



General Certificate of Education
Advanced Level Examination
June 2010

Physical Education

PHED3

Unit 3 Optimising Performance and Evaluating Contemporary Issues within Sport

Wednesday 23 June 2010 9.00 am to 11.00 am

For this paper you must have:

- a 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 **Examining Body** for this paper is AQA. 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 part questions are shown in brackets.
- The maximum mark for this paper is 84.
- In question 1, question 5 and question 9, you will be marked on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

PHED3

Section A

Answer **three** questions.
Answer question 1 **and** any two from question 2, question 3 **or** question 4.

Question 1

At the 2008 Beijing Olympic Games, David Davies won the silver medal in the swimming 10 kilometre marathon event, in a time of 1 hour 51 minutes and 53.1 seconds.

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| 0 | 1 |
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 Explain how the **majority** of energy used during the race would be provided **and** outline the process of 'glycogen loading' that may be used by performers to improve performance in this type of event. (14 marks)

Question 2

During the race, a swimmer has to dive off the starting blocks as quickly as possible.

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 Identify the 'muscle fibre type' used to complete this action **and** justify your answer. (3 marks)
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| 0 | 3 |
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 Using 'Newton's First **and** Second Laws of Motion', explain how the swimmer dives off the starting blocks. (4 marks)

Question 3

Competitive swimmers will often compete in several events and suffer from fatigue due to limited recovery time.

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 Explain the possible causes of fatigue during a race. (3 marks)
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 Explain how the use of an ice bath can help to reduce the 'delayed onset of muscle soreness' (*DOMS*). (4 marks)

Question 4

Elite swimmers follow structured training programmes to develop exceptional levels of fitness.

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 Outline the relationship between 'VO₂ max' and 'lactate threshold'. (3 marks)
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| 0 | 7 |
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 Explain how a swimmer would use 'periodisation' to prepare for competitions. (4 marks)

Section B

Answer **three** questions.

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

Question 5

The crowd can affect elite performers either positively or negatively. At the 2008 Wimbledon Tennis Championships, the British player Andy Murray commented after winning one match:

'You know, the crowd were awesome, they got behind me, I mean, more than they ever have before. I think to finish the set like that really got the crowd going. It shifted the momentum of the match hugely.'

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| 0 | 8 |
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 Explain the concept of 'social facilitation' and how it can affect performance. Outline the possible strategies which the performer and coach may use to limit any negative effects that may occur. (14 marks)

Question 6

Elite tennis players have to devote large amounts of time to develop their skills, requiring a positive attitude and high levels of motivation.

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 Name and explain the components of attitudes, giving an example of how a tennis player would display a positive 'attitude'. (3 marks)

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 How would a coach use 'attribution theory' to maintain motivation following a defeat? (4 marks)

Question 7

During a tennis match, a player may display signs of anxiety and become over-aroused.

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 Using the 'catastrophe theory', describe how over-arousal may affect a player's performance. (4 marks)

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 Name a 'cognitive stress management technique' **and** describe how a player could use this technique to control their arousal level. (3 marks)

Question 8

A coach will often try to pair players with compatible personalities to form a successful doubles partnership.

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 What do you understand by the term 'profile of mood states'? (3 marks)

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 Explain the term 'task cohesion' **and** why it is vital for success in any game. (4 marks)

Turn over ►

Section C

Answer **three** questions.

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

Question 9

Following the success of Team GB Cyclists in winning 14 medals at the 2008 Beijing Olympics, Brough Scott of the Daily Telegraph wrote:

‘Their feats will not only change the way their sport is perceived back home, they will actually change our society.’

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Discuss this statement with particular reference to the successful performers, the governing body and society. *(14 marks)*

Question 10

The rewards for success in elite sport are increasing every year and officials are under greater pressure than ever from players, supporters and the media.

1	6
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Discuss the suggestion that the increased use of technology to help officials make the correct decision has improved the sporting event. *(7 marks)*

Question 11

To maximise the chances of winning medals at major championships, such as the Olympic Games, performers need the support of many organisations.

1	7
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Outline **and** explain the structure of the World Class Performance Pathway. *(3 marks)*

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Explain the support structures for elite performers provided by the National Institutes of Excellence, such as the English Institute of Sport. *(4 marks)*

Question 12

In today’s society, the majority of people have access to a variety of sporting activities.

1	9
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Explain how the leisure opportunities for the working classes improved during the 19th century in terms of provision. *(7 marks)*

END OF QUESTIONS