

A-level

PHYSICAL EDUCATION

Unit 3 Optimising Performance and Evaluating Contemporary Issues within Sport

Friday 17 June 2016

Morning

Time allowed: 2 hours

Materials

For this paper you must have:

- an AQA 16-page answer book

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 this book. Cross through any work 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.

Section A: Applied Physiology to Optimise Performance

Answer **three** questions.

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

Question 1

Elite performers who play games, such as hockey and football, will use a predominant energy system which will vary depending on the demands of the match.

0	1
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Explain how each energy system contributes to the performance of a games player during a match.

[14 marks]

Question 2

Elite performers may use illegal ergogenic aids and specialised training methods to improve performance.

0	2
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Explain the physiological reasons why an elite performer may use synthetic erythropoietin (EPO).

[2 marks]

Altitude training is used to improve aerobic capacity.

0	3
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Outline the advantages **and** the disadvantages of altitude training.

[5 marks]

Question 3

Gymnasts have to change the position of their body when performing a somersault during a gymnastic floor routine.

0	4
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Name the muscle fibre type predominantly used by a gymnast during a floor routine **and** state the functional characteristics that allow these muscles to produce this type of movement.

[3 marks]

0	5
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Explain how a gymnast alters their angular velocity by changing their moment of inertia.

[4 marks]

Question 4

Elite endurance performers require a high VO_2 max and the ability to delay the effects of fatigue.

0	6
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 Explain the term VO_2 max **and** its relationship to aerobic performance. **[2 marks]**

0	7
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 Describe one method of glycogen loading **and** outline the benefits to an elite performer. **[5 marks]**

Turn over for the next section

Turn over ►

Section B: Psychological Aspects that Optimise Performance

Answer **three** questions.

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

Question 5

All teams will experience victories and defeats.

0 | 8

Explain how the coach of a team can use knowledge of Weiner's Attribution Theory to maintain the motivation of a team following defeat **and** outline other strategies that can be used to avoid learned helplessness.

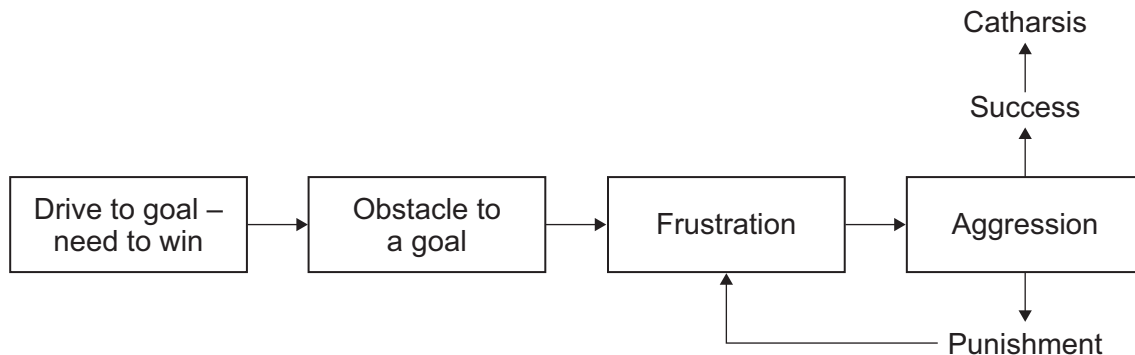
[14 marks]

Question 6

During competitive matches players may become over-aroused and commit aggressive acts, such as foul play.

Figure 1 shows the frustration-aggression hypothesis, which offers one explanation for the cause of aggressive behaviour.

Figure 1



0 | 9

Using other psychological theories of aggression, explain the weaknesses of the frustration-aggression hypothesis.

[4 marks]

1 | 0

Explain how a performer can use biofeedback as a stress management technique to control over-arousal.

[3 marks]

Question 7

Leaders and coaches have an important role in developing the performance of their players.

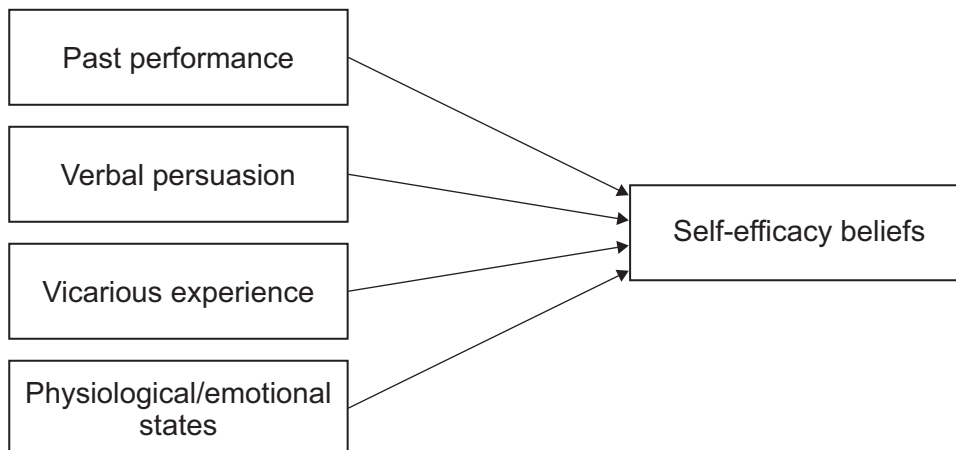
1	1
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Outline the role of a leader **and** explain the difference between a prescribed leader and an emergent leader.

[3 marks]

Figure 2 shows Bandura's model of self-efficacy.

Figure 2



1	2
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Explain the term self-efficacy **and** outline the impact of positive vicarious experiences on the performer.

[4 marks]

Question 8

Spectators can have an impact on the quality of an individual's performance.

1	3
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Explain the difference between the terms social inhibition **and** evaluation apprehension.

[2 marks]

1	4
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Outline the strategies a coach may use to reduce the negative effects of an audience on performance.

[5 marks]

Turn over for the next section

Turn over ►

Section C: Evaluating Contemporary Influences

Answer **three** questions.

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

Question 9

Modern day sport is constantly changing due to the advancement of technology.

1	5
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Discuss the suggestion that technology is improving the experience of the performer and spectator in modern day sport.

[14 marks]

Question 10

During the 19th century, many sports' governing bodies were established.

1	6
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Explain the factors that led to the emergence of national governing bodies, such as the Football Association, during the 19th century.

[4 marks]

1	7
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Outline the role and purpose of a national governing body in modern day sport.

[3 marks]

Question 11

There is a temptation for performers to take drugs to enhance their sporting performance.

1	8
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Other than for the physiological benefits, outline the reasons sport performers take performance enhancing drugs.

[2 marks]

1	9
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Explain the problems faced by sporting organisations when implementing a ban on the use of performance enhancing drugs.

[5 marks]

Question 12

During sporting contests performers are expected to maintain traditional ethical codes, such as sportsmanship, and play within the laws of the game.

2	0
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Explain the term sportsmanship **and** outline how it is encouraged and maintained at the highest level of sport.

[4 marks]

The law has become increasingly involved in sporting issues.

2	1
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State how the law can protect elite performers.

[3 marks]

END OF QUESTIONS

There are no questions printed on this page

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