



General Certificate of Education  
Advanced Level Examination  
June 2015

## Physical Education

## PHED3

### Unit 3 Optimising Performance and Evaluating Contemporary Issues within Sport

Thursday 11 June 2015 9.00 am to 11.00 am

**For this paper you must have:**

- an AQA 16-page answer book.

#### Time allowed

- 2 hours

#### Instructions

- Use black ink or black ball-point pen. Pencil should only be used for drawing.
- Write the information required on the front of your answer book. The **Paper Reference** is PHED3.
- Answer **nine** questions.
- In **Section A**, **Section B** and **Section C**, answer the **first** question and **two** other questions from this section.
- Do all rough work in your answer book. Cross through any work that you do not want to be marked.

#### Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 84.
- Question 1, Question 5 and Question 9 should be answered in continuous prose.
- In these questions, you will be marked on your ability to:
  - use good English
  - organise information clearly
  - use specialist vocabulary where appropriate.

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**Section A**

Answer **three** questions.

Answer Question 1 **and** any two from Question 2, Question 3 **or** Question 4.

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**Question 1**

Andy Murray won the 2013 Wimbledon Men's Tennis Final. During the match he completed a variety of strokes and a series of rallies, which varied in length.

0	1
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Using Newton's Laws of Motion, explain how a player moves towards a ball during a rally **and** outline how the force of muscle contraction can be varied to ensure that skills are executed correctly.

[14 marks]

**Question 2**

A sport such as tennis uses the ATP-PC system for energy production.

0	2
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Outline the advantages **and** the disadvantages of the ATP-PC system.

[4 marks]

0	3
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What is the effect on ATP and PC stores of short periods of high intensity exercise followed by recovery periods lasting up to 30 seconds? Justify your answer.

[3 marks]

**Question 3**

During extended periods of high intensity exercise lactic acid is formed.

0	4
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Explain how an increase in  $\text{VO}_2$  max aids the performance of a player during extended periods of high intensity exercise.

[3 marks]

0	5
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Explain how lactic acid is removed from the body.

[4 marks]

**Question 4**

Elite performers need to use a variety of training methods and recovery techniques.

Plyometrics involves hopping and bounding to develop explosive power and speed.

0	6
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Explain how the muscular and nervous systems work together during plyometric exercises.

**[4 marks]**

0	7
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Name **and** explain **three** rehabilitation techniques elite athletes may use to recover from a soft tissue sports injury.

**[3 marks]**

**Turn over for the next section**

**Turn over ►**

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**Section B**

Answer **three** questions.

Answer Question 5 **and** any two from Question 6, Question 7 **or** Question 8.

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**Question 5**

The performance of a team can be influenced by the attitudes of its players.

0	8
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Explain how the negative attitude of players can impact on the cohesion of a team **and** using named psychological theories, describe how a negative attitude may be changed.

**[14 marks]**

**Question 6**

The leader of a team has an important role to ensure that the players work together.

0	9
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Explain the term autocratic leader **and** outline when the autocratic style of leadership should be used.

**[3 marks]**

Elite performers often display approach behaviour.

1	0
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How does the achievement motivation of a performer affect their approach behaviour?

**[4 marks]**

**Question 7**

During sporting contests, performers have to control their arousal levels and display assertive behaviour.

1	1
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Explain the terms aggression **and** instrumental aggression.

**[3 marks]**

1	2
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Apart from aggression, using appropriate psychological terms, explain the impact of over-arousal on the performer.

**[4 marks]**

**Question 8**

Elite performers have to maintain high levels of motivation to perform at their optimum level.

1	3
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How can a coach use attributions to maintain high levels of motivation following a defeat?

**[3 marks]**

1	4
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Identify **and** explain the different types of goals that a coach could use to motivate performers.

**[4 marks]**

**Turn over for the next section**

**Turn over ►**

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**Section C**

Answer **three** questions.

Answer Question 9 **and** any two from Question 10, Question 11 **or** Question 12.

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**Question 9**

Elite sport has changed significantly since the 19th century.

1	5
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Explain the 19th century codes of amateurism **and** professionalism, **and** their positive impact on 19th century and modern day sport.

[14 marks]

**Question 10**

England, Wales, Scotland and Northern Ireland all have national Institutes of Sport, providing high quality facilities and coaches.

1	6
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What is the role and purpose of national Institutes of Sport?

[3 marks]

1	7
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The contract to compete has the following four key components:

- abide by the written rules
- abide by the unwritten rules
- give 100% effort
- allow opponents to show skill.

Discuss the continued relevance of the contract to compete for elite performers in today's society.

[4 marks]

**Question 11**

1	8
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Explain the impact of **each** of the following social and cultural factors on the development and spread of rational recreation during the 19th century:

- urbanisation
- public provision
- communications.

[7 marks]

**Question 12**

Performance enhancing substances have been used in sport since the ancient times of Greece and Rome.

1	9
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 Suggest reasons to support the argument for legalising drugs in sport today. **[4 marks]**

2	0
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 Explain why an elite performer **should** consider the nature of a sponsor and their products before accepting a sponsorship deal. **[3 marks]**

**END OF QUESTIONS**

**There are no questions printed on this page**