edexcel

A Level
Physical Education

Sample Assessment Materials

Pearson Edexcel Level 3 Advanced GCE in Physical Education (9PE0)

First teaching from September 2016

First certification from 2018 | Issue 1

Edexcel, BTEC and LCCI qualifications

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Contents

Introduction

The Pearson Edexcel Level 3 Advanced GCE in Physical Education is designed for use in schools and colleges. It is part of a suite of AS/A Level qualifications offered by Pearson.

These sample assessment materials have been developed to support this qualification and will be used as the benchmark to develop the assessment students will take.

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.

How to award marks

Finding the right level

The first stage is to decide which level the answer should be placed in. To do this, use a 'best-fit' approach, deciding which level most closely describes the quality of the answer. Answers can display characteristics from more than one level, and where this happens markers must use their professional judgement to decide which level is most appropriate.

Placing a mark within a level

After a level has been decided on, the next stage is to decide on the mark within the level. The instructions below tell you how to reward responses within a level. However, where a level has specific guidance about how to place an answer within a level, always follow that guidance. Statements relating to the treatment of students who do not fully meet the requirements of the question are also shown in the indicative content section of each levels based mark scheme. These statements should be considered alongside the levels descriptors.

Markers should be prepared to use the full range of marks available in a level and not restrict marks to the middle. Markers should start at the middle of the level (or the uppermiddle mark if there is an even number of marks) and then move the mark up or down to find the best mark. To do this, they should take into account how far the answer meets the requirements of the level:

- If it meets the requirements fully, markers should be prepared to award full marks within the level. The top mark in the level is used for answers that are as good as can realistically be expected within that level
- If it only barely meets the requirements of the level, markers should consider awarding marks at the bottom of the level. The bottom mark in the level is used for answers that are the weakest that can be expected within that level
- The middle marks of the level are used for answers that have a reasonable match to the descriptor. This might represent a balance between some characteristics of the level that are fully met and others that are only barely met.

Write your name here

Surname	Other names

Pearson Edexcel Level 3 GCE

Centre Number | | | | | |

Candidate Number | | | | |

Physical Education

Advanced

Component 1: Scientific Principles of Physical Education

Sample assessment material for first teaching September 2016
Time: 2 hours 30 minutes

Paper Reference
9PE0/01

You must have:
Calculator

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions in Sections A and B.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*
- Questions marked with an **asterisk** (*) require students to use their knowledge and understanding from across the course of study in their answer.
- Calculators can be used.

Information

- The total mark for this paper is 140.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

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S 5 0 1 2 4 A 0 1 2 5

PEARSON

SECTION A – Applied anatomy and physiology

Answer ALL questions. Write your answers in the spaces provided.

1 (a) Define the following movements.

(i) Adduction

(1)

(ii) Supination

(1)

(iii) Dorsi flexion

(1)

(b) Identify the type of movement made when an athlete points their toes.

(1)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(c) Using sporting examples, explain the difference between rotation and circumduction.

(4)

(Total for Question 1 = 8 marks)

2 Look at Figure 1, showing a front squat and Figure 2, showing a Smith machine squat.

The load for both exercises is 100 kg. The moment arm length between the knee and the 'line of force' is 0.30 m for the front squat and 0.40 m for the Smith machine squat.

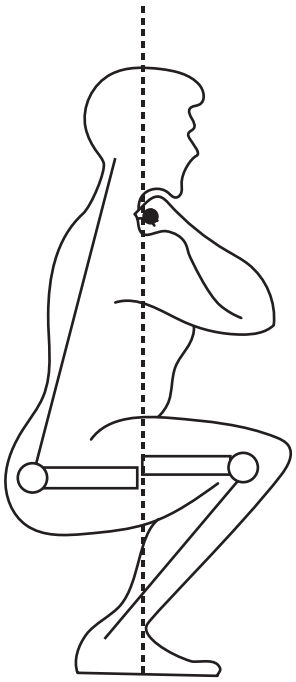

Figure 1

Front squat

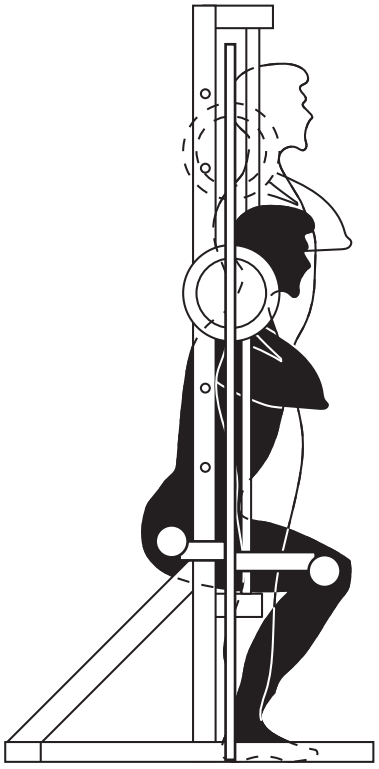

Figure 2

Smith machine squat

(a) Calculate the 'moment of force' at the knee in both exercises. You must show your working.

(i) Front squat

(2)

(ii) Smith machine squat

(2)

(b) When performing a squat there is movement at the knee in both the upward and downward phase.

Using the table below:

(i) identify the muscles around the knee that are contracting.

(4)

(ii) identify the types of contractions that they are performing to allow the complete range of movement of the squat.

(3)

	(i) Muscle contracting	(ii) Type of contraction
Downward phase	1	1 .....
Bottom of the squat	2 ..... 3	2 .....
Upward phase	4	3 .....

(Total for Question 2 = 11 marks)

3 During intense racing, an endurance swimmer will require a greater volume of air per breath than when at rest.

Explain how the swimmer achieves a greater volume of air per breath during a race.

(Total for Question 3 = 6 marks)

4 (a) (i) Explain why the body utilises the lactic acid pathway for different track and field athletics events.

(4)

(ii) Explain why the body utilises the aerobic energy pathway for different track and field athletics events.

(4)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(b) Assess where the 1500 m track race would be placed on the energy continuum.

(8)

(Total for Question 4 = 16 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

5 (a) Explain how **three** of the structural characteristics of slow twitch muscle fibres enable the fibres to be better suited to endurance activities.

(6)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(b) Structural responses provide functional benefits.

Explain how **four** structural responses experienced during a warm up would lead to functional improvements in a performance.

(8)

(Total for Question 5 = 14 marks)

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***6** Discuss the likely effects of an unhealthy lifestyle on the body.

Use your knowledge and understanding from across the course of study to answer this question.

(15)

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DO NOT WRITE IN THIS AREA

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(Total for Question 6 = 15 marks)

TOTAL FOR SECTION A = 70 MARKS

SECTION B – Exercise physiology and applied movement analysis

Answer ALL questions. Write your answers in the spaces provided.

7 (a) Other than cooling down and wearing compression clothing, identify **three** strategies used by athletes to speed up recovery.

(3)

(b) Explain how cooling down and compression clothing can speed up the recovery process.

(i) Cooling down

(3)

(ii) Compression clothing

(3)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(c) Explain why it is important for an athlete to recover after exercise.

(6)

(Total for Question 7 = 15 marks)

8 (a) Explain how periodisation can be used to minimise the risk of injury.

(4)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(b) An athlete uses periodisation to plan their training programme.

Examine how technology used to measure exercise intensity can contribute to successful periodisation for the athlete.

(8)

(Total for Question 8 = 12 marks)

The table below shows the break down of a 200 m sprinter's performance. The table outlines the split times and average speed for every 50 m.

