



Mark Scheme (Results)

April 2014

NQF BTEC Level 1/Level 2 Firsts in
Sport

Unit 1: Fitness for Sport and Exercise
(20586E)

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.

Question Number	Answer	Mark
1	Coordination	(1)

Question Number	Answer	Mark
2(a)	Fartlek training	(1)
2(b)	30 minutes	(1)

Question Number	Answer	Mark
3	Picture A - flexibility (1) Picture B - speed (1) 1 mark for each correct answer.	(2)

Question Number	Answer	Mark
4(a)	Muscular endurance	(1)
4(b)	Active stretching Accept: - static active stretching - active static/static active - active Do not accept just 'static' or 'static stretching' or 'stretching' Accept an answer that is phonetically spelt.	(1)

Question Number	Answer	Mark						
5	<table border="1"> <thead> <tr> <th>Answer</th> <th>Definition</th> </tr> </thead> <tbody> <tr> <td>Muscular strength</td> <td>The maximum force that can be generated by a muscle or muscle group.</td> </tr> <tr> <td>Aerobic endurance</td> <td>The ability of the cardiovascular system to work efficiently, supplying nutrients and oxygen to working muscles during sustained physical activity.</td> </tr> </tbody> </table> 1 mark for each correct answer.	Answer	Definition	Muscular strength	The maximum force that can be generated by a muscle or muscle group.	Aerobic endurance	The ability of the cardiovascular system to work efficiently, supplying nutrients and oxygen to working muscles during sustained physical activity.	(2)
Answer	Definition							
Muscular strength	The maximum force that can be generated by a muscle or muscle group.							
Aerobic endurance	The ability of the cardiovascular system to work efficiently, supplying nutrients and oxygen to working muscles during sustained physical activity.							

Question Number	Answer	Mark
6 (a)	Adaptation Accept an answer that is phonetically spelt.	(1)
6 (b)	Reversibility Accept an answer that is phonetically spelt.	(1)

Question Number	Answer	Mark
7(a)	Either vertical jump test or vertical jump Sergeant Jump Accept an answer that is phonetically spelt.	(1)
7(b)	Legs	(1)
7(c)	Anaerobic power or explosive strength Accept any answer which contains the word 'power' Accept an answer that is phonetically spelt.	(1)
7(d)	Volleyball	(1)

Question Number	Answer	Mark
8(a)	Borg scale Accept: Borg Borg 6-20 Accept an answer that is phonetically spelt	(1)
8(b)	$RPE \times 10 = HR$	(1)

Question Number	Answer	Mark
9	Completion of an informed consent form (1) Calibration of equipment (1) 1 mark for each correct answer	(2)

Question Number	Answer	Mark
10(a)	Shot put	(1)
10(b)	Low reps and high loads	(1)

Question Number	Answer	Mark
11	<p>Award 1 mark for identification of the advantage and 1 mark for the disadvantage.</p> <p>Award an additional mark for the appropriate related expansion for each, related to hurdling performance.</p> <p>Mark allocation a maximum of 2 marks for the advantage and up to 2 marks for the disadvantage.</p> <p>Plyometrics allows replication of the movement for hurdling/trains for power (1). This method of training is an advantage for a hurdler because it develops the power/height to enable the hurdler to perform the correct technique/clear the hurdles at speed (1).</p> <p>This type of training can be a disadvantage because it has to be performed at very high intensity/can result in muscle damage/injury (1) so they cannot perform the hurdling technique/race/training(1).</p> <p>Accept any other relevant wording/phrasing.</p>	(4)

Question Number	Answer	Mark
12	Abdominal curls	(1)

Question Number	Answer	Mark
13	<p>Award 1 mark for identification of why the component of fitness is required for tennis and an additional mark for appropriate expansion that is specific to tennis performance.</p> <p>Specific tennis terminology is not required to attain the second mark, however, the response has to be related to an aspect of playing tennis.</p> <p>Up to 2 marks available for responses related to muscular endurance, and up to 2 marks available for responses related to coordination, for a maximum of 4 marks for this question.</p> <p>Muscular endurance - is required to play tennis for a long period of time (1) so that they can continue to hit the ball/ run around the court(1).</p> <p>Coordination - the tennis player needs to be able to successfully perform tennis-related technique (1) so the tennis player will be able to increase their accuracy/ efficiency/ positioning when playing shots so they have a better chance of beating their opponent (1).</p> <p>Accept any other relevant wording/phrasing.</p>	(4)

Question Number	Answer	Mark
14(a)	<p>1 mark for the working out: $0.38 \times 36 + 25.98$ (1) And 1 mark for correct answer. Accept: 39.66 39.7 40. (1)</p>	(2)
14(b)	<p>Award 1 mark for identification and 1 additional mark for appropriate expansion.</p> <p>For example:</p> <p>Many people who take part in this test stop before they are exhausted (1) which means the test results are not a true estimate of their VO₂ max as the test is a maximal test. (1)</p> <p>Statements related to the impact on the need for agility in the test result can also be given credit.</p> <p>A combination of stopping a test due to poor motivation and the need for agility can be awarded 2 marks.</p>	(2)

