

Sample Assessment Materials

September 2007

GCE Physical Education

**Edexcel Advanced Subsidiary GCE in Physical Education
(8PE01)**

First examination 2009

Edexcel Advanced GCE in Physical Education (9PE01)

First examination 2010



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A Introduction

These sample assessment materials have been prepared to support the specification.

Their aim is to provide the candidates and centres with a general impression and flavour of the actual question papers and mark schemes in advance of the first operational examinations.

B Sample question papers

Unit 1: Participation and Performance in Sport and Recreation.....	7
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Answer ALL questions.

1. Target group is a term now used extensively when discussing access to sport and recreation.

(a) Define target group

.....
.....
(1)

(b) Identify **two** target groups and explain how their access to sport and recreation is restricted.

Target group

.....

Explanation

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(3)

Target group

.....

Explanation

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(3)

(c) Outline **three** reformative polices that can be used by sporting facilities to encourage participation amongst target groups.

Policy 1

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Policy 2

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Policy 3

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(3)

Q1

(Total 10 marks)

2. A number of recent surveys on fitness have raised concerns about the fitness of young people in the UK.

(a) Discuss how changes in lifestyle may have created some of these problems.

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(3)

(b) Outline, using **two** specific examples, how sporting organisations are attempting to reverse this trend amongst **young** people.

Example 1

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Example 2

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(4)

(Total 7 marks)

Q2

3. Explain the term *Americanisation* and suggest how it is influencing professional sport across Europe.

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(Total 4 marks)

Q3

6. The body responds and then adapts to exercise.

(a) Explain the difference between a response and an adaptation.

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.....

(4)

(b) Identify **two** cardio-respiratory responses, explaining why each occurs and a benefit of each to the performer.

response	why it occurs	benefit
1.		
2.		

(6)

Q6

(Total 10 marks)

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7. (a) Identify **three** components of fitness that are considered important for a named sport. For each component explain why you think it is important.

Named sport

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Component 1

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Explanation

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Component 2

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Explanation

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Component 3

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Explanation

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(9)

- (b) Name a recognised fitness test for each component of fitness defined in your answer to part (a) and give a brief description of the protocol of each test.

Component 1

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Test

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Protocol

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Component 2

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Test

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Protocol

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Component 3

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Test

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Protocol

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(9)

Q7

(Total 18 marks)

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Answer ALL questions.

- 1. Explain why, after exercise, the body's oxygen consumption remains elevated above resting level.

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(Total 6 marks)

Q1

2. There are three food groups that can produce energy. Identify them and explain the approximate percentages of each required for a general all-round athletic performance.

1.

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2.

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3.

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(Total 9 marks)

Q2

3. (a) Explain the positive and negative effects that competing in front of a home crowd has on performance.

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(5)

(b) Goal setting is often used as a motivational strategy in the long term development of elite athletes. Explain **five** factors that need to be considered when setting goals.

1.
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2.
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3.
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4.
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5.
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(5)

(Total 10 marks)

Q3

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4. Plyometric training is extensively used by many athletes to improve power and strength.

(a) Identify what DOMS stands for, and explain why it can occur after plyometric training.

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(4)

(b) What can athletes do in order to minimise the effects of DOMS?

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(5)

(Total 9 marks)

Q4

5. During intense exercise, athletes can experience a large increase in lactic acid.

(a) Explain the effect this increase in lactic acid has on muscle function.

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(4)

(b) Suggest strategies that athletes might use to increase their tolerance to lactic acid.

