

GCE

Physical Education

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

Advanced Subsidiary GCE

Mark Scheme for June 2014

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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.

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These are the annotations, (including abbreviations), including those used in scoris, which are used when marking

Annotation	Meaning of annotation
	Blank Page – this annotation must be used on all blank pages within an answer booklet (structured or unstructured) and on each page of an additional object where there is no candidate response.

Question			Answer	Marks	Guidance	
1	(a)	(i)	4 marks for 4 from: 1. Pivot / Gliding / Cartilaginous 2. Extension 3. Erector Spinae 4. Rectus Abdominus	4	Mark first attempt only	
		(ii)	1 mark for 1 from: 1. Multifidus / Transverse abdominus / Erector spinae / Sacrospinalis / Obliques / Rectus abdominus	1	Mark first attempt only	

Question			Answer	Marks	Guidance															
1	(b)	(i)	<p>3 marks for 3 from: The bridge compared to the handstand:</p> <ol style="list-style-type: none"> has more points of contact (on the floor) has a wider or larger base or larger area of support has a lower centre of mass or gravity line of gravity at centre of base of support / line of gravity falls further within the base of support line of gravity is easier to keep in the centre of the base of support 	3	<table border="1"> <thead> <tr> <th>Accept</th> <th>Do not accept</th> </tr> </thead> <tbody> <tr> <td>Opposites throughout</td> <td></td> </tr> <tr> <td>1.</td> <td></td> </tr> <tr> <td>2.</td> <td></td> </tr> <tr> <td>3. CoM for centre of mass/ shorter line of gravity=BOD</td> <td></td> </tr> <tr> <td>4. central line of gravity</td> <td></td> </tr> <tr> <td>5.</td> <td></td> </tr> </tbody> </table>		Accept	Do not accept	Opposites throughout		1.		2.		3. CoM for centre of mass/ shorter line of gravity=BOD		4. central line of gravity		5.	
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	(b)	(ii)	<ol style="list-style-type: none"> (Description) Movement around a fixed point or axis (of rotation) / generated by an eccentric force or force that travels outside the centre of mass or gravity (Example) (whole body) a gymnast swings on or around the bar (part of a body) any mention of movement of a limb around its joint. e.g. lower leg rotates around the knee joint when kicking a ball arm action in front crawl around the shoulder joint (other) a bicycle wheel rotates around its axis 	2	<table border="1"> <thead> <tr> <th>Accept</th> <th>Do not accept</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>movement that makes a circle = TV</td> </tr> <tr> <td>2. gymnast on the bars</td> <td>without reference to an axis e.g. wheels on a bike / arm action in swimming / legs when cycling / somersault / spinning ball without reference to a sport e.g. flexion of the elbow on own</td> </tr> </tbody> </table>		Accept	Do not accept	1.	movement that makes a circle = TV	2. gymnast on the bars	without reference to an axis e.g. wheels on a bike / arm action in swimming / legs when cycling / somersault / spinning ball without reference to a sport e.g. flexion of the elbow on own								
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1	(c)	(i)	<p>2 marks for 2 from (At rest)</p> <p>1. 4 – 6 l/min or lmin⁻¹ or litres/min or litresmin⁻¹ or l or litres 4,000 - 6,000 ml/min or mlmin⁻¹ or or ml</p> <p>(During maximal exercise)</p> <p>2. 20 - 40 l/min or lmin⁻¹ or litres/min or litresmin⁻¹ or l or litres 20,000 – 40,000 ml/min or mlmin⁻¹ or ml</p>	2	<table border="1"> <thead> <tr> <th>Accept</th> <th>Do not accept</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>without units</td> </tr> <tr> <td>2.</td> <td>without units</td> </tr> </tbody> </table>	Accept	Do not accept	1.	without units	2.	without units										
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1	(c)	(ii)	<p>4 marks for 4 from Conduction system should be considered in the correct order to gain marks.</p> <p>1. SA node or sino-atrial node or SAN initiates or sends an impulse</p> <p>2. this causes atrial systole or atrial depolarisation or contraction of atria</p> <p>3. blood forced or pushed or flows from the atria to the ventricles or out of the atria or through AV valves</p> <p>4. impulse travels to or is received by the AV node or atrio-ventricular node or AVN / AV node sends impulse</p> <p>5. impulse continues down the bundle of His <u>and</u> to the Purkinje fibres</p> <p>6. Causing ventricular systole or ventricular depolarisation or contraction of ventricles</p> <p>7. blood is ejected from the ventricles</p>	4	<table border="1"> <thead> <tr> <th>Accept</th> <th>Do not accept</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>pacemaker</td> </tr> <tr> <td>2.</td> <td>systole or depolarisation or contraction on own</td> </tr> <tr> <td>3. bicuspid and / or tricuspid vales</td> <td></td> </tr> <tr> <td>4.</td> <td></td> </tr> <tr> <td>5.</td> <td></td> </tr> <tr> <td>6.</td> <td>systole or depolarisation or contraction on own</td> </tr> <tr> <td>7.</td> <td></td> </tr> </tbody> </table>	Accept	Do not accept	1.	pacemaker	2.	systole or depolarisation or contraction on own	3. bicuspid and / or tricuspid vales		4.		5.		6.	systole or depolarisation or contraction on own	7.	
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1	(d)	<p>4 marks for 4 from</p> <ol style="list-style-type: none"> 1. <u>external</u> intercostals contract 2. diaphragm contracts or flattens 3. (which) pulls or moves the rib cage up <u>and</u> out 4. increasing the volume of the thoracic cavity or thorax or lungs 5. decreasing the pressure within thoracic cavity or thorax or lungs / pressure within thoracic cavity is less than atmospheric pressure 6. forcing air into the lungs / air enters the lungs 	4	<table border="1"> <thead> <tr> <th>Accept</th> <th>Do not accept</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td></td> </tr> <tr> <td>2. lowers</td> <td></td> </tr> <tr> <td>3. ribs</td> <td></td> </tr> <tr> <td>4. increasing size of thoracic cavity or lungs/ thorax / chest or chest cavity or rib cage / expands or increased area in lungs = BOD</td> <td>increasing volume on own / creating more room</td> </tr> <tr> <td>5. decreasing pressure on own if linked to thoracic cavity or thorax or lungs referred to in pt 4.</td> <td>decreasing pressure on own</td> </tr> <tr> <td>6. lungs fill with air / breathe air in = BOD</td> <td>breathe in on own / reference to oxygen</td> </tr> </tbody> </table>	Accept	Do not accept	1.		2. lowers		3. ribs		4. increasing size of thoracic cavity or lungs/ thorax / chest or chest cavity or rib cage / expands or increased area in lungs = BOD	increasing volume on own / creating more room	5. decreasing pressure on own if linked to thoracic cavity or thorax or lungs referred to in pt 4.	decreasing pressure on own	6. lungs fill with air / breathe air in = BOD	breathe in on own / reference to oxygen	
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(e)* Levels of Response	
Generic 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 	<p>At level 3 responses <u>are likely</u> to include:</p> <ul style="list-style-type: none"> • Detailed description of the receptors • Detailed description of neural regulation of cardiac system • Detailed description of neural regulation of respiratory system <ul style="list-style-type: none"> ○ Inspiration and expiration • Explanation of the effect on endurance performer
<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 	<p>At level 2 responses <u>are likely</u> to include:</p> <ul style="list-style-type: none"> • Satisfactory description of the receptors • Satisfactory description of neural regulation of cardiac system • Satisfactory description of neural regulation of respiratory system • Reference to the effect on endurance performer
<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 	<p>At level 1 responses <u>are likely</u> to include:</p> <ul style="list-style-type: none"> • Basic description of the receptors • Basic description of neural regulation of cardiac system • Basic description of neural regulation of respiratory system • Little or no reference to the effect on endurance performer
<p>[0 marks] No response or no response worthy of credit.</p>	

