



GCE

Physical Education

Unit **G451**: An Introduction to Physical Education

Advanced Subsidiary GCE

Mark Scheme for June 2017

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

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

OCR will not enter into any discussion or correspondence in connection with this mark scheme.

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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
L1	Level 1
L2	Level 2
L3	Level 3
KU	Knowledge and Understanding
EG	Example/Reference
TV	Too Vague
DEV	Development
SEEN	Noted but no credit given
IRRL	Significant amount of material which does not answer the question

Subject-specific Marking Instructions

Marking responses ‘a – d’; points marked questions

An element of professional judgement is required in the marking of G451. Correct answers should always be rewarded irrespective of whether or not they appear on the mark scheme. If you are in doubt about the validity of any answer then consult your Team Leader (Supervisor) by phone, scoris messaging or e-mail.

Marking response ‘e’; levels of response marked question

It is quite possible for an excellent and valid answer to contain knowledge and arguments which do not appear in the indicative content on the mark scheme. Each answer must be assessed on its own merits according to the generic descriptors and discriminators.

The levels of response descriptors are cumulative, ie a description at one level builds on or improves the descriptions at lower levels. Not all qualities listed in a level must be demonstrated in an answer for it to fall in that level.

Candidates will take different approaches to achieve within the same level. Some will adopt a less focused approach but demonstrate a wide range of knowledge others may adopt a more focused approach using a narrower range of well-developed knowledge.

Approach to marking levels of response questions:

- read the candidate response in full;
- working from the top down and using a *best-fit* approach, refer to the generic descriptors and discriminators to determine the level;
- re-read the answer, highlighting credit worthy aspects of the response in relation to knowledge, understanding, development, examples, etc;
- confirm or revise initial decision re level;
- determine the mark within the level as per the guidance in 10 (above), with reference to the discriminators, and, again, using a *best-fit* approach.

SECTION A – Anatomy and Physiology

Question	Answer	Marks	Guidance
1 (a) (i)	3 marks for 3 from: <ol style="list-style-type: none"> 1. Ball and Socket 2. Pectoralis Major(is) / Latissimus Dorsi 3. Deltoid (Medial / Anterior / Posterior) 	3	Accept mild spelling errors
1 (a) (ii)	2 marks for 2 from: Mark first two attempts only. <ol style="list-style-type: none"> 1. Infraspinatus 2. Supraspinatus 3. Teres Minor 4. Subscapularis 	2	Accept mild spelling errors
1 (b) (i)	3 marks for 3 from: For characteristics mark first two attempts only. <p>Fibre Type</p> <ol style="list-style-type: none"> 1. Fast Twitch Glycolytic / Type IIb / FG <p>Characteristics</p> <ol style="list-style-type: none"> 2. Large fibres / White 3. Low mitochondrial density 4. Low capillary density 5. High Glycogen density 6. Large stores of phospho-creatine / PC 7. Low triglyceride stores 8. Low myoglobin density 	3	<p>1. Do not accept fast twitch on own – must say glycolytic</p> <p>If candidate incorrectly identifies the muscle fibre type they can still access marks 2-8 if correct characteristics identified.</p> <p>Mark first attempt at characteristics on each line only. If a candidate tries several attempts on each line we cannot accept the subsequent attempts.</p>

1 (b) (ii)	<p>2 marks for 2 from:</p> <ol style="list-style-type: none"> 1. An increase in muscle temperature allows greater stretch / elasticity of muscle 2. Less resistance within muscle / reduced muscle viscosity 3. Increased speed of nerve transmission / nerve conduction 4. Increased speed or strength of contraction 5. Improved coordination / efficiency between antagonistic pairs 6. Increased enzyme activity within muscle cells 7. Reduced risk of injury 	2	<ol style="list-style-type: none"> 1. Do not accept increase muscle temperature on own – must state reference to greater stretch or increased elasticity. Increased elasticity of muscle on own is ok to award.
1 (c)	<p>5 marks for 5 from:</p> <p>Sub max of 3 for points 1 - 7</p> <ol style="list-style-type: none"> 1. (using the) vascular shunt mechanism 2. Chemoreceptors detect increase in (blood) acidity or an increase in (pp)CO₂ or decrease in pH or in (pp)O₂/ 3. proprioceptors detect movement/ baroreceptors detect increase in pressure 4. Information sent to vasomotor (control) centre or VCC (in the medulla oblongata) / VCC controls the distribution of cardiac output 5. (VCC) uses the sympathetic nervous system (to...) 6. More blood is distributed to the working muscles / during exercise 80-85% blood distributed to the working muscles 7. Less blood is distributed to the organs / during exercise 15-20% blood distributed to the organs 8. ... decrease nerve impulses or sympathetic stimulation to the arterioles or pre-capillary sphincters or PCS leading to the muscles 9. ... vasodilate the arterioles leading to the muscles ... relax or vasodilate the pre-capillary sphincters or PCS leading to the muscles 10. ... increase nerve impulses or sympathetic stimulation to the arterioles or pre-capillary sphincters or PCS leading to the organs 11. ... vasoconstrict arterioles leading to the organs ... contract or vasoconstrict the pre-capillary sphincters or PCS leading to the organs 	5	

