



Pearson
Edexcel

Mark Scheme (Results)

November 2021

Pearson Edexcel Advanced Level
In Physical Education (9PE0)
Paper 1: Scientific Principles of Physical Education

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October 2021

Question Paper Log Number P66600A

Publications Code 9PE0_01_2111_MS

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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.

Section A

Question Number	Answer	Additional Guidance	Mark
1a	A muscle lengthening whilst contracting (/under tension)		(1)

Question Number	Answer	Additional Guidance	Mark
1b	A muscle shortening whilst contracting (/under tension)		(1)

Question Number	Answer	Additional Guidance	Mark
2	a) Flexion b) Extension		(2)

Question Number	Answer	Additional Guidance	Mark													
3	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 30%; text-align: center;">Muscle contracting</th> <th style="width: 30%; text-align: center;">Type of contracting</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Downward phase</td> <td>Quadriceps</td> <td>(Isotonic) eccentric</td> </tr> <tr> <td rowspan="2" style="text-align: center;">Bottom of the squat</td> <td>Quadriceps</td> <td rowspan="2">Isometric</td> </tr> <tr> <td>Hamstrings</td> </tr> <tr> <td style="text-align: center;">Upward phase</td> <td>Quadriceps</td> <td>(Isotonic) concentric</td> </tr> </tbody> </table>		Muscle contracting	Type of contracting	Downward phase	Quadriceps	(Isotonic) eccentric	Bottom of the squat	Quadriceps	Isometric	Hamstrings	Upward phase	Quadriceps	(Isotonic) concentric		(7)
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	Hamstrings															
Upward phase	Quadriceps	(Isotonic) concentric														

Question Number	Answer	Additional Guidance	Mark
4	<ul style="list-style-type: none"> a) Both b) Advantage / Mechanical advantage c) Disadvantage / Mechanical disadvantage 		(3)

Question Number	Answer	Additional Guidance	Mark
5	<ul style="list-style-type: none"> • Atria- contract to push blood into ventricles • Ventricles- contract to push blood into blood vessels • Valves –prevent back flow of blood • SA node – spreads impulse across atria • Arteries-distribute blood round the body • Capillaries – allow gas exchange • Veins – return blood to the heart • Aorta – pumps blood away from heart • Bicuspid/Tricuspid valves – regulates flow/prevents back flow • Pulmonary Vein-carries blood from lung to heart • Pulmonary Artery-carries blood from heart to lungs • Red blood cells - carry oxygen 	Must name both structural component and its function	(3)

Question Number	Answer	Additional Guidance	Mark
6a	<p>Newton's 2nd Law of Motion- force = mass x acceleration ($F = MA$)</p> <p>OR</p> <p>The law of acceleration, states that an increase in the velocity of a moving object is directly proportional to the force applied and inversely proportional to the object's mass. (The object will accelerate in the direction of the external force.)</p>		(1)

Question Number	Answer	Additional Guidance	Mark
6b	<p>Player A: $F = 91 \times 2.5 = 227.5\text{N}$ (1)</p> <p>Player B: $F = 63 \times 4 = 252\text{N}$ (1)</p> <p>Resultant force of $(252\text{N}-227.5\text{N})$ 24.5N (1)</p> <p>Advantage in favour of player B (1)</p>	1 mark for the resultant force and one for the advantage and one mark for each players force	(4)

Question Number	Answer	Additional Guidance	Mark
7	<ul style="list-style-type: none"> • The electrical impulses begin at the brain transmitted to a muscle via the spinal cord. • Motor neurones (nerve cells) can only stimulate the muscle fibres within it (a motor unit). • The point at which the nerve meets the muscle fibre is the motor end plate • Nerve to muscle is the neuromuscular junction. • Calcium ions enter the synaptic knob and acetylcholine is released. • Causes action potential along muscle fibre • Triggering sliding filament theory 		(5)

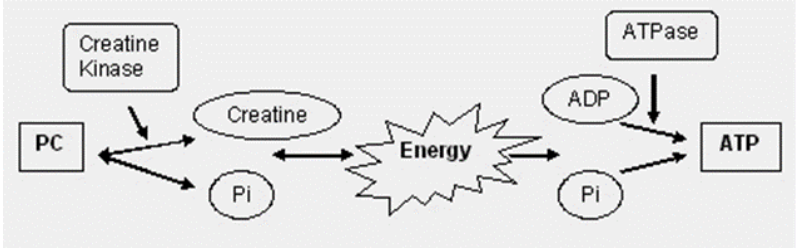
Question Number	Answer	Additional Guidance	Mark
8	<ul style="list-style-type: none"> • Takes place in the mitochondria • Krebs Cycle • Electron transport Chain • Energy produced using oxygen • Uses various fuel sources • Slowest of the energy systems • Series of enzymatic reactions • Provides energy for exercise up to an intensity of V02 max • Waste products of CO2 and H2O produced 	More detailed answers that are accurate will be accepted	(6)

