



Physical Education

Advanced Subsidiary GCE

Unit G451: An Introduction to Physical Education

Mark Scheme for January 2012

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Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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Annotations used in the detailed Mark Scheme (to include abbreviations and subject-specific conventions)

Annotation	Meaning
✓	Correct response
×	Incorrect response
BOD	Benefit of the doubt
REP	Repeat of key point in question or point already awarded
?	Unclear/Unable to read/Decipher
L1	Level 1
L2	Level 2
L3	Level 3
KU	Knowledge and Understanding
EG	Example/Reference
τν	Too Vague
DEV	Development
SEEN	Noted but no credit given
IRRL	Significant amount of material which does not answer the question

Section A Anatomy and Physiology

Q	Question		Answer		Marks		Guidance
1	(a)	(i)	1. (joint)	Hinge	1		
		(ii)			3	Accept	Do not accept
			1. (biceps brachii)	The biceps <u>brachii</u> is the agonist		1. prime mover	
			2. (biceps brachii)	The biceps <u>brachii</u> contracts		2. shortens	
			3. (triceps brachii)	The triceps <u>brachii</u> is the antagonist		3.	
			4. (triceps brachii)	The triceps <u>brachii</u> relaxes (to allow the movement)		4. lengthens / extends = BOD	
			5. (antagonistic pair)	(muscles <u>)</u> work as an antagonistic pair or antagonistic muscle action (only if <u>both</u> biceps brachii <u>and</u> triceps brachii have been named)		5.	Agonistic pair

		Answer	Marks	Guidance	
(b)	Inspiration (sub ma	ax 3 for inspiration)	5	Accept	Do not accept
	1. (muscles contract)	Diaphragm and external intercostal muscles contract		1. diaphragm flattens or lowers	
	2. (rib cage)	Rib cage or ribs move up <u>and</u> out		2.	
	3. (thoracic cavity volume)	Increasing the volume of the thoracic cavity or lungs		 increasing the size of thoracic cavity or lungs / thorax or chest or chest cavity or rib cage / expands or increased area in lungs = BOD 	increasing volume on own
	4. (thoracic cavity pressure)	Decreasing the pressure within the thoracic cavity or in the lungs		4. Thorax or chest or chest cavity or rib cage	Partial pressure or p p
	5. (pressure gradient)	(air) pressure in the lungs is lower than atmospheric pressure		5.	Partial pressure or p p
	6. (movement of air)	Air rushes in		6.	Oxygen/gas
	Expiration (sub ma	x 3 for expiration)		Accept	Do not accept
	7. (passive)	Expiration is passive		7.	
				8. diaphragm returns to dome shape	
	8. (muscles relax)	Diaphragm <u>and external</u> intercostal muscles relax			
	, ,	intercostal muscles relax Rib cage or ribs move down <u>and</u> in		9.	
	relax)	intercostal muscles relax Rib cage or ribs move down <u>and</u> in Decreasing the volume of the thoracic cavity or lungs		 9. 10. decreasing the size of thoracic cavity or lungs / thorax or chest or chest cavity or rib cage / decreased 	
	relax) 9. (rib cage) 10. (thoracic cavity volume) 11. (pressure)	intercostal muscles relax Rib cage or ribs move down <u>and</u> in Decreasing the volume of the thoracic cavity or lungs Increasing the pressure within the thoracic cavity or in the lungs		 9. 10. decreasing the size of thoracic cavity or lungs / thorax or chest or chest cavity or rib cage / decreased area in lungs = BOD 11. Thorax or chest or chest cavity or rib cage 	Partial pressure or p p
	relax) 9. (rib cage) 10. (thoracic cavity volume)	intercostal muscles relax Rib cage or ribs move down <u>and</u> in Decreasing the volume of the thoracic cavity or lungs Increasing the pressure within the thoracic cavity or in the		 9. 10. decreasing the size of thoracic cavity or lungs / thorax or chest or chest cavity or rib cage / decreased area in lungs = BOD 11. Thorax or chest or chest cavity or rib 	

Question	tion Answer		Marks	Guidance		
(c) (i)			2	Accept	Do not accept	
	1. (disease)	Osteoarthritis (OA) is a (degenerative) joint disease		1.	OA is a (degenerative) bone disease	
	2. (articular or hyaline cartilage)	Caused by a breakdown or deterioration or loss of or damage to <u>articular</u> or <u>hyaline</u> cartilage		2. worn down / cartilage at the end of (long) bones	Weakens cartilage Cartilage on own Cartilage in joints	
	3. (replacement)	In OA cartilage is destroyed quicker than it is replaced		3.		
	4. (causes)	Friction (between the ends of bones) / pain / swelling / discomfort / inflammation / reduced (range of) motion or flexibility		4. reduced RoM stiff=BOD		
	5. (bone spurs)	(Bone) spurs (can be) formed (where friction occurs)		5.		
	6. (weight bearing joints	OA commonly affects weight bearing joints / it commonly affects hips or knees		6. Ankles / Wrists / Spine / Shoulder	Joints on own	