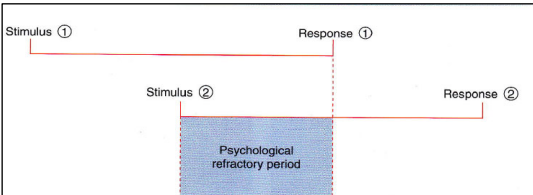
Question	Answer	Marks	Guidance
1 (e)*	<p>Indicative content: Candidate responses are likely to include: (relevant responses not listed should be acknowledged)</p> <p>Numbered points = knowledge / understanding</p> <p>Bullet points = likely to be development of knowledge</p> <p>General</p> <ol style="list-style-type: none"> 1. Neural control is under Autonomic Nervous System or ANS control 2. uses the sympathetic nervous system <p>Receptors during physical activity</p> <ol style="list-style-type: none"> 3. Chemoreceptors <ul style="list-style-type: none"> • detect increase in (pp)CO₂ or carbonic acid or lactic acid or acidity • detect decrease in (pp)O₂ or pH 4. Proprioceptors <ul style="list-style-type: none"> • detect (increase in) motor activity or movement 5. Baroreceptors <ul style="list-style-type: none"> • detect increase in blood pressure • detect increased stretch of arterial or blood vessel wall • detect increased stretch of lung walls 6. Thermoreceptors or temperature receptors <ul style="list-style-type: none"> • detect increase in blood temperature <p>Cardiac System</p> <ol style="list-style-type: none"> 7. information sent to the CCC or cardiac control centre (in medulla oblongata) <ul style="list-style-type: none"> • impulses sent via the (cardiac) accelerator nerve 8. to increase the firing rate or stimulate the SA node 9. increasing heart rate <p>(overall effect...)</p> <ol style="list-style-type: none"> 10. increases cardiac output or Q <ul style="list-style-type: none"> • $Q = SV \times HR$ / cardiac output = stroke volume x heart rate 	10	

