Eic CARIBBEAN EXAMINATIONS COUNCIL

# CSEC® Physical Education and Sport 

SYLLABUS SPECIMEN PAPER
MARK SCHEME SUBJECT REPORTS

## Macmillan Education

4 Crinan Street, London, N1 9XW
A division of Macmillan Publishers Limited
Companies and representatives throughout the world
www.macmillan-caribbean.com

ISBN 978-0-230-48226-5
© Caribbean Examinations Council (CXC ${ }^{\circledR}$ ) 2015
www.cxc.org
www.cxc-store.com

The author has asserted their right to be identified as the author of this work in accordance with the Copyright, Design and Patents Act 1988.

First published 2014
This revised edition published 2015

Permission to copy
The material in this book is copyright. However, the publisher grants permission for copies to be made without fee. Individuals may make copies for their own use or for use by classes of which they are in charge; institutions may make copies for use within and by the staff and students of that institution. For copying in any other circumstances, prior permission in writing must be obtained from Macmillan Publishers Limited. Under no circumstances may the material in this book be used, in part or in its entirety, for commercial gain. It must not be sold in any format.

Designed by Macmillan Publishers Limited
Cover design by Macmillan Publishers Limited and Red Giraffe
CSEC ${ }^{\circledR}$ Physical Education and Sport Free Resources
LIST OF CONTENTS
CSEC ${ }^{\circledR}$ Physical Education and Sport Syllabus Extract ..... 3
CSEC ${ }^{\circledR}$ Physical Education and Sport Syllabus ..... 5
CSEC ${ }^{\circledR}$ Physical Education and Sport Specimen Papers and mark Schemes/Keys ..... 62
Paper 012011 Section A ..... 63
Paper 012011 Section B ..... 76
CSEC ${ }^{\circledR}$ Physical Education and Sport Subject Reports
May/June 2005 ..... 80
May/June 2006 ..... 86
May/June 2007 ..... 94
May/June 2008 ..... 96
May/June 2009 ..... 103
May/June 2010 ..... 110
May/June 2011 ..... 118
May/June 2012 ..... 125
May/June 2014 ..... 135
May/June 2015 ..... 142

## Physical Education and Sport

The study of Physical Education and Sport not only allows students to work individually and cooperatively in the theoretical and practical components of the subject but also assists them in developing critical life skills. As a curricular inclusion, it provides students of varying abilities with experiences that facilitate physical, social, intellectual, cultural, spiritual and emotional growth. Skills related to decision making, problem solving and critical thinking and the use of sport technology are acquired by students undertaking a course of study in Physical Education and Sport.

The Physical Education and Sport syllabus is made up of a Compulsory Core and three Options to be completed during the two-year course of study. Each candidate must do the Compulsory Core and three sports from at least two different Options.

## Compulsory Core

1. History and Development of Physical Education and Sport
2. Anatomy and Physiology
3. Fitness and Performance
4. Health and Nutrition
5. Trends and Social Issues

Option A
a) Dance
b) Gymnastics
c) Martial Arts/Combative Sports
d) Swimming
e) Track and Field/Athletics

Option B
a) Badminton
b) Golf
c) Squash
d) Table Tennis
e) Tennis

## Option C

a) Basketball
b) Cricket
c) Football
d) Hockey
e) Netball
f) Rugby
g) Volleyball
h) Softball/Baseball

## CARIBBEAN EXAMINATIONS COUNCIL

Caribbean Secondary Education Certificate ${ }^{\circledR}$

## CSEC ${ }^{\circledR}$

## PHYSICAL EDUCATION AND SPORT SYLLABUS

Effective for examinations from May-June 2014

Published by the Caribbean Examinations Council
© 2012, Caribbean Examinations Council

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form, or by any means electronic, photocopying, recording or otherwise without prior permission of the author or publisher.

Correspondence related to the syllabus should be addressed to:

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

Telephone Number: +1 (876) 630-5200
Facsimile Number: +1 (876) 967-4972
E-mail Address: cxcwzo@cxc.org
Website: www.cxc.org

Copyright © 2012 by Caribbean Examinations Council
The Garrison, St Michael BB14038, Barbados
RATIONALE ..... 1
AIMS ..... 1
CAREER CHOICES ..... 2
SUGGESTED RESOURCES ..... 2
CANDIDATE POPULATION ..... 2
sUGGESTED TIME-TABLE ALLOCATION FOR TEACHING ..... 3
ORGANISATION OF THE SYLLABUS ..... 3
CERTIFICATION AND DEFINITION OF PROFILE DIMENSIONS ..... 4
FORMAT OF THE EXAMINATIONS ..... 5
REGULATIONS FOR PRIVATE CANDIDATES ..... 6
REGULATIONS FOR RESIT CANDIDATES ..... 6
RECOMMENDED TEACHING TIME AND STRATEGY ..... 7
CORE ..... 8
OPTIONS ..... 13
MARK SCHEME FOR PRACTICAL SKILLS ..... 38
SCHOOL-BASED ASSESSMENT ..... 40
RESOURCE MATERIAL ..... 49
GLOSSARY ..... 50

This document CXC 33/G/SYLL 12 replaces CXC 33/0/SYLL 03 issued in 2003.

Please note that the syllabus has been revised and amendments are indicated by italics.

First issued 2003
Revised 2012

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


## - RATIONALE

Movement is essential for daily functioning. Knowledge of what, where and how the body can move is critical for quality human existence. Physical Education, as an integral part of the general education process, contributes to an individual's awareness and understanding of the elements and dimensions of movement and forms the basis for the learning of sport skills. Sport, on the other hand, is viewed as a vehicle for the enhancement of fundamental motor skills and the development of complex skills learnt through a properly structured Physical Education and Sport programme. It is governed by formal or informal rules that involve competition and may be pursued for recreation or reward while promoting healthy lifestyle practices. Sport is recognised as an instrument for the promotion of international peace and understanding and many local, regional and international sporting bodies have embraced shared values through sport.

The study of Physical Education and Sport, therefore, not only allows students to work individually and cooperatively in the theoretical and practical components of the subject but also assists them in developing critical life skills. As a curricular inclusion, it provides students of varying abilities with experiences that facilitate physical, social, intellectual, cultural, spiritual and emotional growth. Skills related to decision-making, problem solving and critical thinking and the use of sport technology are acquired by students undertaking a course of study in Physical Education and Sport.

This syllabus will contribute to the development of the Ideal Caribbean Person as articulated by the CARICOM Heads of Government, who has the capacity to create and take advantage of opportunities to control, improve, maintain and promote physical, mental, social and spiritual well-being and to contribute to the health and welfare of the community and country. Although this syllabus is primarily intended to meet the needs of Caribbean students, by providing opportunities for attaining a working knowledge of Physical Education and Sport and its component parts, it may have relevance and appeal at a more universal level. Acquired skills and knowledge can form the basis for further studies in Physical Education and related fields in health, recreation and sport. The syllabus takes into consideration the multicultural nature of Caribbean peoples and consequently endeavours to respond to a wide range of experiences relating to a healthy lifestyle.

## - AIMS

The syllabus aims to:

1. develop the knowledge, skills and values for the enhancement of performance in a wide range of movement and sport experiences;
2. promote optimal health and wellness through an understanding of healthy lifestyle practices and regular participation in physical activities;
3. develop the capacity for critical and creative thinking, technological competence, problem solving, leadership and cooperative behaviours through authentic learning experiences;
4. Integrate information, communication and technological (ICT) tools and skills.

## - CAREER CHOICES

The skills and knowledge acquired through the study of this syllabus may be further developed and employed in a variety of professions including, but not confined to, Physical Education, Games or Sports. The professions include those below.

| Athlete |  | Sport Administrator |
| :--- | :--- | :--- |
| Coach |  | Sport Analyst |
| Curriculum Officer |  | Sport Equipment Dealer |
| Dietitian |  | Sport Journalist |
| Exercise Physiologist |  | Sport Announcer |
| Masseur/Masseuse |  | Sport Lawyer |
| Physical Education teacher/lecturer |  | Sport Manager |
| Physical Training Instructor |  | Sport Medicine/Practitioner |
| Physiotherapist |  | Sport Official (referee, umpire, linesman) |
| Research Officer |  | Sport Organiser |
| Sport Agent |  | Sport Psychologist |

## - SUGGESTED RESOURCES

The following is a suggested list of resources that should be available to schools in their preparation of students for the examination:
(a) qualified staff;
(b) playing field;
(c) hard courts relative to each particular sport selected;
(d) gym or access to indoor multi-purpose area;
(e) swimming pool or access to community facility for schools that select the swimming activity;
(f) basic equipment for each sport and game activity selected;
(g) multimedia devices;
(h) computer with internet access;
(i) resource books and videos of sports, games and other Physical Education content;
(j) current international rules and regulations for the respective sports.

## - CANDIDATE POPULATION

This syllabus is designed for students who intend to pursue further studies in Physical Education and Sport at the tertiary level as well as students whose formal study of the subject is unlikely to proceed further.

Students who have benefited from a Physical Education programme equivalent to that undertaken in the first three years of secondary school will be better prepared to undertake this syllabus.

It is recommended that no more than twenty (20) students should be included in a class for practical exercises. It is recommended that teachers make the necessary adaptations to cater for candidates with disabilities.

## - SUGGESTED TIME-TABLE ALLOCATION FOR TEACHING

It is recommended that a minimum of three hours per week be allocated to the subject over a two-year period.

## - ORGANISATION OF THE SYLLABUS

The Physical Education and Sport syllabus is made up of a Compulsory Core and three Options to be completed during the two-year course of study. Each candidate must do the Compulsory Core and three sports from at least two different Options.

| COMPULSORY CORE | OPTIONS | SPORTS |
| :---: | :---: | :---: |
| 1. History and Development of Physical Education and Sport <br> 2. Anatomy and Physiology | A | (a) Dance <br> (b) Gymnastics <br> (c) Martial Arts/Combative Sports <br> (d) Swimming <br> (e) Track and Field/Athletics |
| 4. Health and Nutrition <br> 5. Trends and Social Issues | B | (a) Badminton <br> (b) Golf <br> (c) Squash <br> (d) Table Tennis <br> (e) Tennis |


| COMPULSORY CORE | OPTIONS |  | SPORTS |
| :--- | :--- | :--- | :--- |
|  |  | (a) | Basketball |
|  |  | (b) | Cricket |
|  |  | (c) | Football |
|  | c | (d) | Hockey |
|  |  | (e) | Netball |
|  |  | (f) | Rugby |
|  |  | (g) | Volleyball |
|  |  | (h) | Softball/Baseball |
|  |  |  |  |

## - CERTIFICATION AND DEFINITION OF PROFILE DIMENSIONS

The Physical Education and Sport syllabus will be examined at the General Proficiency only. Candidates will be awarded an overall grade reported on a 6-point scale. In addition to the overall grade, candidates' performance will be reported by a letter grade under profile dimensions of: Theory and Practical.

## - FORMAT OF THE EXAMINATIONS

Candidates will be required to take Paper 01, Paper 02, and Paper 03.

## Paper 01

(2 hours 30 minutes)

## Paper 02

(45 minutes)

## Paper 03

| PROFILE <br> DIMENSION | PAPER 01 <br> (CORE) |  | PAPER 02 <br> (OPTIONS) |  | PAPER 03 <br> (SBA) |  | GRAND TOTAL |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Raw <br> Score | $\%$ | Raw <br> Score | $\%$ | Raw Score | $\%$ | Raw Score | $\%$ |
| Theory | 90 | 30 | - | - | 30 | 10 | 120 | 40 |
| Practical | - | - | 45 | 15 | 135 | 45 | 180 | 60 |
| Total | 90 | 30 | 45 | 15 | 165 | 55 | 300 | $\mathbf{1 0 0}$ |

## - REGULATIONS FOR PRIVATE CANDIDATES

1. Private candidates must be entered through institutions recognised by the Council.
2. Private candidates will be required to complete all aspects of the examination (Papers 01, 02 and 03).
3. The SBA activities of private candidates must be monitored by tutors in the institution through which they register.
4. Private candidates must submit their own work, which must be validated by their tutors.

## - REGULATIONS FOR RESIT CANDIDATES

1. Resit candidates must complete Papers 01, 02and 03 of the examination for the year for which they re-register. Resit candidates who have earned 50 per cent of the MODERATED score for the SBA component may elect not to repeat this component, provided they re-write the examination no later than the year following their first attempt. The scores for the SBA can be transferred once only, that is, to the examination immediately following that for which they were obtained.
2. Resit candidates who have obtained less than 50 per cent of the MODERATED scores for the SBA component must repeat the component at any subsequent sitting.
3. Resit candidates must be entered through a school or other approved educational institution.

## - RECOMMENDED TEACHING TIME AND STRATEGY

| COMPONENTS | $\begin{gathered} \text { TERM } \\ 1 \end{gathered}$ | $\begin{gathered} \text { TERM } \\ 2 \end{gathered}$ | $\begin{gathered} \text { TERM } \\ 3 \end{gathered}$ | $\begin{gathered} \text { TERM } \\ 4 \end{gathered}$ | $\begin{gathered} \text { TERM } \\ 5 \end{gathered}$ | $\begin{gathered} \text { TERM } \\ 6 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CORE | Theory | Theory | Theory | Theory | Theory | Revision and External Examination (Paper 01 Theory) |
| OPTIONS | Preparation for $1^{\text {st }}$ Sport Option and Assessment of sport skills | Preparation for $1^{\text {st }} \& 2^{\text {nd }}$ Sport Options and Assessment of sport skills | Preparation for $2^{\text {nd }} \& 3^{\text {rd }}$ Sport Options and Assessment of sport skills | Preparation for $3^{\text {rd }}$ Sport Option and Assessment of Sport skills | Assessment of $3^{\text {rd }}$ Sport Option <br> Preparation for External Examination (Practical) | *External Examination (Paper 02 Practical) |
| CLASS PROJECT |  | Introduction of the Class Project | Continue Class Project | Completion of Class Project |  |  |

*NB: For the External Practical Examination (Paper 02), candidates should be encouraged to perform the sport in which they consider themselves BEST prepared.

## - CORE (Compulsory Paper - Paper 01)

## GENERAL OBJECTIVES

On completion of the CORE, students should:

1. appreciate the historical significance of Physical Education and Sport;
2. know the structure and functions of the body in relation to movement;
3. understand the factors that affect physical performance;
4. appreciate the need for healthy lifestyle practices;
5. be aware of the various points of view on issues related to physical education and sport;
6. improve skills of critical thinking, creative thinking, problem solving, leadership, co-operative behaviours and technical competencies.

## SPECIFIC OBJECTIVES

## CONTENT

## 1. History and Development of Physical Education and Sport

Students should be able to:
1.1 explain the relationship between Physical Education and Sport;
1.2 examine the major historical developments of Physical Education and Sport;
(a) The nature and meaning of Physical Education.
(b) The nature and meaning of Sport.
(c) The relationship between Physical Education and Sport.

Physical Education and Sport in ancient societies.

Examples: Ancient Greece, Ancient Rome Renaissance period.
(a) Ancient and Modern Olympic Games.
(b) Twentieth Century.
(c) Physical Education and Sport in the Caribbean.
(d) Major Sporting Events (for example, Commonwealth Games, Pan American Games, CARIFTA, World Cup, Paralympics, Special Olympics).

Hierarchical relationships among sporting organisations, for example, ICC/WICB/local cricket boards, FIFA/ CONCACAF/ local football associations.

## SPECIFIC OBJECTIVES

CONTENT

## 2. Anatomy and Physiology

Students should be able to:
2.1 describe the structure and organisation of

Cells -> Tissues -> Organs -> Systems -> Organisms the human body;
2.2 analyse the structure and functions of the systems of the human body.
(a) The skeletal system

Bones: types, names, structure, function, growth.
Joints: types, names, structure, function, movement.
(b) The muscular system Muscles: types (muscle fibre), names of major muscle groups, structure, function.
(c) The circulatory system

Names of major organs (heart and blood vessels), structure, function, heart-rate, stroke volume, cardiac output, blood pressure.
(d) The respiratory system

Names of major organ (lungs), structure, function, respiratory rate, tidal volume, minute volume, vital capacity, residual volume, total lung capacity, maximum aerobic capacity.
(e) The nervous system

Central, peripheral, autonomic, types of nervous tissue (sensory, motor and relay), structure, function, voluntary and involuntary actions, reflex actions.
(f) The digestive system Names of organs, structure, function.
(g) The excretory system

Relate structure of the kidney to its excretory function.
Kidneys - excretory function only; osmo regulation; homeostasis.
(h) The integumentary system: skin, hair, nails and associated glands.
Skin: structure (diagram required), function.

## SPECIFIC OBJECTIVES

## 3. Fitness and Performance

Students should be able to:
3.1 explain the concept of fitness;
3.2 apply tests for assessing and evaluating fitness;
(a) Definition of fitness.
(b) Classification and components of fitness:
(i) health related - strength, cardiovascular endurance, muscular endurance, flexibility, body composition;
(ii) performance related-speed, power, agility, balance, reaction time, coordination.
(c) Physical, mental and social benefits of exercise and recreation.

Include: Standing broad jump, 1 minute sit-up test, grip strength dynamometer, sit and reach, agility run, alternate hand-wall throw, shuttle runs, Cooper Test, Bleep/Beep Test, 3 minute step test.
3.3 explain the major principles of training and conditioning;
3.4 describe the major methods of training;

Principles of training and conditioning:
(a) Progression.
(b) Specificity.
(c) Reversibility.
(d) Overload.
(e) Variation and recovery.
(a) Continuous.
(b) Interval (extensive-intensive).
(c) Fartlek.
(d) Circuit.
3.5 design simple short-term training plans for improving fitness and performance;
3.6 describe the body's response to training;

Components of a training session:
(a) warm-up, main activities, cool-down;
(b) physical preparation;
(c) psychological preparation;
(d) tactical preparation;
(e) technical preparation.
(a) Energy Systems: aerobic and anaerobic, maximum heart rate, an aerobic target zone, aerobic target zone.
(b) Muscle development: Hypertrophy and atrophy.

## SPECIFIC OBJECTIVES

explain the concept of skill learning;
3.8 explain some of the factors that affect performance;
3.9 classify movements according to muscle action;
apply principles of movement to enhance performance;
identify major causes of sport related injuries;
describe procedures for the prevention of injuries;
identify common sport-related injuries,
outline procedures for the treatment of common sport-related injuries.
(a) Definition of skill.
(b) Classification of skills: open and closed continuum.
(c) Phases of skill learning: Cognitive, Associative and Autonomous.
(a) Physiological, for example, body type, diet, age, fitness.
(b) Psychological, for example, motivation, stress.
(c) Environmental, for example, altitude, weather, playing surface.
(a) Muscle contractions: isotonic and isometric.
(b) Types of movement: Flexion/extension, abduction/adduction, rotation, circumduction, inversion/eversion, pronation/supination.
(a) Skilled Movement: Muscles and joints used in specific ways, knowledge of skills used in activities; observation, analysis, improvement.
(b) Motion and Force: striking; throwing, propulsion, catching, receiving, landing.
(c) Stability: Base of support; centre of gravity.

Overuse, environment, violence, accidental, lack of fitness, improper technique, knowledge of rules.

Adherence to principles of training, safety rules, appropriate equipment, appropriate playing area, appropriate playing gear, fitness level, proper warm-up/cool down, hydration.

Include:
(a) fractures, joint injuries, unconsciousness/ concussion, soft tissue injuries;
(b) skin damage: cuts/grazes/blisters, dehydration and hyperthermia, cramps, winding.

Include:
Rest, Ice, Compression and Elevation (RICE), Heimlich manoeuver, bandages, slings, moving a victim, the recovery position.

## SPECIFIC OBJECTIVES

## 4. Health and Nutrition

Students should be able to:
4.1 explain health-related terms;
4.2 identify nutrients and the main food groups;
4.3 select appropriate foods for health and athletic performance;
4.4 evaluate different types of diet;
4.5 identify eating disorders.
5. Trends and Social Issues

Students should be able to:
5.1 evaluate various issues related to Physical Education and Sport.

Definitions: good health (physical, mental, social), nutrients, malnutrition, wellness.
(a) Nutrients: protein, carbohydrates, fats, minerals, vitamins, fibre, water.
(b) Caribbean food groups: staples, legumes, fruits, vegetables, food from animals, fats and oils.

High energy foods, high protein foods, pre-activity meal, post-activity meal, fluid replacement.

Balanced diet, factors affecting diet, planning meals.

Anorexia, bulimia, binging.
(a) Politics: role of government (policy, funding).
(b) Gender: equity.
(c) Violence: hooliganism, terriorism.
(d) Drugs: social drugs, performance enhancing drugs, anti-doping (methods, testing, banned substances).
(e) Special populations: inclusion, accessibility.
(f) Cultural influences: customs and traditions.
(g) Media: influence of the mass media.
(h) Technology: officiating, statistics and analysis of performance.
(i) Commercialisation: sponsorship, endorsement, marketing.
(j) Ethics: fairplay and sportsmanship, racism.
(k) Legal issues: contracts.
(I) Environment: relationship between sport and the environment.