Question		Answer	Marks		Guidance
(ii)	Development (sub	max 3 for development)	4	Accept	Do not accept
	1. (injury)	An injury to a joint or joint trauma or damage to growth plate can cause (onset of) OA		1. Examples of joint injuries such as dislocation	
	2. (lifestyle)	Lack of physical activity or increased body weight can cause (onset of) OA		2.	
	3. (forces through joints)	Activity with large forces travelling through the joints or high impact or contact sport can cause OA		3.	
	4. (repetitive actions)	Repetitive actions or skills or overuse can cause OA		4.	
	5. (enzymes)	Exercise causes enzymes to be released which break down cartilage.		5.	
	Prevention (sub max 3 for prevention)		Accept	Do not accept	
	6. (cartilage)	increase thickness of cartilage		6.	Physical activity prevents / reduces OA on own Strengthens cartilage
	7. (synovial fluid)	(thicker cartilage) secretes more synovial fluid that nourishes joint		7.	
	8. (joint stability)	increase joint stability / strengthen ligaments		8.	
	9. (muscle strength)	strengthens (surrounding) muscles or increases muscle tone		9.	
1 1	10. (weight management)	or lower body weight		10.	

Question			Guidance		
(d) (i)	2. (haemoglobin) (combines as carban HbCO ₂	d) in water / as acid or H_2CO_3 s) with haemoglobin / minohaemoglobin or d) in plasma	 As (bi)carbonate ions or HCO₃ Accept close spellings of Carboxy 	haemoglobin n red blood cells	
(ii)	gases)pressure low partial concentra2. (movement of CO2)CO2 diffus to the alve to the alve3. (partial pressures)There is a pressures)3. (partial pressures)There is a or ppCO2 Partial pre higher in the alveoli) / Partial pre lower in the blood)4. (diffusion gradient)There is a concentra	ses (from the blood)	Accept 1. Pressure for partial pressure 2. 3. Concentration of CO ₂ for ppCO ₂ Pts 2, 3 & 4 Capillaries for blood Lungs or air for alveoli 4. Accept pressure gradient	Do not accept	

Mark Scheme

Question	Answer	Guidance
(e)*	Levels Descriptors	Levels Discriminators
	 Level 3 (8–10 marks) A comprehensive answer: detailed knowledge & understanding effective analysis/critical evaluation and/or discussion/explanation/development clear and consistent practical application of knowledge accurate use of technical and specialist vocabulary high standard of written communication. 	 At Level 3 responses are likely to include: detailed knowledge and understanding of the effects of a warm up on performance effects of warm up on both skeletal muscle tissue and on the vascular system detailed knowledge and understanding of the effects of a cool down on recovery effects of cool down on both the skeletal muscle tissue and on the vascular system
	 Level 2 (5–7 marks) A competent answer: satisfactory knowledge & understanding analysis/critical evaluation and/or discussion/explanation/development attempted with some success some success in practical application of knowledge technical and specialist vocabulary used with some accuracy written communication generally fluent with few errors. 	 At Level 2 responses are likely to include: satisfactory knowledge and understanding of the effects of a warm up on performance effects of warm up on both or either skeletal muscle tissue and on the vascular system satisfactory knowledge and understanding of the effects of a cool down on recovery effects of cool down on both or either skeletal muscle tissue and on the vascular system
	 Level 1 (1–4 marks) A limited answer: basic knowledge & understanding little or no attempt to analyse/critically evaluate and/or discuss/explain/develop little or no attempt at practical application of knowledge technical and specialist vocabulary used with limited success written communication lacks fluency and there will be errors, some of which may be intrusive. 	 At Level 1 responses are likely to include: basic knowledge of the effects of a warm up on performance understanding of the effects of a warm up on performance likely to be limited basic knowledge of the effects of a cool down on recovery Understanding of the effects of a cool down on recovery likely to be limited
	[0 marks] No response or no response worthy of credit.	

Question	Answer	Marks	Guidance
	Indicative content: Candidate responses are likely to include: (relevant responses not listed should be acknowledged) Numbered points = knowledge / understanding Bullet points = likely to be development of knowledge	10	
	Warm up		
	General		
	1. Improves performance / delays OBLA or onset of blood lactate accumulation/performer can work at a higher intensity for longer before fatigue		
	2. Usually performed in 3 stages:		
	3. light jog / cardiovascular exercise / sub-maximal exercise		
	 to increase heart rate or stroke volume or cardiac output or breathing rate or tidal volume or minute ventilation 		
	4. mobility exercises or (dynamic) stretching		
	increased range of movement (around joint)		
increased secretion of synovial fluid or lubrication of joint / better shock absorption			
	 5. sport specific skills or techniques to activate neuromuscular system or muscle memory 		
	6. Jasts between 5 and 40 minutes		
	depending on intensity of exercise to follow		
	•		
	other detail:		
	 early sweating leads to better temperature regulation during activity 		
	 balance of hormones designed to regulate energy production 		
	allows carbohydrates or fatty acids or fats or fuels for exercise to be available earlier		
	is of significant benefit to asthmatics		
	 less risk of injury to ligaments due to increased elasticity or extensibility 		
	Skeletal muscle tissue		
	7. less risk of injury / injury prevention		
	8. increased (muscle or core body) temperature		
	 decreased muscle viscosity / reduction in viscous resistance 		
	• increased elasticity or extensibility of muscle fibres (flexibility of muscle fibres/stretched = TV)		
	increased flexibility / range of movement (around the joint)		
	9. increased efficiency or economy of muscular contractions or movement		