Question	Answer	Marks	Guidance
	<p>Respiratory System</p> <p>11. information sent to RCC or respiratory control centre (in medulla oblongata)</p> <p>12. (which) stimulates the inspiratory centre</p> <p>(inspiration...)</p> <p>13. increased stimulation or force of contraction of diaphragm</p> <ul style="list-style-type: none"> • via phrenic nerve <p>14. increased stimulation or force of contraction of external intercostals</p> <ul style="list-style-type: none"> • via intercostal nerve <p>15. recruitment or stimulation of additional (inspiratory) muscles e.g. sternocleidomastoid or SCM or scalenes or pectoralis minor</p> <p>(mechanics of inspiration compared to rest)</p> <p>16. rib cage or ribs move up and out further</p> <p>17. volume of thoracic cavity increases further</p> <p>18. pressure inside thoracic cavity decreases further</p> <p>19. more air rushes in</p> <p>20. increases depth of breathing or tidal volume or TV</p> <p>(expiration)</p> <p>21. expiratory centre stimulated (by baroreceptors or stretch receptors)</p> <p>22. expiration becomes active</p> <p>23. recruitment or stimulation expiratory muscles e.g. internal intercostals or obliques or rectus abdominus or transverse abdominus or abdominals</p> <p>(mechanics of expiration compared to rest)</p> <p>24. rib cage or ribs move down and in further</p> <p>25. volume of thoracic cavity decreases further</p> <p>26. pressure inside thoracic cavity increases further</p> <p>27. more air forced out</p> <p>28. increases rate of breathing or breath frequency or ventilation rate</p> <p>(overall effect)</p> <p>29. increases minute ventilation or VE</p> <ul style="list-style-type: none"> • $VE = TV \times f$ / Minute ventilation = Tidal Volume x breath frequency 		

Question	Answer	Marks	Guidance
	<p>Effect on endurance performer</p> <p>30. endurance performer relies on supply of oxygen to working muscles or aerobic respiration or the aerobic system</p> <p>(increased heart rate or cardiac output means ...)</p> <p>31. more oxygen or blood to the working muscles (per minute)</p> <p>(increased tidal volume or minute ventilation means ...)</p> <p>32. more oxygen inspired or breathed in (per breath or per minute)</p> <p>(so ...)</p> <p>33. increase in aerobic respiration</p> <p>34. performer will be able to work for longer / greater endurance capacity</p> <p>35. performer will be able to work at a higher intensity</p> <p>36. less build up of lactic acid e.g. run or cycle or swim faster</p> <p>37. delayed fatigue or lactate threshold or OBLA / (accept) – increased lactate threshold or OBLA</p> <p style="text-align: right;">[Total: 30 marks]</p>		

Section B Acquiring Movement Skills

Question		Answer	Marks	Guidance										
2	(a)	<p>Four marks for four from:</p> <p>(self-paced)</p> <p>1. when the performer has control over the speed or timing of the skill or chooses or decides when to start or perform the skill / when performer has (a more or a higher degree of) control over the speed or timing of the skill</p> <p>2. any example where the performer has control over the speed or timing or starting of the skill - e.g. tennis serve or javelin throw or golf swing / free kick in football</p> <p>(externally-paced)</p> <p>3. when the environment or opponent or external factors have control over the speed or timing of the skill or determine when the skill is performed / when the environment or opponent has (a more or a higher degree of) control over the speed or timing of the skill</p> <p>4. any example where the environment or opponent has control over the speed or timing or starting of the skill e.g. receiving a tennis serve or receiving a pass in football / having to pass in a game when opponent running in for a tackle / sprint start</p>	4	<table border="1"> <thead> <tr> <th>Accept</th> <th>Do not accept</th> </tr> </thead> <tbody> <tr> <td> <p>1. when environment doesn't control speed or timing= BOD /</p> <p>it doesn't have to be done at a set time - BOD</p> </td> <td> <p>pace / pacing</p> <p>...unless there is ref to speed or timing or starting</p> </td> </tr> <tr> <td>2.</td> <td>chosen speed of running or walking (sprint / marathon)</td> </tr> <tr> <td> <p>3.opposite – when performer doesn't control speed or timing - BOD</p> </td> <td> <p>pace / pacing /</p> <p>...unless there is ref to speed or timing or starting /</p> <p>Reacting to opponent on own</p> </td> </tr> <tr> <td>4.</td> <td> <p>chosen speed of running or walking (sprint / marathon) /</p> <p>passing in hockey on own / tackling in rugby on own</p> </td> </tr> </tbody> </table>	Accept	Do not accept	<p>1. when environment doesn't control speed or timing= BOD /</p> <p>it doesn't have to be done at a set time - BOD</p>	<p>pace / pacing</p> <p>...unless there is ref to speed or timing or starting</p>	2.	chosen speed of running or walking (sprint / marathon)	<p>3.opposite – when performer doesn't control speed or timing - BOD</p>	<p>pace / pacing /</p> <p>...unless there is ref to speed or timing or starting /</p> <p>Reacting to opponent on own</p>	4.	<p>chosen speed of running or walking (sprint / marathon) /</p> <p>passing in hockey on own / tackling in rugby on own</p>
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2 (b)	<p>4 marks for 4 from:</p> <ol style="list-style-type: none"> when a second stimulus is presented before the first stimulus has been responded to / time between S2 and R1 / (ref diagram below)  <ol style="list-style-type: none"> after the presentation of the first stimulus or dummy move, processing or perception occurs or a decision is made when second stimulus is presented, then further processing or a second decision must be made (.....this causes) a delay or an increase in reaction or response time (...because of) the single channel hypothesis / because the brain is (seen as) a single channel organ only one piece of information can be processed at a time / brain or performer has to process the first stimulus before responding to the second stimulus / brain or performer cannot react to or deal with second stimulus until first stimulus has been processed or responded to 	4	Accept	Do not accept Diagram on own – without S2 and R1 and PRP labelled
			1. when a performer is presented with two stimuli in a short space of time = BOD	
			2.	decision making on own / dummy on own
			3.	
			4. suitable practical example of delay	
			5.	
			6. ref to bottleneck = BOD	

