commences;
(b) a copy of the final form of the Strategy Sheet must be included in the completed Field Study report.

## CONTENT

The report should include:

1. Table of Contents;
2. Introduction;
3. Aim of Study;
4. Location of the study - sketch maps and description of the location of the study;
5. Methodology - description of the data collection methods utilised;
6. Presentation of data (maps, graphs, diagrams, photographs);
7. Analysis of data;
8. Discussion of findings;
9. Conclusion;
10. Bibliography.

Information may be used from the Internet, pamphlets and textbooks but should not be copied directly. Any information used from such sources must be appropriately acknowledged and included in the bibliography.

## PRESENTATION

1. The report should be submitted in a soft-backed folder of 'Quarto' or 'A4' size.
2. The candidate's name, registration number, name of the school, and the title of the Study should be clearly written on the outside of the folder AND on the FIRST page of the report.
3. A Strategy Sheet should be included on the second page of the Field Study Report.
4. The table of contents should follow the Strategy Sheet.
5. Illustrations used in the report (maps, tables, graphs, diagrams, photographs) should be suitably chosen, structured and integrated into the report. At least, two different types of illustrations should be used.
6. The presentation, written or typed and graphical, should be neat and legible.
7. The references should be listed in alphabetical order in a bibliography at the end of the report. (See books and websites listed under RESOURCES on pages 43-45 for a recommended format to be used for the bibliography).
8. All maps and other illustrations should be folded to an appropriate size to fit within the cover and be positioned alongside the appropriate point in the text.
9. Appendices (for example, questionnaires) should appear at the end of the report, after the bibliography.
10. The overall presentation should be well-organised demonstrating cohesion, continuity and completeness.
11. The report may be submitted electronically.

## The Role of the Teacher in Managing SBA

Since the School-Based Assessment is an integral part of the evaluation scheme of the syllabus, teachers are expected to guide and monitor students' progress and score the finished product in accordance with the criteria set out in the mark scheme.

The teacher is expected to:

1. advise students on the areas suitable for field work and the role of the strategy sheet in guiding this process;
2. assist in the refinement of the aims of the study;
3. approve students' field work plans;
4. advise students of the nature of the task and the scope and depth of the data required;
5. advise students on the availability of resource materials;
6. advise students about the deadlines for completing and submitting the interim drafts and the final report;
7. use different strategies to monitor students' progress and advise them on the quality of their work and ways of improving it, where necessary;
8. employ appropriate techniques to establish authenticity of the student's work. These techniques may include oral questioning and review of the student's progress reports and preliminary drafts;
9. mark the field study reports submitted by students;
10. keep a record of students' marks and submit them together with samples of work as requested by CXC;
11. ensure that students attach the strategy sheet to their reports;
12. ensure that the Geography Field Study Individual Mark Sheet (Form GEOG: 6) is submitted along with each sample script.

IMPORTANT - The teacher is required to:

1. verify that the report submitted by each student is his or her own work;
2. discourage plagiarism and other forms of cheating by students;
3. impose appropriate penalties for any form of cheating;
4. advise students of the consequences of plagiarism and other forms of cheating before they commence the writing of the report.

## Examples of Areas of Investigation for Field Studies

It is important that the precise focus and scope of the field study be clearly defined. Some examples for field studies are as follows:

1. investigate the impact of flooding on the people of South Ruimveldt, Georgetown, Guyana. (Specific Objective \# 29, Human Systems).
2. investigate the measures taken to reduce the impact of hurricanes in Rocky Point, Clarendon, Jamaica. (Specific Objective \# 30, Natural Systems).
3. investigate to what extent the coastal features along Cove Bay, St Lucy, Barbados, reflect the dominant types of waves, relief and geology. (Specific Objective \# 22 (b), Natural Systems).
4. investigate the downstream changes in the size and shape of the bedload in Dennery River, St Lucia. (Specific Objective \# 21, Natural Systems).
5. investigate the factors affecting the location of National Flour Mills, Port-of-Spain, Trinidad. (Specific Objective \# 12, Human Systems).

The following timetable illustrates one way in which a teacher can meet these requirements:

| FOURTH AND FIFTH YEARS IN SECONDARY SCHOOLS |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Fourth Year (Term 3) | Fifth Year (Term 1) | Fifth Year (Term 2) |
| Developmental <br> Activities <br> - basic research field techniques (including sampling); <br> - develop field study questions; <br> - identify methods of data collection; <br> - design instruments; checklist; observation schedules; questionnaires. | 1. Teacher initiates discussion of Field <br> Studies with <br> students. <br> 2. Students and teachers decide on provisional topics. <br> 3. Students explore feasibility of methods to be used and identify potential methodologies. <br> 4. Students submit first draft of Strategy Sheets. <br> 5. Students and teacher finalise the questions to be investigated. <br> 6. Students and teacher review Strategy Sheet. <br> 7. Students go into the field, collect data and refine data collection technique. <br> N.B. It is strongly recommended that Field Work is completed before the start of Term I of Fifth Year. | 1. Students revise and re-submit strategy sheet, if necessary. <br> 2. Teacher and students discuss Field Studies. <br> 3. Teacher reviews required SBA sections and discusses ways students process data, draw maps. <br> 4. Students submit first draft of reports. <br> 5. Teacher discusses data and findings with students. <br> 6. Students prepare written report. <br> 7. Students submit first draft of written report. <br> 8. Teacher provides feedback to students. | Students submit their completed reports early in the term (no later than mid-term). |
| Scoring |  |  | Teacher marks reports using the procedures and criteria outlined in the syllabus. |

## NOTES TO TEACHERS

1. For the Field Study, the teacher may choose the objective(s) from the syllabus or allow the students to do so. The purpose of the fieldwork is to enhance the students' understanding of the objectives. Students must be given an opportunity for self-directed learning in which they can assume responsibility for conducting an enquiry and presenting their findings. The quality of the candidates' work can be improved by:
(a) stimulation - of interest in a problem;
(b) guidance - to help the candidate become more aware of the strategies, concepts, attitudes and principles which are involved in the enquiry.
2. The teacher may provide specific guidance by:
(a) encouraging the development of the skills required for illustrating data, drawing and labelling sketch maps and diagrams and using annotated photographs;
(b) advising on the format for the presentation of the report;
3. Careful planning and sequencing should be given to the timing of tasks or activities in order to:
(a) avoid serious clashes with students' workload in other subjects;
(b) allow sufficient time for the students to acquire familiarity with appropriate fieldwork techniques;
(c) allow adequate time for individual supervision by the teacher;
(d) ensure that there is sufficient time after students have completed their studies for teachers to meet assessment and moderation deadlines.
4. The marking criteria should be applied consistently to the report of each student.
5. Fractional marks are NOT to be awarded.

Schools should retain copies of the individual mark sheets and the moderation sheet for the samples submitted to CXC.

## ASSESSMENT

The marks for the field study reports are to be distributed across profiles as follows:

|  | Components of Report |  | Maximum Marks For Profile |  |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  |  | PS | KC | UK | Total |
| 1. | Table of Contents |  | 1 |  | $\mathbf{1}$ |
| 2. | Introduction |  |  | 2 | $\mathbf{2}$ |
| 3. | Aim of Field Study |  | 2 |  | $\mathbf{2}$ |
| 4. | Location of Field Study | 4 |  |  | $\mathbf{4}$ |
| 5. | Methodology | 2 | 2 |  | $\mathbf{4}$ |
| 6. | Presentation of Data | 4 |  |  | $\mathbf{4}$ |
| 7. | Quality of Data |  |  | 4 | $\mathbf{4}$ |
| 8. | Analysis and Discussion |  |  | 10 | $\mathbf{1 0}$ |
| 9. | Conclusion |  |  | 4 | $\mathbf{4}$ |
| 10. | Communication of Information |  | 4 |  | $\mathbf{4}$ |
| 11. | Bibliography |  | 1 |  | $\mathbf{1}$ |
|  | Total | $\mathbf{1 0}$ | $\mathbf{1 0}$ | $\mathbf{2 0}$ | $\mathbf{4 0}$ |

## CRITERIA FOR MARKING THE FIELD STUDY REPORT

Wherever the length of a research report exceeds 1000 words, the teacher is required to impose a penalty of 10 per cent of the score that the candidate achieves on the report.

