

**CARIBBEAN EXAMINATIONS COUNCIL**

**REPORT ON CANDIDATES' WORK IN THE  
SECONDARY EDUCATION CERTIFICATE EXAMINATION**

**MAY/JUNE 2010**

**PHYSICAL EDUCATION AND SPORT  
GENERAL PROFICIENCY**

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## GENERAL COMMENTS

The Physical Education and Sport Examination comprised three papers. Paper 01 consisted of 12 compulsory short-answer questions and five compulsory essay questions based on the following units:

- History and Development of Physical Education and Sport
- Anatomy and Physiology
- Fitness and Performance
- Health and Nutrition
- Social Issues

Paper 02 was a practical examination worth 60 marks, based on one sport selected by candidates.

Paper 03, the School-Based Assessment, consisted of two parts — a class project and the assessment of the practical skills associated with two sports. The class project was worth 30 marks and each sport 60 marks.

A total of 5,636 candidates were entered for the examination in 2010, an increase of approximately 31 per cent.

Overall candidates' performance was good. Approximately 80 per cent of candidates achieved acceptable grades, Grades I – III. Forty-seven per cent of the candidates achieved Grade I. However, performance on Paper 01 declined from a mean of 53 per cent in 2009 to 49 per cent in 2010. Performance on Paper 02 and Paper 03 remained steady, with a mean of approximately 75 per cent on both papers.

## DETAILED COMMENTS

### Paper 01 – Theory

**Section A comprised 12 questions for a total of 30 marks.**

#### Question 1

Mean: 1.83

Standard deviation: 1.28

Maximum Mark: 4

In Part (a), candidates were asked to name the sport committee whose acronym is IOC. Many candidates scored full marks. A few scored one mark for partially stating 'International Olympic'. Even though the question asked to name the committee, some candidates referred to council rather than committee.

For Part (b), candidates were asked to state two main differences between the Olympic Games and the Commonwealth Games. Only a few showed knowledge of the Commonwealth Games. Most candidates correctly provided information on the Olympic Games but had no knowledge of how it differed from the Commonwealth Games. Expected responses included: *only former British colonies are allowed in the Commonwealth Games; Commonwealth host countries select demonstration sports while the International Olympic Committee decides on all Olympic sports.*

### Question 2

Mean: 1.74

Standard deviation: 0.56

Maximum Mark: 2

Candidates were asked to suggest two main objectives of a school's Physical Education programme. Overall, the responses were good. Correct responses included *development of fitness, positive attitudes, appreciation for fair play and sportsmanship*.

The majority of candidates scored two marks, with a small number scoring one mark.

### Question 3

Mean: 1.30

Standard deviation: 0.66

Maximum Mark: 2

Candidates were asked to give two reasons why a healthy digestive system is important for competing athletes. The responses were very good. Most candidates stated *providing energy, ensuring better performance and eliminating waste* as correct answers.

### Question 4

Mean: 0.76

Standard deviation: 0.87

Maximum Mark: 2

Candidates were asked to identify thigh muscles, given two diagrams of the muscle groups. Fifty-two per cent scored zero or made no response. A large percentage of the candidates incorrectly labelled B as 'leg biceps' which was also accepted, instead of the scientific term 'biceps femoris'. The correct response for A was rectus femoris.

Students must be encouraged to use the correct scientific terminology.

### Question 5

Mean: 1.00

Standard deviation: 0.80

Maximum Mark: 2

Candidates were asked to state two effects of exercise on the respiratory system. The responses from most candidates were good. Popularly listed effects were *increased rate of breathing, more oxygen intake, deeper breathing and more oxygen available for the blood*.

### Question 6

Mean: 1.75

Standard deviation: 0.51

Maximum Mark: 2

Candidates were asked to state two clear reasons why feedback is an important part of a training programme. Most candidates were able to give correct responses such as *to improve performance and confidence, to clarify misunderstandings or to show the importance of planning*.

### Question 7

Mean: 1.63

Standard deviation: 0.68

Maximum Mark: 2

Candidates were asked to write the correct description of two terms related to fitness and performance. Most candidates were able to match the description to the terms. However, some described the parts of the training session using their own words rather than the descriptions given.

