

# **Physical Education**

General Certificate of Secondary Education

Unit **B451**: An Introduction to Physical Education

## **Mark Scheme for June 2011**

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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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Any enquiries about publications should be addressed to:

OCR Publications  
PO Box 5050  
Annesley  
NOTTINGHAM  
NG15 0DL

Telephone: 0870 770 6622  
Facsimile: 01223 552610  
E-mail: [publications@ocr.org.uk](mailto:publications@ocr.org.uk)

1 The following annotations are available:

- ✓ = correct response
- ✗ = incorrect response
- BOD** = Benefit of doubt
- IRRL** = Irrelevant
- REP** = Repetition
- VG** = Vague
- ? = Unclear
- L1** = Level 1
- L2** = Level 2
- L3** = Level 3

Highlighting is also available to highlight any particular points on the script.

<b>Section A – Multiple choice</b>			
<b>Question Number</b>	<b>Expected Answer</b>	<b>Marks</b>	<b>Rationale/Additional Guidance</b>
1	<p><b>Which one of the following is an essential component of a healthy diet?</b></p> <p>(c) Water</p>	[1]	
2	<p><b>Which one of the following is a good example of the aesthetic characteristic of skilful movement?</b></p> <p>(b) The movement of the gymnast looks good and is fluent in the floor exercise</p>	[1]	
3	<p><b>Which one of the following is a way to get involved in physical activity?</b></p> <p>(b) Volunteering to help coach the local football team</p>	[1]	
4	<p><b>Which one of the following is an example of peer pressure that prevents participation in physical activities?</b></p> <p>(b) Friends telling you that physical activity is for 'losers'</p>	[1]	
5	<p><b>Which one of the following is an example of the role of an official in school physical education lessons?</b></p> <p>(d) Refereeing a basketball game</p>	[1]	
6	<p><b>Which one of the following is the best description of aqua-aerobics?</b></p> <p>(b) An exercise class in water</p>	[1]	

<b>Section A – Multiple choice</b>			
<b>Question Number</b>	<b>Expected Answer</b>	<b>Marks</b>	<b>Rationale/Additional Guidance</b>
7	<p><b>Which one of the following is a good example of decision making when participating in physical activities?</b></p> <p>(d) Choosing the right pass to one of your team mates</p>	[1]	
8	<p><b>One of the key concepts in physical education is healthy, active lifestyles.</b></p> <p><b>Which one of the following shows how physical activity can lead to a healthy, active lifestyle?</b></p> <p>(a) Playing a sport encourages you to give up smoking</p>	[1]	
9	<p><b>Cooling down following physical activity is important.</b></p> <p><b>Which one of the following is a good reason for performing a cool down?</b></p> <p>(d) Prevents muscle soreness</p>	[1]	
10	<p><b>One of the key processes in physical education is developing skills and techniques.</b></p> <p><b>Which one of the following is a good example of developing skills and techniques?</b></p> <p>(a) Trying to serve consistently well in tennis</p>	[1]	
11	<p><b>Positive mental health can be an indicator of health and well-being.</b></p> <p><b>Which one of the following shows positive mental health?</b></p> <p>(c) Feeling happy</p>	[1]	

<b>Section A – Multiple choice</b>			
<b>Question Number</b>	<b>Expected Answer</b>	<b>Marks</b>	<b>Rationale/Additional Guidance</b>
<b>12</b>	<b>Which one of the following shows the importance of muscular endurance as a component of a healthy lifestyle?</b>  <b>(c)</b> To be able to carry your baby brother safely on long walks	<b>[1]</b>	
<b>13</b>	<b>Which one of the following shows that ethnicity can affect participation in physical activity?</b>  <b>(c)</b> You may not be selected for a team because of the colour of your skin	<b>[1]</b>	
<b>14</b>	<b>Which of the following is an example of a test protocol when setting up a fitness test?</b>  <b>(a)</b> to ensure that the distance is measured accurately	<b>[1]</b>	
<b>15</b>	<b>Which of the following is a health reason for participating in physical activities</b>  <b>(d)</b> to help manage your stress levels	<b>[1]</b>	
	<b>Total</b>	<b>[15]</b>	