|  |  | GENERAL PROFICIENCY |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | PROFILE DIMENSIONS |  |  |
|  |  | PRACTICAL SKILLS (PS) | KNOWLEDGE (KC) | USE OF KNOWLEDGE (UK) |
|  | CRITERIA | P1 | P2 | P3 |
| 1. | TABLE OF CONTENTS [1] <br> - Accurately presented in the study and properly presented with correct page numbers. <br> - No page numbers or more than two inconsistencies. |  | 1 mark <br> 0 mark |  |
| 2. | INTRODUCTION [2] <br> Gives clear over view with justification and narrows the research to the area of study <br> Is not clear or does not provide a focus for the study <br> Is not suitable for a geographical topic |  | 2 marks <br> 1 mark <br> 0 mark |  |
| 3. | THE AIM OF THE STUDY [2] <br> - At least ONE aim which clearly defines and focuses the study, stated as a direct or implicit question, is based on the syllabus and allows for collection of primary data. <br> - At least ONE aim stated. <br> - Not based on the syllabus or the study |  | 2 marks <br> 1 mark 0 mark |  |
| 4. | LOCATION OF THE STUDY [4] <br> - At least two sketch maps: <br> (i) the location map, usually of the territory or a large part of it, showing the position of the study area in relation to one or two major reference points (for example, main town, | 4 marks |  |  |


|  | GENERAL PROFICIENCY |  |  |
| :---: | :---: | :---: | :---: |
|  | PROFILE DIMENSIONS |  |  |
|  | PRACTICAL SKILLS (PS) | KNOWLEDGE (KC) | USE OF KNOWLEDGE (UK) |
| CRITERIA | P1 | P2 | P3 |
| mountain peak, bays, airport) at a small or atlas scale. <br> (ii) The site Map showing the study area and characteristics of the immediate environs of the study area at a large scale (1:25 000 or 1:10000), including for example, elevation, roads, water courses, settlements and other land uses. (Other maps may be added in the body of the report, if needed, to be credited as illustrations). <br> Both maps accurately drawn and neat. <br> Marks to be distributed as follows: <br> - Between the two maps: indication of scale, directional arrow, key or labels, title (1 mark each to maximum of 4 marks) <br> - Both Maps. No scale indicated (maximum of 3 marks). <br> - Only ONE map with scale (maximum of 2 marks). <br> - Study area not drawn or no study area. | 4 marks <br> 3 marks <br> 1-2 marks <br> 0 mark |  |  |


|  |  | GENERAL PROFICIENCY |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | PROFILE DIMENSIONS |  |  |
|  |  | PRACTICAL SKILLS (PS) | KNOWLEDGE (KC) | USE OF KNOWLEDGE (UK) |
|  | CRITERIA | P1 | P2 | P3 |
| 5. | METHODOLOGY [4] <br> - Clear statement on HOW data were collected and an example of the instrument (data record sheet or questionnaire) used or a brief outline of how observations were made and tests done. <br> EITHER <br> - A clear statement on HOW the data were collected. <br> OR <br> - Little or no mention of HOW the data were collected, but an example of the instrument used is included. <br> - No statement or a vague statement of HOW data were collected and no example of the instrument used. <br> - A clear statement on WHEN the data were collected - date, month, year (and time if relevant). <br> - A clear statement on WHERE the data were collected. <br> - Vague statements for either WHEN or Where | 2 marks <br> 1 mark <br> 1 mark <br> 0 mark | 1 mark <br> 1 mark <br> 0 mark |  |


|  |  | GENERAL PROFICIENCY |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | PROFILE DIMENSIONS |  |  |
|  |  | PRACTICAL SKILLS (PS) | KNOWLEDGE (KC) | USE OF KNOWLEDGE (UK) |
|  | CRITERIA | P1 | P2 | P3 |
| 6. | PRESENTATION OF DATA [4] <br> Illustrations: <br> For example, graphs, tables, labelled photographs, maps. <br> These should be generated from field observation/tested by candidates and not copied from secondary sources (that is, they should be the candidates' original work). <br> - Accurate, relevant, neat, clearly labelled, and titled. <br> (Excellent presentation) <br> [A maximum of 3 marks will be awarded if copied from secondary sources] <br> - Accurate, relevant, neat, clearly labelled, and titled. (Good presentation) <br> [A maximum of 2 marks will be awarded if copied from secondary sources] <br> - Fairly accurate, relevant, neat with some attempt at labelling and titling). (Moderate presentation) <br> [A maximum of 1 mark will be awarded if copied from secondary sources] <br> - Lack accuracy, neatness and clarity. (Poor presentation) <br> [If copied from secondary sources no marks will be awarded.] | 4 marks <br> (3 marks) <br> 3 marks <br> (2 marks) <br> 2 marks <br> (1 mark) <br> 0 mark <br> (0 mark) |  |  |


|  |  | GENERAL PROFICIENCY |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | PROFILE DIMENSIONS |  |  |
|  |  | PRACTICAL SKILLS (PS) | KNOWLEDGE (KC) | USE OF KNOWLEDGE (UK) |
|  | CRITERIA | P1 | P2 | P3 |
| 7. | QUALITY OF DATA [4] <br> - Accurate, appropriate and relevant. <br> - Comprehensive enough to achieve aim. <br> - Some primary data but not enough explanation given. <br> - Not enough data collected (no explanation given). <br> - NO data. <br> - ONLY secondary data (maximum 2 marks). |  |  | 4 marks <br> 3 marks <br> 2 marks <br> 1 mark <br> 0 mark <br> 2 marks |
| 8. | ANALYSIS AND DISCUSSION [10 ] <br> Text (8) <br> - Very well organised, coherent, points well-developed, well-sequenced and supported by comprehensive data. (Excellent) <br> [If there is no evidence of field work a maximum of 4 marks will be awarded] <br> - Well organised, coherent and points developed, sequenced satisfactorily and supported by some data (Good) <br> [If there is no evidence of field work a maximum of 3 marks will be awarded] <br> - Fairly well-organised, few points developed, sequenced satisfactorily and supported by data (Moderate). <br> [If there is no evidence of field work a maximum of 2 marks will be awarded] |  |  | 7-8 marks <br> (4 marks) <br> 5-6 marks <br> (3 marks) <br> 3-4 marks <br> (2 marks) |


|  |  | GENERAL PROFICIENCY |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | PROFILE DIMENSIONS |  |  |
|  |  | PRACTICAL SKILLS (PS) | KNOWLEDGE (KC) | USE OF KNOWLEDGE (UK) |
|  | CRITERIA | P1 | P2 | P3 |
|  | - Shows little relevance or organisation, poor presentation of points, and points not supported by data. (Poor) <br> Integration of Illustrations (2) <br> - Well integrated - discussed and placed appropriately near first reference. <br> - Satisfactorily integrated - discussed not placed appropriately. <br> - No integration - no reference to illustrations in text (they are mere decorations) |  |  | 1-2 marks <br> 2 marks <br> 1 mark <br> 0 mark |
| 9. | CONCLUSION [4] <br> - Is related to the aim of the study, and provides a succinct summary consistent with the data obtained. <br> - Is related to the aim of the study and provides a summary consistent with data obtained. <br> - Shows little relation to the aim of the study. |  |  | 4 marks <br> 2-3 marks <br> 0-1 mark |
| 10. | COMMUNICATION OF INFORMATION <br> [4] <br> - No grammatical errors or flaws and extensive use of appropriate geographical terms. <br> - Some grammatical errors and good use of appropriate geographical terms. <br> - Some grammatical errors and limited use of appropriate geographical terms. |  | 4 marks <br> 3 marks <br> 2 marks |  |


|  |  | GENERAL PROFICIENCY |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | PROFILE DIMENSIONS |  |  |
|  |  | PRACTICAL SKILLS (PS) | KNOWLEDGE (KC) | USE OF KNOWLEDGE (UK) |
|  | CRITERIA | P1 | P2 | P3 |
|  | - Numerous grammatical errors and poor use of appropriate geographical terms. <br> - Numerous grammatical errors and no use of appropriate geographical terms. |  | 1 mark 0 mark |  |
| 11. | BIBLIOGRAPHY [1] <br> - Alphabetical order by author with title, publisher, place and date for at least two, relevant and up-to-date references <br> - Fewer than two references or references written in an inconsistent manner |  | 1 mark <br> 0 mark |  |
| 12. | Penalty For Exceeding Word Limit | -1 mark (max) | -1 mark (max) | -2 marks (max) |
|  | TOTAL | 10 | 10 | 20 |

## MODERATION OF SCHOOL-BASED ASSESSMENT

School-Based Assessment Record Sheets are available online via the CXC's website www.cxc.org.

All School-Based Assessment Record of marks must be submitted online using the SBA data capture module of the Online Registration System (ORS). A sample of assignments will be requested by CXC for moderation purposes. These assignments will be reassessed by CXC Examiners who moderate the SBA. Teachers' marks may be adjusted as a result of moderation. The Examiners' comments will be sent to schools. All samples must be delivered to the specified marking venues by the stipulated deadlines.

