



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

CANDIDATE  
NAME

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CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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**PHYSICAL EDUCATION**

**0413/13**

Paper 1

**October/November 2018**

**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 Suggest **one** reason why the type of physical activity a person takes part in may change as they get older.  
.....  
..... [1]
  
- 2 State **one** requirement for good health and fitness.  
.....  
..... [1]
  
- 3 State **one** type of voluntary organisation that may provide recreational opportunities.  
.....  
..... [1]
  
- 4 Describe why the goals set for a performer should be specific.  
.....  
..... [1]
  
- 5 State **one** reason why a performer may have a high energy requirement.  
.....  
..... [1]
  
- 6 Describe **one** benefit for a student of their school offering extracurricular activities.  
.....  
..... [1]
  
- 7 Name a different joint where each of the following types of movement can occur.  
abduction.....  
rotation..... [2]

8 Describe **two** benefits of a cool down for a performer.

.....  
.....  
.....  
.....

[2]

9 Describe **three** benefits of having efficient gaseous exchange in the lungs for a performer.

.....  
.....  
.....  
.....  
.....  
.....

[3]

10 Describe how teachers can reduce the chances of students being injured during physical education activities.

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[3]

11 Suggest how use of the internet can benefit sport.

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[4]

[Total: 20]

**Section B**

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

**Unit 1 Factors affecting performance**

**12 (a)** Suggest **two** reasons why the majority of skills used in team games are open skills.

.....  
.....  
.....  
.....

[2]

**(b)** Explain **three** ways in which arousal can affect a performance.

.....  
.....  
.....  
.....  
.....  
.....

[3]

**(c)** Name an extreme body type and describe how it may provide an advantage in a named physical activity.

extreme body type.....  
physical activity.....  
description.....  
.....  
.....  
.....

[3]

(d) Describe how tendons aid movement.

.....

.....

.....

.....

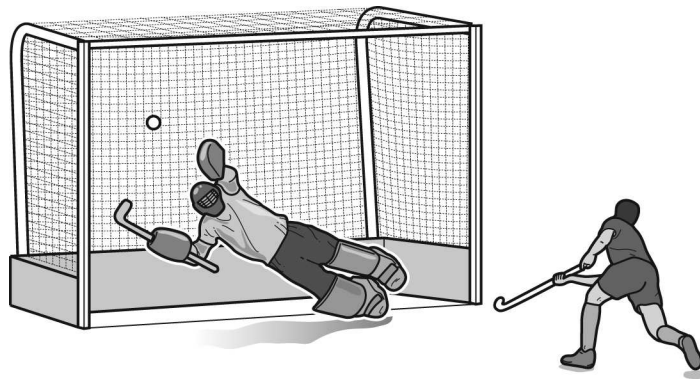
.....

.....

.....

[3]

(e) The diagram shows a hockey goalkeeper trying to save a penalty.



Explain how **four** components of health-related fitness assist the goalkeeper's movements.

component 1.....

.....

component 2.....

.....

component 3.....

.....

component 4.....

.....

[4]

(f) Describe **one** function of each of the following components of blood.

plasma.....

.....

red blood cells.....

.....

white blood cells.....

.....

platelets.....

.....

[4]

(g) Describe **four** ways that regular aerobic exercise develops the efficiency of the circulatory and respiratory systems and how this improves performance.

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[6]

[Total: 25]

## Unit 2 Health, safety and training

**13 (a)** State **two** characteristics of physical well-being.

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.....

.....

.....

[2]

**(b)** Complete the table to show the missing nutrient and a benefit that protein provides for a performer.

nutrient	benefit
protein	
	insulation and slow release of energy

[2]

**(c)** Describe examples of how participants can physically assist and support other pupils in physical activities.

.....

.....

.....

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.....

.....

[3]

**(d) (i)** Describe the difference between isotonic and isometric muscle contractions.

.....

.....

[1]



(ii) Describe **two** examples from different physical activities of isometric muscle contractions.

physical activity 1.....

example.....

.....

physical activity 2.....

example.....

..... [2]

(e) Explain the long-term effects of regular aerobic training on skeletal muscles.

.....

.....

.....

.....

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.....

..... [4]

- (f) (i) Explain, using examples from a named physical activity, how training principles can be applied to bring about an improvement in performance.

physical activity.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

- (ii) Suggest **two** signs that a performer is over-training.

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

[Total: 20]

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

**14 (a)** Kenya and Ethiopia are two countries with areas located at high altitude. Many athletes from both countries excel in middle and long-distance running.

Suggest **two** reasons why some other countries with areas located at high altitude do **not** achieve excellence in these activities.

.....  
.....  
.....  
.....

[2]

**(b)** Describe how television has increased people’s understanding of sport.

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.....  
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.....  
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.....

[3]

**(c)** Describe factors that have led to a growth in leisure activities.

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[4]