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
16	<p>Give <u>three</u> practical examples that show different characteristics of skilful movement in physical activities.</p> <p>three marks for three from: (Max of one mark if no practical examples) Practical examples showing:</p> <ol style="list-style-type: none"> <li>1. Efficiency -serve was efficient in tennis without wasting energy</li> <li>2. Pre-determined - knowing what you want to do before you pass the ball</li> <li>3. Co-ordinated /agile/good timing -linking the movements together/co-ordinated for a smooth discuss throw</li> <li>4. Fluent -movement of trampoline routine shows fluency/flow/smooth movements</li> <li>5. At speed -the volleyball player gets to the ball quickly</li> <li>6. Aesthetic - the smash in badminton looked good</li> <li>7. Good technique/accuracy/successful - the netball shot showed good shooting technique</li> <li>8. Controlled - the tackle in rugby took the player down within the rules</li> <li>9. Confidence - the goalkeeper was confident in winning the ball when tackling the player</li> <li>10. Skilful movement is learned -the required footwork is learned to effectively perform the shot putt</li> <li>11. Consistent - the tennis serve is nearly always in</li> </ol>	[3]	<ul style="list-style-type: none"> <li>• Maximum of 1 mark if no practical examples with just three relevant characteristics listed.</li> <li>• Must be practical examples showing <u>different</u> characteristics.</li> </ul> <p>Accept example linked to a skill eg an efficient <b>serve</b> in tennis = Pt 1</p> <p>Accept the same practical example showing different characteristics eg the tennis serve shows efficiency and fluency = Pt1 and Pt 4</p> <p>Do not accept example merely linked to a sport eg in gymnastics the participant can compete fluently.</p>

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
17	<p><b>Health screening is important in assessing the body's readiness for exercise.</b></p> <p><b>Identify and describe <u>two</u> health screening methods in assessing readiness for exercise.</b></p> <p><b>four marks for four from: two max for i/d (odd numbers) and two max for appropriate (simple) description (even numbers)</b></p> <ol style="list-style-type: none"> <li>1. Body mass index / BMI</li> <li>2. This is a measure of body composition/weight divided by height squared / measuring height and weight/ indicates under weight/overweight</li> <li>3. Blood pressure (measure)</li> <li>4. Use an instrument/sphygmomanometer/ healthy or unhealthy values/levels in a correct range</li> <li>5. Cholesterol (measure)</li> <li>6. Test to show how much cholesterol in blood</li> <li>7. Glucose/sugar levels</li> <li>8. Test to show the level of glucose in blood</li> <li>9. (Resting) heart rate</li> <li>10. Take the pulse/heart rate using stethoscope or by pressing the radial/carotid artery – count how many beats per unit of time - values</li> <li>11. Hydration</li> <li>12. Testing the water content of the body</li> <li>13. Flexibility</li> <li>14. Testing the flexibility of joints/sit and reach test</li> <li>15. Questionnaires/medical history/interview</li> <li>16. Asking about lifestyle/behaviour (for an analysis)</li> <li>17. Skinfold measurements</li> <li>18. Measures fat (coverage)</li> <li>19. Other appropriate health measures</li> <li>20. With suitable description</li> </ol>	<b>[4]</b>	<ul style="list-style-type: none"> <li>• Two marks max for identification only (odd numbers).</li> <li>• Two marks max for descriptions only (even numbers)</li> </ul> <p>Do not accept: Fitness tests unless directly related to health screening</p>