greater speed of conduction of nerve impulses to muscles	Marks	Guidance
 greater speed of muscular on relevation (particularly in fast twitch or FG or FOG or 2a or 2b) increased motor unit recruitment in muscle cell greater force of muscular contraction (particularly in fast twitch or FG or FOG or 2a or 2b) improves performance in power based activities Vascular system increased blood flow (due to) vascular shunt mechanism vasomotor (control) centre or VCC redistributes blood from organs to the working muscles vasoconstriction of arterioles or pre-capillary sphincters decrease blood flow to organs vasodilation of arterioles or pre-capillary sphincters decrease blood flow to working muscles 12 reduced blood viscosity 13 increased venous return (skeletal) muscle pump squeezes veins forcing blood back towards the heart (pocket) valves in veins ensure one way blood flow respiratory pump pulls blood up towards the heart (due to pressure changes in the thoracic cavity from breathing) venomotor tome or smooth muscle in veins contracts (to increase pressure within the blood vessel) Starlings' law of the heart / increased venous return increases stroke volume 14. (all leads to) increased oxygen delivery to working muscles 15. Increased blood acidity / decreased blood pH / increased lactic acid in blood / the Bohr shift Increased blood acidity / decreased blood pH / increased lactic acid in blood / the Bohr shift Increased ppO2 in muscles that gives a steeper diffusion gradient (between muscles and blood or during internal respiration) 16. Increased enzyme activity Increased fliciency of energy systems 	Marks	Guidance

Question	Answer	Marks	Guidance
	Cool down		
	General		
	 Aids or speeds up recovery process or EPOC / allows performer to train or compete sooner (after previous bout of activity) / repays oxygen deficit or debt 		
	18. Usually performed in 2 stages:		
	19. Light jog or similar cardiovascular exercise / active cool down or recovery		
	 5 – 10 minutes / 30 – 40% of VO₂ max / gradually decreasing intensity 		
	20. (Static) stretching		
	 short static stretches of 6-10 seconds each 		
	 realigns muscle fibres / relaxes muscle / returns muscle to resting length 		
	21. Cold water therapy or ice baths or contrast water therapy		
	 improves removal of lactic acid after therapy completed 		
	 improves recovery of nervous system / stimulates the central nervous system 		
	 reduces swelling / minimises effects of DOMS or delayed onset of muscle soreness / improves recovery 		
	from micro-tear damage of muscle fibres		
	can have a negative effect		
	Other detail		
	 compression wear (e.g. compression socks, tights, clothes) have been found to decrease muscle soreness or swelling or lactate levels or increase blood flow and venous return 		
	 massage or sleep or nutrition can speed up recovery process 		
	Both		
	22. Increased speed of removal of lactic acid or CO_2 or waste products (from blood or muscles)		
	 keeps capillaries dilated 		
	 flushes oxygenated blood through the muscles 		
	Skeletal muscle tissue		
	23. Decreased risk of Delayed Onset of Muscle Soreness or DOMS		
	 (which is) intracellular pressure or swelling causes pain 		
	 experienced 24-72 hours after exercise 		
	due to microscopic tears in the muscle fibres		

Question	Answer	Marks	Guidance
	 Vascular system 24. Keeps metabolic activity elevated / gradually decreases metabolic activity heart rate or respiratory rate or stroke volume gradually decrease or remain elevated increased enzyme activity involved in buffering or breakdown of lactic acid / increased enzyme activity for efficient breakdown of glycogen in aerobic system or glycolysis 25. Maintains blood flow or stroke volume or cardiac output or blood pressure or venous return (skeletal) muscle pump or respiratory pump remain active (which) prevents blood pooling vascular shunt mechanism remains active 		

Section B Acquiring Movement Skills

Q	uestion		Answer	Marks	Guidanc	e
2	(a)			4	One mark for description via One mark for explanation	practical example
		Open			Accept	Do not accept
		1. (Open eg)	Passing or receiving a ball in any game / receiving a serve in tennis / rugby tackle / saving a goal in football or hockey		 Must be a situation that has <u>significant</u> environmental influences /sailing = BOD netball / football <u>game</u> = BOD 	The name of a sport eg football
		2. (Open explanati on)	this skill is affected by the environment / environment unstable or changing or unpredictable / predominantly perceptual / needs perception or judgement or interpretation or decision making / a lot of information to process / patterns of movement different each time skill is performed / externally paced / the speed or timing of the skill is dictated or controlled by others / more complex / affected by the		 Depending on or relies on environment = BOD Conditions for environment Many factors to consider = BOD Affected by external factors=BOD 	Crowd/playing surface Stimuli affect the skill =TV
		Closed	weather or by the wind		1 mark for description via pra	ctical example
			abot put / hommon on invalin throw /		1 mark for explanation	
		3. (Closed eg) shot put / hammer or javelin throw / triple jump / golf shot / penalty in hockey or football / basketball free throw / gymnastics vault or routine or move		Accept 3. Must be a situation that has few significant environmental influences	Do not accept The name of a sport eg golf	
		4. (Closed explanation)	this skill is not affected (much) by the environment / environment is stable or unchanging or predictable / predominantly habitual / limited information to process / patterns of movement similar each time skill performed / internally or self paced / the skill is simple / the performer controls the speed of the skill / fewer stimuli / fewer responses		4.	No stimuli affect the skill = TV