1 (d)	<p>5 marks for 5 from:</p> <ol style="list-style-type: none"> 1. Gases / O₂ move from high pressure to low pressure <p>Submax 3 for rest</p> <p>At Rest</p> <ol style="list-style-type: none"> 2. O₂ diffuses from the alveoli into the blood or (pulmonary) capillaries 3. There is a high partial pressure of oxygen (ppO₂) in the alveoli 4. There is a low partial pressure of oxygen in the blood or (pulmonary) capillaries 5. There is a diffusion or pressure or concentration gradient of O₂ <p>Submax 3 for exercise</p> <p>During Exercise</p> <ol style="list-style-type: none"> 6. There is a lower partial pressure of oxygen in the blood / (pulmonary)capillary 7. The same or high partial pressure of oxygen in the alveoli 8. There is a larger / increased diffusion or pressure or concentration gradient 9. More oxygen diffuses from the alveoli into the blood or (pulmonary) capillaries / rate of oxygen diffusion increases 	<p>5</p> <p>There must be clear reference to oxygen as opposed to CO₂ to award the marks.</p> <p>The word oxygen appears in the question so could be inferred in the answer</p> <p>Be aware that some candidates may be able to get 2 marks in one sentence eg A higher pp of O₂ in the alveoli than in the capillaries = 2 marks points 2 and 3</p> <p>Candidate must be clear that the diffusion is between alveoli and blood or capillaries.</p>
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1 (e)* Level Descriptors	Discriminators
<p>Level 3 (8 – 10 marks) A comprehensive answer:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • At the top of this level there will be a detailed explanation and a good balance between cardiovascular (CV) and muscular-skeletal (MS) benefits with good muscular examples. • At the bottom of this level there will be a detailed explanation of either CV OR MS with one less detailed than the other.
<p>Level 2 (5 - 7 marks) A competent answer:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • At the top of this level both CV & MS are well described but one area is more dominant than the other OR a satisfactory balanced explanation of both • At the bottom of this level both <u>CV</u> and <u>MS</u> will be described but one will be less satisfactory than the other
<p>Level 1 (1 - 4 marks) A limited answer:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • At the top of this level, there will be a limited description of both <u>CV</u> and <u>MS</u> benefits OR only one area is described in good detail • At the bottom of this level, only one part of the question has been attempted with a basic description
<p>[0 marks] No response or no response worthy of credit.</p>	

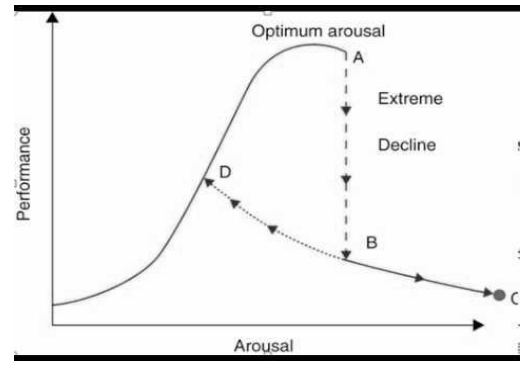
Question	Answer	Guidance
1 (e)*	Indicative content: Candidate responses are likely to include: (relevant responses not listed should be acknowledged) Numbered points = knowledge / understanding Bullet points = likely to be development of knowledge	
	1. Main point/prompt	
Background	Cardiovascular Benefits 1. Jogging is an endurance activity / aerobic activity 2. Endurance activities lasting 30 minutes or longer undertaken 3 – 5 times per week can: 3. Increase the efficiency of the circulatory system <ul style="list-style-type: none"> • Allowing more oxygen to be transported to the working muscles 4. Increase the size and strength of the heart / heart hypertrophy <ul style="list-style-type: none"> • Increasing stroke volume • Decreasing resting heart rate / can cause bradycardia 5. Increase the volume of blood plasma / increased volume of red blood cells or haemoglobin <ul style="list-style-type: none"> • Allowing more oxygen to be transported 6. Further increasing endurance performance 7. Exercise improves coronary circulation <ul style="list-style-type: none"> • Resulting in improved health of the heart 8. Can reduce the effects of Coronary Heart Disease (CHD) 9. CHD is the deposit of fatty materials in the coronary arteries of the heart (vascular system) 10. Can reduce the risk of a heart attack / myocardial infarction <ul style="list-style-type: none"> • Where part of the heart muscle dies because it has been starved of oxygen • Complete blockage of the coronary arteries. 11. Moderate aerobic activity should reduce the effects of angina <ul style="list-style-type: none"> • Pain in the chest and discomfort associated with CHD • Partial blockage of coronary arteries 12. Exercise causes the blood vessels to maintain their elasticity 13. Exercise improves coronary circulation 14. Exercise helps reduce atherosclerosis <ul style="list-style-type: none"> • the build-up of fatty deposits and cholesterol 	
CV improvement for performance		
Prevention of CHD		
Atherosclerosis		