## - OPTIONS (Paper 02 and Paper 03)

## GENERAL OBJECTIVES

On completion of the OPTIONS, students should:

1. apply the rules or laws of the game, including those of specific competitions;
2. develop tactics and strategies of competitive play and adapt these to the strengths and limitations of other players;
3. understand the need for regular and appropriate practice in an effort to improve technique;
4. develop competencies in planning and implementing an intra-mural event;
5. develop leadership qualities and cooperative behaviours through group activities.

## SPECIFIC OBJECTIVES

Students should be able to:

1. execute a full range of skills that are required in competitive situations;
2. apply the principles of defense and offense in competitive situations;
3. explain the rules/laws of the games;
4. demonstrate correct use of the laws or rules of the sport or game and their application;
5. interpret feedback on their performance and on others' performance and general play;
6. demonstrate competencies in one (1) selected ROLE for an intra-mural event;
7. demonstrate leadership and cooperative behaviours.

## CONTENT

## OPTION A

1. DANCE

Each candidate will be required to perform, compose and demonstrate an appreciation for different types of dance.

This option may be studied in relation to any appropriate dance style, for example, contemporary, ballet, jazz, modern and ethnic. Any style of dance can be used as a stimulus or idea. Steps from folk dance and ballroom dance may be incorporated into a candidate's own composition and performance.
(a) Performance: a study of the mechanical and expressive nature of dance.
(i) Basic Principles

- Posture and placement; alignment; flow of energy; co-ordination; balance; control and mobility; and strength.
(ii) The Body
- Locomotion and elevation; movement involving the flexion; rotation; use of individual body parts in isolation and combination.
(iii) Dynamics
- Speed, energy, continuity, rhythm.
(iv) Spatial aspects
- $\quad$ Shaping and projecting the body in space through size level direction and pathway.


## (b) Dance Composition

(i) A study and appreciation of dances through participating in composing solo, duo and group dances.
(ii) The exploration of a range of dance ideas, styles and accompaniments.
(iii) The selection and development of appropriate actions, spatial and dynamic content.
(iv) The use of choreographic devices as appropriate to the chosen dance style.
(v) The use of expression and communication.

## (c) Dance Appreciation

A study of the meaning and significance of dances, both those composed by the candidate and those composed by professional choreographers. This will include the consideration of such features as: type of dance, for example, lyrical, abstract, dramatic; style of the dance; number and gender of dancers; theme or subject matter of the dance; dynamic, spatial, and action content of the dance; set, design, lighting, costume and accompaniment; structure and form; interpretation resulting from the way in which elements are perceived.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## See pages 46-47 for Mark Scheme

## 2. GYMNASTICS

Each candidate will be required to:
(a) perform a floor routine including a combination of at least eight different skills;
(b) perform at least four different vaults;
(c) demonstrate competencies in one other category:
(i) Rhythmic Gymnastics using selected apparatus (ball, hoop, baton).
(ii) Trampolining.
(iii) Rings.
(iv) Parallel bars.
(v) Uneven bars.
(vi) Horizontal bar.
(vii) Balance beam.
(viii) Pommel horse.
(ix) Floor Exercise Skills (Balances and tumbles).
(a) Floor Exercise

Each candidate will be required to perform a floor routine of at least eight different skills.
(i) Handstand.
(ii) Rolls (forward, backward, dive forward).
(iii) Headstand.
(iv) Cartwheel.
(v) Round off.
(vi) Kip.
(vii) Handspring.
(viii) Headspring.
(ix) Back handspring.
(x) Front somersault.
(b) Vaulting Skills

Each candidate will be required to perform at least four different vaults.
(i) Squat vault.
(ii) Straddle vault.
(iii) Flank vault.
(iv) Rear vault.
(v) Front vault.
(vi) Shoulder/Neck spring vault.
(vii) Headspring vault.
(viii) Handspring vault.

## (c) Rhythmic Gymnastics Skills

Each candidate will be required to perform a routine using at least four different skills from one of the categories listed below.

## Body Movement Skills

(i) Steps

- Variety in step patterns.
(ii) Jumps and leaps
- Take offs, landings, shapes in flight, rotations.
(iii) Pivots
- On different body parts, with different body/limb shapes.
(iv) Balances
- On different body parts, with different shapes, levels.
(v) Waves
- With different body parts, in different directions, levels.
(vi) Bends
- Of different body parts, while in different positions.
(vii) Rolls/Splits
- Different directions.
(d) Trampolining Skills
(i) Tuck jumps.
(ii) Pike jumps.
(iii) Straddle jumps.
(iv) Seat drop.
(v) Half twist.
(vi) Full twist.
(vii) Front drop.
(viii) Front somersault.
(ix) Back somersault.
(x) Combinations.
(e) Suspended Rings Skills
(i) Inverted hang.
(ii) Nest hang.
(iii) Forward single leg cut.
(iv) Backward double leg cut dismount.
(v) Combinations.


## (f) Parallel Bars Skills

(i) Forward hand walk.
(ii) Hip roll.
(iii) Corkscrew mount.
(iv) Flank dismount.
(v) Combinations.
(g) Uneven Bars
(i) Pull over mount
(ii) Back hip circle
(iii) Free hip circle
(iv) Stride Front hip circle
(v) Front hip circle
(vi) Squat on jump to high bar
(vii) Sole circle dismount
(h) Horizontal Bar
(i) Pull over mount
(ii) Back hip circle
(iii) Free hip circle
(iv) Stride Front hip circle
(v) Front hip circle
(vi) Swing 1/2 turn
(vii) Kip
(viii) Sole circle dismount
(i) Balance Beam Skills
(i) Squat mount.
(ii) Chasse.
(iii) Back shoulder roll.
(iv) Arabesque.
(v) Leap.
(vi) Forward roll.
(vii) Cartwheel dismount.
(viii) Combinations.

## (j) Pommel Horse Skills

(i) Feint.
(ii) Front support and swing.
(iii) Single leg circle forward.
(iv) Simple travel.
(v) Combinations.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## 3. MARTIAL ARTS/COMBATIVE SPORTS

Each candidate will be required to select, either Boxing, Karate, Taekwondo, or Judo for Martial Arts.
(a) Boxing

Each candidate will be required to demonstrate all the skills listed below.
(i) Stance

- Right hand stance.
- Left hand stance.
(ii) Footwork
- Attack.
- Defense.
(iii) Punches
- Jab.
- Cross.
- Hook.
- Upper Cut.
- Combinations.
(iv) Defense
- Slip.
- Bob and Weave.
- Parry/Block.
- Cover Up.
- Clinch.
- Counter attack.
(v) Tactics
- Toe To Toe.
- Counter Attack.
- Fighting in close.
- Feinting.


## Rules

Knowledge of the rules of the discipline/sport and their application.
(b) Karate
(i) Foundations of Karate

- Historical background.
- Styles, vocabulary.
- Karate in everyday life.
- Application to modern living.
- Breathing methods.
- Postures.
(ii) Basics of Karate Training
- Karate etiquette.
- Health and well being through correct diet and healthy lifestyle.
- Awareness of legal and ethical implications of the use of force.
(iii) Warming-up

Stretching; Aerobic exercises.
(iv) Falls and Rolls

On to back and side to side from squatting position.
(v) Stances

- Walking.
- Hand positions.
- Front-leaning.
- Side-fighting.
(vi) Hand Techniques
- $\quad$ Punches (form of a punch, straight punch, reverse punch).
- Blocks (eight basic).
(vii) Leg Techniques
- Snap kicks.
- $\quad$ Stretching straight leg.
- Thrust kicks.
- Side kicks.
- Round house.
(viii) Forms

The First Cause Katas.
(ix) Self -Defense

- Against punches, grabs and strikes.
- Against basic weapons (knife, club sticks).
(x) Sparring
- One step for middle punch.
- High punch and groin punch.
(Defended by appropriate block from eight basic blocks).


## Rules

Knowledge of the rules of the discipline/sport and their application.
(c) Taekwondo
(i) Foundations of Taekwondo

- Definition of Taekwondo.
- Historical Background.
- Tenets of Taekwondo.
- Taekwondo Etiquette.
- Taekwondo Counting and Commands (in Korean).
- Belt System.
(ii) Fundamental Movements
- $\quad$ Sitting stance punch (Annunso Jirugi)
- Single Punch (6).
- Double Punch (4).
- Triple Punch (3).
- Punching Skills from sparring position
- Front-Fist Punch (2).
- Rear Fist Punch (2).
- Double Punch (2).
- Four Combination Punch.


## Stances

- Walking.
- Extending Walking.
- L Stance.
- Cat Stance.
(iii) Foot Techniques (Balgisul)
- $\quad$ Standing kicks (Soseo Chagi)
- Front stretching downward kick (AP Olier Naeryo Chagi).
- Abduction downward kick (Oejun Dollyo Naeryo Chagi).
- Adduction downward kick (Naejun Dollyo Chagi).
- Front kick (Ap Chagi).
- Arc kick (Bandal Chagi)
- $\quad$ Side kick (Yeop Chagi).
- Turning kick (Dollyo Chagi).
- Back kick (Twit Chagi).
- Reverse turning kick (Bandae Dollyo Chagi).
- Jump Kicks (Twimyo Chagi)
- Jump front kick (Twimyo Ap Chagi).
- Jump side kick (Twimyo Yeup Chagi).
- Jump turning kick (Twimyo Dollyo Chagi).
- Jump back kick (180 and 360 degree turn).
- Jump reverse turning kick (180 and 360 degree turn).
(iv) Poomsae (Forms)
- Definition of Taegeuk and its Symbol.
- Poomsaes in the Taegeuk System: Jang (1); Yi Jang (2); Sam Jang (3); Sa Jang (4); O Jang (5); Yook Jang (6); Chil Jang (7); Pal Jang (8):
- fundamental movements;
- eye control;
- concentration of spirit;
- speed control;
- strength control;
- flexibility;
- balance;
- variety in techniques.
(v) Kyorugi (Sparring)
- One Step Sparring:
- 5 hand techniques;
- 5 foot techniques;
- 5 self defense techniques;
- combination kicks.
- Free Sparring.
(vi) Kyokpa (Board Breaking)
- Eye control.
- Balance.
- Power control.
- Speed.
- Point of attack.


## Rules

Knowledge of the rules of the discipline/sport and their application.

## (d) Judo

(i) Foundations of Judo

- Historical background.
- Styles, vocabulary.
- Judo in everyday life.
- Application to modern living.
- Breathing methods.
- Postures.
(ii) Basics of Judo Training
- Judo etiquette.
- $\quad$ Health and well being through correct diet and healthy lifestyle.
- Awareness of legal and ethical implications of the use of force.
(iii) Warming-up

Stretching; Aerobic Exercises.
(iv) Falling: why, when, how.
(v) Throws and Break falls

- Foot, leg, body and shoulder throws.
- Rear, side, and forward rolling break falls.
- Balance breaking techniques.
- The importance of hand holds.
(vi) Mat Work (Groundwork)
- Sash hold.
- Shoulder hold.
- $\quad$ Side four corner hold.
- Upper four corner hold.
- Straight four corner hold.
- Turnover techniques.
- Balance breaking techniques.
(vii) Locks
- Elbow locks
- Arm locks.
(viii) Chokes
- $\quad$ Naked strangle.
- $\quad$ Single wing sleeper.
- Collar choke.
- Opposite cross.


## Rules

Knowledge of the rules of the discipline/sport and their application.

## 4. SWIMMING

Each candidate will be required to select three of the four strokes and all of the life saving skills listed below.
(a) Swimming Skills
(i) Breaststroke.
(ii) Backstroke.
(iii) Front crawl.
(iv) Butterfly.
(b) Tactic

Turning

- Flip;
- touch.


## (c) Life Saving Skills

## Strokes:

(i) Side stroke.
(ii) Life saving leg kick.
(iii) Elementary backstroke.
(iv) Entry into water:

- $\quad$ stride entry;
- $\quad$ stride jump;
- $\quad$ straddle jump.
(v) Rescues:
- land based; reaching assists; throw;
- water based; wade; accompanied rescue, non-contact rescue; contact rescue (Select 2 from the following):
- extended tow;
- clothing tow;
- wrist tow;
- chin/head tow;
- double shoulder tow;
- cross chest tow.
(vi) Landing a casualty.
(vii) Assessing life support skills.
(viii) Demonstrate CPR (Cardio-Pulmonary Resuscitation).
(ix) Recovery position.

Rules
Knowledge of the rules of the discipline/sport and their application.

## 5. TRACK AND FIELD/ATHLETICS

Each candidate will be required to undertake three events but no more than two events from any group of Running, Jumping and Throwing events.
(a) Running Events
(i) Sprints

- Starts.
- Transition.
- $\quad$ Acceleration to maximum speed.
- Finish.
- 60 metres.
- 100 metres.
- 200 metres.
- $\quad 400$ metres.
(ii) Middle and Long Distance
- Starts.
- Transition.
- Strategy.
- Finish.
- 800 metres.
- 1500 metres.
- 5000 metres.
(iii) Hurdles
- Hurdle start.
- Lead leg action.
- Trail leg action.
- Running to first hurdle.
- Running between hurdles.
- 100 metres.
- 110 metres.
- $\quad 400$ metres.
- Finish.
(b) Jumping Events
(i) Long Jump
- Approach.
- Take off.
- Flight (hitch kick, hang, sail).
- Landing (tele-mark).
(ii) Triple Jump
- Approach.
- $\quad$ Sequence (Hop/Step/Jump).
- Flight.
- Landing.
(iii) High Jump
- Approach.
- Take Off.
- Flight (Bar clearance).
- Landing.


## (c) Throwing Events

(i) Shot Put

- Stance, Grip, standing frontal throws.
- Movement sequence (Glide/Spin).
- Power position and execution.
- Follow through and recovery.
(ii) Discus
- Grip, stance, preliminary swings, standing frontal throws, throws from a side on stance
- Power position and execution
- Movement sequence (rotation: 1-turn, 1½-turns).
- Follow through and recovery.
(iii) Javelin
- Grip and approach run.
- Transition (cross steps).
- Power position and execution.
- Follow through and recovery.


## Rules

Knowledge of the rules of the discipline/sport and their application.

## OPTION B

1. BADMINTON

Each candidate will be required to demonstrate all of the skills listed below in a game situation.
(a) Skills
(i) Grips

- Forehand.
- Backhand.
(ii) Service
- High.
- Low.
- Forehand.
- Backhand.
- Flick.
- Drive.
(iii) Clears
- Over-head.
- Around head.
- Underarm.
- Backhand.
- Attacking.
- Defensive.
(iv) Drops shots
- Slow.
- Fast.
- Forehand.
- Backhand.
- Around head.
(v) Smash
- Forearm.
- Backhand.
- Around head.
(vi) Drives
- Forehand.
- Backhand.
(vii) Net shots
- Hair pin.
- Kill.
- Lift.


## (b) Tactics

(i) Tactics for singles and doubles: attacking; defending; anticipation; deception; positioning in attack; positioning in defense; correct angles.
(ii) Tactics for service: serving strategy; varying the service; receiving service in singles; receiving service in doubles/mixed.
(iii) Formations: front and back; side-by-side.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## 2. GOLF

Each candidate will be required to demonstrate all of the skills listed below in a game situation.
(a) Skills
(i) Stance: open; closed; position of ball.
(ii) Grip: weak/strong; overlapping (Vardon); interlocking (Hogan).
(iii) Swing: backswing; downswing.
(iv) Use of woods, irons and putters.
(v) Strokes: tee shot; drive; approach shots; chip; pitch; putt.
(vi) Playing from hazards: shots from bunkers and from the rough.

## (b) Tactics

(i) Selection of club.
(ii) Use and control of: draw; fade; backspin; topspin; lofting.
(iii) Taking account of conditions: lie; distance; wind and weather.
(iv) Using the run of fairway.
(v) Slopes and green.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## 3. SQUASH

Each candidate will be required to demonstrate all of the skills listed below in a game situation.
(a) Skills
(i) Basic Shots

- The forehand and backhand drives: grip, swing, racquet head up, follow through.
- The service: forehand lob (floating service), forehand hard hit service, backhand service, return of service.
(ii) Attacking and defensive shots (forehand and backhand): the volley; the boast; the drop shot; the lob.
(iii) Fundamentals of movement: watching - footwork - balance - readiness; returning to the ' $T$ '; anticipation; deception.


## (b) Tactics

(i) Use of side walls and angles to out-manoeuvre an opponent.
(ii) Width and length (switching).
(iii) Use of the nick.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## 4. TABLE TENNIS

Each candidate will be required to demonstrate all of the skills listed below in a game situation.
(a) Skills
(i) Services using a variety of length, direction and spin; forehand and backhand.
(ii) Return of service; attacking and defensive returns with and without spin.
(iii) Push shots: backhand push; forehand push.
(iv) The block.
(v) Half volleys: using forehand and backhand.
(vi) Back spin defensive returns using forehand and backhand; the chop.
(vii) Top spin driving using forehand and backhand.
(viii) Drop shots.
(ix) Loop: fast forehand; slow forehand; backhand loop.
(x) Lob: forehand and backhand.
(b) Tactics
(i) Tactics for singles and doubles: attacking; defending; anticipation; deception; positioning in attack; positioning in defense; correct angles.
(ii) Tactics for service: serving strategy; receiving service in singles; varying the service; receiving service in doubles/mixed.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## 5. TENNIS

Each candidate will be required to demonstrate all of the skills listed below in a game situation.
(a) Skills
(i) Service

- Basic Service.
- $\quad$ Service variations (Sliced, Top Spin, Flat).
(ii) Ground Strokes
- Forehand.
- Backhand.
- Variations (Drives, Topspin, Slice).
(iii) Volleys
- Backhand.
- Forehand.
- Variations (Slice, Drop).
(iv) Overhead Smash
- Basic.
- Jump Smash.
(v) Lobs
- Backhand.
- Forehand.


## (b) Tactics

(i) Tactics for singles and doubles: attacking; defending; anticipation; deception; positioning in attack; positioning in defense; correct angles.
(ii) Tactics for service: serving strategy; receiving service in singles; varying the service; receiving service in doubles/mixed.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## OPTION C

## 1. BASKETBALL

Each candidate will be required to demonstrate all of the skills listed below in a game situation.
(a) Skills
(i) Passing: chest pass; bounce pass; baseball pass (long) and overhead pass.
(ii) Catching: one-hand/block and trap; two-hand catch/funnel;
(iii) Dribbling: either hand (right, left); alternate hands; change of direction and change of pace; high, low and cross-over (reverse, front cross-over, between the legs, behind the back);
(iv) Shooting: lay-up shots; set shot; jump shot; hook shot.
(v) Footwork: stance; pivoting; changes of pace and direction; sliding; jumping; stopping.
(b) Playing Positions

Point guard; shooting guard; forward; power forward; centre.
(c) Tactics
(i) Offence

## Individual

- one-on-one;
- one-on-zero;
- post play (pivot).


## Group

- two-on-one;
- two-on two;
- three-on-three;
- three-on-two.


## Team

- five-on-five.

Special Situations: in-bound pass; jump ball; free throws.
(ii) Defense

## Individual

- one-on-one;
- one-on-zero;
- post play (pivot).


## Group

- two-on-one;
- two-on two;
- three-on-three;
- three-on-two.


## Team

- zone;
- man-to-man;
- mixed (zone and man-to-man).

Special situations: press and trap defense.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## 2. CRICKET

Each candidate will be required to demonstrate all of the skills listed below in a game situation.

## (a) Skills

(i) Batting

- Approach: grip; stance; the backlift.
- $\quad$ The forward and back strokes: in defense - use of feet; in attack - the drives; leg glance.
- $\quad$ Strokes played with vertical bat.
- $\quad$ Strokes played with horizontal bat: hitting a full pitch to leg; the pull; the hook; the sweep; the cut.
- $\quad$ Running between the wickets; calling and backing up.
- Reading the bowling: spin; speed; in swing; out swing.
(ii) Bowling
- The basic action: grip; run up; delivery stride; release; follow through.
- The basic action: side-on, front-on, semi-open, mixed action.
- Length and direction.
- $\quad$ Swing: out swing (grip, rotation at shoulders, use of out swing); in swing (grip, bowling action, use of in swing).
- Cutters: off-cutter (grip, action, when to use); leg-cutter (grip, action, when to use).
- Medium and fast pace bowling: run up; action; grip; variation of pace.
- Spin: grip; action; when to use spin, googly; top spin; off spin.
(iii) Fielding
- Concentration; backing up; getting behind ball; moving onto the ball.
- Two hand interception, underarm flick.
- $\quad$ Stopping and returning: barrier position.
- Throwing: long, high, flat, hard - at the wicket.
- $\quad$ Chasing and retrieving: over short distance; over long distance.
- Catching: high catching; slip catching; medium catching, low catch.
- Positions: away from wicket; close to wicket; specialist positions.
- Wicket keeping: stumping; run outs; receiving the ball from bowling and fielding; catching; use of pads.
(b) Tactics
(i) Field placing for attacking and defensive fields.
(ii) Bowling changes.
(iii) Reading the wicket (pitch) - when to bat or bowl.
(c) Laws of the discipline/sport and their application
(i) Knowledge of field dimensions.
(ii) Umpiring.


## 3. FOOTBALL

Each candidate will be required to demonstrate all of the skills listed below in a game situation.