G	Question		Answer		Marks		Guidance			
2	(b)	(i)	Descriptions		3		Accept	Do not accept		
			1. (FB)	intrinsic or internal or kinaesthetic or proprioceptive feedback available during performance / feedback monitors performance		1.		'Involves (internal) feedback' on own / 'Feedback during performance' on own		
			2. (memory and perceptual trace)	Two areas of stored information / memory trace and perceptual trace / memory trace initiates movement/ (then)perceptual trace is point of reference or record of past experience / memory trace might be incorrect / perceptual trace might be inaccurate		2.		There is a memory trace on own / There is a perceptual trace on own		
			3. (comparison)	(Feedback or perceptual trace allows) comparison between perceptual and memory trace / (feedback or perceptual trace) compares what is happening with what is stored		3.	Compares current action with one already learned (and stored in LTM)			
			4. (correction/ learning)	(if it doesn't match/if incorrect) movements adjusted or corrected (during performance) / improvement or progress or learning occurs (during performance)		4.	motor programmes are formed or updated			
			5. (reinforce- ment)	(if it matches) correct movements are reinforced		5.				
			6. (level 2)	Level 2 (motor control is FB) via muscles / L2 adjusts quickly or subconsciously/ L2 is internal / L2 has a shorter loop		6.		Level 2 on own		
			7. (level 3)	Level 3 (motor control is FB) via brain / L3 adjusts more slowly or consciously /L3 can be external / L3 results in jerky movements (as skill adjusted) / L3 has a longer loop		7.		Level 3 on own		
					1					

Q	uesti	on	Answer	Marks	Guidance	
2	(b)	(ii)	Practical example: mark first attempt 1. Gymnast on beam or skier or trampolinist etc making adjustments or to keep balance / high diver making adjustments	1	Accept 1. Any description where the performer acts on feedback during performance	Do not accept A practical example when there is little or no time for feedback eg a 'reflex' save in hockey

Q	uestion	Answer		Guidance		
2	(c)	Graph Octimum arousal A extreme i decline	6			
		6 marks from 6:		Accept Graph information without letters ABCD Arousal/anxiety as synonymous	Do not accept	
		 If arousal increases so does performance up to a certain (optimal) level/ If graph: arousal and performance axes labelled correctly and curve drawn to A and optimum level identified 		1.	'If arousal increases so does performance' on own	
		2 if arousal or (cognitive) anxiety or stress or worry or apprehension continues to increase or is (too) high		2.		
		 3there is a sudden or extreme or acute decrease in performance or learning / If graph:line A-B drawn with arrow/s and labelled 'extreme decline' and explanation /annotation re decrease in performance 		3.	Leads to disastrous performance Sudden drop on own = TV	
		 Cognitive anxiety or stress or apprehension or worry interacts with somatic anxiety or stress on body systems / high cognitive arousal coincides with high somatic anxiety 		4.		
		 5and body control or coordination are lost 6. This has effect of: not being able to concentrate / losing cognitive control / getting distracted / losing perceptual awareness / difficulty making decisions 		5. 6. All following = BOD: Start to miss cues / attentional field narrows / start making mistakes / a disastrous performance/ choke / panic	Forget what to do / a catastrophe happens = REP	
		 7. If arousal or (cognitive) anxiety lowered or emotions controlled, performance can improve again or upward curve can be rejoined / If graph: line B-D drawn with arrow/s and explanation /annotation re control of anxiety 		7.		

Question	Answer	Marks	Guidance		
	 If arousal or cognitive anxiety continues to increase then performance will continue to decrease / If graph: line B-C drawn with arrow/s and explanation /annotation re continued decrease if anxiety continues 		8.		

