

# **Physical Education**

General Certificate of Secondary Education

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

## **Mark Scheme for June 2013**

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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

|   |       |                                 |
|---|-------|---------------------------------|
|    | ?     | Unclear                         |
|    | BOD   | Benefit of doubt                |
|    | Cross | Incorrect                       |
|    | L1    | Level 1                         |
|    | L2    | Level 2                         |
|    | L3    | Level 3                         |
|    | REP   | Repeat                          |
|    | Tick  | Correct                         |
|    | VG    | Vague                           |
|    | SEEN  | Noted but no credit given       |
|    | S     | S (indicates 'sub max reached') |
|    | EG    | Example                         |
|  | K     | Knowledge                       |
|  | DEV   | Development                     |

- Sub-maxes are indicated with **S**; the guidance section of the mark scheme shows which questions these are relevant to.
- **K** and **DEV** used instead of ticks on question 25 to indicate where knowledge or development points from the indicative content have been made.
- On question 25, one K or DEV does not necessarily equate to one mark being awarded; the marking is based on a levels of response mark scheme which awards a level and mark holistically based upon the quality of the response overall against the levels descriptors.

## Section A–Multiple Choice

| Question |  | Answer | Marks | Guidance |
|----------|--|--------|-------|----------|
| 1        |  | c.     | 1     |          |
| 2        |  | a.     | 1     |          |
| 3        |  | d.     | 1     |          |
| 4        |  | d.     | 1     |          |
| 5        |  | b.     | 1     |          |
| 6        |  | d.     | 1     |          |
| 7        |  | a.     | 1     |          |
| 8        |  | b.     | 1     |          |
| 9        |  | b.     | 1     |          |
| 10       |  | c.     | 1     |          |
| 11       |  | b.     | 1     |          |
| 12       |  | c.     | 1     |          |
| 13       |  | d.     | 1     |          |
| 14       |  | a.     | 1     |          |
| 15       |  | c.     | 1     |          |

## Section B–Short Answer Questions

| Question | Answer  | Marks | Guidance   |
|----------|---|-------|--|
| 16       | <p><b>3 marks for 3 from:</b></p> <p><b>Practical examples showing:</b></p> <ol style="list-style-type: none"> <li>1. (Efficiency) eg serve was efficient in tennis without wasting energy</li> <li>2. (Pre-determined) eg knowing what you want to do before you pass the ball</li> <li>3. (Co-ordinated/agile) eg linking the movements together/co-ordinated for a smooth discus throw or eg a bicycle kick in football completed successfully</li> <li>4. (Fluent) eg movement of trampoline routine shows flow/smooth movements</li> <li>5. (At speed) eg the volleyball player gets to the ball quickly</li> <li>6. (Aesthetic) eg the smash in badminton looked good or making a dive look effortless</li> <li>7. (Good technique) eg the netball shot showed good shooting technique</li> <li>8. (Controlled) eg the tackle in rugby took the player down within the rules</li> <li>9. (Confidence) eg the goalkeeper was confident in winning the ball when tackling the player</li> <li>10. (Skilful movement is learned) eg the required footwork is learned to effectively perform the shot putt</li> <li>11. (Consistent) eg the tennis serve is nearly always in</li> <li>12. (Creativity) eg a gymnast creates a new jump in her floor routine.</li> </ol> | 3     | <ul style="list-style-type: none"> <li>• Must have practical examples for each mark to be awarded</li> <li>• Must be practical examples showing <u>different</u> characteristics</li> <li>• Do not accept a skill on its own without the characteristic eg fluent - a gymnastic routine</li> <li>• Accept a gymnastic routine that shows fluency.</li> </ul> |

| Question | Answer  | Marks | Guidance  |
|----------|---|-------|---|
| 17       | <p><b>4 marks for 4 from:</b></p> <ol style="list-style-type: none"> <li>1. Carrying too much weight or excess fat or obesity to be involved in physical activities / lack of mobility / more likely to get injured/ strain on joints</li> <li>2. (short term feelings) Tiredness/lethargy/ lack of energy/feel sick or ill/cramps/ stitch/ bloated that stops you performing</li> <li>3. (longer term fitness effects) Not fit enough/ tire easily/lack of stamina or endurance</li> <li>4. Lack of agility/speed/co-ordination/flexibility that makes moving quickly/effectively difficult</li> <li>5. Lack of motivation to get involved or to perform well</li> <li>6. Related health issues (such as diabetes) may limit performance/strain on the heart/ heart problems</li> <li>7. Feeling of embarrassment/low self-esteem that stops you getting involved</li> <li>8. The negative views of others/discrimination impedes your performance.</li> </ol> | 4     | <p>Must be an attempt at a description for a mark to be awarded<br/>           Single word answers = no marks<br/>           Eg<br/>           overweight = no marks<br/>           overweight makes it difficult to move = one mark.</p> |