## (a) Skills

(i) Control

- Using static practices: use of chest, thigh, feet and head.
- Pressurised situations: use of chest, thigh, feet and head.
(ii) Passing
- Short pass: including use of both feet; use of the inside and the outside of the foot, instep.
- $\quad$ Long pass (along the ground, lofted pass): skills to include use of both feet, outside of the foot, the chip pass.
- Body pass: use of head and chest.
(iii) Shooting: power shots (short and long range); shots with inside and outside of foot (swerving shots); first time shots (volleys and half volleys); heading; shooting on the move; penalty kicks and direct free kicks.
(iv) Tackling: block tackle; side tackle; sliding tackle
(v) Dribbling: close control; use of either foot; feints; changes of pace and direction, against opponents.
(vi) Heading: defensive and attacking; for distance and for accuracy.
(vii) Jockeying: pressurising and attacking; closing down a player.
(viii) Goalkeeping skills: Distribution - throwing for distance and accuracy, punching, palming, handling of shots and crosses (to include pressurised situations; kicking dead ball and clearance; narrowing the angle and diving saves).
(b) Tactics
(i) Attack: depth, width and penetration in attack; use of space and timing; mobility; support play; positional sense, improvisation.
(ii) Defense: close marking; lateral running; covering; depth, width and concentration in defense; delay in defense; man to man and zonal marking.
(iii) Set pieces: direct and indirect free kicks, corner kicks.
(iv) Throw-in and goalkeeper's kicks.
(v) Systems of play.
(c) Laws of the discipline/sport and their application.
(i) Knowledge of field dimensions.
(ii) Refereeing.

4. HOCKEY

Each candidate will be required to demonstrate all of the skills listed below in a game situation.

## (a) Skills

(i) Use of the stick:
grip, movement of hands.
(ii) Passes:
the drive (hitting from left to right, right to left, footwork); the push (straight, from right to left, left to right, footwork); the flick (straight, right to left; left to right, footwork); the scoop; the reverse stick pass; the hit-on; the self-pass; the sweep (forearm, reverse); the drag/drag flick, slap shot.
(iii) Receiving the ball:
grip; position of body; receiving from right and left, in front, behind and side, receive reverse stick.
(iv) Stopping the ball: hands on stick; position of feet.
(v) Dribbling:
grip; footwork; head position, body position.
(vi) Types (Indian, push, tap, aerial).
(vii) Defense:

- $\quad$ Stick side; non stick side; lunge; jab; from front, behind and side; shave.
- Goalkeeping/Kicking Back skills: kicking; use of hand; use of stick.
(viii) Attack:
- Evading an opponent: stick side; non stick side; scoop; pull back and touch/drag stop; lift; bully.
- Shooting: from forward line attack; from penalty corner, from long corner.
(b) Tactics
(i) Principles of attack and defense: triangular passes; through and square passes; zonal defense; one to one marking; attacking through left and right; attacking in the 23 m area.
(ii) Corners (long corner, short corner):
- attack;
- defense.
(iii) Attacking goalkeeping; defensive goalkeeping; body position; diving.
(iv) Systems of play.
(v) The link system.


## Rules

Knowledge of the rules of the discipline/sport and their application.
5. NETBALL

Each candidate will be required to demonstrate all of the skills listed below in a game situation.

## (a) Skills

(i) Catching: one handed, two handed, with feet grounded, in flight.
(ii) Throwing (different passes and their uses): one handed passes (shoulder, high shoulder, underarm, bounce, lob); two handed passes (push, overhead, bounce).
(iii) Footwork: landing on one foot; landing on two feet; pivot; running pass.
(iv) Shooting: one hand; two hands; forward step shot; backward step shot.
(v) Techniques of getting free: dodge and sprint; sudden sprint; sprint and stop; sprinting with change of speed.
(vi) Defending: marking the player; marking the ball; blocking; inside the circle; outside the circle (that is, defending the circle edge against the pass in).
(vii) Intercepting: pass; shot.
(viii) The toss-up.
(b) Tactics
(i) Attacking: system of centre passes; set patterns of play; throw-in; toss-up; holding the space; back up on the circle edge.
(ii) Defending: blocking; zoning; defending the space; the throw-in; the toss-up; back up on the circle edge.
(iii) Role of individual players.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## 6. <br> RUGBY

Each candidate will be required to demonstrate all of the skills listed below in a game situation.
(a) Skills
(i) Passing: grip on ball; body position; accuracy of pass; orthodox; short and long; passing at speed; lob and reverse; pendulum pass; diving and spin passes.
(ii) Receiving: high balls; balls at speed; ground pick-up.
(iii) Tackling: basic technique; low tackle from side, rear, front and smother, hand off.
(iv) Kicking: place; punt; drop; dribble; screw; grubber.
(v) Beating opponents: side-step; feint; swerve; change of pace and direction; dummy pass;
(vi) Scissors; switch; loop and kick ahead.
(b) Team Skills
(i) Set scrimmaging: binding; position of feet; angle of drive for front row, second row and back row.
(ii) Line out play: jumping and catching: binding; throwing in.
(iii) Ruck and maul.
(c) Tactics
(i) Forward play: scrum; line out.
(ii) Three quarter play: handling; kicking; running; tackling.
(iii) Role of individual players.
(iv) Positional play.
(d) Laws of the game and their application
(i) Knowledge of field dimensions.
(ii) Refereeing.

## 7. <br> VOLLEYBALL

Each candidate will be required to demonstrate all of the skills listed below in a game situation.
(a) Skills
(i) Service: underarm; overarm (float, top spin).
(ii) Service reception, underarm, over head (volley).
(iii) Defense: two armed defense, pass/underarm pass.
(iv) Set: front volley; reverse volley, back set.
(v) Attack: spike (hard or soft); tip.
(vi) Blocking.

## (b) Team Skills and Tactics

Attacking and Defending: block (one person, two persons, three persons); systems of play (4:2 system, 5:1 system); role of individual players; team formation when serving; team formation when receiving; serve switching and penetration by the setter; setting up attack and block; defending attack and block.

## Rules

Knowledge of the rules of the discipline/sport and their application.

## 8. SOFTBALL/BASEBALL

Each candidate will be required to demonstrate all the skills listed below in a game situation:
(a) Skills
(i) Batting

- Grip: standard; choke grip.
- Batting: swing; bunts.
(ii) Pitching
- Baseball: slider; fast pitch; curve ball; drop ball; rise ball; change up; knuckle ball; screw ball.
- Softball: windmill; sling shot.
- Starting position: wind up; set.
(iii) Fielding
- $\quad$ Catching: basics to catch fly hits; rolling hits.
- Throwing: over arm; side arm.
(iv) Base running
- Base running: single; double; triple; home run.
- $\quad$ Sliding: bent leg slide; hook slide; head first slide.
(b) Tactics
(i) Defensive: pitchout; intentional walk; infield fly; pop fly coverage; cuts off and relays; rundown; double and triple play; signals.
(ii) Offensive: batting order; switch hitters; the bunt; sacrifice fly; stealing; hit and run; substitution.
(iii) Field set up and positions.


## Rules

Knowledge of the rules of the discipline/sport and their application.

## MARK SCHEME FOR PRACTICAL SKILLS

## (Paper 02-45 marks)

The assessment of practical skills for the ONE sport selected by the candidate shall be conducted onsite by an External Examiner appointed by the Council. The class teacher should submit the names of candidates and selected sports to the Ministry of Education or Local Registrar on the appropriate form.

The assessment criteria provided below are intended to assist the external examiners and teachers in awarding marks that are reliable assessments of the achievement of candidates.

| ELEMENTS ASSESSED | TOTAL MARKS | LEVELS OF PERFORMANCE | RANGE OF MARKS | MARKS GAINED |
| :---: | :---: | :---: | :---: | :---: |
| - Skills (Individual performance) | 12 | - Demonstrates advanced standards of performance using correct technique all of the time. <br> - Demonstrates proficient standards of performance using correct technique most of the time. <br> - Demonstrates partially proficient standards of performance using correct technique occasionally. <br> - Demonstrates low standards of performance not using correct technique. <br> - Unable to demonstrate the required skill/technique. | $\begin{gathered} 10-12 \\ 6-9 \\ 3-5 \\ 1-2 \\ 0 \end{gathered}$ |  |
| - Application of skills in a competitive situation | 11 | - Demonstrates advanced standards of performance using correct technique all of the time. <br> - Demonstrates proficient standards of performance using correct technique most of the time. <br> - Demonstrates partially proficient standards of performance using correct technique occasionally. <br> - Demonstrates low standards of performance not using correct technique. | $9-11$ $6-8$ $3-5$ $1-2$ |  |


| ELEMENTS ASSESSED | TOTAL MARKS | LEVELS OF PERFORMANCE | RANGE OF MARKS | MARKS GAINED |
| :---: | :---: | :---: | :---: | :---: |
|  |  | - Unable to demonstrate the required skill/technique in a competitive situation. | 0 |  |
| - Tactics: application in a competitive situation | 11 | - Demonstrates advanced standards of performance using appropriate tactics all of the time. <br> - Demonstrates proficient standards of performance using appropriate tactics most of the time. <br> - Demonstrates partially proficient standards of performance using appropriate tactics occasionally. <br> - Demonstrates low standards of performance using inappropriate tactics. <br> - Unable to demonstrate the required standard of performance and tactics. | $\begin{gathered} \hline 9-11 \\ 6-8 \\ 3-5 \\ 1-2 \\ 0 \end{gathered}$ |  |
| - Laws/Rules of the game/event and their application. | 11 | - Demonstrates advanced knowledge of the laws/rules of the game/event and their application all of the time. <br> - Demonstrates good knowledge of the laws/rules of the game/event and their application most of the time. <br> - Demonstrates moderate knowledge of the laws/rules of the game/event and their application occasionally. <br> - Demonstrates limited knowledge of the laws/rules of the game/event and their application. <br> - Unable to demonstrate knowledge of the laws/rules of the game/event and their application. | $9-11$ <br> 6-8 $3-5$ $1-2$ <br> 0 |  |
| TOTAL | 45 |  |  | 45 |

## - SCHOOL-BASED ASSESSMENT

## RATIONALE

The School-Based Assessment is an integral part of students' assessment in the Physical Education and Sport syllabus. It is intended to assist students in acquiring certain knowledge, skills and attitudes that are associated with the subject. The activities for the SBA are linked to the syllabus and should form part of the learning activities to enable students to achieve the objectives of the syllabus.

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

The SBA for the Physical Education and Sport syllabus is divided into two parts, namely, a Class Project and Practical Skills. The instructions provided in the syllabus are intended to assist teachers and students in selecting and completing these compulsory assignments of the syllabus. The assessment criteria provided are intended to assist teachers in awarding marks that are reliable estimates of the achievement of students on the SBA.

In order to ensure that the scores awarded by teachers are not out of line with CXC's standards, the Council will undertake the moderation of a sample of the Class Projects assessed by teachers.

## 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 re-assessed by CXC Examiners who moderate the School-Based Assessment. 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' assignment that are not submitted must be retained by the school until three months after publication by CXC of the examination results.

## CONDUCT AND ASSESSMENT OF CLASS PROJECT (30 MARKS)

The Class Project should take the form of an intramural event planned and conducted by the students themselves. Each student must take on the responsibilities of ONE role as an official (see roles listed below). Information collected on particular roles selected for study and students' written reflections on their respective roles should be included in a portfolio for assessment by the teacher. Suggested items to be included in the portfolio on Class Project are as follows:

1. information on event selected and role chosen, for example, rules of sport or event, competition formats, training schedules, correspondence, minutes of meetings, inventory, reports, competition results, DVDs and photographs;
2. reflections: students should also be encouraged to write brief reflections over the duration of the course, based on the items and experiences collected throughout the project.

## ROLES

## Competition Director

1. Ultimately responsible for the conduct of the event being planned.
2. Convenes a series of meetings with the organising committee to plan and execute the game/event.
3. Provides guidance and support to members of the organising committee in execution of their duties.
4. In conjunction with the committee, selects the format and decides on the characteristics of the competition -team sizes - roles- modifications for game/event.
5. Develops rules and procedures for dealing with anticipated problems.

## Competition Manager

1. Prepares a list of tasks for successful staging of events.
2. Primarily responsible for the conduct of the game/event on the day of competition.
3. Ensures that the decisions of the organising committee are executed.
4. Provides guidance and support to all officials involved in the event.
5. Liaises with Technical Manager to ensure successful organisation of facilities and equipment on competition day.

## Competition Secretary

1. Deals with all correspondence related to the planning, organisation and execution of the game/event.
2. Must be present at all meetings and prepare the minutes for those meetings.
3. Collects the scores from all games and writes up results to be given to the press official.
4. Coordinates the provision of awards and recognition of achievements.
5. Prepares press release for all events.

## Equipment Manager

1. Carefully follows the advice of the organising committee, setting up and return of equipment for games.
2. Keeps an inventory of the equipment that is needed for the execution of the game/event and be responsible for the return of the equipment to the storeroom.
3. Performs simple maintenance of equipment.
4. Investigates and compiles a report about any damage or loss of equipment and reports findings to the Competition Manager.
5. Responsible for maintaining a tidy and efficient equipment storeroom.

## Event Official

1. Responsible for officiating at games/events ensuring that the conduct of the competition is fair.
2. Prepares score cards and statistical sheets for the tournament.
3. Records and tabulates scores and statistics on each game.
4. Allows the game/event to flow by calling only essential stoppage.
5. Signals appropriately so that participants recognise his/her decision.

## Coach

1. Responsible for planning training sessions.
2. Responsible for tactical and technical decisions.
3. Monitors and evaluates team performance.
4. Liaises with Team Manager to organise training sessions.
5. Liaises with the Manager, Captain and other players to work out ways of improving the team's performance.

## Team Manager

1. Arranges and attends training sessions required.
2. Ensures availability of all equipment and facilities for training session and competition.
3. Addresses all concerns that may affect team members and the coaches' participation and performance at training and game/event.
4. Motivates players and coaches.
5. Represents the team at meetings.

## Sports Journalist

1. Designs promotional and information material for display.
2. Features sports personalities in newsletters and magazines.
3. Highlights and reviews interesting, funny or informative news from each week's fixtures and training sessions.
4. Interviews players or coaches at the end of a training session or game/event.
5. Highlights the upcoming week's game/event and reports on its execution and the status of the competition.

## First Aid Officer

1. Responsible for maintaining a first aid kit and applying first aid when required.
2. Liaises with relevant personnel to devise appropriate procedures in event of serious injuries.
3. Collates and distributes information related to care and prevention of sport injuries.
4. Writes up reports of accidents, detailing causes, injuries and suggested action for future prevention.
5. Identifies possible hazards or causes of injuries and reports them to the Competition Manager.

## ASSESSMENT OF THE CLASS PROJECT - Paper 03 (30 marks)

The assessment of the Class Project must be conducted by the class teacher. The assessment criteria provided below are intended to assist teachers in awarding marks that are reliable assessments of the achievements of students on the activity.

| ELEMENTS ASSESSED | MARKS | ASSESSMENT CRITERIA | MARKS | TOTAL MARK |
| :---: | :---: | :---: | :---: | :---: |
| CLASS PROJECT | 30 | Planning and Organising <br> - Effective leadership and knowledge initiative: <br> - consistently displays leadership, responsibility and initiative in planning and organising activities; <br> - occasionally displays initiative in planning and organising activities; <br> - $\quad$ seldom displays initiative in planning and organising activities. <br> Implementation <br> - Competent demonstration of selected role: <br> - consistently displays appropriate knowledge and skills; <br> - occasionally displays appropriate knowledge and skills; <br> - seldom displays appropriate knowledge and skills. | (6) <br> 5-6 <br> 3-4 <br> 1-2 <br> (6) <br> 5-6 <br> 3-4 <br> 1-2 | 18 |


| ELEMENTS ASSESSED | MARKS | ASSESSMENT CRITERIA | MARKS | TOTAL MARK |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Teamwork <br> - Contribution to overall success of the Class Project: <br> - consistently displays cooperation and involvement; <br> - occasionally displays cooperation and involvement; <br> - seldom displays cooperation and involvement. <br> Content <br> - Portfolio contains pertinent and accurate information related to selected role and general organisation of event. <br> - Portfolio contains information in a variety of formats (at least two, for example, hard copy, diskette, videotape/CD, photographs). <br> Organisation <br> - Portfolio contains a table of content. <br> - Portfolio contains a list of references. <br> - Content organised in a logical and presentable manner. | (6) <br> 5-6 <br> 3-4 <br> 1-2 <br> (9) <br> 6 <br> 3 <br> (3) <br> 1 <br> 1 <br> 1 | 12 |
| TOTAL | 30 | TOTAL |  | 30 |

The assessment of Practical skills for each Option must be conducted by the class teacher. The criteria provided below are intended to assist teachers in making reliable assessment of students' achievement in EACH of the three sports selected. This does not include Dance (see pages 44-45 for mark scheme for Dance).

MARK SCHEME FOR PRACTICAL SKILLS
(45 marks for EACH)

| ELEMENTS ASSESSED | TOTAL MARKS | LEVELS OF PERFORMANCE | RANGE OF MARKS | MARKS GAINED |
| :---: | :---: | :---: | :---: | :---: |
| Skills (Individual performance) | 12 | - Demonstrates advanced standards of performance using correct technique all of the time. <br> - Demonstrates proficient standards of performance using correct technique most of the time. <br> - Demonstrates partially proficient standards of performance using correct technique occasionally. <br> - Demonstrates low standards of performance not using correct technique. <br> - Unable to demonstrate the required skill/technique. | $\begin{gathered} 10-12 \\ 6-9 \\ 3-5 \\ 1-2 \end{gathered}$ |  |
| Application of skills in a competitive situation | 11 | - Demonstrates advanced standards of performance using correct technique all of the time. <br> - Demonstrates proficient standards of performance using correct technique most of the time. <br> - Demonstrates partially proficient standards of performance using correct technique occasionally. <br> - Demonstrates low standards of performance not using correct technique. <br> - Unable to demonstrate the required skill/technique in a competitive situation. | $\begin{gathered} 9-11 \\ 6-8 \\ 3-5 \\ 1-2 \\ 0 \end{gathered}$ |  |


| ELEMENTS ASSESSED | TOTAL MARKS | LEVELS OF PERFORMANCE | RANGE OF MARKS | MARKS GAINED |
| :---: | :---: | :---: | :---: | :---: |
| Tactics: application in a competitive situation | 11 | - Demonstrates advanced standards of performance using appropriate tactics all of the time. <br> - Demonstrates proficient standards of performance using appropriate tactics most of the time. <br> - Demonstrates partially proficient standards of performance using appropriate tactics occasionally. <br> - Demonstrates low standards of performance using inappropriate tactics. <br> - Unable to demonstrate the required standard of performance and tactics. | $9-11$ <br> 6-8 <br> 3-5 <br> 1-2 <br> 0 |  |
| Laws/Rules of the game/event and their application. | 11 | - Demonstrates advanced knowledge of the laws/rules of the game/event and their application all of the time. <br> - Demonstrates good knowledge of the laws/rules of the game/event and their application most of the time. <br> - Demonstrates moderate knowledge of the laws/rules of the game/event and their application occasionally. <br> - Demonstrates limited knowledge of the laws/rules of the game/event and their application. <br> - Unable to demonstrate knowledge of the laws/rules of the game/event and their application. | $9-11$ $6-8$ 3-5 <br> 1-2 <br> 0 |  |
| TOTAL | 45 |  |  | 45 |

MARK SCHEME FOR DANCE
(90 MARKS WEIGHTED TO 45 MARKS)


| Elements Assessed: | MARKS |  |
| :---: | :---: | :---: |
| DANCE APPRECIATION |  |  |
| - Type of dance | 3 marks |  |
| - Style of dance | 3 marks |  |
| - Number and gender of dancers | 3 marks |  |
| - Theme | 4 marks |  |
| - Dynamics | 3 marks |  |
| - Costume and accompaniment | 3 marks |  |
| - Structure and form | 3 marks |  |
| - Interpretation of elements | 8 marks |  |
|  |  | 30 MARKS |
| total |  | 90 MARKS |

## Note to the Teacher

To calculate the final mark, the candidates' total score should be divided by 2. For example, if a candidate gets 48 out of 90 , divide the 48 by 2 and enter 24 on the SBA form.

## 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 re-assessed by CXC Examiners who moderate the School-Based Assessment. 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' assignment that are not submitted must be retained by the school until three months after publication by CXC of the examination.

## - RESOURCE MATERIAL

Alexander, K. and Taggert, A.

Beashel, P., Taylor, J. and Sibson, A.

Bulger, S., Mohr, D., Rairigh, R., and Towsend, J.

Coe, E., Guest, V. and
Lawrence, J.

Douge Neate

Fountain, S. and Goodwin, L.

Gallagher, R., Fountain, S. and Gee, L.

Honeybourne, J., Hill, M. and Wyse, J.

Schmottlach, N. and McManama, J.

Siedentop, D. Hastie, P. and Van der Mars, H.

Speight, J.

Winnicle, J.

Sport Education in Physical Education Programme, Australian Sports Commission, 1995.

The World of Sport Examined, Gloucestershire: Nelson Thornes Limited, 2002.