Question	Answer	Marks	Guidance		
2 (d) (i		4	Any practical example that describes using demonstrations / pictures / charts / video / DVD / court or pitch markings / markers / cones / guidance lines / boxes to learn movement skills or improve a BAHL	Do not accept Sports (look for skills)	
	Mechanical guidance – sub max 2 Sub max 1 if no Practical Example 3. using a bowling machine to help batting in cricket 4. using trampoline harness to help learn somersault using equipment such as armbands to increase confidence in a beginner swimmer using armbands in swimming using tackle pads in rugby		Any practical example that describes using equipment or apparatus or aids or machines or technology to: learn movement skills or develop kinaesthetic awareness or increase safety or increase confidence	Do not accept Use of cameras or videos / manual guidance / physical support / unless skill or practical sporting example included Objects = TV	

Q	uesti	on	Answer		Marks	Guidance											
2	(d)	(ii)	Visual guidance		2	Visual guidance											
			1. (picture)	Giving a mental picture or building a mental image or giving a visual representation of a BAHL / a mental picture or mental image or visual representation of a skill makes learning skills or being active move likely (making a BAHL more likely)													AcceptDo not acceptAny description linking visual guidance (eg demos/DVDs) to BAHLAny descriptions of how Visual guidance encourages or shows a BAHL or how physical
			(understanding)	by increasing understanding of why you should be healthy or have a BAHL / by increasing understanding of skill makes learning skills or being		skills or being more active makes a BAHL more likely Mechanical guidance											
				active move likely (making a BAHL more likely)		AcceptDo not acceptDescription linking mechanicalMechanical											
			(role model)	If you watch a role model you are more likely to learn skills or be active (which makes a BAHL more likely) / Guidance by role model or significant other makes behaviour more likely to be copied		guidance(e.g. arm bands) to:objects unless• confidencethey support the• safetyperson e.g.• kinaesthetic awarenessDNA weighing• being active (which canmonitor your											
			(attractiveness)	If guidance attractive, it encourages copying (making a BAHL more likely)		ead to BAHL) weight or linking • confidence											
			Mechanical guida			safety											
			2. (confidence / safety/timing)	Increased confidence or safety or timing makes learning skills or being active more likely (and so makes BAHL more likely)		 kinaesthetic awareness to: acquiring skills 											
			(kinaesthesis)	Correct proprioception or kinaesthesis or getting the right 'feel' of the skill makes learning skills or being active more likely (and so makes BAHL more likely)		being active (which can lead to BAHL)											

Mark Scheme

Question	Answer	Guidance		
2 (e)*	Levels Descriptors	Levels Discriminators		
	 Level 3 (8–10 marks) A comprehensive answer: detailed knowledge & understanding effective analysis/critical evaluation and/or discussion/explanation/development clear and consistent practical application of knowledge accurate use of technical and specialist vocabulary high standard of written communication. 	 At Level 3 responses <u>are likely</u> to include: detailed understanding of at least two types of reinforcement discussion and reference to both movement skills and healthy lifestyle behaviour understanding of S-R bond; reference to learning or conditioning by linking or associating stimulus and response 		
	 Level 2 (5–7 marks) A competent answer: satisfactory knowledge & understanding analysis/critical evaluation and/or discussion/explanation/development attempted with some success some success in practical application of knowledge technical and specialist vocabulary used with some accuracy written communication generally fluent with few errors. 	 At Level 2 responses <u>are likely</u> to include: satisfactory understanding of at least one type of reinforcement discussion and reference to both movement skills and/or healthy lifestyle behaviour satisfactory knowledge of S-R bond 		
	 Level 1 (0-4 marks) A limited answer: basic knowledge & understanding little or no attempt to analyse/critically evaluate and/or discuss/explain/develop little or no attempt at practical application of knowledge technical and specialist vocabulary used with limited success written communication lacks fluency and there will be errors, some of which may be intrusive. 	 At Level 1 responses <u>are likely</u> to include: basic understanding of at least one type of reinforcement reference to both movement skills and/or healthy lifestyle behaviour little if any reference to S-R bond 		
	[0 marks] No response or no response worthy of credit.			

Q	uestion	Answer	Marks	Guidance
2	(e)	Indicative content: Candidate responses are likely to include: (relevant responses not listed should be acknowledged) Numbered points = knowledge / understanding Bullet points = likely to be development of knowledge	10	
		 General 1. Reinforcement (is a process that) ensures that the correct or desired response is repeated / reinforcement increases the probability of (desired) response or behaviour occurring again it strengthens the S-R bond eg from coach or teacher or parent or teammate 		
		 Positive Positive reinforcement Give a stimulus or satisfier eg praise or rewards or positive feedback or encouragement after a successful or desired response to strengthen the S-R bond /to ensure repetition of (desired) behaviour it raises confidence or self esteem or makes you feel good about yourself it motivates or encourages good for cognitive learners or beginners or children / give soon after the desired response 3. Give rewards 		
		 on the rewards that are tangible eg reaching target weight may attract money reward / badge / certificate other suitable example of a tangible reward or intangible eg applause or praise (credit when given as example of an intangible reward) 4. Show results or benefits of following a healthy lifestyle eg feel better / more energy / make more friends 5. Educate or persuade by showing benefits or positive outcomes eg feel better / more energy / make more friends ousing role models to train with set goals, and then give results of goals being reached eg in exercise adherence Links with or supports (Thorndike's) Law of Effect 		
		 it strengthens the S-R bond between exercise and being healthy 		