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(4)

(Total 8 marks)

Q5

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C Sample mark schemes

General marking guidance	41
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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.
- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:
 - i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear
 - ii) select and use a form and style of writing appropriate to purpose and to complex subject matter
 - iii) organise information clearly and coherently, using specialist vocabulary when appropriate

Unit 1: Participation and Performance in Sport and Recreation

Question Number	Question	
1.(a)	<p>Target group is a term now used extensively when discussing access to sport and recreation.</p> <p>Define target group.</p>	
	Answer	
	<p>One of the following examples from: A group identified as not participating fully in sport and recreation (1) A minority group/not WASP (1).</p>	(1)

Question Number	Question	
(b)	<p>Identify TWO target groups and explain how their access to sport and recreation is restricted.</p>	
	Answer	
	<p>Target Group - 1 mark for each target group (up to 2 marks) Group - old (1)/disabled (1)/young (1)/unemployed (1)/low income (1)/ethnic minorities (1)/female (1)/low social economic groups (1) etc. Explanation - up to 2 marks for each explanation. Group that has issues in terms of access to sport and recreation.</p>	(6)

Question Number	Question	
(c)	<p>Outline THREE reformative policies that can be used by sporting facilities to encourage participation amongst target groups.</p>	
	Answer	
	<p>Any three from the following: Concessions/cheaper rates (1) Programming/specific sessions (1) Taster days/open days (1) Increase range of activities/sports on offer (1).</p>	(3)

Question Number	Question	
2.(a)	A number of recent surveys on fitness have raised concerns about the fitness of young people in the UK. Discuss how changes in lifestyle may have created some of these problems.	
	Answer	
	Any three from the following: Young people now have more alternatives in their leisure (1) Rise in popularity/access of computer/TV/video (1) Rise in car ownership/transport issues (1) School run now done by car/not walking (1) Pressures on school curriculum/squeezing out time for sport (1).	(3)

Question Number	Question	
(b)	Outline, using TWO specific examples, how sporting organisations are attempting to reverse this trend amongst young people.	
	Answer	
	1 mark for each named example/individual sports programme, (max 2 examples) and 1 further mark for explanation as to how each example impacts on young people. LEA's (1)/Sport England promoting programmes such as walking (1) Buses(1)/safe routes to school/encouraging pupils to walk/bike to school (1) Sports mark (1) encouraging schools to promote exercise (1) Active mark awards (1) encouraging schools to promote exercise (1) TOP sport scheme (1) developed to introduce young people into sport (1) Examples of grass root schemes in sports (1).	(4)

Question Number	Question	
3.	Explain the term <i>Americanisation</i> and suggest how it is influencing professional sport across Europe.	
	Answer	
	<p>Maximum of 2 marks for definition of Americanisation: Increasing reliance on commercial/private sector funding/advertisement/sponsorship (1) American influence of sport/adopting practices that have developed in American sport (1).</p> <p>Any 3 from the following: (1 mark for each influence, maximum of 3 marks)</p> <p>Use of franchises (1) Increasing influence of media/ key funder of sport/selling media rights /exclusive TV deal (1) Sport acting as a bill board to advertisers and sponsors/festoon (1) Adoption of names/changing image of clubs/ stadium sponsors (1) Match now part of an entertainment package/cheer leaders/razzmatazz few play more watch (1) Accelerates move towards gamesmanship /cheating/win ethic dominates (1) Increases the amount players can earn changing rules to enhance entertainment (1). Marks for definition plus influence must not total more than 4.</p>	(4)

Question Number	Question	
4.	Describe THREE ways the increased globalisation of sport has affected the Olympic Games.	
	Answer	
	<p>1 mark for identified affect, 1 further mark for linked example and 1 mark for explanation - maximum 3 marks for each example.</p> <p>Importance of sports golden triangle/ relationship between event, sponsor and TV TV companies now pay huge amounts to have exclusive rights to games TV now has power to control timing and scheduling of events IOC moved Olympics into separate year to accommodate TV/Calgary winter Olympics Companies pay huge amounts to have exclusive rights to Olympic name and logo/official Olympic products 90% of Olympic budget now generated through corporate sponsorship and TV rights McDonalds paid for building of Olympic pool in 1984/companies pay for/sponsor facilities Decision on who hosts games now includes a commercial element/emphasis Rise in deviance/rewards for winning now mean athletes are prepared to bend rules/drug taking.</p>	(9)