Question		Answer	Marks	Guidance	
2	(c)	<p>6 marks for 6 from:</p> <p>Visual guidance</p> <p>1. (Description with example) showing or watching correct action or what needs to be done (if not given in 2) / giving mental picture or demonstration / using pictures or posters or charts or court or pitch markings etc / using DVD or video analysis</p> <p>2. (Benefit): builds mental picture or image (if not given in 1) / let's learner know what 'skill' looks like / increases understanding (of movement)</p> <p>Verbal guidance</p> <p>3. (Description with example): giving instructions or information or coaching points or feedback / talking through what needs to be done or talking through tactics (if not given in 4) / 'keep head up' / 'tuck tighter' or other suitable e.g.</p> <p>4. (Benefit): builds on knowledge gained by visual guidance / gives information to improve performance / good for tactics or strategies (if not given in 3) / highlights weaknesses / helps focus on key aspects / gives detail</p> <p>Mechanical guidance</p> <p>5. (Description with example): use of equipment or apparatus or aids or technology / using twisting belts or arm bands or scrum machine or tackle pads or stabilisers or other suitable example</p> <p>6. (Benefit): gives confidence / encourages correct proprioception or kinaesthesia / increases safety</p>	6	Accept	Do not accept
				1. answers such as: <i>watching a golf drive / watching a demo / demonstrating forward roll/ watching video of football pass/ using video analysis</i>	
				2.	good for cognitive learners on own/ raises confidence or motivation/ learn how to do it
				3. answers such as: <i>explaining how to drive from blocks / listening to half time talk / explaining tactics</i>	
				4. can be given during performance	raises confidence or motivation / learn how to do it
				5.	cones / flags etc
				6.	Good for autonomous learners on own/ learn how to do it

(d) 6 marks		Accept	Do not accept
Description of cognitive theory of learning (sub max 5)			
1. (Problem solving)	(learning by) problem solving / (some) trial and error / problem not necessarily solved immediately		
2. (perception)	involves perception or intelligence or reasoning or understanding / an intellectual or perceptual or mental process	makes sense of / works out	involves the brain or thinking / mental rehearsal
3. (whole)	Gestalt / problem or situation or skill considered as a whole / (learning occurs by) thinking about the whole problem		
4. (insight/intuition)	insight (learning) / intuitive (learning)		
5. (intervening variables)	intervening variables (drawn together or made sense of)		
6. (learning optimised)	a way of thinking to optimise learning / schema broadened		
7. (past experience)	using past experience (to form a response)		
Practical example of cognitive theory applied to the learning of healthy lifestyles (sub max 1)			
8.	<ul style="list-style-type: none"> • a person wants to improve body shape... they realise that increasing physical activity will help ... they start swimming interval training ... they feel healthier ... their body shape improves ... the problem has been solved • working out the best way to keep fit / understanding that jogging reduces weight / returning to a particular training routine because it was successful before • understanding the components of a healthy diet / understanding how a healthy diet contributes to a BAHL / understanding the importance of 5-a-day • understanding that commitment to an exercise programme improves BAHL • realising (insight) that if someone continues to increase the distance they run on the treadmill they will be better able to keep running throughout the netball game 		

(e)* Levels of Response	
Generic 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 	<p>At level 3 responses <u>are likely to include:</u></p> <ul style="list-style-type: none"> • all theories described in detail <ul style="list-style-type: none"> ○ reference to effects of arousal on a range of variables ○ reference to dominant response in drive theory • critical evaluation of at least two theories <ul style="list-style-type: none"> ○ positive and negative points included • .. at top of level, critical evaluation of all theories <ul style="list-style-type: none"> ○ positive and negative for each theory
<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 	<p>At level 2 responses <u>are likely to include:</u></p> <ul style="list-style-type: none"> • satisfactory description of theories • critical evaluation attempted but not necessarily showing balance <ul style="list-style-type: none"> ○ between theories ○ between positive and negative points
<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 	<p>At L1 responses <u>are likely to include:</u></p> <ul style="list-style-type: none"> • superficial descriptions of theories • little or no critical evaluation
<p>[0 marks] No response or no response worthy of credit.</p>	

Question		Answer	Marks	Guidance
2	(e)*	<p>Indicative content: Candidate responses are likely to include: (relevant responses not listed should be acknowledged)</p> <p>Drive theory</p> <p>Description</p> <ul style="list-style-type: none"> • there is a linear relationship or positive correlation between arousal and performance or between arousal and the dominant response / as arousal increases, performance increases • $B = HxD$ / Behaviour = Habit x Drive • a dominant response is more likely as arousal increases <ul style="list-style-type: none"> ○ learned behaviours or stored motor programmes are dominant responses <p>Drive theory - Critical evaluation</p> <p>Strengths / positive:</p> <ol style="list-style-type: none"> 1. it explains high performance by experts (at high arousal) <ul style="list-style-type: none"> • ...because their dominant response (likely to be) correct • ...because experts can cope with higher levels of arousal / experts need to be challenged e.g. Team GB performer at London 2012 Olympic Games 2. it explains high performance at dynamic or explosive or ballistic skills 3. it helps teachers and coaches when coaching novices ... (as they understand that) <ul style="list-style-type: none"> • ... novices need low arousal to learn /novices learn or perform badly with high arousal <p>Weaknesses / negative:</p> <ol style="list-style-type: none"> 4. it isn't applicable to novices <ul style="list-style-type: none"> • ...because their dominant response (likely to be) incorrect • ...so low performance (at high arousal) 5. linear relationship or positive correlation hardly ever occurs 6. it doesn't take into account nature of task or personality or ability / potential 7. it does not explain decline in performance (at high arousal) 8. it doesn't explain how performers can produce high performance with low arousal 	10	<p>Accept graph</p> <p>for experts – accept autonomous learners</p> <p>for novices – accept beginners / cognitive learners</p>

