

**OCR**

Oxford Cambridge and RSA

**Friday 5 June 2015 – Afternoon****AS GCE PHYSICAL EDUCATION****G451/01** An Introduction to Physical Education

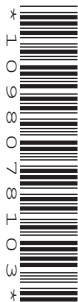
Candidates answer on the Question Paper.

**OCR supplied materials:**

None

**Other materials required:**

None

**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, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** parts of the question in each of Sections A, B and C.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- 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.

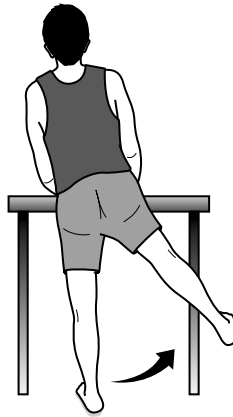
**INFORMATION FOR CANDIDATES**

- 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 – Anatomy and Physiology**

Answer **all** parts of the question.

- 1 (a) Fig. 1 shows an athlete performing a warm up exercise.



**Fig. 1**

- (i) Complete the table below for the athlete’s hip joint in the direction of the arrow. [3]

Joint	Movement	Agonist	Antagonist	Type of muscular contraction
Hip		Gluteus Medius		

- (ii) Give **two** ways in which a warm up would affect skeletal muscle during exercise.

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..... [2]

- (b) (i) Define blood pressure.

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..... [1]

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(ii) Describe the changes that occur to both systolic and diastolic blood pressure during exercise.

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(c) Explain hormonal regulation of the heart during exercise.

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(d) For a performer at rest, explain gaseous exchange between the blood and muscle tissue cells.

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(e)\* Explain the changes in the distribution of cardiac output from rest to maximal exercise.

Make reference to:

- Vascular shunt mechanisms
- Venous return
- Control by the vasomotor centre

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### SECTION B – Acquiring Movement Skills

Answer **all** parts of the question.

- 2 (a) Abilities are often regarded as being innate and enduring.  
Describe other characteristics of gross motor and psychomotor abilities and give an example of each.

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- (b) Describe Whiting’s model of information processing.

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**SECTION C – Socio-Cultural Studies relating to participation in physical activity**

Answer **all** parts of the question.

- 3 (a) (i)** Identify reasons why many people lead increasingly sedentary lifestyles in contemporary UK society.

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- (ii)** State the recommended amounts of physical activity needed to be healthy.

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- (b) (i)** Identify **two** benefits of outdoor recreation. Give a practical example of how each can be achieved.

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(ii) State **two** differences between outdoor education and outdoor recreation.

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(c) Explain why ethnic sports such as the Highland Games are still popular today.

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(d) The relationship between sport and sponsorship is one part of the 'golden triangle'. Discuss possible advantages and disadvantages of the relationship between sport and sponsorship.

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**END OF QUESTION PAPER**

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