Question Number	Question	
5.	<p>Codification is a term associated with the development of sport during the Industrial Revolution.</p> <p>Explain how changes in society during the Industrial Revolution led to the need for <i>codification</i> of sport and outline the process by which sports achieved this.</p>	
	Answer	
	<p>Up to 4 marks for explanation of changes and up to 4 marks for the process.</p> <p>Any 4 from the following, 1 mark for each:</p> <p>Changes</p> <p>Transport development meant teams could travel/setting up of competitions/leagues (1)</p> <p>Need for national/standardised set of rules (1)</p> <p>Urbanisation meant large numbers of potential players (1)</p> <p>Urbanisation meant a lack of space so pitch boundaries had to be introduced (1)</p> <p>Compulsory education meant every one could read and write (1)</p> <p>Need for consistent/fully fit work force meant need to reduce violence (1)</p> <p>Emergence of middle class/muscular Christianity/civilizing sport (1).</p> <p>Any 4 from the following, 1 mark for each:</p> <p>Process</p> <p>Role of public schools/Oxbridge/universities move towards one set of rules (1)</p> <p>Formed a national governing body/association (1)</p> <p>Invited representatives from clubs, schools and universities (1)</p> <p>Held meetings where rules were agreed (1)</p> <p>Compromised/melting pot of rules from around the country (1)</p> <p>Had agreed rules written down and printed (1).</p>	(8)

Question Number	Question	
6. (a)	The body responds and then adapts to exercise. Explain the difference between a response and an adaptation.	
	Answer	
	Up to 2 marks for each explanation Responses are short term changes/reversible/ enable increase in physiological output (1) e.g. an increase in heart rate prior to a 100m final/or equivalent (1) An adaptation is a long term/permanent change (1) e.g. a decrease in resting heart rate as a result of aerobic training (1).	(4)

Question Number	Question	
(b)	Identify TWO cardio-respiratory responses, explaining why each occurs and a benefit of each to the performer.	
	Answer	
	1 mark for each response, reason and benefit maximum of 2 marks for responses maximum of 2 marks for reasons maximum of 2 marks for benefits. Response Increase in heart rate (1). Reason Response to build up of CO ₂ /secretion of adrenalin (1). Benefit Faster removal of waste/faster delivery of O ₂ (1). Response Increase in stroke volume (1). Reason <ul style="list-style-type: none"> • Starlings Law (1) • Increased Venous return (1) • Secretion of adrenalin (1) • Increase in sympathetic nerve impulses (1). Benefit Increase in cardiac output (1). Response Increase in ventilation rate (1). Reason Response to build up of CO ₂ secretion of adrenalin (1). Benefit Rise in the amount of gaseous exchange/helps to remove waste (1). Response Increase in Respiratory volumes (1). Reason <ul style="list-style-type: none"> • Response to build up of CO₂ secretion of adrenalin (1) • Increased activity of respiratory muscles (1). Benefit Rise in the amount of gaseous exchange/helps to remove waste (1).	(6)

Question Number	Question	
7.(a)	Identify THREE components of fitness that are considered important for a named sport. For each component explain why you think it is important.	
	Answer	
	<p>1 mark for each component, (maximum of 3 marks) 2 marks for each explanation linked to importance.</p> <p>Any 3 from the following:</p> <p>Strength (1)</p> <ul style="list-style-type: none"> • Maximal/absolute (1) • The ability to exert a maximal force once regardless of body weight (1) • Relative (1) • The ability to exert a maximal force once relative to your body weight (1) • Dynamic (1) • The ability to exert a significant force repeatedly (1) • Static (1) • The ability to exert a force - often against an immoveable object, without movement (1). <p>Endurance (1)</p> <ul style="list-style-type: none"> • Localised muscular - the ability of a muscle to exert a repeated force over an extended period of time (1) • Cardiovascular - the ability of the body to supply the working muscles with sufficient O₂ / remove CO₂ (1). <p>Flexibility (1)</p> <ul style="list-style-type: none"> • The range of movement at a joint (1) • Increase the length and flexibility of the soft tissues, especially muscle and tendons (1). <p>Speed (1)</p> <ul style="list-style-type: none"> • The ability to move the body or specific body parts as quickly as possible (1) • Key factor in explosive sports and relies on anaerobic pathways (1). <p>Power (1)</p> <ul style="list-style-type: none"> • The ability to produce force rapidly (1) • Strength x speed (1) • Power to weight ratio (1). 	(9)

