



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

CANDIDATE  
NAME

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CENTRE  
NUMBER

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**PHYSICAL EDUCATION**

**0413/13**

Paper 1

**May/June 2017**

**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.



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**Section A**

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

1 State **one** example of a complex skill.

.....  
..... [1]

2 Describe **one** physical effect of eating an unbalanced diet.

.....  
..... [1]

3 Describe **one** way that the media has increased participation in physical activities.

.....  
..... [1]

4 State **one** physical effect of adrenaline.

.....  
..... [1]

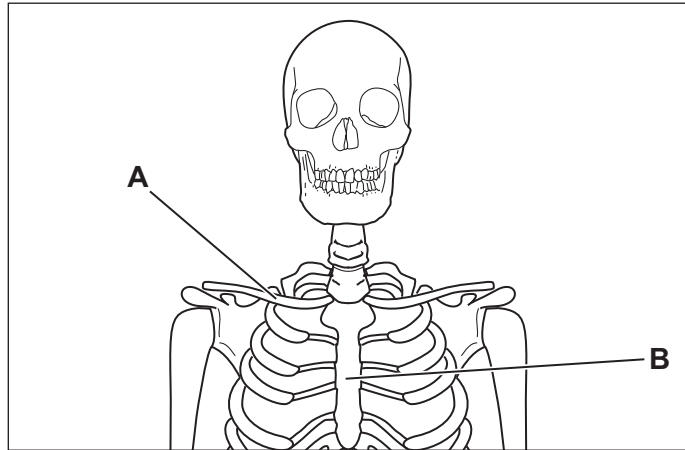
5 Suggest how being unemployed can affect a person's fitness level.

.....  
..... [1]

6 Name **two** roles necessary to organise and run a local sports club.

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

7 The diagram shows part of a human skeleton.



Describe the functions of the bones **A** and **B**.

**A** .....

**B** ..... [2]

8 Suggest the signs a coach might see in a performer who is overtraining.

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

9 Suggest how parents can influence their child's participation in sport.

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

**10** Explain how smoking can affect the amount of oxygen reaching muscles and the effects it can have on performance.

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

[3]

**11** Warming up before a gymnastic event can prevent injuries.

Describe other ways that a performer can prevent injury to themselves when competing.

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

[4]

[Total: 20]

**Section B**

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

**Unit 1 Factors affecting performance**

12 (a) State **two** functions of muscles.

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

[2]

(b) Describe **three** examples of extrinsic motivation that schools could use to increase student participation in sports.

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

[3]

(c) Suggest reasons why many performers choose **not** to take performance-enhancing drugs.

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

[3]

(d) Explain how **four** different factors can affect a performer's fitness.

factor 1.....

.....

factor 2.....

.....

factor 3.....

.....

factor 4.....

.....

[4]

(e) Describe the role of memory when learning a new skill.

.....

.....

.....

.....

.....

.....

[3]

(f) Fitness has both skill-related and health-related components.

(i) In most cases components of skill-related fitness are harder to improve than components of health-related fitness.

Suggest reasons for this.

.....

.....

.....

.....

[2]

(ii) Describe, using examples from a named sport, benefits of **four** components of skill-related fitness to a performer.

sport.....

component 1.....

benefit.....

.....

component 2.....

benefit.....

.....

component 3.....

benefit.....

.....

component 4.....

benefit.....

.....

[4]

(g) The majority of junior athletics world champions do **not** become senior world champions. Suggest why.

.....

.....

.....

.....

.....

.....

.....

.....

.....

[4]

[Total: 25]

**Unit 2 Health, safety and training**

**13 (a)** State **two** long-term benefits of exercise.

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

[2]

**(b)** A lack of water causes dehydration.

Suggest **two** effects of dehydration on a performer's ability to play sport.

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

[2]

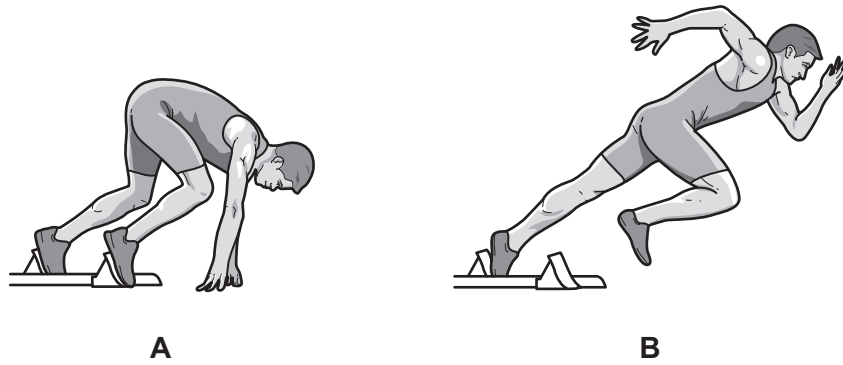
**(c)** Explain how a person's social well-being can affect their participation in sport.

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

[3]



(d) The diagrams show a sprinter.



(i) Identify the different types of muscle contraction taking place in diagram **A** and diagram **B**.

**A**.....  
.....  
**B**..... [2]

(ii) Describe possible improvements to a sprinter's performance from using weight training.

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

(e) (i) State **two** symptoms of a muscle injury.

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

(ii) Describe **one** immediate treatment and **one** longer-term treatment for a muscle injury.

immediate treatment.....

.....

longer-term treatment.....

..... [2]

(f) (i) Name a physical activity in which a performer would benefit from using plyometric training.

..... [1]

(ii) Describe **two** exercises that could be included in plyometric training and explain the benefits that the training could bring to a performer.

exercise 1.....

explanation of benefits.....

.....

.....

exercise 2.....

explanation of benefits.....

.....

..... [2]

(iii) Describe the safety factors that should be considered when using plyometric training.

.....

.....

.....

..... [2]

[Total: 20]

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

**14 (a)** Suggest why participation rates in sport are low for disabled people.

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

[2]

**(b)** Improvements in health care have resulted in many people living longer.

Describe how being physically active can contribute to maintaining the good health of elderly people.

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

[3]

**(c)** Describe the psychological characteristics expected from a performer who achieves excellence in their sport.

.....  
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.....

[4]

(d) The table shows the average hours per week of sport covered by television on free-to-view channels and fee-paying channels in 1989 and in 2015 for one country.

year	free-to-view channels	fee-paying channels
1989	12 hours per week	85 hours per week
2015	51 hours per week	630 hours per week

(i) Suggest **one** reason why the number of hours of sport covered by television has increased between 1989 and 2015.

.....  
 ..... [1]

(ii) Suggest reasons why there has been a greater increase in the hours per week of sport shown on fee-paying channels than for free-to-view channels between 1989 and 2015.

.....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 ..... [5]

[Total: 15]

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