

**OXFORD CAMBRIDGE AND RSA EXAMINATIONS  
AS GCE  
G451/01**

**PHYSICAL EDUCATION**

**An Introduction to Physical Education**

**FRIDAY 6 JUNE 2014: Morning**

**DURATION: 2 hours  
plus your additional time allowance**

**MODIFIED ENLARGED**

<b>Candidate forename</b>						<b>Candidate surname</b>				
<b>Centre number</b>						<b>Candidate number</b>				

**Candidates answer on the Question Paper.**

**OCR SUPPLIED MATERIALS:**

**None**

**OTHER MATERIALS REQUIRED:**

**None**

**READ INSTRUCTIONS OVERLEAF**

## **INSTRUCTIONS TO CANDIDATES**

**Write your name, centre number and candidate number in the boxes on the first page. 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).**

## **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 (\*).**

**Any blank pages are indicated.**

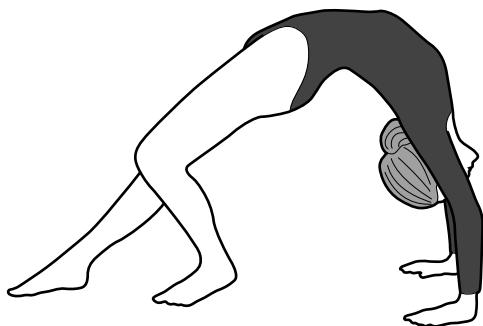
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## **SECTION A – Anatomy and Physiology**

**Answer ALL parts of the question**

- 1 (a) Fig. 1 shows a gymnast in a bridge position.**

**FIG. 1**



- (i) Complete the table below for the gymnast's spine.**

<b>Joint</b>	<b>Joint Type</b>	<b>Movement</b>	<b>Agonist</b>	<b>Antagonist</b>
<b>Spine</b>				

**[4]**

- (ii) Name ONE muscle involved in the core stability of the spine.**

**[1]**

- (b) (i)** Explain why the position held in a bridge is more stable than in a handstand.

[3]

[3]

- (ii) Describe angular motion and give an example from sport.**

[2]

[2]

- (c) (i) Give an average value for cardiac output for a performer at rest and during maximal exercise.**

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**[2]**

- (ii) Describe how the conduction system of the heart controls the systolic phase of the cardiac cycle.**

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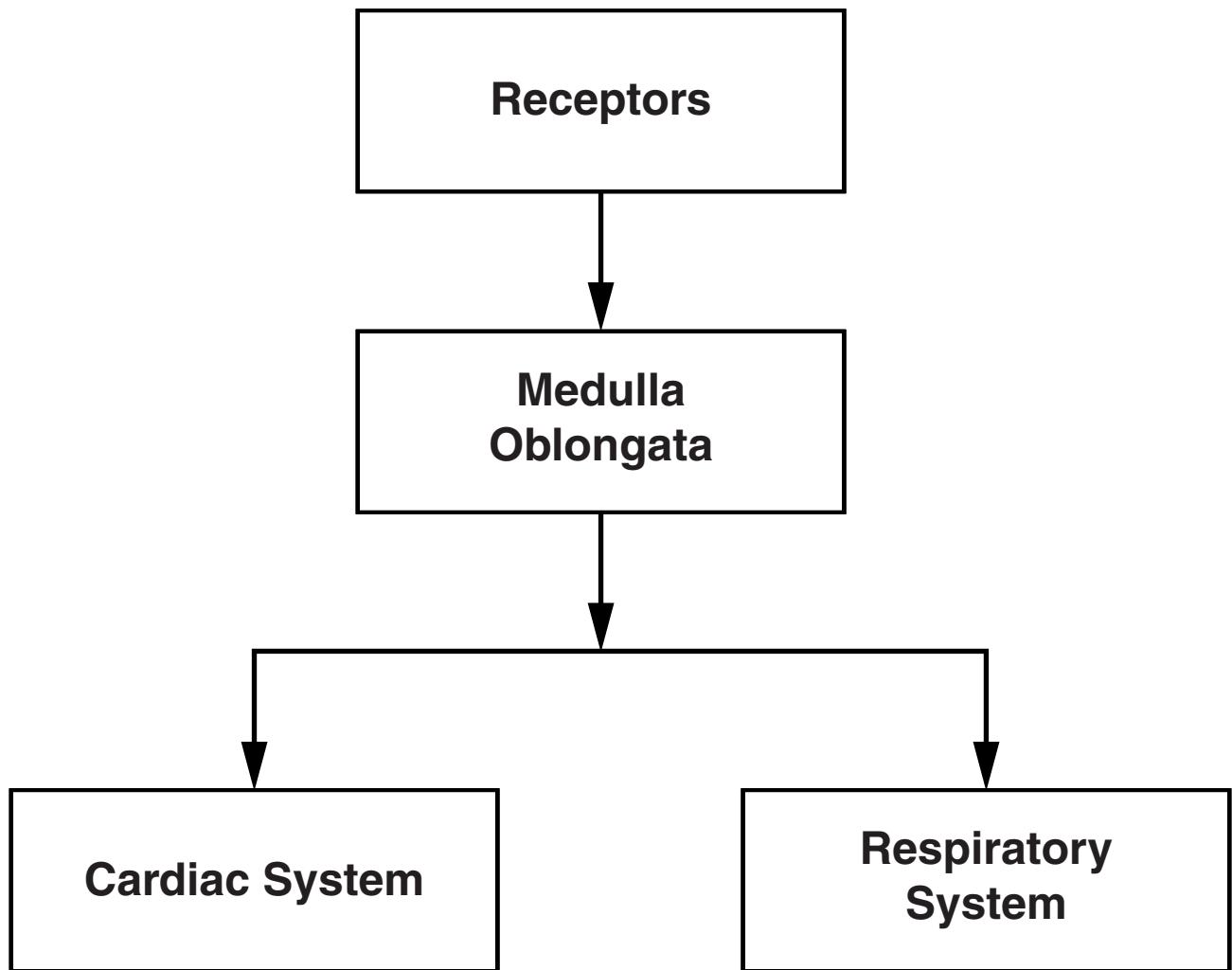
**[4]**