Question	Answer	Marks	Guidance
	<p>Inverted U theory</p> <p>Description</p> <ul style="list-style-type: none"> • as arousal increases, performance increases up to an optimum or midway point • after that, or if arousal continues to rise or goes beyond moderate, performance will decrease • optimal arousal is where the potential to learn and perform well is maximised <p>Inverted U theory - Critical evaluation</p> <p>Strengths / positive:</p> <p>9. theory takes into account different variables (task type, personality, skill level)</p> <p>10. it recognises that optimum levels of arousal are not the same for all activities or all performers</p> <ul style="list-style-type: none"> • the inverted U can shift (along the x axis) <p>11. (shift)...depending on task type</p> <ul style="list-style-type: none"> • it suggests complex or fine skills best with low arousal • it suggests simple or gross skills best with high arousal <p>12. (shift) depending on personality e.g. extroverts coping with higher arousal</p> <ul style="list-style-type: none"> • extroverts cope better with high(er) arousal accept opposite) <p>13. (shift)...depending on skill level or experience</p> <ul style="list-style-type: none"> • optimum performance for experts at higher arousal / optimum performance for novices at lower arousal <p>14. it takes into account that performance can decline even with high arousal</p> <p>15. links with cue-utilisation or perceptual narrowing or attention narrowing</p> <ul style="list-style-type: none"> • if under aroused: attentional field too broad / can't concentrate / info overload / 'noise' • at optimum point: cue utilisation occurs / optimal attentional field / performer able to concentrate or selectively attend • if over aroused: attentional field too narrow / cues are missed / hypervigilance or anxiety or nerves or panic occur <p>Weaknesses / negative:</p> <p>16. (conflicting views) it doesn't take into account other variables</p> <ul style="list-style-type: none"> • does not take into account task or ability or personality <p>17. increase or decrease in performance rarely smooth or steady or gradual</p> <ul style="list-style-type: none"> • it doesn't explain a sudden drop in performance • with high arousal some performers improve 		<p>Accept graph that clearly links with bullet/s 1-2</p> <p>Accept 15 + DEVS if linked with catastrophe theory</p>

Question	Answer	Marks	Guidance
	<p>18. it only considers somatic or physical arousal</p> <p>Catastrophe theory – Description</p> <ul style="list-style-type: none"> • theory is about the effects of different types of anxiety or arousal <ul style="list-style-type: none"> ○ cognitive: the mind / mental anxiety / apprehension / worry ○ somatic: the body / physiology • (2) as (somatic) arousal increases, performance increases up to an optimum or midway point • optimal arousal is where the potential to learn and perform well is maximised • (4) if arousal continues to increase or is (too) high there is a sudden or extreme decline in performance or learning / performer ‘goes over the edge’ <ul style="list-style-type: none"> ○ ...if high cognitive arousal coincides with or interacts with high somatic anxiety • ...causing loss of control or coordination or concentration or decision making skills e.g. a golfer on the final green experiences high anxiety and misses an easy putt • (6) if arousal then controlled performance can improve / the upward curve can be rejoined • (7) if arousal continues to increase then performance will continue to decrease <p>Catastrophe theory - Critical evaluation</p> <p>Strengths / positive</p> <p>19. it is more realistic (than others)</p> <p>20. it explains why performance can suddenly or dramatically decline</p> <p>21. it is a multidimensional theory / it takes various factors into account (cognitive anxiety and somatic arousal)</p> <p>22. it explains how some performers can recover (as they rejoin the upward curve of arousal)</p> <p>Weaknesses / negative:</p> <p>23. some performers never experience a sudden decline (but slowly decline - as suggested by inverted U)</p> <p>24. it does not take task or skill level or personality into account</p> <p>25. it is not a proven theory / it is a theoretical idea</p> <p style="text-align: right;">[Total: 30 marks]</p>		<p>Accept graph that clearly links with bullet/s: 2 4 6 7</p>