Distance (m)	Split times (s)	Average speed (m/s)
0	0	0
0–50	8	6.25 m/s
50–100	6	8.33 m/s
100–150	5	10 m/s
150–200	6	8.33 m/s
Total time	25	

9 (a) (i) Showing your working, calculate the average speed of the sprinter.

(2)

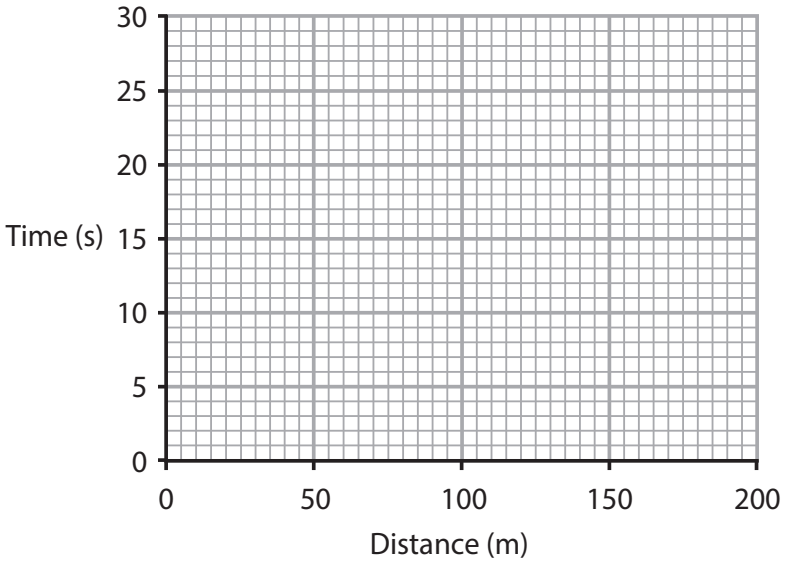
.....

(ii) Plot the results from the table in the distance against time graph below.

(1)

(iii) Shade the area of the graph where the sprinter accelerated the most.

(1)



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(b) An elite marathon runner is returning to the sport after a long-term injury. He intends to use heart rate (HR) as a means of measuring the intensity of his training. His current resting HR is 45 bpm and maximum HR is 196 bpm.

(i) State Karvonen's theory.

(2)

.....

.....

.....

.....

(ii) Using Karvonen's theory, calculate the runner's heart rate reserve.

(1)

.....

(iii) Calculate the runner's:

(2)

lowest training heart rate

.....

highest training heart rate

.....

(Total for Question 9 = 9 marks)

10 (a) Define the terms *isotonic*, *hypertonic* and *hypotonic* in the context of sports drinks.

(3)

Isotonic

Hypertonic

Hypotonic

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

(b) Assess the merits of hypotonic drinks for a marathon runner.

(8)

(Total for Question 10 = 11 marks)

11 Assess the use of POLICE rather than RICE as a rehabilitation strategy for sporting injuries sustained in a team game.

(Total for Question 11 = 8 marks)

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

12 Analyse whether interval training is a valid method of training for an elite marathon runner.

(15)

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(Total for Question 12 = 15 marks)

TOTAL FOR SECTION B = 70 MARKS
TOTAL FOR PAPER = 140 MARKS

Component 1 Mark Scheme

Question number	Acceptable answer	Additional guidance	Mark
1(a)(i)	Movement towards the mid-point of the body (1).	Do not accept 'a circular movement'.	**(1)**

Question number	Acceptable answer	Mark
1(a)(ii)	Turning the palm of the hand to face upwards (1).	**(1)**

Question number	Acceptable answer	Mark
1(a)(iii)	Bringing the toes or fingers upwards (1).	**(1)**

Question number	Acceptable answer	Mark
1(b)	Plantar flexion (1)	**(1)**

Question number	Acceptable answer	Mark
1(c)	**1 mark for the definition of each term.** Rotation is movement around a mid-point (1). Circumduction is a circular movement that resembles a cone shape (1). **1 mark for an example of circumduction and 1 mark for an example of rotation.** An example of rotation is twisting at the waist in preparation for a top-spin shot in tennis (1). An example of circumduction is the arm action in the shoulder when bowling in cricket (1). **Other appropriate examples are acceptable.**	**(4)**

Question number	Acceptable answer	Additional guidance	Mark
2(a)(i)	Front squat moment of force = 981 × 0.30 m (1) = 294.3 Nm (1)	Accept 1000 x 0.3 = 300	**(2)**

Question number	Acceptable answer	Additional guidance	Mark
2(a)(ii)	Smith machine moment of force = 981 × 0.40 m (1) = 392.4 Nm (1).	Accept 1000 x 0.4 = 400	**(2)**

Question number	Acceptable answer	Mark
2(b)(i)	1 Quadriceps 2 Quadriceps 3 Hamstring 4 Quadriceps	**(4)**

Question number	Acceptable answer	Additional guidance	Mark
2(b)(ii)	1 (Isotonic) eccentric 2 Isometric 3 (Isotonic) concentric	Do not accept 'Isotonic' on its own.	**(3)**

Question number	Acceptable answer	Additional guidance	Mark
3	**A linked explanation which makes reference to any of the following points (up to a maximum of six marks).** Air flow will always travel down the pressure gradient, from a high- to a low-pressure area (1). Blood flowing into the alveoli is venous blood – relatively high in CO2 but low in O2 (1); during intense efforts there is need for a greater diffusion and so a bigger gradient is required (1), which is created by increased depth of breathing (1). When the alveoli are filled with air after inspiration, that air will be high in O2 and lower in CO2 (1), which creates pressure gradients for both gasses/oxygen and carbon dioxide, but in the opposite directions (1). For O2 the pressure is high in the alveoli and low in the blood (1) so the gradient runs from the alveoli to the blood (1). For CO2 the pressure is high in the blood and low in the alveoli (1) so the gradient runs from the blood and the alveoli (1).	A maximum of 2 marks for non-linked statements.	**(6)**

Question number	Acceptable answer	Additional guidance	Mark
4(a)(i)	**A linked explanation which makes reference to any of the following points (up to a maximum of four marks).** **The lactic acid energy pathway** The lactic acid pathway is more suited to high-intensity, short duration activities such as 200m, 400m or any other appropriate example (1). It creates the ATP/energy extremely quickly (1) It will sustain near maximal contractions for up to one minute (1) The rate of glucose depletion is rapid (1) The consequent build-up of waste products that cause fatigue (accept lactic acid, hydrogen ions and carbon dioxide) (1)	A maximum of 1 mark for non-linked statements.	**(4)**

Question number	Acceptable answer	Additional guidance	Mark
4(a)(ii)	**A linked explanation which makes reference to any of the following points (up to a maximum of four marks).** **The aerobic energy pathway** The aerobic pathway is more suited to low-intensity, long duration activities such as 5000m, 10000m or any other appropriate example (1). Can produce up to a further 32 (36 from glucose/37 glycogen) ATP in total (1). The rate at which ATP is created is slower (1). Which means glucose stores will last considerably longer (1). The contractions will have to be submaximal (1).	A maximum of 1 mark for non-linked statements. Accept 32/36/37 ATP.	**(4)**

Question number	Indicative content
4(b)	**AO2 = 4 marks, AO3 = 4 marks** Reward acceptable answers. Responses may include, but are not limited to the following. • The 1500m race would be placed approximately in the middle of the continuum but could vary depending on the tactics (AO2). **Candidates may draw this in a diagram.** • The energy continuum identifies athletic events by the percentage of energy obtained from the different pathways (AO3). • The placement of the 1500m on the energy continuum would need to be justified by tactics and the application of energy systems at various points throughout the race (AO2). • The start of the race will be very anaerobic, predominantly utilising the ATP-PC pathway (AO2). • After approximately 50 metres the pace may drop a little but will still be anaerobic, utilising the Lactic Acid Pathway as the dominant provider until the end of the lap (AO3). • The next two laps will experience another slight drop in intensity, allowing the aerobic pathway to be the dominant provider (AO3). • On the bell, the intensity will gradually increase, firstly utilising the Lactic Acid pathway until the final sprint finish which again is ATP-PC pathway dependent (AO3).