Question	Answer	Marks	Guidance
	 associate good outcomes with desired behaviour eg if you serve correctly in tennis and it wins a point, you are more likely to serve in that way again Enjoyment of the activity increases the chance that the person will do the activity again eg enjoyable activities or variety in diet BUT – don't give too much praise/ or reward or it can lose its effect / care should be taken that the wrong behaviour isn't inadvertently encouraged 		
	Negative		
	9. Negative reinforcement		
	 aims to weaken undesired S-R bond 		
	 (and) aims to strengthen the correct or desired S-R bond 		
	 (in order to) condition the (desired) behaviour or response 		
	 can be useful for autonomous learners or advanced performers 		
	can motivate or encourage		
	 Give disapproval or an annoyer or a negative or unpleasant or noxious stimulus or negative feedback 		
	 When skill or behaviour undesired or wrong 		
	eg criticism		
	11(then) remove or withdraw it when the correct or (desired) response occurs / stop negative		
	feedback or punishment / withdrawal of punishment eg 'telling off' stopped if active or healthy behaviour or lifestyle shown / parent stops criticising child		
	for not doing any physical activity		
	12. Take away praise or reward		
	eg remove privileges if inactive or unhealthy behaviours are shown		
	13. BUT - not good for cognitive learners / can sap confidence or motivation / participants may not		
	understand why stimulus or praise has been withdrawn (so they do not link it to following BAHL)		Look for key points of:
			 annoyer
	Punishment		 being
	14. Punishment		withdrawr
	used to eliminate undesired behaviour		
	 15. give an unpleasant or noxious stimulus or negative feedback to (help to) break or weaken an (undesired) S-R bond or to stop an (undesired) behaviour or 		
	response.		
	can stop us learning incorrect movements or unhealthy behaviour		
	eg tell them off or embarrass them or make them feel uncomfortable if not active, or if healthy		

Question	Answer	Marks	Guidance
	behaviour or lifestyle not shown eg send them off / award penalty again them / fine or ban them 16. Breaks or helps to break or block an (undesired) S-R bond		
	17. Compare them with others who are unhealthy / dysfunctional eg accept any suitable example of comparisons or 'showing them up'		
	 18. BUT - can lead to frustration or anger or resentment BUT - can stop someone starting or continuing a healthy lifestyle 		
	Other types of reinforcement 19. Complete or continuous reinforcement		
	Rewards given after each successful response 20. Partial reinforcement		
	 Reward given after a number of successful responses 		
	 Factors to consider 21. What type of reinforcement to use / when to use the different types / when/how soon after response to give / ratio of positive to negative / the phase of learning of the performer (cognitive, associative, autonomous) 		

Section C Socio-Cultural Studies relating to participation in physical activity

Q	uesti	on	Answer		Marks	Guidance		
3	(a)	(i)		nip or link between) sponsorship and <u>media</u>	1	Accept 1. Sporting events' for sport 'Sponsors' for sponsorship / triangle if labelled correctly	Do not accept 'performer' for sport	
		(11)	(ii) Role and Example 1. Inform itell about fixtures / results /stats /		3	Mark first three definite attemp Identification and example nee Accept Same example for more than one role if accurate /		
			/information/ make people aware of / tell / report on	league positions / news / fixtures / analysis / behaviour / role		Other relevant examples of each role	They inform viewers of what's going on /about	
			2. Educate/ Education / teach	explain or teach about fixtures / results /stats / league positions / news / fixtures / analysis / behaviour / BAHLs / role modelling / campaigns / skills / tactics / rules / breaking down stereotypes / documentaries		2.	sport about sport	
			3. Entertain/ entertainment	programmes / documentaries /		3.	with sport	
			4. Advertise/ advertising/ promote/ promotion / publicity / publicise	on perimeter fencing / sponsors / products / events / role models / leagues / minority sports		ч. 		

Q	uestion		Answer	Marks	Guidance			
3	(b)				Accept	Do not accept		
		1. (decisions)	angry or frustrated with decisions or match officials / bad officiating	5	1. Other suitable examples of cause of frustration	Anger or frustration on own		
		2. (result)	angry or frustrated with score or result or performance / not much time left		2.	Anger or frustration on own		
		3. (emotion / hype)	emotional intensity / cauldron effect/ tension in stadium / over arousal or pre-match hype or psyche-up		3. High expectations	Aggression / media hype		
		4. (rivalry/ derby)	rivalry / local derby / team loyalty/ grudges		4. 5.	pressure on own		
		5. (importance/ money/ position/ pressure)	importance of game or result or winning / money at stake / position in league or cup or competition / pressure to win		5.	pressure on own		
		6. (abuse / provocation/ retaliation)	provocation by or abuse or sledging or gamesmanship or deviance from opponents or team mates or (hostile) crowd / retaliation /violence among crowd		 Bad tackle by opponent Crowd interaction = BOD 	provocation etc on own		
		7. (punishment/ copying)	lack of punishment or deterrent/ think they can get away with it /copying a role model		7.			
		8. (religion / racism)	religious reasons (e.g. Celtic v Rangers) / racism		8.			
		9. (nature of game)	nature of game / body contact or checking / to prove masculinity		9.			
		10. (weapons / de- humanise)	(equipment such as) sticks or clubs that can be used as weapons / kit or equipment that 'de-humanises' or protects		10.	sticks or clubs or 'weapons' on own kit or equipment on own		
		11. (drugs)	increased aggression or arousal from drug or steroid use		11.	Aggression or arousal or drugs on own		