Question Number	Answer	Additional Guidance	Mark
9	<ul style="list-style-type: none"> • Time outs called to recover PC stores • Rolling substitutions to allow recovery of energy stores • Half time use of cooling aids to enhance active recovery • Use of active recovery at half time • Massages at half time to speed up Lactate removal • Glycogen in form of drinks/gels sent on to the pitch to maximise energy stores • Keeping possession or set plays to allow extra recovery time • Use of gamesmanship to buy time 		(6)

Question Number	Answer	Mark
10	<p>AO1 = 4 marks, AO3 = 4 marks</p> <p>Students who only show achievement against AO1 will not be able to gain marks beyond level 1.</p> <p>Reward acceptable answer. Responses may include, but are not limit to the following:</p> <p>A discussion that gives all sides of the issue and any implications, including details about chronic adaptations, that includes the following indicative content:</p> <ul style="list-style-type: none"> • Increase in maximal cardiac output (AO1) • Enlarged heart / hypertrophy (AO1) • An increase in blood volume (AO1) • Increased stroke volume (increased LVEDV) (AO1) <p>Application to activity for example:</p> <ul style="list-style-type: none"> • Increase in capillary density allows better gas exchange (AO3) • Increased red blood cells/increased haemoglobin allow better oxygen carrying capacity (AO3) • Increase gas exchange in the blood allows faster delivery of oxygen (AO3) • Decrease resting heart rate (bradycardia) (AO3) <p>The indicative content is a guide to the responses candidate may give. Other valid responses which answer the question correctly can be credited as appropriate.</p> <p>The candidate's response must be read in conjunction with the level descriptor below in order to give the appropriate mark. For example, a response that is firmly in the level would receive the middle mark in the level, a response that is just into the level would receive the bottom mark in the level, a response which nearly reaches the next level would receive the top mark in the level preceding it.</p>	(8)

Level	Mark	Descriptor
	0	<ul style="list-style-type: none"> • No rewardable material
Level 1	1-2	<ul style="list-style-type: none"> • 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).

Level 2	3-5	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	Answer	Mark
11	<p>AO1 = 4 marks, AO3 = 4 marks</p> <p>Students who only show achievement against AO1 will not be able to gain marks beyond level 1.</p> <p>Reward acceptable answer. Responses may include, but are not limit to the following:</p> <p>A discussion that gives all sides of the issue and any implications, including details about ATP-PC system, that includes the following indicative content:</p> <p>AO1 knowledge:</p> <ul style="list-style-type: none"> • ATP is broken down at the cross-bridges to release energy for muscle contraction. This leaves the by-products of ATP breakdown: adenosine diphosphate (ADP) and one single phosphate (Pi). • Phosphocreatine (PC) is then broken down by the enzyme creatine kinase into Creatine and Pi. • The energy released in the breakdown of PC allows ADP and Pi to rejoin forming more ATP. This newly formed ATP can now be broken down to release energy to fuel activity. <p>ATPase in this case assists the synthesis of new ATP rather than the breakdown.</p>  <p>AO3:</p> <ul style="list-style-type: none"> • During the first few seconds of exercise regardless of intensity, the ATP-PC system is relied on almost exclusively, with energy coming from the breakdown of the ATP stores within the muscles. • These ATP stores last only a few seconds after which the breakdown of PC provides energy for another 5-8 seconds of activity. • If activity continues beyond this immediate period, the body must rely on other energy systems to produce ATP as the limited stores 	