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–2	• There are few links between theory and practice. Isolated elements of knowledge and understanding (AO2). • There is little application of knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Limited balancing of ideas against each other (AO3). • Limited evaluative statement (AO3).
Level 2	3–5	• Makes connections between theory and practice (AO2). • Applies a knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Examines a wide range of ideas, balancing ideas against each other (AO3). • An evaluative statement which is relevant (AO3).
Level 3	6–8	• Makes many insightful and significant connections between theory and practice (AO2). • Applies an excellent knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Critically examines a wide range of issues balancing ideas against each other (AO3). • Clear evaluative statement which is thorough and focussed (AO3).

Question number	Acceptable answer	Additional guidance	Mark
5(a)	**Any three of the following linked responses.** Thin in diameter (1) – short diffusion distance/less body mass to be carried (1). Large numbers of capillaries (1) – facilitates oxygenated blood delivery/removal of waste/slows blood flow through the muscle, allowing more time for gas exchange (1). Large amount of myoglobin (1) – oxygen reserve/transportation of oxygen from blood to mitochondria (1). Large and numerous mitochondria (1) – facilitates high capacity to use oxygen/large amount of ATP produced (1).	A maximum of 2 marks for non-linked statements.	**(6)**

Question number	Acceptable answer		Additional guidance	Mark
5(b)	**One mark awarded for any of the following points up to a maximum of four marks (knowledge in isolation).** Vaso constriction means that blood vessels in non-working body parts become smaller (1). Vaso dilation means that blood vessels in working body parts become bigger (1). Decreased muscle viscosity increases muscle elasticity and functional strength (1). Increased production of Synovial fluid provides easier movement at a joint (1). Vaso dilation and vaso constriction together allow vascular shunting to take place (1).	**One mark awarded for any of the following points up to a maximum of four marks (linked reasoning).** This limits the blood volume within the blood vessels (1). This enables the blood vessels to accept more blood (1). This reduces the risk of injury and increases the performance of the muscle (1). This increases the range of movement/flexibility (1). This results in the delivery of oxygen to where it is most needed (1).	Any other appropriate structural response linked to performance. A maximum of 2 marks for non-linked statements.	**(8)**

Question number	Indicative content
*6	**AO1 = 5 marks, AO3 = 10 marks** **Students who only show achievement against AO1 will not be able to gain marks beyond Level 1.** **Students who only draw their answer from one area of study will not be able to gain marks beyond Level 4.** Reward acceptable answers. Responses may include, but are not limited to the following. • Health is a complete state of social, mental and physical wellbeing, not just the absence of disease. Therefore, the implications of being unhealthy would affect social, mental and physical components of the body (AO3) • An unhealthy lifestyle can include: poor diet, lack of exercise, stress, social habits (AO1) • An unhealthy lifestyle is likely to have the biggest effect on the cardiovascular system. This system is made up of the heart, blood and blood vessels (AO1) • Social habits such as smoking can lead to stiffening of blood vessels, reducing blood flow and increasing blood pressure (AO1) • The detrimental effects of a lack of physical activity on the muscular and skeletal systems (AO3) • Unhealthy lifestyle resulting in an increased potential for injury (specification reference 2.3.1) (AO3) • The detrimental effects of a poor diet on physical performance and on the body (specification reference 2.1.2) (AO3) • The negative effects of an unhealthy lifestyle on motivation and future behaviour (AO3) • Lack of self confidence and increased anxiety resulting from an unhealthy lifestyle (AO3) • Lack of exercise and an unhealthy lifestyle can lead to an increase sporting deviance due to poor physical conditioning (AO3) • Unhealthy lifestyle can negatively affect participation in physical activity (AO3)

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Limited understanding of the factors that underpin performance and involvement in physical activity and sport. This is communicated in a basic way with simple or generalised statements (AO1). • Limited analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Analysis is not used to make a judgement (AO3).
Level 2	4–6	• Attempts some understanding of the factors that underpin performance and involvement in physical activity and sport and expresses ideas with some clarity (AO1). • Attempts some analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Analysis may not be used to make a clear judgement (AO3).
Level 3	7–9	• Evidence of some understanding of the factors that underpin performance and involvement in physical activity and sport. Communicated in a logical writing structure (AO1). • Good analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a judgement but without full substantiation (AO3).
Level 4	10-12	• Very good understanding of the factors that underpin performance and involvement in physical activity and sport. Communicated in a logical, clear writing structure (AO1). • Very good analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a clear judgement and supports this with examples (AO3).
Level 5	13-15	• Excellent knowledge and understanding of factors that underpin performance and involvement in physical activity and sport. Communicated in a coherent writing structure with clarity and precision (AO1). • Sophisticated analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a fully informed judgement and supports this with examples (AO3).

Question number	Acceptable answer	Mark
7(a)	Any **three** of: • massage (1) • ice baths (1) • diet (1) • physiotherapy (1) • ultrasound (1) • cryotherapy (1) • nutritional supplements (1)	**(3)**

Question number	Acceptable answer		Additional guidance	Mark
7(b)(i)	**One mark awarded for the following point (knowledge in isolation).** Involves performing gross motor activity at a gradually lower intensity and or flexibility exercises (1).	**One mark awarded for any of the following points up to a maximum of two marks (linked reasoning).** This will aid a continued and elevated blood and oxygen supply to the working muscles (1). This will take required nutrients etc to the muscles (1). This will help to remove waste quicker (1). Flexibility exercises can also help to break down any scar tissue or any cross bridges remaining (1). It can help to increase muscle elasticity and increase the range of movement (ROM) (1).	A maximum of 1 mark for non-linked statements.	**(3)**

Question number	Acceptable answer		Additional guidance	Mark
7(b)(ii)	**One mark awarded for the following point (knowledge in isolation).** Compression clothing works by performing a constant pressure on the body part, which adds external pressure to the veins (1).	**One mark awarded for any of the following points up to a maximum of two marks (linked reasoning).** By squeezing the muscle, venous return will be encouraged, which may reduce the potential for venous pooling (1). This may also lessen the potential for the athlete experiencing light headedness/dizziness post-exercise (1). Quicker venous return facilitates a quicker cardiac output, which enables increased blood supply to the muscles (1). This increased blood supply will carry required nutrients to the muscles (1) and/or help to remove waste more quickly (1).	A maximum of 1 mark for non-linked statements.	**(3)**

Question number	Acceptable answer	Additional guidance	Mark
7(c)	**A linked explanation which makes reference to any of the following points (up to a maximum of six marks).** In order to improve fitness, the body has to be allowed time to recover (1) so exercise plus recovery will lead to improvements in fitness (1). Athletes need to train as often as is possible in order to maximise their fitness (1), which means that they must recover so that they can train again (1). Training hard before full recovery will prevent the necessary growth or improvements taking place (1) and could lead to overtraining/injury (1). Speeding up the recovery period through active recovery and or with enhanced nutrition enables a greater frequency of training with a lessened risk of overtraining (1).	A maximum of 2 marks for non-linked statements.	**(6)**

Question number	Acceptable answer		Additional guidance	Mark
8(a)	**One mark awarded for any of the following points up to a maximum of two marks (knowledge in isolation).** Periodisation enables athletes to plan effectively and over time (1). Injury occurs most often when an athlete is over-fatigued (1). Injury occurs when an athlete is applying overload too quickly or too often (1).	**One mark awarded for any of the following points up to a maximum of two marks (linked reasoning).** And so it allows for specific objectives for identified periods/mesocycles (1). So by periodising, the athlete can have a clearer overview of the progression (1). Athletes can measure or manage the overload with regular and planned periods of intense training, testing or rest (1).	A maximum of 2 marks for non-linked statements.	**(4)**

<table>
<tr><th>Question number</th><th colspan="2">Indicative content</th></tr>
<tr><td>8(b)</td><td colspan="2">AO1 = 4 marks, AO3 = 4 marks

Students who only show achievement against AO1 will not be able to gain marks beyond Level 1.