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

Question			Answer	Marks	Guidance									
3	(a)	(i)	<p>Candidates must include pt 1) plus pt 2) or pt 3) for mark. The two parts must be 'sensibly' close. 1 mark for:</p> <p>1) teaching / learning / studying + 2) skills / activity / sports / exercise or 3) benefits / values</p>	1	Accept	Do not accept								
						1) education 2) examples of skills/ sports 3) examples of benefits/ values								
3	(a)	(ii)	<p>3 marks for 3 from: benefit <u>and</u> explanation needed for each mark mark first three attempts only</p>	3	Accept	Do not accept								
			<table border="1"> <tr> <td>1. (theory /KU)</td> <td>learning about the body or theory or rules of tactics or benefits of exercise / get qualifications with explanation of how achieved eg via GCSE or A Level PE</td> </tr> <tr> <td>2. (skills)</td> <td>physical benefits or skills with explanation of how achieved e.g. learning to play volleyball / attending visiting coaches' 'clinics'</td> </tr> <tr> <td>3. (prep)</td> <td>preparation for leisure or sport or career or work / increases or encourages lifelong participation / hobby / chance to be competitive with explanation of how achieved e.g. join a club / become PE teacher</td> </tr> <tr> <td>4. (self)</td> <td>(self) confidence or esteem or development / achievement / independence / knowledge of strengths & weaknesses with valid explanation of how achieved e.g. confidence from learning to swim or getting positive feedback from teacher</td> </tr> </table>		1. (theory /KU)	learning about the body or theory or rules of tactics or benefits of exercise / get qualifications with explanation of how achieved eg via GCSE or A Level PE	2. (skills)	physical benefits or skills with explanation of how achieved e.g. learning to play volleyball / attending visiting coaches' 'clinics'	3. (prep)	preparation for leisure or sport or career or work / increases or encourages lifelong participation / hobby / chance to be competitive with explanation of how achieved e.g. join a club / become PE teacher	4. (self)	(self) confidence or esteem or development / achievement / independence / knowledge of strengths & weaknesses with valid explanation of how achieved e.g. confidence from learning to swim or getting positive feedback from teacher	same valid explanation for more than one benefit / any suitable example of how achieved	benefit on own stress relief / catharsis health / fitness
			1. (theory /KU)		learning about the body or theory or rules of tactics or benefits of exercise / get qualifications with explanation of how achieved eg via GCSE or A Level PE									
			2. (skills)		physical benefits or skills with explanation of how achieved e.g. learning to play volleyball / attending visiting coaches' 'clinics'									
			3. (prep)		preparation for leisure or sport or career or work / increases or encourages lifelong participation / hobby / chance to be competitive with explanation of how achieved e.g. join a club / become PE teacher									
4. (self)	(self) confidence or esteem or development / achievement / independence / knowledge of strengths & weaknesses with valid explanation of how achieved e.g. confidence from learning to swim or getting positive feedback from teacher													
	1. other academic qualifications	learning on own												
	2.													
	3.													
	4.													

Question		Answer	Marks	Guidance	
		5. (character) character building / leadership / discipline / loyalty / courage / emotional control / learn to: win-lose or accept defeat / responsibility with explanation of how achieved e.g. leadership from being team captain		5.	
		6. (social/ team work) social (skills or benefits) / teamwork / sharing / co-operation / communication / trustworthiness / interaction / enjoyment / feel good factor / with explanation of how achieved eg group work		6.	friendships=BOD / <i>'teamwork by playing football'</i> (or other named team game) to socialise / social life REPS such as <i>'teamwork by playing in a team'</i>
		7. (commitment) commitment / determination / motivation with explanation of how achieved e.g. turning up for training every week		7.	
		8. (cognitive) cognitive or thinking skills / decision making / problem solving with explanation of how achieved eg planning gymnastics routine		8.	
		9. (fair play) sportsmanship / fair play / morals / respect (for others) with explanation of how achieved e.g. by watching role models		9.	
		10. (quality / aesthetic) qualitative benefits / (improved) quality of life / chance to be creative / achieving excellence / aesthetic appreciation or awareness with explanation of how achieved e.g. working on dance sequence		10.	

Question			Answer	Marks	Guidance	
					If answers are not labelled, take first answer as layer 2 and second answer as layer 3	
3	(b)	(i)	2 marks for 2 from: Both name and linked description must be correct	2	Accept	Do not accept
			Layer 2: 1. <u>Participation</u> (description) school or club or team involvement / extra-curricular / regular or recreational involvement / in leisure time / 'trying out' activities / for health or fitness or friendships or fun or enjoyment or hobby / intermediate level / associative stage / gaining experience / sport for all / Sunday league / more or higher skill than previous level / more dedicated		1. more or higher skill than previous level / more dedicated – once only	helps them get to performance level
			Layer 3: 2. <u>Performance</u> (description) district or county or regional or 'academy' involvement / skilled or committed or dedicated performers / autonomous stage / emphasis on competition or winning / competitions / serious or competitive school or club participation / (regular or high level) training or coaching / semi-pro / structured or organised sport / more or higher skill than previous level / more dedicated		2. more or higher skill than previous level / more dedicated – once only	