### Question 8

Mean: 1.00

Standard deviation: 1.06

Maximum Mark: 4

Part (a) required a definition of the term 'balance'. The majority of the candidates found it challenging to define balance as *the ability to maintain the centre of gravity above the base of support or keeping the centre of mass above the base of the support*. A few candidates gave responses not applicable to Fitness and Performance, for example, balance is stability of mind and body. These were not accepted since the stem of the question stated that balance is a component of skill-related fitness.

In Part (b) (i), candidates were asked to give an example of an activity that involves static balance. Only a small number scored one mark. Many candidates gave gymnastics as an answer instead of *standing on the balance beam, standing on a bench or standing on a small base*.

For Part (b) (ii), candidates were asked to give an example of an activity that involves dynamic balance. This was poorly answered. Gymnastics was again among the incorrect responses. Examples of good responses could have been *riding a bicycle, walking on a balance beam, ballet*.

### Question 9

Mean: 1.63

Standard deviation: 1.01

Maximum Mark: 3

Candidates were asked to state three factors that influence a person's 'basal metabolic rate' after it was observed that a former athlete's basal metabolic rate had changed. Some correct responses included *age, sex, lifestyle, occupation and health*.

### Question 10

Mean: 1.02

Standard deviation: 0.73

Maximum Mark: 2

Candidates were asked to state two functions of vitamins for an active person. Many were able to give correct responses such as, *energy enhancement, maintenance of skin and gums, and good health*.

### Question 11

Mean: 1.29

Standard deviation: 0.90

Maximum Mark: 3

Candidates were asked to state three ways in which peer group influences participation in sport. Responses were varied and included reasons such as, friends having similar interests, peer pressure as friends encourage each other to participate in activities, having role models to emulate, and not getting the opportunity or support from friends to participate.

### Question 12

Mean: 0.58

Standard deviation: 0.69

Maximum Mark: 2

Candidates were asked to give two ways in which the environment in the Caribbean influences our participation in specific sports and recreational activities. Correct responses varied from weather and terrain of land to availability of trained personnel and equipment, and culture.

**Section B comprised five compulsory essay questions, each worth 12 marks.**

### Question 13

Mean: 6.50

Standard deviation: 2.79

Maximum Mark: 12

In Part (a), candidates were asked to state six benefits to the Caribbean region of international sporting events such as the Olympics. Most candidates were able to state benefits to the Caribbean which included facilitates the improvement or the development of friendships with persons from different countries, and the creation of opportunities to learn from world-class players.

For Part (b) (i), candidates were asked to give one example of a team sport. The majority knew of cricket, basketball and football, among others.

In Part (b) (ii), candidates were asked to give an example of an individual and a dual sport. Only a small number could not give a correct answer such as tennis, track and field or swimming.

For Part (b) (iii), candidates were asked to give one example of a leisure time activity. The majority named an appropriate activity.

In Part (c), candidates were asked to outline three points, other than the match fixture, that should be made to a gathering of Caribbean persons on the subject of hosting an international sport event. Approximately 50 per cent of the candidates scored full marks. Examples of responses were *the need for security arrangements at hotels and competition venues, the need for volunteers, accommodation and transportation, publicity and or advertising*.

### Question 14

Mean: 7.42

Standard deviation: 3.13

Maximum Mark: 12

In Part (a), candidates were given a scenario stating that various systems of the body work together to produce explosive movement in a 100 m sprint. They were asked to name the three body systems. Expected responses were *the skeletal, muscular and circulatory systems* but a number of candidates gave responses such as lactic system, creatin phosphate system and adenosine triphosphate (ATP) system. In such cases, partial marks were allocated.

For Part (b), candidates had to describe how the three body systems work together to produce movement. Responses were vague and disjointed as candidates could not clearly describe how the three systems work together to provide the desired action.

A good response could have been:

*At the start of the race, the nervous system allows the runner to respond to the gun and produce movement. The skeletal system allows for movement through the coordination of muscles and bones. The circulatory system provides the blood to supply the muscle cells with oxygen and glucose.*

In Part (c), candidates were asked to name three factors that could influence blood pressure and most correctly named exercise, age, stress, poor diet and poor circulation.

#### Question 15

Mean: 3.69

Standard deviation: 2.63

Maximum Mark: 12

In Part (a), candidates were asked to describe two methods that may be used to teach new skills in passing, in a sport or activity of choice. Responses ranged from demonstration to whole-part-whole methods of teaching. The majority of candidates listed rather than described the methods.