All answers should be linked to appropriate sections of the training cycle (periodisation).

Reward acceptable answers. Responses may include, but are not limited to the following.

• Periodisation specifically utilises different training periods: athletes will require different objectives and so need different training intensities (AO1).

• It is common for athletes to undertake an aerobic base period early in the macrocycle and then to build on this base and focus on VO2Max or speed later in the cycle (AO1).

• Training instensity needs to be accurately monitored and match the stage of the season (AO1).

• Technology, such as a heart rate monitor, gives a guide to the effort the athlete is exerting at a given time and will help them to work in a specific target zone (AO3).

• Heart rate (HR) monitors are useful for base line and lower aerobic activity as they provide information based on what has happened previously. HR monitors can lose accuracy with higher intensity and sudden efforts (AO3).

• Power meters offer the most accurate measure of training intensity, but are expensive and not always suitable for all activities, being more appropriate for rowers and cyclists (AO3).

• Mobile phone apps and devices that rely on satellite navigation technology can offer a guide to training intensity. They can calculate approximate training intensities with information about an athlete’s height, weight and gender (AO3).</td></tr>
<tr><td>Level</td><td>Mark</td><td>Descriptor</td></tr>
<tr><td></td><td>0</td><td>No rewardable material.</td></tr>
<tr><td>Level 1</td><td>1–2</td><td>• Some accurate and relevant knowledge (AO1).

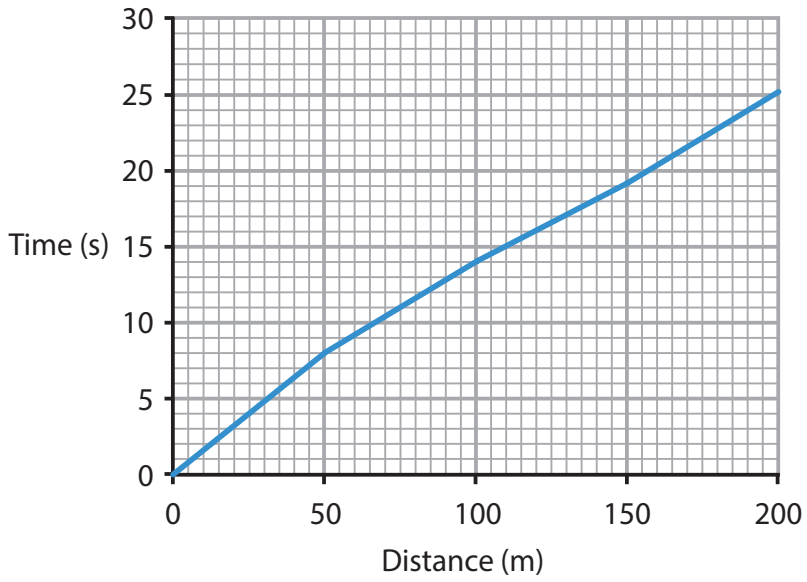
• Simple or generalised statements supported by limited evidence (AO1).

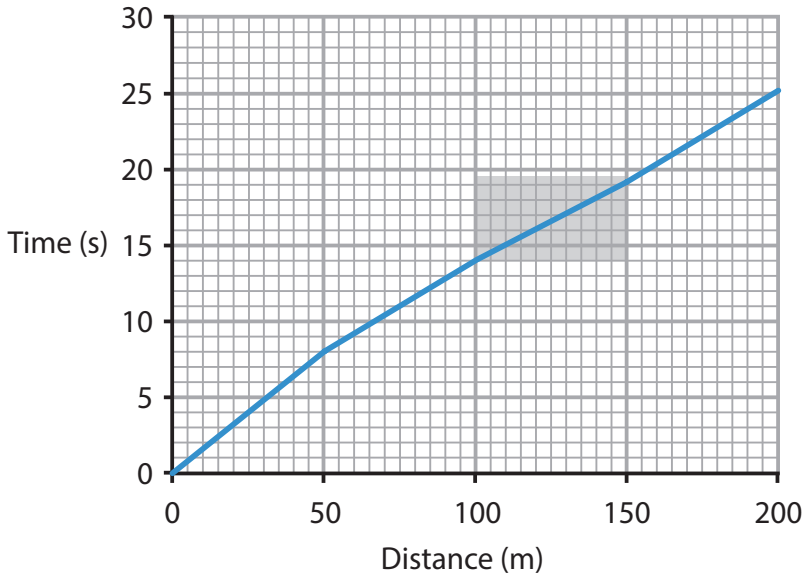
• Limited balancing of ideas against each other (AO3).

• Limited evaluative statement (AO3).</td></tr>
</table>

Level	Mark	Descriptor
Level 2	3–5	• A good level of accurate and relevant knowledge (AO1). • A line of reasoning is presented and supported by some evidence (AO1). • Examines a wide range of ideas, balancing ideas against each other (AO3). • An evaluative statement which is relevant (AO3).
Level 3	6–8	• A high level of accurate and relevant knowledge (AO1). • Articulates a clear viewpoint with clarity and precision which is well substantiated (AO1). • Critically examines a wide range of issues balancing ideas against each other (AO3). • Clear evaluative statement which is thorough and focussed (AO3).

Question number	**Acceptable answer**	**Mark**
9(a)(i)	Average Speed/Velocity = distance/time (s=d/t) = 200/25 (1) = 8 m/s (1)	**(1)**

Question number	**Acceptable answer**	**Mark**
9(a)(ii)		**(1)**

Question number	Acceptable answer	Mark
9(a)(iii)		(1)

Question number	Acceptable answer	Mark
9(b)(i)	Maximum heart rate – resting heart rate = heart rate reserve (MHR-RHR=HRR) (1) Heart rate reserve x %heart rate + resting heart rate = target heart rate (HRR x %HR + RHR = THR) (1)	(2)

Question number	Acceptable answer	Mark
9(b)(ii)	151 bpm (196 – 45 = 151) (1)	(1)

Question number	Acceptable answer	Mark
9(b)(iii)	**Lowest training heart rate** 60% of 151 = 90.6 90.6 + 45 = 135.6 bpm (accept 136) (1) **Highest training heart rate** 80% of 151 = 120.8 120.8 +45 = 165.8 bpm (accept (166) (1)	(2)

Question number	Acceptable answer	Mark
10(a)	**Isotonic** is when the glucose osmolality of the drink is the same as blood (1). **Hypertonic** is when the glucose osmolality of the drink is greater than the blood (1). **Hypotonic** is when the glucose osmolality of the drink is lower than the blood (1).	**(3)**

Question number	Indicative content		
10(b)	**AO2 = 4 marks, AO3 = 4 marks** Reward acceptable answers. Responses may include, but are not limited to the following. • Hypotonic drinks have the lowest glucose osmality (AO2). • They will be emptied from the stomach the quickest (AO2). • The greater the glucose osmality of a sports drink, the slower the gastric emptying and the greater the likelihood of a stomach upset (AO3). • Hypotonic drinks provide the fastest glucose benefit for the marathon runner (AO2). • A large volume of hypotonic drinks would have to be consumed in order to obtain a significant amount of glucose (AO3). • These drinks are most beneficial when working at a low intensity, requiring quick energy but not in great quantities (AO3). • Hypotonic drinks offer optimal hydration (AO2).		
Level	Mark	Descriptor	
	0	No rewardable material.	
Level 1	1–2	• There are few links between theory and practice. Isolated elements of knowledge and understanding (AO2). • There is little application of knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Limited balancing of ideas against each other (AO3). • Limited evaluative statement (AO3).	