| Question | Answer  | Marks | Guidance   |
|----------|---|-------|--|
| 18       | <p><b>6 marks for 6 from:</b></p> <ol style="list-style-type: none"> <li>1. Body mass index/BMI test</li> <li>2. measures body composition/body fat/how much you should weigh by dividing weight by height (squared)/ indicates underweight/overweight</li> <li>3. 30 metre sprint test or sprint test/ 100m sprint</li> <li>4. tests speed by timing the run</li> <li>5. The sit and reach test</li> <li>6. measures/tests flexibility by reaching forward/down as far as possible or using a 'sit and reach box' to measure</li> <li>7. Grip dynamometer test or grip test/ 1 rep max</li> <li>8. tests strength by measuring grip strength (implies overall strength)</li> <li>9. Coopers (12 minute) run/walk test or multi-stage fitness test/bleep test</li> <li>10. test cardiovascular endurance or stamina by how long you can last/ measuring how far you can run in a given time</li> <li>11. Sit-up test/number of sit-ups/press-ups/squats in a certain time/ abdominal curl test</li> <li>12. Tests muscular endurance by how long your muscles can work for</li> <li>13. Questionnaire or interview/take into account family history or disability</li> <li>14. tests whether they are able to participate/their motivation/whether any physical or mental aspects are barriers to participation.</li> </ol> | 6     | <ul style="list-style-type: none"> <li>• 3 max for identification only (odd numbers)</li> <li>• 3 max for explanation (even numbers)</li> <li>• Must have explanation (even numbers) for full marks</li> <li>• Accept other suitable fitness related tests</li> <li>• Do not accept any health screening measures eg blood pressure/resting heart rate / blood tests etc</li> <li>• Accept a valid explanation without identification eg how far you can run</li> <li>• Do not accept name of test followed by the fitness component on its own eg grip test for strength = 1 mark only eg grip test by measuring grip strength = 2marks.</li> </ul> |

| Question | Answer  | Marks | Guidance  |
|----------|---|-------|---|
| 19       | <p><b>4 marks for 4 from:</b></p> <ol style="list-style-type: none"> <li>1. (To speed up) remove or get rid of lactic acid or waste products</li> <li>2. Decreases/ prevent risk of injury or pulling a muscle</li> <li>3. Decreases/ prevent risk of muscle soreness or cramp or stiffness or relaxes muscles</li> <li>4. Prevent blood pooling</li> <li>5. Prevent feeling tired or fatigued/ recover quicker</li> <li>6. <b>Gradually</b> decrease heart rate/blood pressure/maintain blood pressure</li> <li>7. <b>Gradually</b> decrease body temperature</li> <li>8. <b>Gradually</b> decrease breathing rate</li> <li>9. To stop you feeling dizzy or faint or sick</li> <li>10. Psychological benefits or makes you calm down or lowers anxiety.</li> </ol> | 4     | <ul style="list-style-type: none"> <li>• 4 marks for the explanation of the importance of the cool down</li> <li>• For point 4 accept maintain blood flow to muscles/ venous return.</li> </ul> <p><b>Do not allow:</b><br/>'stops the build-up of lactic acid'</p> |



| Question | Answer  | Marks | Guidance   |
|----------|---|-------|--|
| 20       | <p><b>6 marks for 6 from</b><br/> Sub max 3 marks for :<br/> (Steroids)</p> <ol style="list-style-type: none"> <li>1. Able to train more often or for longer / enhances muscular endurance</li> <li>2. Can make you go quicker/be stronger/ increase muscle mass</li> <li>3. Faster recovery</li> <li>4. Can affect physical health or examples of health related illnesses or could put your life at risk/could cause death/ cancer/ liver damage/infection</li> <li>5. Can affect mental health or examples of mental health problems or an increase in confidence/ increase aggression/ 'roid rage'.</li> </ol> <p>Sub max 3 marks for:<br/> (Blood doping)</p> <ol style="list-style-type: none"> <li>6. can give you more stamina/endurance</li> <li>7. Boost/increase red blood cells/can increase oxygen uptake</li> <li>8. Can affect physical health or examples of health related illnesses or could put your life at risk/could cause death / an allergic reaction/ increase in blood viscosity/ blood clotting</li> <li>9. Can cause infection/risk of AIDS/ catch disease.</li> </ol> <p>(Both)</p> <ol style="list-style-type: none"> <li>10. Can enhance performance</li> <li>11. If caught can be banned/disqualified</li> <li>12. Heart problems/heart attacks</li> <li>13. Kidney failure/problems</li> <li>14. Increase blood pressure</li> <li>15. Psychological problems/guilt/addiction to cheating/cheating becomes an obsession.</li> </ol> | 6     | <ul style="list-style-type: none"> <li>• Sub max 3 marks for each different effects on performance</li> <li>• Do not accept one word answers (description is required)</li> <li>• One mark only if point repeated eg you can be banned if caught for steroid use—you could be banned for blood doping = 1 mark max.</li> </ul> |

