



GCSE

Physical Education

Unit **B453**: Developing Knowledge in Physical Education

General Certificate of Secondary Education

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.

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Annotations in scoris

The following annotations are available:

	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.
	Unclear
	Benefit of doubt
	Incorrect
	Level 1
	Level 2
	Level 3
	Repeat
	Correct
	Vague
	Noted but no credit given
	S (indicates 'sub max reached')
	Example
	Knowledge
	Development

Section A – Multiple choice			
Question Number	Expected Answer	Marks	Additional Guidance
1	(c) To attach muscle to bone	[1]	
2	(c) An example of continuous training is swimming thirty lengths of the pool	[1]	
3	(d) Providing cut price membership deals for yoga classes after the Christmas holidays	[1]	
4	(a) A teacher praises your attempt at passing the ball accurately in netball	[1]	
5	(d) Deltoid and abdominals	[1]	
6	(b) Competing against players from the same age group in rugby	[1]	
7	(b) Repeating a chest pass in basketball and correcting your mistakes	[1]	
8	(a) Targeting upper body strength, through consultation with your coach, and increasing the weight that can be lifted in one repetition after a six-week weight training programme	[1]	
9	(d) It leads to muscle fatigue during hard exercise	[1]	
10	(a) Overload is working the body too hard	[1]	
11	(a) Broken glass	[1]	
12	(c) To pay for the organisation of a free cycle-for-fun day in a city centre	[1]	
13	(c) To encourage children to be physically active for more than 60 minutes per day	[1]	
14	(d) Tendonitis is caused by the underuse of certain muscle groups in long distance running	[1]	
15	(a) An increase in tidal volume	[1]	

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Additional Guidance
16	<p>Four marks for four from:</p> <p>(Internal motives) Sub max three marks</p> <ol style="list-style-type: none"> 1. For fun / enjoyment / pleasure / love the sport (when officiating) or because it is interesting / stimulating / challenging or to feel good or to relieve stress/anxiety 2. To gain satisfaction (for a job well done or for helping) or to feel proud of themselves or to help / encourage others 3. To raise self-esteem or confidence (by taking a leadership role) or to create a better body image or to feel good about yourself 4. To be accepted by a group/team or to be part of a group/team or to feel a sense of belonging or to stay part of their sport or to feel valued 5. To become fitter or healthier or to control/lose weight 6. Feel they are not good enough to perform as a player or because of injury cannot play 7. Improve knowledge 8. Follow role model 9. For power / authority <p>(External motives) Sub max three marks</p> <ol style="list-style-type: none"> 10. To gain (financial) reward / to be paid a wage or for the money or to officiate as a job/career 11. To please other people/players/friends or because others have encouraged / persuaded you / for praise 12. To gain a qualification / badge / certificate in officiating 13. To enable the game to take place (without an official the game cannot be played) 		<p>Both internal and external motives linked to officiating must be covered for full marks If motives are not linked to internal or external then nil marks</p> <p>If a clear attempt to differentiate between the two motives then accept e.g. in separate paragraphs.</p> <p>Going to the gym to lose weight = Vg (must relate to officiating) To get a trophy / medal = vg</p> <p>Someone encouraging you to get fit = BOD pt 11 External motive is to get fit = x Mix with elite players = Vg</p> <p>To ensure game is fair or to prevent injury = vg</p> <p>To boss around others = vg</p>
		[4]	

