

# **Physical Education**

General Certificate of Secondary Education **B451**

An Introduction to Physical Education

## **Mark Scheme for June 2010**

---

OCR (Oxford Cambridge and RSA) is a leading UK awarding body, providing a wide range of qualifications to meet the needs of pupils of all ages and abilities. OCR qualifications include AS/A Levels, Diplomas, GCSEs, OCR Nationals, Functional Skills, Key Skills, Entry Level qualifications, NVQs and vocational qualifications in areas such as IT, business, languages, teaching/training, administration and secretarial skills.

It is also responsible for developing new specifications to meet national requirements and the needs of students and teachers. OCR is a not-for-profit organisation; any surplus made is invested back into the establishment to help towards the development of qualifications and support which keep pace with the changing needs of today's society.

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

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

Mark schemes should be read in conjunction with the published question papers and the Report on the Examination.

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

© OCR 2010

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)

<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 might be regarded as a role model for others to participate in physical activities?</b></p> <p>(b) A parent who values physical exercise</p>	[1]	<p>For all multi choice questions from 1-15 accept any written indication of the answer eg circle/tick/cross out and then tick etc. If two or more indicated then no marks but give BOD if not completely clear.</p>
2	<p><b>Which one of the following is an example of a food high in carbohydrates?</b></p> <p>(b) Bananas</p>	[1]	
3	<p><b>Which one of the following is a key process in physical education?</b></p> <p>(c) Developing skills and techniques</p>	[1]	
4	<p><b>Which one of the following is a volunteer route into physical activity?</b></p> <p>(d) Organising an exercise class for clients in a care home</p>	[1]	
5	<p><b>Which one of the following age groups participates most in physical activities?</b></p> <p>(a) 16-24 years of age</p>	[1]	
6	<p><b>Which one of the following is a reason for <u>not</u> participating in physical activities?</b></p> <p>(d) Increasing risk of injury</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	The recommended amount of exercise for a healthy young person (5-18 years of age) is approximately:  (c) One hour, five to seven days per week	[1]	For all multi choice questions from 1-15 accept any written indication of the answer eg circle/tick/cross out and then tick etc. If two or more indicated then no marks but give BOD if not completely clear.
8	Which one of the following shows a lack of confidence in participating in physical activities?  (c) Feeling of not being good enough	[1]	
9	Which one of the following best indicates a balanced diet?  (a) A balance between what is eaten and energy expended	[1]	
10	Which one of the following is a suitable test for strength?  (d) The grip dynamometer test	[1]	
11	Muscular endurance is one component of fitness. Which of the following best describes muscular endurance?  (a) To be able to carry out repetitive tasks without tiring	[1]	
12	Which one of the following best describes the characteristics of a successful leader in a physical activity?  (d) To encourage others to take part effectively	[1]	

<b>Section A – Multiple choice</b>			
<b>Question Number</b>	<b>Expected Answer</b>	<b>Marks</b>	<b>Rationale/Additional Guidance</b>
13	Which one of the following best describes performance in physical education?  (c) To play well	[1]	For all multi choice questions from 1-15 accept any written indication of the answer eg circle/tick/cross out and then tick etc. If two or more indicated then no marks but give BOD if not completely clear.
14	Which one of the following would be a good method of exercise to improve your stamina?  (d) Aerobics	[1]	
15	Which one of the following would you <u>not</u> take into account when assessing someone for readiness to exercise?  (c) History of sports success	[1]	
<b>Total</b>		<b>[15]</b>	





Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
18	<p>Describe a cool down exercise <u>and</u> explain why you should cool down after physical activity.</p> <p><b>One mark for:</b></p> <p><b>Description:</b> Description of a suitable cool down exercise, eg jogging around the pitch in hockey after a game, followed by some stretching exercises mobilising the main muscle groups.</p> <p><b>Explanation:</b> <b>Three marks max. One mark for each correct response.</b></p> <p>1 (To speed up) remove/get rid of lactic acid/waste products 2 Decreases risk of injury/pulling muscle 3 Decreases risk of muscle soreness/cramp/stiffness 4 Prevent blood pooling 5 Prevent feeling tired 6 Gradually decrease heart rate/blood pressure 7 Gradually decrease body temperature 8 Gradually decrease breathing rate/to stop feeling dizzy/faint/sick 9 Psychological benefits/makes you calm down</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p><b>[4]</b></p>	<p><b>Accept:</b> Jogging/stretching as descriptions.</p> <p><b>Do not accept:</b> Shaking muscles off. Gradually returning body to its normal/resting state.</p>



Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
19	<p><b>Explain the effects of under-eating on performance <u>and</u> participation in physical activity.</b></p> <p><b>Four marks max. One mark for each correct response.</b></p> <p>1 Causes muscle weakness/harder to do things</p> <p>2 Performance/speed/stamina/participation decreases or example of this decrease</p> <p>3 Loss/lack of energy available/tiredness/low blood sugar/dizziness/nausea/faint</p> <p>4 Causes <b>weight loss</b> that may decrease strength/mobility/power</p> <p>5 May feel embarrassed/low self esteem</p> <p>6 More illness/disease</p> <p>7 Not having a healthy diet/loss of vitamins/minerals</p> <p>8 Slows growth and development/weaker bones/more prone to injury</p> <p>9 Slows recovery after exercise/after illness</p> <p>10 Loss of motivation/lethargy/not alert/slow reactions</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p><b>[4]</b></p>	<p><b>Accept:</b></p> <p>- for point 6 (illness and disease) accept most body organ illnesses/diseases.</p>

Section B – Short Answer Questions																																				
Question Number	Expected Answer	Marks	Rationale/Additional Guidance																																	
20	<p>Recent research has shown different levels of participation in different physical activities as shown in Fig. 1 below.</p> <p>Using Fig. 1 choose <u>three</u> activities and give <u>two</u> reasons why each has either a high, moderate or low percentage participation.</p> <p>Six marks total for:</p> <p><b>Two marks sub max for each activity (x3):</b></p> <p>1 Suitable explanation for the level of participation, eg high participation in swimming because of availability/access of swimming pools/easy for all ages/cheapness of cycling/little equipment needed for football etc</p> <p>2 Second explanation for level of participation for same activity: swimming - eg the importance of being able to swim for safety/survival/cycling easily learned/football has huge media interest/role models etc</p> <p>Possible answers for medium: Badminton indoor hall needed but fairly easy to get a game going/lots of tennis courts in parks and recreational grounds but some clubs are very exclusive etc</p> <p>Possible answers for low: Cricket needs a decent ground to play on/not many girls play cricket/skiing not suited for our climate etc</p>	<p><b>two marks sub max for each activity (x3)</b></p> <p>[6]</p>	<p>Mark responses that give reasonable reasons for the level of participation. Use BOD when appropriate.</p> <p>Can give same reasons if applied to different activities (eg horse riding difficult to access in city and fishing difficult to access if no where near water).</p> <p>If choice of physical activity is wrong then no marks can be given for reasons.</p> <table border="0"> <thead> <tr> <th>High</th> <th>Medium</th> <th>Low</th> </tr> </thead> <tbody> <tr> <td>Swimming</td> <td>Badminton</td> <td>Cricket</td> </tr> <tr> <td>Football</td> <td>Tennis</td> <td>Rugby Union</td> </tr> <tr> <td>Cycling</td> <td>Bowls</td> <td>Basketball</td> </tr> <tr> <td>Athletics</td> <td>Horse riding</td> <td>Fishing</td> </tr> <tr> <td>Golf</td> <td>Squash</td> <td>Skiing</td> </tr> <tr> <td></td> <td></td> <td>Boxing</td> </tr> <tr> <td></td> <td></td> <td>Weight lifting</td> </tr> <tr> <td></td> <td></td> <td>Hockey</td> </tr> <tr> <td></td> <td></td> <td>Rugby League</td> </tr> <tr> <td></td> <td></td> <td>Netball</td> </tr> </tbody> </table> <p>Possible reasons drawn from:  <b>Cost, Access, Ethnicity, Media, Role models, Participation rates, Gender, Climate, Transport, Competiveness, Facilities, Equipment, Safety, Image, Risk of Injury, Age, Status, Child-rearing.</b></p>	High	Medium	Low	Swimming	Badminton	Cricket	Football	Tennis	Rugby Union	Cycling	Bowls	Basketball	Athletics	Horse riding	Fishing	Golf	Squash	Skiing			Boxing			Weight lifting			Hockey			Rugby League			Netball
High	Medium	Low																																		
Swimming	Badminton	Cricket																																		
Football	Tennis	Rugby Union																																		
Cycling	Bowls	Basketball																																		
Athletics	Horse riding	Fishing																																		
Golf	Squash	Skiing																																		
		Boxing																																		
		Weight lifting																																		
		Hockey																																		
		Rugby League																																		
		Netball																																		





Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
23	<p>Give <b>three</b> reasons why it is important for all those involved in a physical activity to abide by rules and codes of behaviour.</p> <p><b>Three marks for three from:</b></p> <ol style="list-style-type: none"> <li>1 To prevent injury/less dangerous</li> <li>2 For fair play/so that the activity/game can be played fairly/effectively/flowing</li> <li>3 So all can enjoy the activity</li> <li>4 Important to establish so that all participants know what is expected of them when playing a particular sport or engaging in exercise and physical activities/following role model behaviour</li> <li>5 So that behaviour is socially acceptable (in a particular culture) to have good control</li> <li>6 To show respect to those around you/well mannered/to care about the well-being of others/sportsmanship/good etiquette/respect</li> <li>7 To not be disqualified/sent off/fined</li> <li>8 To not let your team mates down/give them a bad name</li> </ol>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p><b>[3]</b></p>	