Question Number	Answer	Mark
15	<p>Award 1 mark for explanation of PNF/ballistic stretching method and 1 additional mark for appropriate expansion</p> <p>For example:</p> <p>PNF stretching requires the use of a person/object to perform isometric contraction against a resistance (1). This stops the stretch reflex from happening in the muscle being stretched, which increases flexibility at a faster rate compared to other methods of stretching (1)</p> <p>Ballistic stretching involves bouncing/jerky stretches which can result in muscle strains/injury (1). As a result, this method of stretching is usually just used for individuals who already have high levels of flexibility / this method of stretching is not recommended in a training programme for people who are not very flexible/ as they have a greater change of injuring themselves (1).</p> <p>Accept any other relevant wording/phrasing.</p>	(4)

Question Number	Answer	Mark
16	<p>Gym Mat (1)</p> <p>Stopwatch (1)</p> <p>1 mark for each correct answer</p>	(2)

Question Number	Answer	Mark
17	<p>Award 1 mark for explanation of why the test may not be reliable (any aspect of the preparation prior to the test or administration of the test) and 1 additional mark for an appropriate expansion that is related to the first point.</p> <p>For example:</p> <p>Prior to the test: The reliability of this test depends upon the person taking part in the same warm up prior to the test (1) as the longer a person spends warming up the more flexible their muscles will be resulting in higher scores (1)</p> <p>Administration of the test: The way the reaching process is carried out should be the same for each test (1) as it should be carried out with no bouncing as this will over estimate the result (1)</p> <p>Accept any other relevant wording/phrasing.</p>	(2)

Question Number	Indicative content
18	<p>Indicative content</p> <p><u>Administration processes of the BIA</u></p> <ul style="list-style-type: none"> <li> <p>Advantages of the BIA</p> <p>It is easy and quick to use so can be easily administered. It is non invasive so that the person being tested does not have to remove any clothing other than shoes and socks so it is less embarrassing than the skinfold test. Unlike other forms of body composition assessment such as the skin fold test which can be embarrassing for the client. It is related to a person's age and gender unlike BMI.</p> <li> <p>Disadvantages of the BIA</p> <p>The equipment is quite expensive so people may not be able to afford it in order to administer the test. Reliability and validity depends upon the correct protocol being followed, which can be difficult to oversee:</p> <ul style="list-style-type: none"> <li>○ Client inputs own data incorrectly <li>○ Client doesn't follow pre test procedures with regard to alcohol consumption and physical activity <li>○ Calibration of equipment. <p>The individual also has to ensure that they are hydrated and have not drunk alcohol 48 hours prior to the test or taken part in high intensity exercise 12 hours prior to the test. A person with a pacemaker or a pregnant woman should not be tested using this equipment.</p> <p>It is not as accurate as the skin fold measurements. The scores are influenced by how well hydrated a person is.</p> <p>If a person is dehydrated, their body fat is overestimated.</p> <p><u>Administration processes of the skinfold test</u></p> <ul style="list-style-type: none"> <li> <p>Advantages of the skinfold test</p> <p>It is a valid test as it provides a good estimation of the body fat of a person and is one of the most valid tests for estimating body fat percentage. The equipment is not very expensive and is therefore readily available.</p> <p>The test does not require the person being tested to carry out any pre-test procedures unlike the BIA method.</p> <p>The test can be performed on most people as there is no contra indications to the administration of this test</p> <li> <p>Disadvantages of the skinfold test</p> <p>The person being tested has to remove or adjust their clothing and have parts of their body 'pinched' by the tester which can be embarrassing.</p> <p>The skinfold test must be consistently taken at the same places in order to get reliable results, this relies on the skill of</p>

	<p>the tester to accurately and consistently identify the sites. The test cannot be used on people that are very obese and a different type of test would need to be used for this type of person.</p>
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Level	Descriptor
0 0 marks	No rewardable material
1 1-3 marks	A few key points identified, or one point described in some detail. The answer is likely to be in the form of a list. Only one viewpoint considered. Points made will be superficial/generic and not applied/directly linked to the situation in the question.
2 4-6 marks	Some points identified, or a few key points described. Consideration of more than one viewpoint but there will be more emphasis on one of them. The answer is unbalanced. Most points made will be relevant to the situation in the question, but the link will not always be clear.
3 7-8 marks	Range of points described, or a few key points explained in depth. All sides of the case are considered and the answer is well-balanced, giving weight to all viewpoints. The majority of points made will be relevant and there will be a clear link to the situation in the question.

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