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Question Number	Expected Answer	Marks	Additional Guidance
17	<p>Three marks for three from:</p> <ol style="list-style-type: none"> 1. Example of a suitable role model eg a gymnastics coach / PE teacher / professional footballer 2. Use of demonstration or their own skills to show how a skill is performed or for you to copy the skill / routine or observational learning 3. Praise / reward given (to reinforce correct actions) 4. Criticism or corrections or feedback given (to correct errors) or coaching points / tips 5. Motivating / influencing / inspiring / encourage or someone to look up to or to be like them/role model or will listen/focus more/determined 	[3]	<p>If no practical example given then nil marks awarded.</p> <p>Place EG in margin if example given</p> <ul style="list-style-type: none"> • For point 1 to be awarded an appropriate role model (to show understanding of what a role model is) Eg a gymnastics coach or an elite athlete (must have link to sport/activity). • For point 2 to be awarded the skill to be demonstrated must be named eg the coach demonstrates a handspring. <p>Pt5 'want to copy demonstration' = vg A role model is a footballer = Vg</p>
18	<p>Six marks for six from:</p> <ol style="list-style-type: none"> 1. To get better/increase/optimise performance or improved technique/performance or goal is to win 2. To motivate /enthuse / inspires / gain satisfaction / enjoyment / pride or to work harder or to more effort or gives you a purpose 3. To give a target (to keep fit / healthy / improve skills) or to monitor your achievements or to see how successful you are or to track progress or to identify specific areas of weakness or something to aim for 4. To ensure participation continues/keep exercising/training/practice or to ensure exercise adherence or makes you stick to it or dedication 5. To control anxiety/stress (so that performance is enhanced) 6. To improve concentration/ focus and avoid distractions 7. To increase / improve confidence (to improve performance) 	[6]	<p>To get man of the match = pt 3</p> <p>To prove you can do it or to prove yourself to others = pt 3</p> <p>Help mentally = vague</p> <p>To your needs = vague pt 3</p>

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Question Number	Expected Answer	Marks	Additional Guidance
19	<p>Four marks for four from:</p> <ol style="list-style-type: none"> 1. To avoid (minor) infections (or an example of avoiding a specific infection eg athlete's foot) or to prevent bacteria / illness / disease 2. To avoid infecting others or to stop germs spreading 3. To avoid unpleasant odours causing embarrassment or loss of friendship / social interaction or to be courteous or to show etiquette 4. So that you feel good about yourself or to raise self -esteem/confidence or to make you feel better 5. To be able to continue with the activity or to ensue you are invited to play again or to help to be involved or poor personal hygiene can stop you playing 	[4]	<p>Look for brief explanations rather than detail here</p> <p>To keep fit / healthy = Vg</p> <p>Accept without personal hygiene results in illness = pt 1</p> <p>If no personal hygiene you can smell bad = pt 3</p>
20	<p>Five marks for five from:</p> <p>Sub max four marks for structure</p> <ol style="list-style-type: none"> 1. It is (soft) <u>connective</u> tissue 2. It is tough / strong / flexible / elastic 3. Found on the articulating surfaces / ends of bones (accept suitable diagram) 4. Has no blood supply 5. There are different types or cartilage includes yellow elastic / hyaline/white cartilage <p>Sub max four marks for importance/use</p> <ol style="list-style-type: none"> 6. It protects the bones/joint 7. It prevents friction or rubbing / colliding / crunching between bones (within the joint) or prevents wear and tear 8. It acts as a shock absorber or a cushion 9. Aids mobility or free / smooth movement (of joint) 	[5]	<p>Four marks sub max for description of structure.</p> <p>Four marks sub max for importance of cartilage.</p> <p>Award point 3 for an acceptable diagram showing location (as part of structure).</p> <p>Between the bones = vg</p> <p>Surrounds bones = vg</p> <p>Decrease risk of injury = vg</p> <p>Gives strength to the joint = vg</p>