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
18	<p><b>Describe the characteristics of a balanced diet.</b></p> <p><b>six marks for six from:</b></p> <ol style="list-style-type: none"> <li>1. Eating the right amount (for energy expended) / the right amount of calories /eating according to how much you work/exercise.</li> <li>2. Have an appropriate portion size/not too much or too little food</li> <li>3. Eat breakfast</li> <li>4. Sufficient water</li> <li>5. Limit or non-use of alcohol</li> <li>6. (Approx 50%) carbohydrates / carbs</li> <li>7. Not too much sugar</li> <li>8. Not too much salt</li> <li>9. (About 30-35%) fats/not too many (saturated) fats</li> <li>10. (About 15-20%) protein (needed for repair)</li> <li>11. Fibre / roughage intake sufficient</li> <li>12. Sufficient minerals</li> <li>13. Sufficient vitamins</li> <li>14. Plenty of fruit/vegetables/at least 5 a day / variety of foods / different food groups/Eat well plate/healthy eating plate.</li> </ol>	<b>[6]</b>	<ul style="list-style-type: none"> <li>• 4 marks max if simply a list with no description. E.g. water, fibre, vitamins, minerals, protein, carbohydrates = 4 marks.</li> <li>• If some attempt at description then allow access to full 6 marks.</li> </ul> <p>Accept descriptions that might include the reasons for their inclusion eg water to stop dehydration.</p> <p>Accept reasonable amount of/small amount of as description.</p> <p>Accept sources of nutrients eg protein found in fish as a description</p>

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
19	<p><b>Give <u>four</u> ways that disability might affect participation in physical activities.</b></p> <p><b>four marks for four from:</b></p> <ol style="list-style-type: none"> <li>1. May have physical/health difficulties that limit performance/ lacks strength/power/co-ordination /lacks fitness/prone to illness</li> <li>2. May have mental/cognitive difficulties that limit performance</li> <li>3. No/lack of suitable activities on offer / not many teams/ players available / lack of opportunity</li> <li>4. No/lack of specialist coaches/teachers/lack of support</li> <li>5. Lack of role models/media coverage</li> <li>6. Limited access to facilities/no wheelchair access/no ramps</li> <li>7. Difficulties in transport/getting to use facilities</li> <li>8. Limited specialist equipment/resources/facilities for disability participation</li> <li>9. Others may discriminate against participation /getting picked on</li> <li>10. Feeling of helplessness/lack of confidence/low self-esteem/embarrassment</li> <li>11. Lack of money</li> </ol>	<b>[4]</b>	<p>Do not accept: not safe (too vague)</p> <p>Accept positive views as opposites eg more specialist equipment available now, but only 1 mark for this point.</p>

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
20	<p><b>Over-eating and under-eating can both affect the performance of physical activities.</b></p> <p><b>Explain how over-eating <u>and</u> under-eating can have negative effects when performing physical activities.</b></p> <p><b>Six marks for six from: max of three marks for over-eating:</b></p> <ol style="list-style-type: none"> <li>1. Not fit enough/carrying too much weight to be involved in physical activities / excess fat / obesity / strain on heart/shortness of breath</li> <li>2. Tiredness/lethargy/lack of motivation / feel sick or ill / cramps</li> <li>3. Lack of mobility/speed</li> <li>4. Related health issues such as diabetes / CHD etc may limit participation</li> <li>5. Feeling of embarrassment/low self-esteem</li> <li>6. The negative views of others</li> <li>7. Increase likelihood of injury</li> </ol> <p><b>Max of three marks for under-eating:</b></p> <ol style="list-style-type: none"> <li>8. Lack of physical fitness / not enough weight to participate / fainting / lack of endurance</li> <li>9. Illness / not receiving the right nutrients/vitamins / related health issues such as muscle wastage</li> <li>10. Not enough energy/too tired/lethargic / will not be able to function properly /de-motivated/give up/lack of concentration / body works slower</li> <li>11. Lack of strength/power / too weak</li> <li>12. Easily injured/too delicate / fragile for many activities / weak bones</li> <li>13. Feeling embarrassed / low self esteem</li> <li>14. The negative views of others</li> </ol>		<p>If answers separated then give max of 3 marks for over-eating and 3 marks max for under-eating explanations.</p> <p>Accept responses that are linked for 2 marks e.g. over-eating and under-eating can lead to lack of fitness = 2 marks.</p> <p>Must be negative effects only.</p>
		<b>[6]</b>	