Copies of the students' assignments that are not submitted must be retained by the school until three months after publication by CXC of the examination results.

## gUIDELINES FOR THE CONDUCT OF THE PAPER 032, ALTERNATIVE TO SBA

The Paper 032, Alternative to the SBA, assesses the same skills as the SBA itself. The questions are set to assess the skills that the candidates should demonstrate when carrying out a field study.

Candidates are expected to:

1. formulate a research question or hypothesis;
2. design a strategy to collect relevant data by field research;
3. say how the field study will be conducted;
4. present data in tables or charts;
5. evaluate data collected with respect to a question or hypothesis;
6. make logical deductions or inferences supported by data;
7. draw conclusion with respect to the findings as indicated by question or hypothesis;
8. present a bibliography.

Candidates may also be required to respond to scenes, situations or problems that are likely to occur in the conduct of a field study.

## - RESOURCES

The following is a list of books and other printed material that might be used for teaching Geography for the CSEC Examinations. This list is by no means exhaustive or prescriptive but indicates sources that teachers and students could use as appropriate.

| Abbott, P. | Natural Disasters: Seventh Edition, United States: McGraw Hill, 2009. |
| :---: | :---: |
| Bleasdell, S. et al. | A Photographic Geography of the Caribbean, Trinidad and Tobago: Caribbean Educational Publishers, 2009. |
| Bleasdell, S. et al. | CSEC - New Integrated Geography, Trinidad and Tobago: Caribbean Educational Publishers, 2008. |
| Guinness, P. et al. | Geography for CSEC, United Kingdom: Nelson Thornes, 2008. |
| James, K. J. et al. | Geography for CSEC: Second Edition, United Kingdom: Nelson Thornes, 2008. |
| Johnston, R. J. et al. | The Dictionary of Human Geography: Fifth Edition, Oxford: Wiley-Blackwell, 2011. |
| Lindsay, J. et al. | Volcanic Hazard Atlas of the Lesser Antilles, Trinidad and Tobago, Seismic Research Unit of the University of the West Indies, 2005. |
| Mayhew, S. | A Dictionary of Geography, Oxford: Oxford University Press, 2010. |
| Morrissey, M. | Atlas for the Caribbean Examinations: Third Edition, London: Pearson Longman Education, 2011. |
| Nagle, G. and Spencer, K. | AS AND A Level Geography through Diagrams, Oxford: Oxford University Press, 2005. |
| Niles, J. | Modern Caribbean Geography, Oxford: Macmillan Caribbean, 2005. |
| Ottley, J. and Gentles, M. | Longman Geography for CSEC, United Kingdom: Pearson Longman, 2010. |
| Reardon, G.J and Bidaisee, S. | The Essential Guide to Map Reading, Singapore: Marshall Cavendish Education, 2005. |
| Ross, S. and Rocke, J. | Essential Mapwork Skills for the Caribbean, United Kingdom: Nelson Thornes, 2013. |
| Ross, S. et al | Geography for CSEC - Caribbean Examinations Council Study Guide, United Kingdom: Nelson Thornes, 2012. |
| Sealy, N. | Geography for CSEC Examinations, London: Macmillan Caribbean Publishers, 2010. |
| Wilson, M. | The Caribbean Environment, Fully Revised Edition, Oxford: Oxford University Press, 2007. |

## Websites

1. http://www.bbc.com/news/world-asia-22907307
2. http://www.bbc.co.uk/schools/gcsebitesize/geography/population/managing population rev1.shtml
3. http://www.brazilintl.com/agsectors/sugarcane/map-sugarcane/map-sugarcane.htm
4. http://www.cdc.gov/healthyyouth/evaluation/pdf/brief12.pdf
5. www.cdema.org
6. http://education.nationalgeographic.com/education/geographic-skills/1/?ar a=1
7. http://en.wikiversity.org/wiki/Tourism industry
8. http://geocurrents.info/population-geography/indias-plummeting-birthrate-a-television-induced-transformation
9. http://www.geography.learnontheinternet.co.uk/topics/popn.html
10. http://www.geohive.com/
11. http://geology.about.com/od/volcanoes/a/aa nuts volcism.htm
12. https://www.gov.uk/government/policies/adapting-to-climate-change
13. http://www.ibtimes.com/indias-population-will-grow-while-chinas-will-begin-decline-2028-making-india-worlds-most-populous
14. http://www.learner.org/interactives/rockcycle/diagram.html
15. http://www.mathsisfun.com/data/pie-charts.html
16. www.nationalgeographic.com/
17. http://www.notesmaster.com/
18. http://www.population.gov.ng/index.php/84-news/latest/106-nigeria-over-167-million-population-implications-and-challenges
19. http://www.prb.org/
20. http://www.sciencedaily.com/
21. http://www.slideshare.net/Adrienna/aec-2015-singapore-food-manufacturing-industry
22. http://www.statcan.gc.ca/edu/power-pouvoir/ch9/pie-secteurs/5214826-eng.htm\#a2
23. http://sugarcane.org/resourcelibrary/studies/evidences on sugarcane expansion and agri cultural land use changes in brazil 1206.pdf
24. http://theworldoutline.com/2013/03/the-impact-of-chinas-one-child-policy/
25. https://www.wmo.int/pages/index en.html
26. http://worldpopulationreview.com/countries/nigeria-population/
27. http://www2.le.ac.uk/offices/ld/resources/numeracy/numerical-data

## GEOGRAPHY FIELD STUDY

## STRATEGY SHEET

To be completed by 15 March of the year of the examination (but preferably in Fourth Year). Make a duplicate copy of this sheet. Your teacher will return a copy to you.

CANDIDATE'S NAME: William Smith REGISTRATION NUMBER-------------------------------CLASS: 4A GENERAL TOPIC OF INTEREST: Coastal Landforms

1. (a) POSSIBLE QUESTION TO BE INVESTIGATED: To what extent do the coastal features along Las Cuevas Bay, Trinidad, reflect the dominant types of waves? (Specific Objective\#22 (b), Natural Systems).
(b) Location of Study Area: State the name of area of study; show on maps. (Las Cuevas, North Coast, Trinidad and Tobago).

## STRATEGY

A. What is the Aim of your Study?

To investigate the role of waves in the formation of features in the area of study.
B. How will you obtain data?

1. Review maps to measure the width of the bay and its indentation.
2. Field trip to the area of study to (a) measure wave frequency and beach width; (b) determine the direction in which beach sediments move; (c) estimate wave energy; (d) note relief, geology and features.
3. Draw sketch maps and take photographs.
4. Review secondary sources: for example, guides on coastal field work.
C. Resources:

Maps, record sheet, measuring tape, floats, stop watch, camera, ranging pole, painted pebbles.
D. How do you intend to present the data and findings in your report?

1. Location maps of the area of study: Las Cuevas, North Coast, Trinidad and Tobago (as shown on the map).
2. Illustrate data using tables and graphs.
3. Illustrate with annotated photographs.
E. Analyse and Discuss Data:

Discuss relationship among wave processes, relief and geology, and landforms in the study area.

## ANTICIPATED CHALLENGES:

Tides, safety measures.

## POSSIBLE SOLUTIONS:

Check tidal schedules; ensure there is adequate assistance and safety gear for students and teachers.
$\qquad$


## - GLOSSARY OF BEHAVIOURAL VERBS USED IN THE GEOGRAPHY EXAMINATIONS

| Analyse | Examine key factors and constituent parts critically and in detail and suggest possible results/outcomes. |
| :---: | :---: |
| Assess | Present possible explanations or reasons for the importance of a particular structure, relationship or process and say what would be the appropriate explanation. |
| Classify | Place into groups according to observable characteristics, attributes, features or qualities. |
| Compare/Contrast | Identify and describe/examine similarities and differences between two elements/concepts/entities of the same or different kinds. |
| Define | Provide a brief statement giving the precise meaning of or outlining the nature, properties or essential qualities of a term, concept, and principle. |
| Describe | Provide statements of the features or characteristics of an object or process. |
| Differentiate/Distinguish | Provide an explanation of the differences between entities which allow them to be placed in distinct groups. |
| Discuss | Give a careful explanation of a concept or statement by providing a definition and explaining the arguments for or against it. |
| Draw | Make a line representation of specimens, objects or features to show accurate relationship between the parts. |
| Evaluate | Explain the evidences for or against a given topic or concept and come to a conclusion. |
| Explain | Provide detailed, logical statements which make clear what happened, how it happened and why it happened. |
| Locate/Find | Establish the position of a place by giving its coordinates. |

## OR

Illustrate the position of a place by a sketch map showing its position in relation to other features and or places or describe this in words.

Point out or describe distinguishing features (without giving explanation).

