



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International General Certificate of Secondary Education

CANDIDATE  
NAME

CENTRE  
NUMBER

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CANDIDATE  
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**PHYSICAL EDUCATION**

**0413/01**

Paper 1

**October/November 2010**

**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 a soft pencil for any diagrams, graphs or rough working.

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

**DO NOT WRITE IN ANY BARCODES.**

Answer **all** questions.

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.

| For Examiner's Use |  |
|--------------------|--|
| <b>Section A</b>   |  |
| <b>B1</b>          |  |
| <b>B2</b>          |  |
| <b>B3</b>          |  |
| <b>Total</b>       |  |

This document consists of **13** printed pages and **3** blank pages.



**Section A**

Answer **all** the questions in this section.

For  
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Use

1 What is meant by the term *physique*?

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

2 If a performer sprains an ankle, part of the recommended treatment is to elevate the leg. How does this action help recovery?

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

3 Give **one** typical feature of sports facilities that are found in rural areas.

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

4 What is meant by the term *open skill*?

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

5 Describe the role of the chairperson in a local sports club.

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

6 Give **one** component of a balanced diet and explain its importance to a performer.

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

7 Complete the table below that describes different types of movement.

| Type of movement | Description of movement                                  |
|------------------|----------------------------------------------------------|
| rotation         | The swivelling of a joint.                               |
| adduction        |                                                          |
|                  | Moving of a limb away from the central axis of the body. |

[2]

8 Give **two** reasons why Fartlek Training is an effective method to use with a performer starting to regain fitness.

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

9 Use of centres of excellence is important for elite performers. Describe **two** advantages of being able to use these centres for the performer.

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

10 Describe how **two** environmental factors might result in a reduction in performance.

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

11 Describe **two** ways that the body controls its temperature.

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

12 You are organising a multi sports event for your school. Name **three** activities that you would include in the event and describe a different safety consideration for each activity.

Activity 1 .....

Safety consideration .....  
.....  
.....  
.....

Activity 2 .....

Safety consideration .....  
.....  
.....  
.....

Activity 3 .....

Safety consideration .....  
.....  
..... [3]

[Total: 20]