Question			Answer	Marks	Guida	nce	
3	(C)	(i)			1		
						Accept	Do not accept
			1. (eg)	(Gloucestershire) cheese rolling or cheese chasing / Highland or Lakeland Games / mob football / Ashbourne or Shrovetide football / Hallaton bottle game / Lewes fire festival /		1.other suitable examples of a surviving ethnic sport in UK	Hurling / Gaelic football / street football / Morris or Irish or Maypole dancing
				Cornish Hurling / tar barrel rolling			

Question		Answer		Marks	Guidance		
Questic 3 (c)	on (ii)	Reason 1. Tradition / traditional / (medieval) customs	and Explanation passed from generation to generation / celebration of past / people want them to continue / media interest / part of identity / shows or part of identity or heritage or	Marks 4	Guidance Reason and explanation neede Accept other explanations / same other explanation for different reason 1. 2.		
		2. Local / locally important	culture or history they increase local pride / because community want them to continue		3.		
		 Annual / occasional/ on public or bank hols Isolation / in authin a 	.so 'special' occasions / effort made to watch or take part / people can go/ people aren't bored / media interest / people look forward to them so not affected by 'main' sports /		4.		
		in outlying areas 5. Rural	ethnic identity or uniqueness kept so not affected by 'main' sports / natural facility available		5.		
		6. Tourism	so commercial opportunities / money to area / media interest / publicity / people know about them / want to watch or take part		6.		
		7. Social / festival/ community/ carnival	and so entertaining or enjoyable / chance to celebrate / 'an escape from reality' / bring people together / media interest / focus on pub		7.		
		8. Rowdy / violent	chance to show manliness / focus on 'pub' or links with drinking		8. 9.		
		9. Religion / pagan / ritual	people want them to continue / people committed to them				

Question	Answer		Guidance		
Question 3 (d)	Answer1. (status/ image / promotion /publicity)Nation Building involves increasing 	Marks 6	AcceptDo not accept1. Makes country look good or betterGives country a better chance of hosting another 		
	4. (appease /pride /unity)appeasement or morale or (national) pride or patriotism or medals for host nation or supporters/unites or brings country together5. (example of hosting benefits)economic (e.g. due to tourism)/more jobs/legacy of facilities or housing or improved infrastructure or transport system		around the globe' 4. feel good factor / hope 5. Other examples of benefits of hosting / redevelopment Increase participation or BAHLs on own		
	6. (political tool - popularity / stability)OGs can be used as a political tool/sport and politics linked/sporting success reflects political success or country's power/OGs or sport can increase popularity or stability of government7. ('new'Beijing OGs a 'coming out party' for China/		6. 7.		
	China)chance to: show its economic status/show itself as a world power/show political reform or changing system/show that Communism works8. (cover up)Beijing OGs an opportunity for China to cover up (Human Rights) problems		8.		

Question	Answer Marks Guidance			Guidance
Question	9. (examples of attempted NB via OGs)	Answer 1968 or Mexico city–black power salute/ 1972 or Munich–terrorism/1976 or Montreal –African nations withdrew (due to NZ rugby tour to SA)/1980 or Moscow– western boycott (Soviet invaded Afghanistan) /1984 or LA socialist boycott (retaliation) v commercialism	6	Accept Do not accept 9. 1936 or Berlin OGs used to 'show off' Nazi Germany / 1948 or London – Japan/Germany not invited due to war

Question	Answer	Guidance		
3 (e)*	Levels Descriptors	Levels Discriminators		
	 Level 3 (8–10 marks) A comprehensive answer: detailed knowledge & understanding effective analysis/critical evaluation and/or discussion/explanation/development clear and consistent practical application of knowledge accurate use of technical and specialist vocabulary high standard of written communication. 	 At Level 3 responses <u>are likely</u> to include: detailed understanding and coverage of why PA valuable and necessary explanations of types of activity to promote a BAHL / recommendations for BAHL / reasons for sedentary lifestyles detailed understanding of barriers to young people's participation likely structure to second part of question around opportunity, provision and esteem satisfactory balance between both parts of question 		
	 Level 2 (5–7 marks) A competent answer: satisfactory knowledge & understanding analysis/critical evaluation and/or discussion/explanation/development attempted with some success some success in practical application of knowledge technical and specialist vocabulary used with some accuracy written communication generally fluent with few errors. 	 Satisfactory balance between both parts of question At Level 2 responses are likely to include: satisfactory understanding and coverage of why PA valuable and necessary reference to types of activity to promote a BAHL / recommendations for BAHL / sedentary lifestyles satisfactory understanding of barriers to young people's participation possibly structure to second part of question around opportunity, provision and esteem attempt at balance between both parts of question if only one part of question addressed L2 6 marks max 		
	 Level 1 (0-4 marks) A limited answer: basic knowledge & understanding little or no attempt to analyse/critically evaluate and/or discuss/explain/develop little or no attempt at practical application of knowledge technical and specialist vocabulary used with limited success written communication lacks fluency and there will be errors, some of which may be intrusive. [0 marks] No response or no response worthy of credit. 	 At Level 1 responses <u>are likely</u> to include: basic understanding of why PA valuable and necessary basic understanding of barriers to young people's participation description rather than explanation limited or no success at addressing/balancing both parts of the question lack of structure 		