Show clearly by using appropriate examples, diagrams or sketches.

| Label | Identify structures or parts with the use of pointers. |
| :--- | :--- |
| List | Itemise answers concisely and in order if specified. <br> Use an appropriate instrument or unit of measure to take accurate <br> quantitative readings. |
| Name | Provide accurate labels, words or statements. <br> Outline |
| Give basic steps, organise information concisely to provide main |  |
| points or features only. |  |$\quad$| Provide an outline of steps to be followed or the scheme of |
| :--- |
| arrangements. |
| Sketch | | Give a brief general account of or provide an outline. |
| :--- |

## Western Zone Office

16 March 2015

## CARIBBEAN EXAMINATIONS COUNCIL

Caribbean Secondary Education Certificate*


## GEOGRAPHY

## Specimen Papers and Mark Schemes Keys

Specimen Papers:

Paper 01
Paper 02
Paper 032

Mark Schemes and Keys:
Paper 01
Paper 02
Paper 032

01225010

## SPEC 2015/01225010

# CARIBBEAN EXAMINATIONS COUNCIL CARIBBEAN SECONDARY EDUCATION CERTIFICATE ${ }^{\circledR}$ EXAMINATION <br> GEOGRAPHY 

## SPECIMEN PAPER

Paper 01 - General Proficiency

## 1 hour 30 minutes

## READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This test consists of 60 items. You will have 1 hour and 30 minutes to answer them.
2. In addition to this test booklet, you should have an answer sheet.
3. Each item in this test has four suggested answers lettered (A), (B), (C), (D). Read each item you are about to answer and decide which choice is best.
4. On your answer sheet, find the number which corresponds to your item and shade the space having the same letter as the answer you have chosen. Look at the sample item below.

## Sample Item

Hurricanes in the Caribbean area are MOST
likely to occur during
(A) February-April

## Sample Answer

(A) B D
(B) April-June
(C) July-September
(D) October-February

The correct answer to this item is "July-September", so (C) has been shaded.
5. If you want to change your answer, erase it completely and fill in your new choice.
6. When you are told to begin, turn the page and work as quickly and as carefully as you can. If you cannot answer an item, go on to the next one. You may return to that item later.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

Items $\mathbf{1 - 5}$ refer to the following diagram showing a river and its environs.


1. Which of the following gives the location of Point P?
(A) 307957
(B) 305954
(C) 954305
(D) 957307
2. The straight-line distance, in km, between the church and the railway station is
(A) 2.2
(B) 2.8
(C) 3.0
(D) 3.8
3. In which direction is the arrow on the map pointing?
(A) Southeast
(B) Southwest
(C) East-southeast
(D) South-southeast
4. Which of the following man-made features runs through Point P ?
(A) Road
(B) Canal
(C) Railway
(D) Swamp
5. The settlement form of the area represented on the map is BEST described as being
(A) linear
(B) isolated
(C) nucleated
(D) dispersed

Items 6-10 refer to the following diagram extract on a scale of $1: 10000$

6. Which of the following features of Jalltown are the BEST reasons for its location?
I. It is near to the swamp.
II. It is on flat land.
III. It has a supply of fresh water.
(A) I and II only
(B) I and III only
(C) II and III only
(D) I, II and III
7. A prospective buyer of a house is BEST advised to search in area
(A) V
(B) W
(C) X
(D) Y
8. What is the general direction of flow of the river shown in the map above?
(A) West to east
(B) East to west
(C) South to north
(D) North to south
9. The height of the contour interval is
(A) 5 m
(B) 10 m
(C) 20 m
(D) 30 m
10. In which area is land value likely to be the HIGHEST?
(A) V
(B) W
(C) X
(D) $\quad \mathrm{Y}$
11. What is the Standard Time in Town X located at $22^{\circ} \mathrm{E}$ when it is 10 a.m. at Greenwich $\left(0^{\circ}\right)$ ?
(A) 9.00 a.m.
(B) $\quad 9.30$ a.m.
(C) 10.30 a.m.
(D) $\quad 11.00$ a.m.

## - 4 -

Items 12-14 refer to the following bar graph which shows employment figures for four industries in a Caribbean territory.

12. Which of the following sectors had an emloyment figure in excess of 50000 ?
(A) Furniture and tourism
(B) Agriculture and furniture
(C) Tourism and manufacturing
(D) Furniture and manufacturing
13. Which of the following statements is NOT true of the data given in the graph?
(A) The manufacturing sector employs the least number of people.
(B) More than one-half of the entire business sector is employed in agriculture.
(C) The tourism sector employs less than half of the number of people employed in furniture.
(D) The two sectors, furniture and tourism, employ more people than agriculture.
14. What is the TOTAL number of persons employed across the four industries?
(A) 310000
(B) 320000
(C) 330000
(D) 350000

Items 15-16 refer to the following map of Africa.

15. What is the approximate position of the city of Durban?
(A) Latitude $30^{\circ} \mathrm{S}$, longitude $31^{\circ} \mathrm{E}$
(B) Latitude $31^{\circ} \mathrm{S}$, longitude $29^{\circ} \mathrm{E}$
(C) Latitude $29^{\circ} \mathrm{N}$, longitude $29^{\circ} \mathrm{W}$
(D) Latitude $29^{\circ} \mathrm{N}$, longitude $31^{\circ} \mathrm{W}$
16. Which of the following cities lie north of $0^{\circ}$ latitude?
I. Accra
II. Oran
III. Johannesburg
(A) I only
(B) II only
(C) III only
(D) I and II only

Items 17-19 refer to the following rainfall and temperature graph for the year 2014.

17. The TWO wettest months of the year indicated in the graph are
(A) May and June
(B) July and August
(C) January and February
(D) November and December
18. The annual range of temperature is approximately
(A) $3{ }^{\circ} \mathrm{C}$
(B) $\quad 5^{\circ} \mathrm{C}$
(C) $12{ }^{\circ} \mathrm{C}$
(D) $19^{\circ} \mathrm{C}$
19. Which of the following statements is true?
(A) There are two dry seasons.
(B) The hottest months of the year are also the driest.
(C) The hottest months of the year are also the wettest.
(D) There is little variation in rainfall throughout the year.
20. Isobars are lines drawn on a map which join places experiencing the same
(A) annual rainfall
(B) relative humidity
(C) atmospheric pressure
(D) mean annual temperature
21. The formation of fold mountains is NOT explained by
(A) upwelling of magna to form new crust
(B) deposition of sediments in a shallow basin
(C) compression of sediments by colliding plates
(D) elevation of sediments into anticlines and synclines
22. Which of the following descriptions is NOT true of basic lava?
(A) Flows easily
(B) Erupts explosively
(C) Forms a shield volcano
(D) Has high percentage of iron
23. At which of the following locations does sea floor spreading occur?
(A) Mid-Atlantic ridge
(B) Windward Passage
(C) Foor of the Puerto Rico trench
(D) Junction of the Caribbean andCocos plates
24. Which of the following relief features results from plate tectonic activity in the Caribbean?
(A) Aripo Plains in Trinidad
(B) Palisadoes Spit in Jamaica
(C) Soufrière volcano in St Vincent
(D) Rupununi Savannas in Guyana

Items 25-26 refer to the following diagram.

25. What is the CORRECT order of the features identified as I, II, III and IV?
(A) Cave, arch, cliff, stack
(B) Arch, cave, stack, cliff
(C) Stack, cliff, arch, cave
(D) Cliff, cave, stack, arch
26. Which of the following processes is NOT important in the formation of the features labelled I, II, III and IV?
(A) Abrasion
(B) Corrosion
(C) Deposition
(D) Hydraulic action

Items 27-28 refer to the following photograph.

27. The valley labelled A was MOST likely formed as a result of
(A) folding
(B) faulting
(C) running water
(D) mass movement
28. Which of the following features have formed by the sides of the valley?
(A) Terraces
(B) Meanders
(C) Knick-points
(D) Interlocking spurs
29. The process of exfoliation may be defined as the
(A) peeling off of the outer layers of rocks
(B) splitting of rocks into rectangular blocks
(C) movement of rocks due to the action of rivers
(D) disintegration of rocks by root penetration into crevices
30. Which of the following conditions may result from man's utilization of the natural environment?
I. Soil erosion
II. Pollution
III. Depletion of natural resources
(A) I and II only
(B) I and III only
(C) II and III only
(D) I, II and III
31. Which of the following statements is NOT true about waves?
(A) They are caused by wind blowing over the surface of the water.
(B) On nearing the beach, the speed of waves slackens and the tops are thrown forward.
(C) On approaching the coast, the body of water forming the waves increases rapidly.
(D) The stronger the wind and the greater the fetch, the more powerful the waves are.
32. It is MOST likely that recent hurricanes in the Caribbean have caused fewer deaths because
(A) families no longer live in unsafe areas
(B) many hurricanes have occurred during the day
(C) the majority of the population goes to storm shelters
(D) there have been improved forecasts of hurricane tracks
33. The process by which water vapour cools and forms water droplets is termed
(A) convection
(B) evaporation
(C) precipitation
(D) condensation
34. Which of the following features is the MOST important difference between weather and climate?
(A) Time
(B) Rainfall
(C) Location
(D) Temperature
35. Tropical or easterly waves in the Caribbean are MOST common during the months
(A) June to July
(B) May to October
(C) December to March
(D) November to December
36. The temperature suddenly drops and wind speed increases; the sky gradually becomes overcast and there is a slight drizzle.