	<ul style="list-style-type: none"> • on the wall of the coronary arteries • narrowing of the lumen of the arteries 	
	<p>15. Exercise helps reduce Arteriosclerosis</p> <ul style="list-style-type: none"> • the build-up of calcium deposits • on the wall of the coronary arteries • reducing the elasticity / hardening of the artery walls 	
	<p>16. Reduced blood flow from narrowed coronary arteries can cause angina.</p> <p>17. Reduced blood flow from narrowed coronary arteries can cause a heart attack.</p>	
	<p>18. Cholesterol is carried in the blood by lipoproteins</p> <p>19. Regular exercise can reduce the percentage of LDL s</p> <p>20. Regular exercise can increase the percentage of HDLs</p> <ul style="list-style-type: none"> • Low density lipoproteins / LDLs build up on the walls of coronary arteries • High density lipoproteins carry cholesterol away from coronary arteries 	
	<p>21. Cholesterol / LDLs found in many foods can cause an accumulation of proteins on the walls of the arteries</p>	
	<p>22. A clot occurring in narrowed arteries which have become too narrow will result in a heart attack or stroke</p>	
	<p>23. Can reduce hypertension / lower blood pressure</p> <ul style="list-style-type: none"> • Prolonged high blood pressure (140+ / 90+ mmHg) 	
	<p>24. Moderate exercise reduces body fat.</p>	
	<p>25. Loss of weight reduces strain on circulatory system</p>	

<p>Bone Density Osteoporosis Growth Plates</p> <p>Cartilage Arthritis</p> <p>Joint Stability</p> <p>Lubrication</p> <p>Posture and Alignment</p>	<p>Muscular Skeletal Benefits</p> <p>26. Jogging is a low impact activity the benefits of which are:</p> <p>27. Stronger or healthier bones / increase in peak bone density or calcium deposits</p> <ul style="list-style-type: none"> • reduced risk of osteoporosis • osteoporosis is the weakening of bones or loss of bone density • making bones more prone to fractures or damage • reduced risk of damage to growth plates • weight bearing activities are best to improve bone health. <p>28. Healthier joints / increase in thickness of articular or hyaline cartilage</p> <ul style="list-style-type: none"> • greater ability to absorb shock so reduced risk of injury • reduced risk of developing osteoarthritis in later life • osteoarthritis is a degenerative disease due to loss of articular or hyaline • cartilage at the ends of long bones <p>29. Stronger ligaments (stronger tendons = BOD)</p> <ul style="list-style-type: none"> • increased joint stability • less risk of injury or joint trauma • e.g. sprains, dislocations etc <p>30. Stronger muscles surrounding joints / muscular hypertrophy</p> <ul style="list-style-type: none"> • Greater joint stability • Less risk of injury <p>31. Better lubrication of joints by synovial fluid</p> <ul style="list-style-type: none"> • improves joint health • aids flexibility decreased mechanical strain on joints due to exercise helping to manage <ul style="list-style-type: none"> • reduces risk of osteoarthritis <p>32. Improved posture and alignment</p> <ul style="list-style-type: none"> • More efficient movements in everyday life / sporting actions • Fewer structural problems later in life • Increased strength of core muscles <p>33. Prevents sedentary lifestyle that can be linked with osteoporosis in later life</p> <p>34. Reduced overall weight leads to less strain on connective tissue and joints</p>	
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Section B – Acquiring Movement Skills

Question	Answer	Marks	Guidance
2 (a)	<p>Four marks for four from:</p> <p>Submax of 3 if all stores are not identified correctly.</p> <ol style="list-style-type: none"> 1. <u>Short term sensory store / Sensory Register</u> which is where selective attention happens or important information is filtered in or where irrelevant information is filtered out / 2. information is received from the display or environment / 3. duration 0.25-1sec / holds all information in the display 4. <u>Short term memory store</u> which is where information is perceived or understood or interpreted 5. Duration up to 30 secs / capacity 5 – 9 items 6. information is organised or chunked or encoded in this store. 7. Known as the 'workspace' / decision to carry out movement is made. 8. <u>Long term memory store</u> which helps in remembering or recognition of information or patterns of movement that have been learned / repeated or rehearsed 9. Limitless duration/ limitless capacity 10. Information is decoded or stores motor programmes (used to perform movements) or associates (current) performance with previous performances (to recognise strengths and weaknesses) / information sent back to STM 	4	<ul style="list-style-type: none"> • Can only access full marks if they have referenced all 3 stores ie STSS STM and LTM • Stamp KU where the store is identified • Mark only to be awarded if there is a description in addition to naming the store. • e.g. if a candidate says the STM has a capacity of 30 secs or 5-9 items– only award pt 5 not points 4 and 5