| Question | Answer  | Marks | Guidance  |
|----------|---|-------|---|
| 21       | <p><b>5 marks for 5 from:</b></p> <ol style="list-style-type: none"> <li>1. Physical health/not getting ill/less prone to heart disease/other diseases</li> <li>2. Less prone to injury</li> <li>3. Live longer (because more healthy/less likely to be ill)</li> <li>4. Components of physical fitness improving/keep fit</li> <li>5. Mental health/feel happy/positive feelings/less stress/anxiety</li> <li>6. Good self-image/self-esteem/confident/feel good about what you look like</li> <li>7. For enjoyment/as a hobby</li> <li>8. Social life increased/more likely to make friends</li> <li>9. Peer pressure/ pressure from parents</li> <li>10. Sense of achievement after participation</li> <li>11. Be good at an activity/ learn new skills/ get into team</li> <li>12. Not getting tired easily/offsets fatigue/can cope with demands of everyday life</li> <li>13. Avoids obesity/being overweight</li> <li>14. To copy a role model/ become a role model / someone who you look up to</li> <li>15. As a profession/ job or to get money/a wage/ rewards/ qualifications.</li> </ol> | 5     | <ul style="list-style-type: none"> <li>• No marks if single word answer eg fun = no marks.</li> </ul> |

| Question | Answer  | Marks | Guidance  |
|----------|---|-------|---|
| 22       | <p><b>4 marks for 4 from:</b><br/>(speed)</p> <ol style="list-style-type: none"> <li>1. Have good reactions/be able to respond quickly or to be able to run/move fast to catch someone or to chase after something or to be able to get jobs done quickly/efficiently</li> <li>2. <b>Eg</b> To run quickly and win a sprint race.</li> </ol> <p>(strength)</p> <ol style="list-style-type: none"> <li>3. To be able to lift or carry effectively or to be able to overpower an opponent or to be able to support your body weight well</li> <li>4. <b>Eg</b> To lift the heaviest weight in a power-lifting competition.</li> </ol> | 4     | <ul style="list-style-type: none"> <li>• 1 mark for description of why speed is important <u>for physical activity</u> and 1 mark for the eg</li> <li>• 1 mark for description of why strength is important <u>for physical activity</u> and 1 mark for the eg</li> <li>• Accept suitable <u>but different</u> examples for all marks eg<br/>To be able to run fast away from a player in football = Pt 1. To get away from an opponent quickly in basketball= Pt 2<br/>To be able to support your body in a handstand = Pt 3<br/>Lifting heavy weights = Pt 4.</li> </ul> <p>How fast you are is too vague for Pt 1<br/>How fast you can run to beat an opponent = Pt 1 (because there is some reference to a physical activity)<br/>For example in a 100metre sprint race = Pt 2.</p> <p>To be strong is too vague for Pt 3<br/>To be strong enough to dominate an opponent = Pt 3<br/>For example to push someone backwards in a rugby scrum = Pt 4.</p> |
| 23       | <p><b>3 marks for 3 from:</b></p> <ol style="list-style-type: none"> <li>1. Developing skills/techniques</li> <li>2. Decision making</li> <li>3. Physical and mental capacity</li> <li>4. Evaluating/improving</li> <li>5. Making informed choices (about active/healthy lifestyles).</li> </ol>  | 3     | <p>Marks for first three only</p> <ul style="list-style-type: none"> <li>• Accept accurate equivalents eg learning skills for Pt 1.</li> </ul>  |