Sport Education Seasons, United Kingdom: Human Kinetics, 2007.

Fundamentals of Health and Physical Education, London: Heinemann, 2008.

PE Essentials, Feltham Press, 1998.
P.E. to 16, Oxford: Oxford University Press, 2002.

Physical Education through Diagrams, Oxford: Oxford University Press, 1997.
P. E. for you, Gloucestershire: Nelson Thornes Limited, 1998.

The Physical Education Handbook, Massachusetts: Allyn and Bacon, 1997.

Complete Guide to Sport Education, United Kingdom: Human Kinetics, 2004.

Know the Game - Simple Gymnastics Activities, Yorkshire: E. P. Publishing Limited, 1976.

Adapted Physical Education and Sport, United Kingdom: Human Kinetics, 2010.

## - GLOSSARY

## WORD/TERM

annotat
apply
appraise
assess
calculate
classify
comment
compare
construct
deduce
define

## DEFINITION/MEANING

Add a brief note to a label.

Use knowledge/principles to solve problems.

To judge the quality or worth of.

Present reasons for the importance of particular structures relationships or processes

Arrive at the solution to a numerical problem.

Divide into groups according to observable characteristics.

State opinion or view with supporting reasons.

State similarities and differences.

Use a specific format to make and/or draw a graph, histogram, pie chart or other representation using data or material provided or drawn from practical investigations, build (for example, a model), draw scale diagram.

Make a logical connection between two or more pieces of information; use data to arrive at a conclusion.

State concisely the meaning of a word or term.
(Simple phrase or a few words only.)
(Make inferences/conclusions.)
(Compare the advantages and disadvantages or the merits and demerits of a particular relationship or process.)
(Steps should be shown; units must be included.)
(An explanation of the significance of each similarity and difference stated may be required for comparisons which are other than structural.)
(Such representations should normally bear a title, appropriate headings and legend.)
(This should include the defining equation/formula where relevant.)

| WORD/TERM | DEFINITION/MEANING |  |
| :---: | :---: | :---: |
| demonstrate | Show clearly by giving proof or evidence; direct attention to. |  |
| derive | To deduce; determine or extract from data by a set of logical steps some relationship, formula or result. | (This relationship may be general or specific.) |
| describe | Provide detailed factual information of the appearance or arrangement of a specific structure or the sequence of a specific process. | (Descriptions may be in words, drawings or diagrams or any appropriate combination. Drawings or diagrams should be annotated to show appropriate detail where necessary.) |
| determine | Find the value of a physical quantity. |  |
| design | Plan, and present with appropriate practical detail. | (Where hypotheses are stated or when tests are to be conducted, possible outcomes should be clearly stated and/or the way in which data will be analysed and presented.) |
| develop | Expand or elaborate an idea or argument with supporting reasons. |  |
| differentiate/distinguish (between/among) | State or explain briefly those differences between or among items which can be used to define the items or place them into separate categories. |  |
| discuss | Present reasoned arguments; consider points both for and against; explain the relative merits of a case. |  |
| draw | Make a line representation from specimens or apparatus that shows an accurate relationship between the parts. | (In case of drawings from specimens, the magnification must always be stated. A diagram is a simplified representation showing the relationship between components.) |
| estimate | Make an approximate quantitative judgment. |  |

WORD/TERM
evaluate
explain
find
formulate
identif
illustrate
investigat
justify
labe
list
measure
name

Note
observe

DEFINITION/MEANING
Weigh evidence and make judgments based on given criteria.

Give reasons based on recall; account for.

Locate a feature or obtain as from a graph.

To express in a formula or in a systematic manner.

Name or point out specific components or features.

Show clearly by using appropriate examples or diagrams, sketches.

Use simple systematic procedures to observe, record data and draw logical conclusions.

To prove a statement or claim true.

Add names to identify structures or parts indicated by pointers.

Itemise without detail.

Take accurate quantitative readings using appropriate instrument.

Give only the name of.

Write down observations.

Pay attention to details which characterise a specimen, reaction or change taking place; to examine and note scientifically.
(The use of logical supporting reasons for a particular point of view is more important than the view held; usually both sides of an argument should be considered.)
(No additional information is required.)
(Observations may involve all the senses and/or extensions of them, but would normally exclude the sense of taste.)

| WORD/TERM | DEFINITION/MEANING |  |
| :---: | :---: | :---: |
| plan | Prepare to conduct an exercise. |  |
| predict | Use information provided to arrive at a likely conclusion or suggest a possible outcome. |  |
| record | Write an accurate description of the full range of observations made during a given procedure. | (This includes the values for any variable being investigated where appropriate recorded data may be depicted in graphs, histograms or tables.) |
| relate | Show connections between; explain how one set of facts or data depend on others or are determined by them. |  |
| sketch | Make a simple freehand diagram showing relevant proportions and any important details. |  |
| state | Provide factual information in concise terms, omitting explanation. |  |
| suggest | Offer an explanation deduced from information or previous knowledge. | (No correct or incorrect solution is presumed but suggestions must be acceptable within the limits of scientific knowledge.) |
| suggest an hypothesis | Provide a generalisation which offers a likely explanation for a set of data or observations. |  |
| test | To find out by following set procedures. |  |

## CARIBBEAN EXAMINATIONS COUNCIL

Caribbean Secondary Education Certificate®


# PHYSICAL EDUCATION AND SPORT 

## Specimen Papers and Mark Schemes/Keys

Specimen Papers:

Paper 01, Section A Paper 01, Section B

Mark Schemes and Keys:
Paper 01, Section A
Paper 01, Section B

TEST CODE $\mathbf{0 1 2 5 2 0 1 0}$

## FORM 01252010/SPEC/2011

## CARIBBEAN EXAMINATIONS COUNCIL SECONDARY EDUCATION CERTIFICATE EXAMINATION PHYSICAL EDUCATION AND SPORT - General Proficiency SPECIMEN PAPER <br> Paper 01 - SECTION A <br> READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

1. This test consists of 45 items. You will have 60 minutes to answer them.
2. 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.
3. 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
As an athlete it is important to increase one's vital capacity as there will be

## Sample Answer

(A) (B) (C)
(B) more oxygen intake
(C) less carbon dioxide released
(D) more carbon dioxide released

The best answer to this item is "more carbon dioxide released", so answer space (D) has been shaded.
4. There will be a 10 -minute break at the end of Section A, after the invigilator has collected this paper.

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

Copyright © 2010 Caribbean Examinations Council
All rights reserved.

1. The Olympic games originated as a religious festival in
(A) Greece
(B) Egypt
(C) Italy
(D) China
2. Which female Olympian from the Englishspeaking Caribbean has won the HIGHEST number of medals in the Olympic Games?
(A) Cydonie Mothersill
(B) Debbie Ferguson
(C) Veronica Campbell
(D) Merlene Ottey
3. Which Summer Olympics was affected by student riots?
(A) 1948-London
(B) 1964-Tokyo
(C) 1968-Mexico City
(D) 1992-Barcelona
4. In which city was the Olympic stadium dubbed the 'Bird's Nest'?
(A) 1996-Atlanta
(B) 2000-Sydney
(C) 2004-Athens
(D) 2008-Beijing
5. Which of the following events are held every two years?
I. CARIFTA
II. CAC Championships
III. World Athletic Championships
IV. Pan American Games
(A) I and II only
(B) I and III only
(C) II and III only
(D) III and IV only
6. The integumentary system consists of
(A) pancreas, hair and brain
(B) hair, nails and skin
(C) nails, sweat and blood
(D) hair, blood and brain
7. When exposed to sunlight, our skin manufactures
(A) Vitamin A
(B) Vitamin B
(C) Vitamin C
(D) Vitamin D
8. Which of the following nutrients helps to repair muscle damage?
(A) Fat
(B) Protein
(C) Mineral
(D) Carbohydrate
9. Heat loss is associated with
I. the movement of heat directly through the skin
II. radiation from dilated blood vessels
III. the secretion of sweat
(A) I and II only
(B) I and III only
(C) II and III only
(D) I, II and III
10. Which of the following athletes is MOST likely to have more fast twitch muscle fibres?
(A) 100 m runner
(B) 1500 m runner
(C) Marathon runner
(D) Long distance swimmer
11. Which of the following is the correct sequence for the process of digestion?
(A) Oesophagus, small intestines,
stomach
(B) Oesophagus, stomach, small intestines
(C) Oesophagus, anus, small intestines
(D) Stomach, oesophagus, anus
12. Which of the following structures prevents food from entering the lungs?
(A) Larynx
(B) Stomach
(C) Epiglottis
(D) Oesophagus
13. In humans, the purpose of cartilage is to
(A) keep bones cool
(B) attach bones to muscles
(C) stop bones from growing long
(D) protect the ends of the bones where they meet
14. Sugar is stored as glycogen in the
(A) gall bladder
(B) pancreas
(C) stomach
(D) liver
15. Which of the following processes is NOT a function of the digestive system?
(A) Ingestion
(B) Absorption
(C) Inspiration
(D) Mastication
16. Which of the following are functions of the nervous system?
I. Allows us to be aware of our surroundings
II. Provides us with the ability to think and act
III. Allows us to control and coordinate movement
(A) I and II only
(B) I and III only
(C) II and III only
(D) I, II and III
17. When direct light shines into Peter's eyes, his pupils dilate. This is called
(A) a reflex action
(B) a normal action
(C) a chain reaction
(D) an automatic reaction
18. The parts of a neurone are
(A) nucleus, synapse, axon
(B) nucleus, synapse, dendrite
(C) dendrite, axon, synapse
(D) dendrite, axon, nucleus
19. Which of the following is NOT associated with the excretory system?
(A) Kidney
(B) Homeostatasis
(C) Tidal capacity
(D) Osmoregulation
20. Which of the following is NOT a feature of the spinal cord?
(A) Transmits messages to and from
our brain
(B) It is enclosed in vertebral column
(C) It is flexible
(D) It consists of bones
21. Which of the following identifies a chamber of the heart?
(A) Front atrium
(B) Left ventricle
(C) Back atrium
(D) Front ventricle
22. In the RICE procedure, what does the letter ' R ' stand for?
(A) Resuscitate
(B) Remove
(C) Renew
(D) Rest
23. Unconsciousness, disorientation and memory loss following a blow to the head are ALL symptoms of
(A) cramps
(B) contusion
(C) concussion
(D) compound fracture
24. Strained muscles may be caused by
(A) over-stretching
(B) wearing tight gear
(C) exercising too soon after eating
(D) drinking insufficient water during exercise
25. A sprain may be defined as
(A) a bone pulled from its normal position
(B) ligament damage at a joint
(C) damage to the tendon
(D) bones rubbing at the joints
26. Specific fitness is the ability of the body to carry out set tasks effectively and efficiently. Which of the following is NOT an aspect of specific fitness?
(A) Agility
(B) Flexibility
(C) Coordination
(D) Speed and reaction
27. Which of the following activities BEST displays the fitness component of power?
(A) Throwing the javelin
(B) Tug of war
(C) Marathon
(D) Skipping
28. People are usually at their fittest at about
(A) 10-19 years
(B) 20-29 years
(C) 30-39 years
(D) 40-49 years
29. Which of the following are considered when assessing fitness?
I. Age
II. Equipment
III. Environment
(A) I and II only
(B) I and III only
(C) II and III only
(D) I, II and III
30. Which of the following factors must be considered when designing training programmes?
I. Weight
II. The particular sport
III. A specific level of ability
IV. An individual or group
(A) I, II and III only
(B) I and II and IV only
(C) II, III and IV only
(D) I, II, III and IV
31. Which of the following procedures must be followed in conducting training sessions?
(A) Pre-competition, competition, recovery
(B) Warm up, main activity, cool down
(C) Warm up, recovery, main activity
(D) Pre-competition, main activity, cool down
32. Which of the following would facilitate a stable posture?
I. Feet close together
II. Feet shoulder width apart
III. Body in upright position
IV. Body in half-squat position
(A) I and III only
(B) II and III only
(C) II and IV only
(D) III and IV only
33. The falling of one's body temperature below $35{ }^{\circ} \mathrm{C}$ is called
(A) hyperthermia
(B) hypotrophy
(C) heat exhaustion
(D) hypothermia

Item 34 refers to the diagram of the muscles of the human arm.

34. The muscular contraction shown in the diagram above is
(A) isometric
(B) isotonic concentric
(C) isotonic eccentric
(D) isokinetic
35. A sport injury can be any injury caused to a sport person whilst in action. These injuries can be classified as
I. overuse
II. chronic
III. acute
(A) I only
(B) II only
(C) I and II only
(D) II and III only
36. Sports persons need a balanced diet to keep healthy. A balanced diet is one which
(A) matches your energy needs
(B) uses equal portions of food
(C) provides equal amounts of nutrients
(D) contains a lot of fruit and vegetables
37. We should include fibre in our daily diet because it
I. makes us feel full longer
II. helps prevent constipation
III. reabsorbs water
IV. removes poisonous waste
(A) I and II only
(B) I and III only
(C) II and III only
(D) II and IV only
38. Jane is a netballer who does not eat meat. Which of the following combinations is a good replacement for meat?
(A) Fish, peas, pasta and eggs
(B) Beans, lentils, nuts and eggs
(C) Nuts, bananas, beans and milk
(D) Pasta, rice, nuts and bananas
39. Water is an essential agent for the many processes that keep us alive. Which of these statements is NOT true of water? It helps to
(A) suppress appetite
(B) maintain muscle tone
(C) remove waste and toxins
(D) prevent dehydration
40. Which of the following is NOT an eating disorder?
(A) Binging
(B) Anorexia
(C) Obesity
(D) Bulimia
41. What is the role of most Caribbean governments in sport?
(A) Hosting national leagues
(B) Supporting national sport
(C) Selecting national athletes
(D) Organizing coaching courses
42. Which of the following is the MOST appropriate way to address violence in sports?
(A) Ban competitions that give financial awards
(B) Educate athletes, coaches and spectators about the value and purpose of sport
(C) Limit the number of spectators at sporting events
(D) Increase the price of tickets for games
43. How do the mass media support the development of sport?
I. Exposing the private lives of professional athletes
II. Covering games for the wider audience
III. Increasing financial support from media rights and advertising
IV. Promoting positive values such as team spirit
(A) I and II only
(B) II and III only
(C) I, II and III only
(D) II, III and IV only
44. A professional footballer may use a banned substance if
(A) it is taken as medication prescribed by a doctor
(B) he/she stops using it at least one week before the competition
(C) he/she is not representing the national team
(D) it is part of his religious or cultural practice
45. Which of the following games cater for persons with physical disabilities?
I. Paralympics
II. Winter Olympics
III. Special Olympics
IV. Summer Olympics
(A) I and II only
(B) I and III only
(C) I and IV only
(D) I, II, III and IV

CARIBBEAN EXAMINATIONS COUNCIL

CARIBBEAN SECONDARY EDUCATION CERTIFICATE

PHYSICAL EDUCATION AND SPORT

PAPER 01, SECTION A

KEY

## CARIBBEAN EXAMINATIONS COUNCIL SECONDARY EDUCATION CERTIFICATE EXAMINATION

## PHYSICAL EDUCATION AND SPORTS

SPECIMEN PAPER 2011

| Item No. | Key |
| :---: | :---: |
| 1 | A |
| 2 | D |
| 3 | C |
| 4 | D |
| 5 | C |
| 6 | B |
| 7 | D |
| 8 | B |
| 9 | D |
| 10 | A |
| 11 | B |
| 12 | C |
| 13 | D |
| 14 | D |
| 15 | C |
| 16 | D |
| 17 | A |
| 18 | D |
| 19 | C |
| 20 | D |
| 21 | B |
| 22 | D |
| 23 | C |


| Item No. | Key |
| :---: | :---: |
| 24 | A |
| 25 | B |
| 26 | B |
| 27 | A |
| 28 | B |
| 29 | B |
| 30 | D |
| 31 | B |
| 32 | C |
| 33 | D |
| 34 | B |
| 35 | D |
| 36 | A |
| 37 | D |
| 38 | B |
| 39 | A |
| 40 | C |
| 41 | B |
| 42 | B |
| 43 | D |
| 44 | A |
| 45 | B |

TEST CODE 01252010/SPEC

## FORM TP 01252010/SPEC/2011

CARIBBEAN EXAMINATIONS COUNCIL SECONDARY EDUCATION CERTIFICATE EXAMINATION PHYSICAL EDUCATION AND SPORT

GENERAL PROFICIENCY

## SPECIMEN PAPER

Paper 01 - Section B
$11 / 2$ hours

## READ THE FOLLOWING INSTRUCTIONS CAREFULLY

1. This paper consists of FIVE questions.
2. Answer ALL questions.
3. Write your answers in the answer booklet provided.
4. Each question is worth nine marks.

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

Copyright © 2010 Caribbean Examinations Council All rights reserved.

## SECTION B

## Answer ALL questions. <br> Write your answers in the answer booklet provided.

## History and Development of Physical Education (PE) and Sport

1. (a) Physical Education and Sport in ancient times served specific purposes in the lives of the people who practised the various sports.

State THREE purposes served by PE and Sport in ancient times.
(b) As captain of your school's Sports Club, you have been asked to make a speech at the school's orientation for new students about the benefits of physical education and sport to young people.

Discuss THREE of these benefits that you would include in your speech.
(6 marks)
Total 9 marks

## Anatomy and Physiology

2. In a game of cricket Hans throws a ball to Mark.
(a) Name THREE bones in Hans' upper limb which would enable the throw.
(b) Name TWO types of joints involved in the process of throwing the ball.
(c) Describe the difference in the movement produced by the joints named in (b) above.

## Fitness and Performance

3. The sportsman in Figure 1 is performing an exercise with the edges of his palms pressed against the frame of his bedroom door.


FIGURE 1: Diagram showing a sportsman pressing the edges of his palms against a door frame
(a) What name is given to the type of exercise that the sportsman is performing with his hands?
(b) What role is the door frame performing in the exercise?
(c) Explain the reactions in the biceps and triceps as the sportsman
(i) presses against the frame
(ii) stops pressing and relaxes his hands
(d) State ONE advantage and ONE disadvantage of this type of exercise

## Health and Nutrition

4. On joining the school's football team, Joe has been told by the coach to eat more energy-giving foods.
(a) Suggest TWO foods that can provide a lot of energy
(b) Joe undergoes very strenuous training sessions, and his muscles need to recover through the intake of a particular nutrient.
(i) Identify the nutrient which would help Joe's body to repair itself. (1 mark)
(ii) Suggest TWO foods which contain this nutrient.
(iii) Justify why Joe must consume this nutrient daily.

Total 9 marks

## Trends and Social Issues

5. (a) Explain THREE ways in which the mass media can help to promote physical education and sports in the Caribbean.
(b) Suggest THREE ways in which the mass media could affect sports NEGATIVELY through their activities.

Total 9 marks

01252010 /K/MS / 2011

## CARIBBEAN EXAMINATIONS COUNCIL HEADQUARTERS

## SECONDARY EDUCATION CERTIFICATE <br> EXAMINATION

## PHYSICAL EDUCATION AND SPORT

## PAPER 01 Section B <br> SPECIMEN PAPER

```
KEY AND MARK SCHEME
```

```
PHYSICAL EDUCATION AND SPORT
    PAPER 01 Section B
    KEY AND MARK SCHEME
```

1 (a)

1 (b)

2 (a)

- Humerus
- Radius
- Ulna
- Metacarpals
- Carpals
- Phalanges

1 mark each for any $3=3$

## marks

2 (b)

- Hinge
- Ball and Socket
- Condyloid
- Glyding


## 1 mark each $=2$ marks

- The ball and socket joint undergoes rotation and abduction/adduction. This allows Hans to swing his arm when throwing the ball.
- The hinge joint undergoes flexion and extension. This allows for the hand to be extended when throwing the ball, and pulled back when the action is completed
- The Condyloid joint allows abduction and adduction, allowing flexion and extension and accuracy
- The Gliding joint allows little movements in all directions allowing for stability and accuracy in direction.

```
PHYSICAL EDUCATION AND SPORT
    PAPER 01 Section B
    KEY AND MARK SCHEME
```

3 (a) Isometric exercise 1 mark
3 (b) Immovable resistance
1 mark
3(c) (i) Pressing
The biceps muscles expand and the triceps muscles contract, generating the force which facilitates the push.
(ii) Releasing

The biceps muscles contract and the triceps muscles
expand. This causes the hand to lose pushing power. The hand then falls into a free position.

Bold words - 1 mark each if used correctly; 1 mark for any underlined comment $=5$ marks

3 (d) Advantage
Requires no specialized equipment
Can be undertaken at no extra financial cost to the sportsman
Can be undertaken in the sportsman's home at his/her leisure

1 mark for any one point
Disadvantage
Strength is developed only at a specific joint angle and not throughout the entire range of motion

1 mark

4 (a) Yam
Flour
Bread
Rice
Any other correct answer
1 mark each for any $2=2$ marks
4(b) (i) Protein
1 mark
4(b) (ii) Meat
Liver
Fish
Peas, beans, legumes, soy
Any other correct answer
1 mark each for any $2=2$ marks


5 (a)

- Media coverage promotes sport. People learn a sport and may want to try it out.
- The media help to educate and inform sports fans, which is healthy for sport.
- TV programmes, videos and books can help you learn and improve your sports skills.
- The media highlights the achievements of sport stars who inspire young athletes and act as role models for them.
- A sport with a lot of media coverage (especially TV) finds it easier to get sponsorship.

