



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 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.



Section A

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

1 State **one** function of the skeleton.

..... [1]

2 Describe why a balanced diet is important.

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

3 State **one** reason why a young person might choose to participate in recreational activities.

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

4 Name the component of blood that aids clotting.

..... [1]

5 Name a sport that requires a performer to have a high-protein diet.

..... [1]

6 The diagram shows an athlete sprinting.



State the main type of muscle fibre being used by the athlete.

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

7 Suggest **two** reasons why a performer might choose to take a banned performance-enhancing drug.

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

8 Describe **two** factors that will affect the energy requirements of an individual.

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

9 Describe, using a named joint as an example, **two** features of a fibrous joint.

fibrous joint.....
feature 1.....
.....
feature 2.....
..... [3]

10 Describe **three** benefits of a warm up.

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

11 Suggest why some governments encourage participation in 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) State two factors that can affect the skill level of a performer.

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

[2]

(b) (i) Describe the effect of adrenaline on the heart.

.....
.....

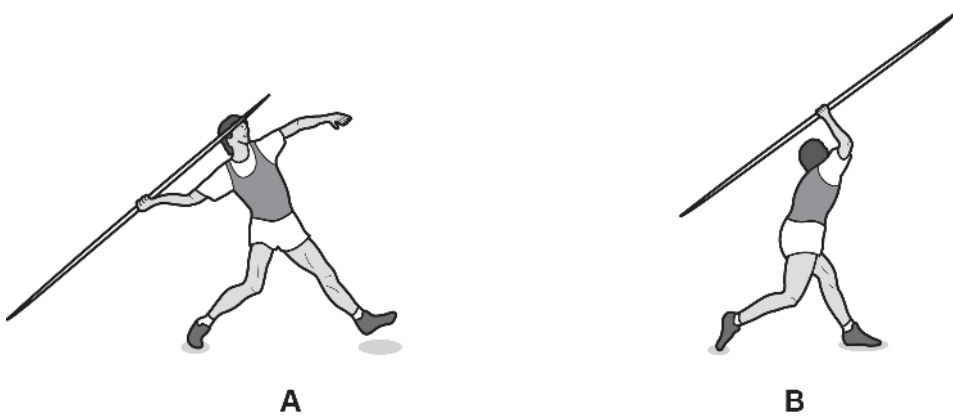
[1]

(ii) Explain how adrenaline can affect the quality of a performance.

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

[3]

(c) The diagrams, A and B, show an athlete during different stages of throwing a javelin.



State the type of movement which has taken place at the elbow of the throwing arm from A to B and the agonist muscle that creates the movement.

movement.....

agonist.....

[2]

(d) Explain factors that affect recovery time after exercise.

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

[3]

(e) Muscular endurance is a component of health-related fitness.

(i) State what is meant by the term *muscular endurance*.

.....
.....

[1]

(ii) Name a sport where muscular endurance is essential.

.....
.....

[1]

(iii) Name and describe a recognised test that could be used to measure muscular endurance.

name of test.....

.....

description.....

.....

.....

.....

[2]

(f) Explain why an extreme endomorph might be at a disadvantage when playing a team game such as basketball or netball.

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[4]

(g) Explain how smoking tobacco can reduce performance in physical activity.

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[6]

[Total: 25]

Unit 2 Health, safety and training

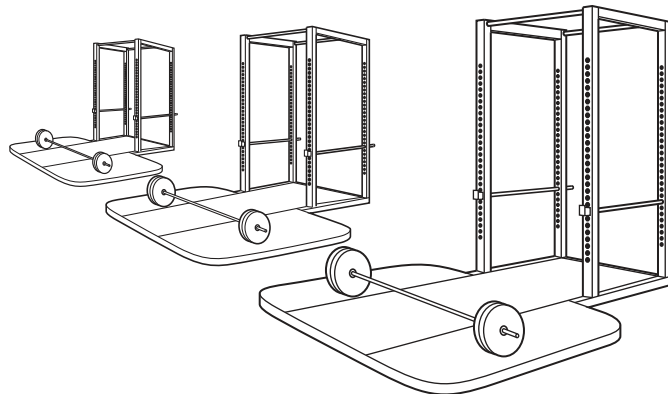
13 (a) State why taking part in sport can improve a person's social well-being.

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..... [2]

(b) Suggest some of the personal safety issues, other than warming up, that should be considered before starting to exercise.

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

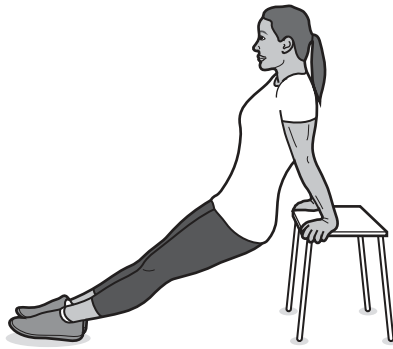
(c) The diagram shows a weight-training facility.



Explain the safety arrangements that a school teacher should consider when planning to use weight training as a group activity following a warm up.

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

(d) The diagram shows a performer holding a fixed position during a training session.



(i) Name the type of muscle contraction that is taking place in the upper arm.

..... [1]

(ii) State the advantages and disadvantages of using this type of exercise during a training session.

advantages.....

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

disadvantages.....

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.....

[4]

- (e) (i) Describe, using an example from a sport, when twisting or turning movements take place.

sport.....

example.....

..... [1]

- (ii) State an injury that could result from a sudden twisting or turning movement and describe the benefits of the initial treatment that should be given.

injury.....

benefits of initial treatment.....

.....

..... [2]

- (f) Explain the long-term physiological benefits to a performer of regular aerobic exercise.

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..... [5]

[Total: 20]

Unit 3 Reasons and opportunities for participation in physical activity

14 (a) State **two** advantages of sports commentary on the radio.

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..... [2]

(b) Describe some of the disadvantages that living in a rural area can have on sports participation.

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..... [3]

(c) Explain the benefits to a sponsor of sponsoring a local amateur team.

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

(d) Suggest ways that a country can improve its athletes' chances of success in major global events such as the Olympic Games.

.....

 [6]

[Total: 15]

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