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
24	<p>The following are aspects of creativity as a physical education concept: Expressing ideas; solving problems; exploring tactics; being effective.</p> <p>Describe, using practical examples, how each of the above can be achieved.</p> <p>Four marks max. One each for each correct response.</p> <p><b>Expressing ideas</b></p> <p>1 Helping a team mate with skills/giving opinion during coaching/telling the exercise trainer about your own idea for exercise/a dancer showing ideas through their movement</p> <p><b>Solving problems</b></p> <p>2 Deciding on the equipment to be used during icy weather/ choosing rehabilitation exercise for a damaged knee/ constructing a gymnastic routine within the confines of the mat area</p> <p><b>Exploring tactics</b></p> <p>3 Using different defence strategies for different teams/as an official talking to the players and explaining decisions</p> <p><b>Being effective</b></p> <p>4 Choosing creative moves that score high points in diving/ the free kick routine devised results in a goal</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>[4]</p>	<p>BOD with practical examples. The practical example may be described in one and inferred for the others so accept this – BOD. If <u>no</u> practical examples then <u>no</u> marks.</p>

Section B – Short Answer Questions			
Question Number	Expected Answer	Marks	Rationale/Additional Guidance
25 *	<p>Identify a role as either a referee or an umpire in a physical activity of your choice <u>and</u> describe what is involved in performing one of these roles.</p> <p><b>Levels marked question</b></p> <p><b>Level 1 (1-2 marks)</b> Candidates make only one or two valid points about the role of an official and describes only very superficially. 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> Candidates make some valid points about the role of an official with good knowledge and understanding. 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> Candidates make many developed points about different aspects of the role of an official. 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>		<p>The following are GUIDELINES ONLY. Refer to Level descriptors at all times.</p> <p>Tick each point found in the indicative content.</p> <p><b><u>However the number of ticks on their own do not indicate the level.</u></b></p> <p>View the number of ticks/points:</p> <p><b>Level 1</b></p> <ul style="list-style-type: none"> <li>• 1 tick to get into Level 1</li> <li>• Must have <u>description</u> (rather than identifying isolated points) to lift from level 1</li> </ul> <p><b>Level 2</b></p> <ul style="list-style-type: none"> <li>• 3 ticks to get into Level 2</li> <li>• Some technical vocabulary in this level</li> </ul> <p><b>Level 3</b></p> <ul style="list-style-type: none"> <li>• 5 ticks to get into Level 3</li> <li>• A <u>few</u> technical/spelling mistakes are acceptable for top level</li> <li>• Different aspects of the role are explored in-depth</li> <li>• The role is described not just with controlling aspects but also maintaining the spirit of the game</li> </ul>

<b>Section B – Short Answer Questions</b>			
<b>Question Number</b>	<b>Expected Answer</b>	<b>Marks</b>	<b>Rationale/Additional Guidance</b>
<b>25*</b> <b>continued</b>	<b>Indicative content</b> 1 To move/run around/get exercise 2 Need to concentrate/watch the game (carefully)/ignore distractions 3 To keep the score 4 Communicates well to other officials/participants 5 To gain qualifications/badges/awards 6 Ensure all keep to the rules of the game 7 Let the game run smoothly/keep the flow of the game 8 Good knowledge of rules and regulations/use of rules 9 Ensure fairness for all players/participants/make honest decisions be consistent 10 Make (firm) decisions/decisions under pressure/give punishments 11 Could help to organise a competition or physical activity 12 The referee/umpire etc, with a whistle, takes charge of a match/controls 13 Need to work with other officials, eg in football with the help of two assistant referees 14 Can keep a check on the time/timekeeper 15 The ref/umpire etc can also postpone, stop, suspend or call off a match if there are weather or crowd problems 16 You are a good role model/appropriate appearance/ personal equipment 17 Have to have an appropriate level of fitness 18 Looks after the safety of players/individuals, playing equipment 19 Checks the playing surfaces		<b><u>Do not accept:</u></b> <b><u>- Officials other than referee or umpire.</u></b>
	<b>Total</b>	<b>[6]</b>	
	<b>Paper Total</b>	<b>[45]</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)

**[www.ocr.org.uk](http://www.ocr.org.uk)**

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored

**Oxford Cambridge and RSA Examinations**  
is a Company Limited by Guarantee  
Registered in England  
Registered Office; 1 Hills Road, Cambridge, CB1 2EU  
Registered Company Number: 3484466  
OCR is an exempt Charity



**OCR (Oxford Cambridge and RSA Examinations)**  
Head office  
Telephone: 01223 552552  
Facsimile: 01223 552553

© OCR 2010