2 marks EACH for any 3 full explanations $=6$ marks (1 mark EACH for any 3 partial explanations)

5 (b)

- The media put extra pressure on managers and captains to get results. They may be hounded out of their jobs if they fail.
- Sports stars lose privacy. Their private lives get reported on, causing disaffection to the sportsman at times.
- A sport may get too much exposure, such as in football to the discomfort of non- lovers of the particular sport.
- The media may over-sensationalize sports news and events to attract more viewers or readers. This may be a form of social exploitation.
- Sports that get little or no media attention find it very difficult to attract sponsorship.

1 mark for any one point
$1 \times 3$ = 3 marks

Total 45 marks

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

JUNE 2005

## PHYSICAL EDUCATION AND SPORT

# PHYSICAL EDUCATION AND SPORT <br> GENERAL PROFICIENCY EXAMINATION <br> 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 performanceenhancing 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 ergonometer 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.

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

MAY/JUNE 2006

PHYSICAL EDUCATION AND SPORT

## PHYSICAL EDUCATION AND SPORT

## GENERAL PROFICIENCY EXAMINATION

## MAY / JUNE 2006

## General Comments

The Chief Examiners would like to express our appreciation to the Physical Education teachers in the region for contributing to the success of the Caribbean Examinations Council's Caribbean Secondary Education Certificate General Proficiency Examination in Physical Education and Sport. As predicted on the occasion of the inaugural offering of this subject at CXC, there has been considerable growth in this the second sitting. This growth is attributable to the work of the teachers in the region and the support they have received from the educational institutions in which they serve.

In May/June 2006, Physical Education and Sport had its second examination paper with approximately 1015 candidates. We expect the numbers to continue to increase as the relevance of Physical Education and Sport to regional development is recognised more widely.

## Paper 01

The performance of the candidates in Paper 01 this year was generally satisfactory. Candidates in Physical Education have shown some growth in the understanding of the demands of the syllabus. However, there remains the challenge of integrating the theory with the lived experiences of the candidates to enable them to demonstrate a deeper understanding of the syllabus contents and objectives.

## Paper 02

From the samples of the evaluations on the Sport-specific Practical (Paper 02) it is apparent that the candidates mastered the skills of the chosen Sports and were graded accordingly. Few discrepancies were evidenced between the grades awarded by the External Examiners and those of the Physical Education teachers. According to the reports from the External Examiners the physical arrangements for the practical exams were adequate.

There remains however, the issue of accountability for the Mark sheets, as for many of the schools the official feedback sheets from the teachers were either not submitted or submitted with incomplete information. In completing the relevant forms, teachers should take great care in their responses, as the information provided is critical to the success of the standardization process and to ensuring that the students are not disadvantaged.

## Paper 03 - School-Based Assessment

The Moderation process for the School-Based Assessment is presently limited by the distribution of marks. As Moderation of this section is only concerned with the elements of content and organization, the teachers must take great care in the assignment of marks awarded for the elements of planning and organization, implementation and teamwork. Teachers' marking continued to demonstrate great leniency even in cases in which it was clear that candidates did not fully understand the requirements of the task.

Many portfolio samples submitted were of an excellent standard. They contained pertinent and accurate information related to the selected role as required by the syllabus. The more successful candidates presented their information in a variety of formats and these portfolios were well organized in a logical and presentable manner. However, there were too many portfolios that did not conform to syllabus requirements. There was
evidence that in some schools the requirement for the realisation of an event as a major project and the adequate reporting of the roles of the students in the hosting of this event was not fully understood. As in the first sitting, teachers awarded lenient marks in cases where sometimes the role of the student was not explained. For some schools, no event was organised, and the samples submitted were not reports on the project. The teachers, therefore, should ensure that learning experiences for the candidates are designed to meet the objectives set out for Paper 03.

Teachers must ensure that candidates are guided in the approved methodologies and guidelines for the research of information to ensure that the correct lessons are learnt from this process. It is imperative that the importance of crediting the sources of information is emphasised. Too many cases of direct downloads of information from internet sources without filtering for authenticity, relevance and adequate referencing have arisen in the samples.

## Detailed Comments

## Paper 01 - General Proficiency

This paper was presented as Section A and Section B with a total of 17 compulsory items of which 12 are placed in Section A. This year the candidates generally showed an improvement in the use of terminology related to the subject and thus were able to provide more appropriate responses to the questions. Challenges were noted in the items that demanded application and analysis while it is evident that the candidates were able to master most of the items targeted at recall of information.

## SECTION A

## History and Development of Physical Education and Sport

## Question 1

This question required that the students demonstrated awareness of the current issues of the anti-doping movement and the social benefits of sport. Candidates' responses to the naming of the World Anti-Doping Agency (WADA) revealed a lack of familiarity with this worldwide movement that is topical and relevant to all Olympic Sports. However, candidates were able to very competently identify the social benefits of sport.

## Question 2

Candidates experienced difficulty with giving details of the sporting exploits of Merlene Ottey in order to explain why she is considered to be an outstanding female Olympian. Few candidates were able to earn full marks on this question.

## Anatomy and Physiology

## Question 3

This question was well answered by the majority of candidates. While many candidates were able to define "flexion", many were not able to define the term "extension" adequately.

## Question 4

The candidates answered this question very well. The level of difficulty was low and students were able to identify the chambers of the heart.

## Question 5

Of the candidates registered, approximately 1010 attempted this question. Full marks were awarded to $52 \%$ of the candidates and only $5 \%$ failed to score. Candidates were able to easily complete the matching of scientific names for aspects of the skeletal system .

## Fitness and Performance

## Question 6

Students experienced difficulty in explaining the Principle of Overload with only three candidates scoring full marks for this item. The application of this principle is basic to the development of fitness and the improvement of performance and it was predicted that the performance in this question would have been stronger. The responses revealed a common confusion between the terms Overload (which is desirable in fitness and performance preparation), and Overtraining, which is harmful and ought to be avoided.

## Question 7

This question was generally well answered with approximately $70 \%$ of the candidates receiving marks for their responses. Candidates seemed to understand the measures necessary for the prevention of heat-related conditions and brought their experiences to bear on their responses to this question.

## Question 8

Of the candidates examined, $68 \%$ were awarded full marks for this question. Candidates competently identified injuries sustained in sport and only $5 \%$ failed to earn marks on the question.

## Health and Nutrition

## Question 9

Candidates were able to define the term 'nutrients' and give the reasons for controlling body fat. However, there were very few candidates who were able to identify the 'skinfold caliper' as the instrument often used to measure body fat.

## Question 10

This question was well answered as only thirty-two candidates failed to score marks for their responses. Candidates were able to provide adequate explanations of the reasons for the avoidance of a heavy meal before an exercise routine is attempted.

## Question 11

In this question candidates were asked to provide two examples of behaviour that demonstrate sportsmanship in the field of sport. Although 962 candidates attempted the question, as in the previous year when a question included the use of this term, fewer than expected were able to provide the examples. Some candidates gave examples of 'gamesmanship', a related concept that has negative connotations. The use of the term 'fair play' is promoted by some world governing bodies for sport and might have elicited the desired response.

## Question 12

Candidates were generally able to provide an example of the use of technology in sport but were not able to explain how technology has been used to enhance sport performance. The answers indicated that the term 'enhance performance' is interpreted in the sense of the use of banned performance-enhancing substances.

## SECTION B

## History and Development of Physical Education and Sport

## Question 13

Overall the response of candidates to this question was satisfactory. Part (a) of this question was well answered identifying Athens, Greece as the site of the first Olympic Games.

Part (b) of this question was moderately well understood. Candidates were able to provide the functions of the governing bodies for the sport of their choice.

However, for Part (c) candidates experienced difficulty identifying the flow chart of the relationships among world, regional, national and local entities governing a specific sport.

## Anatomy and Physiology

## Question 14

In Part (a) of this question, candidates were able to identify the functions of the skeleton with little difficulty.
Part (b) of this question was also answered well. Candidates demonstrated a clear understanding of the characteristics of fast twitch and slow twitch muscle fibre types. Although this aspect of the question posed some difficulty, Part (c) of this question was satisfactorily answered, as a large number of the candidates were able to explain the effects of aerobic training on the heart and circulatory system.

## Question 15

Generally this question was well answered. As predicted, Parts (a) (i)and (a) (ii) were challenging and candidates gave brief answers on the energy systems and their advantages.

In Part (b), candidates were able to suggest reasons for the decline in performance with increased age and provided interesting opinions on this phenomenon. In Part (c), candidates competently described the symptoms of dehydration.

## Health and Nutrition

## Question 16

Overall performance on this question was satisfactory. Part (a) of this question was very well answered as candidates showed familiarity with the components of a healthy lifestyle. Part (b) of this question in which candidates were expected to have been able to identify the minerals needed in the stage of puberty was satisfactorily answered. Part (c) of this question proved to be more challenging and candidates were very creative in their responses. It was noted that although this question held great salience to the stage of development of the candidates, they found difficulty in identifying the factors affecting their own nutritional needs. On reflection, this type of question required that candidates in their interaction with their teachers need guidance in understanding the application of theory to their lived experience.

## Social Issues

Question 17
The performance in this question was below the required standard. There were no instances in which the candidate received full marks and it is clear that not all candidates were able to complete this final question in the examination. It is possible that time constraints were operational in candidates' failure in this question. In part (a), candidates' responses indicated that they did attempt the question but found difficulty in differentiating the social and physical adjustments that could be made to facilitate the participation of persons with disabilities in sport. In Part (b), candidates consistently identified specific events for persons with disabilities but were unable to provide the names of regional or international sport competitions for persons with disabilities. Candidates did not make distinctions between regular competitions and those for special populations. It is unclear whether the use of the word 'tournament' would have elicited the required response, or whether there is little awareness of competitions such as 'Special Olympics', and 'Paralympic Games'. In Part (c), many candidates attempted but were not able to identify 'THG' as the recently banned performance-enhancing substance or 'Balco' as the company that was involved in the highly publicised Doping scandal. The Mark Scheme was adjusted so that in cases in which the candidates provided other names of banned substances these were accepted.

## Recommendations:

1. Teachers should continue to integrate the theory into the practical preparation of students by using the terminology to refer to body parts and means of training. Energy systems targeted should be identified when the practical and sport specific activities are assigned.
2. Teachers should become thoroughly familiar with the syllabus in order to ensure that they are able to guide their students towards work that fulfils the stated objectives, especially for the SchoolBased Assessment. For the SBA's students must select an event, must choose a role to be carried out and record the entire procedure in their portfolios for assessment. In addition to the summary of the event, students should be encouraged to write brief reflections over the duration of the course. Through these reflections students will share what the experiences meant to them and state the effects that the project had on them.
3. Teachers should focus on the application aspect of the Fitness and Performance section of the syllabus. Teachers are reminded that there may be few opportunities to consolidate the knowledge gained in the integrated study of energy production, fitness components and appraisal and other aspects specific to Physical Education and Sport Science. Some of the concepts may need special attention in order to promote this knowledge and the skills that contribute to the lifetime fitness and performance of the candidates.
4. All 17 questions in Paper 01 are compulsory. Teachers should encourage students to attempt all questions, as marks may be earned for each subsection thus contributing to success in the examination.
5. Students should be encouraged to research Caribbean sports history and social issues and pay attention to current affairs as reported in the news media. Teachers should guide students to reference materials used in their project (Paper 03) in the approved format, and to use their own words to integrate researched information. Teachers should ensure that students do not plagiarise the work of other persons and that they present original and individual portfolios at the end of their group project.
6. Teachers should ensure that the forms for the Assessment of the Class Project are completed carefully, and that for each sample submitted, the allocation of marks for each component is clearly noted according to the requirements of the syllabus.

## CARIBBEAN EXAMINATIONS COUNCIL

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

MAY/JUNE 2007

## PHYSICAL EDUCATION AND SPORT

Copyright © 2007 Caribbean Examinations Council ®
St Michael, Barbados
All rights reserved.

## PHYSICAL EDUCATION AND SPORT

## GENERAL PROFICIENCY EXAMINATION

MAY / JUNE 2007

## General Comments

There has been a significant increase (100\%) this year in the number of candidates sitting the Caribbean Secondary Education Certificate General Proficiency Examination in Physical Education and Sport. In fact, since the inaugural offering of this subject, there has been 100 per cent growth each year.

Approximately 495 candidates sat the examination in 2005, 1015 in 2006 and 2167 in 2007. It is expected that there will be continued growth in the number of candidates sitting this examination. The Physical Education teachers in the region are to be congratulated for contributing to this great success.

## Paper 01

In 2007, candidates performed better on Section B as the responses were more clearly explained than those in Section A. Candidates seemed to have found the historical questions in both sections challenging. All teachers of the subject are encouraged to acquire the relevant books with areas dealing with the history of sports, and to do research on the past, present and future happenings of sport locally, regionally and internationally.

Technical and scientific terminologies should be used in teaching so that candidates will become more familiar with these. For example, candidates were asked to state one component of fitness being tested in each of the Figures 1.1 and 1.2. Many candidates responded by saying "abs" or "strengthening abs" instead of the more acceptable phrase which is "endurance or strength of the abdominal muscles".

## Paper 02

Candidates seemed to have mastered the skills of their chosen sports. The External Examiners should continue to be vigilant in awarding grades as few discrepancies were noted between their grades and those of the teachers. Greater care must be exercised in completing the mark sheets. Too many of the schools did not submit the requested information.

## Paper 03 - School-Based Assessment

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

The marks awarded were very generous even when it was evident that candidates did not fully understand the requirements of the task.

The samples of the portfolios that were submitted have improved. Many were of an excellent standard, however, it was noted that too many of them did not conform to syllabus requirements.

Candidates need to be guided in the approved methodologies and guidelines for the research of information. This will ensure that they understand the process and ultimately learn from the experience.

## DETAILED COMMENTS

## Paper 01

## SECTION A

## History and Development of Physical Education and Sport

## Question 1

In Part (a), candidates were asked to name the city that won the bid to host the 2012 Summer Olympic Games. The responses named the country that would host the Summer Olympic Games rather than the city. The performance in this question was below the required standard.

In Part (b), candidates were required to state the reasons why Coubertin revived the Olympic Games. The performance was satisfactory.

## Question 2

Candidates had no difficulty identifying three benefits of studying Physical Education as a subject in schools since the syllabus itself states clearly the various career choices. Many candidates earned full marks. Few candidates found the question difficult.

## Anatomy and Physiology

## Question 3

Candidates were asked to list two functions of the circulatory system in physical activity. The responses from candidates showed a great understanding of the functions of this system in physical activity.

## Question 4

In this question, candidates presented appropriate answers in describing two effects of the build-up of lactic acid in muscles. Only a few candidates suggested that the build-up of lactic acid could have a positive effect.

## Question 5

This question was well answered with only a few candidates giving answers for the muscular system instead of the skeletal system.

## Fitness and Performance

## Question 6

Candidates were generally able to name two components of skill-related fitness. Only a few singled out endurance as one component of skill-related fitness and this response was accepted.

## Question 7

Few candidates were able to identify one component of fitness being tested in each of Figure 1.1, sit-ups and Figure 1.2, 10 m shuttle. The question was answered satisfactorily. Too many candidates used the colloquial term "abs" or "abdomen" for the correct response to Figure 1.1, which should have been "strength or endurance of abdominal muscles". Candidates must avoid the use of colloquial expressions.

## Question 8

Candidates were asked to define the term "open skills and the environment" in Part (a). Although a part of the question "... and the environment" provided a clue, many candidates were challenged in expressing the meaning very well.

In Part (b), however, it was evident that candidates had knowledge of the topic as fairly good examples were presented.

In Part (c), candidates were again challenged in presenting the expected responses. Responses encompassing any brain structure as well as the information processing system of input, decision-making, output and feedback were credited.

## Health and Nutrition

Question 9

Candidates were asked to give three reasons why a banana is a better choice than sweets as a snack for an athlete. This was answered appropriately.

## Question 10

Candidates were able to state well, two nutritional guidelines an athlete should follow to remain healthy.

## Social Issues

## Question 11

Candidates were able to identify three benefits for a sponsor in supporting sports. The majority of candidates scored full marks for this question.

## Question 12

Candidates were able to provide two ways in which the media can have a positive effect on sports.

## SECTION B

## History and Development of Physical Education and Sport

## Question 13

Overall the response to this question was weak as candidates could not identify one outstanding incident which occurred in any three of the four summer Olympic Games, namely:

| 1936 | - | Berlin |
| :--- | :--- | :--- |
| 1968 | - | Mexico |
| 1972 | - | Munich |
| 1980 | - | Moscow |

Part (b) of this question also proved challenging as responses were below average. Many candidates were not familiar with the various periods from Ancient Greece, through the 1900s, to the present.

Part (c) of this question was well answered as candidates named successfully three responsibilities of the local governing body of a sport.

## Anatomy and Physiology

## Question 14

In Part (a), candidates were asked to explain three functions of the nervous system in the production of skilled movement. The majority gave good responses such as "sending messages to the brain", but did not explain how, or "it co-ordinates movements of the body", but never explained how this works.

In Part (b), the majority of candidates gained full marks.
In Part (c), very few candidates scored zero as the majority gained full marks for recommending two ways of taking care of a cut to the skin.

## Fitness and Performance

## Question 15

Overall, candidates performed fairly satisfactorily on this question.
In Part (a), candidates were asked to state two immediate effects of exercise. Only a few presented long-term benefits.

On the other hand, candidates responded well in Part (b) when asked to identify four long-term benefits of exercise.

In Part (c), many candidates were unable to explain very well the meaning of the acronym R.I.C.E. which represents Rest, Ice, Compression, Elevation. Few received full marks.

In Part (d), candidates were asked to suggest two differences between the muscle fibres of a world-class sprinter and those of a marathon runner. Candidates' responses were quite satisfactory.

## Health and Nutrition

Question 16

Part (a) of this question drew various responses as candidates explained three factors that could affect the energy or calorie needs of an individual. Credit was awarded for diet as an aspect of healthy lifestyle. The majority of candidates scored no more than three marks. Very few candidates received full marks.

In Part (b), candidates were not always able to give three reasons for including fibre in the daily diet. A few candidates earned two marks while a small number earned full marks.

In Part (c), candidates named satisfactorily three foods that are rich in fibre. Although a fair number of candidates earned full marks, too many earned zero marks.

## Social Issues

## Question 17

Candidates performed quite well as the responses were considered quite good. In Part (a), candidates were asked to explain three ways in which the governments in the Caribbean assist in the development of Physical Education and Sport. The majority of candidates earned at least four of the maximum six marks. They were able to state ways in which governments can assist.

In Part (b), candidates were invited to prepare a ten-minute speech on the subject, "Keeping Sport Free From Prohibited Drugs and Doping". Some candidates did not emphasize the real facts about drug abuse and doping and how they would educate persons. The performance on this question was satisfactory.

## Recommendations:

1. Candidates should become more aware of the selected role that they are expected to carry out for their SBAs. Candidates must select an event, choose a role to be carried out and then record the entire procedure in their portfolios for assessment.
2. Candidates should be encouraged to read more about the history of Physical Education from ancient times to modern times. If they were encouraged to research the changing concepts from the beginning of the modern European period to the present, then candidates would have been better prepared to answer Question 13 (a) and (b).
3. Candidates should become more aware of current developments in Physical Education and Sport nationally, regionally and internationally so as to understand the social issues worldwide.
4. Qualified teachers should keep abreast of the latest developments in this subject by attending the relevant seminars and / or workshops in Physical Education and Sport. For those not qualified as teachers of Physical Education and Sport, they should be pursuing at least the Diploma Programme or its equivalence at an appropriate institution.

MAY/JUNE 2008

## PHYSICAL EDUCATION AND SPORT

## PHYSICAL EDUCATION AND SPORT

## GENERAL PROFICIENCY EXAMINATION

## MAY/JUNE 2008

## General Comments

This examination consists of three papers. Paper 01 comprises of two sections - Section A and Section B.
Section A consists of twelve compulsory questions based on the themes:

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

The maximum score for this section is 30 marks. The mark per question is variable.
Section B consists of four compulsory questions each worth twelve marks and is based on the same theme as in Section A.

Questions in Section B require more extensive responses than those in Section A.
Great interest abounds generally in physical education and sport as a CSEC Examination. There was a significant increase again this year in the number of candidates writing the Caribbean Secondary Education Certificate General Proficiency Examination in Physical Education and Sport. This year the subject enjoyed an $80 \%$ growth.

Approximately 3,217 candidates registered for the examination while 2,933 sat the examination. Candidates who were deemed absent numbered 252 while the number of missing candidates totalled 32 . All teachers should pay great attention to the number of absentees and or missing candidates to ascertain the real reason for this behaviour. This trend should not be allowed to grow. The highest mark earned was $86 \%$ out of $90 \%$ on Paper 01. Only 5 candidates received $86 \%$. The physical education teachers in the region are to be congratulated for continuing the great energy behind this subject allowing us to stir up significant interest and gain much appreciation and respect for this subject.

