

## PHYSICAL EDUCATION

Paper 3

9396/33 October/November 2016 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) Explain the role of ATP, including its breakdown and re-synthesis, in producing muscle contractions to enable human movement. [6]
  - (b) The 1500 m race in athletics involves the performer using all three energy systems at different times during the race.
    - (i) Explain, using the 1500 m race, when and why each of the energy systems would be used by an elite performer. [6]
    - (ii) After the race, a significant amount of lactic acid will be present in the working muscles. Outline the processes that occur in the body in the removal of this lactic acid. [4]
  - (c) Define the term *body composition* and outline guidelines for its improvement. [4]
  - (d) Speed is a vital fitness component for most elite sports performers.
    - (i) Identify and describe a recognised test to evaluate speed. [2]
    - (ii) Plyometric training programmes can be used to improve explosive strength and power, which impacts on speed.

Explain the principles behind plyometrics training. [4]

(e) Critically evaluate the use of creatine supplements as an ergogenic aid to performance. [4]

[Total: 30]

## Section B: Psychology of sport performance

2 (a) The trait theory of personality suggests that individuals have either Type A or Type B characteristics.

Identify **two** characteristics of a Type A personality.

- [2]
- (b) Prejudice is a prejudgement of a person, group, or situation, usually based on inadequate information.

State an example of prejudice in a sporting situation and identify the origins and influences that may have contributed to this prejudice. [4]

(c) Successful sports teams generally work together very well as a unit.

Steiner's model of group performance can be expressed as shown.

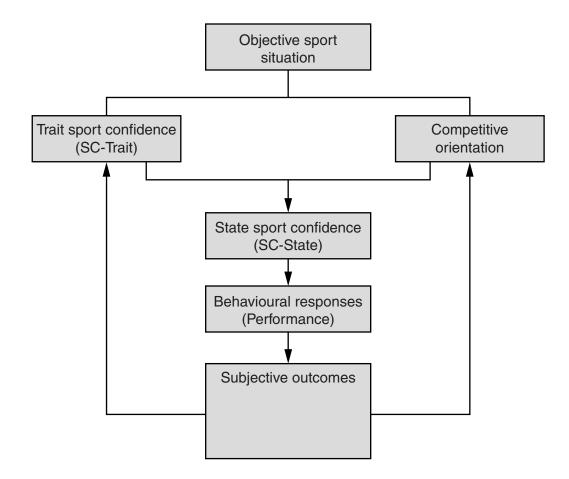
Actual productivity = Potential productivity – Losses due to faulty processes

Using examples from a team sport of your choice, explain Steiner's model and describe the possible causes of faulty processes. [5]

- (d) There are different theories to explain how effective leadership characteristics are developed.Outline the trait theory of leadership and contrast it with the social learning theory. [5]
- (e) An Olympic athlete has set themselves the goal of winning a podium place and achieving a personal best in the 100 m sprint in the Olympic Games.

Explain the importance of goal setting in sport as a method of anxiety management. [4]

- (f) Describe two recognised techniques that can be used by an athlete to reduce somatic anxiety. [4]
- (g) Fig. 2.1 shows Vealey's model of sports confidence.





Explain what is meant by each of the terms:

- trait sport confidence,
- state sport confidence,
- competitive orientation.

[6]

[Total: 30]

## Section C: Olympic Games: a global perspective

- **3** (a) The Ancient Olympic Games are seen as a blueprint for the modern era. Many aspects of their format were incorporated into the modern era and the philosophy behind the Games was believed to act as a social force.
  - (i) Identify four athletic events that were a part of the Ancient Olympic Games. [4]
  - (ii) Describe the philosophy and values behind the Olympic Games. [4]
  - (b) When the Modern Olympic Games began in 1896, the concept of amateurism significantly influenced participation in the Games.

Explain the transition from amateurism to professionalism during the Modern Olympic Games. [5]

(c) No women were allowed to compete in the first Modern Olympic Games in 1896.

Discuss the changing role of women in the Olympic Games from 1896 to today. [4]

- (d) The modern Olympic oath was written by Pierre de Coubertin. It has been modified over time to reflect the changing nature of sports competition and to address dysfunctional aspects of behaviour.
  - (i) Explain, using at least one practical example from the Olympic Games, what is meant by dysfunctional aspects of behaviour. [3]
  - (ii) Describe how dysfunctional aspects of behaviour could be prevented from occurring at the Olympic Games.
    [4]
- (e) The Ancient Olympic Games were held at the same site in Olympia every four years, whereas the Modern Olympic Games rotate from city to city based on bids to host the Games.

Give reasons why it was decided to rotate the Games from city to city and consider the benefits that would arise from having a permanent site for the Olympic Games. [6]

[Total: 30]

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cie.org.uk after the live examination series.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.