Question	Answer	Marks	Guidance
3	Indicative content: Candidate responses likely to include: (other relevant responses must be acknowledged)	10	
	Numbered points = knowledge / understanding Bullet points = likely to be development of knowledge		
	Physical Activity valuable/necessary because it promotes: 1. Physical benefits		
	 fitness / health / healthy body weight / greater life expectancy or other suitable physical factors inactivity dangerous (to health) eg PA protects against CHD or osteoporosis or other conditions 		
	2. Personal benefits or development		
	 enjoyment / self awareness / esteem / confidence / / 'feel good' factor / leadership or other suitable personal benefits 		
	 3. Social benefits friendships / teamwork / communication / meeting people or other suitable social factors eg by joining clubs 		
	 Less anti-social behaviour in society Emotional benefits / mental wellbeing 		
	 stress relief or other suitable emotional factors 		
	And because of:		
	5. Increased or widespread obesity or CHD		
	 due to widespread junk or fast food consumption / increasingly unhealthy diets eg McDonald's or other suitable example of junk or fast food Stressful lives 		
	 eg due to recession or long working hours or unemployment or other suitable example The desire for or need for Balanced Active Healthy Lifestyles – (BAHLs) Quality of life / wellness 		
	 components of a BAHL: physical well-being, physical exercise, being (physically) fit / injury or illness prevention / sufficient rest or sleep / a nutritious or balanced diet / not smoking / not taking drugs / moderate alcohol / personal hygiene / mental well-being / control of stress / stress relief / mental well-being / 'free' time 		
	8. More sedentary or inactive lifestyles / low or decreasing levels of physical activity		
	 7/10 people have sedentary lifestyle (according to some data) 		
	 (many people do) less than 1x30 mins physical activity per week 		

Question	Answer	Marks	Guidance
	More sedentary lifestyles because:		
	9. Desk job / less manual labour		
	exercise a choice not necessity		
	10. Longer working hours / concentration on careers		
	 impact of credit crunch/economic situation 		
	 scared of losing jobs 		
	11. Gadgets		
	eg sit on mowers or other suitable example		
	12. Widespread car use		
	eg children don't walk to school		
	13. Technology		
	 computer use / computer games 		
	eg shopping on line		
	14. More TV / people watch sport rather than participate		
	Types of physical activity to promote a BAHL		
	15. Physical or outdoor recreation		
	16. Physical or outdoor education		
	17. Sport / life time sport / life-long physical activity		
	 activities that can be pursued into middle and older age 		
	eg table tennis, badminton		
	Recommendations for a BAHL		
	18. (adults) 30 mins 5 times a week		
	19. Moderate or sub max or aerobic level		
	eg jogging / cycling		
	20. Children/young people 60 mins a day / 5 or 6 or 7 x 60 mins per week		
	eg 5 x 60 / Welsh initiative		
	21. Children – (at least) twice a week higher impact activities should be done		
	eg skipping /jumping etc		
	Explanation of possible barriers to participation by young people		
	22. Being in a minority group		
	 discrimination or unfair treatment or stereotyping or myths 		
	eg women / disabled /ethnic minority /Rerigious		

Question	Answer	Marks	Guidance
	Asian women and swimming restrictions		
	eg appropriate clothing		
	23. Opportunity – (limited or no)		
	24. Don't like exercise / choose not to / negative attitude to PA or to exercise / don't enjoy it		
	 don't like getting hot and sweaty 		
	do other things		
	eg socialise / play computer games or other suitable example		
	25. No time / other commitments		
	eg studying or part time job or other suitable example		
	26. Lack of role models		
	 friends or family don't participate or encourage or support 		
	peer pressure (not to participate)		
	27. Bad (school) experience/ limited range of activities offered at school		
	28. No or not enough money / too expensive / socio-economic status		
	Imited or withdrawal of Government funding		
	eg withdrawal of free swimming for young people		
	eg for memberships or kit or other suitable example of expense		
	29. Poor health / injury		
	eg asthma or other health related limitation		
	30. Tired / lethargic / can't be bothered		
	31. Risk of being out at night / parents stop you going out at night / danger / risk of injury		
	32. Provision – (limited or no)		
	33. Lack of equipment or (suitable) facilities / live in a rural or disadvantaged area		
	eg no (suitable/local) clubs / no swimming pool nearby or other suitable example		
	34. No transport / no buses or trains etc		
	 can't get there / distance from facilities / parents won't or can't take you 		
	35. Unfavourable weather or climate		
	 too cold or wet 		
	eg for activities outside		
	36. Withdrawal or lack of Government support or funding		
	37. Esteem – (limited or no)		
	38. Lack of confidence		
	 self-conscious / 'no good at it' / 'everyone else better than me' /poor body image 		

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