## Paper 01

In 2008, candidates performed well in Section A when compared with 2007. This year the responses in Section A showed a greater knowledge of the History and Development of Physical Education and Sport over the different periods, as many more territories have been using the recommended text.

The use of technical and scientific terminologies has shown some improvement as candidates have become more familiar with these. For example, candidates were told that one essential principle followed by coaches in planning training programmes was overload. They were then required to state two other principles of training. Many candidates responded very well using technical terms such as the principle of reversibility, the principle of variety and the principle of progression. Unfortunately a couple territories argued to accept 'tedium' which is a negative principle. To 'avoid tedium' would have been the more acceptable answer.

Figure 2 showed a diagram of a joint in the human body and candidates were asked to identify the type of joint shown in the figure. The responses were scientifically correct but incorrectly spelt. For example 'ball soc', 'socket', 'nut and bolt' instead of 'ball and socket'. Regarding the correct naming, in Question two, candidates were asked to name the two English-speaking Caribbean countries which qualified to participate in World Cup Football Games in the last decade. A few candidates answered using brand names such as 'Reggae boys' and 'Soca warriors', instead of the countries, Jamaica and Trinidad and Tobago.

## Paper 02

This year 2,755 candidates were presented to be externally assessed in the practical component of the examination. Greater effort must be made in submitting the requested information. For those schools which submitted mark sheets, greater care must be exercised in completing these forms. Candidates, however, seemed to have mastered the skills of their chosen sports.
External Examiners, in awarding grades, noted few discrepancies between their grades and those of the teachers.

## Paper 03 - School-Based Assessment

2,970 candidates were presented for this project. The School-Based Assessment is an integral part of candidates' assessment in the Physical Education and Sport Examination.
The samples of the portfolios that were submitted suggest improvement in this area. Based on the samples viewed, many were of an excellent quality with only a few not conforming to syllabus requirements.

The moderation process for the School-Based Assessment is limited to the project. As usual Examiners only moderate the elements of content and organization while the teachers award marks for the elements of planning and organization, implementation and teamwork.

Continued guidance in the approved methodologies and guidelines in executing their duties should be encouraged. This will ensure that the candidates understand the process and continue their learning as they carry out these roles.

## DETAILED COMMENTS

## Paper 01

## SECTION A

## History and Development of Physical Education and Sport

## Question 1

Candidates were asked to name two areas of development aided by physical education. The responses named were either social or physical. 2,047 candidates earned full marks by giving the correct responses such as emotional and intellectual. The mean percentage of candidates who answered correctly was 86.5 .

## Question 2

Candidates were asked to name two events of the Ancient Olympic Games. Candidates were challenged to identify the events done in the Ancient Olympics versus events for participation in the Modern Olympics. For example, candidates specified 100 m or 200 m instead of running which was accepted or the shot-put instead of shot-ball or weight- throw. All answers were however accepted as the name of events became more specific in the Modern Olympics. The performance in this question was still good as an average of 73 per cent of the candidates answered correctly.

## Anatomy and Physiology

## Question 3

Candidates were asked to name two English-speaking Caribbean countries which qualified to participate in World Cup Football. A few candidates did not state the country but instead they referred to the countries as 'Soca Warriors' and 'Reggae Boys'. Although there was a suggestion of correctness in these answers, they were not accepted as the question asked for the countries. On average, 69.5 per cent of the candidates answered correctly.

## Question 4

Candidates had little difficulty completing column B by selecting from the list in Table 1 , the best description of each type of vertebra listed in Column A. approximately 74 per cent of the candidates answered correctly. The few candidates who missed the fifth point, identified incorrectly, the definition of coccyx which is the remains of the tail.

## Question 5

Candidates were asked to name two main parts of the central nervous system in Part (a). In Part (b) however, it was evident that candidates knew the function of the central nervous system is movement, as nearly all presented good definitions. Overall the average percentage of candidates who answered correctly was 65.3

## Fitness and Performance

## Question 6

On average, 62.5 per cent of the candidates were generally able to identify two of the stages of a training session. Only a small number gave terms such as fitness training, drills or progression instead of the accepted term 'skill learning' or 'skill development'. All these responses were accepted.

## Question 7

Seventy-seven per cent of the candidates were able to give two measures that may be used to reduce the risk of injury in any sport. This question was answered well with no candidate scoring zero marks.

## Question 8

Overall the response to this question was below standard. Only an average 23.75 per cent of the candidates answered correctly. In Part (a), a great number of candidates gave examples of methods used, for example, circuit training and fartlek rather than a principle such as variety, progressive or progressive overload or reversibility.

In Part (b), responses were only fair as only a few scored full marks. A satisfactory number of candidates scored one mark.

## Health and Nutrition

## Question 9

Candidates were asked to select from a list given, the four foods that are highest in carbohydrates per kilogram. This was answered appropriately as all candidates scored at least one mark. Overall, 64 per cent of candidates answered correctly.

## Question 10

Candidates were able to state very well the two functions of water in the body. An average of 82.5 per cent of the candidates answered correctly. The majority scored at least one mark.

## Question 11

In Part (a), candidates were asked to state the form in which sugar is stored in the body. Candidates were able to state that sugar is stored as glycogen.

However in Part (b), candidates' responses were just satisfactory as many were not able to identify, the liver and the muscles, as the places where glycogen is stored. Fortunately, the allocation of points for this part was small. Overall only 43 per cent of the candidates answered correctly.

## Social Issues

Question 12
On average 78 per cent of the candidates answered correctly by suggesting two reasons for aggressive behaviour in spectators at sporting events. This question garnered appropriate answers.

## SECTION B

## History and Development of Physical Education and Sport

## Question 13

In Part (a), candidates were asked to outline four roles of one of a sport organization in their country, chosen from a given list. Only a few were not able to state at least one role from the selected sport organizations. Some candidates however gave one role for all five sport organizations instead of choosing one organization. Candidates responded satisfactorily.

In Part (b), candidates had a challenge listing three similar features of the following sports: namely football, netball, basketball. Expected answers such as large ball and not just a ball, special equipment per sport and not just a net were seen. The answers given were accepted. Examples of answers given were that the three sports use balls, use nets and the three sports shoot to score goals. The responses from candidates were only satisfactory.

In Part (c), candidates were asked to suggest three advantages and two disadvantages to the Caribbean in hosting the 2007 Cricket World Cup. The majority of candidates scored four marks out of a possible 5 marks. Overall 56.3 per cent of the candidates answered the entire question correctly.

## Anatomy and Physiology

## Question 14

In this question, candidates were presented with a given diagram labeled Figure 2.
In Part (a) (i), candidates were asked to identify the type of joint shown in Figure 2. The majority of candidates scored four marks. Only a few received five marks and a small minority gained full marks. Candidates were challenged to give the appropriate response which is ball and socket; 'ball and soc', 'socket, ball', 'nut and bolt', 'ball socket' and such are some examples of the responses given by candidates.

In Part (a) (ii), candidates were asked to name two parts of the human body in which the joint in Figure 2 is found. Few candidates named the parts as hip and shoulder.

Although candidates could not correctly answer Part (a) (ii), many of them correctly identified the motion that takes place at this joint as requested in Part (a) (iii).
Overall, responses for this part of the question were only fair.
In Part (b), candidates were asked to explain how the body cools itself when it gets hot while exercising. The majority found this question challenging as they were only able to explain that we perspire to cool our bodies but they did not describe the process of cooling such that when one becomes hot, blood vessels under the skin widen and more blood flows near the surface where it can lose heat by radiation. Only 36.7 per cent of the candidates gave acceptable answers.

## Fitness and performance

## Question 15

In Part (a) (i), candidates were asked to name two categories of sport injuries and in (a) (ii) to describe one of the categories of sport injuries named in a (i) and give one example of each category named in (a) (i).
Nearly all candidates named the category by giving a description and stating an example, all in one response.
Candidates were credited with marks as examiners deciphered the correct answers. Candidates did not show any distinction in the individual parts of the question that is (i) (ii) (iii) as they lumped their responses together. The performance was only fair as an equal number of candidates scored four marks or zero. Only a few scored the full 6 marks.

In Part (b), a scenario was given of Winsome being a good football player. Candidates were then asked to state three specific components of fitness that must be targeted during her training. The responses from candidates showed a great understanding of the components of fitness. Candidates responded well on this part.

In Part (c), candidates were asked to recommend three aerobic activities that Jonathon can practice to reduce his body fat since he does not like running. Many candidates earned two marks out of three marks and an unusual number scored zero. Candidates' performance in this part of the question was barely satisfactory as they could not distinguish between a definition of aerobic exercises as appose to an anaerobic exercises. Overall, an average of 52.9 per cent of the candidates answered the entire question correctly.

## Health and nutrition

Question 16
In Part (a), candidates were able to select from a list given, four items one could include in the menu for a balanced breakfast of an athlete in training. The majority earned full marks. Of the 2,895 candidates who attempted this question only 459 candidates earned 12 marks.

Part (b) (i) required candidates to name four kinds of nutrients which the human body needs for growth and development.

Part (b) (ii) required candidates to state the function(s) of each group of nutrients named in (b) (i). Overall 71.8 per cent of the candidates answered correctly.

## Question 17

In Part (a), candidates were asked to state four valuable lessons one could learn from being a member of a sports team.
Candidates responded well and the majority had little difficulty earning full marks.
Part (b) required candidates to outline three features of the building that they would ensure were in place to accommodate a group of physically challenged people, whose physical education facility is being renovated. Candidates responded satisfactorily and equally in terms of gaining marks allocated between zero and two marks.

In Part (c), candidates' scores were evenly distributed between zero and two. Candidates are not aware that requirements of either the rules or the facilities and equipment ought to be specific for boys ages 10-12 years.

Overall, the correct responses among the candidates average 53.3 per cent.

## Recommendations:

1. Based on the heavy involvement of our teachers at the national level, the team of Examiners would like to recommend:

- That Physical Education and Sport be marked as soon as the CSEC Paper is sat in May to allow examiners to accompany National teams for example Regional Netball, Football and Cricket tournaments, Central American and Caribbean Games, World Youth Games and Olympic Games.
- That all Ministries of Education within the region begin to consider having all High Schools operate on the Semester system. This would mean that all schools would close in May instead of June/July. Benefits:
a) Results would be delivered early. Students would have results available so as to move on for further education.
b) School dates would be aligned with Colleges and Universities.
c) More time could be spent on Summer Classes especially those who are preparing for CXC.
d) Teachers would be available to attend seminars, workshops especially those seminars attached to the various Championships and Games.

2. Teachers should help students to become more familiar with the syllabus so that students can fulfill the stated objectives, especially the School-Based Assessment. For the SBA, students must select an event, must choose a role to be carried out and record appropriately the entire procedure.
3. Candidates should take great care in responding correctly. As in Question 3, some responses did not name the two Caribbean countries who qualified to participate in World Cup football in the last decade. Instead they gave jargons like 'Reggae Boys' and 'Soca Warriors', which were not accepted.
4. Teachers should pay more attention to the History of Physical Education and Sport and encourage students to read the various periods such as Ancient and Modern periods.
5. All forms pertaining to Papers 02 and 03 should be carefully completed. Too many of these were incomplete.

# SECONDARY EDUCATION CERTIFICATE EXAMINATION <br> MAY/JUNE 2009 

## PHYSICAL EDUCATION AND SPORT

## PHYSICAL EDUCATION AND SPORT

## GENERAL PROFICIENCY EXAMINATION

## MAY/JUNE 2009

## General Comments

This examination consisted of three papers. Paper 01 comprised two sections - Section A and Section B.
Section A consisted of twelve compulsory questions based on the themes:

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

The maximum score for this section was 30 marks with each question having varying marks.
Section B consisted of 5 compulsory questions based on the same themes stated above but pitched at a higher order of application.

The interest in Physical Education and Sport continues to grow in the wider society especially since the career choices are now being highlighted such as Sport Journalism, Sport Management and Physiotherapy. This year the subject enjoyed the same 80 per cent growth as last year.

Approximately 4312 candidates registered for the examination while 3798 sat the examination, and 514 candidates were deemed missing or absent. As was mentioned in last year's report, schools really need to pay special attention to the reasons why so many candidates are not sitting this examination.

## Paper 01

In 2009, candidates performed fairly well in Section A, as they did in 2008. The areas of strength this year were in the Fitness and Performance section, the Health and Nutrition section and the Social Issues section. In these areas, candidates' scores were remarkable.

In the History and Development of Physical Education and Sport section, candidates presented poor responses when asked to define the term 'Sport'. Physical Education teachers in the past would always take pains in making the distinction to persons who would want to see or use the Physical Education classes to coach or to play major sports. One definition is: 'Sport is organized competitive activities governed by rules so that individuals can compete fairly'.

The use of scientific terminologies, though improved, still has room for improvement. Candidates were asked to explain the term 'vital capacity'. Many of the responses referred to blood passing through the heart muscles or referred to aspects of the circulatory system, instead of stating that it is the maximum volume of air one can breathe out after breathing in as hard as possible. However, marks were awarded for any mention of oxygen, air and lung, as this gave some idea that candidates had some knowledge of the topic.

In Section B Question 14 (b), from a list presented, candidates were asked to identify the parts of the respiratory and circulatory systems, in the correct order, to show the pathway of oxygen from air inhaled and going to the muscles. Marks were allocated for any part or parts in the correct position such as trachea after nose and also any three parts placed in sequence such as bronchi, bronchioles, alveoli. In this way weaker candidates were given credit for demonstrating partial knowledge when they did not provide a complete correct answer.

Candidates were largely unfamiliar with the events contested in Winter Olympic Games. The responses showed that they were more familiar with events in the Summer Olympics.

## Paper 02

External Examiners, in awarding grades, noted few discrepancies between their grades and those of the teachers. Greater care must be taken in submitting the requested information. Candidates, however, seemed to have mastered the skills of their chosen sports.

## Paper 03 School-Based Assessment

The School-Based Assessment is an integral part of candidates' assessment in the Physical Education and Sport Examination. In some ways the samples submitted showed improvement. However, it is evident that a number of candidates needed more guidance. One main problem encountered was that some projects recorded no evidence that the event took place. All that was sometimes recorded was the history of the sport with rules or regulations. Continued guidance in the approved methodologies and guidelines in executing their duties should be encouraged so as to ensure that candidates understand the process as they carry out these roles. The moderation process for the School-Based Assessment is limited to the project so Examiners only moderate the elements of content and organization. The teachers are the ones who award marks for the elements of planning and organization, implementation and teamwork.

## DETAILED COMMENTS

## Paper 01

## SECTION A

## History and Development of Physical Education and Sport

## Question 1

Candidates were asked to name two activities in which a student would have participated during Physical Education classes in Ancient Greece.

## Anatomy and Physiology

## Question 3

Candidates were asked to discuss one change that would have taken place in the circulatory system of an athlete during a football game. The majority responded by stating, for example, that athlete's heart beat would rise. More than half scored 50 per cent of the marks while only a small percentage earned full marks.

## Question 4

In this question candidates were asked to explain the term 'vital capacity'. One mark was awarded for any mention of oxygen, air and lungs. The majority responded by making reference to volume of blood and the circulatory system. Only a small percentage received full marks.

## Question 5

Table 1 showed a list of long bones and short bones. Candidates were asked to identify two long bones and two short bones. The majority scored full marks.

## Fitness and Performance

## Question 6

Candidates were asked to give two examples of sports or activities in which rotary motion is used. The majority of responses given were accurate. Candidates displayed good knowledge of the types of motion.

## Question 7

Candidates were asked to describe the R.I.C.E. procedure as it relates to treating a sprained ankle. The majority defined the acronym but did not describe the procedure to be used in treating a sprained ankle. Candidates' scores ranged from zero to 4 marks.

## Question 8

In this question candidates were asked to state one component of fitness that is being measured in a fitness test when Mary was asked to complete the 5-metre Shuttle Run. Overall candidates' responses were poor, with the majority scoring zero.

## Health and Nutrition

## Question 9

Candidates were asked to give three reasons why water is the single most important nutrient. The responses were generally good.

## Question 10

Candidates were asked to name two foods containing fibre since fibre is essential in the digestive system. The majority of candidates responded very well.

## Social Issues

## Question 11

Candidates were asked to state two ways in which a sponsor could assist a national team. Candidates had little difficulty scoring full marks.

## Question 12

Candidates were asked to give two reasons why the government of a country should promote Physical Education and Sport. Candidates were able to give solid reasons in their responses. The majority of candidates did very well on this question.

## SECTION B

## History and Development of Physical Education and Sport

## Question 13

In Part (a), candidates were asked to give one main reason why no Olympic Games were held during the years 1914 to 1918 and 1940 to 1944. A great majority scored zero. Candidates displayed a lack of knowledge of this aspect of history.

In Part (b), candidates were asked to name two events contested in the winter Olympic Games. Scores were more or less evenly distributed between zero to two marks.

In Part (c), candidates showed little knowledge about the 'Olympic Ideals'. When asked to state three of these ideals the majority were only able to record fair play, the most common ideal spoken about. There was infrequent mention of personal excellence, cultural exchange, mass participation (some did identify this one) as 'Olympic Ideals'. The majority scored one mark.

In Part (d), candidates scored between two marks and six marks with a small number scoring full marks. Candidates identified three professions and explained carefully how the study of Physical Education can improve the selected professions.

## Anatomy and Physiology

## Question 14

Candidates were told that isotonic muscle contractions can be divided into two types.
In Part (a) (i), candidates were asked to name the two types of contractions. A small number of candidates scored two marks for giving "concentric" and "eccentric" contractions.

In Part (a) (ii), candidates were asked to pretend they were lifting a heavy weight with their hand. They were asked to name the muscle group which is shortened in the task and the muscle group which is lengthened. Candidates scored equally between zero and two marks for identifying shortening of the biceps and lengthening of the triceps.

In Part (b), candidates were given a list of some parts of the circulatory systems which help oxygen to reach the muscles. They were required to write the parts in the correct order to show the pathway of oxygen from air inhaled through the nostrils and going to the muscles. This question proved
challenging. However, marks were allocated for the correct order and also for the correct sequence of the various parts.

## Fitness and Performance

## Question 15

In Part (a), candidates were asked to describe two effects of high altitude on the fitness of a distance runner. Approximately 60 per cent of the candidates gained two marks out of four marks. Candidates were able to state reasonable responses giving the immediate effects. Approximately 30 per cent of the candidates were able to describe the effects when athletes return to sea level and show a level of increase in his/her performance in the endurance event. A small percentage did not score.

In Part (b), the graph in Figure 1 showed how Paula's heart rate changed during a run on a flat track. In Part (b) (i), candidates were to state Paula's maximum heart rate reached. The majority scored full marks. In Part (b) (ii), candidates were asked to state what was happening between A and B on the graph. The majority of candidates gained the allotted marks. In Part (b) (iii), candidates were asked how would the graph change if Paula were fitter. A number of candidates scored zero but a good percentage of candidates got two marks.

In Part (c), candidates were given a statement which said males tend to be bigger and stronger than females. They were required to discuss this statement giving two reasons for these differences. Candidates' scores were satisfactory as the majority gave good reasons by referring to the testosterone levels in the male. Very few candidates made reference to the male's anatomical structure or the physiological features, the approach that was expected in answer to the question.

## Health and Nutrition

Question 16
In Part (a), candidates were asked to name any two of the Caribbean food groups. This area remains a challenge as candidates continue to give examples of nutrients rather than identifying the food groups. It appears that the information in some of the recommended textbooks use different terminologies even in the books from the region. It is useful to point out that nutrient is defined as a substance obtained from food and used in the body to provide growth, maintenance and repair of body tissues. Food groups refer to groupings of foods that have similar nutritional properties. The food groups are fats, carbohydrates, proteins, minerals, vitamins, water and fibre. Scores were equally distributed between zero and two marks.

In Part (b), candidates were asked to give one example of a food for each of the two food groups selected in 16 (a) above. Although candidates were unable to name the Caribbean food groups, in this part they successfully gave correct responses. The majority scored full marks.

In Part (c) (i), candidates were presented with this statement "Carbohydrate loading is often used by distance runners before their events". Candidates were asked to state one feature of this practice. The general response was that this process showed that more energy was available. However candidates gave this same response for Part (c) (ii) and could not be credited for giving the same response. An example of a good response is 'to increase the amount of carbohydrate reserves in muscle tissue the day and night before the event'. Another correct response is 'to eat a large amount of pasta, rice or potato the night before'. Overall candidates showed a good understanding of carbohydrate loading.

In Part (c) (ii), candidates were asked to explain two expected effects of carbohydrate loading. A number of the candidates responded fairly well. Some examples of expected effects which candidates mentioned were 'the increased endurance of the performer' and 'better performance generally'.

In Part (d), candidates were asked to state three reasons why eating immediately before an event is not recommended. A great number of candidates gave three appropriate responses.

## Social Issues

## Question 17

In Part (a), candidates were asked to state ways in which the media can have a positive effect on Sport. Candidates scored very well, with the majority gaining full marks.

In Part (b), candidates were asked to suggest two reasons why stimulants, if misused by athletes, may be dangerous to their health. The majority of candidates correctly gave one reason which was 'violent and aggressive behaviour' and this earned one mark only. Only a few managed to give two responses.