2 (b)	<p>Five marks for five from:</p> <ol style="list-style-type: none"> 1. When arousal is (too) high there is then a sudden decrease in performance or sudden decrease in learning or stopping learning or learning incorrect movements (A-B in graph) 2. This occurs when anxiety or stress or worry or apprehension is high. 3. This is called (high) cognitive anxiety. 4. This (cognitive anxiety) interacts or works with or combines with somatic anxiety or somatic stress or stress on body systems. 5. This has effect of losing body control or cannot co-ordinate body systems/muscles. 6. This has effect of losing cognitive control or not being able to concentrate or not attending or getting distracted or losing perceptual awareness or reducing the perceptual field / performer can resort to hostile aggression 7. And decision-making becomes difficult. 8. If cognitive anxiety is then controlled or if you are able to control your emotions and thoughts then arousal will lower (B-D in graph) 9. If arousal can be lowered performance can increase (B-D in graph) 10. If arousal or cognitive anxiety continues to increase then performance will continue to decrease (B-C in graph) 	5	 <ol style="list-style-type: none"> 1. Catastrophic drop in performance = REP Do not give credit for the initial rise in arousal as question is asking for info after point A <p>Credit responses which include examples which allude to points 5,6,7 and 8. (ie a player head-butts another player = point 6 on ms.)</p>
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2 (c)	<p>Five marks for five from: Sub max of 2 with no practical example or inappropriate/inaccurate example</p> <ol style="list-style-type: none"> 1. Plan / series of movements 2. stored in or retrieved from the long-term memory eg passing a netball is remembered once learned 3. <u>Series of movements</u> brought about by making <u>one</u> decision eg make the decision to shoot in football which triggers a whole series of linked actions 4. Programmes link sub routines together / made up of subroutines Eg the separate components of a trampoline sequence 5. Programmes are formed by rehearsal or practise or overlearning / grooving the skill Eg repeating the spin pass in rugby 6. Programmes are formed through reinforcement or feedback or by creating an S-R bond or by watching a role model Eg a teacher says well done when you shoot the ball effectively in netball or watching an expert netball player and wanting to copy them. 	5	<ul style="list-style-type: none"> • Practical example must be referred to at some stage in the answer for full marks to be scored • E.G. must be stamped on the script • The example must relate to the performance of the skill • eg a pass in netball – on its own is not clear enough • eg pass in netball is learned / stored in LTM • Only one practical example is required but response may continue to use practical examples and therefore mark if shows equivalent to point in MS.
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2 (d)	<p>Six marks for six from:</p> <p>Sub max 3 if no practical examples or inappropriate/inaccurate examples</p> <p>Sub max four marks (Description of schema)</p> <ol style="list-style-type: none"> 1. Schema is a broad generalised motor programme 2. Involves the modification / adaptation of a motor programme 3. Information is stored (each time an action is performed) 4. Involves knowledge of initial conditions/environment or everything in the display 5. Response specifications or knowledge of what needs to be done 6. Sensory consequences or knowledge of what the movement feels like or kinaesthetic sense 7. Movement Outcomes or knowledge of end result 8. Two types of schema called <u>recall and recognition</u> schema <p>Sub max three marks (using schema in practice)</p> <ol style="list-style-type: none"> 9. Practice / training needs to be varied 10. Practice needs to be relevant or true to life / practice in a game situation (eg 2 v 1) (for positive transfer) 11. Open skills demand many schema - exposure to different situations 12. Performers should be aware of initial body position or should get feedback about technique 13. Performers need to be aware or get feedback on kinesthesia/ how the action feels or should feel 14. Performer should get feedback about results 15. Coach should consider transferable elements between skills / practice and performance 	6	<ul style="list-style-type: none"> • Practical examples must be used throughout the description for full marks to be scored. • Referring to kinaesthesia distinction must be made between description of schema (pt 6) and application to practice (pt 13) • If candidate confuses recall and recognition schema and includes ic/rs with the wrong type of schema you can still award the marks for ic or rs etc. • Some candidates may use examples where performers gain intrinsic or extrinsic feedback during / after performance which will allow them to access pts 12,13 and 14.
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2 (e)* Level Descriptors	Discriminators
<p>Level 3 (8 – 10 marks) A comprehensive answer:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • At top of this level: reference to both practice methods in detail with relevant practical examples a. clear links to skills from several different classifications eg open/closed; gross/fine; discrete/continuous evaluation of both methods showing clear advantages and disadvantages for using each for both novice and expert learners. • At the bottom of this level fewer classifications referred to and evaluation not fully developed
<p>Level 2 (5 - 7 marks) A competent answer:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • At top of this level Reference to both practice methods b. links to described skills from a some different classifications/types of skills eg open/closed; gross/fine Evaluation of both of the methods clear advantages and disadvantages novice and expert learners are recognised. • At the bottom of this level at least one link will be made to types of skills still reference to both practice methods links to skills and some evaluation attempted
<p>Level 1 (1 - 4 marks) A limited answer:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • At top of this level: there will be some description of at least one method. Little balance between practice methods or concentration on only one method. Weak evaluation and no decent reference to stage of learning • At the bottom of this level attempts at descriptions of whole or part with no evaluation or reference to skills or stage of learning.
<p>[0 marks] No response or no response worthy of credit.</p>	