**(d) Describe the mechanics of breathing for inspiration at rest.**

[4]

(e)\*

**FIG. 2**



**Describe neural factors which regulate the cardiac and respiratory systems shown in Fig. 2 during exercise.**

**Using Fig. 2, explain how these systems affect an endurance performer. [10]**







## **SECTION B – Acquiring Movement Skills**

# **Answer ALL parts of the question**

- 2 (a) Giving a practical example for each, explain why a skill can be classified as either self paced or externally paced.**

[4]

**(b) Quick reactions can be affected by factors such as the psychological refractory period.**

## **Explain the psychological refractory period.**

[4]

- [4]

- (c) Using practical examples, describe visual, verbal and mechanical guidance. Outline ONE benefit of each type of guidance.

[6]

**(d) Describe the cognitive theory of learning. Give ONE example of how this theory can be applied to the learning of healthy lifestyles.**

[6]

**(e)\* Arousal is often linked to performance. Critically evaluate Drive theory, Inverted U theory and Catastrophe theory. [10]**

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

# **Answer ALL parts of the question**

### **3 (a) (i) Define Physical Education.**

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[1]

**(ii) Physical Education has many benefits such as improved health and fitness.**

**Identify THREE other possible benefits of Physical Education and explain how each can be achieved.**

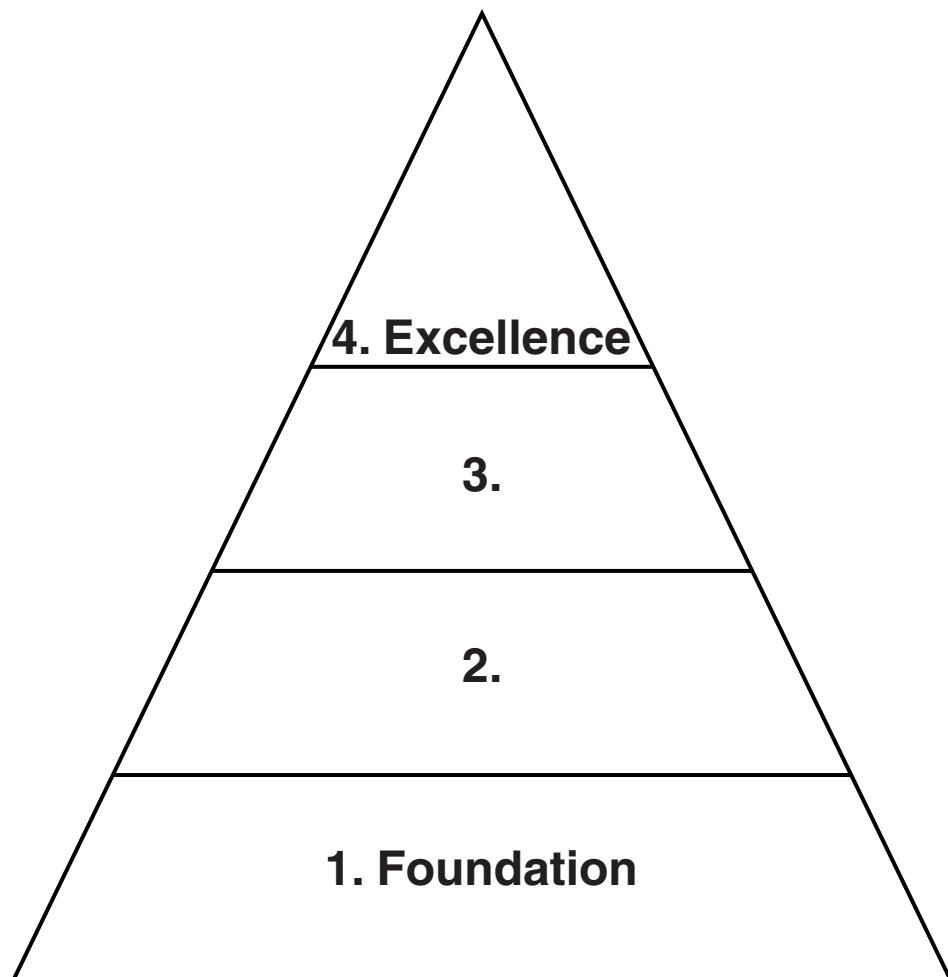
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[3]

**(b) The sports development pyramid has four layers as shown in Fig. 3.**

**FIG. 3**



**(i) Name and describe layers 2 and 3 in Fig. 3.**

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**[2]**

- (ii) Name and describe the role of ONE national organisation in the UK that supports elite performers at the top of the sports development pyramid.**

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[3]

- (c) The first modern Olympic Games were in Athens in 1896.**

- (i) Describe the background to the modern Olympic Games.**

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[3]

- (ii) Describe the early aims and philosophy of the modern Olympic movement.**

[3]

[3]

- (d) (i) Explain deviance in sport.**

[2]

[2]

- (ii) Compare the possible effects of sportsmanship and gamesmanship on sporting situations.**

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[3]

**(e)\* Explain the nature of sport in the USA.**

**[10]**

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**END OF QUESTION PAPER**

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