What weather system produces the weather conditions described above?
(A) Cold front
(B) Hurricane
(C) Easterly wave/tropical wave
(D) Inter-tropical convergence zone
37. Which of the following processes is at work in the concentration of minerals in the lower layers of a soil profile?
(A) Erosion
(B) Leaching
(C) Capillarity
(D) Illuviation
38. Basic lava extruded on the surface tends to form
(A) sills
(B) dykes
(C) shields
(D) domes

Item 39 refers to the following diagram which shows the three layers of plants in an equatorial forest.

39. Some of the trees which grow in the lower layer are adapted to growing in
(A) low humidity
(B) shaded areas
(C) bright sunlight
(D) windy conditions
40. Which of the following features is formed by the deposition of rivers?
(A) Solution
(B) Traction
(C) Saltation
(D) Suspension
41. Which of the following features determines the presence of inorganic material in a soil?
(A) Relief
(B) Climate
(C) Vegetation
(D) Parent material
42. Which of the following factors are causes of high population density in the Caribbean?
I. Entertainment options
II. Availability of jobs
III. The presence of a major port
(A) I and II only
(B) I and III only
(C) II and III only
(D) I, II and III
43. Which of the following areas would have the HIGHEST population density in the daytime?
(A) A squatter settlement
(B) A rural fishing village
(C) An urban residential community
(D) An urban commercial centre
44. The following table shows birth and death rates for Country A in 2000 .

| Birth Rate <br> per 1000 | Death Rate <br> per 1000 |
| :---: | :---: |
| 20 | 15 |

For 2000 , the natural increase in Country A is
(A) $0.005 \%$
(B) $0.5 \%$
(C) $3.5 \%$
(D) $5.0 \%$
45. Which of the following terms BEST explains the rapid growth in size of the LARGEST urban centres in the Caribbean?
(A) An ageing population
(B) An increase in the number of immigrants
(C) High birth rates and low infant mortality
(D) The migration of persons from rural areas
46. Which of the following results from tropical deforestation?
(A) Lumbering
(B) Loss of flora
(C) Increased fauna
(D) Increased underground water
47. Which of the following statements is true of subsistence farming?
(A) Individual farms are quite small.
(B) Yields per farm are generally high.
(C) Large amounts of fertilizers are used on the farm.
(D) Crop cultivation is not as important as animal rearing.
48. Commercial pastoral farming in Caribbean territories is LEAST likely to take place near urban settlements because
(A) the soil in these locations is infertile
(B) there are no large areas of land for grazing
(C) there is easy transmission of animal diseases to humans
(D) the size of the population is too small to support this activity
49. An increase in the proportion of a country's population living in towns is referred to as
(A) urbanization
(B) urban sprawl
(C) sub-urbanization
(D) population growth
50. Rapid urbanization in Caribbean countries usually results in
(A) housing shortages in the cities
(B) increased employment in the cities
(C) decreased foreign exchange earnings
(D) improvement in the standard of living
51. A farmer is involved in planting sugar cane which he supplies to a factory. In which of the following industries is he involved?
(A) Tertiary
(B) Secondary
(C) Primary
(D) Quaternary

Items 52-53 are based on the following sketch map.

52. Which of the following features BEST explain why the urban centre in the sketch map above is located at Y?
I. The presence of flat land
II. The nearness to the mountains
III. The presence of a sheltered harbour
(A) I and II only
(B) I and III only
(C) II and III only
(D) I, II and III
53. In which direction is the urban centreMOST likely to expand?
(A) East
(B) West
(C) North
(D) South

Items 54-55 are based on the following sketch map, drawn to a scale of $1: 50000$.

54. Which of the following areas is MOST likely to be developed as a tourist resort?
(A) I
(B) II
(C) IV
(D) V
55. Which of the following areas would be BEST for locating a new factory in order to minimize the effects of air pollution?
(A) IV
(B) III
(C) II
(D) I
56. In a mountainous region severely eroded because of deforestation, what are the possible soil conservation methods that could be put in place?
(A) Strip cropping and crop rotation
(B) Agro-forestry and strip cropping
(C) Crop rotation and reafforestation
(D) Reafforestation and contour ploughing
57. Agriculture is an importanteconomic activity in the Caribbean because
(A) it is heavily mechanized
(B) it employs a significant percentage of people
(C) government allocates a significant portion of its budget to the sector
(D) it accounts for a significant portion of the foreign exchange earnings
58. Many garment industries in the Caribbean are closing business MAINLY because
(A) the demand for clothing is falling
(B) cheaper imports are entering the region
(C) the rates for wages are lower in the region
(D) many women refuse to work in the factories
59. In the long-term, volcanic activity can be beneficial to a country by
I. causing people to relocate to new areas in the country
II. providing sources of energy to be used for electricity needs
III. bringing new materials to the earth's surface which produce rich soils
(A) I only
(B) I and II only
(C) I and III only
(D) II and III only
60. In advance of the approach of a hurricane, risk to lives can be reduced by
I. relocating people to shelters
II. encouraging people to stock up on fresh supplies
III. evacuating people living in lowlying areas
(A) I and II only
(B) I and III only
(C) II and III only
(D) I, II and III

CARIBBEAN EXAMINATIONS COUNCIL CARIBBEAN SECONDARY EDUCATION CERTIFICATE ${ }^{\circledR}$ EXAMINATION

## GEOGRAPHY

GENERAL PROFICIENCY
SPECIMEN 2015

| Item No. | Key | Item No. | Key |
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| 1 | D | 31 | C |
| 2 | B | 32 | D |
| 3 | A | 33 | D |
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| 6 | C | 36 | A |
| 7 | C | 37 | D |
| 8 | D | 38 | C |
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| 11 | D | 41 | D |
| 12 | B | 42 | C |
| 13 | D | 43 | D |
| 14 | C | 44 | A |
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| 17 | A | 47 | A |
| 18 | C | 48 | B |
| 19 | B | 49 | A |
| 20 | C | 50 | A |
| 21 | A | 51 | C |
| 22 | B | 52 | B |
| 23 | A | 53 | A |
| 24 | C | 54 | D |
| 25 | A | 55 | A |
| 26 | C | 56 | D |
| 27 | C | 57 | D |
| 28 | D | 58 | B |
| 29 | A | 59 | D |
| 30 | D | 60 | B |



FILL IN ALL THE INFORMATION REQUESTED CLEARLY IN CAPITAL LETTERS.

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SUBJECT $\qquad$ GEOGRAPHY - Paper 02

PROFICIENCY $\qquad$ GENERAL REGISTRATION NUMBER


| NAME OF SCHOOL/CENTRE |
| :---: |
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| CANDIDATE'S FULL NAME (FIRST, MIDDLE, LAST) |
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DATE OF BIRTH


SIGNATURE $\qquad$

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# CARIBBEAN <br> EXAMINATIONS <br> COUNCIL <br> <br> CARIBBEAN SECONDARY EDUCATION CERTIFICATE ${ }^{\circledR}$ <br> <br> CARIBBEAN SECONDARY EDUCATION CERTIFICATE ${ }^{\circledR}$ EXAMINATION EXAMINATION <br> GEOGRAPHY 

## Paper 02 - General Proficiency

2 hours 30 minutes

SPECIMEN PAPER

## READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This paper consists of FOUR compulsory questions.
2. Write your answers in the spaces provided in this booklet.
3. Do NOT write in the margins.
4. You may use a silent, non-programmable calculator to answer questions.
5. You may use geometrical instruments.
6. If you need to rewrite any answer and there is not enough space to do so on the original page, you must use the extra lined page(s) provided at the back of this booklet. Remember to draw a line through your original answer.
7. If you use the extra page(s) you MUST write the question number clearly in the box provided at the top of the extra page(s) and, where relevant, include the question part beside the answer.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

## Copyright © 2014 Caribbean Examinations Council

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## You MUST answer ALL questions.