	<p>of both ATP and PC will be exhausted and will need time to replenish.</p> <ul style="list-style-type: none"> • These stores are replenished after about two minutes rest. • If activity continues at a high intensity these stores may only partially replenish as there will not be enough energy available for creatine and Pi to reform PC and the rate of ATP breakdown through other energy systems will impede the replenishment of ATP stores in the muscle. <p>The indicative content is a guide to the responses candidate may give. Other valid responses which answer the question correctly can be credited as appropriate.</p> <p>The candidate's response must be read in conjunction with the level descriptor below in order to give the appropriate mark. For example, a response that is firmly in the level would receive the middle mark in the level, a response that is just into the level would receive the bottom mark in the level, a response which nearly reaches the next level would receive the top mark in the level preceding it.</p>	(8)
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Level 2	3-5	<ul style="list-style-type: none"> • 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)
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Question Number	Answer	Mark						
*12	<p>AO2 = 5 marks, AO3 = 10 marks</p> <p>Students who only draw their answer from one area of study will not be able to gain marks beyond Level 3.</p> <p>Reward acceptable answer. Responses may include, but are not limit to the following:</p> <p>A discussion that gives all sides of the issue and any implications, including details about fibre type of characteristics, that includes the following indicative content:</p> <p>AO2: Fibre characteristics:</p> <table border="1" data-bbox="331 853 1243 1682"> <thead> <tr> <th data-bbox="331 853 625 1003">Slow twitch (Type 1)</th> <th data-bbox="625 853 911 1003">FOG (IIa)</th> <th data-bbox="911 853 1243 1003">FTG (IIx) formerly known as IIb</th> </tr> </thead> <tbody> <tr> <td data-bbox="331 1003 625 1682"> <ul style="list-style-type: none"> - Thin in diameter - Lots of capillaries - Lots of myoglobin - Big / dense mitochondria - Better suited to using oxygen - Resistant to fatigue - Slower rate of force production - Able to maintain force production for long time </td> <td data-bbox="625 1003 911 1682"> <p>For all the characteristics of the other fibres, Type IIa fibres fall between the extremes of Type 1 and Type IIx</p> </td> <td data-bbox="911 1003 1243 1682"> <ul style="list-style-type: none"> - Wide in diameter - Few capillaries - Few myoglobin - Small mitochondria - High levels of ATP & PC - Larger stores of muscle glycogen - Rapid rate of force production - Only able to produce force for short periods of time - High fatigability - Fast contraction time and high elasticity </td> </tr> </tbody> </table> <p>AO3 examples:</p> <ul style="list-style-type: none"> • The structural and functional characteristics of the different fibres should then be related to the demands of the students identified sport. • Type 1 fibres are most suited to endurance based sports such as marathon running, endurance cycling or other suitable 	Slow twitch (Type 1)	FOG (IIa)	FTG (IIx) formerly known as IIb	<ul style="list-style-type: none"> - Thin in diameter - Lots of capillaries - Lots of myoglobin - Big / dense mitochondria - Better suited to using oxygen - Resistant to fatigue - Slower rate of force production - Able to maintain force production for long time 	<p>For all the characteristics of the other fibres, Type IIa fibres fall between the extremes of Type 1 and Type IIx</p>	<ul style="list-style-type: none"> - Wide in diameter - Few capillaries - Few myoglobin - Small mitochondria - High levels of ATP & PC - Larger stores of muscle glycogen - Rapid rate of force production - Only able to produce force for short periods of time - High fatigability - Fast contraction time and high elasticity 	
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	<p>example(s) because of their ability to use oxygen and produce force for long periods of time.</p> <ul style="list-style-type: none"> • Type IIx fibres are most suited to short duration, high intensity activities such as 100m sprint, long jump or other suitable examples because of their ability to exert rapid force. • Type IIa fibres are most suited to intermittent sports such as team games, tennis or other suitable examples because of their ability to use oxygen without fatigue and produce force at high rates when required. <p>The indicative content is a guide to the responses candidate may give. Other valid responses which answer the question correctly can be credited as appropriate.</p> <p>The candidate's response must be read in conjunction with the level descriptor below in order to give the appropriate mark. For example, a response that is firmly in the level would receive the middle mark in the level, a response that is just into the level would receive the bottom mark in the level, a response which nearly reaches the next level would receive the top mark in the level preceding it.</p>	(15)
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Level	Mark	Descriptor
	0	<ul style="list-style-type: none"> • No rewardable material
Level 1	1-3	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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).