| Question | Answer  | Marks | Guidance   |
|----------|---|-------|--|
| 24       | <p><b>4 marks for 4 from:</b></p> <ol style="list-style-type: none"> <li>1. Good for (overall/holistic) fitness/keeps you active</li> <li>2. Good for muscular endurance</li> <li>3. Suitable for all ages/abilities/both sexes</li> <li>4. Is (usually) a safe way of exercising</li> <li>5. Can be done at own pace/is non-competitive</li> <li>6. Can be done at home/no need for expensive/complex equipment</li> <li>7. Can be good for core/strength/power</li> <li>8. Good for agility or co-ordination or balance</li> <li>9. Keeps you supple or flexible/ stretches muscles</li> <li>10. Prevents injury</li> <li>11. Good for the mind/mental health/(yoga) has spiritual dimension/keeps you positive or happy or enjoyable/relaxed/less stressed</li> <li>12. Can be sociable/can make friends.</li> </ol> | 4     | <ul style="list-style-type: none"> <li>• Do not accept 'keeps you healthy'.</li> </ul> |

| Question |  | Answer  | Marks | Content  | Guidance  |
|----------|--|---|-------|--|---|
|          |  |   |       |  | Levels of response  |
| 25*      |  | <p><b>6 marks total.</b></p> <p><b>Indicative content–</b><br/><b>Examples might include:</b></p> <ol style="list-style-type: none"> <li>1. Sportsmanship with examples:</li> <li>2. Shaking hands with opponents/showing respect</li> <li>3. Thanking officials</li> <li>4. Never argue/disagree with officials respect officials</li> <li>5. Never swear/be abusive</li> <li>6. Do not stretch/bend rules to your advantage</li> <li>7. Always sticking to the rules</li> <li>8. Lose gracefully/congratulate opponents who beat you</li> <li>9. If you hurt someone then showing concern</li> <li>10. Sharing resources/facilities/equipment</li> <li>11. Do not over-celebrate when you win/do not show arrogance</li> <li>12. Replacing weights or equipment after use/wiping your sweat off exercise equipment</li> <li>13. Three cheers at the end of a game.</li> </ol> <p><b>Rules and etiquette important because:</b></p> <ol style="list-style-type: none"> <li>14. Fairness or fair play</li> <li>15. Avoiding the consequences (sending off) of rule breaking</li> <li>16. Prevents injury</li> <li>17. Prevents aggression/violence</li> </ol> | 6     | <p>Differentiating between levels look for:<br/><b>(These are guidelines only )</b></p> <p><b>Level 1 (1-2 marks):</b></p> <ul style="list-style-type: none"> <li>• Few indicative points made and mostly from pts 14 - 17</li> <li>• Description rather than explanation and few if any practical examples</li> </ul> <p><b>Level 2 (3-4 marks):</b></p> <ul style="list-style-type: none"> <li>• More indicative points made and may include pts 18 - 21</li> <li>• at least one good practical example</li> <li>• Some explanation</li> </ul> <p><b>Level 3 (5-6 marks):</b></p> <ul style="list-style-type: none"> <li>• Many indicative points made including pts 18 - 21</li> <li>• Points are developed/expanded</li> <li>• 2 or more good practical examples</li> <li>• Clear explanations</li> <li>• Very few QWC errors</li> </ul> | <p><b>Levels marked question</b></p> <p><b>Level 1 (1–2 marks)</b><br/>Candidates make only one or two valid points about rules <i>or</i> etiquette and describes only very superficially. Little or no attempt at explanation with few or no practical examples. 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><b>Level 2 (3–4 marks)</b><br/>Candidates make some valid points about rules <i>and</i> etiquette with good knowledge and understanding. Some attempt at explanation with practical examples. 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><b>Level 3 (5–6 marks)</b><br/>Candidates make many developed points about rules <i>and</i> etiquette. Candidate demonstrates excellent knowledge and understanding of the factors involved. Explanation clearly given with practical examples throughout.</p> |

| Question |  |  | Answer  | Marks     | Guidance  |  |
|----------|--|--|---|-----------|---|--|
|          |  |  |   |           | Content   | Levels of response   |
|          |  |  | 18. Can be fun/enjoyable/you can appreciate it<br>19. Encourages respect<br>20. Game can continue/be flowing/be effective—otherwise will not be a good game/activity<br>21. Ethical/moral implications.<br><br>Being a role model/others may copy |           | <b>Always indicate the level at the end of the response</b> | 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. |
|          |  |  | <b>Section Total</b>  | <b>45</b> |   |  |
|          |  |  | <b>Total</b>  | <b>60</b> |   |  |

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