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Question Number	Expected Answer	Marks	Additional Guidance
21	<p>Four marks for four from:</p> <ol style="list-style-type: none"> Through PE lessons / core PE Examination courses or sport/PE qualifications Extra-curricular activities / Sports Day or school teams or house matches or wide range of sports Links with outside clubs or agencies or community organisations Through promotional activities/posters/leaflets or through assemblies or through PSHE programmes or educate about active/healthy lifestyle or walk/ride/cycle to school Use of outside speakers / role models (School) trips to watch/experience activities (to encourage involvement) 	[4]	<p>Accept a list of ways for identifications</p> <p>Healthy food options = vg (question is on active lifestyle)</p> <p>Accept courses – BOD pt 2.</p>
22	<p>Four marks for four from:</p> <p>Sub max one mark for:</p> <ol style="list-style-type: none"> (Hinge joint) Elbow or knee or interphalangeal joints of the fingers <p>Sub max one mark for:</p> <ol style="list-style-type: none"> (Ball and socket) Shoulder or hip <p>Sub max two marks for (differences):</p> <ol style="list-style-type: none"> Hinge joint allows movement in one plane or is uniaxial or allows flexion <u>and</u> extension Ball and socket joint allows a wide or many/greater ranges of movement or allows rotary movement or rotation (in different directions) or is polyaxial or circumduction or allows flexion, extension, adduction and abduction 	[4]	<p>Point 3 Do not accept hinge joint works like a hinge or forward and back or in two directions / one direction or up and down = vg</p> <p>Point 4 moves freely = vg</p>

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Question Number	Expected Answer	Marks	Additional Guidance
23	<p>Four marks for four from:</p> <ol style="list-style-type: none"> 1. Suitable practical example eg mentally rehearsing a rugby conversion or concentrating on the ball in tennis or gymnast thinking through their routine or keeping calm before a game of football 2. Can help relaxation or to keep calm / composed or to control your emotions or to avoid stress or to control arousal (levels) or to 'psych yourself up' or to get into the zone 3. Can help focus or concentrate or to increase selective attention or to block out distractions 4. Can raise confidence or to be more positive or to boost/increase your self esteem 5. To increase motivation or to be (more) determined or to tell yourself you will succeed 6. To decrease reaction time or to improve reflexes or makes you quicker to react 	[4]	<ul style="list-style-type: none"> • If no practical example given then nil marks awarded. • Only one mark given for the example – must be an explanation to gain remaining marks • Practical example must be specific ie the sport / context must be mentioned to gain a mark. <p>Place EG in margin if example given</p> <p>Listening to music before a rugby game = BOD Pt 1 Get in mind set = Vg To improve performance = x (in question) To visualise (on its own) = vg Visualise a gymnastic movement = pt 1 To increase readiness = vg</p>

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Question Number	Expected Answer	Marks	Additional Guidance
24	<p>Five marks for five from:</p> <ol style="list-style-type: none"> 1. Increase in size (of muscle fibres)/hypertrophy of muscles 2. Increase in strength (of muscle fibres) / tone / power or increase in strength of ligaments/tendons 3. Increase in speed (of contraction) 4. Increase in muscular endurance or they last longer or less fatigue 5. Increase in flexibility (of muscle)/elasticity 6. Increased tolerance to lactic acid 7. Increase in recovery rate or recovers quicker or less effect of DOMS 8. Increased rate of removal of lactic acid 9. Greater potential for energy production or more energy available 10. Size/number of mitochondria increased 11. Increase in myoglobin (within muscle cells) 12. Increase in capillaries in muscles /more oxygen/ haemoglobin to (working) muscles 13. Helps prevent injury/helps recovery from injury 	[5]	<p>Increase in muscle fatigue = x</p> <p>Increase in range of movement = BOD pt 5</p>

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Question Number	Expected Answer	Marks	Additional Guidance
25*	<p>Six marks total.</p> <p>Levels descriptors</p> <p><u>Level 1 (1-2 marks)</u> Candidates describes only very superficially. Little or no attempt at explanation. There is little or no use of technical vocabulary and sentences have limited coherence and structure. There is much irrelevant material. Errors in grammar, punctuation and spelling may be noticeable and intrusive.</p> <p><u>Level 2 (3-4 marks)</u> Candidates make some attempt at explanation with good knowledge and understanding. Material largely relevant. There is some use of technical vocabulary and sentences for the most part are relevant and are coherent. There are occasional errors in grammar, punctuation and spelling.</p> <p><u>Level 3 (5-6 marks)</u> Candidates make many explained and developed points. Candidate demonstrates excellent knowledge and understanding of the factors involved. Candidate gives relevant material that is clearly structured and using appropriate terminology and technical vocabulary. There are few if any errors in grammar, punctuation and spelling.</p>	[6]	<p>Differentiating between levels look for:</p> <p>Level 1: (1-2)</p> <ul style="list-style-type: none"> • Few types of media identified with superficial links to performance or participation. • More descriptive than explanatory • Few practical examples • One mark for any relevant comment linking media to performance/participation <p>Level 2: (3-4)</p> <ul style="list-style-type: none"> • More than one type of media represented and not confined to TV • Links to participation/ performance explained well but not always developed • Practical examples when present are relevant • Top of this level - may have negative as well as positive influences of the media <p>Level 3 (5-6):</p> <ul style="list-style-type: none"> • Several different types of media represented and likely to include social media • Top of this level - links to participation and performance explained well and each point well developed • Practical examples are relevant • More likely to include negative and positive media influences