Question Number	Question	
(b)	Name a recognised fitness test for each component of fitness defined in your answer to part (a) and give a brief description of the protocol of each test.	
	Answer	
	<p>1 mark for correctly identified fitness test and then a maximum of 2 marks for explanation of protocol. This is for each of the 3 components identified Eg Fitness test example: Test - NCF multistage shuttle test</p> <p>Protocol 20 metre space Athletes run in time with bleeps from a cassette They must reach each marker cone as the bleep occurs Failure to meet 3 consecutive bleeps signals the end of the test The bleeps occur more frequently as the test progresses.</p>	(9)

Question Number	Question	
8. QWC (i-iii)	Discuss the reasons for the increasing commercialisation of global sport and the effect it has on the levels of deviance found.	
	(12)	
	Indicative content	
	<p>In their responses, candidates may refer to the following points:</p> <p>At the early games most of performers were gentleman amateurs More money now available in elite sport than ever before Source of money from sponsors and media Olympic movement based around the public school ideal of taking part This was the only attitude prevalent at the time As sport moves into 20th century and moves down to working class/pro sport appears For most of 20th century Olympics maintains amateur status Amateur status tended to maintain ethic of sportsmanship Political use of games in 60s and 70s led to some erosion of ideal Led to emergence of state sponsored athletes in the eastern bloc Mirrored development in USA of college sponsored athletes Need to win for nation/political system led to some deviance Suggested that drug abuse became a central part of the east European sports system By 1990s commercial pressure on sport and athletes led to a change of focus Pressure to have sports such as tennis in the Olympic also led to professionals So much reward for winning a gold medal increases chance of deviance Olympic drug testing programme lacked behind the drug users Olympic has had no real control over athletes outside of Olympic competition Olympic oath still taken by athletes and most still support sportsmanship ethic Winning through gamesmanship called hollow victory.</p> <p>QWC is assessed in this question.</p>	
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	Candidates will produce brief and narrative answers, making simple statements, showing little relevance to the question. The material will be mostly generalised. No attempt at the analytical demands of the question. The skills needed to produce effective writing will not normally be present. The writing may have some coherence and will be generally comprehensible, but lack both clarity and organisation. High incidence of syntactical and/or spelling errors.
Level 2	4-6	Candidates will produce statements with some development in the form of mostly accurate and relevant factual material. There will be some attempt at analysis, with limited success. Range of skills needed to produce effective writing is likely to be limited. There are likely to be passages which lack clarity and proper organisation. Frequent syntactical and/or spelling errors are likely to be present.
Level 3	7-9	Candidates' answers will show some understanding of the focus of the question and will be broadly analytical. They will, however, include material which is descriptive, and thus only implicitly relevant to the question's focus, or which strays from that focus. The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation. Some syntactical and/or spelling errors are likely to be present.
Level 4	10-12	Candidates will offer an analytical response which is sustained and relates well to the focus of the question, and addresses the key issues contained in it. The analysis will be supported by accurate factual material, which is relevant to the question. The skills needed to produce convincing extended writing in place. Good organisation and clarity. Very few syntactical and/or spelling errors may be found. Excellent organisation and planning.

