



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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4954287765



PHYSICAL EDUCATION

0413/12

Paper 1

May/June 2017

1 hour 45 minutes

Candidates answer on the Question Paper.

No Additional Materials are required.

MODIFIED LANGUAGE

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 **11** printed pages and **1** blank page.



Section A

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

- 1 State **one** feature of a closed skill.
.....
..... [1]

- 2 State the type of movement at the knee when the hamstrings contract.
..... [1]

- 3 Suggest **one** factor that determines a young person's choice of physical activity.
.....
..... [1]

- 4 Describe the role of cartilage in a synovial joint.
.....
..... [1]

- 5 Name **one** example of safety equipment that can be used to reduce the chances of injury in game activities.
.....
..... [1]

- 6 State **two** outdoor and adventurous activities that could take place in a rural setting.
.....
.....
..... [2]

- 7 Suggest **two** benefits of sporting events being broadcast on the radio.
.....
.....
..... [2]

8 State **two** factors that may affect the energy requirements of a sports performer.

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

9 Suggest **two** ways that a school can encourage participation in physical activities.

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

10 Explain why when arousal levels become too high the level of a performance may reduce.

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

11 Explain how the codes of behaviour that performers are expected to follow can ensure games are played safely.

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

[Total: 20]

Section B

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

Unit 1 Factors affecting performance

12 (a) Explain why feedback is important when learning a new skill.

.....

.....

.....

.....

[2]

(b) Complete the table to identify the types of synovial joints in the arm.

joint in the arm	type of synovial joint
wrist	
elbow	
shoulder	

[3]

(c) Explain, using examples, how **three** principles of goal setting can be used in a named sport.

sport.....

principle 1.....

.....

.....

principle 2.....

.....

.....

principle 3.....

.....

.....

[3]

(d) Explain, using a movement at the elbow, the meaning of the terms *prime mover*, *antagonist* and *synergist*.

movement.....

prime mover.....

.....

antagonist.....

.....

synergist.....

.....

[4]

(e) State **three** possible advantages of being a mesomorph in a named sport.

sport.....

advantage 1.....

.....

advantage 2.....

.....

advantage 3.....

.....

[3]

(f) (i) Describe the process of gaseous exchange in the lungs.

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

(ii) Suggest **two** advantages a performer gains from more efficient gas exchange in the lungs.

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

(g) (i) Name a suitable test to measure flexibility.

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

(ii) Suggest **one** possible reason why females perform better than males in flexibility tests.

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

(iii) Describe exercises that could improve flexibility.

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

[Total: 25]

Unit 2 Health, safety and training

13 (a) State **one** advantage and **one** disadvantage of continuous training.

advantage.....

.....

disadvantage.....

.....

[2]

(b) A lack of water causes dehydration.

Suggest the effects of dehydration on a performer's ability to perform effectively.

.....

.....

.....

.....

[2]

(c) Suggest why performers are at greater risk of injury once they become tired during physical activity.

.....

.....

.....

.....

.....

.....

[3]

(d) State **three** environmental factors that could put a performer at risk of injury during an outdoor team game and explain how each risk could be reduced.

environmental factor 1.....

explanation.....

.....

environmental factor 2.....

explanation.....

.....

environmental factor 3.....

explanation.....

.....

[3]

(e) State what is meant by an isometric muscle contraction and give examples from **three** different sports of when isometric contractions take place.

meaning.....

sport 1.....

example.....

.....

sport 2.....

example.....

.....

sport 3.....

example.....

.....

[4]

(f) A performer can choose to use resistance training as part of their training programme.

(i) Suggest **two** examples of types of resistance training.

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

[2]

(ii) Describe **two** benefits of resistance training to a performer.

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

[2]

(iii) Explain **two** ways that a performer can use training principles to ensure progress is made when resistance training.

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

[2]

[Total: 20]

Unit 3 Reasons and opportunities for participation in physical activity

14 (a) Suggest **two** reasons why a person's age can affect the type of sports they choose to play.

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

(b) The Commonwealth Games in 2014 included disability events in the athletics programme. Describe the benefits of having disability events in global events.

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

(c) Describe some of the benefits of being part of a school sports team.

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

(d) Describe how the internet has increased the understanding of, and participation in, sport.

.....

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..... [6]

[Total: 15]

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