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MAY/JUNE 2009

PHYSICAL EDUCATION AND SPORT

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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
- 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 4 312 candidates registered for the examination while 3 798 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.