For Part (b), candidates were asked to complete a table to show the type of movement one makes during certain exercises. Correct responses were *when swinging the thigh across the body, the movement of the hip is adduction; curling up to a sit-up position, the movement of the hip is flexion; moving the head around, the movement of the neck is rotation; swinging the arms in a big circle, the movement of the shoulders is circumduction*. The majority of the candidates got the movement of the neck correct but overall performance on this part of the question was poor.

In Part (c) (i), candidates were asked to name one type of injury that was possible when a classmate was struck on the head during training. No bruise was evident. Correct responses were *concussion and fractured skull*. Internal injury was accepted but hard tissue injury was not considered. Overall, the responses were good.

For Part (c) (ii), candidates were asked to give an example of a contact sport in which the injury in (c) (i) was common. The responses were satisfactory, with many candidates correctly stating *boxing, wrestling, rugby or karate*.

#### Question 16

Mean: 7.91

Standard deviation: 2.61

Maximum Mark: 12

In Part (a) (i), candidates were asked to name two non-communicable diseases prevalent in the Caribbean. The responses were surprising as many did not think of hypertension and diabetes as non-communicable diseases.

For Part (a) (ii), candidates were asked to explain to a group of 14-year old athletes, two healthy lifestyle habits which they should adopt to prevent non-communicable diseases. The responses were satisfactory. Most candidates were able to develop their answers on habits such as balanced diets, sufficient sleep and rest, exercise and avoidance of drugs and alcohol.

In Part (b), candidates were asked to match each Caribbean food group from Column A with the correct foods from Column B. The responses were very good as the majority scored six marks.

### Question 17

Mean: 5.19

Standard deviation: 2.50

Maximum Mark: 12

In Part (a), candidates were asked to explain three ways in which Physical Education can change the perception of some sports being seen as exclusive to one gender. The responses were fair.

Candidates were not able to expand on their own perceptions. A large number of candidates suggested that changes could be made through education which would focus on equity and equality, and through the development of programmes which use videos and books to teach understanding of gender issues.

In Part (b), candidates were asked to describe three ways of encouraging elderly persons (seniors) to participate in physical activity. The majority scored partial marks. Candidates merely listed their ideas with very little description as to how one would encourage these seniors to engage in physical activities. Some methods that candidates could have described include the provision of transportation; creating greater access to available facilities; the action of forming community groups and the provision of age appropriate activities.

## **Paper 02 – Practical Examination**

Students seemed to have mastered the skills of their selected sports. Greater care must be taken in submitting the requested information. Some packages had no forms enclosed. In awarding grades, there were few discrepancies noted between the external examiners' grades and those of the teachers.

## **Paper 03 – School-Based Assessment**

The moderation process for the School-Based Assessment is limited to the elements of content and organization, since the teachers award marks for the elements of planning and organizing, implementation and teamwork.

Teachers continue to show great leniency in marking even when it is evident that students do not fully understand the requirements of the task. One disconcerting observation this year was a school whose students attempted a group project. Instead of each member of the group being responsible for different parts, all members presented the same project in its entirety. There was no indication of who was responsible for which part of the project.

There was a weakness in schools presenting the relevant forms which were in many cases incomplete and sometimes absent from the package. Teachers must ensure that students are guided in the approved methodologies and guidelines for the research of information. This will ensure that students understand the process and ultimately learn from the experience.

## RECOMMENDATIONS

1. Invigilators of this examination should remind candidates to number the questions correctly on the front cover. They should also encourage the candidates to number the responses for each question legibly, especially for those questions with many parts.
2. Teachers should encourage their students to attempt every question.
3. Students should do more reading on other Games outside of the Olympic Games such as the Central American and Caribbean (CAC), Commonwealth, and Pan American Games.
4. Students should be knowledgeable about regional competitions and events in as many sports as possible.
5. Teachers must encourage students to use correct scientific terminology.
6. Teachers must teach students how to answer questions. For example, the verbs *state*, *outline*, *describe* and *explain* all have different meanings and, therefore, expected answers differ. Also, the number of marks at the end of questions is an indication of the required answers.
7. Students should become more aware of the selected role they are expected to carry out for the SBA. Students must select an event, choose a role to be carried out and then record the entire procedure in their portfolios for assessment.
8. Teachers should be more vigilant in completing and submitting all relevant forms pertaining to Paper 02 and Paper 03.