In Part (c), candidates were asked to explain two negative effects that drunkenness from ethanol can have on the body. The majority of candidates scored two marks only as many of the responses were repeated and expressed the same idea in different words.

In Part (d), candidates were asked to state one of the benefits which they would include if they as the president of a sports club had to address a group of students.

In Part (d) (i), physical benefits, candidates were able to state such benefits as better posture and better health. In Part (d) (ii), social benefits, candidates were able to state benefits such as meeting people and joining a club. In Part (d) (iii), moral/mental benefits, candidates were able to state benefits such as fair play, and a display of good etiquette.

Overall the majority of candidates scored full marks. This question was well done.

## 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 those with many parts.
2. Although there has been some improvement, candidates should increase their knowledge on the History of Physical Education and Sport, in particular Olympism, by doing more reading.
3. Candidates should become more aware of the selected role that they are expected to carry out for the SBAs. Candidates must select an event, choose a role to be carried out and then record the entire procedure in their portfolios for assessment.

# CARIBBEAN EXAMINATIONS COUNCIL 

REPORT ON CANDIDATES' WORK IN THE SECONDARY EDUCATION CERTIFICATE EXAMINATION

MAY/JUNE 2010

## PHYSICAL EDUCATION AND SPORT GENERAL PROFICIENCY

## 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 $\mathbf{1 2}$ questions for a total of $\mathbf{3 0}$ marks.

## Question 1

Mean: $1.83 \quad$ Standard deviation: $1.28 \quad$ 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: $1.74 \quad$ Standard deviation: $0.56 \quad$ 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: $1.30 \quad$ Standard deviation: $0.66 \quad$ 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

$$
\text { Mean: } 0.76 \quad \text { Standard deviation: } 0.87 \quad \text { Maximum Mark: } 2
$$

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: $1.00 \quad$ Standard deviation: $0.80 \quad$ 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: $1.75 \quad$ Standard deviation: $0.51 \quad$ 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.

Mean: $0.58 \quad$ Standard deviation: $0.69 \quad$ 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 $\mathbf{1 2}$ marks.

## Question 13

Mean: $6.50 \quad$ Standard deviation: $2.79 \quad$ 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: $3.13 \quad$ 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: $7.91 \quad$ Standard deviation: $2.61 \quad$ 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: $2.50 \quad$ 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.

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

MAY/JUNE 2011

PHYSICAL EDUCATION AND SPORT<br>GENERAL PROFICIENCY EXAMINATION

Copyright © 2011 Caribbean Examinations Council St Michael, Barbados<br>All rights reserved.

## 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 7,520 candidates entered for the 2011examination, an increase of approximately 33 per cent.

## DETAILED COMMENTS

## Paper 01 - Theory

## Section A

## Question 1

In Part (a), candidates were required to state the sporting discipline that produced the most outstanding results for the Caribbean at the 2008 Olympic Games in Beijing, China. Unfortunately, candidates interpreted sporting discipline to mean behaviour such as sportsmanship rather than naming a sport like athletics, swimming or boxing. This section presented some difficulty to candidates.

For Part (b) (i), candidates were asked to name the Jamaican athlete who won three gold medals at the 2008 Olympic Games. The majority of candidates got the Jamaican athlete correct. Even though the spelling was not always correct, markers were able to decipher the name Usain Bolt.

In Part (b) (ii), candidates were asked to state the two individual events in which the athlete named in (b) (i) won the gold medals.

Some candidates could not name the two individual events correctly. Some of them included the relays and one individual event in their answers. This question required an awareness of current affairs in sport and general attention to the major sporting achievements of regional athletes.

## Question 2

In this question, candidates were asked to state two of the Olympic ideals by which the Olympic Games are guided. Candidates were required to show familiarity with Olympic as a pillar of sport history. Very few candidates named 'sport as education' and 'personal excellence' in their responses. The teaching of Olympic as an aspect of the history of Physical Education and Sport should not be restricted to information on the rings and the flag alone but must include critical areas such as the Olympic ideals.

## Question 3

For Part (a), candidates were asked to describe briefly the muscle action involved in lifting and lowering the dumbbell. Responses were fairly good as candidates explained how in lifting the dumbbell the biceps contract
while shortening and the triceps relaxing while lengthening. In lowering, candidates explained that the biceps relax while the triceps contract. Other responses were accepted such as the use of the terms 'concentric contraction' when lifting the dumbbell and 'eccentric contraction' while lowering the dumbbell. This question allowed candidates to demonstrate their abilities and skills in analysis of movement.

In Part (b), candidates were asked to name the two types of tissue that make up the skeletal system. The expected response was bone and cartilage but many candidates had ligaments and tendons which were accepted.

Overall, although candidates appeared to be familiar with the topics tested, only a small number scored full marks.

## Question 4

Candidates were asked to copy and complete Table 1 in their answer booklet, namely hypermobility, shin splint and condyloid joint. They were then required to complete Column B by selecting from the list given the best definition of each term listed in Column A, namely

- pain in the front of the tibia
- one bone slides on top of the other
- the ability to extend the knee, elbow, thumb or wrist joint past a straight line
- allows movement in two planes (directions)

Candidates demonstrated moderate knowledge of the skeletal system and its articulation.

## Question 5

Candidates were asked to copy the terms Force, Mass and Inertia in their answer booklets. They were then required to match the definition of each term by writing the correct number of the definition next to the term.

Definitions were taken from the following:

1. The ability to exercise the entire body for long periods of time
2. Tendency of the body to remain at rest
3. The body's ability to start or stop, or alter the state of motion, and is proportional to the body's mass
4. The amount of material of which an object is made

Responses were satisfactory.

## Question 6

In Part (a), candidates were asked to name one food high in fibre. Most of the responses showed that candidates possessed a good knowledge of foods high in fibre. They provided responses such as whole wheat, brown and rye wheat.

For Part (b), candidates were asked to give two benefits of fibre in an athlete's diet. Popular responses included fibre being an essential aid to digestion; fibre controls movement or prevents constipation. Candidates also highlighted other important benefits in their responses by stating that fibre makes you feel full and prevents people from having to overeat as it provides bulk.

A few candidates suggested that fibre is related to a low incidence of coronary heart disease, stroke and some form of cancer. This was accepted.

## Question 7

In Part 7(i), candidates were asked to identify one food that is high in saturated fats. The majority of candidates gave good examples namely red meat, dairy products, eggs and animal products.

For Part 7(ii), candidates were required to name one food high in unsaturated fats: Examples given came from soya beans, corn oil, olive oil, mackerel and mainly plant products. In this part responses were good.

## Question 8

In this question candidates were required to name the nutrient that is responsible for tissue repair for which they gave protein as their response. Candidates who responded by naming amino acids were given the mark. Performance on this question was good.

## Question 9

Allen Stanford's 20/20 cricket competition had an impact on cricket in the Caribbean. Candidates were asked to identify two possible effects that resulted from this competition. Most candidates stated that this competition gave the countries who participated great exposure and increased tourism to the various countries. Others mentioned more crowd participation and more opportunities for players. A few candidates suggested that it had brought back international rivalry. This was also accepted. It is suggested that more research be done on current sporting events in the Caribbean.

## Question 10

For this question, candidates were required to state two contributions that governments can make towards the development of sport in small communities. Many candidates responded favourably and received full marks. Good responses varied from building sporting facilities to promoting sport for all so as to reduce health problems, crime and violence. Other contributions that the government could make were subsidizing equipment and providing financial aid to athletes who are in training.

## Question 11

Candidates were asked to give one benefit that a country may gain from hosting the summer Olympic Games. The most popular responses were that the host country would gain worldwide publicity or that the country would enjoy popularity or prestige and the improvement of sporting facilities. Candidates showed mastery of the content in response to this question. Improving reading and comprehension skills could help candidates avoid incorrect answers.

## Question 12

Candidates responded very positively when asked to name one of the two sisters who have dominated the sport of tennis worldwide over the last decade. The majority of candidates named Venus or Serena. Other accepted responses were Williams or one of the Williams sisters. For those candidates who did not respond appropriately, it is suggested that they improve on their reading and comprehension skills and pay attention to news on international sport.

## Section B

## Question 13

In Part (a), candidates were required to examine the Renaissance period between 1300 and 1600 AD and show its impact on physical education. This question proved very challenging for candidates as textbooks in this area
are generally not available. Candidates seemed to be more knowledgeable about the Ancient and Modern period. They were not able to speak about physical education being good for discipline or state the importance of having daily physical education. A good response could have been:

- The theory that the body and the soul are inseparable, that they are indivisible, and that one is necessary for the optimal functioning of the other
- Good physical education helped persons learn other subject matter better.

Responses were generally weak with candidates providing responses that were more appropriate for Ancient times; some candidates focused more on modern developments to the exclusion of the Renaissance period.

For Part (b), candidates were asked to discuss three factors that can facilitate or help persons to achieve excellence in sport. Very good responses were given which included coaching so as to produce qualified coaches, training of the young, the provision facilities such as of sports academies and research centres. All these are factors that can help to achieve excellence in sport.

In Part (c), candidates were asked to suggest two ways in which society can benefit from young persons being physically active. Some of the benefits given were fewer cases of health care, less stress, greater productivity, improved self-esteem, greater socialization or less deviant behaviour. A few candidates referred to families getting together more often and being more able to assist older generation.

## Question 14

In Part (a), candidates were asked to describe how the femur and the pelvic girdle of the skeletal system support the lower body when a player is kicking a ball using his right foot. Candidates showed a lack of understanding of the role of the femur and the pelvic girdle in kicking actions. Many candidates gave no response.

For Part (b), candidates were required to describe four effects of exercise on the skeletal system. Candidates failed to respond appropriately. A good response could have been:

Bones will become stronger in order to deal with the stress placed on the individual, or, tendons will become thicker and more capable of withstanding greater force.

While the anatomy of the skeletal system was well handled, the suggestion is that the physiology proved to be challenging.

Question 15
In Part (a), candidates were asked to name each of the three seasons or periods of the sport training year. Candidates had difficulty naming the following: the off-season, pre-season, general-preparation period or postseason. Unfortunately, many candidates gave spring, summer and winter as their responses. The word seasons definitely created a problem for many candidates. Generally, candidates scored between three and four marks out of seven.

For Part (b), candidates were asked to state five characteristics of the trained individual who is expected to be in a better state of physical fitness than the average person. Candidates experienced difficulty in identifying the physiological characteristics of the trained individual for example; higher $V_{2} M a x$, lower resting heart rate. Individual components of fitness for example; strength, power and speed, were accepted although this group can be classifies as fitness.

Teachers should try to cover the jargon used in physical education and have candidates understand the meanings.

## Question 16

In Part (a), candidates were asked to describe three ways a balanced diet enhances fitness and health. Some of the responses given were choosing foods from each food group, explaining the importance of each food group and the need for sufficient calories so that persons will have enough energy to carry out their daily routine without fatigue. Explanations given were not enough to garner full marks.

For Part (b), candidates were asked to select two foods for breakfast, lunch and dinner for a footballer who is a strict vegetarian. Candidates' knowledge of this question was good and many scored full marks.

## Question 17

In Part (a) (i), required candidates to give three factors, other than personal reasons, that influence players to become aggressive. Appropriate responses were given such as pressure or humiliation from crowds and friends, monetary gains or the tactics to "slow up" a talented player. Oppressive environmental conditions such as heat as well as harassment by media were singled out.

Part (a) (ii), candidates were asked to give three personal reasons for aggressive behaviour facing sport. Candidates gave responses such as:

- To gain attention
- Lack of respect shown to officials and to the rules
- Self-defence against blatant 'aggravation' by other players
- Substance abuse

Most candidates were able to identify and explain three reasons.
In Part (b), candidates were asked to state three ways in which a person's financial status could affect his/her choice of sport. In the stem of this question an example was given 'sailing versus football'. The majority of candidates grossly misinterpreted the question by comparing and/or contrasting the choice of sailing with the choice of football.

Some good responses could have arisen from expanding on the following items:

- unemployed people cannot afford to pay fees
- facilities non-existent or expensive
- inability to afford equipment
- distance to venue for competition far and consequently expensive.

The overall marks earned for this question were negatively affected by the weak responses given in Part (b).

## Paper 02 - Practical Examination

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

Teachers are free to seek guidance from the external examiner so that common behaviours are assessed. This can help to reduce the internal/external examiner gap and give greater validity to the scores.

## Paper 03 - School-Based Assessment (SBA)

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

Teachers continue to show leniency in marking even when it is evident that students do not fully understand the requirements of the task. Final presentations were generally weak. It was evident that some teachers lacked the required content knowledge and so were not able to adequately guide students. In addition, teachers across the region have a different understanding of what the project should be. There was a weakness in schools presenting the relevant forms which were in many cases incomplete and sometimes absent from the package. Another disappointing fact was that no grades were posted in many of the projects submitted.

Teachers must ensure that students are guided in the approved methodologies and guidelines for the research. This will ensure that students understand the process and ultimately learn from the experience, in order to transfer and apply skills learnt.

## RECOMMENDATIONS

1. Invigilators of this examination should remind candidates to number the questions correctly on the front cover. They should also encourage candidates to number the responses for each question legibly, especially for those questions having many parts.
2. Teachers should encourage their students to attempt every question.
3. Teachers should teach students how to answer questions. For example, the verbs state, outline, describe and explain all have different meanings and, therefore, expected answers would differ. Also it should be brought to the attention of students that the number of marks at the end of questions is an indication of the depth of answers required.
4. Teachers must continue to encourage students to use correct scientific terminology where required.
5. Students should do more reading on the History and Development of Sport in the Ancient period, the Renaissance period and the Modern period.
6. Students should learn more about what the Olympic ideals are and what the seasons of the training year mean in any sport.
7. Students should read the questions more carefully and answer specifically what is being asked.
8. Students should develop greater awareness 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.
9. Portfolios for the SBA component should reflect the individual effort of students and should show greater clarity in assigning credit to the sources of information.
10. Teachers should be more thorough in completing and submitting all different but relevant forms pertaining to Paper 02 and Paper 03.
$\begin{array}{lllllllll}\text { C } & \mathbf{A} & \mathbf{R} & I & B & B & \mathbf{E} & \mathbf{A} & \mathbf{N}\end{array}$
$\begin{array}{llllllllllll}\text { E } & \text { X } & \text { A } & \text { M I } & \text { I } & \text { A } & \text { T I O }\end{array}$
C O U N C I L

REPORT ON CANDIDATES' WORK IN THE
CARIBBEAN SECONDARY EDUCATION CERTIFICATE ${ }^{\circledR}$ EXAMINATION

MAY/JUNE 2012

PHYSICAL EDUCATION AND SPORT
GENERAL PROFICIENCY EXAMINATION

Copyright © 2012 Caribbean Examinations Council
St Michael, Barbados
All rights reserved.

## 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 (SBA) 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.

For the 2012 examination, there was an increase of approximately 12 per cent in candidate entries over the previous year.

## DETAILED COMMENTS

Paper 01 - Theory

## Section A

This section comprised of 12 questions worth a total of 30 marks.

## Question 1

In Part (a), candidates were required to name the colour of any two of the Olympic rings in the logo. The majority of the candidates scored the maximum two marks.

For Part (b), candidates were asked to write the English meaning of the Latin word altius which is higher. The majority of candidates got it either wrong or gave no response.

## Question 2

In Part (a), candidates were asked to name the second tournament hosted by the West Indies Cricket Board (WICB), following on the hosting of the 50/50 World Cup in 2007. The responses varied but the majority referred to the tournament as 20/20, T20, 20th, 20 or 20 overs. The correct response was 20/20.

In Part (b), candidates were asked to state which country emerged the winner of the second tournament. Many candidates answered correctly. The tournament comprised two competitions, one for males and one for females, but the responses of some candidates did not make this distinction.

## Question 3

For Part (a), candidates were asked to state the major muscle and muscle action involved when Max sat up in the figure provided.

The correct muscle group was the rectus abdominis and the action was flexion. However, abdominals or just $a b s$, and contraction were accepted. Responses were evenly distributed between zero and two marks. A very small percentage of candidates scored full marks.

In Part (b), candidates were asked to name the type of muscle fibre found in large percentages in sprinters and speed skaters, and the muscle group in which this type of muscle fibre would mostly be found. Many candidates named the fast twitch muscle fibre but could not identify a muscle group in which this type of muscle fibre would mostly be found. Scientific terminologies were also rarely used, for example, 'calf muscle' was stated rather than gastrocnemius.

## Question 4

Candidates were asked to state two functions of the cardiovascular system. It was apparent that candidates were more familiar with the term circulatory system. The cardiovascular system depends on the circulatory system to deliver the oxygen the muscles need, regulate body temperature and remove waste. A very small percentage of candidates scored full marks.

## Question 5

Candidates were asked to identify the part of the digestive system that is responsible for an athlete vomiting after rigorous training. The majority of candidates responded correctly by naming the stomach. Other terms commonly used such as gut, gullet, esophagus or the epiglottis were also accepted.

## Question 6

Candidates were asked to copy Table 1 in their answer booklets and, from the list given, identify and place two components under each of the headings 'skill' or 'performance-related fitness' and 'health-related fitness'. The majority of candidates scored full marks.

## Question 7

In Part (a), candidates were asked to name one symptom or sign of a sprain to the ankle which a football player sustained in a practice match. A large majority of candidates named the correct symptom or sign; some candidates overly explained by giving a scenario.

For Part (b), candidates were asked to state the recommended method of treating the type of injury referred to in Part (a). The correct response was RICE. The acronym meaning being rest, ice, compression and elevation or PRICE for prevention, rest, ice, compression, elevation. Those who had the correct sequence scored the maximum two marks, while those who only had two to three steps in the correct sequence were awarded only one mark.

## Question 8

Candidates were asked to name two foods which are high in carbohydrates that a 17 -year-old athlete should eat in preparation for competition. Candidates demonstrated good knowledge of these foods and the variety of foods given was wide.

## Question 9

Candidates were asked to suggest two foods that athletes should include in their diet to develop hypertrophy. Very few candidates gained full marks.

## Question 10

Candidates were asked to state three characteristics of sportsmanship that a model athlete is expected to display. Candidates displayed a fair knowledge of this in their responses but some of them explained one characteristic in three different ways, for example, respect for self/disciplined/self-control. This was accepted.

## Question 11

Candidates were asked to list two negative effects of the use of anabolic steroids. The majority of candidates scored one mark with a fair number scoring the full two marks.

## Question 12

Candidates were asked to suggest two reasons for increased security measures at major international sporting events. Responses were good.

## Section B

## Question 13

Candidates were asked to discuss two roles that each of the following organizations played in the hosting of the ICC 50/50 Limited Overs World Cup 2007 in the Caribbean.

1. National governing body
2. Regional governing body (WICB)
3. International governing body (ICC)

A few candidates scored full marks. There was a high number of candidates who gave no response. In this question, candidates were more familiar with roles of the international governing body than that of their national and regional bodies.

It is recommended that candidates familiarize themselves with the roles of the governing bodies in as many sports as possible especially the national and regional ones which are much closer to them.

## Question 14

Candidates were asked to describe one function of each of the following systems in the actions shown in two figures, one depicting an athlete about to respond to the starter's pistol (Figure 2a) and another showing an athlete powering out of the blocks (Figure 2b).

1. Skeletal system
2. Muscular system
3. Nervous system

Candidates were not able to transfer the knowledge of what the above systems do and show how these systems work together to cause specific movements. A very small number of them scored in the range of nine to twelve marks; twelve being the maximum mark for the question.

However, more candidates were able to explain the nervous system as it relates to the specific movement, for example, a good answer was In Figure $2 a$ the nervous system keeps him alert, makes him respond to the starter's pistol correctly and effectively. In Figure $2 b$ when powering out, the nervous impulse sends messages to the brain and the brain reacts to the sound of the pistol and tells him it's time to run.

## Question 15

In Part (a), candidates were asked to give three benefits of weight training which the coach recommended for a person participating in a competitive sport. Candidates responded well.

For Part (b), candidates were asked to recommend two weight-training exercises. Candidates did a fairly good job at naming weight-training exercises such as squats, lunges, dead lifts, bench press, shoulder press, biceps curls or arm curls. A few candidates suggested weight lifting, sit-ups and pull-ups which
were not accepted. Candidates should be aware that weight-training exercises must involve some form of external weights.

In Part (c), candidates were asked to state two advantages of a warm-up, and then to suggest two appropriate activities for warm-up. Candidates were able to give good advantages of a warm-up, for example, prevents injury, increases blood flow to muscles, prepares one psychologically for the activities. They also suggested two appropriate activities for warm-up, for example, jogging and stretching, which were frequently used. A few candidates suggested specific warm-up activities.

In Part (d), candidates were asked to identify three measures to ensure safety in a named sport, other than warm-up and cool-down. Candidates easily identified at least two safety measures which proved generic to nearly all sports. They rarely named a sport.

## Question 16

In Part (a), candidates were asked to name three of the food groups shown in the given figure. It was clear that candidates are still struggling to understand the difference between food groups and nutrients. They gave carbohydrates for staples and chicken or meat for the group 'food from animals'. A large number of candidates stated vegetables, fats, or oil in response to this part of the question. 'Fats and oils' were accepted as one group. Overall, responses were fairly good.