Question	Answer	Guidance
2 (e)*	<p>Indicative content: Candidate responses are likely to include: (relevant responses not listed should be acknowledged)</p> <p>Numbered points = knowledge / understanding</p> <p>Bullet points = likely to be development of knowledge</p>	
	<p>Part practice</p> <ol style="list-style-type: none"> This method involves splitting the skill up into parts or sub routines <ul style="list-style-type: none"> eg practising each element of the triple jump separately 	
Subroutines	<p>(Positive)</p> <ol style="list-style-type: none"> Part better for low organised skills / skills which can broken down into subroutines 	
Complex	<ol style="list-style-type: none"> Part better for complex skills <ul style="list-style-type: none"> Makes understanding the skill easier better for perceptual skills because more perceptual requirements 	
Closed	<ol style="list-style-type: none"> Part better for closed skills / serial skills <ul style="list-style-type: none"> with identifiable sub-routines or discrete elements. eg a tennis serve that has identifiable sub-routines of backswing, throw-up, striking the ball and follow-through 	
Motivation	<ol style="list-style-type: none"> Part better to give early success <ul style="list-style-type: none"> this motivates This raises confidence Because the learner can feel successful at completing parts of skills before learning the whole eg a novice who is successful in basic preferred handed dribbling in basketball 	
Cognitive	<ol style="list-style-type: none"> Better with cognitive learners <ul style="list-style-type: none"> those who have low attention or special learning needs better for less motivated performers eg a child with learning difficulties will understand the serve in tennis if they just attempt throwing the ball into the air at first 	
Danger	<ol style="list-style-type: none"> Part if dangerous. <ul style="list-style-type: none"> It is safe practice to try elements of movements before joining potential dangerous moves together eg in many gymnastic / trampoline skills 	
Kinesthesia	<p>(Negative)</p> <ol style="list-style-type: none"> The performer does not experience the whole skill 	

<p>Motivation</p> <p>Time</p> <p>Fluency</p>	<ul style="list-style-type: none"> • lack of feeling of complete movement or true kinesthesia • eg by splitting the handspring into sub routines the gymnast loses the feel of the whole movement <p>9. Can be boring</p> <ul style="list-style-type: none"> • de-motivating • especially if already skilled or an elite performer <p>10. Not good for continuous skills</p> <p>11. It takes more time to teach / learn</p> <ul style="list-style-type: none"> • eg to split up the many skills needed in a gymnastic routine may take up too much time <p>12. Lack of fluency or co-ordination in responses.</p> <ul style="list-style-type: none"> • transfer back to whole skill can be difficult • eg if the separate elements of the tennis serve is practiced, when you put this together the co-ordination or flow of the skill can be compromised <p>13. Some learning styles not suited to this style</p> <ul style="list-style-type: none"> • because of need to visualise the whole skill for better understanding. • eg a volleyball player who prefers to have a go at the whole skill may feel inhibited by practising the volleyball serve in parts <p>Whole practice</p> <p>14. This method is practising the complete movement without splitting into sub routines</p>	
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<p>Mental Picture</p> <p>Kinesthesia</p> <p>Skill Classifications</p> <p>Level of Learning</p> <p>Experience</p>	<ul style="list-style-type: none"> • eg practising the complete tennis serve from the throw-up to the follow through. <p>(Positive)</p> <p>15. To give the right idea or to create a mental picture</p> <ul style="list-style-type: none"> • can be referred to as the Gestaltic view / Cognitive Theory • holistic view of skill for open skills to be able to interpret the environment • gives greater overall understanding • eg completing all elements of the triple jump <p>16. Whole to enable true kinesthesia</p> <ul style="list-style-type: none"> • 'real' feel for the skill • eg to feel the whole movement when performing a handspring in gymnastics <p>17. Encourages fluency</p> <ul style="list-style-type: none"> • improves flow and timing • eg the timing of striking the ball during a golf swing <p>18. Better for continuous / highly organised/ low complexity / simple skills</p> <ul style="list-style-type: none"> • continuous/high org skills have inextricably linked sub routines / the end of one sub routine becomes the start of the next • the learner can appreciate the relationship between the sub-routines / parts of the skill • eg cycling leg action <p>19. Good for rapid / ballistic / powerful skills</p> <ul style="list-style-type: none"> • eg shot putt <p>20. Can be better for beginners if skill is simple / low in organisation</p> <ul style="list-style-type: none"> • eg a serve in badminton <p>21. Can be better for more experienced</p> <ul style="list-style-type: none"> • because they have learned the sub-routines • have developed motor programmes • eg an elite basketball player practising shooting <p>22. Reduces amount of information processed</p> <ul style="list-style-type: none"> • can be easier for beginners • eg a beginner hockey player learning to hit the ball <p>(Negative)</p> <p>23. Is too difficult or complicated</p> <ul style="list-style-type: none"> • can create too much failure (esp for beginner) • eg a beginner attempting to perform a lay-up in basketball 	
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<p>Complexity</p> <p>Motivation</p> <p>Danger</p>	<p>24. Less experienced may experience low confidence levels</p> <ul style="list-style-type: none"> • develops low self-esteem • eg a novice netball player when shooting <p>25. Difficult for complex / fine skills</p> <ul style="list-style-type: none"> • eg a batsman in cricket or a snooker player <p>26. Can be de-motivating if not progressing or improving</p> <ul style="list-style-type: none"> • can lead to drive reduction / learned helplessness • eg a novice who keeps failing at serving in tennis <p>27. Can be dangerous</p> <ul style="list-style-type: none"> • if not skilled or physically able • or is immature • eg a novice trying a vault in gymnastics <p>Extended knowledge</p> <p>28. Progressive-part</p> <p>29. involves building up skill through practising increasingly complex actions / building blocks / gradual inclusion of additional parts</p> <p>see relevant indicative content on part practice don't double credit – look for good Egs</p> <p>30. Whole part whole</p> <p>31. this involves practising the complete skill then splitting into sub routines and then practising as a complete skill again</p> <p>see relevant indicative content on whole and part practice don't double credit – look for good Egs</p>	
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SECTION C – Socio-Cultural Studies relating to participation in physical activity