1. Study the map extract of Nevis, on the scale of $1: 25000$ (provided as an insert), and answer the following questions.
(a) (i) State the six-figure grid reference of the ruin on the coast at Newcastle Bay.
(ii) Complete the following statement.

On this map, 4 cm represents $\qquad$
(iii) What is the length of the runway (the inner rectangle) at Newcastle Airport, to the NEAREST 100 metres?
$\qquad$
(iv) What is the grid bearing of the boundary between the parishes of St Thomas Lowland and St James Windward at the point where this boundary crosses easting 37 heading inland?
$\qquad$
(v) What is the compass direction of Hurricane Hill (near easting 35) from the runway at Newcastle Airport?
$\qquad$
(vi) State FOUR characteristics of the drainage in the area north of northing 99.
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(b) Figure 1 is a grid showing part of the map of Nevis drawn to the same scale as the map. The grid lines are numbered to identify the area.


Figure 1. Part of Nevis coastline
On the grid,
(i) insert a beach
(ii) insert an area of cliffs on the coast
(iii) place the letter P to show the position of a peak 500 feet high
(iv) show the area of cultivation

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(c) Using evidence from the map, give THREE reasons to explain the distribution of the areas of cultivation and plantation in Nevis.
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(d) List THREE features of the relief around Charlestown between northings 94 and 95 and eastings 32 and 34.
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2. (a) Figure 2 is a diagram of the Caribbean showing the position of three plates and features produced by movement of the plates. Study the diagram carefully and use the information to answer the questions that follow.


| Key |  |
| :---: | :---: |
| ---- | Plate boundary |
| -utuer | Trench |
| 自 | Deep water area G |

Figure 2. Diagram of three Caribbean plates
Name any FIVE of the features labelled A to G. (Note: only the first five answers will be marked).
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(b) (i) Describe ONE way in which oceanic trenches can be formed.
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(ii) Describe ONE way in which a volcano can be formed.
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"*"Barcode Area"*"
Sequential Bar Code
(c) (i) Explain THREE conditions which influence the formation of a delta on the coast.
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(ii) Outline TWO conditions for the formation of a headland.
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3. (a) In the space provided below, draw a sketch map of a CARICOM country and put in the location of ONE area where a natural resource, used for commercial purposes, is found.
(b) (i) Describe how TWO factors have influenced the location of ONE of the following primary industries in the Caribbean.

- Bauxite
- Oil and natural gas
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(ii) Define the term 'secondary economic activity'.
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(iii) State TWO examples of a secondary economic activity.
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(c) (i) Explain THREE effects of population growth in a named urban area in the Caribbean.
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(ii) Compare the influence of TWO factors affecting the growth of the population in the Caribbean with the growth of the population of India OR China OR Nigeria.
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4. (a) Figure 3 below shows temperature and rainfall data for Havana, Cuba. Study it and use the information to answer Parts (a) (i)-(iv).


Figure 3. Temperature and rainfall graphs for Havana, Cuba
Source: http://www.cubaweather.org/cuba_climate.php
(i) What is the LOWEST minimum monthly temperature?
$\qquad$
(ii) What is the difference between the highest average and the lowest average temperature? (Show all working.)
$\qquad$
$\qquad$
$\qquad$
(iii) If a dry month (in the Tropics) is one with 100 mm or less rainfall, when is the dry season in Havana?

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(iv) What is the general relationship between the temperature and rainfall patterns?
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$\qquad$
(b) (i) Describe TWO ways in which some agricultural practices in the Caribbean have resulted in environmental degradation.
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(ii) State FOUR benefits of mangrove wetlands to Caribbean countries.
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(c) (i) Explain TWO ways in which the development of agriculture in the Caribbean is influenced by climate.
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(ii) Explain TWO ways in which human activities can have a positive impact on tropical forest biomes in the Caribbean.
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## END OF TEST

## IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST.

## EXTRA SPACE

## If you use this extra page, you MUST write the question number clearly in the box provided.

 Question No. $\square$$\qquad$
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## CANDIDATE'S RECEIPT

## INSTRUCTIONS TO CANDIDATE:

1. Fill in all the information requested clearly in capital letters.

TEST CODE:

| 0 | 1 | 2 | 2 | 5 | 0 | 2 | 0 |
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SUBJECT:
GEOGRAPHY - Paper 02

PROFICIENCY:
GENERAL

REGISTRATION NUMBER:

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FULL NAME: $\qquad$
(BLOCK LETTERS)

Signature: $\qquad$

Date: $\qquad$
2. Ensure that this slip is detached by the Supervisor or Invigilator and given to you when you hand in this booklet.
3. Keep it in a safe place until you have received your results.

## INSTRUCTION TO SUPERVISOR/INVIGILATOR:

Sign the declaration below, detach this slip and hand it to the candidate as his/her receipt for this booklet collected by you.

I hereby acknowledge receipt of the candidate's booklet for the examination stated above.

Signature: $\qquad$
Supervisor/Invigilator

Date: $\qquad$
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C O U N C I I

CARIBBEAN SECONDARY EDUCATION CERTIFICATE ${ }^{\oplus}$ EXAMINATION

GEOGRAPHY

SPECIMEN PAPER PAPER 02 - GENERAL PROFICIENCY

KEY AND MARK SCHEME


KEY AND MARK SCHEME


## Question 1．（continued）

Diagram for Question 1 （b）


| Key |  |
| :---: | :--- |
| $\square$ | Cultivated area |
| $\bullet$ | Peak |
| $\square ⿱ 宀 ⿻ 三 丨 口$ | Beach area |
| 0000 | Cliff |


| Question 2. | P1 | P2 | P3 |
| :---: | :---: | :---: | :---: |
| (a) Features of <br> - Trench A - Cayman Trench (accept Bartlett Deep) <br> - Trench B - Puerto Rico Trench <br> - Volcano C - Mt Pelee <br> - Island Chain D - island arc (volcanic arc is used on the continent) <br> - Plate E - North American Plate <br> - Plate F - Caribbean Plate <br> - Deep Water G - Subduction Zone <br> Any FIVE - 1 mark EACH <br> Accept first five listed if more than five answers are given <br> (b) (i) Ways in which trenches are formed: <br> - Oceanic trenches develop where continental and oceanic plates (1) converge. (1) The oceanic plate (1) is subducted (1) and a trench is formed on the ocean floor at the junction. (1) <br> - Trenches can also be formed along a transform boundary (1) where the plates move at different rates (1) or in opposite directions <br> (1) so that a gap develops between the plates (1) within this gap or trench upwelling of magma occurs. (1) <br> Any ONE point - 1 mark EACH $1 \times 4 \text { marks }=4 \text { marks }$ <br> (ii) Ways in which volcanoes can be formed: <br> - Volcanoes can be produced where plates converge. (1) Oceanic plates laden with water and sediment plunge into the hot mantle, (1) fluids that are driven off the descending plates rise into the upper, overriding plate (1) where they promote the formation of magma (1), which rises to the surface to form a volcano often with a violent eruption. (1) <br> - Volcanoes can be produced where plates diverge. (1) Upwelling currents (1) in the mantle move the plates apart (1) the release of pressure causes part to melt. (1) This magma rises to the surface and creates a volcano which erupts quietly. (1) <br> Any ONE point - 4 marks EACH <br> $1 \times 4$ marks $=4$ marks | 5 | 4 |  |


| Question 2. (continued) |  |  | P1 | P2 | P3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (i) | Formation of delta: <br> - Where there is active erosion along a river's course (1) a large load comprising mud, silt, and, gravel (1) is produced. <br> - An absence of large lakes, dams along the river's course or of diversion of the river (1) prevents the removal of these sediments (1) most of which are transported to the lowest parts of the river where it meets the sea. (1) <br> - Reduction of the river's velocity and its energy as it enters the sea (1) leads to the deposition of the sediments (1) the absence of strong tides and currents allow for the deposition of most of the sediments at the coast (1) / where there are strong tides deposition may still occur if there is an extremely large load (e.g. Colorado River Delta). <br> - As deposition occurs in the river's mouth (1), the river separates into a number of smaller streams or channels called distributaries. (1) Over time repeated deposition produces a lowlying alluvial plain extending seaward, just above sea level (1), this is called a delta; the shape of the delta depends on which of three factors (the river, the tides and waves) is dominant. <br> Any THREE conditions: 1 for the condition and 1 for any expansion explaining its influence $2 \times 3=6 \text { marks }$ |  |  | 6 |