Level	Mark	Descriptor
Level 2	3–5	• Makes connections between theory and practice (AO2). • Applies a knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Examines a wide range of ideas, balancing ideas against each other (AO3). • An evaluative statement which is relevant (AO3).
Level 3	6–8	• Makes many insightful and significant connections between theory and practice (AO2). • Applies an excellent knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Critically examines a wide range of issues balancing ideas against each other (AO3). • Clear evaluative statement which is thorough and focussed (AO3).

<table>
<tr><th>Question number</th><th colspan="2">Indicative content</th></tr>
<tr><td>11</td><td colspan="2">AO2 = 4 marks, AO3 = 4 marks

Reward acceptable answers. Responses may include, but are not limited to the following.

• RICE (Rest, Ice, Compression and Elevation), is a traditional application applied to soft tissue injuries (AO2).

• By resting the injured body part you prevent further damage and so speed up the healing process (AO2).

• Ice prevents further ‘bleeding’ or leakage from the injured body part and helps to speed up the healing process (AO3).

• Compression helps to lessen the effect of any swelling and supports damaged soft tissue, reducing pain discomfort and minimising the danger of further damage (AO3).

• Elevation aids the drainage of any liquid/leakage caused by the injury that may have led to swelling/pain (AO3).

• POLICE (Protection, Optimal Loading, Ice, Compression, Elevation) is a more recent application for injuries, though not necessarily soft tissue injuries (AO2).

• The main difference between RICE and POLICE is the inclusion of Protection and Optimal Loading in POLICE (AO3).

• Optimal loading encourages recovery through increased circulation to the injured area and by applying an optimal level of stress in the correct direction (AO3).

• POLICE might not be appropriate for some soft tissue injuries such as torn muscles. RICE might not be appropriate for some other injuries due to the potential for muscle wastage (AO3).

All points should be supported by accurate examples of team games.</td></tr>
<tr><td>Level</td><td>Mark</td><td>Descriptor</td></tr>
<tr><td></td><td>0</td><td>No rewardable material.</td></tr>
<tr><td>Level 1</td><td>1–2</td><td>• There are few links between theory and practice. Isolated elements of knowledge and understanding (AO2).

• There is little application of knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2).

• Limited balancing of ideas against each other (AO3).

• Limited evaluative statement (AO3).</td></tr>
</table>

Level	Mark	Descriptor
Level 2	3–5	• Makes connections between theory and practice (AO2). • Applies a knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Examines a wide range of ideas, balancing ideas against each other (AO3). • An evaluative statement which is relevant (AO3).
Level 3	6–8	• Makes many insightful and significant connections between theory and practice (AO2). • Applies an excellent knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Critically examines a wide range of issues balancing ideas against each other (AO3). • Clear evaluative statement which is thorough and focussed (AO3).

<table>
<tr><th>Question number</th><th colspan="2">Indicative content</th></tr>
<tr><td>12</td><td colspan="2">AO2 = 5 marks, AO3 = 10 marks

Reward acceptable answers. Responses may include, but are not limited to the following.

• Discussion centred around the suitability or not of interval training for an elite marathon runner (AO3).

Argument against using interval training/reasons why it is not valid
• Marathon running is traditionally an endurance-based event (AO2).

• Interval training is 'traditionally' associated with high-intensity and short duration activities, even maximum intensity (AO2).

• Marathon runners would rarely work at maximum intensity (AO2).

• Continuous and Fartlek would be more traditional methods of training for a marathon (AO2).

Argument in favour of using interval training/reasons why it is valid
• Interval training is very adaptable (AO3).

• The work and the rest periods can be manipulated in order to achieve the desired outcome (AO3).

• Interval training is used to enable an athlete to work at a higher than normal intensity, but this can be adapted for a marathon runner (AO3).

• A marathon is a race and a measure of speed, and an elite athlete will want to run faster and win the race (AO3).

• To improve speed the athlete needs to overload and interval training facilitates this (AO3).

• Long intervals of up to 20 minutes performed in sets of three are a good way to improve functional threshold (AO3).</td></tr>
<tr><td>Level</td><td>Mark</td><td>Descriptor</td></tr>
<tr><td></td><td>0</td><td>No rewardable material.</td></tr>
<tr><td>Level 1</td><td>1–3</td><td>• There are limited links between theory and practice. Limited technical language supports isolated elements of knowledge and understanding (AO2).

• Limited analysis of the factors that underpin performance and involvement in physical activity and sport (AO3).

• Analysis is not used to make a judgement (AO3).</td></tr>
</table>

Level	Mark	Descriptor
Level 2	4–6	• Makes few links between theory and practice. Basic technical language supports some elements of knowledge and understanding (AO2). • Attempts some analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Analysis may not be used to make a clear judgement (AO3).
Level 3	7–9	• Makes some links between theory and practice. Some appropriate technical language supports a good knowledge and understanding (AO2). • Good analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a judgement but without full substantiation (AO3).
Level 4	10-12	• Makes strong links between theory and practice. Appropriate technical language supports a very good knowledge and understanding (AO2). • Comprehensive analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a clear judgement and supports this with examples (AO3).
Level 5	13-15	• Makes many insightful and significant links between theory and practice. Appropriate technical language supports a significant level of knowledge and understanding (AO2). • Sophisticated analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a fully informed judgement and supports this with examples (AO3).

Write your name here

Surname	Other names

Pearson Edexcel Level 3 GCE

Centre Number | | | | | |

Candidate Number | | | | |

Physical Education

Advanced

Component 2: Psychological and Social Principles of Physical Education

Sample assessment material for first teaching September 2016
Time: 2 hours

Paper Reference
9PE0/02

You must have:
Calculator

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions in Sections A and B.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*
- Questions marked with an **asterisk** (*) require students to use their knowledge and understanding from across the course of study in their answer.
- Calculators can be used.

Information

- The total mark for this paper is 100.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

S50125A

S 5 0 1 2 5 A 0 1 2 3

PEARSON

SECTION A – Skill acquisition and sport psychology

Answer ALL questions. Write your answers in the spaces provided.

1 Identify **four** advantages of mental practice when improving a skill in sport

1 .....

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2 .....

.....

3 .....

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4 .....

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(Total for Question 1 = 4 marks)

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2 Using Cottrell's theory of Evaluation Apprehension, assess the effect that 'others' could have on the performance of an under-18 club debutant.

(Total for Question 2 = 8 marks)

3 A generally non-aggressive person displays aggressive tendencies when playing competitive sport.

Using examples, explain the view expressed by Social Learning Theorists in relation to aggressive behaviour in sport.