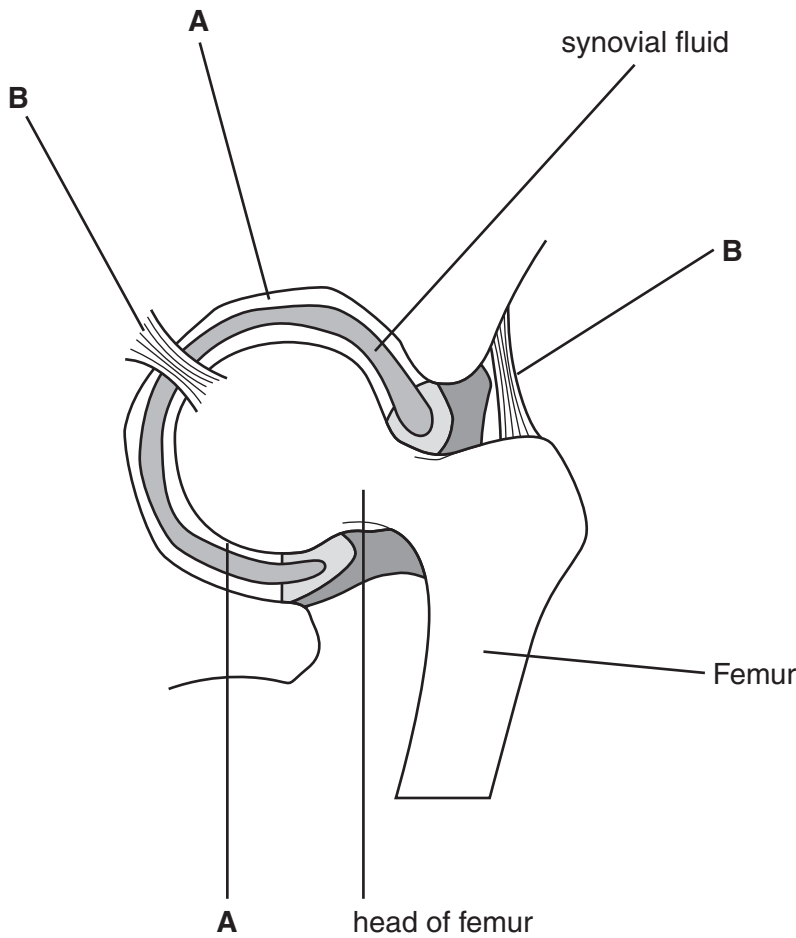
**Factors affecting performance**

**B1 (a)** Why are red blood cells important to a sports performer?

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

**(b)** The diagram below shows a synovial hip joint.

**(i)** Name the components labelled **A** and **B**



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

(ii) Describe how the components labelled **A** and **B** help to provide movement.

**A** .....

.....

.....

**B** .....

.....

..... [2]

(c) Describe the differences in the respiratory systems of a top athlete compared to an unfit person.

.....

.....

.....

.....

.....

.....

..... [3]

(d) Choose **one** activity and describe **three** different ways a coach could help a performer during feedback.

Activity .....

1 .....

.....

.....

.....

2 .....

.....

.....

.....

3 .....

.....

..... [3]

- (e) Top performers need to spend a great deal of time participating and training very hard in their chosen activity. Give **three** reasons why they may do this.

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Use

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

- (f) In a game, a player has to sprint to reach a ball. How does the body respond to this sudden burst of energy?

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

(g) Using **three** of the Principles of Goal Setting explain why an athlete may not achieve his goals.

*For  
Examiner's  
Use*

Principle .....

Explanation .....

.....

.....

.....

Principle .....

Explanation .....

.....

.....

.....

Principle .....

Explanation .....

.....

.....

..... [6]

[Total: 25]



**Health, Safety and Training**

**B2 (a)** Give **one** factor, apart from a balanced diet, that contributes to a person having a healthy lifestyle.

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

**(b)** Describe **two** difficulties a performer could experience from over training.

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

**(c)** Weight training can be either Isotonic (dynamic) or Isometric (static).

In the chart below complete the blank spaces. [4]

|                                                              | <b>Isotonic</b>                                     | <b>Isometric</b>                                                                                     |
|--------------------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Advantages of using this type of training.                   | Strengthens a muscle through the range of movement. |                                                                                                      |
| Disadvantages of using this type of training.                |                                                     | During exercise the blood flow to the muscle stops so blood pressure rises which could be dangerous. |
| An example of the type of activity for each training method. |                                                     |                                                                                                      |

(d) Training is a programme to improve performance.

(i) What information does the coach need to set up a training programme?

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

(ii) Using **two** Training Principles describe how a coach could ensure that a performer improves.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

(e) (i) Describe the effects endurance training has on muscles.

.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
.....  
..... [4]

- (ii) Muscles are made up of different types of fibres. Name and describe the features of the fibre that would enable an endurance athlete to perform well.

*For  
Examiner's  
Use*

Name of fibre .....

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

[Total: 20]

**Reasons and opportunities for participation in physical activity.**

**B3 (a)** Describe **one** way that a school can support physical activities within their local community.

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

**(b)** Describe **two** ways that a local sports centre could encourage more women to participate in recreational activities.

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

**(c)** Describe the ways in which **two** sports have been changed to ensure that performers with disabilities can participate.

Sport .....

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

Sport .....

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

**(d)** Describe **three** benefits to the viewer of showing sports events on the television.

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

(e) Many major sporting events require a sponsor to ensure their success.

(i) Give **three** reasons why a sponsor would invest money in supporting an event.

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

(ii) What potential disadvantages could there be for the sponsor when supporting an event?

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

(iii) Describe some of the disadvantages that the event may experience by having a sponsor.

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

[Total: 15]





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