KEY AND MARK SCHEME


| Que | ion 3. | P1 | P2 | P3 |
| :---: | :---: | :---: | :---: | :---: |
| (a) <br> (b) | Sketch map of Trinidad, Guyana or Jamaica fairly accurate outline with a title <br> Sketch map - fairly accurate outline - 2 marks Title - 1 mark <br> North arrow - Correct location and name of resource <br> - 1 mark each 5 marks <br> (i) Factors influencing the location of primary industries in the Caribbean: <br> Bauxite: <br> - Raw material (1) large commercial supplies (1) of bauxite are available in Guyana (e.g. Linden) (1) and Jamaica (e.g. Mandeville) (1) <br> - Labour (1) - Adequate supply of labour available locally (1) highly trained and skilled labour supply (1) some trained locally by companies to fill skilled positions (1) others were trained at regional and international institutions to fill senior/highly skilled positions. Many were later trained at regional and international institutions. (1) <br> - Capital (1) - Very little capital available locally (1) stable governments and commercial supplies of the raw materials attracted foreign investors. (1) <br> - The role of government (1) initially incentives attracted foreign investors mainly from the USA and Canada. withdrawal of foreign companies from the Caribbean and decline in bauxite prices on world market led to heavy state investment in the industry in Jamaica. (1) In 1971 in Guyana the industry was nationalized (1) and at present much foreign investment in the industry. (1) <br> - Markets (1) - Available external markets for raw bauxite, calcined bauxite, alumina (1) in the USA, Canada. (1) These markets are in relatively close proximity to the Caribbean. <br> (1) Transport (1) - Network of roads, rail, conveyor belts (1) constructed by bauxite companies over short distances (1) to facilitate easy movement of ore from mines to processing plants (1) and ports. (1) In Jamaica ports were developed for export of bauxite. (1) In Guyana easy access to rivers allows for lower transport costs to the coast. (1) <br> 1 mark for factor plus 1 mark for description | 5 | 4 |  |



\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{3}{|l|}{Question 3. (continued)} \& P1 \& P2 \& P3 <br>
\hline (b)

(c) \& \begin{tabular}{l}
(iii) <br>
(i)

 \& 

Examples of secondary economic activity: <br>

- Garment <br>
- Food processing <br>
- Construction <br>
- Bauxite smelting <br>
- Crude oil refining <br>
- Processing of natural gas (e.g. liquefaction of natural gas/LNG, menthol and ammonia) <br>
1 mark EACH for any TWO <br>
$2 \times 1$ mark $=2$ marks <br>
Effects of population growth on a named urban area in the Caribbean: <br>
- Overcrowding (1) - The number of persons using a service/an area or facility exceeds its capacity consequently reducing the quality of the service. (1) <br>
- Over Population (1) - The number of people living in an urban area exceeds that which the resources can support without having a decline in the standard of living. This can cause social problems such as crime, slums and squatter settlements. (1) <br>
- Pollution (1) - As a result of the waste generated by a larger population exceeding the systems to dispose of the waste. (1) <br>
- Lack of adequate recreation and entertainment space. (1) The demands for these exceed the capacity or the rate at which the authority can supply them. <br>
- Lack of adequate transport facilities. More people are forced to provide their own transportation so there are traffic jams. (1) <br>
- Shortage of school spaces as the school age population becomes larger than can be accommodated (1) and the authorities do not have adequate resources to add more spaces. (1) <br>
- Loss of residential facility (1) as businesses expand into areas previously zoned for housing. (1) <br>
1 mark each for any THREE effects - 3 marks <br>
1 mark for EACH explanation - 3 marks $3 \times 2$ marks $=6$ marks
\end{tabular} \& \& 2 \& 6 <br>

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| Question 3. (continued) |  |  | P1 | P2 | P3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ( C ) | (ii) | Factors affecting the growth of the population in the Caribbean with that of those in India $O R$ China OR Nigeria: <br> China and The Caribbean <br> Improvements in health care (1) have caused life expectancy to increase in both areas. More people are living to an older age and there is a decrease in the death rate of the older age groups (1) and a decline in the younger age groups. (1) <br> - Infant mortality (1) - In both areas there has been a significant decline in the infant mortality rate (1) as there is improved prenatal and postnatal care. (1) This has contributed to women having fewer pregnancies/children. <br> - State policy (1) - In China the state's imposition of a one child policy for families living on the mainland (1) (excluding minorities) helped to curb the population growth. In the Caribbean no government has introduced such a policy but they have introduced family planning programmes to encourage families to limit the size or have used moral suasion and education to encourage people to have fewer children or to delay having children. <br> - Improved educational levels of women (1) in both countries (1) and as a result many women are now working outside of the home hence family sizes are not as large as before lowering fertility rates. <br> 1 mark for EACH of TWO factors <br> 2 marks for the comparison which relates to the influence of the element or factor (there must be a comparison) <br> For EACH of TWO factors - $2 \times(1+2)=6$ marks <br> India and the Caribbean: <br> - Education $\qquad$ Increased educational opportunities for girls in both India and the Caribbean (1) are causing a decline in the total fertility ratios (TFRs) in both countries on a national level. (1) However TFRs are lower in the Caribbean due to more widespread and easier access to education and job opportunities for women. (1) |  |  | 6 |


| Question 3. (continued) | P1 | P2 | P3 |
| :---: | :---: | :---: | :---: |
| intervention (1) - In India the government has increased spending on family planning programmes and associated resources (1) especially in urban areas (1) while in the Caribbean there is a much higher prevalence and access to family planning than in India (1) contributing to a faster decline in fertility rates and overall population. (1) <br> - Cultural factors (1) - Due to more deeprooted cultural factors such as early marriages (1) and religious and societal pressures to bear sons (provide economic support) (1), there are greater disparities in population growth rates between regions in India than in the Caribbean. Much higher rates of population growth in the poorer Indian north than in the more urbanized southern India (1) are leading to increasing population growth. (1) In the Caribbean, on the other hand, cultural traditions are not as deeply rooted and have less impact on population growth. (1) However religious beliefs do encourage higher fertility levels in some areas of the Caribbean. (1) <br> 1 mark for EACH of TWO factors <br> 2 marks for the comparison which relates to the influence of the element or factor (there must be a comparison) <br> For EACH of TWO factors - $2 \mathbf{x}(1+2)=6$ marks <br> Nigeria and the Caribbean: <br> - Education/literacy levels (1) - In Nigeria, the more educated and employed women tend to have fewer children than those who are uneducated/ less empowered (1) particularly in urban areas while in the rural areas of north east Nigeria, for example, the total fertility rate (TFR) is approximately 6.1 as more girls do not have opportunities to attend school causing high rates of population increase (1); while in the Caribbean TFRs average 2 for most countries, also birth rates, death rates and natural increase rates (except for Haiti which has a higher rate) all continue to decline due to greater access to education/greater empowerment of women (1) leading to a slowing of population growth. (1) |  |  |  |
| Total 25 marks | 5 | 8 | 12 |

Specific Objectives:3.3, 3.5, 3.8, 3.11, 3.12


| Question 4. (continued) |  |  | P1 | P2 | P3 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (b) | (ii) | Benefits of mangrove wetland areas: <br> - Breeding grounds and nursery for fish and crustaceans <br> - Tourist attractions - Visits to wetlands as part of eco-tourism attraction <br> - Sanctuary for endangered plants and animal species <br> - Reservoirs to store and release water naturally when streams are in flood <br> - Traps for sediments <br> - Storm buffer <br> Any FOUR benefits - 1 mark EACH $4 \times 1 \text { mark }=4 \text { marks }$ |  | 4 |  |
| ( c ) | (i) | Ways in which the development of agriculture in the Caribbean is influenced by climate: <br> - Cultivation of crops on the onset of the wet season (1) and harvesting of crops in the dry season (farmer's year) (1) are influenced by the wet and dry seasons (1); some crops like bananas do not depend on seasonal rhythm (1); in Guyana two crops of rice and sugar cane are cultivated each year due to two wet and two dry seasons per year. (1) <br> - A wide variety of tropical crops (1) is cultivated in the Caribbean because of high uniform temperatures year round (1) and adequate rainfall (1); as well as cooler temperatures at higher elevations, for example, the growing of crops such as coffee in the Blue Mountains of Jamaica. (1) <br> - Unreliable income from agriculture weather systems such as hurricanes <br> contribute to flooding (1) and landslides (1) that cause destruction of crops and death of livestock. (1) Droughts <br> (1) decrease crop <br> yields (1) cause death to livestock (e.g. cattle). (1) <br> Any TWO - 1 mark for the way <br> and 2 marks for development $=3$ marks $2 \times 3=6 \text { marks }$ |  |  | 6 |




FILL IN ALL THE INFORMATION REQUESTED CLEARLY IN CAPITAL LETTERS.