Question	Answer	Marks	Guidance
3 (ai)	2 marks for 2 from: 1. (Physical activity) any reference to movement or movement that raises heart rate / getting heart pumping harder than when at rest 2. (Exercise) Planned or structured actions/ requires effort/ aimed at improving health and fitness / physical exertion / high intensity activity with a purpose / aerobic or anaerobic training	2	1. What you do to have an HBL / BAH = TV 2. Movement for a set time = TV
3 (aii)	1 marks for 1 from: 1. Nutritious diet / free from injury or illness / adequate sleep or rest / hobbies or social life / good personal hygiene / controlled stress / healthy relationships	1	Do not accept diet / hygiene / sleep/ stress/ relationships on own Healthy Eating = BOD
3 (bi)	4 marks for 4 from: Submax 2 for characteristics: Characteristics: 1. Set time/ set duration 2. Set place/ designated place/ purpose built facilities/ measured pitch/ court 3. People with prowess/ skills and endeavour/effort / aesthetically pleasing / professionals/ elite 4. Set of rules/ official rules/ NGB rules/ officials/ codification 5. Requires high level of commitment/ training/ coaching 6. With sportsmanship/ fair play 7. Sponsorship/ media interest/ commercialised 8. Can be highly funded 9. Specialist equipment/ technology/ specific kit 10. Spectators often present/ crowds/ supporters 11. Clearly defined roles or positions Submax 2 for benefits Benefits: 12. Personal satisfaction / intrinsic rewards / improved self confidence 13. Sense of achievement / leadership / communications skills / teamwork 14. Winning/ pride from winning 15. Health benefits/ fitness / stress relief / 16. Prize money /Medals 17. Fame/ status / Media attention/ sponsorship 18. Gain record/ title	4	1. Do not accept competitive or organised 2. Do not accept 'leagues /matches / tournaments without explanation 6. Accept 'gamesmanship' / deviance with some explanation. Beware of candidates who mix characteristics and benefits. Mark first attempt at characteristics on each line only. If a candidate tries several attempts on each line we cannot accept the subsequent attempts

