



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education  
Advanced Subsidiary Level and Advanced Level

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**PHYSICAL EDUCATION**

**9396/03**

Paper 3

**For Examination from 2010**

SPECIMEN PAPER

**2 hours 30 minutes**

Additional Materials: Answer Booklet/Paper

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**READ THESE INSTRUCTIONS FIRST**

If you have been given an Answer Booklet, follow the instructions on the front cover of the Booklet.

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use a soft pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

At the end of the examination, fasten all your work securely together.

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

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This document consists of **4** printed pages.



Answer **all** questions.

**Section A: Exercise and Sport Physiology**

1 (a) Knowledge of the three energy systems underpins exercise and sport physiology.

(i) Name an energy system and identify the missing information **A**, **B** and **C** for this system. [3]

Fuel used	<b>A</b>
Site of reaction	<b>B</b>
Controlling enzyme	<b>C</b>

(ii) Sketch a graph of energy supplied against time to show when each of the three energy systems is predominant in relation to duration of exercise. [3]

(b) A weight training programme can develop maximum strength.

(i) Explain the main features of a weight training programme designed to develop **maximum strength**. [4]

(ii) Identify **two** physiological adaptations that take place during the training programme and explain how each helps to improve maximum strength. [4]

(c) During a period of intense physical activity such as a 400m sprint or 100m swim there is a build up of lactic acid.

(i) Explain why this build up of lactic acid occurs and what impact this build up has on performance. [5]

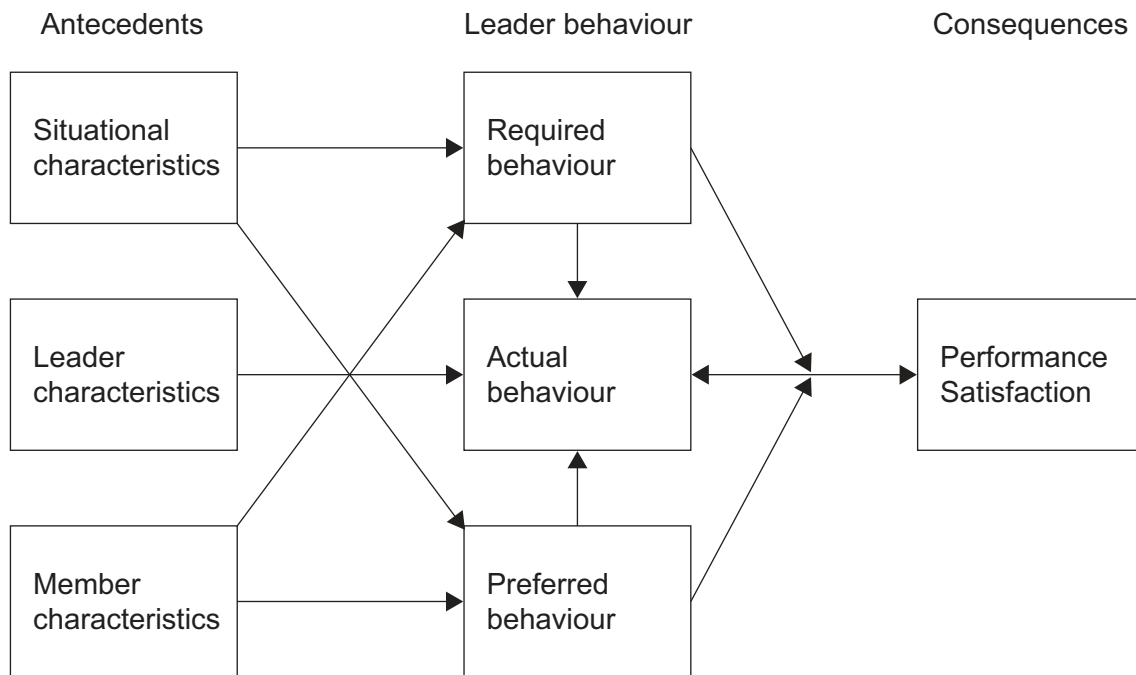
(ii) What can an athlete do to try and offset and delay the build up of lactic acid? [3]

(d) The coach is responsible for ensuring that the performer is in peak condition as competition approaches. Using principles of training applied to an example from sport, explain how this may be achieved. [8]

**[Total: 30]**

## Section B: Psychology of Sports Performance

- 2 (a) Leadership has been described as the process of influencing individuals and groups towards set goals.



**Fig. 3 Adapted from Chelladurai's multi-dimensional model of leadership**

- (i) How might a sports team select its leader? [2]
- (ii) With reference to Fig. 3 explain the achievement of optimum performance and satisfaction by a group of sports performers. [6]
- (b) Optimum arousal levels are desirable in all sports and at all levels of performance.  
Explain the cue-utilisation hypothesis, its links to arousal and its effect on performance. [7]
- (c) (i) Identify the different attributions according to Weiner's attribution model. [4]  
(ii) Use practical examples from sport to explain how attributions given for success and failure can affect motivation. [5]
- (d) Apply theoretical principles to practical examples to show how you would change a negative attitude into a positive one. [6]

**[Total: 30]**

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

- 3 (a) (i) Explain the reasons why the Ancient Olympic Games were a common feature of life in ancient Greece. [4]
- (ii) Explain the benefits to the ancient Greeks of taking part in the Games. [3]
- (b) Sheikh Ahmad, president of the Olympic Council of Asia stated that “We have a responsibility to embrace different cultures”.
- How do the Olympic Games promote an appreciation of cultural diversity? [4]
- (c) The concept of the amateur sports person has changed at the highest levels of sport. Explain some of the changes which have taken place. [5]
- (d) (i) Describe the selection process for the host city of the Olympic Games. [5]
- (ii) How would you suggest that the process could be improved? [3]
- (iii) Why do cities bid to host the Olympic Games? [3]
- (e) What part did the policy of apartheid practiced in South Africa play in the boycotts of the Olympic Games. [3]

**[Total: 30]**

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