Section B

Question Number	Answer	Additional Guidance	Mark
13a	Hypertonic is when the glucose osmolality of the drink is greater than the blood		(1)

Question Number	Answer	Additional Guidance	Mark
13b	Hypotonic is when the glucose osmolality of the drink is lower than the blood		(1)

Question Number	Answer	Additional Guidance	Mark
13c	Isotonic is when the glucose osmolality of the drink is the same as blood		(1)

Question Number	Answer	Additional Guidance	Mark
14a	The use of momentum of a body or limb to force it beyond its normal range of motion		(1)

Question Number	Answer	Additional Guidance	Mark
14b	<ul style="list-style-type: none"> • Greater range of movement allows better technique/take off • It is a fast-dynamic movement which is used in high jump • Can be dangerous so athlete risks injury if incorrectly done • Enhances motor performance of muscles which aids performance • Improved tendon elasticity allows for greater force production 	Response must be linked	(4)

Question Number	Answer	Additional Guidance	Mark
15	<ul style="list-style-type: none"> • Individual needs: a successful training programme will meet individual needs which are personal fitness needs based on age, gender, fitness level and the sport for which we are training. • Specificity: the principle of training that states that sports training should be relevant and appropriate to the sport for which the individual is training in order to produce a training effect. • Progressive overload: the need to increase training demands on the body in order to encourage it to adapt further. • Frequency Intensity Time and Type (FITT): this describes how often you train, how hard you train, how long you train for and which method of training you select. • Overtraining: where a person trains too much, too often or with too little time for recovery between training sessions, risking injury or illness or an imbalance between training and recovery. 	Using all four FITT only scores 1 mark	

	<ul style="list-style-type: none"> • Reversibility: the reversibility principle dictates that athletes lose the beneficial effects of training when they stop working out. Conversely, it also means that detraining effects can be reversed when athletes resume training. 		(4)
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Question Number	Answer	Additional Guidance	Mark
16	<ul style="list-style-type: none"> • Takes up less space • Can be cheaper/more durable/less maintenance • Can be done in own home/outside space or gym not needed • Free weights tend to use multiple muscle groups/joints which can improve coordination as well as muscle function. • Free weights are adaptable to specific movements in your sport • Can use smaller increments • Incorporates fixators/stabilising muscle groups • Challenges balance more • Increased range of movement planes/exercises 		(5)

Question Number	Answer	Additional Guidance	Mark
17	<ul style="list-style-type: none"> • Velocity of release • Height of release • Angle of release 		(3)

Question Number	Answer	Additional Guidance	Mark
18	<ul style="list-style-type: none"> • Led by audio player • Run to the other end before the beep • Immediately return before next signal • 5/10 second recovery • During recovery jog around cone and back to start line • If miss beep twice withdrawn from test • Diagram of course accepted for a point • Cones 20m apart/additional cones 2.5/5m apart (intermittent endurance/recovery) • Score is total distance covered 	We accept the correct protocol for other versions of the test	(5)

Question Number	Answer	Additional Guidance	Mark
19	<p>Summary of benefits from taking three different named nutritional supplements:</p> <ul style="list-style-type: none"> • Supplements can enhance energy stores e.g. creatine or isotonic/hypertonic drinks (1) • Supplements can enhance hydration e.g. isotonic/hypertonic/hypotonic drinks/sodium loading (1) • Supplements can enhance recovery e.g. protein, amino acids, whey protein, milk, cherry juice (1) • Supplements can enhance metabolic processes e.g. caffeine, nitric oxide (1) • Supplements can enhance electrolyte levels e.g. isotonic drinks • Supplements can delay fatigue e.g. sodium bicarb/caffeine (1) 	<p>No mark for a named supplement without its benefit</p> <p>Credit can be awarded for other contemporary supplements and their benefits</p>	(6)

Question Number	Answer	Additional Guidance	Mark
20	1. 132 bpm - (202 - 70) 2. 136 bpm - (132 x 0.5) + 70 3. 182.2 bpm - (132 x 0.85) + 70	Accept 182.2 or 182 for part three	(3)

Question Number	Answer	Additional Guidance	Mark
21	<ul style="list-style-type: none"> • Can be adapted to suit needs of games activities • Work/rest periods can be adjusted to mimic the game e.g. energy system • Individual stations can include specific skills linked to the sport • Can target multiple components of fitness needed in a game • Can use time working, reps or type of rest to determine intensity linked to a specific sport • Individual stations can include specific movements linked to the sport • Practice sport skills/movements when fatigued 	Points should be linked to games to score a mark Any suitable examples can be credited	(5)