(Total for Question 3 = 6 marks)

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4 (a) Define the term *State Anxiety*.

(1)

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(b) Give a sporting example of *State Anxiety*.

(1)

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(Total for Question 4 = 2 marks)

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5 Compare the likely psychological characteristics of two contrasting athletes, one who 'Needs to Achieve' (NACH) and one who 'Needs to Avoid Failure' (NAF).

Use sporting examples in your answer.

(15)

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(Total for Question 5 = 15 marks)

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***6** Discuss how the provision of technology has aided the learning and understanding of skills for both the performer and spectator.

Use your knowledge and understanding from across the course of study to answer this question.

(15)

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(Total for Question 6 = 15 marks)

TOTAL FOR SECTION A = 50 MARKS

SECTION B – Sport and society

Answer ALL questions. Write your answers in the spaces provided.

7 Define the terms *Gentleman Amateur and Playing Professional*.

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(Total for Question 7 = 2 marks)

8 Explain how the modern Olympics between 1972 and 1984 revolutionised the commercialisation of sport.

(Total for Question 8 = 6 marks)

9 Outline how global sport has changed over the last 20 years due to 'Americanisation'.

(Total for Question 9 = 4 marks)

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QUESTION 10 BEGINS ON THE NEXT PAGE.

10 The data in Figure 1 shows the physical participation rates among children across the country in 2012.

Suggest the possible consequences for society if the pattern shown in the graph were to continue.

You must make specific reference to the data in Figure 1 in your answer.

(8)

Children meeting phyiscal activity recommendations, by gender and region, England 2012

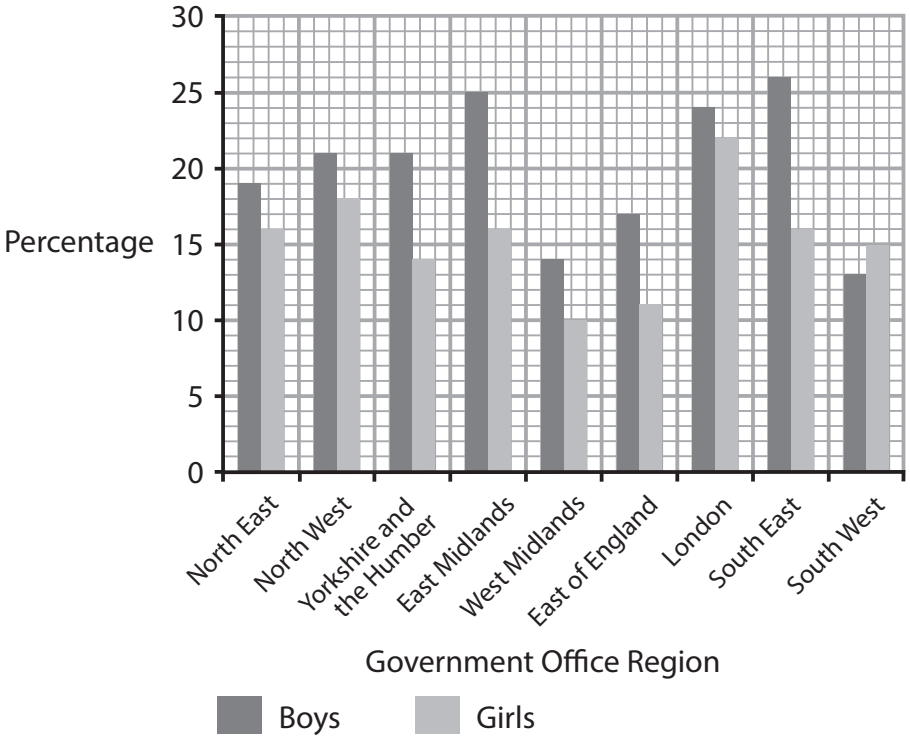

Figure 1

(Source: © BHF)

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(Total for Question 10 = 8 marks)

***11** Discuss the view that a lack of global sporting success for Britain during the period of 1970 – 2008 was in part due to the legacy of the public school development.

Use your knowledge and understanding from across the course of study to answer this question.

(15)

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(Total for Question 11 = 15 marks)

12 Using sporting examples, evaluate whether deviance in sport has increased in the 21st century.

(15)

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(Total for Question 12 = 15 marks)

TOTAL FOR SECTION B = 50 MARKS
TOTAL FOR PAPER = 100 MARKS

Component 2 Mark Scheme

Question number	Acceptable answer	Mark
1	Any **four** of: • can lead to a reduction in anxiety • helps to clarify goals • aids psychological preparation • stimulates nerve reactions in muscles • muscle recruitment results in kinesthetic feedback • focus entirely on the cognitive level of skill learning. **Other appropriate examples are acceptable.**	**(4)**

Question number	Indicative content
2	**AO2 = 4 marks, AO3 = 4 marks** Reward acceptable answers. Responses may include, but are not limited to the following. • The presence of others can either facilitate or inhibit an athlete's performance (AO2). • The presence and effect of others can be grouped as passive and/or interactive others and, dependent on their status or the situation, the performer can be aroused to perform better or over-aroused and suffer from apprehension and anxiety (AO3). The apprehension and consequent arousal (positive) or consequent anxiety (negative) can be affected by the following: • The other is an evaluator and is of high status, and/or the opposite sex. This can motivate or inhibit (AO2). • The performer has low self-esteem or perceived low ability, this will usually lead to increased apprehension and anxiety (AO2). • If there is a crowd present and they are vociferously critical, this can lead to increased arousal but is more likely to lead to increased apprehension and anxiety (AO3). • If the event is considered to be important this can lead to increased arousal but is more likely to lead to increased apprehension and anxiety (AO3).

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–2	• There are few links between theory and practice. Isolated elements of knowledge and understanding (AO2). • There is little application of knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Limited balancing of ideas against each other (AO3). • Limited evaluative statement (AO3).
Level 2	3–5	• Makes connections between theory and practice (AO2). • Applies a knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Examines a wide range of ideas, balancing ideas against each other (AO3). • An evaluative statement which is relevant (AO3).
Level 3	6–8	• Makes many insightful and significant connections between theory and practice (AO2). • Applies an excellent knowledge and understanding of factors that underpin performance and involvement in physical activity and sport (AO2). • Critically examines a wide range of issues balancing ideas against each other (AO3). • Clear evaluative statement which is thorough and focussed (AO3).

Question number	Acceptable answer	Additional guidance	Mark
3	**A linked explanation which makes reference to any of the following points (up to a maximum of six marks).** Social learning theory is based on the view that our behaviour is related to our experiences (1). These experiences can be from personal experience (1), e.g. if we acted aggressively in a sporting confrontation then we were more likely to get our own way (1). They can be from vicarious modelling (1), e.g. seeing how a professional performer used intimidation of an official to influence the decision (1). They can be a result of verbal persuasion from a coach or significant other (1), e.g. being told that the referee is more likely to give you the decision if you challenge their earlier decisions aggressively (1).	A maximum of 2 marks for non-linked statements.	**(6)**

Question number	Acceptable answer	Mark
4(a)	*State Anxiety* is when anxiety is experienced in a particular situation (1).	**(1)**

Question number	Acceptable answer	Mark
4(b)	Taking a penalty in football (1). **Other appropriate examples are acceptable.**	**(1)**

<table>
<tr><th>Question number</th><th>Indicative content</th></tr>
<tr><td>5</td><td>
AO1 = 5 marks, AO2 = 5 marks, AO3 = 5 marks

Students who only show achievement against AO1 will not be able to gain marks beyond level 1.

