

### PHYSICAL EDUCATION

Paper 3

0523010

9396/33 October/November 2015 2 hours 30 minutes

No Additional Materials are required.

### **READ THESE INSTRUCTIONS FIRST**

An answer booklet is provided inside this question paper. You should follow the instructions on the front cover of the answer booklet. If you need additional answer paper ask the invigilator for a continuation booklet.

Answer all questions.

Electronic calculators may be used.

You may lose marks if you do not show your working or if you do not use appropriate units.

The number of marks is given in brackets [] at the end of each question or part question.

This document consists of 4 printed pages and 1 insert.



## Answer all questions.

# Section A: Exercise and Sport Physiology

- 1 (a) Energy is fundamental to performance in sport.
  - (i) Define each of the following terms and give the units that they are expressed in:
    - energy
    - work
      - power. [6]
  - (ii) Explain, using the ATP/PC system, the principles of a coupled reaction. [4]
  - (b) Balance, co-ordination, agility and reaction time are important fitness components that will enable sports performers to achieve success in their chosen activity.

Give a definition and a method of evaluating **two** of the above components. [4]

- (c) An elite marathon runner is preparing to compete in the Olympic Games next year.
  - (i) Use the principles of training to design a continuous training programme that will enable the athlete to reach peak performance for the Games. [6]
  - (ii) Explain the benefits of periodisation in planning this continuous training programme. [6]
  - (iii) Outline the constituents and timings of the recommended pre-competition and postcompetition meals for a marathon runner. [4]

[Total: 30]

# Section B: Psychology of Sport Performance

- 2 (a) (i) Eysenck identified two dimensions to characterise personality: extroversion/introversion and neuroticism/stability. Describe the characteristics of each dimension. [2]
  - (ii) Describe two limitations of personality profiling in sport. [2]
  - (b) Effective leadership is a crucial element affecting overall group performance.

Explain, using sporting examples, the differences between a prescribed leader and an emergent leader. [2]

(c) Fig. 2.1 shows Chelladurai's multi-dimensional model of leadership related to sport.

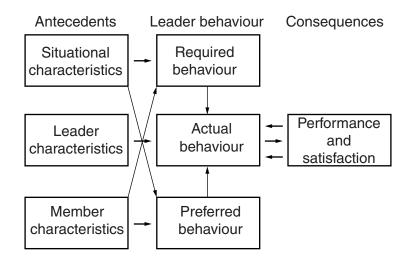


Fig. 2.1

Explain, using sporting examples, what is meant by each of the antecedents and leader behaviours shown in the model. [6]

- (d) To achieve peak performance, emotional control is required and arousal must be at an optimum level. Over-arousal can lead to anxiety which can have a negative effect on performance.
  - (i) Describe, using practical examples, how task complexity and the ability level of the performer can affect arousal levels and therefore sports performance. [4]
  - (ii) Explain what is meant by trait and state anxiety. [4]
  - (iii) Outline the factors that may influence a performer's sports competition anxiety in the hours leading up to an event. [4]
- (e) Many British athletes at the London Olympic Games in 2012 attributed part of their success to the support of the crowd. Critically evaluate the effect of home advantage on sporting performance. [6]

[Total: 30]

#### Section C: Olympic Games: A Global Perspective

3 (a) The Olympic Games is an athletics festival that is seen to act as a social force. One of the key values of the Games is the concept of a supreme mental and physical challenge.

What is meant by the concept of a supreme mental and physical challenge? [4]

- (b) After the 1976 Montreal Games, the IOC accepted the need for commercialisation to enable the Olympic Games to take place.
  - (i) Outline the various sources of funding that are available to a host nation to cover the costs of hosting the Olympics.
    [3]
  - (ii) Describe the possible financial costs to an athlete of competing in the Olympic Games. [3]
  - (iii) Evaluate the potential impact to people living in an area that has been awarded the honour of hosting the Olympic Games. [4]
- (c) The United States of America and the People's Republic of China have dominated the medal table at the most recent Olympic Games.

Compare the methods used in these two countries of nurturing talent in the pursuit of global excellence. [6]

(d) Baron Pierre de Coubertin established the modern Olympic Games and believed strongly in the 19<sup>th</sup> century ideal of amateurism, which remained in place at the Games until the late 20<sup>th</sup> century.

Explain how the traditional definition of amateurism was believed to exclude working class athletes from participation in the Olympic Games in the first half of the 20<sup>th</sup> century. [5]

(e) Discuss the suggestion that reform of the Olympic Games by the IOC should include the dropping of 'wealth sports' from the programme of activities. [5]

[Total: 30]

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