TEST CODE

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SUBJECT $\qquad$ GEOGRAPHY - Paper 032

PROFICIENCY $\qquad$ GENERAL REGISTRATION NUMBER


| NAME OF SCHOOL/CENTRE |
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| CANDIDATE'S FULL NAME (FIRST, MIDDLE, LAST) |
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DATE OF BIRTH


SIGNATURE $\qquad$

| "*"Barcode Area"*" |
| :---: |
| Sequential Bar Code |



Test code 01225032/SPEC

## CARIBBEAN EXAMINATIONS COUNCIL <br> CARIBBEAN SECONDARY EDUCATION CERTIFICATE ${ }^{\circledR}$ EXAMINATION <br> GEOGRAPHY

## Paper 032 - General Proficiency

## 1 hour 45 minutes

SPECIMEN PAPER

## READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This paper consists of SIX questions. Answer ALL questions.
2. Write your answers in the spaces provided in this booklet.
3. Do NOT write in the margins.
4. You may use a silent, non-programmable calculator to answer questions.
5. You may use geometrical instruments.
6. You are advised to take some time to read through the paper and plan your answers.
7. If you need to rewrite any answer and there is not enough space to do so on the original page, you must use the extra lined page(s) provided at the back of this booklet. Remember to draw a line through your original answer.
8. If you use the extra page(s), you MUST write the question number clearly in the box provided at the top of the extra page(s) and, where relevant, include the question part beside the answer.

DO NOT TURN THIS PAGE UNTIL YOU ARE TOLD TO DO SO.

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## Answer ALL questions.

## You are advised to spend no more than 10 minutes on Question 1.

1. A map of Nevis (scale $\mathbf{1 : 2 5 0 0 0}$ ), is provided as an insert for this question.

Imagine you are preparing to study farms at Cades Estate in St Thomas Lowland in the northwest of Nevis. With reference to the map, complete the two sketch maps as indicated below at (a) and (b).
(a) Figure 1 shows an outline of Nevis, the parish boundaries and Charlestown.


Figure 1. Location of Cades Estate

On this map show the position of Cades Estate.
"*"Barcode Area"*
Sequential Bar Code
(b) Figure 2 shows part of the map of Nevis between Eastings 33 and 35 and Northings 99 and 01 on the same scale as the map. The 50 ft contour line and the water courses are shown.


Figure 2. Site map of Cades Estate study area

## Scale 1:25 000

Complete the sketch map in Figure 2 by adding the following:
(i) The main road
(ii) The secondary road
(iii) The Cades Estate and Lawrence Estate combined area of cultivation (with name labels)
(1 mark)
i
2. You are to study the extent to which the characteristics of two small, commercial farms in the Cades Estate area in Nevis have been influenced by economic factors.
(a) Formulate a question or state a hypothesis to guide the collection of data in the field. This will be the 'purpose' or 'aim' of your research.
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(b) Suggest a reason for studying the farms (the reason for your aim). This will form an introduction to your report.
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3. (a) For the study in Question 2, list SIX items on which you would collect information from the farms.
(b) Describe how and when you would conduct the research and record the information in the spaces below.

How: $\qquad$
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When: $\qquad$
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(c) (i) Identify ONE problem (excluding the weather, illness and injury) that you are likely to encounter in conducting the research in (b) above.
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(ii) State how you would overcome the problem that you identified in (c) (i) above.
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4. The climate of Nevis influences its agriculture. Table 1 shows the average high and low temperatures in Charlestown.

TABLE 1: AVERAGE HIGH AND LOW TEMPERATURES IN CHARLESTOWN OVER A ONE-YEAR PERIOD

| C | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sept | Oct | Nov | Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| High | 28 | 27.5 | 29 | 29.5 | 30 | 30 | 30 | 30.5 | 30.5 | 30 | 29 | 28 |
| Low | 23 | 22 | 23 | 24 | 25.5 | 25.5 | 25.5 | 25.5 | 25 | 24.5 | 23 | 23 |

(a) Using the data in Table 1 and the grid in Figure 3, complete the line graph to show the high temperatures for Charlestown.


Figure 3. High temperatures in Charlestown
(3 marks)

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(b) Using the data in Table 1, describe how TWO characteristics of the temperature could make Charlestown suitable for farming.
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5. Imagine you are studying the micro-climate on a farm in Nevis and have recorded the rainfall for the month of February. The data is shown in Table 2 below.

TABLE 2: FEBRUARY RAINFALL (mm) IN STUDY AREA

| 1 | 5 mm | 8 | 3 mm | 15 | 2 mm | 22 | 3 mm |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 0 | 9 | 0 | 16 | 0 | 23 | 4 |
| 3 | 5 | 10 | 0 | 17 | 0 | 24 | 0 |
| 4 | 0 | 11 | 3 | 18 | 0 | 25 | 1 |
| 5 | 0 | 12 | 0 | 19 | 2 | 26 | 0 |
| 6 | 4 | 13 | 3 | 20 | 4 | 27 | 0 |
| 7 | 4 | 14 | 0 | 21 | 4 | 28 | 0 |

(a) What instrument would help you to collect the rainfall data shown in Table 2?

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(b) Use the grid below to construct a bar graph to show the data for the last week of February shown in Table 2.
Axis Label: $\qquad$

Figure 4. Rainfall in the last week of February
(3 marks)

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(c) The data in Table 2 is normal for February as it is the same as the average rainfall for Nevis. Explain TWO ways in which farming activities may be influenced by the rainfall.
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6. After completing the body of your report, you need to present the bibliography which lists the books that you used as references. Four of the five elements of a book required for a bibliography are listed below.

- City of publication
- Name of publisher
- Name of author
- Year of publication

What is the fifth element?
$\qquad$

## END OF TEST

IF YOU FINISH BEFORE TIME IS CALLED, CHECK YOUR WORK ON THIS TEST.

## EXTRA SPACE

If you use this extra page, you MUST write the question number clearly in the box provided. Question No. $\square$
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## EXTRA SPACE

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"*"Barcode Area"*"
Sequential Bar Code


## CANDIDATE'S RECEIPT

## INSTRUCTIONS TO CANDIDATE:

1. Fill in all the information requested clearly in capital letters.

TEST CODE:

| 0 | 1 | 2 | 2 | 5 | 0 | 3 | 2 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

SUBJECT:
GEOGRAPHY - Paper 032

PROFICIENCY:
GENERAL

REGISTRATION NUMBER:

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| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

FULL NAME: $\qquad$
(BLOCK LETTERS)

Signature: $\qquad$

Date: $\qquad$
2. Ensure that this slip is detached by the Supervisor or Invigilator and given to you when you hand in this booklet.
3. Keep it in a safe place until you have received your results.

## INSTRUCTION TO SUPERVISOR/INVIGILATOR:

Sign the declaration below, detach this slip and hand it to the candidate as his/her receipt for this booklet collected by you.

I hereby acknowledge receipt of the candidate's booklet for the examination stated above.

Signature: $\qquad$
Supervisor/Invigilator

Date: $\qquad$
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 I

CARIBBEAN SECONDARY EDUCATION CERTIFICATE ${ }^{\oplus}$ EXAMINATION

GEOGRAPHY

SPECIMEN PAPER
PAPER 032 - GENERAL PROFICIENCY
KEY AND MARK SCHEME

| Question No. |  | P1 | P2 | P3 |
| :---: | :---: | :---: | :---: | :---: |
| 1. (a) <br> (b) <br> 2. (a) <br> (b) | Figure 1 <br> Outline map of Nevis with parish boundaries and Charlestown. The location of Cades Estate clearly shown. <br> Figure 2 <br> Site Map of Cades Estate Study Area with each of the following: <br> (i) Main road <br> (ii) Secondary road <br> (iii) The Cades Estate and Lawrence Estate combined area of cultivation (with name labels) <br> 1 mark for EACH correct response <br> 3 marks <br> Specific Objective: 1.4 (b) <br> Sample answers: <br> How have the characteristics of the two farms been influenced by economic factors? <br> Are economic factors more important than other factors in the two farming systems? <br> The two farms have been greatly influenced by economic factors. <br> Any hypothesis or question that covers the importance of the economic factors on the nature of both farms 2 marks <br> Any which only mentions the factors or the nature of the farms - E.g. Are economic factors important? <br> 1 mark <br> Specific Objective: 1.6.1 <br> Any statement which can introduce the report: <br> For example: Some farmers are unable to make a living only from farming. This study is to examine how economic factors influence the farming in Cades Estate. 2 marks <br> Clear overview with justification and topic narrowed to the area of study - 2 marks <br> Introduction not clear or does not provide a focus - 1 mark <br> Specific Objective: 1.6 | 1 | 2 | 2 |




GEOGRAPHY<br>SPECIMEN PAPER<br>PAPER 032 - GENERAL PROFICIENCY<br>KEY AND MARK SCHEME