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Question Number	Expected Answer	Marks	Additional Guidance
	<p>Indicative content <i>[Explain how different types of media influences young people's participation in physical activities].</i> (Different types of media)</p> <ol style="list-style-type: none"> 1 Wide/intense/regular coverage of sport on TV/satellite/radio 2 Internet/web-sites encourages interest and therefore participation 3 Social media or YouTube influences through raising awareness / interest 4 Press/written/print media extensive coverage <p>(Influences of media)</p> <ol style="list-style-type: none"> 5 Encourages general interest in sport/physical activities/exercise <ul style="list-style-type: none"> • Gives ideas about new/novel activities • Promotes/educates about benefits to health/well being • Show consequences of low activity levels 6 Can inform about how to participate / perform <ul style="list-style-type: none"> • Can give information about tactics / skills / strategies • Can inform about where to participate 7 Entertains and therefore attracts participation (Wimbledon and tennis) 8 Media attracts sponsorship <ul style="list-style-type: none"> • to clubs/individuals that may then encourage more participation • Can lead to rule changes • Raises performance levels 9 Advertising linking products with active living <ul style="list-style-type: none"> • draws attention to activity (via product) • promotes healthy lifestyle • Promotes concessions / offers 10 Activity can be perceived as fashionable/cool thing to do <ul style="list-style-type: none"> • raise status of sport / activity – more attractive to play/participate 11 Media can attract funds <ul style="list-style-type: none"> • for facilities/equipment participation can give prizes • Some sports attract participation because of monetary reward • To improve skills 		<p>Always indicate the level at the end of the response.</p> <p>Look for the <u>three</u> variables:</p> <ul style="list-style-type: none"> ➤ Different types of media ➤ Influencing performance/participation ➤ Relevant practical examples

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Question Number	Expected Answer	Marks	Additional Guidance
	<p>12 Shows role models successful sportspeople</p> <ul style="list-style-type: none"> • that inspires others to participate in different ways/role models <p>13 Minority groups</p> <ul style="list-style-type: none"> • (eg advertisement of walking football etc) • Minority sports shown / covered (eg extreme sports on SKY) <p>(Negative aspects):</p> <p>14 Negative view that media may link activity to undesirable factors for some people</p> <ul style="list-style-type: none"> • Alcohol / competitiveness etc • aggression / fighting <p>15 Media advertises unhealthy eating</p> <ul style="list-style-type: none"> • Links to obesity / lack of participation <p>16 The availability of media may stop people participating in sport/making couch potatoes</p> <p>17 Can give activities a bad name</p> <ul style="list-style-type: none"> • make it seem dangerous • or too many cheat / drug-taking <p>18 Coverage can be limiting</p> <ul style="list-style-type: none"> • only some sports represented • over-emphasis on male/able bodied sport <p>19 Can encourage too much nationalism</p> <ul style="list-style-type: none"> • prejudice/jingoism <p>20 Can lead to events being on at different times/days-affecting participation</p> <p>21 Decrease in self-esteem / motivation</p> <ul style="list-style-type: none"> • 'perfect figure' unattainable • Skills unable to emulate/learn <p>22 Fake news</p> <ul style="list-style-type: none"> • Information eg on internet can be incorrect • Wrong information about skills / strategies 		

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