3 (bii)	<p>3 marks for 3 from:</p> <ol style="list-style-type: none"> 1. <u>Public</u> funding from... government / exchequer / local authority / taxes /lottery / world class funding / world class (pathway) programmes /world class talent or development or podium / athlete personal awards 2. <u>Private</u> funding from sponsorship or endorsements from companies or businesses / corporations /investors or entrepreneurs / golden triangle / from TV rights or TV companies / prize or appearance money / from advertisers or advertising / ticket sales 3. <u>Voluntary</u> funding ...donations or individuals/charities / fundraising or scholarships or bursaries / Sports Aid grants / TASS (talented athlete scholarship scheme) 4. (Agency distribution) UK Sport or Sport England or home country councils distribute lottery funding / NGBs provide funding distribute funding from home country sports councils / Sport England 	3	<p>For points 1 2 3 candidate must first identify the type of funding, for example public and then make at least one reference to one of the descriptions included</p> <p>e.g. Public funding is from the government.</p> <p>Stamp KU on each type of funding identified</p>
3 (c)	<p>4 marks for 4 from:</p> <p>Government – submax 3 marks</p> <ol style="list-style-type: none"> 1. Government have introduced a range of initiatives in order to increase mass participation or elite sport e.g. Fit For Life e.g. World Class Podium 2. Government has improved structure of sport to remain on world stage following 2012 3. Government providing more funding and support to raise the quality/ standard of sport / given more money to agencies to invest / more grass roots funding 4. Creation of the DCMS <p>Sporting organisations – submax 3 marks</p> <ol style="list-style-type: none"> 5. Institutes of Sports established / agencies offering sport scientists, physios, career advice, coaching conferences / provision of high level facilities equipt 6. NGBs had to ensure success at global events to secure funding 7. Sporting organisation initiatives to increase participation, e.g. ECC's Chance to Shine, LTA's Great British Tennis Weekend 8. Role models now visit schools and clubs to inspire next generation 9. UK Sport has more planning and policies in place to ensure more professional standard 10. More streamlined system for organisation of sport 11. Increased funding to elite athletes 12. Attract more global sporting events to the UK 	4	<p>Accept explanation of 'initiatives' for a single mark if not clearly made specific to government or sporting organisations</p> <p>Candidates must be identify which institution / organisation they are addressing. They cannot write about NGBs under the government heading and access marks.</p>

3 (di)	<p>3 marks for 3 from:</p> <ol style="list-style-type: none"> 1. (Improve performance) increase muscle mass / increase strength / increase aerobic capacity / 2. To lose weight to make a category 3. mask an injury in order to perform 4. recover quicker to train more frequently 5. (psychological) steady an athlete's nerves 6. increase aggression which could benefit an athlete in some sports like boxing 7. increase arousal/ motivation which may make them more alert 8. due to pressure from coaches/ media/ peers/ family 9. fear of failure 10. gain prize money/ gain sponsorship deal / for fame 11. level the playing field/ because they think everyone else is taking them so in order to compete they need to take them too / believe they can get away with it. 	3	<p>Do not accept to win Do not accept one word answers Do not accept to improve performance = TV</p>
3 (dii)	<p>3 marks for 3 from:</p> <ol style="list-style-type: none"> 1. Stricter bans / harsher punishments/ life bans/ fines / banned / name and shame / strip of medals titles 2. More frequent/ stricter/ more rigorous testing 3. More out of season testing 4. More money into testing to make tests better 5. Educate athletes/ coaches on risks of taking drugs / make more aware of side effects 6. Role models to support 'no drug' position 7. Unified/ consistent policies about drugs in sport 8. Legalise all drugs / create separate drugs Olympics 	3	<p>Point 2 – candidate needs to be clear that there needs to be an improvement in testing – whether that's frequency/ accuracy etc – but must be about tests being more rigorous</p> <p>Point 3 – candidate must be clear on the fact that a solution would be more out of season testing – just saying more testing would not be acceptable.</p>

3 (e)* Level Descriptors	Discriminators
<p>Level 3 (8 – 10 marks) A comprehensive answer:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • At the top of this level answers should include a detailed discussion of a range of benefits to both sport and society. • Examples are frequent, relevant and support the points made • Detailed explanation of how Governments use sport as a political tool using examples or case studies • At the bottom of this level there should be good discussion of the benefits to both sport and society, but not necessarily in equal detail. • Examples are relevant but not extensively used • There may be less detail with regards to how Government's use sport as a political tool using only a few examples
<p>Level 2 (5 - 7 marks) A competent answer:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • At the top of this level answers should explain some benefits to sport and society • More relevant examples • Some explanation of how Government's use sport as a political tool. • At the bottom of this level the response may only focus on sport or society, or be unbalanced • The response may be more descriptive, rather than explanatory. • Limited or vague examples • There may be some reference to how Governments use sport as a political tool but it is likely to be basic
<p>Level 1 (1 - 4 marks) A limited answer:</p> <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • At the top of this level answers should identify a few benefits to sport or society, perhaps with some description. • Some attempted examples but not necessarily. • Limited attempt, if any, to explain how Governments use sport as a political tool • At the bottom of this level, one or two benefits of being a host country will be stated but with no description • Benefits will be brief/ basic/ simplistic with no examples. • No reference to Government's using sport as a political tool.
<p>[0 marks] No response or no response worthy of credit.</p>	