Reward acceptable answers. Responses may include, but are not limited to the following.

<table>
<tr><th>Characteristics of the NACH</th><th>Characteristics of the NAF</th></tr>
<tr><td>They want to take the difficult option (AO1)</td><td>They want to avoid the situation (AO1)</td></tr>
<tr><td>They want to be challenged (AO1)</td><td>They want to take the easy option (AO1)</td></tr>
<tr><td>They are likely to persevere (AO1)</td><td>They are afraid of failure (AO1)</td></tr>
<tr><td>They will take risks or seek challenges (AO1)</td><td>They more likely to give up (AO1)</td></tr>
<tr><td>They will take personal responsibility (AO1)</td><td>They seek out easy situations (AO1)</td></tr>
<tr><td>They will welcome feedback (AO2)</td><td>They avoid personal responsibility (AO2)</td></tr>
<tr><td>They want to gain pride (AO2)</td><td>They do not want the knowledge of results or feedback (AO2)</td></tr>
<tr><td>They perform better when being evaluated. (AO2)</td><td>They perform worse when being evaluated. (AO2)</td></tr>
<tr><td>They tend not to be troubled by fear of failure (AO2)</td><td>They have a drive to avoid shame and humiliation (AO2)</td></tr>
</table>

• Extroverts tend to be NACH (need to be seen, demanding praise and attention) (AO3).

• Introverts tend to be NAF (take the easy option, hope not to fail and not to be noticed) (AO3).

• Someone with high NACH will generally have low NAF and someone with high NAF will generally have low NACH (AO3).

Each characteristic should be supported by a sporting example (AO2).

Examples of NACH: tennis players seeking to play higher ranked opponents in tournaments; boxers seeking elimination bouts; football teams playing higher level opposition in pre season matches (all AO2).
Examples of NAF: tennis players seeking to play lower ranked opponents in tournaments; football teams playing lower ranked teams in pre season matches to avoid defeat; golfers playing the same course to claim a higher handicap (all AO2).
</td></tr>
</table>

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Limited understanding of the factors that underpin performance and involvement in physical activity and sport. This is communicated in a basic way with simple or generalised statements (AO1). • Limited links between theory and practice. Limited technical language supports isolated elements of knowledge and understanding (AO2). • Analysis is not used to make a judgement (AO3).
Level 2	4–6	• Attempts some understanding of the factors that underpin performance and involvement in physical activity and sport and expresses ideas with some clarity (AO1). • Makes few links between theory and practice. Basic technical language supports elements of knowledge and understanding (AO2). • Analysis may not be used to make a clear judgement (AO3).
Level 3	7–9	• Evidence of some understanding of the factors that underpin performance and involvement in physical activity and sport. Communicated in a logical writing structure (AO1). • Makes some links between theory and practice. Some appropriate technical language supports a good knowledge and understanding (AO2). • Uses analysis to make a judgement but without full substantiation (AO3).
Level 4	10-12	• Very good understanding of the factors that underpin performance and involvement in physical activity and sport. Communicated in a logical, clear writing structure (AO1). • Makes strong links between theory and practice. Appropriate technical language supports a very good knowledge and understanding (AO2). • Uses analysis to make a clear judgement and supports this with examples (AO3).
Level 5	13-15	• Excellent knowledge and understanding of factors that underpin performance and involvement in physical activity and sport. Communicated in a coherent writing structure with clarity and precision (AO1). • Makes many insightful and significant links between theory and practice. Appropriate technical language supports a significant level of knowledge and understanding (AO2). • Uses analysis to make a fully informed judgement and supports this with examples (AO3).

Question number	Indicative content
*6	**AO1 = 5 marks, AO3 = 10 marks** **Students who only show achievement against AO1 will not be able to gain marks beyond Level 1.** **Students who only draw their answer from one area of study will not be able to gain marks beyond Level 4.** Reward acceptable answers. Responses may include, but are not limited to the following. **Examples of relevant technology (AO1)** • Wind tunnels • Power meters • Heart rate monitors • Force plates • Dartfish • GPS • Smart phone apps **Other appropriate examples are acceptable.** • Feedback can be provided instantly through use of smart phones, video cameras, delayed playback (AO1) • Technologies aid a more detailed analysis of effective biomechanical positions, aerodynamic positions and optimal intensity (AO3) • Technologies used to analyse current and progressive performance of performer against a perfect model (AO3) • Technologies to allow technique modification through their application (AO1) • Technologies enable greater access to classification and dissection of skill (AO3) • Use of technology to enhance learning process and aid psychological performance: increased confidence and motivation resulting from performance analysis (specification reference 4.1.6) (AO3) • Use of technology in the media to aid supporter understanding (AO3) • Use of technology to identify and control increasing arousal levels to ensure optimal levels for performance (AO3) • Use of technology to increase understanding of officials' decisions in the correct/incorrect performance of a skill and therefore reduce deviance (specification reference 5.4.3) (AO3)

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Limited understanding of the factors that underpin performance and involvement in physical activity and sport. This is communicated in a basic way with simple or generalised statements (AO1). • Limited analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Analysis is not used to make a judgement (AO3).
Level 2	4–6	• Attempts some understanding of the factors that underpin performance and involvement in physical activity and sport and expresses ideas with some clarity (AO1). • Attempts some analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Analysis may not be used to make a clear judgement (AO3).
Level 3	7–9	• Evidence of some understanding of the factors that underpin performance and involvement in physical activity and sport. Communicated in a logical writing structure (AO1). • Good analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a judgement but without full substantiation (AO3).
Level 4	10–12	• Very good understanding of the factors that underpin performance and involvement in physical activity and sport. Communicated in a logical, clear writing structure (AO1). • Very good analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a clear judgement and supports this with examples (AO3).
Level 5	13–15	• Excellent knowledge and understanding of factors that underpin performance and involvement in physical activity and sport. Communicated in a coherent writing structure with clarity and precision (AO1). • Sophisticated analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a fully informed judgement and supports this with examples (AO3).

Question number	Acceptable answer	Mark
7	*Gentleman Amateur:* wealthy, high social position; did not need financial compensation to participate in sport (1). *Playing Professional:* workers of low social position; needed financial compensation to afford to participate in sport (1).	**(2)**

Question number	Acceptable answer	Additional guidance	Mark
8	**A linked explanation which makes reference to any of the following points (up to a maximum of six marks).** 1972 (Munich) terrorist attack on Israeli Olympic athletes led to increased security costs for subsequent Olympics (1). This contributed to Montreal (1976) going bankrupt (1). USA federal government and Los Angeles state governments refused to fund the LA games (1984) (1). Peter Ueberroth (IOC) had to find ways to fund them (1). Ueberroth encouraged sponsorship of the games and most notably sold the festoon (1). He sold the TV rights which encouraged selling advertising space during commercial breaks (1). All of this enabled the 1984 games to return a profit, which encouraged subsequent pay per view and sponsors (1). TOP sponsorship programme was created (1). A successful blueprint for the future commercialisation of sport was established (1).	A maximum of 2 marks for non-linked statements	**(6)**

Question number	Acceptable answer	Mark
9	Any **four** of: • 'Americanisation' is copying of American values in sport (1) • values such as the Lombardian ethic/will to win at all costs (1) • where it is seen as acceptable to do 'whatever it takes' to win (1) • the 'hyping of events to make them a bigger spectacle (1) • pay per view and its impact on sport (1) • franchising of sports clubs (1) • high salaries and increased commercialisation of sport and the sports stars (1). **Other appropriate examples are acceptable.**	**(4)**

Question number	Indicative content
10	**AO3 = 8 marks** Reward acceptable answers. Responses may include, but are not limited to the following. **Points related to the data may include:** • at best, 26% of children participate sufficiently • 74% do not participate sufficiently • a more realistic generic average gives a current trend of less than 20% meeting recommended activity rates. **Other appropriate examples are acceptable.** **Points related to the interpreted content may include:** • the graph suggests that physical participation rates among children across the country are low • low activity rates will lead to a smaller base in the participation pyramid • this will lead to fewer numbers at the elite level • and reduce the potential for elite sporting success • less sporting success will produce fewer role models to inspire children • and will result in a spiralling decline of participation rates • low activity is indicative of a sedentary lifestyle • a population which is physically and mentally unfit will lead to greater pressure and more money being spent on the health service • an unfit adult population will have a negative impact on children • children who do not participate in physical activity may turn to other social habits and ultimately to crime.

