

Centre Number	Candidate Number	Name
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CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International General Certificate of Secondary Education

**PHYSICAL EDUCATION**

**0413/01**

Paper 1

May/June 2003

**2 hours**

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 in the spaces provided on the Question Paper.  
You may use a soft pencil for any diagrams, graphs, or rough working.  
Do not use staples, paper clips, highlighters, glue or correction fluid.

Answer **all** questions.

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

**FOR EXAMINER'S USE**

Section A	
Section B1	
B2	
B3	
<b>Total</b>	

If you have been given a label, look at the details. If any details are incorrect or missing, please fill in your correct details in the space given at the top of this page.

Stick your personal label here, if provided.

This document consists of **11** printed pages and **1** blank page.



**Section A**

Answer **all** questions in this section.

1 What is meant by the term **leisure time**?  
.....[1]

2 Describe the meaning of the term **fitness**.  
.....[1]

3 Define the term **amateur sportsman**.  
.....[1]

4 What extreme body type would you associate with a **sumo wrestler**?  
.....[1]

5 Give **one** reason why there is a steady increase in the demand for leisure facilities.  
.....[1]

6 State **two** factors that can affect the performance level of an individual.  
1 .....  
2 .....[1]

7 Give **two** ways of avoiding serious injury when participating in a sporting activity.  
.....  
.....  
.....[2]

8 What does the term  **$\dot{V}O_2$  max** mean? What would it help you measure?  
.....  
.....  
.....[2]

9 Describe **two** ways in which the body loses heat during exercise.

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

10 Fitness can be split into two components, health related and skill related: name **one** aspect of each.

Health related .....

Skill related .....[2]

11 There are seven elements required for a balanced diet. Name **three** of these elements and the effect they have on the body.

1 .....

.....

2 .....

.....

3 .....

.....[3]

12 Explain how the body reacts at the start of a sporting activity.

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

[Total : 20]

**Section B**

Answer **all** questions in this section.

**Factors Affecting Performance**

**B1 (a)** Give **one** reason why a teacher/coach should give simple instructions to a young performer.

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

**(b)** Name **one** fine and **one** gross motor skill.

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

**(c)** When learning a complex skill describe **two** principles that need to be followed by the coach to ensure it is learnt correctly.

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

**(d)** Over arousal can have a negative effect on a sportsperson`s performance:

**(i)** explain why this happens;

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

**(ii)** how can it be overcome?

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

[3]

(e) There could be a number of reasons why a performer takes banned substances:

(i) complete the table below to show the effects of using banned substances and the type of activity that a performer might be involved in. The first one, Steroids, has been completed for you.

Substance	Effect	Type of activity
Steroids	Helps increase the size and strength of muscles, speeds recovery from injury and training.	Power activities
Diuretics	..... ..... .....	..... ..... .....
Stimulants	..... ..... .....	..... ..... .....
Tranquillisers/ Beta blockers	..... ..... .....	..... ..... .....
Analgesics	..... ..... .....	..... ..... .....

[4]

(ii) describe a method of testing that is frequently used to prevent the illegal use of banned substances.

.....  
.....

[1]

(f) Describe the FITT principle of training.

.....

.....

.....

.....[2]

Explain how the FITT principle might be used in the planning of a six week programme for:

(i) a male aged 40 who has not taken part in a great deal of physical activity for some time and is trying to improve his general fitness;

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.....

(ii) an active male aged 20 who is preparing for a long distance run.

.....

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.....

[5]

[Total : 20]

**Health, Safety and Training**

**B2 (a)** Give **one** feature of physical well-being.

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

**(b)** Choose one sporting activity and name **two** essential safety rules for it.

Activity: .....

1 .....

2 .....[2]

**(c)** Describe **two** effects long-term training can have on the body.

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

**(d)** The RICE method of treatment is often used to treat injuries.

Explain

**(i)** what is meant by RICE;

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

**(ii)** what type of injury this would be used to treat.

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

(e) Choose **one** of the following training methods:

- Fartlek training,
- Continuous training,
- Aerobics

Describe:

- (i) the basic principle of this method;
- (ii) advantages of using such a method;
- (iii) disadvantages of using this method.

Training Method .....

(i) .....  
 .....[1]

(ii) .....  
 .....  
 .....  
 .....[2]

(iii) .....  
 .....  
 .....  
 .....[2]

(f) A 400 metre runner starts a race and covers the first 100 metres at a steady pace, then gradually increases the pace between 100 – 200 metres. At 200 metres he increases his speed to almost maximum, maintains this until 300 metres, and during the last part of the race he tries to maintain this pace.





Describe

(i) the changes in respiration that will take place during the race;

.....

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.....

(ii) the effects this will have on the athlete during the race;

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.....

(iii) the effects immediately after the athlete completes the event.

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.....

[7]

[Total : 20]

**Reasons and Opportunities for Participation**

**B3 (a)** Describe **one** way in which a sportsperson may be able to participate full time whilst retaining his amateur status.

.....[1]

**(b)** Name **two** advantages for a sponsor when they support an event.

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

**(c)** Give **two** factors that can determine the development of excellence in a performer.

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

**(d)** Referees are vital in sports matches/events. In what ways has technology affected their role?

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