Question	Answer	Guidance
3(e)*	<p>Indicative content: Candidate responses are likely to include: (relevant responses not listed should be acknowledged)</p> <p>Numbered points = knowledge / understanding</p> <p>Bullet points = likely to be development of knowledge</p>	
	<p>Benefits to sport:</p> <ol style="list-style-type: none"> 1. Increased investment - <ul style="list-style-type: none"> • Increased funding for, or investment in sport (leading up to Games) 2. Higher profile <ul style="list-style-type: none"> • Due to more media attention / greater interest in sport • Increased sponsorship so more money invested 3. World class facilities <ul style="list-style-type: none"> • Legacy of facilities / (world class) facilities for city / world class facilities for other areas • Upgraded training facilities elsewhere • Eg swimming or diving facilities 4. Institutes improve provision <ul style="list-style-type: none"> • Improved or world class sport science support • Improved or world class sports medicine back up • eg EIS or other • eg at Bisham Abbey or other 5. Organisation / administration improved <ul style="list-style-type: none"> • Efficiency of NGB's • Better communication • More partnership work between organisations 6. Success/ improved elite performance for host country <ul style="list-style-type: none"> • Host countries often win more medals than 'usual' 7. Increased chance of hosting other events <ul style="list-style-type: none"> • Country becomes more attractive as host for other international events • E.g. World Cup 8. Increased participation <ul style="list-style-type: none"> • More people involved in sport could potentially result in more money being directed into sport 	

	<p>9. Increased participation at base of sports development pyramid which provides opportunity for more progression</p> <ul style="list-style-type: none"> • More people getting involved means more potential for talent to come through/ bigger selection to draw from <p>Benefits to society:</p> <p>10. Legacy</p> <ul style="list-style-type: none"> • Legacy / upgraded amenities for area / urban renewal / regeneration or rejuvenation of (deprived) area • Eg housing from 'Olympic village' for new residential community / offices <p>11. Transport/ infrastructure improved</p> <ul style="list-style-type: none"> • Better road/ rail links both in local area and across country <p>12. Tourism/ business profit / economic benefit</p> <ul style="list-style-type: none"> • Income for many businesses as a result of tourism • E.g. hotels/ restaurants/ shops/ tourist attractions • Both in immediate area and across the country <p>13. Jobs/ employment opportunities increased</p> <ul style="list-style-type: none"> • More employment opportunities in hospitality, building, security etc <p>14. Volunteering increased</p> <ul style="list-style-type: none"> • Increased number of volunteers which develops peoples skills/ builds confidence/ feel good factor/ builds pride <p>15. Integration / co-op / overcoming discrimination</p> <ul style="list-style-type: none"> • Increased social integration or co-operation or understanding or tolerance / brings people together / sense of belonging • Reduced discrimination (due to high profile of Paralympics) <p>16. Increased participation / campaigns / role models / BAHL's</p> <ul style="list-style-type: none"> • Increased participation due to campaigns /competitions (in schools) / focus on TV • Impact of role models inspire others to start participating in sport or physical activity • E.g. Usain Bolt /accept named role model • More people having/ following a balanced, active and healthy lifestyle / improved health or fitness <p>17. Reduced crime</p> <ul style="list-style-type: none"> • Positive distraction/ something else to do 	Increased housing
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	<ul style="list-style-type: none"> • Feel good factor makes acts of crime less likely • Involvement in positive pastime reduces chance of young people becoming bored and turning to crime <p>18. Urban renewal of areas hosting games</p> <ul style="list-style-type: none"> • Development of local areas to games makes it nicer for visitors and local people • Could be development of areas elsewhere linked to games • Eg increased housing after Games • Increases pride in local area, again reducing potential for crime <p>19. Sense of belonging</p> <ul style="list-style-type: none"> • Feel good factor • Increased sense of belonging may reduce discrimination/ bullying/ mental health issues <p>Sport as a political tool:</p> <p>20. Nation building</p> <ul style="list-style-type: none"> • Showcasing the country/ increasing status/ prestige • Increase national pride • Puts the country on the map <p>21. Shop window effect</p> <ul style="list-style-type: none"> • Gain publicity • Improves the country's image <p>22. Appeasement</p> <ul style="list-style-type: none"> • Appeasement or morale or (national) pride or patriotism or medals for host nation or supporters/unites or brings country together • Reduces chance of discontent/ riots <p>23. Success of Olympics reflects political success</p> <ul style="list-style-type: none"> • Can be used to show strength/ power of country • Vote winner for future elections <p>Eg Berlin Olympics 1936 – Nazi party – Arian supremacy Eg Beijing Olympics 2008 – show success of the ruling communist party.</p> <p>24. Boycotting</p> <p>Eg Moscow 1980 – boycott by USA & others over Afghanistan Eg LA 1984 – boycotted in retaliation by USSR</p>	<p>is included in point 10 too – so should only be credited once under the appropriate point – unless making reference to both areas</p> <p>e.g. if talking about renewal and development of areas then point 18, however if talking about leaving a legacy and use housing as example credit with point 10</p>
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