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–2	• Limited balancing of ideas against each other (AO3). • Limited analysis supports unclear deductions (AO3). • Limited evaluative statement (AO3).
Level 2	3–5	• Examines a wide range of ideas, balancing ideas against each other (AO3). • Some analysis supports relevant deductions (AO3). • An evaluative statement which is relevant (AO3).
Level 3	6–8	• Critically examines a wide range of issues balancing ideas against each other (AO3). • Fully informed analysis supports clear, justified deductions (AO3). • Clear evaluative statement which is thorough and focussed (AO3).

Question number	Indicative content
*11	**AO1 = 5 marks, AO3 = 10 marks** **Students who only show achievement against AO1 will not be able to gain marks beyond Level 1.** **Students who only draw their answer from one area of study will not be able to gain marks beyond Level 4.** Reward acceptable answers. Responses may include, but are not limited to the following. • The role of the public schools in the development, rationalisation and codification of sport (AO1) • Masters at the schools used games for developing leadership qualities 'not for sport's sake' (AO1) • Taking part valued above winning at public schools: performers discouraged from training as it was seen to place value of winning above playing (AO3) • The gentleman amateur sport being process rather than outcome orientated (AO1) • The notion of accepting defeat graciously reinforcing idea that Britain prefers a good loser to an arrogant winner - contrast the public reception of Eddie the Eagle (a loser) to Daley Thompson (a winner) (AO3) • Britain behind other countries in developing centres of excellence and initiating Talent ID programmes (AO3) • Lack of preparation and training and availability of relevant technology to support elite performers (AO3) • Social facilitation and the perpetuation of a common understanding of British sporting expectation (specification reference 4.1.7) (AO3) • Failure of athletes to take responsibility for failure, attribution to external causes (specification reference 4.4.1) (AO3) • Goal setting based around societal norms and lack of confidence that Britain can compete against top sporting nations (AO3) • Challenge to view of lack of global sporting success for Britain in this period: England Rugby World Cup win in 2003, English football clubs domination of European competition in 1970s and 80s, 2000 and 2004 Olympic Games (AO3)

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• Limited understanding of the factors that underpin performance and involvement in physical activity and sport. This is communicated in a basic way with simple or generalised statements (AO1). • Limited analysis of the factors that underpin performance and involvement in physical activity and sport (AO3) • Little analysis of performance due to limited application of relevant skills and techniques in physical activity and sport (AO3). • Analysis is not used to make a judgement (AO3).
Level 2	4–6	• Attempts some understanding of the factors that underpin performance and involvement in physical activity and sport and organises or expresses ideas with some clarity (AO1). • Attempts some analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Attempts to apply relevant skills and techniques in physical activity and sport to analyse performance (AO3). • Analysis may not be used to make a clear judgement (AO3).
Level 3	7–9	• Evidence of some basic understanding of the factors that underpin performance and involvement in physical activity and sport and offers a logical clear writing structure (AO1). • Evidence of some analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Some application of relevant skills and techniques in physical activity and sport to analyse performance (AO3). • A judgement may be given but with limited substantiation (AO3).
Level 4	10–12	• Key issues are explored, but not all viewpoints may be addressed. The answer is generally well organised, communicated with clarity but may lack precision (AO1). • Analyses the factors that underpin performance and involvement in physical activity and sport (AO3). • Application of relevant skills and techniques in physical activity and sport to analyse performance (AO3). • Uses analysis to make a clear judgement and supports this with examples (AO3).

Level	Mark	Descriptor
Level 5	13–15	• Demonstrates an excellent knowledge and understanding of factors that underpin performance and involvement in physical activity and sport. The answer is well organised, coherent throughout and communicated with clarity and precision (AO1). • Comprehensively analyses the factors that underpin performance and involvement in physical activity and sport (AO3). • Full application of relevant skills and techniques in physical activity and sport to analyse performance (AO3). • Sophisticated analysis is used to make a fully informed judgement (AO3).

Question number	Indicative content
12	**AO2 = 5 marks, AO3 = 10 marks** Reward acceptable answers. Responses may include, but are not limited to the following. • Understanding of different types of deviance (AO2). • Sporting examples of deviance in 21st century e.g. Tetrahydrogestrinone (THG) doping scandal in athletics (Dwain Chambers, Marion Jones), abuse of erythropoietin (EPO) and other banned substances by Lance Armstrong and cycling teammates (AO2). • Sporting examples of deviance prior to the 21st century e.g. Festina team doping scandal in cycling, rise of simulation in football (AO2). • Deviance defined as behaviour that differs from accepted norms, often applied by social values. Defined as behaviour that differs in a specific sporting context (AO3). **Evidence that deviance has increased** • The huge expanse of media coverage (AO2). • Examples: betting syndicates; sports stars taking 'bungs'; of internal betting; diving and simulation; increased coverage and complexity of drug use (AO3). • Increased examples of 'Americanisation' in sport and the ethics that accompany it (AO2). • Increased movement away from the early British sporting ideals of 'It's the taking part that counts' (AO3). • The commercial involvement and the financial need to win. (AO3). **Evidence that deviance existed pre-21st century** • Evidence of deviance, in drug taking, dating back to the Roman gladiators (AO3). • Increased media coverage can give the impression that there are more examples of deviance but it may just be that we are more aware of it (AO3). • Highly likely that deviance has increased during the 21st century through drugs, gambling, aggression, gamesmanship, bribery, diving, simulation etc. (AO3). • Difficult to prove how widespread deviance was pre-21st century, e.g. drug taking existed before, we do not know to what extent (AO3). **Other appropriate sporting examples of deviance are acceptable.**

Level	Mark	Descriptor
	0	No rewardable material.
Level 1	1–3	• There are limited links between theory and practice. Limited technical language supports isolated elements of knowledge and understanding (AO2). • Limited analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Analysis is not used to make a judgement (AO3).
Level 2	4–6	• Makes few links between theory and practice. Basic technical language supports some elements of knowledge and understanding (AO2). • Attempts some analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Analysis may not be used to make a clear judgement (AO3).
Level 3	7–9	• Makes some links between theory and practice. Some appropriate technical language supports a good knowledge and understanding (AO2). • Good analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a judgement but without full substantiation (AO3).
Level 4	10–12	• Makes strong links between theory and practice. Appropriate technical language supports a very good knowledge and understanding (AO2). • Comprehensive analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a clear judgement and supports this with examples (AO3).
Level 5	13–15	• Makes many insightful and significant links between theory and practice. Appropriate technical language supports a significant level of knowledge and understanding (AO2). • Sophisticated analysis of the factors that underpin performance and involvement in physical activity and sport (AO3). • Uses analysis to make a fully informed judgement and supports this with examples (AO3).

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