Question			Answer	Marks	Guidance	
3	(b)	(ii)	<p>One mark for name of organisation / mark first only Two marks max for associated role Name and role must match</p>	3	Accept	Do not accept information without named organisation
			1.		Sport UK	
			2.		gives money to sport =TV distributes funding=TV	
			3.			
			4.			
			5.		provides science research	
			6.		works with Sport Aid / Sports coach UK / British Paralympic Association (BPA)	
			7.			
			8.			
			9.			
10.						
			<p>1. (name)- UK Sport</p> <p>2. distributes lottery funding / (invests in) World Class (Performance or Pathway) Programme / funds Podium, Development and Talent programme / invests Government or Public funding (into elite sport)</p> <p>3. promotes ethical behaviour / runs anti-doping programme / 100% ME</p> <p>4. bids for or attracts major (sporting) events (e.g. Olympics 2012)</p> <p>5. does research into training or coaching science / Talent ID</p> <p>6. works with or supports NGBs or Home Country Sports Councils or BOA or institutes / (e.g. EIS) / runs Talented Athlete Scholarship System or TASS / supports or funds elite performers in higher education</p>			
			<p>7. (name) – (National) Institutes / EIS / SIS / WIS / SINI / centres of excellence:</p> <p>8. Talent ID / support via hub or satellite sites) e.g. Bath (uni) / Bisham Abbey / Lillleshall / Loughborough (uni) / Roehampton (tennis) or other example</p> <p>9. Sports science or sports medicine or scientific support /e.g. biomechanics /nutrition /psychology /physiotherapy /S&C or other eg</p> <p>10. high quality or specialist coaching or facilities / provides training camps</p>			

Question	Answer	Marks	Guidance	
	11. Performance lifestyle advice (PLA) / career advice / supports performance lifestyle advice (PLA) (of Institutes)		11.	
	12. (name) – National Governing Bodies (NGBs)		12. named NGB	
	13. talent ID / select performers for world class funding or national squads		13.	
	14. work of performance director/s to increase excellence or chance of international success		14. to develop skills = BOD	
	15. build national facility or centre/s / provides world class or high quality facilities		15.	
	16. whole sport plans or one stop plans		16.	
	17. research into training or coaching science		17.	
	18. (name) BOA		18.	
	19. selects Team GB (with NGBs)		19.	
	20. prepares or supports UK's athletes or Team GB / gives medical support / gives advice / enters team for events		20.	
	21. organises transport or team wear		21.	
	22. supports performance lifestyle advice (PLA) (of institutes) / helps athletes develop careers alongside their sport / helps athletes balance their sport with other aspects of their life		22.	
	23. works with National Governing Bodies (NGBs) / provided (pre-Olympic) training camps		23.	
	24. is the (strong, independent) 'voice' for British Olympic Sport / the main Olympic organisation in the UK		24.	
	25. works on Olympic bids		25.	
	26. fund raises / organises an Olympic Day in UK		26.	
	27. appointed official sponsors for London 2012		27.	

Question			Answer	Marks	Guidance	
3	(c)	(i)	<p>3 marks for 3 from:</p> <p>1. idea of De Coubertin / De Coubertin was founder</p> <p>2. (Influenced or inspired by) Ancient Olympic Games</p> <p>3. (Influenced or inspired by) Cotswold (Olympic) Games or (Robert) Dover Games</p> <p>4. (De Coubertin visited or was influenced or inspired by) (Much) Wenlock (Olympian) Games / Dr William Penny Brookes invited De Coubertin to Much Wenlock / shared vision of De Coubertin and Penny Brookes</p> <p>5. (influenced or inspired by) Public Schools/ De Coubertin visited Rugby School or the Public Schools</p>	3	<p>Accept</p> <p>1. reasonable spellings of De Coubertin</p> <p>2.</p> <p>3. shorter versions of DWPBs name e.g. Dr Brookes</p> <p>4.</p> <p>5.</p>	<p>Do not accept</p> <p>De Coubertin on own without context</p> <p>De Coubertin attended these games=X / Ancient Greece</p>
		(ii)	<p>3 marks for 3 from:</p> <p>1. amateurism / taking part 'for the love of it' / taking part without financial gain</p> <p>2. taking part (was considered to be) more important than winning</p> <p>3. peace / tolerance / unity / friendship / understanding between nations /bring people together</p> <p>4. fair play / sportsmanship / moral integrity</p> <p>5. appreciation of physical endeavour (effort) or physical prowess (skill) /' joy from effort'</p> <p>6. to remove or reduce prejudice or discrimination / to increase respect or equality</p> <p>7. character development / educating young people / linking sport with education or culture</p> <p>8. balance between mind and body</p> <p>9. role modelling / showing a good example</p>		3	<p>Accept</p> <p>1. no professionals</p> <p>2.</p> <p>3.</p> <p>4.</p> <p>5.</p> <p>6.</p> <p>7.</p> <p>8.</p> <p>9.</p>

Question			Answer	Marks	Guidance	
3	(d)	(i)	2 marks for 2 from:	2	Accept	Do not accept
			1. cheating / breaking the rules or norms of sport / behaviour that is very different from a generally accepted standard / deliberate act with intention to deceive		1.	
			2. (due to) importance of winning / pressure from sponsors or coaches or peers or other suitable reasons for deviant behaviour in sport		2.	getting or seeking an unfair advantage = TV
			3. (example) drug taking / diving in football or other suitable example		3. 'red card' offences	committing a foul or 'getting a card' on own

Question			Answer	Marks	Guidance		
3	(d)	(ii)	3 marks for 3 from:	3	Accept	Do not accept	
			Direct comparisons needed		Reference to players or spectators	<i>'tails' to answers such as '...whereas gamesmanship does not'</i>	
			Sportsmanship can:				
			1. help make experience enjoyable or successful or fair / help 'game' to flow		stop experience being enjoyable or successful or fair / limit flow	1.	
			2. encourage good or calm atmosphere or good will or friendliness or feel good factor		cause bad feeling or retaliation or hostile atmosphere or violence or frustration	2.	
			3. help referee or officials		hinder referee or officials	3.	
4. often be admired or respected / improve status of, or respect for 'game' or team	often be unpopular / decrease status of or respect for 'game' or team	4.					
5. be good role modelling	be bad role modelling	5.					