Question Number	Question	
9. QWC (i-iii)	Discuss the different systems used by cultures to identify elite sports talent. (12)	
Indicative content		
<p>In their responses, candidates may refer to the following points:</p> <p>At the early games most of performers were gentleman amateurs</p> <p>More money now available in elite sport than ever before</p> <p>Source of money from sponsors and media.</p> <p>Olympic movement based around the public school ideal of taking part</p> <p>This was the only attitude prevalent at the time</p> <p>As sport moves into 20th century and moves down to working class/pro sport appears</p> <p>For most of 20th century Olympics maintains amateur status</p> <p>Amateur status tended to maintain ethic of sportsmanship</p> <p>Political use of games in 60's and 70's led to some erosion of ideal</p> <p>Led to emergence of state sponsored athletes in the eastern bloc</p> <p>Mirrored development in USA of college sponsored athletes</p> <p>Need to win for nation/political system led to some deviance</p> <p>Suggested that drug abuse became a central part of the east European sports system</p> <p>By 1990s commercial pressure on sport and athletes led to a change of focus</p> <p>Pressure to have sports such as tennis in the Olympic also led to professionals</p> <p>So much reward for winning a gold medal increases chance of deviance</p> <p>Olympic drug testing programme lacked behind the drug users</p> <p>Olympic has had no real control over athletes outside of Olympic competition</p> <p>Olympic oath still taken by athletes and most still support sportsmanship ethic</p> <p>Wining through gamesmanship called hollow victory.</p> <p>QWC is assessed in this question.</p>		
Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1-3	Candidates will produce brief and narrative answers, making simple statements, showing little relevance to the question. The material will be mostly generalised. No attempt at the analytical demands of the question. The skills needed to produce effective writing will not normally be present. The writing may have some coherence and will be generally comprehensible, but lack both clarity and organisation. High incidence of syntactical and/or spelling errors.
Level 2	4-6	Candidates will produce statements with some development in the form of mostly accurate and relevant factual material. There will be some attempt at analysis, with limited success. Range of skills needed to produce effective writing is likely to be limited. There are likely to be passages which lack clarity and proper organisation. Frequent syntactical and/or spelling errors are likely to be present.
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Unit 3: Preparation for Optimum Sports Performance

Question Number	Question	
1.	Explain why, after exercise, the body's oxygen consumption remains elevated above resting level.	
	Answer	Marks
	<p>1 mark for each of the following points, up to 6 points:</p> <p>ATP replenishment (1) Removal of lactic acid (1) Exercise increases body temperature. This speeds up the metabolic process which stays high for some time after exercise (1) Oxygen is used to reload haemoglobin (1) Around 5-10% of oxygen is dissolved in the body's fluids to reload myoglobin (1) Respiratory muscles will still be working hard requiring oxygen (1) Heart rate remains elevated (1) Repair of tissue and redistribution of calcium ions will both require energy and oxygen/Na⁺ and K⁺ (1) Glycogen replacement will require oxygen (1) Phosphor creatine/PC/CP replenishment (1) Returning enzymes and hormones to resting/normal levels (1).</p>	(6)

Question Number	Question																						
2.	There are three food groups that can produce energy. Identify them and explain the approximate percentages of each required for a general all-round athletic performance.																						
	Answer	Marks																					
	<p>Candidates will be awarded 1 mark for each food group, 1 mark for percentage or reference to amount, 1 mark for explanation linked to a specific type of athlete, i.e. power or aerobic.</p> <table border="1"> <thead> <tr> <th>Food group</th> <th>Power athlete</th> <th>Aerobic Athlete</th> </tr> </thead> <tbody> <tr> <td>Fats (1)</td> <td>Approx 20-30% of intake (1).</td> <td>Approx 10-20% of dietary intake (1).</td> </tr> <tr> <td></td> <td>Athletes need to gain weight/protein sources are often accompanied by higher fatty content/slightly higher body fat level not critical for power athletes (1).</td> <td>Excess fat is not required/attempting to pursue a diet of less than 10% too difficult/fat can be utilised during the recovery phase Used as fuel source (1).</td> </tr> <tr> <td>Carbohydrates (1)</td> <td>55-60 % of intake (1)</td> <td>60-70% of intake (1)</td> </tr> <tr> <td></td> <td>Required to fuel high intensity but short duration activity/actual work time will be shorter than for an aerobic athlete (1).</td> <td>Main fuel source for majority of competition and training/training frequently will drain glycogen stores (1).</td> </tr> <tr> <td>Proteins (1)</td> <td>15-20% (1)</td> <td>15% (1)</td> </tr> <tr> <td></td> <td>Repairs muscle and tissue damage/facilitate growth/enable recovery (1).</td> <td>Repairs muscle and tissue damage after intense exercise (1).</td> </tr> </tbody> </table>	Food group	Power athlete	Aerobic Athlete	Fats (1)	Approx 20-30% of intake (1).	Approx 10-20% of dietary intake (1).		Athletes need to gain weight/protein sources are often accompanied by higher fatty content/slightly higher body fat level not critical for power athletes (1).	Excess fat is not required/attempting to pursue a diet of less than 10% too difficult/fat can be utilised during the recovery phase Used as fuel source (1).	Carbohydrates (1)	55-60 % of intake (1)	60-70% of intake (1)		Required to fuel high intensity but short duration activity/actual work time will be shorter than for an aerobic athlete (1).	Main fuel source for majority of competition and training/training frequently will drain glycogen stores (1).	Proteins (1)	15-20% (1)	15% (1)		Repairs muscle and tissue damage/facilitate growth/enable recovery (1).	Repairs muscle and tissue damage after intense exercise (1).	(9)
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	Repairs muscle and tissue damage/facilitate growth/enable recovery (1).	Repairs muscle and tissue damage after intense exercise (1).																					