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
21	<p><b>Describe how flexibility can help you lead a healthy lifestyle.</b></p> <p><b>four marks for four from:</b></p> <ol style="list-style-type: none"> <li>1. (General) To stop danger of straining yourself / safer (eg lifting)</li> <li>2. (Specific joint/ muscular) To prevent joint injuries/muscular injuries/healthy joints/better posture</li> <li>3. To be able to reach for things easier/greater range of movement</li> <li>4. To be able to perform activities that demand flexibility such as gymnastics / enables you to want to do more exercise / enables activity in old age</li> <li>5. To be able to move faster/ quicker reactions/more agile</li> <li>6. To be more effective in movement technique</li> <li>7. To go about everyday activities more easily/ do jobs better</li> </ol>	[4]	
22	<p><b>Describe an effective warm up in a physical activity of your choice.</b></p> <p><b>Five marks for five from:</b></p> <ol style="list-style-type: none"> <li>1. Raise pulse/heart rate/jogging.</li> <li>2. Increasing body/muscle temperature</li> <li>3. Stretch for at least 10+ seconds per main muscle group/ per stretch</li> <li>4. Stretch main muscle groups / those muscles specifically going to be used / use flexibility or stretching exercises.</li> <li>5. Stretch all main muscle groups/those muscles specifically going to be used (2<sup>nd</sup> example)</li> <li>6. Steady breathing/keep control/calm</li> <li>7. To include exercise movements that emulate the ‘real game ‘ situation</li> <li>8. Use of skill drills/practising techniques/shots</li> <li>9. Incremental work rate in warm up/start slow and build up work ready for game/competition</li> <li>10. Mental preparation</li> </ol>	[5]	<p>Accept for 2 marks: 2 examples of different types of stretches for pt 4 and pt 5. E.g. In hockey I would stretch around the shoulder joint by circling my arms (pt 4 ) and then I would stretch my quads (pt 5) = 2 marks.</p> <p>Accept for 1 mark: E.g. I would use stretching or flexibility exercises. (pt 4) = 1 mark</p> <p>Use BOD to adapt main points to candidate’s choice of activity.</p>

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
23	<p>Give <u>three</u> examples of etiquette when participating in physical activities.</p> <p><b>three marks for three from: (reward specific examples)</b></p> <ol style="list-style-type: none"> <li>1. Shaking hands with opponents/showing respect</li> <li>2. Thanking officials</li> <li>3. Never argue/disagree with officials respect officials</li> <li>4. Never swear/be abusive</li> <li>5. Do not stretch/bend rules to your advantage</li> <li>6. Always sticking to the rules</li> <li>7. Lose gracefully/congratulate opponents who beat you</li> <li>8. If you hurt someone then showing concern</li> <li>9. Sharing resources/facilities/equipment</li> <li>10. Do not over-celebrate when you win/do not show arrogance</li> <li>11. Replacing weights or equipment after use / wiping your sweat off exercise equipment</li> <li>12. Any other acceptable and relevant example of etiquette</li> <li>13. Three cheers at the end of a game</li> </ol>	<b>[3]</b>	<p>Accept: Equivalent examples that are relevant. Do not accept shaking hands for point 2 only for point 1</p>

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
24	<p><b>Creativity is a key concept in physical education for pupils who perform, coach or lead.</b></p> <p><b>Identify and describe <u>two</u> different examples of creativity in physical activities, either as a performer, coach or leader.</b></p> <p><b>two marks for two from: Identify <u>two</u> examples of creativity</b></p> <ol style="list-style-type: none"> <li>1. Trying out / improvise / different / alternative/ changing / experiment /practising new things /moves / skills / techniques trying out new positions.</li> <li>2. Trying new tactics/strategies / new ways of communicating with players as an official / changes in coaching activities</li> <li>3. Using your imagination in movement/skills</li> </ol> <p><b>Description of these examples two marks for two from:</b></p> <ol style="list-style-type: none"> <li>4. (Trying out / new) eg passing in netball (trying out) new positions to view play as an official</li> <li>5. (Trying new tactics) – eg using a new defensive formation in basketball</li> <li>6. (Imagination) – eg a new floor routine in gymnastics</li> </ol>		<p>2 marks max for two different identifications only.</p> <p>When marking identifications look for:</p> <ol style="list-style-type: none"> <li>1.Skills / techniques</li> <li>2.Strategies / tactics</li> <li>3.Imagination / ideas</li> </ol> <p>2 marks max for two different descriptions only</p> <p>Credit equivalents/relevant practical examples.</p> <p>Accept description that <b><u>applies</u></b> to sport/activity eg trying out = Pt 1 a dummy pass in rugby = Pt 4</p> <p>Accept different applications within same activity.</p>
		<b>[4]</b>	