Question Number	Answer	Mark
22	<p>AO1 = 4 marks, AO3 = 4 marks</p> <p>Students who only show achievement against AO1 will not be able to gain marks beyond Level 1.</p> <p>Reward acceptable answer. Responses may include, but are not limit to the following.</p> <p>A discussion that gives all side of the issue and any implications, including details about how and why fitness tests are suitable, that includes the following indicative content:</p> <p>AO1:</p> <ul style="list-style-type: none"> • Gas analysis • Multi stage fitness test • YoYo test • Step tests • Cooper 12 min run <p>AO3:</p> <p>An examination to include issues such as: validity, reliability, accuracy, specificity, cost, practicability, adaptability, access, expertise, maximal v submaximal</p> <p>The indicative content is a guide to the responses candidate may give. Other valid responses which answer the question correctly can be credited as appropriate.</p> <p>The candidate's response must be read in conjunction with the level descriptor below in order to give the appropriate mark. For example, a response that is firmly in the level would receive the middle mark in the level, a response that is just into the level would receive the bottom mark in the level, a response which nearly reaches the next level would receive the top mark in the level preceding it.</p>	(8)

Level	Mark	Descriptor
	0	<ul style="list-style-type: none"> • No rewardable material
Level 1	1-2	<ul style="list-style-type: none"> • 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).
Level 2	3-5	<ul style="list-style-type: none"> • A good level of accurate and relevant knowledge (AO1)

		<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	Answer	Mark
23	<p>AO1 = 4 marks, AO3 = 4 marks</p> <p>Students who only show achievement against AO1 will not be able to gain marks beyond level 1.</p> <p>Reward acceptable answer. Responses may include, but are not limit to the following:</p> <p>A discussion that gives all sides of the issue and any implications, including details about how and why magnus effect alters the flight path, that includes the following indicative content:</p> <ul style="list-style-type: none"> • Magnus effect is the force exerted on a ball spinning through the air which causes it to swerve. (AO1) • This force is responsible for the swerve on a ball with hit or thrown with spin. (AO1) • The deflection is explained by the difference in pressure on opposite sides of the spinning ball. (AO1) • Top spin will have a sharper descent/faster dip as it has a downwards force acting on it. (AO1) • Back spin will have an upwards force prolonging the flight of the ball. (AO1) • Side spin causes it to swerve to either side. (AO1) • Suitable sporting examples to explain e.g. golf ball, tennis ball, football, table tennis, or any suitable examples. (AO3) • There is a high and low pressure zone that effects the rate of air flow. (AO3) • The direction of swerve is the same as the direction of spin. (AO1) • Air flows in opposite direction to the motion of the ball. (AO1) • The air travels further and therefore faster on the low pressure side of the ball. (AO1) <p>The indicative content is a guide to the responses candidate may give. Other valid responses which answer the question correctly can be credited as appropriate.</p> <p>The candidate's response must be read in conjunction with the level descriptor below in order to give the appropriate mark. For example, a response that is firmly in the level would receive the</p>	

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Question Number	Answer	Mark
24	<p>AO1 = 5 marks, AO3 = 10 marks</p> <p>Students who only show achievement against AO1 will not be able to gain marks beyond Level 1.</p> <p>Reward acceptable answer. Responses may include, but are not limit to the following:</p> <p>A discussion that gives all sides of the issue and any implications, including details about food, fuel and fluid intake for the marathon, that includes the following indicative content:</p> <p>AO1:</p> <p>Before</p> <ul style="list-style-type: none"> • Carb loading • Adequate hydration <p>During</p> <ul style="list-style-type: none"> • Hydration strategies • Sport drinks • Gels • Electrolytes <p>After</p> <ul style="list-style-type: none"> • 2-hour window of opportunity • Protein intake • Rehydration • Glycogen restoration <p>AO3:</p> <p>Application of knowledge to suitable stages of the race and effects on the body, and discussion of which are the most effective.</p> <p>The indicative content is a guide to the responses candidate may give. Other valid responses which answer the question correctly can be credited as appropriate.</p> <p>The candidate's response must be read in conjunction with the level descriptor below in order to give the appropriate mark. For example, a response that is firmly in the level would receive the middle mark in the level, a response that is just into the level would receive the bottom mark in the level, a response which nearly reaches the next level would receive the top mark in the level preceding it.</p>	(15)

Level	Mark	Descriptor
	0	<ul style="list-style-type: none"> No rewardable material
Level 1	1-3	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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 5	13-15	<ul style="list-style-type: none"> 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).

		<ul style="list-style-type: none">• 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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