Question Number	Question	
3. (a)	Explain the positive and negative effects that competing in front of a home crowd has on performance.	
	Answer	Marks
	<p>Candidates can score a maximum of 3 marks for each side (positive and negative). 1 mark for each effect.</p> <p>Positive Away team may be put off by hostile crowd (1) Support/encouragement from home crowd (1) Knowledge of surroundings/equipment/surface/ environmental factors (1) Away team may play aggressively and give away more fouls (1).</p> <p>Negative Increase feeling of pressure to do well may lead to decrease in performance (1) Increase of arousal may lead to inverted U hypotheses/catastrophe theory/over psyche (1) May lose support of own crowd if mistakes are made evaluation apprehension (1).The total marks for the positive and negative must not exceed 5.</p>	(5)

Question Number	Question	
3. (b)	Goal setting is often used as a motivational strategy in the long term development of elite athletes. Explain FIVE factors that need to be considered when setting goals.	
	Answer	Marks
	<p>Candidates are awarded 1 mark for each factor considered, up to 5 marks: Specific/clearly defined - must know exactly what they are aiming for (1) Measurable (1) Achievable/challenging/attainable/agreed (1) Recorded/negotiated/realistic (1) Time planned (1) Effective/will be seen to improve performance/exciting (1) Goals need to be reviewed (1) Short term goals should be set before long term goals (1).</p>	(5)

Question Number	Question	
4. (a)	<p>Plyometric training is extensively used by many athletes to improve power and strength.</p> <p>Identify what DOMS stands for, and explain why it can occur after plyometric training.</p>	
	Answer	Marks
	<p>Candidates can score maximum of 1 mark for definition Definition Delayed onset of Muscular Soreness (1) Soreness results from damage to muscle fibres and connective tissue surrounding the fibres (1)</p> <p>Candidates can score maximum of 3 marks for explaining causes Cause Excessive eccentric contractions/Eccentric actions are the stimulus for the damage that results in pain rather than the cause of pain. (1) Plyometrics reliant on eccentric contractions/rely on stretch-shortening cycles which have an eccentric component (1) Unaccustomed exercise (1).</p>	(4)

Question Number	Question	
4. (b)	What can athletes do in order to minimise the effects of DOMS?	
	Answer	Marks
	<p>Any 5 from the following - 1 mark for each Warm up thoroughly (1) Overload progressively over time (1) Avoid sudden changes to range of movement/new intensities/apply variance to training (1) Avoid activities that rely on eccentric contractions (1) Incorporating aerobic training/enhanced capillarisation (1) Effective cool downs/ice massage Use of inflammatory medication/drugs/anabolic steroids/correct nutrition, eg Vitamin C and protein (1) Regular use of plyometrics/repeat bout effect (1).</p>	(5)