(e)* Levels of Response	
Generic 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 	<p>At L3 responses <u>are likely</u> to include:</p> <ul style="list-style-type: none"> • detailed explanation/discussion of the nature of sport in the USA • ...from a broad spread of the mark scheme • factors such as: Lombardianism / 'capitalism' / 'American Dream' / 'golden triangle' – with strong development
<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 	<p>At L2 responses <u>are likely</u> to include:</p> <ul style="list-style-type: none"> • satisfactory explanation/discussion of nature of sport in the USA • ...from a moderate spread of the mark scheme • factors such as: Lombardianism / 'capitalism' / 'American Dream' / 'golden triangle' – with some development
<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 	<p>At L1 responses <u>are likely</u> to include:</p> <ul style="list-style-type: none"> • basic explanation/discussion of the nature of sport in the USA • ...from a limited spread of the mark scheme • factors such as: Lombardianism / 'capitalism' / 'American Dream' / 'golden triangle' – with little or no development
<p>[0 marks] No response or no response worthy of credit.</p>	

Question	Answer	Marks	Guidance
(e)*	<p>Indicative content: Candidate responses are likely to include: (relevant responses not listed should be acknowledged)</p> <p>Numbered points = knowledge / understanding Bullet points = likely development of knowledge</p> <p>General / Background</p> <p>USA -</p> <ul style="list-style-type: none"> • young / powerful • native Indians as indigenous population • (relatively) large population / population > 300 million / 50 states <ul style="list-style-type: none"> ○ large 'pool' for talent i/d <ol style="list-style-type: none"> 1. sports adopted or adapted / marginalisation of British sports <ul style="list-style-type: none"> e.g. American football adapted from rugby / baseball adapted from rounders (some evidence) or sports invented eg basketball & ice hockey invented • new sports for a (relatively) new or young society • (approx) 200 years 'old' 2. (some) sports reflect frontier or pioneer(ing) spirit <ul style="list-style-type: none"> • they are physical or tough or need courage or determination e.g. American football or ice hockey 3. 'big four' sports dominate <ul style="list-style-type: none"> eg American football / baseball / ice hockey / basketball 4. sport a vehicle for achieving American Dream <ul style="list-style-type: none"> • 'Rags to Riches' / opportunity to become wealthy or successful or achieve high status through sport • 'land of opportunity' / 'land of the free' • (countless) immigrants / mixture of different cultures or religions • US a democracy / social equality 5. 'win at all costs' or 'win ethic' or Lombardian ethic / very competitive <ul style="list-style-type: none"> • (Vince Lombardi said) '<i>winning isn't the most important thing, it's the only thing</i>' 6. (evidence of) deviance or match fixing (due to importance of winning) <ul style="list-style-type: none"> e.g. violence or drug taking or other suitable example 	10	Award multiple DEVS for characteristics

Question	Answer	Marks	Guidance
	<p>Capitalism / Commercialism / Deviance</p> <p>7. sport reflects capitalism / USA a capitalist country</p> <ul style="list-style-type: none"> • an economic system • free or private enterprise / entrepreneurship / (business) for profit • links with individualism / links with belief that each person responsible for own success <p>8. golden triangle</p> <ul style="list-style-type: none"> • relationship between sport, sponsorship and media • high levels of sponsorship • performers as 'billboards' • TV rights • advertising breaks <p>9. huge media involvement / sport a media product / sport dominated or controlled or funded by media</p> <ul style="list-style-type: none"> • media controls (some) rules and/or timings <p>e.g. accept any suitable example</p> <p>10. sport highly commercialised or driven by commercialism / sport is 'big business' / (huge) investment into sport</p> <ul style="list-style-type: none"> • teams run as franchises <p>e.g. accept any suitable e.g.</p> <ul style="list-style-type: none"> • professional sport dominates / in USA sport is elitist / professional sport has very high status 		

Question	Answer	Marks	Guidance
	<p>Entertainment / Spectatorism</p> <p>11. sport is entertaining / sport part of entertainment industry</p> <ul style="list-style-type: none"> • few draws • sport is: high scoring / action packed / exciting / spectacular • sport is: violent /aggressive <p>e.g. American football / ice hockey</p> <ul style="list-style-type: none"> • dehumanising effect of (protective) clothing <p>12. Super Bowl</p> <ul style="list-style-type: none"> • the championship game (of the NFL) • 30 sec commercial - (approx) \$2-4million <p>13. sport stars as celebrities</p> <p>e.g. Michael Jordan or the Williams sisters or any other suitable example</p> <p>14. spectatorism / 'watch more than play' / 'family friendly'</p> <ul style="list-style-type: none"> • impact on unhealthy lifestyles or obesity • limited mass participation / limited system of local sports clubs or teams <p>School / University Sport</p> <p>15. high status of (high) school or university sport</p> <ul style="list-style-type: none"> • large crowds (at school or university 'games') • high school or university players as local heroes or celebrities • scholarships to universities <p>16. draft system</p> <ul style="list-style-type: none"> • route into professional sport for top university or college athletes <p style="text-align: right;">[Total: 30 marks]</p>		

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