In Part (b), candidates were asked to name three foods that a young athlete, who wishes to eliminate excessive amounts of fat from his diet, should consume in moderation. Surprisingly, candidates found the question challenging, although some of them managed to score at least two marks out of six. It was apparent that the term in moderation was not fully understood as candidates suggested foods that were to be recommended instead.

In Part (c) (i), candidates were asked to suggest two negative effects of not drinking enough water. The majority received full marks. In Part (c) (ii), candidates were asked to state two ways by which athletes lose water from their bodies. The popular responses were by urine and sweat. A few candidates gave vomiting as their response which was not accepted in this case. The majority of candidates did well on this part of the question.

In Part (c) (iii), candidates were asked to identify two foods with high water content. Responses were generally good; most candidates scored full marks.

## Question 17

In Part (a), candidates were asked to suggest two social factors other than culture that influence participation in sport. Some of these social factors include family, friends, availability of facilities and equipment, motivation, exposure, gender and social rewards. Candidates responded well.

For Part (b), candidates were asked to state two aspects of culture that affect participation in sport. Some popular responses were diet, religion or religious values and beliefs, and gender. Some candidates restated some of the other social factors, which were strictly incorrect.

In Part (c) (i), candidates were asked to name a sporting event designed for persons with disabilities. Many candidates responded well, naming an appropriate sporting event. Some of them identified a sport without mentioning the modification that would make it suitable for persons with disabilities.

In Part (c) (ii), candidates were asked to identify three adjustments that must be made to sporting activities to encourage the participation of persons with disabilities in sport. Many candidates gave good responses such as adjustments to participation rules, officiating rules and adjustments to facilities and equipment. Some candidates described how the adjustment could or should be made. Some referred to
attitudes to persons with disabilities. Overall, marks were allocated evenly in the ranges zero to four and five to eight. Very few candidates scored in the higher range of nine to twelve marks.

## Paper 02 - Practical Examination

Examiners reported great satisfaction with the progress in the physical skills demonstrated by students in the practical examination. This reflects the strength of this aspect of the syllabus in giving students choices in the sports they attempted.

## Paper 03 - School-Based Assessment (SBA)

There were some excellent reports in the samples; however, some weaknesses continue to be seen in this paper. The moderation process for the School-Based Assessment is limited to the elements of content and organization of the folders submitted, since teachers are responsible for the award of the major marks assigned to the elements of planning and organizing, implementation and teamwork in this practical assignment.

Some reports were not clearly referenced and others showed weaknesses in logical organization. Teachers should ensure that students submit their own individual productions. Teachers are required to provide the clarification on the guidelines of the project to enable students to produce good quality reports that bear comparison to the regional standard. Teachers must ensure that students are guided in the approved methodologies for the research and reporting of information so that their skills in this aspect of study will be strengthened. Every effort must be made to ensure that the objectives of the SBA learning experience are met. The grades from the schools continue to show leniency in marking when these are compared to the evidence in the folders submitted.

## RECOMMENDATIONS

Candidates should be advised to number the questions accurately on their answer booklet covers and alongside their answers inside the answer booklet.

More emphasis should be placed on the integration of terminology into the description of body parts, actions and activities. The history of sport and physical education should be given more emphasis as students are prepared for the examination. Candidates should be encouraged to write into their reports more of their SBA experiences and the roles they actually played in the event they managed while using information from the internet as supporting materials only.

MAY/JUNE 2014

## PHYSICS <br> GENERAL PROFICIENCY EXAMINATION

## GENERAL COMMENTS

This year 13,788 candidates registered for the examination. This represented a 5.9 per cent increase in candidates registered compared with 13,024 in June 2013. The percentage of candidates achieving Grades I-III was 77 per cent compared with 67 per cent in 2013.

Once again, candidates needed to show better mathematical skills in areas such as scientific notation and solving equations. More emphasis must be placed on using mathematical skills in studying Physics. Also, candidates should not be losing marks on simple recall items.

## DETAILED COMMENTS

## Paper 01 - Multiple-Choice

Performance in the multiple-choice paper was better than that of June 2013. This year, the mean score was 34.47 with a standard deviation of 10.09 , compared with a mean score of 33.14 and a standard deviation of 10.66 in June 2013.

## Paper 02 - Structured Essay Questions

This paper consisted of one data analysis question, two structured and three essay-type questions. All questions were compulsory. Performance on Paper 02 showed improvement compared with performance in June 2013. This year, the mean score was 41.13 with a standard deviation of 20.17, compared with a mean score of 33.82 and a standard deviation of 20.68 in June 2013.

## Section A

Question 1

## Data analysis

This question was based on the change of phase of a substance while cooling, and an understanding of the concepts of heat capacity and specific heat capacity.

## Areas of good performance

The subparts of the question that candidates handled best were Parts (a) plotting the graph of cooling curve data, Part (b) identifying the melting point from the graph and Part (f) identifying correct symbols and units for heat capacity and specific lalent heat of vapouisation.

The graphs were well plotted. However, some candidates did not draw a proper cooling curve.

## Areas of weakness

Parts (c) (i), (d) which tested candidates ability to analyse and interpret data and Part (e) calculating heat lost in cooling were the most difficult. For Part (c) the substance was actually in two states.

Many candidates were probably unaware that the phase in Part (d) was just another term for state and therefore their answers included terms such as 'cooling' and 'condensation' rather than 'solid'.

In Part (e) many candidates were able to recognize and calculate correctly the heat needed to change the state of the substance but were not able to separate the other two stages of cooling.

## Recommendations

Students should get more practice in the drawing of graphs. In particular, more emphasis should be placed on graphical plotting skills. These skills include the following:

- Labelling of the axes with name and units, for example, $t / m i n s$
- Axes correctly oriented
- Plots done, as a recommended practice, using small ' $x$ 's. A dot alone (a blob) is not acceptable.
- Best fit: If the graph is a straight line then a ruler must be used and a line drawn through as many points as possible or drawn so that the balance of space is even on both sides of the line. If the graph is not a straight line then free hand can be used to draw a smooth curve.


## Question 2

## Mechanics

This question was based on an understanding of energy and its units. It also tested candidates' ability to calculate velocity and momentum, given relevant information. This question was satisfactorily done.

## Areas of good performance

Parts (a) (ii) and (iii), (b) (i) and (iii) were for the most part done fairly well as most candidates were able to secure full marks by correctly naming applications and advantages of solar energy as well as correctly applying formulae for gravitational potential energy and momentum.

## Areas of weak performance

Parts (a) (i) and (a) (iv) were poorly handled with many candidates failing to come up with equivalent units to the Joule or naming appropriate alternative energies. In Part (b) (ii), quite a large number of candidates calculated average velocity as the final velocity.

## Recommendations

Teachers should spend more time on teaching qualitative concepts such as alternative and renewable sources of energy. They should also encourage students to use formulas based on the context of the question.

## Question 3

## Thermal Physics and Kinetic Theory

This question tested candidates' ability to recall the gas laws, apply them to the solution of problems as well as give qualitative explanations in terms of the kinetic theory.

## Areas of good performance

Part (a) on recalling the general gas law was done fairly well; however, too many candidates did not make it clear that the temperature had to be the absolute or Kelvin temperature.

## Areas of weak performance

Part (b) (iii) asked for a ratio of volumes, given a missing temperature at fixed pressure. This was definitely the most challenging part of the question. The majority of candidates did not convert from degrees Celsius to Kelvin, transpose correctly or write the ratio correctly.

## Recommendations

More practice needs to be provided on problems involving temperature and the gas laws. Kinetic theory ideas may need to be reinforced with virtual practical activities.

## Section B

Question 4

## Light

This question was based on the laws of refraction, refractive index and total internal reflection.

## Areas of good performance

In Part (a) most candidates knew the laws but did not state that there must be a change of medium.

## Areas of weak performance

For Part (b) (iii) many candidates were able to write 10 m , but could not link this with the two points required, that is, critical angle exceeded and so total internal reflection took place.

## Recommendation

It is clear that more time needs to be spent on tasks and activities that involve applying basic facts and concepts to solve problems.

## Question 5

## Electricity

This question was based on the conserving and costing of electrical energy.

## Areas of good performance

Parts (b) (i) and (ii) were done well by most candidates. They knew the formulas to use to calculate the time in hours, energy and to convert to kWh. However, few candidates took the shorter route by using seconds in their calculation, while others arrived at the correct answers using much longer methods.

## Area of weak performance

Part (b) (iii) finding the efficiency of the bulb was the more challenging of the question sub-parts. Many candidates failed to recognize that to obtain the useful energy, the energy loss had to be subtracted from input energy.

## Recommendation

Students should be encouraged to work with comprehensive definitions rather than loose ideas, for example,

$$
\text { Efficiency }=\frac{\text { Output Energy }}{\text { Input Energy }}=\frac{\text { Useful Energy }}{\text { Total Energy }}
$$

## Question 6

## The Physics of the Atom

This question required the candidates to recall the definition of the term 'half-life' and apply it to solve a problem. Candidates were also required to recall precautions taken when using radioisotopes as well as some useful applications of radioactive isotopes. The question also included a problem dealing with nuclear energy.

## Areas of good performance

Parts (a) and (b) which tested 'half-life' concept and useful applications of radioisotopes were done fairly well by many candidates.

## Areas of weak performance

Candidates failed to identify the energy as $6.7 \times 10^{10}$. Many candidates used $2356.7 \times 10^{10}$ and some of them calculated the change in mass rather than the new mass.

## Recommendation

Teachers should give students more practice in solving half-life problems, and encourage them to carefully read and answer questions more comprehensively.

## Paper 031 - School-Based Assessment

This year candidates in the majority of the centres performed up to an acceptable standard. However, there is still room for improvement by candidates in some centres. Candidates in several centres showed weakness in both the Analysis and Interpretation (A/I) and Planning and Design (P/D) skills being assessed.

Some other observations noted by the marking team were:
(1) A table of contents with the dates and skills was missing from several samples.
(2) Inappropriate activities and criteria were sometimes selected for or used in assessing.
(3) Long essay format was used in the write up of the discussion. This format is not required.
(4) Four A/I and four P/D labs were expected to be assessed. In many cases this was done. Marks cannot be awarded for missing assessments. Teachers are advised to assess two of each skill per year as a minimum. Using traditional laboratory exercises for the Planning and Design is not desirable.
(5) The skill of drawing of graphs, in some cases, needed more assessment. Students should draw more than five graphs in total.

## Recommendations for improved performance are:

(1) The provision of a manual SBA activities and rubrics to teachers. CXC can facilitate a workshop to produce such a manual.
(2) Greater professional development at site-based and district levels.
(3) Development of teacher networks to facilitate continuous communication and collaboration. The Internet, including websites such as http://caribbean.notesmaster.com/\#1 and the http://www.cxc.org/. can be utilized.

From March 2015, SBA Moderators will be visiting centres to moderate the assessment in CSEC Physics. Teachers are encouraged to plan work for the academic year early in the school year. Activities aligned with the syllabus implementation and clear rubrics for each activity should be available at moderation. All books are expected to be marked in detail with reference to the rubrics.

## Paper 032 - Alternative to School-Based Assessment (SBA)

## Question 1

This question explored the candidates' understanding of the cooling curve demonstration.
Experimental Skills tested were:
(a) Reading scales
(b) Graph skills of S-Scales, L-Labels, A-Axes, P-Plot.

## Areas of good performance

Most candidates were able to read the scales correctly.

## Area of weak performance

Both the graph and the calculation of latent heat showed lack of knowledge on the part of many of the candidates. The reading off of the graph did not pose a major problem to candidates but they experienced difficulty with latent heat calculation.

## Recommendation

More practice is needed to achieve the mastery of all graphical skills.

## Question 2

This question tested candidates' familiarity with experiments to investigate the passage of light through a rectangular glass block.

The Experimental skills tested were:
(a) The reading off of points on a graph to complete a table
(b) The drawing of a large triangle to determine the gradient.

The Use of Knowledge skills tested involved the calculation of the gradient and relating it to refractive index.

## Area of good performance

Candidates were able to complete the table from the graph correctly.

## Area of weak performance

The calculation of $c_{2}$ in Part (c) was not well done by the majority of the candidates as most did not make $c$, the subject of the formula, $n=c_{1} / c_{2}$, correctly.

## Recommendation

Students need to be provided with more opportunities to practise graphical skills and related analysis and calculations.

## Question 3

In this question candidates had to plan and design an experiment to determine how the resistance of a metallic conductor varies with the potential difference across it.

## Area of good performance

For Part (a) most candidates knew the components of the circuit though many of them had difficulty connecting the circuit.

## Area of weak performance

The required procedure in Part (b) presented greatest difficulty for most candidates. Many of them misinterpreted the question and monitored resistance and temperature changes. They did not know the readings to be taken.

## Recommendation

Students need to perform the experiment rather than try to remember such activities. The hands-on experience would be more lasting and would facilitate a better understanding of what is happening in each step of the experiment.

CARIBBEANGEXAINATIONSSCOUNCIL

REPORT ON CANDIDATES' WORK IN THE
CARIBBEAN SECONDARY EDUCATION CERTIFICATE ${ }^{\circledR}$ EXAMINATION

MAY/JUNE 2015

PHYSICAL EDUCATION AND SPORT<br>GENERAL PROFICIENCY EXAMINATION

## GENERAL COMMENTS

A total of 10690 candidates registered for the 2015 examinations compared with 9915 in 2014, representing an increase of 7.25 per cent in candidate registration. . This is the second year since the introduction of multiple choice items are being tested in this examination.

The Physical Education and Sport examination comprised four papers Paper 01A consisted of 45 multiple choice items and was worth 45 marks. Paper 01B consisted of five compulsory structured essay - type questions worth 45 marks based on the following units:

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

Paper 02 is a practical examination worth 45 marks, based on one sport selected by candidates. The overall mean for the practical was 79.6 per cent, which is one per cent higher than 2014.

Paper 03, the School-Based Assessment (SBA), consisted of two parts: a class project and the assessment of the practical skills associated with three sports. The class project was worth 30 marks and the examination of the skills for each sport was worth 45 marks.

## DETAILED COMMENTS

## Paper 01A - Theory (Multiple-Choice)

Forty- five items were administered to test mastery of specific objectives from the compulsory core. Items from History and Development of Physical Education and Sport continue to be the most challenging for candidates. The mean for this paper was 57 per cent.

## Paper 01B - Theory (Structured Essays)

## Question 1

This question tested candidates' knowledge in the area of History and Development of Physical Education and Sport.

In Part (a), candidates were required to outline three roles of the National Olympic Committee (NOC).
Expected responses included to:

- Develop interest in the Olympic Games and movement
- Help national governing bodies of sport to prepare teams for participation in the games.
- Foster ideals of the Olympic movement
- Promote the fight against doping in sport

Candidates whose responses included these gained full marks, however many of the responses were not specific to the NOC.

Part (b), tested candidates' knowledge of the role of the International Olympic Committee (IOC).
Expected responses included to:

- Plan, manage and execute the Olympic Games
- Lead the fight against doping in sport
- Promote excellence, cultural exchanges, mass participation, fair play, international understanding, respect and build relationships beyond the games
- Make decisions on rule changes and which sport to include in the games
- Provide funding to NOCs

Candidates whose responses included these gained full marks. Many of the responses were not applicable to the IOC but were roles of the NOC.

Part (c) examined the impact of scientific and technological advances on physical education and sport in relation to:

- Computer technology
- Modern equipment
- Modern facilities

Some expected responses for Part (c) were:

- Quicker/more accurate decision making
- Improved communication
- Enable researchers to compare skills for various sporting activities
- Use of statistics to analyse and improve performance
- Reduction in injuries/accidents in sports
- Provision of facilities for special needs groups
- More access to sports at different times, for example, night time sports
- Enables a more scientific approach to training.

The majority of candidates was able to maximize marks on the impact of computer technology and modern equipment. Some candidates did not specifically address the impact of scientific and technological advances on modern facilities and repeated the answers given for computer technology and modern equipment).

## Question 2

In Part (a), candidates were asked to identify three long-term effects of participation in physical activities (such as swimming and running) on the muscular system.

Expected responses

- Develops stronger and more efficient muscles
- Develops good posture
- Helps prevent injuries
- Reduces risk of atrophy

Although many candidates were able to answer appropriately as it relates to long-term effects, a few candidates focused their responses on the negative effects of participation in physical activity, for example, torn muscles, injuries that can affect the elderly and chronic injuries.

Part (b) required candidates to outline the effects of regular exercise on the circulatory system. A number of responses to this question were good. Responses from most candidates were accurate.

Part (c) tested candidates' knowledge of types of joints and types of movement at the joints. It was evident from the responses that candidates were knowledgeable regarding the type of joint at the elbow and understood the types of movement but were not able to use scientific language in their responses. Responses such as 'in and out' and 'up and down' rather than flexion and extension were given. Overall, candidates did not perform well on this question.

## Question 3

In Part (a), candidates were asked to state three reasons why flexibility is important.
Most candidates responded adequately. The responses related to movement and flexibility and their contribution to health in general; however, some candidates gave the definition for flexibility rather than reasons why flexibility is important.

Expected responses were:

- Maintaining good posture
- Prevention of injuries
- Efficient performance of physical activities
- Contributes to general health

Part (b) required candidates to suggest three ways in which feedback will assist an athlete in a given scenario to learn new skills. The majority of candidates scored full marks and demonstrated good knowledge and understanding of this part of the question.

Part (c) asked candidates to name three possible causes of a broken leg that John suffered during a football match. A few candidates misinterpreted the question because they did not read the question in its entirety and gave unexpected responses such as 'spectator threw an object which hit the player and fractured his leg'. This would fall in the category of 'accidental' therefore marks were given; candidates also used definitions as reasons. Generally, candidate's scores were fair.

## Question 4

This question tested candidates' knowledge of health and nutrition for athletes. Part (a) focused on the advantages of a vegetarian diet to an athlete. Part (b) examined the reasons for inclusion of staples in the diet of an athlete and Part (c) tested the candidates' understanding of why it is important for an athlete to eat after participating in an event.

Part (a) posed challenges for some candidates and many scored more marks on Part (c). Overall, the performance on this question was not acceptable.

Expected responses for Part (a) were:

- Low cholesterol risk
- Slower digestion
- High dietary fibre

Expected responses for Part (b) were:

- Main source of energy
- Delays tiredness
- Can improve performance in the end stage of competition
- Increases glycogen in the muscles

Expected responses for Part (c) were:

- To replace glycogen, lost minerals and fluids
- To build back energy levels
- To assist with recovery

The majority of candidates scored below four marks on this question. Generally, however, the poor performance on this question implies a weak grasp of the concepts of a balanced diet. Most candidates did not answer Parts (a) and (b), however, Part (c) was answered in the reverse, for example candidates gave reasons why an athlete should not eat before an event.

## Question 5

This question comprised two parts. Part (a) tested candidates' knowledge of the anti-doping issues and hosting of international events. Part (a) asked candidates to explain how the breaking of anti-doping rules affect (i) an athlete and (ii ) a country, while Part (b) asked candidates to state three advantages of hosting international sporting events to countries and cities.

Expected responses for Part (a) (i) were:

- Loss of income
- Health risks
- Being banned from competition
- Loss of respect, humiliation, embarrassment

Expected responses for Part (a) (ii) were:

- Disgrace, distrust
- Damage to image
- Loss of income
- Damage to international relations

Some expected responses for Part (b) were:

- Increase in trade and tourism
- Financial gain
- Exposure to high quality sports
- Heritage/cultural legacy

Responses indicated that some candidates did not understand the concept of anti-doping. Most students were able to state correct responses to Part (a) (i), however, some of the responses for Part (a) (ii) were incorrect, for example, the country will be banned, people will not visit the country.

Most candidates however, received full marks for question Part (b).
The performance of candidates in Health and Nutrition indicated that the candidates found Part (b0 most challenging. Candidates need to place greater focus on Health and Nutrition in preparing for the examination. Even though the scores for History and Development were good, more attention is also needed in this area as well.

The overall mean score for Paper 02 was 40 per cent.

## PAPER 03 - School-Based Assessment

A sample of the class projects assessed by class teachers are moderated during marking.
During the moderation process this year the following observations were made.

- The majority of the students planned a competition and assumed a role within the competition and the activities chosen conformed with the guidelines provided in the syllabus.
- Secondly, the SBAs were typewritten, neat and legible from the majority of countries. Only one country presented SBAs that were handwritten.
- Only four SBAs were marked in a manner by the class teacher that did not conform to the syllabus guidelines for example, organization of portfolio carries a maximum of three marks but the class teacher gave a score higher than three.

The mean score for the SBA was 79 per cent which was two per cent higher than 2014.

## Shortcomings

- Some SBAs were not bounded.
- Several SBAs had table of contents that were not paginated.
- Many references lacked the author(s) name, year and publisher.
- Some SBAs showed no evidence that any activity took place.
- Some students assumed roles that are not in the syllabus, and did not present information pertinent to the roles chosen.


## Recommendations

It is recommended that teachers and students refer to the syllabus for proper guidance in role selection for the implementation of the SBA. More emphasis should also be placed on the theory aspects of Physical Education and Sport.

