



# Cambridge International AS & A Level

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**PHYSICAL EDUCATION**

**9396/33**

Paper 3

**October/November 2022**

**2 hours 30 minutes**



You must answer on the enclosed answer booklet.

You will need: Answer booklet (enclosed)

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## INSTRUCTIONS

- Answer **all** questions.
- Follow the instructions on the front cover of the answer booklet. If you need additional answer paper, ask the invigilator for a continuation booklet.
- You may use a calculator.
- You should show all your working and use appropriate units.

## INFORMATION

- The total mark for this paper is 90.
- The number of marks for each question or part question is shown in brackets [ ].

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This document has **4** pages.

Answer **all** questions.

**Section A: Exercise and sport physiology**

- 1 (a) Describe the energy system that breaks down glucose anaerobically. [4]
- (b) Describe the physiological implications of a warm up on the muscular system. [4]
- (c) Coaches use periodisation to break down the training year into training blocks.  
Using a sport of your choice, explain periodisation of training. [6]
- (d) Define each of the following fitness components:
- reaction time
  - coordination. [2]
- (e) The following tests are used to evaluate aerobic capacity:
- the multi-stage fitness test
  - the PWC170 test.
- Describe **one** of these tests. [4]
- (f) Explain the use of target heart rates as an intensity guide during aerobic training. [4]
- (g) Describe how each of the following could enhance the performance of a 400-metre sprinter:
- caffeine
  - creatine supplements
  - recombinant erythropoietin (EPO). [6]

[Total: 30]

**Section B: Psychology of sport performance**

- 2 (a) Sports performers with a need to avoid failure tend to have low levels of achievement motivation and give up easily.

Outline **two** other characteristics of a performer who has a need to avoid failure. [2]

- (b) Effective leadership is an important factor affecting the development of a cohesive sports team.

(i) Suggest other factors that affect the development of a cohesive sports team. [6]

(ii) Compare emergent leaders in sport with prescribed leaders in sport. [3]

(iii) Describe Fiedler's contingency model of leadership. [4]

- (c) Explain, using a practical example for each, what is meant by the following **two** attentional styles:

- broad external
- narrow internal.

[4]

- (d) Describe Hanin's zone of optimum functioning theory. [4]

- (e) Describe how the use of selective attention and mental rehearsal may reduce the effects of social inhibition in sport. [3]

- (f) Learned helplessness is a belief that failure is inevitable.

Outline strategies that may be used by a coach to avoid learned helplessness in their performers. [4]

[Total: 30]

### Section C: Olympic Games: a global perspective

- 3 (a) Compare the ancient Olympic Games with the modern Olympic Games in terms of:
- common features
  - differences.
- [6]
- (b) There is a fear that the Olympic Games may be attacked by terrorists.
- (i) Suggest reasons why the Olympic Games are a potential target for terrorists. [4]
- (ii) Suggest ways that a host nation may try to protect athletes at the Olympic Games from a potential terrorist attack. [3]
- (c) Other than security costs, outline the costs of hosting the Olympic Games. [5]
- (d) (i) Explain what is meant by broken-time payments. [2]
- (ii) Describe the role of broken-time payments in the transition from amateurism to professionalism at the Olympic Games. [3]
- (e) Female participation at the Olympic Games has generally increased in the last 40 years.
- Describe how the modern Olympic Games have changed to encourage female participation. [3]
- (f) Outline the significance of the 1988 Seoul Olympic Games in the development of the Paralympics. [4]

[Total: 30]

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