

**ADVANCED SUBSIDIARY GCE****PHYSICAL EDUCATION**

An Introduction to Physical Education

**G451**

Candidates answer on the Question Paper

**OCR Supplied Materials:**

None

**Other Materials Required:**

None

**Friday 28 May 2010****Morning****Duration: 2 hours**

Candidate Forename		Candidate Surname	
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Centre Number							Candidate Number				
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**INSTRUCTIONS TO CANDIDATES**

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure that you know what you have to do before starting your answer.
- There are three Sections in this paper.
- Answer **all** parts of the question in each of Sections A, B and C.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your Candidate Number, Centre Number and question number(s).
- Do **not** write in the bar codes.

**INFORMATION FOR CANDIDATES**

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is **90**.
- The quality of your written communication will be assessed in questions that are indicated accordingly (\*).
- This document consists of **16** pages. Any blank pages are indicated.



## Section A

Answer all parts of the question.

### Anatomy and Physiology

- 1 (a) Fig. 1 shows a gymnast holding a position on the rings. Use your anatomical and physiological knowledge to complete the table below for the hip joint.



**Fig. 1**

Joint	Joint Type	Movement	Agonist	Antagonist
Hip				Gluteus Maximus

The gymnast in Fig. 1 must keep his shoulders in a fixed position. Name **two** muscles in the rotator cuff group which aid the stability of the shoulder joint.

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..... [5]

- (b) A performer's mix of fast and slow twitch muscle fibres is genetically determined.

How might the mix of muscle fibre types determine the success of a performer?

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Identify **two** structural characteristics of muscle fibre types associated with athletes participating in endurance events.

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..... [5]



- (c) Explain the effects of altitude on the respiratory system and how these effects impact on the performance of an endurance athlete performing at altitude.

[5]

. [5]

- (d) Using an example from PE or Sport explain how changes in the position of a performer's centre of mass can affect performance.

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- [5]



- (e)\* People who have a poor diet and are inactive are at risk of developing coronary heart disease.

**Describe the characteristics of coronary heart disease.**

Explain how an active healthy lifestyle can help prevent coronary heart disease.



[10]

.. [10]

[Total: 30]

Turn over



**Section B**

Answer all parts of the question.

**Acquiring Movement Skills**

- 2 (a) Describe gross motor abilities and psychomotor abilities and give a practical example for each.

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- (b) Explain open loop control and explain why it is often linked to the autonomous phase of learning and performing movement skills.

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- (c) Describe schema theory using practical examples.

[6]

- [6]

- (d) Outline Whiting's model of information processing and explain how the perceptual mechanism can affect the performance of physical activities.

[6]



- (e)\* Many feel that more young people than ever follow an inactive and unhealthy lifestyle. Discuss the advantages and disadvantages of motivational strategies that can be used to encourage disaffected young people to participate in a balanced, active and healthy lifestyle.



. [10]

[Total: 30]

Turn over



**Section C**

Answer all parts of the question.

**Socio-Cultural studies relating to participation in physical activity**

- 3 (a) Fig. 2 shows the 'sports development pyramid'. Your position on the pyramid can be affected by opportunity, provision and esteem.



**Fig. 2**

- (i) Describe the **foundation**, **participation** and **performance** levels of the sports development pyramid.

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- (ii) Describe how **esteem** could affect a person's placement on the sports development pyramid.

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- (b) Performers at the top of the sports development pyramid need high levels of skill, fitness and funding.

- (i) Identify characteristics of **high level** sport other than high levels of skill, fitness and funding.

[2]

[2]

- (ii) Describe the different sources of funding for high level sport.

[3]

[3]

- (c) Compare **gamesmanship** and **deviance** in sport and explain reasons for the use of drugs in sport.

[5]

[5]



- (d) Sports and games were hugely popular in nineteenth century Public Schools.

Explain how nineteenth century Public Schools helped to promote and organise sports and games.

[5]



(e)\* Australians are often said to be pre-occupied with sport.

Explain why sport has such a high status in Australia.



[10]

.. [10]

[Total: 30]