Question Number	Question	
5. (a)	<p>During intense exercise, athletes can experience a large increase in lactic acid.</p> <p>Explain the effect this increase in lactic acid has on muscle function ?</p>	
	Answer	Marks
	<p>1 mark for each explanation up to a total of 4 marks</p> <p>Inhibits muscle efficiency (1)</p> <p>Increase in blood acidity/drop in Ph (1)</p> <p>Protons move from lactic acid to glycolytic enzymes (1)</p> <p>Energy production switches away from glycolysis (1)</p> <p>Increase in acidity inhibits transmission of neural impulses/obstructs contraction (1)</p> <p>Pains receptors stimulated may lead to a psychological effect (1).</p>	(4)

Question Number	Question	
5. (b)	<p>Suggest strategies that athletes might use to increase their tolerance to lactic acid.</p>	
	Answer	Marks
	<p>Any 4 from the following - 1 mark for each</p> <p>Intensity of exercise linked to lactic acid/training systems (1)</p> <p>Train with high levels of lactic acid in system/specific training working with lactic acid in system to allow body to adapt to high levels/increase buffering capacity (1)</p> <p>Work on improving blood flow to muscles (1)</p> <p>Soda loading/drinking sodium bicarbonate/buffering (1)</p> <p>Activities such as shuttle sprints/200-400m sprints (1).</p>	(4)

Question Number	Question	
6.	Explain the positive and negative effects of cognitive and somatic anxiety on sporting performance.	
	Answer	Marks
	<p>Candidates are awarded 1 mark for each of the following, up to 4 marks:</p> <p>Somatic Relationship resembles inverted U (1) Best performance is achieved with moderate levels of somatic anxiety (1) Very low and very high levels of somatic anxiety lead to low level of performance (1) Somatic anxiety should decline once performance begins (1) Physiological symptoms, eg sweating/dry mouth/butterflies/increased HR/increase in adrenaline (1).</p> <p>Candidates are awarded 1 mark for each of the following, up to 4 marks:</p> <p>Cognitive Relationship is negatively linear (1) The more you worry, the greater the negative impact on performance (1) Best performance is achieved with low levels of cognitive anxiety (1) Cognitive anxiety may remain high during performance (1) Psychological symptoms, eg worry/inability to concentrate/loss of attention/fear of failure (1) Levels of both types of anxiety can be tolerated depends on levels of self-confidence (1) Catastrophe theory may be a better explanation/Hardy and Fazey 1987 (1) An increase in cognitive state anxiety will improve performance at low levels of arousal (1) But this increase will have a negative effect on performance at high levels (1) Often seen in training v competitive situations (1).</p>	(8)

Question Number	Question	
7. QWC (i-iii)	Examine how the scientific and social principle behind the use of holding camps can assist in the preparation of elite performers. (20)	
Indicative content		
<p>In their responses, candidates may refer to the following points:</p> <ul style="list-style-type: none"> Definition/explanation of acclimatisation Definition/explanation of holding camp Examples World Cup/Olympic preparation Getting over jet lag/travel problems Getting body use to temperature/humidity Adjusting to/training to accommodate changes in altitude Able to control/monitor diet/hydration of athletes Able to control/monitor diet/hydration of athletes Chance to go over tactics strategy/game plan Help with focus/mental rehearsal/psychological benefits Familiarisation of venues/access/transport system/stadium/venue Team bonding/development of communication. 		
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-4	Candidates will produce very brief, descriptive answers, making simple statements, showing little relevance to the question. The material will be mostly generalised. There will be no attempt at an examination of the question. The writing may have some coherence and will be generally comprehensible, but lack both clarity and organisation. The skills needed to produce effective writing will not normally be present. Frequent syntactical and/or spelling errors are likely to be present.
Level 2	5-8	Candidates will produce statements with some development in the form of mostly accurate and relevant factual material. There will be little attempt at an examination of the question. The writing may show elements of coherence but there are likely to be passages which lack clarity and proper organisation. Range of skills needed to produce effective writing is likely to be limited. Frequent syntactical and/or spelling errors are likely to be present.
Level 3	9-12	Candidates will produce statements with some development in the form of mostly accurate and relevant factual material. Candidates' answers will show knowledge and some understanding. There will be an attempt to apply this to their examination of the question with limited success. The writing may show some degree of organisation and clarity but this will not be sustained throughout the response. The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation. Some syntactical and/or spelling errors are likely to be present.
Level 4	13-16	Candidates will offer material which relates well to the focus of the question. They will demonstrate good knowledge and understanding of the key issues and will apply this to their examination of the question. The response will be supported by accurate and relevant material which demonstrates some range and depth. The skills needed to produce convincing extended writing mostly in place. Good organisation and clarity. Some syntactical and/or spelling errors may be found but overall the writing will be coherent.
Level 5	17-20	Candidates offer material which is sustained and directly addresses the focus of the question. They will demonstrate explicit knowledge and understanding of the key issues and apply this to their examination of the question. The response will be supported by accurate, relevant and appropriately selected material which demonstrates range and depth. Very few syntactical and/or spelling errors may be found, but these will not detract from the overall coherence. Excellent organisation and planning. All the skills required to produce convincing extended writing will be in place.

