



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

CANDIDATE  
NAME

CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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**PHYSICAL EDUCATION**

**0413/13**

Paper 1

**October/November 2016**

**1 hour 45 minutes**

Candidates answer on the Question Paper.

No Additional Materials are required.

**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name on all the work you hand in.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams or graphs.

Do not use staples, paper clips, glue or correction fluid.

**DO NOT WRITE IN ANY BARCODES.**

**Section A**

Answer **all** questions in this section.

Write your answers in the spaces provided on the Question Paper.

**Section B**

Answer **all** questions in this section.

Write your answers in the spaces provided on the Question Paper.

Electronic calculators may be used.

You may lose marks if you do not show your working or if you do not use appropriate units.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [ ] at the end of each question or part question.

This document consists of **12** printed pages.

**Section A**

Answer **all** the questions in the spaces provided.

- 1 State **one** example of a fixed or immovable (fibrous) joint.  
.....[1]
  
- 2 Explain why performers should try to control their emotions when playing a sporting activity.  
.....  
.....[1]
  
- 3 Give **one** role or aim that a local sports club might have.  
.....  
.....[1]
  
- 4 Name **one** stage in the information processing model.  
.....[1]
  
- 5 Give **one** reason why fat is an important component of a balanced diet.  
.....  
.....[1]
  
- 6 Give **one** advantage to a performer from receiving financial aid in the form of a scholarship.  
.....  
.....[1]
  
- 7 Name the antagonistic pair of muscles that allows the arm to extend at the elbow.  
.....  
.....[2]

8 Describe **two** effects that a coach may see if an athlete is over-training.

.....  
.....  
.....  
.....[2]

9 What are the potential benefits to a company of sponsoring an event?

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.....  
.....  
.....  
.....  
.....  
.....[3]

10 Suggest **three** safety precautions a teacher should take when planning an indoor physical education lesson.

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.....  
.....  
.....  
.....[3]

- 11 Complete the table below, stating **two** negative long-term effects of using each of the banned performance enhancing drugs.

<b>Drug</b>	<b>Long-term effects</b>
Stimulants	High blood pressure. Liver damage.
Narcotic analgesics	
Diuretics	
Anabolic steroids	
Tranquillisers	

[4]

[Total: 20]

**Section B**

Answer **all** the questions in the spaces provided.

**Unit 1 Factors affecting performance**

**12 (a)** Provide an example of an extremely open skill and of an extremely closed skill.

open skill .....

.....

closed skill .....

.....[2]

**(b)** Identify **three** components of a synovial joint and describe how each helps movement at a joint.

.....

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.....[3]

**(c)** Describe **three** features of **one** type of muscle fibre and the effects that each feature has for a performer.

muscle fibre .....

.....

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.....[3]

**(d)** The use of blood doping is banned by the International Olympic Committee (IOC).

Describe how blood doping is carried out and the performance enhancing effect it has on an athlete.

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.....[3]

**(e)** Explain the short-term effects and the long-term effects of exercise on the respiratory system.

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.....[4]

(f) Identify **four** components of health related fitness and describe a suitable test for each component.

component 1 .....

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component 2 .....

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component 3 .....

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component 4 .....

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[4]





**Unit 2 Health, safety and training**

**13 (a)** Identify **two** social benefits to a performer of taking part in a team sport.

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.....[2]

**(b)** Give **two** reasons why a teenager usually requires more energy than a young child.

.....  
.....  
.....  
.....[2]

**(c)** Give different examples of how wearing appropriate footwear can help prevent injury.

.....  
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.....  
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.....  
.....[3]

**(d)** Describe the safety considerations that group leaders should take into account when planning a mountainous winter sports activity.

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.....[4]

(e) Describe the benefits and negative effects of using circuit training with large groups of participants.

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.....[4]

(f) An athlete runs in a competitive 1500 metre race on a flat athletics track.

In the first part of the race they run quickly for the first 200 metres, but not at full pace, to establish their position in the race.

The middle part of the race is run at a steady pace.

The final 400 metres is run at a faster pace, with a sprint over the final 200 metres.

Explain the changes in aerobic and anaerobic respiration in each part of the run.

first part of the race .....  
.....  
.....  
.....

middle part of the race .....  
.....  
.....  
.....

final part of the race .....  
.....  
.....  
.....[5]

[Total: 20]

**Unit 3 Reasons and opportunities for participation in physical activity**

**14 (a)** Explain how a young person’s social circumstances can influence the sports they might participate in.

.....  
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.....[2]

**(b)** Describe the factors that will affect a young person’s ability to become an elite performer.

.....  
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.....[3]

**(c)** Explain why there has been an increase in the number of dedicated sports channels on television.

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.....[4]