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
25*	<p><b>Many people participate in physical activities but there are still those that do very little exercise.</b></p> <p><b>Explain the reasons why some people do not participate in physical activities.</b></p> <p><b>Levels marked question</b></p> <p><u>Level 1 (1-2 marks)</u> Candidates make only one or two valid points about non-participation and describes only very superficially. 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 valid points about non-participation with good knowledge and understanding. Some attempt at explanation. 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 developed points about the non-participation. Candidate demonstrates excellent knowledge and understanding of the factors involved. Explanation clearly given. 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>		<p>Differentiating between levels look for:</p> <p>Level 1:</p> <ul style="list-style-type: none"> <li>- Up to two valid indicative points made mainly from points 1 -4</li> <li>- Description rather than explanation</li> </ul> <p>Level 2:</p> <ul style="list-style-type: none"> <li>- At least 3 valid indicative points made with those at upper part of this level making a point other than 1 – 4.</li> <li>- Some explanation</li> </ul> <p>Level 3:</p> <ul style="list-style-type: none"> <li>- At least 4 valid indicative points made and goes beyond points 1 - 4</li> <li>- Points are developed / expanded</li> <li>- Clear explanations</li> <li>- Very few QWC errors</li> </ul> <p><b>Always indicate the level at the end of the response</b></p>

<b>Section B – Short Answer Questions</b>			
<b>Question Number</b>	<b>Expected Answer</b>	<b>Marks</b>	<b>Rationale/Additional Guidance</b>
	<p><b>Indicative content</b> – (Explain the reasons that some people do not participate in physical activities).</p> <ol style="list-style-type: none"> <li>1. Health reasons – physical/mental / overweight / unfit</li> <li>2. Age</li> <li>3. Disability</li> <li>4. Injury</li> <li>5. Negative past experiences</li> <li>6. Discrimination/prejudice/gender expectations / bullying</li> <li>7. Peer pressure</li> <li>8. Cultural barriers/expectations / religious beliefs</li> <li>9. The pressure of other interests/work/study/responsibilities at home/caring responsibilities</li> <li>10. Technology makes life easy / lack of motivation/‘couch potato syndrome’/sport on TV rather watched than played / can’t be bothered</li> <li>11. Lack of confidence/self esteem / poor body image/ (perceived) lack of ability</li> <li>12. Don’t see the point / don’t believe in the value of participation / waste of time / lack of knowledge</li> <li>13. Don’t have to do it / PE not compulsory post 16</li> <li>14. Lack of a role model/parental support</li> <li>15. Lack of opportunity</li> <li>16. Lack of money/unemployment</li> <li>17. Lack of facilities/equipment</li> <li>18. Lack of transport</li> <li>19. Environmental influences/lack of green space</li> </ol>		
	<b>Total</b>	<b>[45]</b>	
	<b>Paper Total</b>	<b>[60]</b>	

**OCR (Oxford Cambridge and RSA Examinations)**  
**1 Hills Road**  
**Cambridge**  
**CB1 2EU**

**OCR Customer Contact Centre**

**14 – 19 Qualifications (General)**

Telephone: 01223 553998

Facsimile: 01223 552627

Email: [general.qualifications@ocr.org.uk](mailto:general.qualifications@ocr.org.uk)

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