Question Number	Question	
8. QWC (i-iii)	<p>Elite sports performers now require physiological, psychological and biomechanical support when preparing for optimum performance.</p> <p>Evaluate why an academy/institute model appears to be the most effective method of providing such extensive support.</p> <p style="text-align: right;">(20)</p>	
Indicative content		
<p>In their responses, candidates may refer to the following points:</p> <ul style="list-style-type: none"> Bringing together best athletes in one place Developing an atmosphere of excellence Chance to control training of athletes/performers/plan/oversee Access to best possible facilities Control diet/supplements/energy intake of performers Bring together best coaches/trainers in one place Chance to provide access to greater range of sports science Allows establishment of Training regimes Explanation and application of macro/meso cycle planning Transfer of ideas/training/methods Chance to transfer/study tactics from different teams and sports tactics Efficient use of biomechanics analysis/availability of labs Less travel time closer links between training and competition Economic benefits/cost saving not having to travel for services Creates a central focus to elite sports programme/home Less travel time closer links between training and competition Economic benefits/cost saving not having to travel for services Creates a central focus to elite sports programme/home 		
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-4	<p>Candidates will produce very brief and narrative answers, making simple statements, showing little relevance to the question. The material will be mostly generalised. No attempt at the analytical demands of the question.</p> <p>The writing may have some coherence and will be generally comprehensible, but lack both clarity and organisation. The skills needed to produce effective writing will not normally be present. Frequent syntactical and/or spelling errors are likely to be present.</p>
Level 2	5-8	<p>Candidates will produce statements with some development in the form of mostly accurate and relevant factual material. There will be some attempt at analysis, but focus on the analytical demands of the question will be implicit.</p> <p>The writing may show elements of coherence but there are likely to be passages which lack clarity and proper organisation. Range of skills needed to produce effective writing is likely to be limited. Frequent syntactical and/or spelling errors are likely to be present.</p>
Level 3	9-12	<p>Candidates' answers will show some understanding of the focus of the question and will be broadly analytical. They will, however, include material which is descriptive, and thus only implicitly relevant to the question's focus, or which strays from that focus.</p> <p>The writing may show some degree of organisation and clarity but this will not be sustained throughout the response. The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation. Some syntactical and/or spelling errors are likely to be present.</p>
Level 4	13-16	<p>Candidates will offer an evaluation which relates well to the focus of the question, and shows some understanding of the key issues contained in it. The analysis will be supported by accurate factual material, which is relevant to the question. The selection of material may lack balance in places.</p> <p>The skills needed to produce convincing extended writing mostly in place. Good organisation and clarity. Some syntactical and/or spelling errors may be found but overall the writing will be coherent.</p>

Level 5	17-20	<p>Candidates offer an well balanced and critical evaluation which is sustained and directly addresses the focus of the question. They will demonstrate explicit understanding of the key issues. The analysis will be supported by accurate, relevant and appropriately selected material which demonstrates range and depth.</p> <p>Very few syntactical and/or spelling errors may be found, but these will not detract from the overall coherence. Excellent organisation and planning. All the skills required to produce convincing extended writing will be in place.</p>
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