



# Cambridge International AS & A Level

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**PHYSICAL EDUCATION**

**9396/32**

Paper 3

**October/November 2020**

**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. Blank pages are indicated.

Answer **all** questions.

**Section A: Exercise and sport physiology**

- 1 (a) Explain the principle of coupled reactions with reference to the breakdown of ATP. [4]
- (b) Compare the ATP/PC system and the aerobic system in terms of:
- type of reaction
  - chemical or food fuel used
  - energy yield
  - by-products produced.
- [4]
- (c) Explain what is meant by the term *energy continuum* and suggest why knowledge of the energy continuum of an activity may help a coach to plan a training programme. [3]
- (d) During the recovery process after strenuous exercise, the body experiences excess post-exercise oxygen consumption (EPOC).
- (i) Explain what is meant by the term *excess post-exercise oxygen consumption (EPOC)*. [2]
- (ii) Describe what this excess oxygen is used for in the recovery process. [3]
- (e) Describe how target heart rates may be used when planning training to develop aerobic capacity. [4]
- (f) Describe a method of evaluating maximum strength. [4]
- (g) Anabolic steroids are illegal ergogenic aids that can enhance performance in sport.
- Describe the positive and negative effects that anabolic steroids may have on a performer. [6]

[Total: 30]

**Section B: Psychology of sport performance**

- 2 (a) Eysenck suggested that personality was based on inherited traits.

Describe each of the following inherited traits of personality:

- extroversion
- neuroticism.

[2]

- (b) It is generally accepted that a sports performer needs achievement motivation to be successful.

(i) Explain what is meant by achievement motivation. [3]

(ii) Explain how situational factors can affect the achievement motivation of a sports performer. [4]

- (c) Chelladurai's model of leadership identifies three factors that have an impact on the type of leadership that would produce the best results in a sporting situation.

Describe, using a sporting example for each, the following factors:

- situational characteristics
- leader's characteristics
- members' characteristics.

[3]

- (d) Outstanding sporting performances may occur at different levels of arousal, and a performer will often talk about being 'in the zone'.

(i) Apart from outstanding performance levels, describe **five** characteristics of a performer who is in the zone of optimum functioning. [5]

(ii) Explain the relationship between arousal and task complexity. [3]

- (e) Outline the positive effects an audience may have on a performer in an athletics event. [5]

- (f) Explain Berkowitz's aggressive-cue hypothesis. [5]

[Total: 30]

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

- 3 (a) Describe ways that the Olympic Games act as a social force. [4]
- (b) The philosophy of many participants at the ancient Olympic Games was very different from the ideals of the modern Games. Many athletes adopted a 'wreath or death' mentality.
- Explain what was meant by a 'wreath or death' mentality. [3]
- (c) Suggest potential problems associated with the bidding process to host the Olympic Games. [4]
- (d) (i) Outline the possible financial costs for athletes of competing in the Olympic Games. [4]
- (ii) Outline the types of facilities, other than sports venues, that a country will have to provide in the areas where the Olympic Games will be staged. [3]
- (e) Explain how amateurism was used to prevent working-class competitors from participating in the Olympic Games. [3]
- (f) Outline the changing role of women in the Olympic Games from 1896 to the present day. [5]
- (g) Some Paralympic athletes are achieving qualifying standards for the Olympic Games. One possible reform of the Olympic Games would be to exclude Paralympic athletes.
- Suggest reasons why Paralympic athletes should **not** be allowed to compete against able-bodied athletes at the Olympic Games. [4]

[Total: 30]

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