

**CARIBBEAN EXAMINATIONS COUNCIL**

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

**JUNE 2005**

**PHYSICAL EDUCATION AND SPORT**

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**PHYSICAL EDUCATION AND SPORT  
GENERAL PROFICIENCY EXAMINATION  
JUNE 2005**

**General Comments**

This was the first sitting of the Physical Education and Sport examination. The examination comprised Paper 01, a theory paper worth 90 marks, Paper 02, the sport-specific Practical examination worth 60 marks, and Paper 03, the School-Based Assessment worth 150 marks.

Overall performance on this examination was very good. Comparison of results from Papers 01, 02 and 03 revealed that the greatest success was recorded on Paper 02, followed by Paper 03 and Paper 01.

**Paper 01**

**Detailed Comments**

**SECTION A**

**History and Development of Physical Education and Sport**

**Question 1**

This question assessed candidates' knowledge of the main problems associated with the 2004 Summer Olympic Games. Candidates' responses related mainly to minor issues with individuals rather than those of venue, security, finance, officiating and politics.

**Question 2**

Candidates had a satisfactory knowledge of the definition of Physical Education in terms of the physical. However, only a few candidates stated that Physical Education deals with instruction and the social and emotional state of a person.

**Anatomy and Physiology**

**Question 3**

This question required the meaning of the term, 'muscular hypertrophy'. It was poorly answered by the majority of candidates who made an attempt. While this question addressed lower order recall and comprehension skills, it was clear that candidates were not familiar with the concept of the muscles' response to strength training by an increase in size of the muscle fibres.

**Question 4**

This question assessed candidates' knowledge of the systems in the body, and types of synovial joints. Candidates answered all parts of this question satisfactorily.

**Question 5**

Candidates' level of knowledge here was satisfactory and they were able to apply knowledge of the muscular system to analysis of a sport-specific movement. A number of candidates identified other muscles which they felt were used in extending the arm when attempting a shot at goal in netball or basketball.

## **Fitness and Performance**

### Question 6

This question assessed candidates' knowledge of benefits of exercise and ways of preventing dehydration.

Nearly all candidates gave good responses and 44% were able to score full marks. In Part (b), most candidates' response to dehydration was to encourage fluid intake before, during and after the event or training. Very few candidates spoke about wearing lightweight loose cotton clothing or acclimatization as ways to prevent dehydration.

### Question 7

This question assessed candidates' knowledge of benefits of cool-down activity. Most candidates responded well. It was apparent that the candidates based their responses on their experiences with the warm-up and cool-down procedures.

### Question 8

Candidates were required to define flexibility as the ability to move a joint through its maximum range of motion or as the range of motion about a joint. The responses were poor. Those who scored one mark literally gave an example of a person being flexible instead of giving the definition. Candidates were also expected to name types of stretching, such as, static, dynamic, ballistic or passive stretching.

## **Health and Nutrition**

### Question 9

Candidates performed moderately on this question which assessed the role of the minerals, sodium, calcium and iron, in the body of the athlete.

### Question 10

Candidates' knowledge of the names of two eating disorders were required in this question. It was poorly answered. Only a few candidates answered correctly using the scientific terminology, with many candidates making references to eating habits rather than disorders. Although eating disorders do not present as a major issue in the Caribbean region, they are well documented in Sport and Physical Education literature and in discussions on Health and Nutrition. Candidates should have named anorexia (nervosa) and bulimia (nervosa).

### Question 11

Many candidates gave good reasons why the use of prohibited performance-enhancing drugs in sport is physically wrong. Only a few actually presented reasons that answered the question, that is, why the use of performance-enhancing drugs is morally wrong. Candidates should pay greater attention to the details asked in the questions and must be encouraged to see the distinction between physical and psycho-social concerns.

### Question 12

Few candidates were able to explain that 'sportsmanship' means playing to the written or unwritten rules of the game, for example, the values, ethics or 'spirit of the game'.

## **SECTION B**

### **History and Development of Physical Education and Sport**

#### Question 13

Overall the response of candidates to this question was satisfactory. For Part (a), many candidates gave similarities between sport and recreation, rather than differences, such as, sport is organised, institutionalised, competitive, whereas recreation is done for pleasure, during leisure time and there is no winner or loser.

Responses to Part (b) of this question were poor. Candidates were not able to explain the factors affecting participation in sport, for example, tradition, culture and gender.

Part (c), which required the candidates to give the benefits of participating in sporting activities, was quite well answered, as most candidates scored full marks.

### **Anatomy and Physiology**

#### Question 14

In Part (a) of this question candidates were able to identify the muscles indicated by the arrows very well.

Part (b) of this question was also done well. Candidates demonstrated a clear understanding of the muscles which work in pairs.

Part (c) (i) of this question was satisfactorily answered re-identifying types of synovial joints on the diagram.

In Part (c) (ii) of this question candidates performed very poorly. The requirement to name the specific bones that make up the hip girdle proved difficult and the candidates who named bones were not able to spell them correctly – ilium, ishium, pubis.

#### Question 15

In Parts (a) (i) and (a) (ii), candidates demonstrated a good understanding of anaerobic respiration by giving examples. Although challenging, they also could identify the products which the muscles use during aerobic respiration.

In Part (a) (iii), candidates were able to name two products given off as waste but they did not use the scientific terminologies. Some candidates' responses also did not relate the waste product given off, to the process of aerobic respiration.

In Part (b), candidates showed little understanding of the components of fitness and the methods one should use to test for these components. Some candidates named the instrument they would use or suggested the test that could be given to a new client before allowing him or her to participate. Many candidates who identified the testing methods did not follow the instruction to explain one of these methods. Some methods which candidates were expected to explain are: the cycle ergometer test, the Harvard step test, the Cooper test, the multistage fitness test, vertical jump, 5-metre shuttle, and others.

## **Health and Nutrition**

### Question 16

Overall performance on this question was average. Part (a) of this question was fairly well answered but many candidates did not identify why the pre-event meal was important. Instead, they listed characteristics of this meal.

In Part (b) of this question, few candidates explained that the effect of energy balance is in 'maintaining body weight'.

In Part (c) (i), candidates were unable to name three of the Caribbean food groups, namely staples, fats and other food from animals, legumes, fruits, green and yellow vegetables. They gave examples of foods rather than stating the food group. This was widespread among candidates and it was apparent that candidates simply named foods that they recognised from the diagram provided.

In Part (c) (ii), candidates chose to explain the role of the nutrients provided by foods from the Caribbean food groups, rather than:

Staples – provide energy, add bulk, satisfy hunger

Food from animals – muscle building, growth and repair of tissues

Fruits – elimination of waste, provide energy, and so on

## **Social Issues**

### Question 17

Candidates did well in answering Part (a), aspects of culture that influence the popularity of a sport.

In Part (b), candidates performed satisfactorily. However, in explaining the reasons for outbreaks of violent behaviour, candidates provided more physical reasons but few social sources of violence.

In Part (c), candidates found difficulty in suggesting reasons for the increased participation of women in sport. Some of these are: greater economic freedom, increase in number of facilities (sporting) for women, increased coverage of women sports, increased opportunity, social acceptance and so on.

## **Recommendations**

1. More emphasis should be placed on teaching candidates the scientific terminologies for this subject area. Emphasis should be placed on introducing these terms to the candidate in an applied manner and then relating these to the more familiar terms, or those used in the vernacular.
2. All teachers who present candidates in the future should go through the syllabus with the candidates in their schools to acquaint them with the objectives, especially for the School-Based Assessment. For the S.B.A., candidates must select an event, must choose a role to be carried out and record the entire procedure. Candidates should be encouraged to write brief reflections over the duration of the course, based on the experiences gained throughout the project.
3. More emphasis must be placed on the instruction of the Fitness and Performance aspects of the syllabus. It must be noted that whereas candidates may be able to consolidate the knowledge gained in Anatomy & Physiology, and Health & Nutrition in other subject areas, it is unlikely that such reinforcement will be found for the integrated study of energy production, fitness components and appraisal and other aspects specific to Physical Education and Sport Science. Special attention must therefore be paid to providing learning experiences that directly address these aspects of the syllabus.

4. Encourage candidates to answer all questions in Paper 01 as instructed, as part of the preparation for this examination.
5. Candidates should be encouraged to reference materials used in their project (Paper 03) in the approved format, and to use their own words to integrate researched information. Plagiarism is to be avoided.
6. Teachers should pay careful attention to the completion of CXC's forms, in particular the mark sheets, to ensure that all assessments made of candidates' performance arrive for the attention of the Council.
7. Clarity of written expression must be stressed as candidates are placed at a disadvantage when they are unable to write standard English in their examination papers.
8. Candidates should be encouraged to develop holistically through the P.E. syllabus, thus moral and social development through Physical Education and Sport must be emphasised.